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MEMORANDUM FOR DISTRIBUTION C  
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FROM: AF/A4  
1030 Air Force Pentagon, Suite 4E154  
Washington DC 20330-1030

SUBJECT: Department of the Air Force Guidance Memorandum to Department of the Air Force  
Instruction 32-1020, *Planning and Programming Built Infrastructure Projects*

By order of the Secretary of the Air Force (SecAF), this Department of the Air Force (DAF) Guidance Memorandum (DAFGM) immediately implements changes to Department of Air Force Instruction (DAFI) 32-1020, *Planning and Programming Built Infrastructure Projects*. Compliance with this memorandum and its attachments is mandatory. To the extent its direction is inconsistent with other Department of the Air Force publications, the information herein prevails in accordance with Department of the Air Force Instruction (DAFI) 90-160, *Publications and Forms Management* and Department of the Air Force Manual (DAFMAN) 90-161, *Publishing Processes and Procedures*.

This memorandum has been updated to reflect how the civil engineer governance structure applies to special Military Construction programs and funding authorized by Congress outside the established authorities outlined in DAFI 32-1020. It establishes AF/A4 Deputy Chief of Staff for Logistics, Engineering & Force Protection as the office authorized to determine and decide program management questions, including project sequencing, scheduling, and prioritization, for special Military Construction programs that would normally be decided by the Air Force corporate structure. It also makes updates to the economic analysis requirement within a project's lifecycle, deletes the requirement to accomplish a DD1354 in the programming stage, establishes requests for equitable adjustment as a funded cost, and updates guidance on reporting for relocatable facilities. Furthermore, it provides updates the table in Attachment 2 for Networked Facilities and clarifies existing guidance in various sections.

The use of an asterisk (\*) identifies a substantive change over the previous guidance. It becomes void after one year has elapsed from the date of this memorandum, upon publication of an interim change to, or rewrite of DAFI 32-1020, whichever is earlier.

TOM D. MILLER  
Lieutenant General, USAF  
DCS/Logistics, Engineering & Force Protection

Attachment:  
DAFI32-1020\_DAFGM2024-01, *Planning and Programming Built Infrastructure Projects*

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Planning and Programming Built Infrastructure Projects

Current guidance in DAFI 32-1020, *Planning and Programming Built Infrastructure Projects*, remains in effect with the following changes:

\*Added. This publication applies to all civilian employees and uniformed members of the Regular Air Force, the Air Force Reserve, the Air National Guard, the United States Space Force, the Civil Air Patrol when conducting missions as the official Air Force Auxiliary, all DAF civilian employees, and those with a contractual obligation to abide by the terms of DAF issuances.

\*Added. Note: All references to United States Air Force (USAF) terminology, units, grades, and positions will also apply to the equivalent in the USSF, as appropriate. For example, references to Airmen will also apply to Guardians. References to MAJCOMs or NAFs will also apply to field commands. References to wings will also apply to deltas. Air Staff roles and responsibilities (e.g., AF/A1, etc.) may also apply to the equivalent Office of the Chief of Space Operations (Space Staff) position or office (e.g., SF/S1, etc.), as deemed appropriate.”

\*Changed. Throughout the DAFI change “AFCEC Director” to “AFCEC Commander” and change “AFCEC/CL” to “AFCEC/CC.”

\*1.2.3 Changed. Director of Civil Engineers (AF/A4C). Provides policy-implementing guidance and oversight for built infrastructure programs and facilities investment. Advocates for Civil Engineer portfolio resources through the Air Force Corporate Structure, Office of the Secretary of Defense (OSD), Office of Management and Budget (OMB), and Congress. A4C will define 35% design maturity to ensure Air Force budget requests comply with OSD standards. When delegated from AF/A4 Deputy Chief of Staff, Logistics, Engineering & Force Protection, act as the Air Force Corporate Structure element to decide program management and funding questions for special Military Construction programs and funding authorized by Congress outside normal Military Construction authorities.

\*2.1.1. Changed. Certificate of Compliance for Critical Planning Actions (CoC). For projects approved higher than installation-level, the Planning Action Process on the Comprehensive Planning Platform (CPP) is the primary vehicle to validate requirements and determine the appropriate course of action. For projects, which go through the Planning Action Process, a completed Certificate of Compliance is not required. Instead, the BCE or designated Flight Chief (may not be delegated lower) may sign the CoC and check the box stating the project was approved via the Planning Action Process. For projects requiring HAF or higher-level approval which did not go through the Planning Action Process, a completed CoC is still required. Alternatively, programmers may choose to put these requirements through the Planning Action Process to eliminate the Certificate of Compliance requirement. When a completed CoC is required for projects requiring HAF or higher-level approval it must include BCE signature and the first cross-functional commander above the Civil Engineer or Group. If the first cross-functional commander is above the group level, signature may be delegated to that commander’s vice or deputy, but no lower. **(T-1)** Approval request packages for projects requiring AFCEC,

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AFRC/A4, or NGB/A4 approval require a CoC signed by the BCE (or equivalent) ensuring the elements of the CoC were used to inform planning actions and requirements development of the project, though completion of the CoC items do not need to be documented or coordinated on the CoC. **(T-1)** BCE signature on the CoC for projects to be approved by AFCEC, AFRC/A4, or NGB/A4 may be delegated no lower than a flight chief/commander. **(T-1)** For projects with costs requiring approval at the installation level, a CoC is not required, but planners and programmers are encouraged to consider the elements of a CoC for all projects. The planning results documented by the CoC should be approved by the installation Facilities Board.

\*2.4.8.1.2. Changed. Though cost comparison and value analysis should be completed for all work, in accordance with AFI 65-501, *Economic Analysis*, project justification based on an economic analysis is required when either: 1) the construction cost is greater than \$2M or 2) the repair cost is greater than \$2M and is greater than 75% of estimated cost of a construction project to replace the facility. **(T-1)** See **Paragraph 2.5.1** for work classification guidance.

\*2.4.8.1.3. Changed. When accomplishing an EA, programmers must demonstrate use of an acceptable cost estimating method for determining the estimated facility replacement cost: Parametric Cost Estimating System (PACES) cost estimate, Micro Computer Aided Cost Estimating System 2nd Generation (MII), or other method specified by the Life Cycle Cost Engineering Subject Matter Expert (LCCE SME) in AFCEC/COS. **(T-1)**

\*2.6.4. DELETED

\*2.6.6. Changed. Project Management Information Technology (IT) Databases. Project management data will be maintained in an Air Force-approved project management database. **(T-1)** NexGen IT is the DAF authoritative IT system for maintenance and reporting of real property data as prescribed in DAFI 32-9005.

\*2.7.9. Changed. Sensitive Compartmented Information Facilities (SCIF). When a project will include a SCIF subject to Intelligence Community Directive (ICD) Number 705, *Sensitive Compartmented Information Facilities*, the installation must obtain project security requirements from the Site Security Manager or Accrediting Official. **(T-0)** Applicable construction standards and any escorts, construction surveillance technicians (CST), or cleared American guards, if allowed by 10 USC § 2465, *Prohibition on contracts for performance of firefighting or security-guard functions*, shall be identified and estimated costs included as separate lines on the DD Form 1391. **(T-0)** The installation will include the estimated cost of escorts or cleared American Guards on the DD Form 1391 as an unfunded cost from other appropriations; these costs will be provided or funded by the user. **(T-1)** The SCIF security cost shall be calculated during the planning phase and certified by the design agent and/or design and construction project managers (DM/CM). **(T-1)** If the installation is to provide any project support, only that portion of installation overhead or support costs that can be identified as additional costs that would not have been incurred were it not for the SCIF portion of the project should be included ((DoD 7000.14-R, Volume 3, *Financial Management Regulation, Budget Execution – Availability and Use of Budgetary Resources*, Chapter 17, Accounting

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Requirements for Military Construction Projects, **paragraph 1704**). Any requirements exceeding a standard, even when based on risk, requires a waiver be processed and approved in accordance with ICD 705. **(T-0)** For standards, see IC Tech Spec – for ICD/ICS 705, *Technical Specifications for Construction and Management of Sensitive Compartmented Information Facilities, current edition*, located at <https://www.dni.gov/files/Governance/IC-Tech-Specs-for-Const-and-Mgmt-of-SCIFs-v15.pdf>. Per **Paragraph 2.7.9.1**, the term “Sensitive Compartmentalized Information Facility” or the acronym “SCIF” cannot be used in any project title or anywhere in a DD Form 1391; however, SCIF requirements, including escorts and CSTs, must be identified on the DD Form 1391 to be considered in scope. **(T-1)**

2.7.9.1. Changed. Do not use the term “Sensitive Compartmentalized Information Facility” or the acronym “SCIF” in any project title or anywhere in a DD Form 1391. **(T-0)** The facility’s location and identity as a SCIF shall be protected at a minimum of “Controlled Unclassified Information” (CUI), formerly FOR OFFICIAL USE ONLY (FOUO), in accordance with Department of Defense Manual (DODM) 5105.21-V2 CE-01, *Sensitive Compartmented Information (SCI) Administrative Security Manual: Administration of Physical Security, Visitor Control, and Technical Security*. **(T-0)**

2.7.9.2. Changed. SCIFs should be referred to as a controlled space so as not to designate it as a SCIF on releasable documents (e.g., bid requests, permit requests, sub-contractor plans). Ensure SCIF spaces are properly captured on the DD Form 1354 and labeled as Controlled Space (similar to DD Form 1391) for proper accountability.

\*2.7.9.3 Added. The following paragraph applies to repair and construction (unspecified and specified) work of SCIFs as outline in **Paragraph 2.7.9** and associated sub-paragraphs. This change for project funded costs takes effect and applies to all contracts awarded on or after 1 October 2024 (FY25). Construction surveillance technicians/personnel required to comply with ICD 705, as directed within the Accrediting Official (AO) approved Construction Security Plan, are authorized as a project funded cost. If the project did not require ICD 705 compliance, this work and associate personnel would not be required. This does not include site security, which is either provided by the user, requestor, or site owner or funded by said parties. Construction surveillance can only be project funded if the construction surveillance is not accomplished by a government employee (military, civilian, or government hired contractor). This line-item cost should be titled “Construction Security Surveillance” and should be placed in the funded section after the SUBTOTAL and before the SIOH. This nomenclature will be distinguished from unfunded “Site Security Surveillance” cost, which includes escorts and cleared American guards.

\*2.7.12.1. Changed. Planners and programmers shall follow the process outlined in AFMAN 32-7003, *Environmental Conservation*, Section 3D. **(T-1)** The goal should first be to avoid the construction of facilities in or partially within a floodplain. The EIAP process shall be completed for all repair or construction projects within or partially within the 100-year floodplain. **(T-0)**

\*2.9. Changed. **Cost Estimates**. All cost estimates for projects covered by this Instruction and exceeding \$1,000,000 (considering funded project costs only) must be prepared by an authorized cost estimator, defined as an AFIT WENG 400 graduate. **(T-1)** Cost estimates may be prepared

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by an Architectural-Engineering (A-E) firm as part of the planning charrette or design process. Projects with funded costs exceeding installation approval level must be reviewed by an AFCEC/COS dedicated reviewer/approver. **(T-1)** A-E personnel are not required to be WENG 400 graduates. However, a WENG 400 graduate at the installation level must take ownership of the A-E estimate and submit the estimate, and other required documentation to AFCEC/COS as required for review. **(T-1)** Similarly, projects at locations not under the jurisdiction of a primary installation commander and/or locations not on DoD real property records with costs exceeding approval levels delegated to the respective senior Civil Engineers (for example, HQUSAFE-AFAFRICA/A4C, HQ PACAF/A4C, HQ AFCENT/A7, HQ AFSOUTH/A4, HQ ACC AMIC/PCE) must be reviewed by an AFCEC/COS dedicated reviewer/approver. **(T-1)** AFRC/A4 or NGB/A4 projects requiring DAF-level approval must be reviewed by an AFCEC/COS dedicated reviewer and approver. **(T-1)** For AFRC/A4 or NGB/A4 projects approved below DAF-level, the respective staffs can choose whether to secure AFCEC/COS review and approval. AFCEC/CV has authority to determine which project cost estimates with costs exceeding installation approval level may be exempted-from review by AFCEC/COS. All estimates should be prepared, reviewed, and approved in accordance with guidelines in the Civil Engineering Cost Estimating Improvement Program.

**NOTE:** MILCON and UMMC projects in which the Air Force is the Design and Construction Agent (DCA) must be reviewed by an AFCEC/COS dedicated reviewer/approver. MILCON and UMMC projects in which USACE or NAVFAC is the DCA will not go through the CEIP reviewer process but will use USACE's or NAVFAC's internal review process.

\*2.9.1. Changed. All estimates must be prepared using parametric estimating tools, at a minimum. **(T-1)** PACES is the only DoD-approved software to develop parametric cost estimates. The basis for parametric project cost estimates is completed planning documents, such as a charrette report. Cost estimates must be developed using PACES, MII, or other method, as approved by the LCCE SME in AFCEC/COS. **(T-1)** For example, a paving project being executed by an Indefinite Delivery / Indefinite Quantity (IDIQ) contract should be estimated using the predefined contract cost line items in the same format as the IDIQ contract and not in PACES or MII. Other methods are also permitted for A-E projects already in solicitation as of the date of this guidance memorandum. A-E projects not yet in solicitation require a provision in the statement of work requiring estimates be developed using PACES, MII, or other method as approved by the LCCE SME in AFCEC/COS prior to award. **(T-1)** The estimator must develop and maintain a Basis of Estimate (BOE) that supports a well-documented and auditable estimate **(T-1)** The BOE, which may use the RP 34R-05 as a guide as taught in AFIT's cost estimating training (WENG 400), provides cost estimating traceability. Additional detailed requirements for use of PACES, AFIT training, and other guidance for cost estimating are found on the LCCE SME Cost Estimating guidance in CE DASH SharePoint ® site. The site can currently be found at <https://usaf.dps.mil/teams/CEDASH/SitePages/Service%20Page.aspx?Service=Cost%20Engineering> and the guidance is under "Resources."

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\*2.11.2. Changed. Ensure an equivalent cost-to-replacement comparison. Programmers cannot expand the facility used in the replacement cost estimate (cost of a replacement MILCON) to accommodate new or additional requirements beyond the existing facility (mission, function, size, etc.) unless that same additional scope is also included in the repair project. The replacement scope (MILCON) should be the same as the total facility of the project in the numerator (existing facility), to include any additions. For example, if the repair project in the numerator includes an addition, the replacement MILCON project in the denominator should also include this same addition or square footage. Note: the replacement facility can be brought up to code. (T-1).

\*3.5.2. Changed. After approving repair projects estimated to exceed \$7,500,000, SAF/IEE will report the approval to the appropriate congressional committees. **(T-0)** Failure to obtain SAF/IEE approval of such projects prior to the obligation of funds may be a statutory violation. Such projects may not proceed until completion of a 7-day period beginning on the day of SAF notification to committees and ending after AF/A4CF, AFRC/A4, or NGB/A4 notification to the installation that the waiting period is complete. **(T-1)** See the AF/A4CF FSRM DD Form 1391 preparation business rules for details on the contents of a project approval request package. AF/RE and NGB/A4 will establish procedures within their respective chains to obtain necessary SAF/IEE approvals and notifications for repair projects. **(T-1)**

\*3.5.4. Changed. Project Re-Approval. The authorities provided for project approval cover both scope and cost as provided in the approval document (DD Form 1391). Projects with work, which differs from or has been changed (increased or decreased) from the scope of what was approved (see [Paragraph 3.5.4.3](#)) or with costs exceeding the threshold cost-differences described in this paragraph require re-approval. The cost threshold requiring re-approval of a repair project is different in the project's pre-award and post-award life cycle. Prior to award, a repair project with costs exceeding 45% difference from the approved amount requires re-approval by the appropriate approval authority (based on the newly expected cost if the cost went up and based on the original approval if the cost went down). After award, the baseline is reset at the award amount plus other funded costs (e.g., SIOH), and a repair project with costs (including all funded costs) exceeding 25% difference from the award amount requires re-approval by the appropriate approval authority (based on the newly expected cost). Once a project has been re-approved, the new threshold for the project is based on the re-approved amount.

\*3.5.4.2.1. Added. Per **Paragraph A5.1.13.**, requests for equitable adjustment (REAs) are funded costs to the project. REAs do count against *statutory* thresholds—they are part of the total project cost. If an REA contributes to the funded cost of a project exceeding a *statutory* threshold or cost limit (e.g., the 10 USC §2811 repair approval and notification threshold of \$7,500,000 or the 10 USC §2805(c) cost limit for unspecified minor construction projects funded with appropriations available for operation and maintenance), re-approval and applicable notification are required.

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\*3.5.4.2.2. Added. Though requests for equitable adjustment (REAs) are funded costs to a project, if an REA only causes a project's cost to exceed the 125% cost increase threshold or the threshold for higher level approval (e.g., AFCEC approval instead of installation-level approval), the project does not require re-approval.

\*3.5.7.1. Changed. See the AF/A4CF FSRM DD Form 1391-preparation business rules for details on the contents of a project approval request package.

\*5.2.1.5. Added. Special Military Construction Programs. Congress may choose to authorize military construction projects outside of the authorities and funding listed in the paragraphs above. Emergent and urgent projects that cannot be deferred to proceed through the established military construction planning and programming process describes programs that might be authorized through special authorities. As these projects have not been planned and competed through the normal prioritization and programming process, authority to manage these programs, including decisions on prioritization, sequencing, and scheduling is retained by AF/A4 Deputy Chief of Staff, Logistics, Engineering & Force protection and as delegated to AF/A4C.

\*5.2.2.5. Changed. Foreign Military Sales Construction (FMS). 22 USC § 2751 et seq., *Arms Export Control*, establishes legal controls on the import and export of defense articles and defense services and codifies the Arms Export Control Act. 22 USC § 2769 authorizes construction services sales to eligible foreign countries. Air Force installations must ensure that proposed FMS construction facilities, built on their installations, are solely for foreign government use. **(T-0)** Facilities required for Air Force use, which may also be available for FMS, must be constructed with appropriated funds. **(T-0)** FMS construction facilities built on Air Force installations are not Air Force real property assets unless the foreign government transfers title to the Air Force an appropriate statutory authority. Unless title is thus conveyed to the Air Force, installations must ensure that the land on which the facility is built is leased to the foreign government. **(T-0)** Installations must consult the Office of the Air Force Deputy General Counsel (Installations, Energy and Environment) through AFCEC regarding such leases. **(T-1)** FMS-funded construction on Air Force installations is subject to the EIAP. EIAP results for MILCON-scope and UMMC-scope construction must be approved by SAF/IEE. **(T-1)**

7.2.4 Changed. Project Justification and Submittal. Installations will submit project justifications as specified in the published storm damage business rules, which are located at <https://usaf.dps.mil/teams/10041/Dashboards/Pages/Storm%20Tracker%20Dashboard.aspx> **(T-2)** Commanders will ensure that the submittal includes a DD Form 1391, a DD Form 1391c, and any additional information requested. **(T-2)** The submittal should explain the urgency and indicate, for each facility, the cause of damage or destruction. The Base Civil Engineer shall certify the following: (i) the project is for restoration or replacement of facilities damaged or destroyed; (ii) any scope increase is a result of economy of design or compliance with new criteria; (iii) deferral of the replacement project for inclusion in the next regular MILCON program would be inconsistent with the national security or the protection of health, safety or environmental quality; and (iv) in the case



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of damage to a facility rather than destruction, a replacement project is more cost-effective than repairing the facility. (T-2)

**\*8.5. Changed Management and Approval.** All RLFs require approval before being acquired and placed in service, except those in support of a named continuing military operation (see [Paragraph 8.4.6](#)). RLF management and approval guidance outlined below includes leased swing space as appropriate. In accordance with OSD policy, approval to use RLFs may not be delegated below a general officer or senior executive service civilian equivalent located at a centralized headquarters organization. For the Regular Air Force (RegAF), AFCEC manages the relocatable facility program and holds approval responsibility for use of RLFs to include extending use beyond the initial approved duration (see [Paragraph 8.5.2](#) for use duration and approval thresholds). AFRC/A4 and NGB/A4 similarly hold approval and extension responsibility for their respective units. If necessary, AFCEC, AFRC/A4, and NGB/A4 may establish approval criteria beyond what is provided below.

\*8.3.8.8. Added. CONEX boxes less than 500 square feet (including when connected) and not being used for living or working. These CONEX boxes are equipment items and are not subject to policy in this chapter. CONEX boxes are essentially shipping containers being used for storage. Purpose-built structures (e.g., for living or working) should not loosely be categorized as CONEX boxes. Validate categorization with AFCEC/CI or AF/A4CA. Placing CONEX boxes requires siting approval through the installation's facility board before being placed. (T-2)

\*8.5.2.1. Changed. The RLF is supporting a continuing military contingency operation. RLFs supporting a named contingency operation are exempt from the limitations on time of use regardless of location of the RLF. See [Paragraph 8.4](#).

\*8.5.9.3. Added. The following relocatable facilities will not require reporting:

\*8.5.9.3.1. Changed. Facilities placed in service at contingency locations.

\*8.5.9.3.2. Changed. Facilities used to meet international agreements in lieu of permanent solutions.

\*8.5.9.3.3. DELETED

\*A5.1.13. Added. Request for Equitable Adjustment (REA). Unlike claims, which are considered unfunded costs to the project, REAs are considered funded costs to the project. See [Paragraph 3.5.4.2.1](#). and [Paragraph 3.5.4.2.2](#). for guidance on repair project re-approval driven by REAs.

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### *Abbreviations and Acronyms*

\*Changed. LCCE – Life Cycle Cost Engineering



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*Terms*

\* Changed. **Parametric Estimate** - An estimate using pre-developed algorithms and cost models using the AFCEC approved software. Currently, PACES is the only approved software for parametric estimates. Parametric estimates should not include guidance unit costs.

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**Attachment 2**  
**Networked Facility Determination**

**\*Table A2.1. Changed. Networked Facility Determination.**

Networked Facility	<b>Networked Facility Components</b> <i>(Those which are <b>interconnected</b> within the networked facility) Note:</i> <i>FAC = Facility Analysis Category</i>
<u>Airfield Pavements:</u> <b>Interconnected</b> assets within the 2-digit DoD Category Group “11”.	<ul style="list-style-type: none"> <li>- Airfield Runways (3-digit DoD Basic Category - 111)                         <ul style="list-style-type: none"> <li>-- Associated Lighting, Runway (6-digit Category Code - 136664)</li> <li>-- Associated Utility Vaults (4-digit DoD FAC - 8927)</li> <li>-- Associated Aircraft Pavement Shoulder (4-digit DoD FAC - 1165)</li> <li>-- <b>Exclude</b> Runway, Unsurfaced (4-digit DoD FAC - 1114)</li> </ul> </li> <li>- Airfield Taxiways (3-digit DoD Basic Category - 112)                         <ul style="list-style-type: none"> <li>-- Associated Taxiway Lighting (6-digit Category Code - 136667)</li> <li>-- Associated Utility Vaults (4-digit DoD FAC - 8927)</li> <li>-- Associated Aircraft Pavement Shoulder (4-digit DoD FAC - 1165)</li> </ul> </li> <li>- Airfield Aprons (3-digit DoD Basic Category - 113)                         <ul style="list-style-type: none"> <li>-- Associated Airfield Pavement Lighting (4-digit DoD FAC - 1361)</li> <li>-- Associated Utility Vaults (4-digit DoD FAC - 8927)</li> <li>-- Associated Aircraft Pavement Shoulder (4-digit DoD FAC - 1165)</li> </ul> </li> <li>- Compass Calibration Pad, Surfaced (4-digit DoD FAC - 1161)                         <ul style="list-style-type: none"> <li>-- Associated Airfield Pavement Lighting (4-digit DoD FAC - 1361)</li> <li>-- Associated Utility Vaults (4-digit DoD FAC - 8927)</li> <li>-- Associated Aircraft Pavement Shoulder (4-digit DoD FAC - 1165)</li> </ul> </li> <li>- Aircraft Washing Pad, Surfaced (4-digit DoD FAC - 1163)                         <ul style="list-style-type: none"> <li>-- Associated Airfield Pavement Lighting (4-digit DoD FAC - 1361)</li> <li>-- Associated Utility Vaults (4-digit DoD FAC - 8927)</li> <li>-- Associated Aircraft Pavement Shoulder (4-digit DoD FAC - 1165)</li> </ul> </li> <li>- Miscellaneous Airfield Pavement, Surfaced (4-digit DoD FAC - 1164)</li> <li>- Aircraft Arresting System (6-digit Category Code - 116922)</li> </ul>
<u>Aircraft Fuel Dispensing Facilities:</u> <b>Interconnected</b> assets within the 3-digit DoD Basic Category “121”, to include associated components as listed to the right.	<ul style="list-style-type: none"> <li>- Aircraft Fueling Facility (4-digit DoD FAC - 1211)</li> <li>- Aircraft Defueling Facility (4-digit DoD FAC - 1212)</li> <li>- Aircraft Operating Fuel Storage (4-digit DoD FAC - 1241)</li> <li>- Other Operating Fuel Storage (4-digit DoD FAC - 1244)</li> <li>- POL Pipeline (4-digit DoD FAC - 1251)</li> <li>- POL Piping (4-digit DoD FAC - 1252)</li> <li>- Liquid Fuel Loading/Unloading Facility (4-digit DoD FAC - 1261)</li> <li>- POL Pump Station (4-digit DoD FAC - 1262)</li> <li>- Bulk Liquid Fuel Storage (4-digit DoD FAC - 4111)</li> <li>- Large Bulk Liquid Fuel Storage (4-digit DoD FAC - 4112)</li> <li>- Cut-and-Cover Bulk Liquid Fuel Storage (4-digit DoD FAC - 4113)</li> <li>- Small Bulk Storage (4-digit DoD FAC - 4114)</li> <li>- Miscellaneous Storage Tank and Basin (4-digit DoD FAC - 8951)</li> </ul>
<u>Marine Fuel Dispensing Facilities:</u> <b>Interconnected</b> assets within the 3-	<ul style="list-style-type: none"> <li>- Marine Fueling Facility (4-digit DoD FAC - 1221)</li> <li>- Marine Operating Fuel Storage (4-digit DoD FAC - 1242)</li> </ul>

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<b>Networked Facility</b>	<b>Networked Facility Components</b> <i>(Those which are <b>interconnected</b> within the networked facility) Note: FAC = Facility Analysis Category</i>
digit DoD Basic Category “122”, to include associated components as listed to the right.	<ul style="list-style-type: none"> <li>- Other Operating Fuel Storage (4-digit DoD FAC - 1244)</li> <li>- POL Pipeline (4-digit DoD FAC – 1251)</li> <li>- POL Piping (4-digit DoD FAC - 1252)</li> <li>- Liquid Fuel Loading/Unloading Facility (4-digit DoD FAC - 1261)</li> <li>- POL Pump Station (4-digit DoD FAC - 1262)</li> <li>- Bulk Liquid Fuel Storage (4-digit DoD FAC - 4111)</li> <li>- Large Bulk Liquid Fuel Storage (4-digit DoD FAC - 4112)</li> <li>- Cut-and-Cover Bulk Liquid Fuel Storage (4-digit DoD FAC - 4113)</li> <li>- Small Bulk Storage (4-digit DoD FAC - 4114)</li> <li>- Miscellaneous Storage Tank and Basin (4-digit DoD FAC - 8951)</li> </ul>
<u>Land Vehicle Fuel Dispensing Facilities:</u> <b>Interconnected</b> assets within the 3-digit DoD Basic Category “123”, to include associated components as listed to the right.	<ul style="list-style-type: none"> <li>- Vehicle Fueling Facility (4-digit DoD FAC - 1231)</li> <li>- Vehicle Operating Fuel Storage (4-digit DoD FAC - 1243)</li> <li>- Other Operating Fuel Storage (4-digit DoD FAC - 1244)</li> <li>- POL Pipeline (4-digit DoD FAC - 1251)</li> <li>- POL Piping (4-digit DoD FAC - 1252)</li> <li>- Liquid Fuel Loading/Unloading Facility (4-digit DoD FAC - 1261)</li> <li>- POL Pump Station (4-digit DoD FAC - 1262)</li> <li>- Bulk Liquid Fuel Storage (4-digit DoD FAC - 4111)</li> <li>- Large Bulk Liquid Fuel Storage (4-digit DoD FAC - 4112)</li> <li>- Cut-and-Cover Bulk Liquid Fuel Storage (4-digit DoD FAC - 4113)</li> <li>- Small Bulk Storage (4-digit DoD FAC - 4114)</li> <li>- Miscellaneous Pump Station (4-digit DoD FAC - 8924)</li> <li>- Miscellaneous Storage Tank and Basin (4-digit DoD FAC - 8951)</li> </ul>
<u>Communication Lines:</u> <b>Interconnected</b> assets within the 3-digit DoD Basic Category “135”, to include associated components as listed to the right.	<ul style="list-style-type: none"> <li>- Communication Lines (4-digit DoD FAC - 1351)</li> <li>- Associated Utility Vaults (4-digit DoD FAC - 8927)</li> <li>- Associated Utility Tunnels (4-digit DoD FAC - 8931)</li> </ul>
<u>Electrical Power:</u> <b>Interconnected</b> assets within the 2-digit DoD Category Group “81”, to include associated components as listed to the right.	<ul style="list-style-type: none"> <li>- Electrical Power Distribution Line, Overhead (4-digit DoD FAC - 8121)</li> <li>- Exterior Lighting, Pole (4-digit DoD FAC - 8122)</li> <li>- Electrical Power Distribution Line, Underground (4-digit DoD FAC - 8123)</li> <li>- Electric Power Substation (4-digit DoD FAC - 8131)</li> <li>- Electric Power Switching Station (4-digit DoD FAC - 8132)</li> <li>- Electric Power Transformers (4-digit DoD FAC - 8133)</li> <li>- Associated Utility Vaults (4-digit DoD FAC - 8927)</li> <li>- Associated Utility Tunnels (4-digit DoD FAC - 8931)</li> <li>- Exclude all Electric Power Source assets (3-digit DoD Basic Category - 811)</li> </ul>

## ATTACHMENT 1

## Planning and Programming Built Infrastructure Projects

<b>Networked Facility</b>	<b>Networked Facility Components</b> <i>(Those which are <b>interconnected</b> within the networked facility) Note:</i> <i>FAC = Facility Analysis Category</i>
<u>Heat Transmission and Distribution Lines:</u> <b>Interconnected</b> assets within the 3-digit DoD Basic Category “822”, to include associated components as listed to the right.	<ul style="list-style-type: none"> <li>- Heat Distribution Line (4-digit DoD FAC - 8221)</li> <li>- Miscellaneous Pump Station (4-digit DoD FAC - 8924)</li> <li>- Associated Utility Tunnels (4-digit DoD FAC - 8931)</li> <li>- Associated Utility Channels (4-digit DoD FAC - 8932)</li> </ul>
<u>Heat Gas Transmission:</u> <b>Interconnected</b> assets within the 3-digit DoD Basic Category “824”, to include associated components as listed to the right.	<ul style="list-style-type: none"> <li>- Heat Gas Storage (4-digit DoD FAC - 8232)</li> <li>- Heat Gas Distribution Line (4-digit DoD FAC - 8241)</li> </ul>
<u>Chilled Water (Air Conditioning) Transmission and Distribution Lines:</u> <b>Interconnected</b> assets within the 3-digit DoD Basic Category - 827”, to include associated components as listed to the right.	<ul style="list-style-type: none"> <li>- Chilled Water and Refrigerant Distribution Line (4-digit DoD FAC - 8271)</li> <li>- Miscellaneous Pump Station (4-digit DoD FAC - 8924)</li> <li>- Associated Utility Tunnels (4-digit DoD FAC - 8931)</li> <li>- Associated Utility Channels (4-digit DoD FAC - 8932)</li> </ul>
<u>Sewage and Industrial Waste Treatment and Disposal:</u> <b>Interconnected</b> assets within the 3-digit DoD Basic Category “831”, to include associated components as listed to the right.	<ul style="list-style-type: none"> <li>- Water Separation Facility (4-digit DoD FAC - 8313)</li> <li>- Septic Tank and Drain Field (4-digit DoD FAC - 8314)</li> <li>- Septic Lagoon and Settlement Ponds (4-digit DoD FAC - 8315)</li> <li>- Sewage Lift Stations (4-digit DoD FAC - 8316)</li> <li>- Sewer and Industrial Waste Line (4-digit DoD FAC - 8321)</li> <li>- Associated Utility Tunnels (4-digit DoD FAC - 8931)</li> <li>- Associated Utility Channels (4-digit DoD FAC - 8932)</li> <li>- <b>Exclude</b> all Sewage Treatment assets (4-digit DoD FAC - 8311)</li> <li>- <b>Exclude</b> all Industrial Waste Treatment assets (4-digit DoD FAC - 8312)</li> <li>- <b>Exclude</b> all Water Separation Facility assets (4-digit DoD FAC - 8313)</li> <li>- <b>Exclude</b> all Storm Drainage Disposal (6-digit Category Code - 871183)</li> </ul>
<u>Potable Water Distribution System:</u> <b>Interconnected</b> assets within the 3-digit DoD Basic Category “842”, to include associated components as listed to the right.	<ul style="list-style-type: none"> <li>- Water Storage, Potable (4-digit DoD FAC - 8413)</li> <li>- Water Distribution Line, Potable (4-digit DoD FAC - 8421)</li> <li>- Water Pump Facility, Potable (4-digit DoD FAC - 8422)</li> <li>- Associated Utility Tunnels (4-digit DoD FAC - 8931)</li> <li>- Associated Utility Channels (4-digit DoD FAC - 8932)</li> </ul>
<u>Fire Protection Water Facilities:</u> <b>Interconnected</b> assets within the 3-digit DoD Basic Category “843”, to include associated components as listed to the right.	<ul style="list-style-type: none"> <li>- Water Distribution Line, Fire Protection (4-digit DoD FAC - 8432)</li> <li>- Water Impoundment, Fire Protection (4-digit DoD FAC - 8433)</li> <li>- Water Pump Facility, Fire Protection (4-digit DoD FAC - 8434)</li> <li>- Water Tank, Fire Protection (4-digit DoD FAC - 8435)</li> <li>- Associated Utility Tunnels (4-digit DoD FAC - 8931)</li> <li>- Associated Utility Channels (4-digit DoD FAC - 8932)</li> <li>- <b>Exclude</b> all Water Source, Fire Protection assets (4-digit DoD FAC - 8431)</li> </ul>

## ATTACHMENT 1

## Planning and Programming Built Infrastructure Projects

<b>Networked Facility</b>	<b>Networked Facility Components</b> (Those which are <b>interconnected</b> within the networked facility) <b>Note:</b> <i>FAC = Facility Analysis Category</i>
<u>Non-potable Water Distribution System:</u> <b>Interconnected</b> assets within the 3-digit DoD Basic Category “845”, to include associated components as listed to the right.	<ul style="list-style-type: none"> <li>- Water Storage, Non-potable (4-digit DoD FAC - 8442)</li> <li>- Water Distribution Line, Non-potable (4-digit DoD FAC - 8451)</li> <li>- Water Pump Facility, Non-potable (4-digit DoD FAC - 8452)</li> <li>- Associated Utility Tunnels (4-digit DoD FAC - 8931)</li> <li>- Associated Utility Channels (4-digit DoD FAC - 8932)</li> </ul>
<u>Roads, Bridges, and Tunnels:</u> <b>Interconnected</b> assets within the 3-digit DoD Basic Category “851”, to include associated components as listed to the right.	<ul style="list-style-type: none"> <li>- Road, Surfaced (4-digit DoD FAC - 8511)</li> <li>- Vehicle Bridge (4-digit DoD FAC - 8513)</li> <li>- Vehicular Tunnel (4-digit DoD FAC - 8514)</li> <li>- Traffic Control Signals (4-digit DoD FAC - 8541)</li> <li>- Vehicle Parking, Surfaced assets (4-digit DoD FAC - 8521) [<b>Exclude</b> those serving a single building]</li> <li>- Vehicle Parking and Staging Area, Unsurfaced assets (4-digit DoD FAC - 8522) [<b>Exclude</b> those serving a single building]</li> <li>- Vehicle Staging Area, Surfaced assets (4-digit DoD FAC - 8523) [<b>Exclude</b> those serving a single building]</li> <li>- Miscellaneous Paved Area assets (4-digit DoD FAC - 8526) [<b>Exclude</b> those serving a single building]</li> <li>- <b>Exclude</b> all Driveway assets (6-digit Category Code - 851145)</li> <li>- <b>Exclude</b> all Road, Unsurfaced assets (4-digit DoD FAC - 8512)</li> </ul>
<u>Sidewalks and Other Pavements:</u> <b>Interconnected</b> assets within the 3-digit DoD Basic Category “852”, to include associated components as listed to the right.	<ul style="list-style-type: none"> <li>- Sidewalk and Walkway (4-digit DoD FAC - 8524)</li> <li>- Pedestrian Bridge (4-digit DoD FAC - 8525)</li> <li>- <b>Exclude</b> all Vehicle Parking, Surfaced assets (4-digit DoD FAC - 8521)</li> <li>- <b>Exclude</b> all Vehicle Parking and Staging Area, Unsurfaced assets (4-digit DoD FAC - 8522)</li> <li>- <b>Exclude</b> all Vehicle Staging Area, Surfaced assets (4-digit DoD FAC - 8523)</li> <li>- <b>Exclude</b> all Miscellaneous Paved Area assets (4-digit DoD FAC - 8526)</li> </ul>
<u>Railroad Tracks:</u> <b>Interconnected</b> assets within the 3-digit DoD Basic Category “860”, to include associated components as listed to the right.	<ul style="list-style-type: none"> <li>- Railroad Track (4-digit DoD FAC - 8601)</li> <li>- Railroad Bridge (4-digit DoD FAC - 8611)</li> </ul>
<u>Grounds Drainage:</u> <b>Interconnected</b> assets within the 3-digit DoD Basic Category “871”, to include associated components as listed to the right.	<ul style="list-style-type: none"> <li>- Storm Drainage (4-digit DoD FAC - 8711)</li> <li>- Retaining Structure assets (4-digit DoD FAC - 8712) [<b>Note:</b> only those contributing to grounds drainage]</li> <li>- Grounds Drainage Dams (4-digit DoD FAC - 8713)</li> <li>- Levees and Dikes for Ground Drainage (4-digit DoD FAC - 8714)</li> <li>- Storm Water Ponds (4-digit DoD FAC - 8715)</li> <li>- Sewer and Industrial Waste Line (4-digit DoD FAC - 8715)</li> <li>- Storm Drainage Disposal (6-digit Category Code - 871183)</li> </ul>

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Planning and Programming Built Infrastructure Projects

<p><b>Networked Facility</b></p>	<p><b>Networked Facility Components</b> (Those which are <b>interconnected</b> within the networked facility) <b>Note:</b> FAC = Facility Analysis Category</p>
	<ul style="list-style-type: none"> <li>- Sewer and Industrial Waste Line (4-digit DoD FAC – 8715) [<b>Note:</b> only those contributing to grounds drainage]</li> <li>- Miscellaneous Pump Station (4-digit DoD FAC - 8924)</li> </ul>
<p><u>Grounds Fencing, Gates, and Guard Towers: <b>Interconnected</b> assets within the 3-digit DoD Basic Category “872”, to include associated components as listed to the right.</u></p>	<ul style="list-style-type: none"> <li>- Boundary Fence and Wall (4-digit DoD FAC - 8721)</li> <li>- Security Fence (4-digit DoD FAC - 8722)</li> <li>- Security Guard Tower (6-digit Category Code - 872845) [<b>Note:</b> These towers must be integrated into the perimeter fence or directly/solely employed at the installation perimeter.]</li> <li>- Security Police Entry Control Building (6-digit Category Code - 730837)</li> <li>- Access Control Facility (6-digit Category Code - 730839)</li> <li>- Visitor Control Center (6-digit Category Code – 730832)</li> <li>- Overhead Protection (6-digit Category Code - 145921) [<b>Note:</b> This only pertains to self-supporting structures providing overhead to Airmen and Guardians directly supporting entry control points.]</li> </ul> <p>Additionally, the following are also included in the <u>Grounds Fencing, Gates, and Guard Towers Networked Facility</u> for the area directly supporting the respective controlled areas entry control points. Reference Figure A2.1 below and the US Army Military Surface Deployment and Distribution Command Transportation Engineering Agency Pamphlet 55-15, <i>Traffic and Safety Engineering for Better Entry Control Facilities</i>.</p> <ul style="list-style-type: none"> <li>- Road, Surfaced (4-digit DoD FAC - 8511)</li> <li>- Traffic Control Signals (4-digit DoD FAC - 8541)</li> <li>- Vehicle Parking, Surfaced assets (4-digit DoD FAC - 8521)</li> <li>- Vehicle Parking and Staging Area, Unsurfaced assets (4-digit DoD FAC - 8522)</li> <li>- Vehicle Staging Area, Surfaced assets (4-digit DoD FAC - 8523)</li> <li>- Miscellaneous Paved Area assets (4-digit DoD FAC - 8526)</li> <li>- <b>Exclude</b> all Driveway assets (6-digit Category Code - 851145)</li> <li>- <b>Exclude</b> all Road, Unsurfaced assets (4-digit DoD FAC - 8512)</li> </ul> <p><b>Note:</b> An installation may have more than one <u>Grounds Fencing, Gates, and Guard Towers Networked Facility</u>. For example: <u>The main Networked Facility is the exterior perimeter fence and entry gates. This network should also include the interior airfield fence and gates that ARE connected to the perimeter fence. The second Networked Facility maybe the Grounds Fencing, Gates, and Guard Towers network around a specific facility or compound inside the installation (i.e., Korea Air Operations Center, CENTCOM Headquarters, etc.) This network value</u></p>

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Planning and Programming Built Infrastructure Projects

<p><b>Networked Facility</b></p>	<p><b>Networked Facility Components</b>  <i>(Those which are <b>interconnected</b> within the networked facility) Note:</i>  <i>FAC = Facility Analysis Category</i></p>
	<p><u>shall not be combined with the exterior perimeter fence Networked Facility.</u></p>
<p><u>Installation Gas Distribution Line:</u>  <b>Interconnected</b> assets within the 4-digit DoD Facility Analysis Category “8930”, to include associated components as listed to the right.</p>	<p>- Installation Gas Distribution Line (4-digit DoD FAC - 8930)</p>

**\*Figure A2.1 Added. Entry Control Facilities Limits for Grounds Fencing, Gates, and Guard Towers Networked Facilities**

Added. Facility component contained in the Approach Zone, Access Control Zone or Response Zone are considered part of the Networked Facilities based on category codes defined in Table A2.1. This figure is from the US Army Military Surface Deployment and Distribution Command Transportation Engineering Agency Pamphlet 55-15, *Traffic and Safety Engineering for Better Entry Control Facilities*.



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Planning and Programming Built Infrastructure Projects

Zone	Location	Goals
<b>Safety</b>	Extends in all directions beyond passive and active barriers.	Protect assets and personnel from explosions.
<b>Approach</b>	Installation boundary to a point just before the ID checkpoint.	Reduce speed, sort vehicles, provide stacking room, identify potential threats.
<b>Access Control</b>	A point just before and after the ID checkpoint.	Identify vehicles and personnel; provide surveillance, random inspection, visitor processing, and rejection capabilities.
<b>Response</b>	A point just after the ID checkpoint to the active vehicle barriers.	Provide measures to react to and contain a threat.

  

**Attachment 5  
Funded And Unfunded Costs**

\*A5.1.7.5. Changed. SIOH is generally used to pay for U.S. Army Corps of Engineers (USACE) or the Naval Facilities Engineering Command (NAVFAC) execution for design and construction services. Air Force execution (design and construction) and contracting, and some OCONUS contracting (e.g., Republic of Korea lead contracting agency for non-MILCON is the Contracting Support Brigade) do not qualify for SIOH. For SIOH performed by USACE or NAVFAC refer to the applicable agent’s district office for current rates and note the reference in Block 11 of the DD Form 1391. Ensure costs included as SIOH are among those listed in **Paragraph 2.9** See AF/A4C DD Form 1391 preparation business rules for guidance about stating the SIOH cost in the DD Form 1391.

A5.1.7.6. Changed. Title II services costs are typically included in SIOH. When additional service is required above normal SIOH, it must be added as a separate line item in Block 9. **(T-1)** Do not title these services as "Title II Services". Programmers must specify what the services are. Provide justification for additional services in Block 11, **ADDITIONAL. (T-1)**

**BY ORDER OF THE SECRETARY  
OF THE AIR FORCE**

**DEPARTMENT AIR FORCE  
INSTRUCTION 32-1020**



**18 DECEMBER 2019**

*Incorporating Change 1, 19 JANUARY 2022*

**Civil Engineering**

**PLANNING AND PROGRAMMING  
BUILT INFRASTRUCTURE PROJECTS**

**COMPLIANCE WITH THIS PUBLICATION IS MANDATORY**

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This instruction implements Air Force Policy Directive (AFPD) 32-10, *Installations and Facilities*, and AFPD 34-1, *Air Force Services*, and establishes an asset management framework to deliver common levels of service for civil engineering activities. It provides guidance and instruction for planning and programming and obtaining approval for appropriated fund and nonappropriated fund maintenance, repair, and construction projects. This instruction applies to all Department of the Air Force civilian employees and uniformed members including the Air Force Reserve and Air National Guard. To ensure a full understanding of the process of providing maintenance, repair, and construction support to real property, users of this instruction should be familiar with other Air Force 32-(Civil Engineer) and 65-(Budget) series publications. Department of the Air Force Manual (DAFMAN) 65-605, Volume 1, *Budget Guidance and Technical Procedures*, is particularly important for determining funded and unfunded costs for all projects. Ensure all records generated as a result of processes prescribed in this publication adhere to Air Force Instruction 33-322, *Records Management and Information Governance Program*, and are disposed in accordance with the Air Force Records Disposition Schedule, which is located in the Air Force Records Information Management System. Refer recommended changes and questions about this publication to the Office of Primary Responsibility using AF Form 847, *Recommendation for Change of Publication*; route AF Forms 847 from the field through Major Command (MAJCOM) publications or forms managers. MAJCOMs may supplement this

instruction to include command-unique requirements. Waiver authorities are identified with a Tier (“T-0, T-1, T-2, and T-3”) number following the compliance statement. See Department of Air Force Instruction (DAFI) 33-360, *Publications and Forms Management*, Table 1.1 for a description of the authorities associated with the Tier numbers. Submit requests for waivers through the chain of command to the appropriate Tier waiver approval authority, or alternately, to the requestor’s commander for non-tiered compliance items. The use of the name or mark of any specific manufacturer, commercial product, commodity, or service in this publication does not imply endorsement by the Air Force. Compliance with Attachments **1, 2, 4, and 5** in this publication is mandatory. **Attachment 3** is the Certificate of Compliance for Critical Planning Actions template. This template is going to be dynamic, so this publication does not mandate this exact template. AF/A4C will post the recommended and updated form for use by the field and will communicate updates.

### **SUMMARY OF CHANGES**

This interim change revises AFI32-1020, *Planning and Programming Built Infrastructure Projects*, dated 18 December 2019. This IC (1) updates the following requirements: Certificate of Compliance, maintaining a project management database, applicability of antiterrorism measures under Unified Facilities Criteria (UFC) 4-010-01, *DoD Minimum Antiterrorism Standards for Buildings*, guidance for programming Sensitive Compartmented Information Facilities, programming guidance for aircraft sunshades, programming of pump houses as a component of an associated building, requirement to use Air Force standard facility designs, guidance for programming contingency on Facility Sustainment, Restoration, and Modernization (FSRM) projects, the distinction of sustainment vs. restoration and modernization, 14-day notification requirement for certain repair projects, re-approval requirements for Unspecified Minor Military Construction projects, the definition of Air Force project management database, guidance for funding for cleanup of environmental contamination, projects to improve already-improved surfaces, system owner involvement in alteration of privatized systems; (2) defines allowable use of Working Capital Funds for certain minor construction, responsibility for planning actions, requirements for cost estimator and reviewer qualifications, data standards and business rules for facilities projects, definition of failed facilities, programming guidance for Energy Resilience and Conservation Investment Program, Certificate of Compliance requirements for Wing Safety coordination, facility conversion, and basing action, mission growth and personnel increases and networked facilities; (3) adds guidance for Cybersecurity of Civil Engineer Control systems; (4) explaining capitalization, incorporates demolition guidance; (5) updates guidance for programming communications cabling; (6) adds relocatable facility guidance; (7) adds Planning Charrette Report guidance. A margin bar (|) and asterisk (\*) indicates newly revised material.

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## Chapter 1

### INTRODUCTION

**1.1. Overview.** This instruction establishes guidance and provides guidance on planning and programming cost-effective appropriated fund and nonappropriated fund (NAF) maintenance, repair, and construction projects for real property facilities, collectively referred to as “built infrastructure projects,” in compliance with referenced and applicable law, and Department of Defense (DoD) and Air Force guidance. NAF projects are those funded with monies not appropriated by Congress, such as private donations, Army and Air Force Exchange Services (AAFES) dividends, Defense Commissary Agency (DeCA) surcharges, and revenue generated from Air Force Services Directorate morale, welfare and recreation (MWR) or lodging activities. Construction on Air Force installations funded through foreign military sales is a distinct project category subject to special planning and programming requirements discussed in this Instruction. Planning and programming of military family housing is addressed in AFI 32-6000, *Housing Management*. See AFI 34-205, *Services Nonappropriated Fund Facility Projects*, for specific guidance on identifying, developing, validating, designing and funding NAF maintenance, repair and construction projects through the installation, the Air Force MWR Fund, the Air Force Base Capital Improvement Fund (AFBCIF) and the Air Force Lodging Fund.

**1.2. Roles and Responsibilities.** Organizations at all levels are responsible for employing a sustainable asset management approach while performing the activities described in this instruction.

1.2.1. Assistant Secretary of the Air Force (Installations, Environment and Energy) (SAF/IE). As delegated in Headquarters Air Force Mission Directive (MD) 1-18, *Assistant Secretary of the Air Force (Installations, Environment and Energy)*, SAF/IE is responsible for providing guidance, direction and oversight with respect to Air Force built infrastructure and executes built infrastructure-related statutory authorities as referenced in MD 1-18.

1.2.2. Secretary of the Air Force, Administrative Assistant (SAF/AA). Acts as a Major Command (MAJCOM) representative for Field Operating Agencies (FOA) that report to elements of the Headquarters Air Force (HAF), primarily by gathering FOA requirements and ensuring their consideration in annual planning, programming, budgeting, and execution (PPB&E) processes. For example, with respect to project planning and programming, SAF/AA gathers annual FOA Military Construction (MILCON) requirements and submits those requirements to Air Force Installation and Mission Support Center (AFIMSC) for consideration at the annual MILCON Working Group.

1.2.3. Director of Civil Engineers (AF/A4C). Provides implementing guidance and oversight for built infrastructure programs and facilities investment. Advocates for Civil Engineer portfolio resources through the Air Force Corporate Structure, Office of the Secretary of Defense (OSD), Office of Management and Budget (OMB), and Congress.

1.2.4. Director of Services (AF/A1S). Provides oversight for facility investments and programs sourced by nonappropriated funds (NAF) through trend analyses and recommends guidance revisions. Advocates NAF resource allocation and exercises oversight over approved funding to ensure use is in accordance with authorized parameters of the NAF construction program.

1.2.5. Air Force Installation and Mission Support Center (AFIMSC). Manages and oversees the planning, programming, budgeting, and execution processes and deliverables for installation and mission support capabilities. Serves as the single intermediate-level organization providing installation and mission support oversight capabilities to MAJCOMs or Direct Reporting Units (DRU) and their subordinate organization and installations. Builds and advocates for budgets to support maintenance, repair, and construction projects.

1.2.6. Air Force Civil Engineer Center (AFCEC). Provides assistance to installations and MAJCOMs for the identification and justification of facility projects. Oversees the process to develop a facility requirement in to a fully programmed project. Ensures project documentation is completed and compliant. Assist AFIMSC/RMP with preparing projects for presentation to the MILCON Working Group. Oversees the process to prepare project justification documents (DD Form 1391, *FY\_\_ Military Construction Project Data*) for submission in the Budget Estimation Submission and Justification Book. Provides requirement development and definition capability to include technical support. Executes the FSRM centralized funding program through the Comprehensive Asset Management Plan (CAMP) process, issuance of the Construction Tasking Order (CTO) and issuance of funds through execution. Publishes business rules for management of the program. Receives and reviews DD Form 1391 programming packages for HHQ approval. The AFCEC Director (AFCEC/CL) approves projects within authority as delegated by AF/A4C or provides coordination for projects requiring a higher authority approval.

1.2.7. Air Force Services Center (AFSVC). Oversees and develops procedures to implement the Air Force NAF Facilities Program. Validates requirements identified by bases. Provides technical clarification and functional assistance to installations on NAF capital improvement issues.

1.2.8. Major Commands, Field Operating Agencies, and Direct Reporting Units. Prioritize and advocate for direct mission related requirements (FSRM – Facility Sustainment, Restoration and Modernization, MILCON – Military Construction, and NAF – Nonappropriated Funds) in accordance with referenced and applicable public law, DoD policy, and Air Force policy and guidance. Use asset management principles and understanding of mission related requirements and impacts to prioritize requirements provided by their installations or subordinate units.

1.2.9. Installation Commanders. Ensure existing facilities are used economically and efficiently and that excess space is evaluated for demolition. Identify, plan, and program facility requirements to support assigned missions provides the installation's input for priority of facility requirements to the MAJCOM for consideration. Are responsible and accountable for ensuring all work accomplished on Air Force-owned or controlled real property is properly authorized and funded in accordance with referenced and applicable laws, policies, and regulations and project approval authority within limits as delegated by AFCEC/CL.

1.2.10. Base Civil Engineer (BCE). Accomplishes required planning actions, programming actions, compliance items, and certifications on behalf of the installation commander for every built infrastructure requirement. Retains documentation for future reference and project management.



1.2.11. The Defense Health Agency-Facilities Enterprise (DHA-FE) provides Defense Health Program funds for maintenance, repair, and construction of medical facilities. DHA-FE provides technical and functional design guidance for medical facilities. DHA-FE also provides planning, programming, and budgetary guidance, direction, and oversight for using appropriated funds for medical facility repair, maintenance, and construction projects.

1.2.12. Air Force Reserve (AF/RE). Manages and oversees the planning, programming, budgeting, and execution processes for Air Force Reserve units and provides data to AFIMSC for consolidation into Total Force submissions. Provides assistance to installations for the identification and justification of facility projects. Oversees the process to develop a facility requirement in to a fully programmed project. Ensures project documentation is completed and compliant for Air Force Reserve funded requirements. Prepares and submits the Air Force Reserve portion of military construction included the President's Budget. Advocates for the Air Force Reserve Military Construction Program through the Air Force Corporate Structure, OSD, OMB, and Congress.

1.2.13. Air Force Reserve (AFRC/A4). Review, validate, approve, prioritize, and advocate for direct mission related requirements (FSRM – Facility Sustainment, restoration and Modernization, MILCON – Military Construction, and NAF – Nonappropriated Funds) in accordance with public law, DoD policy, and Air Force guidance. Provides assistance to installations for the identification and justification of facility projects. Oversees the process to develop a facility requirement in to a fully programmed project. Ensures project documentation is completed and compliant for Air Force Reserve funded requirements. Use asset management principles and understanding of mission related requirements and impacts to prioritize requirements provided by their installations or subordinate units.

1.2.14. Air National Guard (NGB/A4). Manages and oversees the planning, programming, budgeting, and execution processes for Air National Guard units and provides data to AFIMSC for consolidation into Total Force submissions. Provides assistance to installations for the identification and justification of facility projects. Oversees the process to develop a facility requirement in to a fully programmed project. Ensures project documentation is completed and compliant for Air National Guard funded requirements. Prepares and submits the Air National Guard portion of military construction included in the President's Budget. Advocates for the Air National Guard MILCON program through the National Guard Bureau, Air Force Corporate Structure, OSD, OMB, and Congress.

1.2.15. Headquarters Army and Air Force Exchange Services (AAFES). Determines and approves policies, plans, and programs pertaining to AAFES. Decides annual financial plans and goals; monitors, reviews, and recommends approval of construction projects. Submits project documentation to USAF and Congress when projects exceed AAFES approval thresholds. Plans, programs, designs and constructs AAFES projects. Coordinates with USAF on issues requiring APF.

1.2.16. Host, Tenant, and Supported Unit Responsibilities. The host prepares program documents, obtains required certifications, and provides BCE planning and programming services. The host prepares facility project packages requiring AF/A4C and SAF/IEE approval and Congressional notification. Air Reserve Components (ARC) will prepare and staff approval request packages for ARC-funded work. **(T-1)**. Tenants on Air Force installations will coordinate their approval request packages with the host. **(T-1)**.

1.2.17. Joint Basing. AF-led joint bases will comply with the policies in this Instruction. (T-1). On joint bases where the AF is the supported component, the supporting component's processes and procedures will take precedence unless otherwise specified in *Department of Defense Facilities Investment Supplemental Guidance for Implementing and Operating a Joint Base* or the installations Joint Base Memorandum of Agreement. (T-0).

**1.3. Legal Framework.** This section provides an overview of the statutory authorities that apply to the planning and programming of built infrastructure projects.

1.3.1. Authorization. By statute, the Air Force may carry out only those military construction projects that are authorized by law. Title 10 United States Code (USC) Section 2801 defines "military construction" as "any construction, development, conversion, or extension of any kind carried out with respect to a military installation, whether to satisfy temporary or permanent requirements, or any acquisition of land or construction of a defense access road (as described in section 210 of title 23)." A "military installation" includes any base or other activity under the jurisdiction of the Secretary of the Air Force, or under the operational control of the Secretary with respect to activities in foreign countries, without regard to the duration of the operational control. Together these provisions mean that virtually all appropriated-fund construction and repair projects must be based on a statutory authorization. The primary statutory authorities are the annual National Defense Authorization Acts and standing provisions in Title 10 of the United States Code. However, certain other statutory provisions may authorize military construction. Facility maintenance and NAF construction projects are not addressed by statute and are not treated as "military construction" for purposes of project authorization.

1.3.1.1. National Defense Authorization Act (NDAA). Congress authorizes specific proposed Air Force, Air Force Reserve and Air National Guard (ANG) military construction projects in Division B (entitled the "Military Construction Authorization Act") of the annual National Defense Authorization Acts. Congress usually authorizes the appropriation of MILCON funds for such projects. However, Congress can authorize specific projects using other appropriations, such as Research, Development, Test and Evaluation (RDT&E) under the Defense Laboratory Modernization Pilot Program created by Section 2803 of Public Law 114-92, *National Defense Authorization Act for Fiscal Year 2016*. Planning and programming are necessary prerequisites to the inclusion of specific military construction projects in the annual President's Budget Request and corresponding NDAA. In the NDAA, Congress also authorizes lump-sum MILCON appropriations for Air Force, Air Force Reserve and ANG unspecified minor construction under Title 10 of the United States Code, as discussed below.

1.3.1.2. Title 10 United States Code Authorities. Title 10 of the United States Code includes several non-project-specific military construction and facility repair authorities. Proper planning and programming is necessary to ensure compliance with these statutes. The entire United States Code Reference Library is available through the Office of the Law Revision Council at <http://U.S.C.ode.house.gov/>.

1.3.1.2.1. Unspecified Minor Construction. (10 USC § 2805, *Unspecified minor construction*) This is the most frequently used non-project-specific construction authority addressed in this Instruction.

1.3.1.2.1.1. This statute authorizes the Secretary of the Air Force to carry out unspecified minor military construction projects not otherwise authorized by law, using the lump-sum MILCON appropriation authorized in the annual NDAs as discussed above. An unspecified minor military construction project is one costing not more than the amount specified in 10 USC § 2805(a).

1.3.1.2.1.2. 10 USC § 2805 also authorizes the Secretary to carry out unspecified minor military construction projects costing not more than the amount specified in 10 USC § 2805(c) using funds available for operation and maintenance.

1.3.1.2.1.3. Additionally, 10 USC § 2805 authorizes the Secretary to carry out unspecified minor military construction projects for the revitalization and recapitalization of laboratories using funds available for operation and maintenance not more than the amount specified in 10 USC § 2805(d).

1.3.1.2.1.4. The above cost limits are subject to adjustment based on the area construction cost index for military construction published by DoD not to exceed the amount specified in 10 USC § 2805(f) within the US and its territories. The dollar limitations for a given fiscal year apply to all projects awarded for construction during that fiscal year. 10 USC § 2805 (b) and (d) state the congressional notification requirements. (See [Chapter 4](#) for additional information).

1.3.1.2.1.5. For the Air Force Reserve and Air National Guard, unspecified minor construction authority using funds available for operation and maintenance corresponding to 10 USC § 2805 is granted to the Secretary of Defense under 10 USC § 18233b, *Authority to carry out small projects with operation and maintenance funds*. This authority has been delegated to the Secretary of the Air Force under DoDI 1225.08, *Reserve Component (RC) Facilities Programs and Unit Stationing*.

1.3.1.2.2. Repair. (10 USC § 2811, *Repair of facilities*) This provision authorizes the Secretary to carry out facility repair projects using funds available for operation and maintenance. The statute defines a “repair project” as a project to restore a real property facility, system, or component to such a condition that it may effectively be used for its designated functional purpose, or a project to convert a real property facility, system, or component to a new functional purpose without increasing its external dimensions. The Secretary must notify Congress of a decision to approve a repair project with an estimated cost in excess of \$7.5 million and provide a report that includes: the justification for the project; if estimated repair cost exceeds 75% of the estimated cost of a military construction project to replace the facility, an explanation of why replacement is not in the best interests of the Government; and a description of any elements of construction included in the project. (T-0). (See [Chapter 3](#) for additional information).

1.3.1.2.3. Emergency Construction (10 USC § 2803, *Emergency construction*). This provision is used for projects vital to national security or for the protection of health, safety, or the quality of the environment, which are so urgent they cannot be deferred to the next MILCON submittal. (See [Chapter 5](#) for additional information).

1.3.1.2.4. Secretary of Defense Contingency Construction. (10 USC § 2804, *Contingency construction*) Use of this authority is rare. Projects should be considered for funding under authorities available to the Secretary of the Air Force before being considered for funding under the authority of the Secretary of Defense. Use of this authority does not require identification of funding from project cancellations or savings since limited appropriations are provided to the Secretary of Defense for this authority. (See [Chapter 5](#) for additional information)

1.3.1.2.5. Construction Authority in the Event of Declaration of War or National Emergency (10 USC § 2808, *Construction authority in the event of a declaration of war or national emergency*), The Secretary of Defense may authorize the services to undertake military construction projects not otherwise authorized by law. The Air Force may undertake these projects only within the amount of funds appropriated. The Secretary of Defense will provide guidance at the time this authority is needed. (See [Chapter 7](#) for additional information).

1.3.1.2.6. Restoration or Replacement of Damaged or Destroyed Facilities (10 USC § 2854, *Restoration or replacement of damaged or destroyed facilities*). 10 USC § 2854 provides authority to repair, restore or replace facilities damaged or destroyed by such events as fire, flood, wind, crashes, explosions, tornadoes, hurricanes, volcanoes, earthquakes, typhoons, blizzards, snow storms or a terrorism incident, etc. In 10 USC § 2854, “repair” and “restore” have the same meaning. (See [Chapter 7](#) for additional information).

1.3.1.2.7. Acquisition or construction of facilities and equipment for research and development contracts. (10 USC § 2353, *Contracts: acquisition, construction, or furnishing of test facilities and equipment*). This statute authorizes the use of RDT&E appropriations to acquire research, development, and test facilities that contractors need to fulfill RDT&E contracts. (See [Chapter 5](#) for additional information).

1.3.1.2.8. Use of Unspecified Minor Military Construction Projects to Revitalize and Recapitalize Defense Industrial Base Facilities (10 USC § 2208, *Working-capital funds*, paragraph (u)). This provision allows the Secretary to use a working capital fund to fund carry out an unspecified minor military construction project under 10 USC § 2805 for the revitalization and recapitalization of a defense industrial base facility owned by the United States and under the jurisdiction of the Secretary. A “defense industrial base facility” means any Department of Defense depot, arsenal, shipyard, or plant located within the United States. **(T-0)**. The limit of Section 2805(a)(2), subject to adjustment under Section 2805(f), applies. **(T-0)**. The Secretary must approve and notify the appropriate committees of Congress of the decision to use this authority. **(T-0)**. The project may be carried out only after a 14-day period beginning on the date the committees receive the notification. Projects costing less than the amount specified in 10 USC § 2805(c) and (f), \$2 million as of the publishing of this Instruction, are not subject to approval and notification requirements under this authority and may be carried out under authority in 10 USC § 2805(c). As of the publishing of the Interim Change to this Instruction, this authority expires September 30, 2023.

1.3.2. Appropriation. Statutory authorization alone is not sufficient to execute an appropriated-fund repair or construction project. Congress must also have appropriated the applicable funds through the annual appropriation acts, and there must be sufficient available, unobligated appropriate funds to execute the project.

1.3.3. The “Complete and Usable Facility” Requirement and Project Splitting. One of the most fundamental legal concepts in the planning and programming of all repair and construction projects is the requirement that a project must include all work necessary for a complete and usable new facility or a complete and usable improvement to an existing facility. The requirement is based on the statutory definition of military construction, but is considered a substantive rule of law intended to prevent project-splitting, which is dividing a project into segments to avoid full up-front funding or statutory cost limitations. Numerous requirements in this Instruction are intended to prevent project-splitting.

1.3.4. National Environmental Policy Act (NEPA). The Air Force implements the “National Environmental Policy Act (NEPA)”, (Public Law 91-190, 42 USC §§ 4321-4347) and the “President’s Council on Environmental Quality Regulations for Implementing the Procedural Provisions of the NEPA” (40 CFR Parts 1500 – 1508) through the “Environmental Impact Analysis Process” (EIAP) (32 Code Federal Regulation (CFR) Part 989, *Environmental Impact Analysis Process*). Part 989 provides procedures for the EIAP both within the United States and overseas. Procedures used in combination for environmental impact analysis of actions overseas are also contained in Executive Order (EO) 12114, *Environmental Effects Abroad of Major Federal Actions* and AFI 32-7091, *Environmental Management Outside the United States*, Chapter 5. The Air Force Form 813, *Request for Environmental Impact Analysis*, is the principal form adopted in the Air Force EIAP procedures. Issues reflected in AF Form 813 and related EIAP documentation may also be subsequently reflected in other adopted forms, to inform the purposes for which they were adopted (e.g., Forms 332, *Base Civil Engineer Work Request*, 1391, etc.). Commitment of resources cannot be made until the EIAP and related regulatory actions are complete. The Certificate of Compliance for Critical Planning Actions (**Attachment 3**) is the Air Force vehicle for ensuring that planning, programming and execution of built infrastructure projects complies with the EIAP and environmental laws. Consult AFI 32-1015, *Integrated Installation Planning*, and other 32-7000 series AFIs for associated policies on environmental protection, land use, and natural and cultural resources.

## Chapter 2

### PROJECT PLANNING AND PROGRAMMING

**2.1. Overview.** Project planning is the strategy and analysis which results in a built infrastructure requirement. Project planning results in preferred project alternatives to provide, operate, maintain, and protect facilities, infrastructure, and installations for effective mission support at the lowest life-cycle cost. These planning actions enable project programming, which is the process of documenting requirements and acquiring both the authority and the resources necessary to accomplish planned work. However, certain planning actions may continue into the programming phase. See also AFI 32-1015, for how project planning supports integrated on and off-installation planning.

2.1.1. Certificate of Compliance for Critical Planning Actions (CoC). Commanders will ensure installations complete a Certificate of Compliance, including signature by the BCE and first cross-functional commander above the Civil Engineer Squadron or Group, for every construction and repair project requiring HAF or higher-level approval. **(T-1)**. Approval request packages for projects requiring AFCEC, AFRC/A4, or NGB/A4 approval require a CoC signed by the BCE (or equivalent) ensuring the elements of the CoC were used to inform planning actions and requirements development of the project, though completion of the CoC items do not need to be documented or coordinated on the CoC. **(T-1)**. BCE signature on the CoC for projects to be approved by AFCEC, AFRC/A4, or NGB/A4 may be delegated no lower than a flight chief. **(T-1)**. For projects with costs requiring approval at the installation level, a CoC is not required, but planners and programmers are encouraged to consider the elements of a CoC for all projects. The planning results documented by the CoC should be approved by the installation Facilities Board.

2.1.2. Certificate of Compliance Review and Approval Process. For projects funded by the military construction appropriation, AFCEC Planning and Integration Directorate (AFCEC/CP), AFRC/A4, or NGB/A4 shall review the Certificate of Compliance and resolve any discrepancies with the BCE prior to submission to the MILCON Working Group or Unspecified Minor Military Construction (UMMC) Board. **(T-1)**. For repair or unspecified minor construction projects, AFCEC/CP, AFRC/A4, or NGB/A4 shall review the Certificate of Compliance and resolve any discrepancies with the BCE prior to submission for higher-level approval. **(T-1)**. The BCE shall retain the signed Certificate of Compliance in the project folder at the installation. **(T-1)**. Refer to Certificate of Compliance [Attachment 3](#).

**2.2. Responsibilities.** As specifically stated in appropriate and applicable guidance throughout this Instruction, the installation BCE with real property accountability shall ensure all facility work complies with referenced laws, codes, and standards (e.g., Unified Facilities Criteria [UFC], and AFIs). **(T-1)**. See [Paragraph 1.2.16](#) for programming considerations for host-tenant requirements and responsibilities. Projects must be planned and programmed to support current and future mission needs. For Troop Training Projects, the BCE with real property accountability or higher headquarters that have established real property accountability shall conduct planning and programming activities listed here within. **(T-2)**. For centrally managed projects, AFCEC shall provide oversight for these projects to ensure compliance with referenced and applicable laws, codes, and standards specifically stated where applicable throughout this Instruction. **(T-1)**.



2.2.1. BCE, through the installation and Community planners, is responsible for the proper documentation of initial planning efforts (draft DD Form 1391, draft documents that typically go on the continuation sheets, and draft Certificate of Compliance) for all MILCON requirements and for the advanced planning efforts (Customer Concept Documents (CCD), Requirements Documents (RD) and/or Planning Charrette Report (PCR) Level I efforts) for current mission requirements. **(T-1)**.

2.2.2. Weapons System Program Offices / MAJCOM Mission Teams are responsible for the proper documentation of advanced planning efforts (CCDs, RDs and/or PCR Level I efforts) for new mission requirements, with consultation provided by the local installation planners.

2.2.3. AFCEC is responsible for oversight of installation- and MAJCOM-level project planning and for preparation and proper documentation of PCR Level II efforts for all MILCON requirements.

**2.3. Requirements Identification and Definition.** For this Instruction, this stage is the analysis of conceptual planning and applying Asset Management principles prior to any particular project being conceived. The product of this should be a list of requirement solutions that align to strategy while balancing fiscal constraints. Installation needs to apply asset management principles as outlined in Civil Engineer (CE) strategic guidance and further detailed in AFIT training. AFIMSC, AFCEC, AFRC/A4 and NGB/A4 have further developed methods that illustrate how bases should identify and document requirements. The BCE will identify and document requirements in accordance with applicable asset management process. **(T-1)**. The BCE uses a variety of methods to identify requirements, including, but not limited to: projected mission changes; installation development plans; Asset Management Plans (AMP); space utilization surveys; sustainable infrastructure assessments; condition surveys (pavements, roofs, etc.); environmental compliance assessments, safety, security, laws, codes, regulations, design guides, and unified facilities criteria; energy conservation surveys and audits; and user-identified requirements. See DAFMAN 32-1084, *Standard Facility Requirements*, for guidance for determining space allocations for facilities and for evaluation of existing facilities. See Air Force Reserve Command Handbook (AFRCH) 32-1001, *Standard Facility Requirements*, for AFRC-occupied facilities, and Air National Guard Handbook (ANGH) 32-1084, *Facility Space Standards*, for Air National Guard (ANG)-occupied facilities.

**2.4. Development and Evaluation of Alternative Solutions.** With a defined requirement, the BCE determines: (1) solutions to provide, operate, maintain, and protect facilities, infrastructure, and installations for effective mission support at the lowest life-cycle cost to include sustainable design concepts (i.e. facility site, space allocation, facility orientation, energy and water sources); (2) technical engineering requirements; (3) work classification (See [Paragraph 2.5.1](#)), and (4) cost estimates. These actions enable project(s) development and programming.

2.4.1. Proposed work requires compliance with the National Environmental Policy Act (NEPA), prior to obligation of resources. The proponent shall be responsible for compliance with the Environmental Impact Analysis Process (EIAP). **(T-0)**. See also AFI 32-1015.



2.4.1.1. The proponent initiates the EIAP as early in the planning process as possible, by completing Section I on the AF Form 813, *Request for Environmental Impact Analysis Process*, and then submitting the signed (Block 6a) form to the host base Environmental Planning Function. The proponent will ensure all projects comply with 32 CFR Part 989 and that all supporting decisions are consistent with the results of the EIAP. **(T-0)**. The EIAP must be completed as early as possible in the design process but no later than design completion or award of a design build contract. **(T-1)**.

2.4.1.2. Emergency situations do not exempt the Air Force from complying with NEPA, prior to commitment of resources. In some situations, limited emergency response may take place while completing the EIAP (refer to 32 CFR Part 989 paragraph 34(b) and 40 CFR Part 1506, *Other Requirements on NEPA*, paragraph 11).

2.4.2. Facility Optimization. In accordance with the Air Force Infrastructure Investment Strategy, optimize the use and reuse of existing facility resources, divest failing and underutilized facilities, and offset new construction with conversion, consolidation, demolition, and divestment. Limit maintenance, repair, and construction work in facilities identified for disposal to the minimum required to ensure safety and security, to protect health and the environment, and to permit the facility to accomplish its mission. Installations shall evaluate existing assets and determine the most economical and effective means of satisfying facility needs. **(T-2)**. Consideration should be given to consolidating requirements into existing or “right-sized” facilities to optimize the Air Force physical plant.

2.4.3. Planning Determinations. With a defined requirement, the BCE determines: (1) solutions to provide, operate, maintain, and protect facilities, infrastructure, and installations for effective mission support at the lowest life-cycle cost to include sustainable design concepts (e.g., facility site, space allocation, facility orientation, energy and water sources); (2) technical engineering requirements; (3) work classification (see **Paragraph 2.5.1**), and (4) cost estimates. These actions enable project(s) development and programming. Existing built or natural assets should be used to the greatest extent possible to minimize new construction. Facilities that are inefficient or excess to requirements should be demolished when possible. Consider facility space utilization, asset operating costs, and asset condition when making planning considerations. The BCE ensures the project course of action selection and scope is in alignment with the installation and the Asset Management Program. **(T-2)**. For any project that requires alteration or modification of, connections to, or disconnections from, a privatized utility system, the BCE shall ensure the utility System Owner (SO) participates in planning, design, and construction of the project. **(T-1)**. The Requirements Definition & Programming Playbook (RD&P) provides elements to consider when defining and programming projects. The RD&P Playbook can be found on the CE Portal under the Playbooks menu in the Engineering Flight Portfolio Optimization list. The CE Portal is located at <https://usaf.dps.mil/teams/sites/10041/pages/default.aspx>

2.4.4. Planners and programmers must ensure each project provides a complete and usable facility or improvement to a facility. **(T-0)**. Additionally, programmers must ensure the bona fide need is not split to keep the project under the construction cost limit or approval thresholds. **(T-0)**. The entire requirement is subject to the appropriate statutory and policy limitations.

2.4.5. Project Phasing.

2.4.5.1. Specified Construction (MILCON). Phases must be complete and usable and can be independent projects. **(T-0)**. Specified construction only applies to MILCON projects authorized by Congress in an annual National Defense Authorization Act.

2.4.5.2. Unspecified Minor Construction. Unspecified minor construction projects may be phased as long as the total cost of all phases does not exceed the statutory cost limits for minor construction as specified in 10 USC § 2805. Phases are defined as being interdependent in achieving an overall requirement or objective, and are complete and usable on their own.

2.4.5.3. Repair. Per 10 USC § 2811, project approval must include all phases. **(T-0)**. For programming purposes, phases are defined as being interdependent in achieving an overall requirement or objective (e.g. renovating a facility, repairing a system, etc.) but must be complete and usable on their own. **(T-0)**. A requirement may be phased to minimize the impact of work on a facility's mission or for other reasons. Programmers shall not use the word 'phase' in project titles unless it meets this definition. **(T-1)**. Do not confuse the programming definition of "phases" with a project's construction "phases". For approval and notification threshold determination programmers must sum the cost of all phases of a project, and include all phases in project approval requests. **(T-0)**.

2.4.6. Project Splitting in Repair or Unspecified Minor Construction. Installations must not plan a requirement for partial completion with one project and the remainder of the requirement with a separate project. **(T-0)**. This applies to both construction and repair (or combination maintenance and repair) projects. Identify and program the total known or projected requirements as a single project. This determines the appropriate project approval level. This is true whether the projects are planned for simultaneous accomplishment or phased over a period of years. Programmers must not split projects to circumvent approval authorities, reporting requirements, building code, UFC, EIAP requirements, or programming policy. **(T-0)**.

2.4.7. MILCON Incremental Funding. Incremental funding is a single project with funding appropriated over multiple years. The Office of Management and Budget (OMB) Circular A-11, **Part 2**, Section 31.5 mandates fully funded MILCON projects in the President's Budget. Specifically, OMB Circular A-11, *Financial Reporting Requirements*, encourages phasing of large projects into complete and usable phases, with phases in multiple years, when feasible, in lieu of requesting incremental funding for projects. For large projects where phasing is not feasible, OMB approval is required prior to requesting incremental funding. Full authorization of incrementally funded projects is necessary in the first year of the budget cycle and appropriations should be requested over multiple years. If congress incrementally funds a project, the full balance of required funding must be requested in each subsequent year. **(T-0)**.

2.4.8. Economic Analysis and Project Value Assessment. A key step in the evaluation of alternatives is the cost and value comparison. A cost and value comparison is one consideration in determining the most appropriate solution to meet a repair or construction requirement. The optimal solution must be chosen within the context of the enterprise-wide funding environment. **(T-3)**. The preferred option or optimal engineering solution may not be the most affordable option that meets the requirement. Lifecycle costs must be considered as the cheapest option up-front may not be the best option over the long term. **(T-2)**.

2.4.8.1. Economic Analysis (EA). The economic analysis is a decision-making tool to help select the best course of action utilizing asset management principles, appropriate authorities and processes, and available funding. Economic analyses for facilities projects will be conducted and presented as a cost comparison using the four steps outlined in [Paragraph 2.4.8.1.1](#) As a decision-making tool the economic analysis must be conducted early in project development stage when comparing courses of action. **(T-1)**. An EA is one consideration in determining the most appropriate solution to meet a repair or construction requirement. The optimal solution must be chosen within the context of the enterprise-wide funding environment. **(T-2)**. The preferred option may not be the most affordable option that meets the requirement.

2.4.8.1.1. For facilities projects, project owners will present four levels of analysis:

2.4.8.1.1.1. Programmed amount. This captures the current estimate of project cost in the projected year of award. Programmed amount need to be based on a parametric estimate, at a minimum, and not the Guidance Unit Costs found in UFC 3-701-01, *DoD Facilities Pricing Guide*. It does not include intangible or weighted benefits.

2.4.8.1.1.2. Lifecycle cost. The second level of analysis captures the total lifecycle cost, converted to total cost in year of award. This includes all maintenance, repair, and recapitalization for the projected life of the facility. It does not include intangible or weighted benefits.

2.4.8.1.1.3. Other project factors. Detail other non-monetary factors that could affect decision-making efforts, i.e. siting locations that influence inter-office work capabilities such as maintenance functions needing to be located close together for work synergy.

2.4.8.1.1.4. Comparative analysis. If the mission owner desires, they may include a narrative benefit analysis as detailed in AFMAN 65-506, *Economic Analysis*.

2.4.8.1.2. Though cost comparison and value analysis should be completed for all work, in accordance with AFI 65-501, *Economic Analysis*, project justification based on an economic analysis is required when either: 1) the construction cost is greater than \$2M, 2) the repair cost is greater than \$2M and is greater than 75% of estimated cost of a construction project to replace the facility justification, or 3) per AF/A4C guidance, the estimated repair project cost exceeds \$20 million. **(T-1)**. If at any time in the life cycle of a project the cost of the project exceeds these thresholds, an EA, EA waiver, or cost analysis where appropriate must be accomplished. **(T-1)**. See [Paragraph 2.5.1](#) for work classification guidance.

2.4.8.1.3. When accomplishing an EA, programmers must demonstrate use of an acceptable cost estimating method for determining the estimated facility replacement cost: Parametric Cost Estimating System (PACES) cost estimate, Micro Computer Aided Cost Estimating System 2nd Generation (MII), or other method specified by the Life-Cycle Cost Estimate (LCCE) Subject Matter Experts (SME). **(T-1)**.

2.4.8.1.4. For repair projects, when the work is being accomplished in a networked facility, the estimated facility replacement cost includes the entire networked facility. See [Paragraph 2.7.23](#) for additional guidance on networked facilities.

- 2.4.8.1.5. BCEs must consult with AFCEC to submit an EA with all temporary facility acquisition requests. **(T-1)**.
- 2.4.8.1.6. SAF/FMCE is the EA waiver approval authority. In accordance with AFI 65-501, forward EA waiver requests to higher headquarters through the functional channel (e.g., Civil Engineering). The functional office at each level is responsible for obtaining FM coordination before forwarding to the next level.
- 2.4.8.1.7. If an EA is necessary for any work, programmers must ensure all higher headquarters staffing packages (e.g. repair and construction approval requests) include an EA or EA waiver. **(T-1)**.
- 2.4.8.1.8. When facility repair cost exceeds 75% of the replacement cost is because of lifecycle-cost-effective energy program improvements, the Building Lifecycle Cost analysis may be used in the EA justification. **(T-2)**.
- 2.4.8.1.9. When a repair project has been notified to congressional committees with a repair to replacement ratio of less than 75% and the ratio later exceeds 75%, re-notification to the committees is required before the project can continue. A completed EA, EA waiver, or cost comparison is required prior to re-notification.
- 2.4.8.1.10. AFCEC/CL, AFRC/A4, or NGB/A4 (or delegated approving official) must approve requests to perform facility repairs which exceed 75% of the estimated cost of a military construction project to replace the facility regardless of cost. **(T-2)**.
- 2.4.8.1.11. Facilities on National Register of Historic Places. Facilities eligible for listing or listed on the National Register of Historic Places are not an automatic exception to being considered for replacement. Exceptions may be requested and require documentation from the State Historic Preservation Office noting that the repairs for the facility in question must be undertaken as proposed and the facility should not be demolished.**(T-0)**. Even with this documentation, an exception is not assured.
- 2.4.8.2. NAF Project Validation Assessment (PVA). A PVA validates all NAF maintenance, repair, and construction projects costing \$500,000 and greater. See AFI 34-205, for additional guidance. The installation commander and Air Force Services Center (AFSVC) must ensure a PVA is accomplished prior to project submission. **(T-2)**. A PVA is the process used to formally collect data, document facts, determine projected demand, and analyze results to help make a decision. It verifies customer demand, analyzes site and collocation possibilities, and calculates financial viability. A PVA considers alternatives, weighs new construction versus addition or alteration, proposes acquisition resources and methods (such as design-build, design-bid- build, etc.) and analyzes competition to determine project requirements.

## 2.5. Work Classification, Demolition, and Capitalization.

2.5.1. Work classification. Programmers must classify work as maintenance, repair, or construction. **(T-0)**. Demolition is not a work classification (see **Paragraph 2.5.2**). Project approval levels, and appropriate funding sources vary with work classification. See **Chapter 3** for details on maintenance and repair and **Chapter 4** for details on unspecified minor construction. **Note:** [maintenance, repair, and construction are work classifications, and are not to be confused with fund source categories such as Sustainment, Restoration, Modernization, NAF, MILCON, etc.] See **Chapter 3** for funding categories.

2.5.2. Demolition. Demolition of a facility (or portion of a facility) unrelated to or which is not integral to any maintenance, repair, or construction and which provides a complete and usable facility/site does not carry a work classification and can stand alone as its own project. Demolition work performed independently from repair or construction work is not subject to project approval thresholds, but must still be planned and programmed. **(T-1)**. If demolition is required to accomplish a construction or repair project (i.e., demolition is integral to other work in the project), the demolition carries the same class of work as the associated project and the cost for demolition or removal work is a cost of the associated project and will be funded as an integral part of the associated project. See AFI 32-9004, *Disposal of Real Property*, for further information regarding disposal actions. Demolition funded as part of a MILCON project should be directly related to the project (e.g., in the footprint of the new construction or no longer needed as a result of new construction).

2.5.2.1. Demolition of vertical facilities to be accomplished as part of a military construction project shall be documented on the DD Form 1391. **(T-1)**.

2.5.2.2. Square meters to be demolished must be shown under Supporting Facilities and associated facilities are to be included in Description of Construction. **(T-2)**.

2.5.3. Programmers and project managers shall classify removal and disposal of contaminated material (e.g., soil, fuel, asbestos containing material, and mold) identified in anticipation of or during a facility maintenance, repair, or construction project as repair. **(T-1)**. Remediation associated with an isolated demolition project (unrelated to a maintenance, repair, or construction project) is part of the demolition project and carries no work classification.

2.5.4. Capitalization. Consult the Real Property Accountable Officer for work capitalization determinations.

2.5.4.1. In general, work can result in a capital improvement if the result of the work meets at least one of the conditions outline below:

2.5.4.1.1. An asset is acquired through construction (new construction).

2.5.4.1.2. Land is acquired.

2.5.4.1.3. An improvement is made to change the usable size or capacity of an asset.

2.5.4.1.4. An improvement is made that modifies the functionality or use of the asset (conversion).

2.5.4.1.5. An improvement is made to extend the service life of an asset (of the facility) by two or more years.

2.5.4.1.5.1. Determination of capital improvement is made at the facility level, not at the component level.

2.5.4.1.5.2. Extending the life of a facility component is not necessarily in itself a capital improvement; however, if a capital improvement is made, replacement, addition, or deletion of components must be included in the documentation. **(T-1)**. If the work on a component extends the service of life of the facility by two or more years, then a capital improvement results.

2.5.4.1.6. An asset is completely demolished.

2.5.4.2. Size and service life capital improvements require additional clarification as follows:

2.5.4.2.1. Change in size: When determining the change in size, this includes additions to an asset as well as repairs made inside a facility that increase the usable size, such as the addition of a second floor within a warehouse being converted to an admin facility.

2.5.4.2.2. Service life: This determination involves engineering judgement and only applies to a planned activity to increase the service life of the entire facility by 2 or more years. Replacement of an asset component (roof; Heating, Ventilation, and Air Conditioning (HVAC) system; shoulder; etc.) does not necessarily determine the service life of a real property asset even though its usable life may extend beyond the service life of the facility. In total consideration of all asset components, consider whether replacement or repair of a component or group of components extends the service life of the entire asset. For example, if there is a 60-year building and replace a 20-year roof at the 50th year, the life of the roof extends beyond 60 years, but does that necessarily increase the service life of the entire building. The life of the other components (foundation, superstructure, etc.) may still be 60 years and the service life of these components may establish the service life of the building. This requires engineering judgment.

**2.6. Programming Actions.** When a facility project is necessary and a course of action agreed upon, the BCE will initiate the project programming process and complete the initial planning documents. **(T-1)**. The BCE shall prepare appropriate project documentation and obtain appropriate approvals based on the work classification and total funded cost of a facility project prior to obligating project funds or awarding the project. **(T-1)**. ARC units will staff approval packages for ARC-funded work. **(T-1)**. AF Form 332 or DD Form 1391, *FY Military Construction Project Data*, or other AF/A4C-designated forms and electronic approval documents are all acceptable means of documenting projects in the official folder. Projects requiring approval at a level above the installation and all projects funded by military construction appropriations must include: DD Form 1391, facility siting documentation, EIAP review, economic analysis (when required), and all other applicable documents. **(T-0)**. The BCE shall enter the DD Form 1391 information in an approved Air Force project management database. **(T-1)**. For any project that requires alteration or modification of, connections to, or disconnections from, a privatized utility system, the BCE shall ensure the AF Form 332 or DD Form 1391 includes a lump sum connection charge amount for the privatized system owner to construct the new utility infrastructure. **(T-1)**. A properly developed project requires active involvement of all stakeholders to include personnel from Civil Engineering shops, privatized utility system owners, function users, communications, security, and others. Bases should use AF Civil Engineering enterprise tools for developing

projects, follow the latest processes/rules and triggers for reviews, approvals, and other required tools to fully define projects. These products are available from AFCEC, AFRC/A4 or NGB/A4.

2.6.1. Intentionally blank.

2.6.2. Audit Readiness. All work on facilities requires approval per the delegated authorities. Appropriately designated officials (e.g., Operations Flight Commander, Engineering Flight Commander) shall document approval for all levels for all work. **(T-1)**.

2.6.3. Key Supporting Documents for Financial Improvement and Audit Readiness (FIAR) Compliance. The BCE must ensure the documentation of project approval, cost estimate, economic analysis, and certificate of compliance are placed in the project file. **(T-0)**.

2.6.4. In conjunction with the real property accountable officer, the programmer will determine if capitalization of any of the project work is necessary, and if so, must initiate a draft DD Form 1354, *Transfer and Acceptance of Military Real Property*, identifying all work needing to be capitalized. **(T-1)**. If a facility is being demolished, the programmer must initiate a draft AF Form 300, *Facility Disposal*, for real property asset disposal where applicable and in accordance with AFI 32-9004, *Disposal of Real Property*. **(T-1)**.

2.6.5. Project Files. The installation Civil Engineer programming and project management offices are responsible for establishing and maintaining project files in accordance with established AF standards. These offices will create and maintain project files to capture project documentation, including evidence of proper approval. **(T-1)**. Programmers shall ensure project documents are sufficient to allow an independent reviewer to understand the requirement, the benefit, the classification of work, the total cost (funded and unfunded), the current impact to installation mission, the impact if not provided, and the timing of project requirements, including all potential phases (see **Paragraph 2.4.5** for definition of project phases). **(T-1)**.

2.6.5.1. MILCON Projects. For MILCON Projects the following project documents are required as a minimum. Installations should maintain MILCON project files according to the Air Force Records Disposition Schedule (RDS) located at <https://afirms.cce.af.mil/afirms/rims.cfm>.

2.6.5.1.1. Following is a list of the documents that are necessary as part of the regular MILCON programming process.

2.6.5.1.1.1. DD Form 1390, *Military Construction Program* or DD Form 1390S, *Guard & Reserve Military Construction*.

2.6.5.1.1.2. DD Form 1391

2.6.5.1.1.3. DD Form 1391c, *Military Construction Project Data*.

2.6.5.1.1.4. Cost Estimate

2.6.5.1.1.5. Facility Space Optimization Worksheet

2.6.5.1.1.6. Single Line Drawing

2.6.5.1.1.7. Site Plan

2.6.5.1.1.8. Location Plan



2.6.5.1.1.9. Certificate of Compliance for Critical Planning Actions

2.6.5.1.1.10. Economic Analysis Certification

2.6.5.1.2. In addition to the documents listed above, the items listed in **Table 2.1** serve as adequate supporting documentation for project development.

**Table 2.1. Suggested Source Documentation.**

Item	Example Documents to Maintain Along with the DD Form 1391c
Scope/Quantity (Primary and Supporting Facilities)	CE electronic database real property module screenshots Applicable DAFMAN 32-1084 pages and cover page showing the publication number and date, if not on the page(s) retained Site Activation Task Force report (applicable pages) Building drawings and manual calculations Area and space measurements and calculations
Unit Cost (Primary and Supporting Facilities)	Applicable UFC pages and cover page showing the publication number and date, if not on the page(s) retained Detailed calculations performed CE electronic database real property-project management screenshots of similar projects already contracted and/or completed PACES report US Army Core of Engineers (USACE) or contractor reports and calculations

2.6.5.2. Umbrella DD Form 1391s. The following types of project should be programmed using the DD Form 1391 “umbrella” structure: phased projects, projects with multiple facilities, and projects with multiple fund sources where at least one fund source requires its own DD Form 1391. See the AF/A4CF DD Form 1391 business rules for guidance on programming umbrella DD Form 1391s.

2.6.6. Project Management Information Technology (IT) Databases. Project management data will be maintained in an Air Force-approved project management database. **(T-1)**. Project management databases currently approved by the Air Force include Automated Civil Engineering System-Project Management (ACES-PM), Next Generation IT (NexGEN IT), and the ANG Project Data System (PDS).

**2.7. Planning and Programming Factors.**

2.7.1. Special Considerations for Nonappropriated Fund Projects see **Chapter 6**.

2.7.2. Work on New Facilities. The BCE shall not modify newly constructed facilities, funded by any source, within 12 months after the placed-in-service date. **(T-1)**. A request to the appropriate authority to waive this requirement must certify that the modification is based on a requirement that was not known or reasonably foreseeable when the construction contract was awarded. **(T-1)**. If the requirement arises prior to the placed-in-service date, the waiver request must be submitted prior to the placed-in-service date and must explain why it was not in the best interest of the Air Force to modify the construction contract and reprogram funds and seek authority as necessary for any scope increase. **(T-1)**. The waiver should be submitted sufficiently in advance of the anticipated placed-in-service date to allow for action on the request. See **Paragraph 3.4.3.2** for funding to correct a deficiency of the original project (e.g., whether due to inadequate design, construction, or installation).

### 2.7.3. Multiple Construction Projects in a Single Facility.

2.7.3.1. 12-Month Window for Unspecified Minor Construction. Planners and programmers will plan and program all known unspecified minor construction work required for a facility within the next 12 months (do not split the full requirement to stay under a dollar limitation), for accomplishment as a single construction project. **(T-1)**. The 12-month window is defined as completion of one project (placed-in-service date) and start (award) of the next project or upon the start of construction for non-contract projects. Exceptions to this 12-month window guidance are outlined below. To carry out any of the exceptions noted below programmers must obtain prior written approval (signed programming documents) by AFCEC/CL, AFRC/A4 or NGB/A4 when the total, combined funded construction cost of such projects in a single FY exceeds the unspecified minor construction statutory limit specified in 10 USC § 2805. **(T-1)**.

2.7.3.1.1. The requirement for an additional construction project in a 12-month period could not have been reasonably anticipated at the time the previous construction contract was awarded; or

2.7.3.1.2. The requirement for an additional construction project is for an area of the facility with a different category code or function. Each project must be independently complete and usable, must be in clearly unrelated and noncontiguous areas of the building, and programmed separately with its own approval threshold and statutory limit. **(T-1)**. For infrastructure and utility systems, construction on clearly unrelated and noncontiguous components of the system can be programmed as separate undertakings, each with its own approval threshold and statutory limit.

2.7.3.2. An unspecified minor construction project shall not be accomplished concurrently with a MILCON project in the same facility. **(T-1)**. An unspecified minor construction project may precede a known MILCON project for a new mission requirement when the unspecified minor construction provides a complete and usable facility to meet a specific need. An unspecified minor construction project may follow a complete MILCON project when necessary per the guidance above.

2.7.4. Multiple Work Classifications in a Single Project. A project must include all work necessary to result in a complete and useable facility. **(T-0)**. For example, if a dormitory reconfiguration requires construction of balconies to be complete and usable, program a single project including both the reconfiguration work classified as repair and the balcony work classified as construction. Programmers must ensure all work is programmed in a single programming document, but with funded costs of each work classification delineated separately (e.g., repair and construction each detailed on separate line items). **(T-1)**. See AF/A4CF DD Form 1391 preparation business rules for properly programming multiple work classifications. A copy of the current business rule can be found in the Programming Approval Portal.

2.7.4.1. For approval and notification threshold determination when a repair project includes multiple work classifications, programmers must sum the costs of any repair and construction work necessary to make a project complete and usable. **(T-1)**. In other words, the total funded cost of the repair project is used for threshold determination. This summing of repair and construction costs is due to 10 USC § 2811(d)(3), which requires that the congressional notification for a repair project include a description of the elements of military construction incorporated into the repair project. Therefore, it is sound guidance that the cost of the repair project for purposes of notification also include the cost of those same construction elements.

2.7.4.2. Though policy requires summing costs for threshold determination under 10 USC § 2811, programmers must pay attention to construction cost on its own. **(T-0)**. The construction cost limits are independently applicable regardless if they're part of a repair project or not.

2.7.5. Multiple Fund Sources in a Single Project. A project may be funded from multiple fund sources. The programming document must note the fund sources involved in the project. **(T-1)**. When one or more of the fund sources requires its own programming document for funding and/or approval purposes (e.g. MILCON-funded construction combined with Operations and Maintenance (O&M) funded repair, NAF-funded repair combined with APF-funded repair), use the “umbrella” programming structure outlined in the AF/A4CF DD Form 1391 preparation business rules. Do not confuse “multiple fund sources” with “companion projects”; use of multiple fund sources is not the same as companion projects. Use of multiple fund sources is simply the combining of funding to execute a single project.

2.7.5.1. Combined APF and NAF Projects. Combining APF maintenance and repair with a NAF maintenance and repair or NAF construction project is allowable within certain restrictions and controls. Programmers may program certain APF repair and construction within a NAF facility (e.g., a military clothing sales store in a base exchange). In APF/NAF companion projects, the NAF and APF portion each have their own approval authorities. Submit separate NAF documents and APF documents to the proper approval authority. SAF/IEE must approve the combined use of APF and NAF for construction in a NAF facility, regardless of cost. **(T-1)**.

2.7.5.2. Combined Funding. Planners and programmers shall not combine funds from different funding sources (i.e., O&M, MILCON, RDT&E, and NAF) for a single unspecified minor construction project, although you may program certain APF activities within a NAF facility (e.g., a military clothing sales store in a base exchange). **(T-0)**.

2.7.6. Concurrent Projects. Concurrent projects are simply independent projects taking place in the same facility and being accomplished at approximately the same time. Concurrent projects should not be programmed on a single programming document.

2.7.7. Work in Multiple Facilities. Work in multiple facilities should not typically be combined in a single project. Programmers shall not combine work at separate installations or geographically separated units into a single project. **(T-1). Exception 1:** while not required to be programmed in one project, if work in multiple facilities is intended to be procured in one acquisition, then it may be programmed in a single project if the work is essentially identical, is indistinguishable from facility to facility, or is illogical to separate. **Exception 2:** for maintenance and repair projects with similar work at multiple sites belonging to a single installation only, similar work in facilities with the same category code may be programmed as a single project. If work in multiple facilities is combined into a single project, programmers must clearly lay out in the programming text which facilities are involved and must clearly delineate what work is taking place in each facility and the cost associated with each facility. **(T-1).** This is necessary for proper work accountability through the life of the project and clean audit readiness. See AF/A4CF FSRM DD Form 1391 preparation business rules for further guidance on programming FSRM requirements.

2.7.7.1. When combining work in multiple facilities into a single project, the approval threshold determination is dependent upon the summed programmed amount for all facilities within the project. The total project cost is the determining amount for threshold determination, not the cost in each facility. **(T-1).** Example projects allowable under this programming exception include: 1) removing bat guano and repair/sealing of access points in multiple dormitories, 2) repairing the same door-opening/closing problem on multiple protective aircraft shelters, and 3) repairing the fire protection system which spans two hangars from a single pump house. Combining multiple facilities with extensive renovations into one project, such as renovating dorms to current standards, does not meet the intention of this guidance allowance.

2.7.7.2. Minor Construction and Repair in Multiple Facilities for a Single Requirement. When programming minor construction and/or repair of multiple facilities to meet a single overall requirement, programmers must program the work in all facilities as a single project. **(T-1).** Exceptions may be granted on a case-by-case basis where work in a single facility or subset of facilities would result in a project that is independently useful in meeting the requirement regardless whether the remaining work was completed. All requests for such exceptions shall be routed through AF/A4C and SAF/FMB to SAF/IEE for approval. **(T-1).**

2.7.8. Facility Security and Antiterrorism (AT) Measures. Security and AT are primary considerations in the planning and programming of Air Force facilities, which should include independent review and consultation with installation security and AT personnel. UFC 4-010-01 is the official AT minimum design standard for DoD facilities. If the total of any work classified as repair (renovations, modifications, revitalizations, and restorations, etc.), regardless of fund source, exceeds 50% of the current estimated cost of a military construction project to replace the facility or results in a change of occupancy level of the facility (as defined in UFC 4-010-01), programmers must ensure the entire facility is brought into compliance with UFC 4-010-01. **(T-0).** The 50% cost is exclusive of the costs identified to meet these standards. This threshold applies in the projects pre-award phase, up to and including project award. Costs of building additions are not included in the calculation for the compliance threshold. Planners and programmers must ensure planned window and door replacement or new installation included in any project for existing inhabited buildings, regardless of cost, meet UFC 4-010-

01 glazing requirements. (T-0). Planners and programmers must also ensure planned HVAC replacement or new installation included in any project for existing inhabited buildings, regardless of cost, must meet UFC 4-010-01 standard 18. (T-0). UFC 4-020-01, *DoD Security Engineering Facilities Planning Manual*, provides the initial AT process for identifying AT requirements, design basis threat, and protection levels. UFC 3-340-01, *Design and Analysis of Hardened Structures for Conventional Weapons Effects*, is also the design standard for DoD facility hardening against biological, chemical, and conventional weapons chemical, biological, and radiological contamination effects. Contact AFCEC, AFRC/A4 or NGB/A4 for guidance on programming requirements for collective protection systems to protect against chemical, biological, and radiological contamination. Reference Military Standard (MIL-STD) MIL-STD-188-125-1, *High-Altitude Electromagnetic Pulse (HEMP) Protection for Ground Based C4I Facilities Performing Critical, Time-Urgent Missions – Part 1, Fixed Facilities*, if required. The process for approval of applicable deviations from DoD Minimum AT Standards for Buildings (UFC 4-010-01) facility standards is provided in DoDI O-2000.16 Volume 1, *Antiterrorism (AT) Program Implementation*. All other UFC AT and Security criteria follows that typical UFC deviation process.

2.7.8.1. Per signature level requirements stated in [Paragraph 2.1.1](#) commanders will ensure installations certify that new facilities or renovation projects comply with AT standards (e.g., DoDI O-2000.16 Volume 1: *DoD Antiterrorism (AT) Standards*). (T-1). The AT Officer (ATO) will work with the engineering staff during planning, design, and construction to ensure requirements are met, including coordination prior to certification. (T-2). A member of the installation Civil Engineer staff should complete security engineering training in accordance with DoDI O-2000.16 Volume 1.

2.7.8.2. Planners and programmers can classify permanently installed bollards, drop-arm barriers, tire shredders, and pop-up barriers as Real Property Installed Equipment (RPIE); however, cameras, radar, scanners, card readers, mobile or repositionable tire shredders, barriers, and transmitting detection systems and alarms are not RPIE. (T-1). References include; UFC 4-021-01, *Design and O&M: Mass Notification Systems*; DoDI 2000.12, *DoD Antiterrorism (AT) Program*; DoDI 5200.8, *Security of DoD Installations and Resources*; DoDI O-2000.16 Volume 1, *Antiterrorism (AT) Program Implementation* ; DAFMAN 65-605, Volume 1, *Budget Guidance and Technical Procedures*; DAFMAN 32-1084, *Facility Requirements*, and DAFI 32-9005, *Real Property Accountability*, for additional information.

2.7.8.3. Installation Entry Control Areas. The UFC 4-022-01, *Security Engineering: Entry Control Facilities / Access Control Points*, establish standards for improving and strengthening the protection of our forces and installations from potential terrorist attack. The following four basic types of facilities may be needed at installation entry control areas: gatehouse, vehicle inspection facility, visitor control center, and overwatch (including associated final pop-up barriers). Although these facilities each contribute to controlling access to an installation, they each accomplish separate and distinct functions and do not have to be accomplished at the same time (although they may be) as long as they are non-contiguous and are physically separated from each other at an installation's entry control area. Programmers may program these four facility requirements as separate projects provided there is not a specific reason at a particular location that makes aspects of one project dependent on another project. See [Paragraph 2.7.7.1](#) for additional

guidance. For programming roadwork (repair or construction), programmers will determine if the new facility is complete and usable if the road or expansion and alteration of the existing footprint is not constructed. If not, programmers shall program the roadwork as a funded cost of the associated facility project. **(T-0)**. Programmers must include supporting requirements, such as roads, parking lots, pedestrian and bicycle infrastructure, lighting, utilities, and landscaping which make the facility complete and usable in the cost of the project. **(T-0)**.

2.7.8.4. Intrusion Detection System (IDS), Integrated Base Defense Security System, Closed-circuit television and Remote Targeting Engagement Systems are equipment items. The user or security unit is responsible for the funding, procurement, installation, and sustainment of these security equipment items. **(T-1)**. If a system requires installation of a platform to support the sensors (e.g. fencing, gates, posts, slabs, etc.) and/or allied support (e.g. power, conduit, etc.), the platform component(s) and/or allied support are considered real property and are a funded cost to the project. The real property components of these systems should be a funded cost to the project.

2.7.8.5. Guard Towers and Defensive Fighting Positions. Determine whether guard towers and defensive fighting position structures are real property. If real property, planners and programmers shall classify installation of these where they did not previously exist as construction. **(T-1)**. If permanently installed, these will be maintained, sustained, and repaired as real property. If these are not real property, they are equipment items, and the procurement, installation, and sustainment is the responsibility of the user.

2.7.9. Sensitive Compartmented Information Facilities (SCIF). When a project will include a SCIF subject to Intelligence Community Directive (ICD) Number 705, *Sensitive Compartmented Information Facilities*, the installation must obtain project security requirements from the Site Security Manager or Accrediting Official. **(T-0)**. Applicable construction standards and any escorts, construction surveillance technicians (CST) or cleared American guards, if allowed by 10 USC § 2465, *Prohibition on contracts for performance of firefighting or security-guard functions*, shall be identified and estimated costs included as separate lines on the DD Form 1391. **(T-0)**. The installation will include the estimated cost of escorts, construction surveillance technicians, or cleared American Guards on the DD Form 1391 as an unfunded cost from other appropriations; these costs will be funded by the user. **(T-1)**. The SCIF security cost shall be calculated during the planning phase and certified by the design agent and/or design and construction project managers (DM/CM). **(T-1)**. CST are used outside the United States when cleared contractors are not used. If the installation is to provide any project support, only that portion of installation overhead or support costs that can be identified as additional costs that would not have been incurred were it not for the project should be included ((DoD 7000.14-R, Volume 3, *Financial Management Regulation, Budget Execution – Availability and Use of Budgetary Resources*, Chapter 17, Accounting Requirements for Military Construction Projects, **paragraph 1704**). Any requirements exceeding a standard, even when based on risk, requires a waiver be processed and approved in accordance with ICD 705. **(T-0)**. For standards, see IC Tech Spec – for ICD/ICS 705, *Technical Specifications for Construction and Management of Sensitive Compartmented Information Facilities*, current edition, located at <https://www.dni.gov/files/Governance/IC-Tech-Specs-for-Const-and-Mgmt-of-SCIFs-v15.pdf>. Per **Paragraph 2.7.9.1**, the term “Sensitive Compartmentalized Information Facility” or the acronym “SCIF” cannot be used in

any project title or anywhere in a DD Form 1391; however, SCIF requirements, including escorts and CSTs, must be identified on the DD Form 1391 to be considered in scope. **(T-1)**.

2.7.9.1. Do not use the term “Sensitive Compartmentalized Information Facility” or the acronym “SCIF” in any project title or anywhere in a DD Form 1391. **(T-0)**. The facility’s location and identify as a SCIF shall be protected at a minimum of “Controlled Unclassified Information” (CUI), formerly FOR OFFICIAL USE ONLY (FOUO), in accordance with Department of Defense Manual (DODM) 5105.21-V2 CE-01, *Sensitive Compartmented Information (SCI) Administrative Security Manual: Administration of Physical Security, Visitor Control, and Technical Security*. **(T-0)**.

2.7.9.2. SCIFs should be referred to as a controlled space so as not to designate it as a SCIF on releasable documents (e.g., bid requests, permit requests, sub-contractor plans). Ensure SCIF spaces are properly captured on the DD Form 1354 for proper accountability.

2.7.10. Communications Requirements. All wiring, cabling, fiber optic cables, conduits, ducts, manholes and pathways from the customer’s jacks to the point where the facility will receive network services (dial tone and Internet protocol access) must be included as funded costs under a military construction project. **(T-0)**. This includes communications support required for information services and local area networking, including voice, data, facsimile, video, alarms, sensors, etc. The cost of wiring within prewired workstations and all end instruments and equipment are excluded from this. See DAFMAN 65-605, V1, [paragraph 10.18](#) and [paragraph 10.19](#), for additional detail.

2.7.11. Seismic Evaluation and Potential Mitigation. Seismic evaluation and mitigation of an existing building needs to be determined based on guidance provided in UFC 3-301-01 *Structural Engineering*, and the Interagency Committee on Seismic Safety in Construction, NIST GCR 11-917-12, *Standards of Seismic Safety for Existing Federally Owned and Leased Buildings*, *ICSSC Recommended Practice 8 (RP 8)* is applicable to all existing DoD-owned and leased buildings, as well as to newly acquired buildings added to the DoD inventory through purchase, lease, or donation.

2.7.11.1. RP 8 Section 1.3 describes buildings that are exempt from the RP 8 standards.

2.7.11.2. RP 8 Section 2.1 lists all other situations that require evaluation and potential mitigation. In general, in case of the following situations, planners and programmers will initiate actions for seismic evaluation and potential mitigation of existing facilities (the thresholds below are applicable in the pre-award phase of the work):

2.7.11.3. UFC 3-301-01, *Section 4.2, Modifications to RP 8*. RP 8 Section 2.1 (b) [Replacement]: For Seismic Design Category C buildings when a project is planned in which the cost totals more than 50% of the replacement value of the building. **(T-0)**. This threshold applies in the projects pre-award phase, up to and including project award.

2.7.11.4. UFC 3-301-01, *Section 4.2, Modifications to RP 8*. RP 8 Section 2.1 (c) [Replacement]: For Seismic Design Category D, E, or F buildings when a project is planned in which the cost totals more than 30% of the replacement value of the building. **(T-0)**. This threshold applies in the projects pre-award phase, up to and including project award.



2.7.11.5. UFC 3-310-04 applies to DoD facilities worldwide, and for specific applicability defines the “United States” to include all 50 states, the District of Columbia, Commonwealth of Puerto Rico, Virgin Islands, Guam, American Samoa, Commonwealth of the Mariana Islands, and any other territory or possession of the United States.

2.7.12. Floodplain Management. Federal agencies are required to carefully consider floodplain area use. Federal Emergency Management Agency flood hazard insurance maps shall be used, if available, to identify if an installation or part of an installation is located within a designated 100 year floodplain area. **(T-0)**. DoDD 4715.21, *Climate Change Adaption and Resilience*, requires Federal agencies to evaluate climate change risks and vulnerabilities to manage effects on missions and operations, and tasks Federal agencies with developing and implementing climate adaptation plans. It requires consideration of the life-cycle costs of investments and actions that effect military installation resilience. UFC 2-100-01, *Installation Master Planning*, Paragraph 2-2.16 provides guidance regarding protection of facilities in flood hazard areas. DoD components must comply with the following:

2.7.12.1. Planners and programmers shall follow the process outlined in AFI 32-7003, *Environmental Conservation*, Chapter 3. **(T-1)**. The goal should first be to avoid the construction of facilities in or partially within a floodplain. The EIAP process shall be completed for all repair or construction projects within or partially within the 100-year floodplain. **(T-0)**.

2.7.12.2. After completing the EIAP process and assuming a Finding of No Practicable Alternative determination has been made, programmers will document on DD Form 1391 that flood mitigation measures have been incorporated in the project when renovating or constructing facilities within or partially within 100 year floodplain areas. **(T-0)**. See A4CF FSRM DD Form 1391 preparation business rules for further guidance. Assess the vulnerability of mechanical and/or electrical subsystems to flood damage and program necessary measures to mitigate those vulnerabilities, along with electrical & mechanical, items such as protecting flooring and wall surfaces from water damage and mold. **(T-0)**. Refer to UFC 3-201-01, *Civil Engineering*, for flood mitigation plan requirements.

2.7.12.3. Submit a report through the chain of command to SAF/IEE for proposed projects to be sited within or partially within a 100-year floodplain. The report must include an assessment of flood vulnerability for the proposed project; any information concerning alternative construction sites that were considered and an explanation of why those sites do not satisfy mission requirements; and a description of planned flood mitigation measures. **(T-0)**.

2.7.13. Sustainable Design and Development (SDD) Compliance. The Air Force is committed to incorporating sustainable concepts in the planning, programming, design, construction, and operation of facilities and infrastructure. As project planning and programming is the first stage of the facility development process, decisions made during this stage set the project direction and have the greatest impact upon facility life-cycle costs. Installations must comply with Air Force SDD guidance. **(T-1)**. Programmers shall ensure all projects adhere to UFC 1-200-02, *High Performance and Sustainable Building Requirements*; UFC 2-100-01, *Installation Master Planning*; UFC 3-210-10, *Low Impact Development*; and the most current DoD policy and AF Sustainable Design and Development (SDD) implementing guidance. **(T-1)**. When applicable, programmers shall ensure programming documents include the cost associated



with sustainable design elements necessary to achieve sustainable design guidance compliance and most current UFC 1-200-02. **(T-0)**. AF SDD implementing guidance, including mandatory third party certification and mandatory Federal compliance tracking and reporting is maintained by AFCEC at <https://www.wbdg.org/ffc/af-afcec/sustainable-design-development-sdd>.

2.7.14. Accessibility. Planners and programmers shall ensure the scope of each construction and repair project incorporates applicable accessibility standards as prescribed by the Architectural Barriers Act (ABA). **(T-0)**. Information on ADA standards and ABA guidelines is available at the United States Access Board website at <https://www.access-board.gov/>.

2.7.15. Fire Safety Deficiencies (FSDs). Refer to UFC 3-600-01, *Fire Protection Engineering for Facilities*, Paragraph 1-3.2.2, and AFI 32-10141, *Planning and Programming Fire Safety Deficiency Correction Projects*, for guidance regarding the programming of fire protection system work when facility repair costs equal or exceed 50% of the estimated facility replacement cost. This threshold applies in the work's pre-award phase, up to and including project award. See [Table 2.1](#) for UFC 3-600-01 programming compliance metrics. **(T-1)**.

**Table 2.2. UFC 3-600-01, Fire Protection Engineering for Facilities, Compliance Metrics. (T-0).**

UFC Term	UFC Definition	Abridged UFC rule
Repair	Patching, restoring, painting to maintain sound condition	Work area must comply to UFC
Renovation	Replacement, strengthening, or upgrading not resulting in reconfiguration of space	Work area must comply to UFC
Modification	Reconfigurations	Work area must comply; If 50% area, entire facility must comply
Reconstruction	Reconfiguration affecting exit or shared corridor	Entire building must comply
Addition	An increase in area	Addition must comply
Change in Use	None	Area of change must comply
Vacant Building	None	Entire building must comply before occupancy

2.7.16. Historic Property Considerations. Title 54 USC 306108, *Effect of undertaking on historic property*; comment by Advisory Council on Historic Preservation, requires the Air Force to consider the impact of undertakings on properties that are potentially eligible (identified, but unevaluated), eligible for, or listed on the National Register of Historic Places. For undertakings on historic properties (including force protection and anti-terrorism measures), the Air Force must engage in consultation with the State Historic Preservation Officer or Tribal Historic Preservation Officer for Indian lands and other consulting parties to identify, evaluate, and mitigate any adverse effects on historic properties. **(T-0)**. Air Force undertakings found to adversely affect historic properties require mitigation measures outlined or cited in a Memorandum of Agreement, Programmatic Agreement, or in relevant concurrent NEPA documents (in compliance with 32 CFR Part 989). When projects are programmed to repair historic facilities, some additional cost may result from the use of materials and construction methods (life cycle costs may actually show historic properties are less expensive to repair and maintain in the long term) that comply with the Secretary of the Interior's Standards for Rehabilitation. AFI 32-7003, *Environmental Conservation, Chapter 2*, has additional guidance for undertakings on historic properties.

2.7.17. Water and Wastewater Treatment Plants. Consider each wastewater treatment plant or water treatment plant as a single facility for project programming purposes and threshold determination (inclusive of all components, but not the external collection or distribution systems or lines). Waste and water treatment plants are network source facilities and are not part of a network facility.

2.7.17.1. Wastewater treatment plants can include the following facilities as designated by the respective 4-digit DoD Facility Analysis Category code: Sewage Treatment (8311), Industrial Waste Treatment (8312), Water Separation Facility (8313), Septic Tank and Drain Facility (8314), and Septic Lagoon and Settlement Ponds (8315).

2.7.17.2. Water treatment plants can include the following facilities as designated by the respective 4-digit DoD Facility Analysis Category code, Water Treatment Facility (8412) Desalinization Plant (8415). A treatment plant under this paragraph is considered an interconnected set of 4-digit facilities functioning together.

2.7.18. Parking lots, fences, sidewalks. Programmers must group parking lots, fences, and/or sidewalks serving a single building with the associated building for determining compliance with construction approval and notification thresholds. **(T-1)**. For repair projects: parking lots, fences, and/or sidewalks that serve a single facility are only grouped with the facility for approval thresholds if they are not captured distinctly in the real property records (i.e. each has its own facility number).

2.7.19. Electrical distribution circuit. An electrical distribution circuit which can be activated order-activated independent of other electrical distribution circuits can be considered as a distinct component for programming purposes. (Lighting systems are separate from electrical distribution.)

2.7.20. Airfield pavements. Airfield pavements recorded as distinct facilities can be treated as components for programming purposes in accordance with the networked facility guidance in this Instruction (see **Paragraph 2.7.23**). Programmers may not necessarily distinguish “named” airfield infrastructure (e.g. Alpha Apron, Bravo Apron) as separate components unless they are non-contiguous and non-adjacent (separated by unimproved surface). Intersecting taxiways can be treated as separate components; however, programmers must treat continuous taxiways (e.g., a taxiway that turns, but does not intersect another taxiway) as a single component for project programming purposes. **(T-1)**. A taxiway crossing a runway is a continuous taxiway for project programming purposes.

2.7.21. Artificial Turf. When determining the benefit of artificial turf use, installations should consider the life-cycle cost of sustaining both the artificial and natural turf fields prior to installing. Refer to **Attachment 4** for work classification guidance regarding repair by replacement of natural turf with artificial turf.

2.7.21.1. Exterior Artificial Turf, Permanently Installed. Programmers must ensure artificial turf used in place of grass or natural turf is considered an improvement to land and is programmed as a funded, capitalized cost. **(T-1)**.

2.7.21.2. Interior Artificial Turf, Permanently Installed. Artificial turf used as an interior floor surface (such as carpet or court surface) is considered an improvement to real property. If installed when the facility is originally constructed, programmers will ensure the cost of the turf is a funded cost of the construction project and value of the turf will be capitalized. **(T-1)**.

2.7.21.3. Non-permanently Installed Turf--Interior or Exterior. If artificial turf may be rolled up or otherwise dismantled and is removed in practice, then planners and programmers will ensure such turf is classified as equipment and is user-funded. **(T-1)**.

2.7.21.4. Multiple fields in a single recreational complex may comprise a single “facility”. In such a situation, when comparing a repair project cost to the estimated replacement cost, the estimated replacement cost includes the entire facility.

2.7.22. Air Force Government Furnished Equipment (GFE). DAFMAN 65-605, Volume 1, Chapters 10 and 21, and “DoD 7000.14-R, Volume 4, *Financial Management Regulation, Accounting Policy*, Chapter 25, General Equipment, address GFE and accounting for GFE when developing the cost of a facility project. When RPIE designated as GFE is being added to a facility where that specific GFE did not previously exist, such GFE is generally considered as a funded cost of a facility project. If GFE is depreciated (i.e., is not new), then the depreciated value of the GFE, as opposed to the value of the GFE when newly procured, should be used in calculating the funded cost to a facility project. When unfunded equipment (such as communications equipment, systems furniture, desks, chairs, electronic alarm systems, etc.) is designated as GFE, such GFE should be classified as an unfunded project cost. Designation of either funded RPIE or unfunded equipment as GFE does not change the nature of the equipment, it simply signifies that the equipment was procured via means other than competitive sourcing by the contractor. Document all GFE cost decisions and determinations. Refer to DAFI 32-9005 for guidance regarding the recording of the value of GFE in real property inventory records.

2.7.23. Networked facilities. This guidance is only needed and applicable when determining the repair-by-replacement eligibility of a facility. The work to replace a facility must be classified as construction; however, if a facility is a component of a networked facility, the work to replace it can be classified as repair. **(T-1)**. Networked facilities are complete “systems” or compound assets comprised of linear structures, buildings, and structures. The interconnected assets of a networked facility deliver a capability, commodity, or service. **Attachment 2** establishes and defines the networked facilities allowed under this guidance.

2.7.23.1. The networked facility guidance applies for determinations in the project programming process and may not align with Air Force real property facility naming convention or segmentation (e.g., a networked facility will likely not have a unique facility number, but components of a networked facility may have unique facility numbers).

2.7.23.2. A particular component of a networked facility does not carry the Mission Dependency Index (MDI) of other components in the networked facility. A particular component of a network facility carries the MDI as recorded in the real property records.

2.7.23.3. This networked facility guidance is not used as a facility definition when pursuing centralized funding via the Air Force Comprehensive Asset Management Plan (AFCAMP). Follow AFCEC, AFRC/A4 or NGB/A4 business rules for pursuing centralized funding. The following definitions apply:

2.7.23.3.1. Building. A roofed and floored facility enclosed by exterior walls and consisting of one or more levels that is suitable for single or multiple functions and that protects human beings and their properties from direct harsh effects of weather such as rain, wind, sun, etc.

2.7.23.3.2. Linear Structure. A facility whose function requires that it traverse land (e.g., runway, road, rail line, pipeline, fence, pavement, electrical distribution line) or is otherwise managed or reported by a linear unit of measure at the category code level.

2.7.23.3.3. Structure. A facility, other than a building or linear structure, that is constructed on or in the land.

2.7.23.3.4. Network Source. The logical start of a networked facility (typically a utility) that generates the need for the rest of the associated assets. This definition applies similarly for the treatment facilities in the Sewage & Industrial Waste Treatment & Disposal networked facility. The network source is not considered to be a component of the networked facility and cannot be fully replaced as a repair project. Examples of network source facilities includes power plants, water and sewage treatment plants, wells, base-wide water storage facilities associated with the treatment plant.

2.7.23.3.5. The two-digit DoD Category Group Codes, three-digit DoD Basic Categories Codes, four-digit DoD Facility Analysis Category (FAC) Codes, and six-digit Category Codes used in [Attachment 2](#) are defined in The Department of Defense Real Property Classification System published by DASD (INF).

2.7.23.3.6. Parking lots are not part of a networked facility. See [Paragraph 2.7.18](#) for further guidance.

2.7.24. Aircraft Sunshades. DAFMAN 21-101, *Aircraft and Equipment Maintenance Management*, Chapter 15, *Aircraft Sun Shade Sustainment* states aircraft sunshades, which are comprised of a roof and no more than two enclosed sides, are equipment items. Though aircraft sunshades generally fulfill a long-term requirement and are not considered temporary facilities, they are categorized as equipment items. The aircraft sunshade user is responsible for and shall advocate, procure, install, and maintain aircraft sunshades. **(T-1)**. The user will appoint (to be designated by the contracting officer) a Contracting Officer Representative (COR) from within the user's organization for contract oversight of procurement, installation, and long-term sustainment of aircraft sunshades. **(T-1)**. With concurrence from the local Civil Engineer unit, the user may recommend a Civil Engineer as a technical representative to assist the COR in ensuring contractor compliance. Siting, energy/water consumption systems, and other considerations must be approved by the installation facility board. **(T-1)**.

2.7.25. Cybersecurity of Civil Engineer Control Systems. At a minimum, repair or construction projects (FSRM, MILCON, NAF, etc.) repairing or installing a civil engineer control system will comply with the latest Department of the Air Force Guidance Memorandum, *Civil Engineer Control Systems Cybersecurity* (DAFGM2021-32-01, 5 January 2021) or the most current control systems cybersecurity guidance and UFC 4-010-06, *Cybersecurity of Facility-Related Control Systems*. **(T-0)**. Construction projects must include Primary Facility costs for cybersecurity of civil engineer control systems in the amounts indicated in the annual AF/A4C DD Form 1391 Business Rules. **(T-1)**. If an FSRM project performs work on a control system, as defined in the DAFGM, *Civil Engineer Control Systems Cybersecurity* (water distribution system, fire alarm system, airfield lighting control systems, traffic signal systems, etc.), programmers will ensure costs and approvals for control systems cybersecurity compliance are included as identified. **(T-1)**. Cyber vulnerabilities associated with control systems underpinning Defense Critical Assets and Task Critical Assets must be prioritized to be mitigated by enterprise AMP or Sub-AMP managers. **(T-2)**.

2.7.26. Environmental Quality (EQ) Funding Eligibility. Primarily, EQ funding is to be used for the cost of initial construction, modification, or upgrade of a facility, system, or component(s) to comply with new environmental laws or regulations. Once constructed, maintenance and repair of these systems should be accomplished with FSRM funds even if the need to perform maintenance or repair is to satisfy environmental requirements, as cited by an environmental law, regulation, or permit. However, EQ funding is to be used for construction, modification, or upgrade necessary to comply with new or increased EQ requirements. See AFI 32-7001, *Environmental Management*, for additional guidance on programming environmental projects and information on EQ exceptions including limited exemption on using EQ to address formal Enforcement Actions.

2.7.27. Land Acquisition. For land acquisition projects, do not show Supervision, Inspection, and Overhead (SIOH) as a cost element on the DD Form 1391. If the land acquisition is programmed with a construction project, include SIOH only on the construction portion. If a project includes acquisition of 1,000 or more acres of land, or land with an estimated purchase price that exceeds \$1 million, DODI 4165.71, *Real Property Acquisition*, requires approval of the acquisition before including the project in the budget request. **(T-0)**.

2.7.28. Emergency and Standby Power Authorization. The Air Force authorizes use of emergency or standby diesel generators when needed to support mission-critical functions. Refer to section 2 of AFMAN 32-1062, *Electrical Systems, Power Plants and Generators* for type of facilities authorized for emergency power. Authorized backup generators are paid by the MILCON appropriation and should be included in the MILCON project, documented in Block 9 of the DD Form 1391 as a separate line item under Supporting Facilities. However, Uninterruptible Power Supply systems are not funded by the MILCON appropriation (3300) and should be funded by other appropriations.

2.7.29. Unaccompanied Housing. The installation commander will ensure the BCE programs and designs:

2.7.29.1. A major improvement project for a UH facility when the BCI score falls below 80 for inclusion on the Integrated Priority List (IPL) within the FYDP **(T-1)**.

2.7.29.2. A major repair project in the next fiscal year when either the roofing, plumbing, HVAC, or electrical and lighting System Component Index score falls below 70. **(T-1)**.

2.7.29.2.1. When other component scores (in the same facility) are approaching 70, carefully consider including these other components into the repair project.

2.7.29.2.2. To provide timely asset visibility, the BCE will ensure the applicable BUILDER™ component index data is updated at the completion of each project for UH facilities. **(T-1)**.

2.7.30. Pump houses. For project programming purposes only (not for real property facility accountability) a fluid distribution system (for example, systems for distribution of fire suppressant foam or water for cooling) dedicated to one building or a set of similar buildings is considered a building component, whether located inside or outside the building(s), if it is designed to circulate the fluid within the building(s) and is required for a complete and usable facility. This definition of building component does not apply to pump houses that are part of a networked facility that deliver a commodity to a building or other structure.

2.7.31. Standard Facilities Designs. Design teams shall use Air Force standard facilities designs, when available for a specific facility type. **(T-1)**. See AFI 32-1023, *Designing and Constructing Military Construction Projects*, paragraph 4.2.1.2 for standard facility design guidance. This guidance is applicable regardless of the project's fund type or source.

## 2.8. DELETE.

2.8.1. DELETE.

2.8.2. DELETE.

2.8.3. DELETE.

2.8.3.1. DELETE.

2.8.3.2. DELETE.

2.8.4. DELETE.

**2.9. Cost Estimates.** All cost estimates for projects covered by this Instruction and exceeding \$1,000,000 (considering *funded* project costs only) must be prepared by an authorized cost estimator, an AFIT WENG 400 graduate. **(T-1)**. Projects with funded costs exceeding installation approval level must be reviewed by an AFCEC/COS dedicated reviewer/approver. **(T-1)**. Similarly, projects at locations not under the jurisdiction of a primary installation commander and/or locations not on DoD real property records with costs exceeding approval levels delegated to the respective senior Civil Engineers (for example, HQUSAFE-AFAFRICA/A4C, HQ PACAF/A4C, HQ AFCENT/A7, HQ AFSOUTH/A4, HQ ACC AMIC/PCE) must be reviewed by an AFCEC/COS dedicated reviewer/approver. **(T-1)**. AFRC/A4 or NGB/A4 projects requiring DAF-level approval must be reviewed by an AFCEC/COS dedicated reviewer and approver. **(T-1)**. For AFRC/A4 or NGB/A4 projects approved below DAF-level, the respective staffs can choose whether or not to secure AFCEC/COS review and approval. AFCEC/CV has authority to determine which project cost estimates with costs exceeding installation approval level may be excepted from review by AFCEC/COS. All estimates should be prepared and reviewed and approved in accordance with guidelines in the Civil Engineering Cost Estimating Improvement Program.

2.9.1. All estimates must be prepared using parametric estimating tools. **(T-1)**. The Tri-Service Parametric Cost Estimating System (PACES) is a recommended tool to develop parametric cost estimates. The basis for parametric project cost estimates is completed planning documents, such as a charrette report. Installations must maintain an auditable estimate. **(T-1)**. The basis of estimate, which may use the RP 34R-05 as a guide as taught in AFIT's cost estimating training (WENG 400), provides a cost estimating auditability record. Additional detailed requirements for use of PACES, initial and refresher AFIT training, and other cost estimating and review guidance are found on the LCCE SME Cost Estimating guidance in CE DASH SharePoint ® site. The site can currently be found at <https://usaf.dps.mil/teams/CEDASH/SitePages/Service%20Page.aspx?Service=Cost%20Engineering> and the guidance is under "Resources."

2.9.2. Capture unique requirements of a project as separate line items under Primary or Supporting Facility cost. A good starting point for project contingency is 5%, but should be adjusted based on complexity of the project and market conditions. Commanders will ensure that MILCON project costs include contingency in Block 9 of the DD Form 1391. **(T-1)**. FSRM projects should not include contingency in a parametric estimate or Block 9 of the DD Form 1391 unless funds being provided for the project are based on the estimate (and not the bid), such as some organizations who secure funding outside the AFCAMP process.

2.9.3. On MILCON projects, programmers shall coordinate with Design Manager/Construction Manager (DM/CM) to determine Design During Construction (for USACE) or Post Construction Award Services (PCAS) for Naval Facilities Engineering Command (NAVFAC) and include as a line item in Block 9 of the DD Form 1391. **(T-1)**. This amount is shown after SIOH to avoid compounding. Confirm the project execution strategy with the Design and Construction Project Managers (DM/CM) or project manager--Design Build or Design Bid Build.

2.9.4. A figure of 4% is a good starting point for estimating DB design cost, but may be less or more depending a variety of factors (complexity, area, etc.). For projects using the Design Build strategy, an estimated cost for the design portion of the Design-Build contract must be included in Block 9 of the DD Form 1391. **(T-1)**.

2.9.5. Government-owned Utilities. Projects should capture the cost to alter, modify, relocate, connect, or disconnect to or from existing installation utility infrastructure to provide a complete and usable facility. If existing utilities do not have enough capacity to carry the new loads generated by the project, include the cost to provide this capacity increase under Supporting Facilities. Major base-wide capacity increases should be programmed as a separate project.

2.9.6. Privatized Utility Connections. Just as with government-owned utility systems, projects should capture the cost to install, alter, modify, relocate, connect or disconnect to or from existing privatized utility systems to provide a complete and usable facility that is also within regulatory compliance. This work, including extension of service, shall be performed or provided by the System Owner (SO) unless a waiver to do otherwise is obtained from AFCEC/CI. **(T-1)**. If a waiver is obtained, the BCE shall provide access to the worksite for the SO to inspect all aspects of the work including materials and construction practices. **(T-1)**.

2.9.6.1. Programmers, cost estimators, project managers, and project contracting officers shall consult with the privatized utility contract's Administrative Contracting Officer prior to contacting the SO. **(T-1)**. Materials and component specifications, construction standards and practices, and requisite system capacity shall be established by the privatized utility SO. **(T-1)**. Cost estimates for connections, disconnections, modifications, or extensions of service of privatized utilities shall be obtained from the SO **(T-1)**.

2.9.6.2. Sighting locations of newly required privatized utility system components shall be coordinated between the SO and the BCE during the planning stage of the project. **(T-1)**. The SO shall be involved in the master planning of MILCON and minor construction projects, including scheduling and stationing action requirements, prior to design finalization and project bidding. **(T-1)**. The cost estimate work should be a separate line item in Block 9 of the DD Form 1391 and titled "Privatized Utility Connection and Service Fee" for systems that are currently privatized, or scheduled to be privatized within the



current POM cycle. The cost estimate should be shown as a lump sum requirement for each privatized utility system connection and should not provide quantities of materials or components. If the DD Form 1391 is for construction proposed outside of the current POM cycle; Block 11 should be utilized to establish a method of decoupling utility infrastructure modifications from work to be executed by the Prime contractor. Additionally, Block 9 utility cost estimates should be titled "Utility Connection and Service Fee." All DD Form 1391 requests shall be evaluated for compliance with the above established language prior to allocating funds to the project. (T-1).

2.9.6.3. Once project funding has been released for allocation, the project contracting agency must coordinate with the privatized utility contract's Administrative Contracting Officer, AFCEC/CI, and the BCE to obtain design, construction, and operational cost impacts from the SO. (T-1). An Independent Government Estimate and scope evaluation shall be performed for cost and facility support reasonableness analysis and provided to the privatized utility contract's Administrative Contracting Officer Representative. (T-1).

2.9.6.4. Upon successful completion of negotiations, the base utilities privatization contract would be modified to incorporate the construction and subsequent Operations and Maintenance and Renewals and Replacement impacts. The "Privatized Utility Connection and Service Fee" line item funds, equivalent to the amount negotiated with the SO, shall be transferred from the project contracting agency to AFCEC/CI and a subsequent Military Interdepartmental Purchase Request (MIPR) shall be routed to the SO contracting agency. (T-1). This mechanism ensures the constructed assets are immediately owned by the SO, thereby removing the requirement of an amended bill of sale. Changes in inventory are accounted for through modification of the privatized utility contract by the Administrative Contracting Officer. Additionally, construction items related to privatized utility connection and service fees shall be delineated from all other line items when submitting DD Form 1354, with a unique facility number in block 10a, privatized Real Property Unique Identifier Code in block 10b, and privatized utility infrastructure Category Code in block 11. (T-1). Once service to the site has been verified to meet requirements by the project manager and the privatized utility contracting officer's representative, a separate DD Form 1354 for the privatized utility infrastructure shall be submitted to the BCE for updating the installation real property record as required. (T-1).

**2.10. Funded and Unfunded Costs.** For determinations regarding the classification of project costs as funded or unfunded, for both repair and construction, conform to guidance in the DoDI 7000.14-R Volume 3 Chapter 17, *Accounting Requirements for Military Construction Projects*. (T-0). Note that [paragraph 1704](#) provides information unique to projects funded by military construction appropriations, while [paragraph 1705](#) provides guidance on unfunded and planning costs for projects not funded by military construction appropriations. Refer to DAFMAN 65-605, Volume 1, Ch. 9 and UFC 3-580-01, *Telecommunications Interior Infrastructure Planning and Design*, for definition and guidance on funded and unfunded costs. (For additional guidance on Funded and Unfunded Cost, refer to [Attachment 5](#))

**2.11. Estimated Facility Replacement Cost for Repair Projects.** 10 USC § 2811 requires the comparison of the repair project cost to the estimated cost of a MILCON project to replace the facility. See AF/A4CF FSRM DD Form 1391 preparation business rules for documenting the repair-to-replacement ratio. In the repair-to-replacement ratio it's best to use a parametric estimate to determine the facility replacement cost; however, the following formula to estimate the facility replacement cost is allowable as an initial rough estimate: Estimated cost of a MILCON project to replace the facility = Plant Replacement Value (PRV) x 1.4.

2.11.1. Except where noted in this Instruction or any superseding Air Force Guidance Memorandum, programmers must either calculate the PRV using the PRV formula in UFC 3-701-01, *DoD Facilities Pricing Guide*, paragraph 3-2.2 or use the current year PRV of record as available in the Air Force Civil Engineer real property database. **(T-1). Note:** [One factor in the UFC formula is the facility's 4-digit Facility Analysis Category (FAC).] Some facilities have more than one FAC. Programmers should check the facility's "use record" which will provide all FACs for the facility. Determine the PRV for each FAC and then sum for the total PRV for the facility. Because PRV is a modeled cost, the 1.4 factor in the formula above roughly accounts for one standard deviation from the modeled cost plus additional costs of a construction project such as supporting structures and demolition.

2.11.2. To ensure an equivalent cost-to-replacement comparison, programmers cannot expand the facility used in the replacement cost estimate to accommodate new or additional requirements beyond the existing facility (mission, function, size, etc.), but the replacement facility can be brought up to current standards and codes. **(T-1).**

2.11.3. For packages going to the HAF for approval, programmers must show how the estimated replacement cost was determined (PRV from the database, PRV from the UFC formula, PACES estimate, etc.) in a document separate from the DD Form 1391. **(T-1).** Programmers must provide the estimate calculations in an attachment to the approval request package. **(T-1).** Programmers must indicate if any scope and cost increases in the replacement facility are due to compliance with codes or standards. **(T-1).** Additionally, if programmers choose not to use the PRV of record, the estimate must show the factors and numbers and calculations used in the PRV formula from the UFC. **(T-1).**

2.11.4. If programmers use the estimated replacement cost formula above, and the repair-to-replacement ratio exceeds 70%, programmers must use an actual MILCON replacement project cost estimate in the denominator using an accepted cost estimating method: PACES cost estimate, MII, or other method specified by the LCCE SME. **(T-1).**

**2.12. AFCAMP Floor.** To support the Chief of Staff of the Air Force's efforts to reinvigorate squadrons and develop leaders as well as decrease the effort required by civil engineers at every organizational level, installations will assume greater responsibility to fund relatively small dollar repair projects. **(T-1).**

2.12.1. Installations competing for centralized facility repair project funding through AFCEC via the AFCAMP will not submit projects less than the following thresholds to enable and allow for localized prioritization:

2.12.1.1. Sustainment repair projects - \$2 million **(T-1).**

2.12.1.2. Restoration & Modernization repair projects - \$1 million **(T-1).**

2.12.2. For projects that include a combination of repair work classes, the threshold applies to the work classification comprising the majority of the requirement. For projects which include a combination of repair work types, the threshold applies to the work classification comprising the majority of the requirement. Also, in the case of projects programmed as an umbrella project, the child projects under the umbrella project are subject to the AFCAMP floors individually and not as the entire umbrella project.

2.12.3. This guidance is about trusting commanders to make good decisions with limited resources. AFIMSC will establish a funds allocation methodology and funding process that follows the spirit and intent of this guidance to reduce project funding approval workload. **(T-1)**. AFIMSC will develop decision support tools (performance indicators) to measure allocation and execution effectiveness. **(T-1)**. The allocation methodology will be reviewed annually based on the established performance indicators. **(T-1)**.

2.12.4. The following types of project are exempt from this guidance:

2.12.4.1. Energy savings projects.

2.12.4.2. Troop training projects.

2.12.4.3. Third party companion projects.

2.12.4.4. Lajes Air Base real property reduction pay back (also referred to as “efficiency”).

2.12.4.5. Unaccompanied Housing as defined in AFI 32-6000, *Housing Management*.

2.12.4.6. Projects in support of an AF Strategic Basing Action as defined in AFI 10-503, *Strategic Basing*, Paragraphs 1.6 and 1.7.

## Chapter 3

### MAINTENANCE AND REPAIR PROJECTS

**3.1. This chapter provides general procedures for programming Air Force real property projects with the work classified as maintenance or repair.** Funds for these projects are normally from the operation and maintenance (O&M, 3400) appropriation (3740 for AFRC and 3840 for ANG), but may include: Research, Development, Test, and Evaluation (RDT&E) funds (3600 appropriation); Working Capital Fund (WCF); Defense Health Program funds; Defense Sustainment/Restoration and Modernization (S/R&M) accounts, and other fund sources when made available for operation and maintenance purpose.

**3.2. Maintenance.** Maintenance is the recurring, day-to-day, periodic, or scheduled work required to preserve real property facilities, systems, or components and prevent premature failure or deterioration, so they may be effectively used for their designated purposes. Maintenance does not change the function of a facility nor does it result in a capital improvement. Maintenance is a subset of Sustainment. See AF/A4CF FSRM DD Form 1391 preparation business rules for details on preparing a DD Form 1391.

3.2.1. Classify work as maintenance which entails the application of “protective coatings” or “sealants,” removal of rubber from paved surfaces, dredging of existing features (not for new construction), and upkeep of existing dredging spoils areas.

3.2.2. Sustainment Services Contracts. Classify work in service tasks which invest in (sustain) real property as maintenance. See [Attachment 4](#) for examples of maintenance service or commodity contracts.

3.2.3. Energy System Re- and Retro-Commissioning. These projects restore complex, high energy systems to their optimal performance and are considered “maintenance” if the investment is less than 25% of the replacement cost of the energy system. If the investment is greater than 25% of the replacement cost of the energy system, planners and programmers will classify the work as “repair.” **(T-1)**.

3.2.4. Maintenance Approval. There is no statutory or Headquarters Air Force cost approval threshold for maintenance projects.

**3.3. Repair Authority.** See [Paragraph 1.3.1.2.2](#) for the definition of repair. Work to add, alter, or replace any real property systems and/or real property components within the external dimensions of an existing facility may be classified as repair. Repair does not normally increase the volume or footprint of a facility, although repair may result in greater usable floor space due to reconfiguration of the interior of a building. For example, work to increase the gross square footage of a building by adding floors to interior space within the existing building envelope may be classified as repair. Space allowances and optimization need to be primary considerations in reconfiguration work or work to increase interior square footage.

3.3.1. An entire facility cannot be replaced as a repair project; however, components of a facility, including components of a networked facility as defined in this Instruction (**Attachment 2**) can be entirely replaced as repair. Repair work may be accomplished via a project funded by military construction appropriations. However, the fund source does not change the work classification. Work to add exterior appurtenances (such as fire escapes, elevators, and handicap ramps) where such work is required to meet applicable building codes and standards may be classified as repair.

3.3.1.1. Standards used to justify repair work must be well documented and well accepted. (T-1).

3.3.1.2. Repairing a failed system or component can include sizing to meet a known requirement. A failed facility, system, or component is one that is functionally or technologically obsolete, no longer meets codes or standards, or is no longer maintainable (i.e., replacement parts are no longer available).

3.3.2. Conversion. Repair includes the work to convert a facility, system, or component to a new functional purpose (change in category code) without increasing the facility's external dimensions. Repair work may result in a change of facility category code, but repair work cannot result in a change of the facility category code unit of measure (i.e., both current use and converted use possess the same primary unit of measure). (T-1).

3.3.2.1. OSD Reporting. OSD requires an annual report on conversion work classified as repair. To enable ease of gathering data for this report programmers will include the words "Convert" or "Conversion" as the first word in the project title of any project that includes conversion of a facility, portion of a facility, a system, or a component. (T-1). Conversion for purposes of this paragraph means work resulting in a change in the predominant design use category code for a facility with a Real Property Unique Identifier.

3.3.2.2. Construction work to create a new facility or add to an existing facility cannot be accomplished with the intention of later converting it using repair work to circumvent MILCON authority.

3.3.3. Repair by Replacement. Existing components of a facility, including components and sub-components of networked facilities, may be repaired by replacement, and replacements can be up to current industry, Federal, DoD, or AF standards, directives, or codes. Industry standards used to justify repair work need to be well-documented and widely-accepted. If not interior to an existing facility, component repair-by-replacement must be predicated on the need to repair the component due to failure and replacement must be the most cost-effective method of repair. (T-1). In good stewardship and oversight, unless part of a greater renovation project, replacement of components interior to a facility must be predicated on the need to repair the component or its functional obsolescence. (T-1).

3.3.3.1. DELETE.

3.3.3.2. Relocation of Replacement Components. Components being replaced with a repair project may be relocated (and linear structures extended as necessary) as part of the repair work if the scenario fulfills one of the following criteria:

3.3.3.2.1. When the component being replaced needs to remain functional until the new component is ready.

3.3.3.2.2. When safety or code requirements warrant moving the component or portion of a component.

3.3.3.2.3. When it is more cost effective to move the component or portion of the component than to replace it in its current location, to include consideration of life cycle costs and benefits.

3.3.3.2.4. When repair-by-replacement requirement aligns with a mission change driving the need to alter the location of the item in order to continue to provide the support originally intended.

3.3.3.3. How much of a facility can be repaired by replacement? The allowable extent of repair-by-replacement of facility components is as follows:

3.3.3.3.1. Vertical Structures. A facility cannot be replaced with the work being classified as repair, but components of a facility may be replaced with the work classified as repair. **(T-1)**. Any single major component or portion thereof may be replaced as repair, except the foundation and superstructure. In a vertical structure repair project, the primary components which define the facility structure (foundation and superstructure) must remain intact—no more than 25% of each replaced. **(T-1)**. The major components of a vertical facility are: foundation, superstructure, roofing, HVAC, electrical, plumbing, fire protection, exterior enclosure, interiors (including conveying systems).

3.3.3.3.2. Linear Structures. A repair project may replace an existing linear structure (i.e., measured in lineal feet) such as components of an electrical or water distribution line, but may not increase its carrying capacity unless: 1) the linear structure serves only as a service (branch) line between the distribution line and existing building, or 2) the linear structure is in an unserviceable or failing condition.

3.3.3.3.3. Networked Facilities. For networked facilities, any number of the components as defined in **Attachment 2** (including sub-components or portions thereof) can be replaced as repair; however, no more than 75% of an entire networked facility, as defined in **Attachment 2**, can be replaced with the work classified as repair. **(T-0)**. The percentage is based on a reasonable quantification of the networked facility as a whole (e.g., linear feet, square feet, etc.). For purposes of determining whether more than 75% of a networked facility is being replaced as repair the numerator includes the quantification (size, not cost) of the repair requirements in the component plus all known phases (at least five years out). The denominator includes the quantification (size, not cost) of the entire networked facility.

3.3.3.4. When a component is repaired by replacement, the original component must be demolished. **(T-0)**. It cannot remain in place for its original function or any new function. Lack of resources necessary to accomplish the demolition is not an exception to this guidance. When it is cost-prohibitive to demolish the component (e.g., removing an abandoned drainage pipe running under an aircraft parking apron), the original component must be left in a state where it is incapable of being re-used for any function. **(T-0)**. If the component being replaced is not demolished or left in a state incapable of being re-used for any function, then the work to replace the component must be classified as construction. **(T-0)**.

3.3.4. Golf Courses. Refer to [Chapter 6](#) for programming golf course maintenance and repair. For work classification determinations, components of a “golf course playing area” per [Chapter 6](#) can be repaired by replacement.

3.3.5. Combat Arms Training Facilities. Verify RPIE determination with the Real Property Accountable Officer. Exterior installation of real property components where they did not previously exist is construction. Refer to Engineering Technical Letter (ETL) 11-18, *Small Arms Range Design and Construction*, or applicable UFC, for combat arms training facility standards. Cleaning, inspection, disposal of hazardous and nonhazardous residues, and daily maintenance of range components is a using organization responsibility to fund or perform. Periodic maintenance, repair, and replacement of range components, if Real Property Installed Equipment (RPIE), is a Civil Engineer (CE) responsibility.

**3.4. Funding Categories.** This paragraph addresses work eligible using fund sources available for operation and maintenance (O&M, RDT&E, WCF, etc.) Funding categories (Sustainment, R&M) should not be confused with work classification (maintenance, repair, and construction) as well as demolition. It is critical that programmers first correctly identify the work classification when programming projects to determine the appropriate approval authority thresholds and fund sources. **(T-0)**. After the work has been classified, planners and programmers can determine the proper funding category.

3.4.1. Sustainment. Sustainment is a category of maintenance and repair work which is expected to occur within the lifecycle of a facility. Sustainment does not result in a capital improvement. See [Paragraph 2.5.4](#) for capitalization guidance. Sustainment means the maintenance and repair activities necessary to keep an inventory of facilities in good working order.

3.4.1.1. Sustainment Maintenance. Maintenance includes work to maintain the inventory of real property assets through its expected service life. It includes regularly scheduled adjustments and inspections, and preventive maintenance tasks. Maintenance is routinely completed through the Recurring Work Program and Direct Scheduled Work Program. There may be times when a contract effort is necessary to complete maintenance work. See [Attachment 4](#) for examples of contract maintenance work.

3.4.1.2. Sustainment Repair. Repair is defined in [Paragraph 3.3](#) and includes sustainment, restoration, and modernization activities. The sustainment repair activity of this repair triad includes emergency response and service calls for minor repairs. It also includes major repairs or replacement of facility components (usually accomplished by contract) expected to occur periodically throughout the life cycle of facilities. This work includes regular roof replacement, refinishing of wall surfaces, repairing and replacement of heating and cooling systems, replacing tile and carpeting, and similar types of work. It does not include environmental compliance costs, facility leases, or other tasks associated with facilities’ operations (such as custodial services, grounds services, waste disposal, and the provision of central utilities). Timing of the work (within or post life cycle) isn’t the determining factor between sustainment and R&M—the purpose of the work is the primary factor. Repairs expected within the lifecycle but are accomplished post-expected lifecycle (e.g., deferred, delayed, and neglected) are still sustainment repairs. Use Asset Management concepts and tools to identify and program life cycle sustainment projects. See [Attachment 4](#) for examples of sustainment repair work.



3.4.2. Restoration and Modernization. Restoration and modernization are categories of repair and construction work which are not expected to occur within the lifecycle of a facility. Restoration and modernization can result in a capital improvement to the respective facility. See [Paragraph 2.5.4](#) for capitalization guidance. Repair is defined in [Paragraph 3.3](#) and includes sustainment, restoration, and modernization activities.

3.4.2.1. Restoration Repair. Restoration repair includes repair and replacement work to restore facilities collaterally damaged due to natural disaster, fire, accident or other causes. This is considered non-life cycle repair of real property. Repair necessitated by collateral damage from lack of sustainment is restoration repair. For example, fixing interior damage resulting from a leak in an inadequately sustained roof is restoration repair. Fixing the inadequately sustained roof is sustainment repair. Any work which would have been categorized as sustainment is still sustainment. See [Attachment 4](#) for examples of restoration repair.

3.4.2.2. Modernization Repair. Modernization repair includes repair activities to alter facilities or components within the facility's external dimensions to implement new or higher standards (including regulatory changes and code compliance) or to accommodate conversion. Modernization repair is considered non-life cycle repair of real property. See [Attachment 4](#) for examples of modernization repair.

3.4.3. Other Funding Considerations.

3.4.3.1. Funding of Replacement Real Property Installed Equipment (RPIE). If RPIE is being replaced and functioned properly when originally installed, the repair or replacement of the item should be funded using funds available for operation and maintenance. This is applicable whether the equipment is being replaced as part of a larger repair project or as a stand-alone replacement. If the equipment was initially and properly categorized as equipment (not RPIE), then it is not real property and its replacement is properly funded with procurement funds (in accordance with the expense and investment threshold).

3.4.3.2. Funding Military Construction Deficiencies. Programmers and project managers need to ensure funds available for operation and maintenance are not used, regardless of funding source, to correct deficiencies in projects funded with other appropriations (when a component of the original project funded by military construction appropriations has never functioned properly whether due to inadequate design, construction, or installation), including real property installed equipment, throughout the life of the facility. **(T-0)**. This section is applicable to all non-3400 appropriations to including MILCON, BRAC, and RDT&E funds provided pursuant to paragraph (a) in 10 USC § 2363, *Mechanisms to provide funds for defense laboratories for research and development of technologies for military missions*.

3.4.3.3. Working Capital Fund (WCF). WCF activities (e.g. Transportation, Defense, etc.) are responsible for costs associated with S/R&M projects in accordance with DoD 7000.14-R, Volume 11B, *Reimbursable Operations Policy – Working Capital Funds (WCF)*, Chapter 12, paragraph 1205. WCF activities use WCF funds to reimburse host installations or use direct cite funding for such work. When a WCF activity partially occupies a building, WCF will, as established above, fund costs in support of the space occupied by the WCF activity. **(T-1)**. WCF projects are subject to the same statutory limitations as those projects funded with other funds available for operation and maintenance. The Defense



Commissary Agency (DeCA) is a WCF activity; however, DeCA facility S/R&M requirements are programmed, approved, and funded with nonappropriated funds and guidance. DAFMAN 65-605, Volume 1, details all WCF activities on Air Force installations. Additionally, refer to any established base support agreements.

**3.5. Delegation and Approval Levels.** By MD 1-18, the SECAF delegated authorities under 10 USC § 2811 to SAF/IE, who re-delegated them to SAF/IEE. SAF/IEE re-delegation memoranda specify approval levels for AF/A4C, Air Force Reserve, and Air National Guard. AF/A4C re-delegation memoranda specify approval levels for AFCEC/CL and permit AFCEC/CL to further delegate certain approval responsibilities. In all cases refer to current re-delegation memoranda for details. SECAF, SAF/IE, SAF/IEE, or AF/A4C may, at their discretion, for particular projects, reduce or otherwise impose restrictions on the delegated approval levels. Maintenance projects do not require approval under 10 USC §2811 (AFCEC, AFRC/A4, NGB/A4 and installations may set approval requirements for maintenance projects).

3.5.1. Failure to seek proper approval before obligating project repair funds can expose personnel to a possible statutory violation. In a multi-phase project (single facility), failure to obtain the appropriate level of approval for all phases before obligating funds on any phase may expose personnel to a programming or statutory violation. See [Paragraph 2.4.5](#) for definition of project phases.

3.5.2. After approving repair projects estimated to exceed \$7,500,000, SAF/IEE will report the approval to the appropriate congressional committees. **(T-0)**. Failure to obtain SAF/IEE approval of such projects prior to the obligation of funds may be a statutory violation. Such projects may not proceed until completion of a 14-day period beginning on the day of HAF notification to committees and ending after AF/A4CF, AFRC/A4, or NGB/A4 notification to the installation that the waiting period is complete. **(T-1)**. See the AF/A4CF FSRM DD Form 1391 preparation business rules for details on the contents of a project approval request package. AF/RE and NGB/A4 will establish procedures within their respective chains to obtain necessary SAF/IEE approvals and notifications for repair projects. **(T-1)**.

3.5.3. Emergency and Emergent Projects. Emergency and emergent projects require approval at the appropriate level prior to obligating funds (without regard to other pending non-emergency repair projects), to include modifications or other changes. Programmers and project managers must ensure proper approval is in place prior to funds obligation. **(T-0)**.

3.5.4. Project Re-Approval. The authorities provided for project approval cover both scope and cost as provided in the approval document (DD Form 1391). Projects with work, which differs from or has been changed (increased or decreased) from the scope of what was approved (see [Paragraph 3.5.4.3](#)) or with costs exceeding the threshold cost-differences described in this paragraph require re-approval. The cost threshold requiring re-approval of a repair project is different in the project's pre-award and post-award life cycle. Prior to award, a repair project with costs exceeding 25% difference from the approved amount requires re-approval by the appropriate approval authority (based on the newly expected cost if the cost went up and based on the original approval if the cost went down). After award, the baseline is reset at the award amount plus other funded costs (e.g. SIOH), and a repair project with costs (including all funded costs) exceeding 15% difference from the award amount requires re-approval by the appropriate approval authority (based on the newly-expected cost). Once a project has been re-approved, the new threshold for the project is based on the re-approved amount.

3.5.4.1. In accordance with 10 USC § 2811, all phases of a repair project must be approved together. **(T-0)**. For phased projects, re-approval thresholds are applied to the individual phases, not the overall “umbrella” approved amount. Programmers or project managers must ensure the work causing an individual phase to exceed the applicable threshold does not commence until approved or re-approved by the appropriate authority. **(T-1)**.

3.5.4.2. Cost Increase and Re-approval. If a project costing less than the SAF/IEE approval threshold and project costs later exceed the delegated approval threshold from SAF/IEE, programmers or project managers must request SAF/IEE approval, including notification to the appropriate congressional committees. **(T-0)**. The BCE must ensure any portion of the work that will cause the project (including all phases) to exceed the applicable approval threshold shall not start until after re-approval and any necessary report to the appropriate congressional committee is complete. **(T-0)**. Do not proceed with obligation of funds until AF/A4CF provides written notification that the congressional notification and waiting period is complete.

3.5.4.3. If modifications or additional phases of an already-approved project will change the approved scope, programmers or project managers must obtain appropriate approval prior to obligating funds for the newly-added scope (see [Chapter 2](#) for project phases). **(T-1)**. Keep in mind a determination in change in scope from a programming perspective may be different than from a contracting perspective. Determinations of allowable scope changes within the approved project can be addressed on a case-by-case basis with AF/A4CF.

3.5.4.4. When requesting re-approval of a project, if the project has been awarded, do not modify the DD Form 1391 from the time of award. The DD Form 1391 indicates the project of record at the time of award. The re-approval request package should explain the reason for re-approval, what has happened to cause the cost and/or scope to increase from the initial approval, root cause analysis leading to the cost and/or scope increases, local and enterprise lessons learned and corrective actions, etc.

3.5.5. Petroleum, Oil, Lubricant (POL) Systems. The Defense Logistics Agency-Energy (DLA-E) is responsible for project approval on Air Force installations (including ANG installations) for the fuel systems and related appurtenances which receive, store, and dispense DLA-E-owned fuels, as well as for projects in facilities for which DLA-E earns sustainment funding. For guidance regarding POL project requirements, to include programming and documentation, contact the Air Force Petroleum Agency (AFPET).

3.5.6. Defense Health Program (DHP). The Defense Health Agency (DHA) has authority to classify and approve DHP-funded projects. In the project planning stage, the medical unit on Air Force installations will coordinate their projects (fire compliance, safety compliance, siting approval, NEPA compliance, architectural compatibility, etc.) with the host Civil Engineer unit and other applicable installation officials early in project development and prior to sourcing funds. **(T-1)**. The Using Medical Service facilities component will prepare and staff approval request packages through DHA for DHP-funded work in medical facilities. **(T-1)**. The Using Medical Service facilities component will also coordinate project closeout (real property updates, as-built updates, etc.) with the host Civil Engineer unit, including final project costs to complete financial close-out actions. **(T-1)**. The Using Medical Service can determine the

execution agent for O&M (DHP)-funded efforts. For questions and how to coordinate efforts contact DHA-FE or the Medical Facilities' DHA-FE-assigned SRM-Portfolio Manager.

### 3.5.7. Approval Request Packages and Certification.

3.5.7.1. Programmers must ensure documents (e.g., DD Form 1391, etc.) are signed/approved by the appropriate certifying official (per designations in this Instruction or other delegations). **(T-1)**. Programmers must ensure approval request packages coming to the Air Staff include the following at minimum (preliminary review packages do not require signed documents): 1) DD Form 1391 (AF/A4CF FSRM DD Form 1391 preparation business rules), 2) Certificate of Compliance for Critical Planning Actions signed by the installation commander (or as delegated, but not lower than the first cross-functional commander above the BCE), 3) an approved economic analysis or economic analysis waiver as required, or a completed cost comparison when the economic analysis is not required (see **Paragraph 2.4.8.1**) and 4) a cost estimate in sufficient detail to show how the costs on the 1391s were derived. **(T-1)**. Reviewers must ensure approval request packages sent to Air Staff include, at minimum, an approval request certified by AFCEC/CL, AFRC/A4, NGB/A4 or designated coordinating official (memorandum, electronic staff summary sheet, etc.) which includes a certifying statement of review and concurrence and the four items outlined above. **(T-1)**. The AFCEC certifying statement should read similarly to the following, "This package's programming document has been reviewed, and I certify it is complete and accurate, and compliant with appropriate statute(s) and instructions. The primary and supporting costs and work classification have been reviewed."

### 3.5.7.2. Certification.

3.5.7.2.1. DD Form 1391. The DD Form 1391 does not need to be signed during preliminary review; however, a DD Form 1391 signed by the BCE is required for final staffing and approval above the installation level. The signed DD Form 1391 must include the following certification from the Base Civil Engineer (BCE): "I have reviewed this document and certify it is complete and accurate, and is compliant with appropriate statute(s) and instructions. I have validated the project's primary and supporting costs and work classification. It has been fully coordinated with the user and other appropriate agencies." **(T-1)**.

3.5.7.2.2. Electronic Signature. Use of electronic (including digital) signatures on documents supporting repair and construction projects is authorized if the signature meets the criteria established in AFI 33-322, *Records Management and Information Governance Program*.

## Chapter 4

### UNSPECIFIED MINOR CONSTRUCTION

**4.1. Unspecified Minor Construction.** The source of funds for unspecified minor construction projects can be either funds available for operation and maintenance (including RDT&E) or military construction appropriations based on the project cost. Projects under this authority funded with military construction appropriations are referred to as UMMC projects; previously, these projects were referred to as P-341 projects. Projects under this authority funded with funds available for operation and maintenance are referred to as Unspecified Minor Construction (UMC) projects. See [Chapter 1](#) laying out the legal framework and authorities.

4.1.1. When a project includes construction and repair work, the scope of work and all associated costs (estimated and/or actual) must be identified separately for measurement of compliance with respective approval authorities and statutory dollar limitations. **(T-1)**. Actual costs of each work class must be tracked separately during project execution through close-out. **(T-1)**. If construction is funded by military construction appropriations, the repair and construction work require separate DD Form 1391s. In this case, use the umbrella structure described in A4CF FSRM DD Form 1391 preparation business rules.

4.1.2. Construction projects costing less than 90% of the limit specified in 10 USC § 2805 (c) must not be funded using military construction appropriations. **(T-1)**. Projects costing greater than 90% of the limit may be considered for funding by military construction appropriations with SAF/IEE approval.

**4.2. Unspecified Minor Construction approval.** By MD 1-18, the SECAF delegated authorities for unspecified minor construction using funds available for operation and maintenance to SAF/IE, who re-delegated them to SAF/IEE. SAF/IEE re-delegation memoranda specify approval levels for AF/A4C, Air Force Reserve, and Air National Guard. AF/A4C re-delegation memoranda specify approval levels for AFCEC/CL and permit AFCEC/CL to further delegate certain approval responsibilities. In all cases refer to current re-delegation memoranda for details. SECAF, SAF/IE, SAF/IEE, or AF/A4C may, at their discretion, for particular projects, reduce or otherwise impose restrictions on the delegated approval levels.

**4.3. Project Justification.** Commanders will ensure that requests identify any land acquisition and temporary facilities, indicate the date when the requirement was first known, identify unit or activity relocation in submittal documents, provide the required completion date, and schedule of related equipment delivery. **(T-1)**. The BCE shall sign the following statement, included on the DD Form 1391, for all projects submitted for approval above installation level: “I have reviewed the DD Form 1391 and assure the document is complete and accurate, and have validated the primary and supporting costs. The scope has been fully coordinated with the user and the Base Civil Engineer.” **(T-1)**. In the submittal, include a Certificate of Compliance for Critical Planning Actions ([Attachment 3](#)) signed per signature level requirements stated in [Paragraph 2.1.1 \(T-1\)](#).

**4.4. Re-Approval.** Projects will not be re-approved if the current working estimate exceeds statutory dollar limitations specified in 10 USC § 2805, *Unspecified minor construction*. **(T-0).** Re-approval of projects under this Chapter experiencing cost increases is required where either 1) the current working estimate at project award is 125% or more of the approved project cost stated in the documented approval or 2) the current working estimate at project award is 90% or more of the applicable project dollar limitation stated in the SAF/IEE approval memorandum. During construction execution, SAF/IEE re-approval of projects under this Chapter must be obtained when the current working estimate increases to 115% or more of the current working estimate at the time of contract award. **(T-1).**

## Chapter 5

### PROGRAMMING MILITARY CONSTRUCTION (MILCON)

**5.1. Military Construction (MILCON) Definition.** Military Construction includes any construction, development, conversion, or extension of any kind carried out with respect to a military installation. MILCON includes construction projects for all types of buildings, roads, airfield pavements, and utility systems. See [Chapter 1](#) laying out the legal framework and authorities.

5.1.1. A MILCON project costing not more than the amount in 10 USC § 2805(c) and (d) is generally planned and programmed using other appropriations available for Operation and Maintenance (O&M), Research, Development, Test, and Evaluation (RDT&E), Working Capital Fund, etc. in accordance with Chapters 2 and 3 of this Instruction. The Air Force MILCON program objective is to provide quality facilities to support Air Force missions. A MILCON project includes all construction work necessary to produce a complete and usable facility or a complete and usable improvement to an existing facility.

5.1.2. Project Authority. Authority to carry out a MILCON project includes authority for surveys and site preparation; acquisition, conversion, rehabilitation, or installation of facilities; acquisition and installation of equipment and appurtenances integral to the project; acquisition and installation of supporting facilities (including utilities) and appurtenances incident to the project; and planning, supervision, administration, and overhead incident to the project.

**5.2. MILCON Programming.** Installations and other project sponsors identify, develop, and validate MILCON projects, and submit prioritized list of projects to AFIMSC according to this Instruction and guidance provided in annual AFIMSC MILCON program call letters. In addition; NGB/A4 and AFRC/A4 compile, validate and submit their MILCON programs according to AFI and instructions provided in annual AFIMSC MILCON program call letter. AFIMSC obtains MAJCOM/FOA/DRU priorities and runs MILCON scoring model to develop draft priority list. AFIMSC presents the Total Force AF MILCON program to the Air Force Corporate Structure and advocates for MILCON resources. AF/A4C advocates for resources through the Air Force Corporate Structure, Office of the Secretary of Defense (OSD), and Congress.

5.2.1. Other MILCON Authorities.

5.2.1.1. Emergency Construction (10 USC § 2803).

5.2.1.1.1. Project Justification and Submittal. AFCEC/CP will submit project justifications to AF/A4CF. **(T-1)**. Installations will ensure that the submittal includes a DD Form 1391, a DD Form 1391c, and any additional info requested by AF/A4CF. **(T-1)**. The Air National Guard and Air Force Reserve follows similar processes but commanders will submit emergency construction requests directly to SAF/IEE and coordinate with AF/A4CF. **(T-1)**. Commanders will ensure that the urgency of the project is explained, including the date the emergency arose and why it was not known in time for inclusion in the MILCON budget currently before Congress. **(T-1)**. Commanders will ensure that the submittal also explains the impact on the installation mission if the urgent requirement is deferred until the next MILCON budget submission. **(T-1)**.

5.2.1.1.2. Funding. Emergency construction projects are funded from unobligated balances made available from authorized and appropriated MILCON programs.

5.2.1.1.3. Approvals Required. AF/A4CF validates the requirement and submits projects to SAF/IEE for approval and notification to the appropriate Congressional authorization committees. Subsequently, AF/A4CF, through SAF/FMB, requests the OSD Comptroller seek approval from the Senate and House Appropriations Committees to reprogram the identified offsets to the emergency project. A project may be carried out only if: (1) no objection is raised by the Armed Services Committees and (2) approval from the Appropriations Committees is obtained for reprogramming funds. Emergency projects should be accomplished within approved funds. The maximum that can be obligated by the Air Force under 10 USC §2803 in any fiscal year is \$50 million.

5.2.1.2. Secretary of Defense Contingency Construction (10 USC § 2804). For project submittals, requests should include Unified and Specified Commander's certification the project is vital to the United States security. Factors making the project vital to the security of the United States should be described in detail. Reasons the project cannot be programmed in accordance with established planning, programming, and budgeting system procedures, or accomplished using Air Force emergency construction authority should be listed. Also, provide anticipated contract award and design completion dates.

5.2.1.3. Acquisition or construction of facilities and equipment for research and development contracts (10 USC § 2353). Submit each project through A4CF to SAF/IE for approval. Guidance for programming projects under this authority can be found in DAFMAN 65-605, Volume 1.

5.2.1.4. Defense Access Road (DAR) Program.

5.2.1.4.1. General. This program provides a means for DoD to contribute funding to improve public highways serving defense installations and activities. The program is authorized by Section 210 of 23 CFR Part 660 Subpart E, *Defense Access Roads*, and implemented by Army Regulation (AR) 55-80, *DoD Transportation Engineering Program*. The DAR Program is managed by Military Surface Deployment and Distribution Command (SDDC), Department of the Army, and co-administered by the Federal Highway Administration (FHWA) and the Department of Transportation (DOT). The FHWA is the link to State and local transportation agencies that normally execute the projects.

5.2.1.4.2. DAR Project Justification and Submittal. The DoD expects state and local transportation agencies to develop and maintain public highways that serve permanent defense installations. Before requesting funds through the DAR program, installation commanders shall first request the jurisdictional authority to fund and accomplish the required improvements. **(T-1)**. However, some defense-generated impact may be too sudden or unusual to be incorporated into normal civil highway improvement programs. Such impacts could include traffic increases due to major on-base facility expansions, addition of a new entrance gate, a requirement to move unique defense vehicles on low-volume roads, or realignment of public roads due to new facility development (e.g., runway extension), or to repair damage caused to, and for any infrastructure to mitigate the risks posed to, highways by recurrent flooding and sea



level fluctuation, if continued access to an installation has been impacted by past flooding and mean sea level fluctuation. When it is understood that State and local authorities cannot or choose not to fund the necessary improvements, installation commanders shall submit an Access Road Needs Report through AFCEC/CP to AF/A4CF for requirement validation. **(T-1)**.

5.2.1.4.3. DAR Project Programming and Execution. Upon validation, AF/A4CF will coordinate the requirement with SDDC for eligibility determination and certification that the road is important to national defense. **(T-1)**. With AF/A4CF validation and SDDC certification, the MAJCOM/DRU shall include the project in the next command MILCON submittal, and clearly identify the requirement on the DD Form 1391 as a DAR project. **(T-2)**. Air Force funds are transferred to the FHWA via Standard Form 1151, *Non-expenditure Transfer Authorization*, to proceed with project design and construction.

5.2.2. Defense Wide Programs. For the following authorities, follow programming instructions of the sponsor organization.

5.2.2.1. Defense Medical MILCON.

5.2.2.1.1. Authority. This program is managed by the Defense Health Agency (DHA) and is funded by the Defense Health Program, not Air Force total obligation authority. This section applies to all active Air Force medical and medical related facilities; it does not apply to ANG or AFR medical or medical training facilities. The following directives apply: DoDI 6015.17, *Military Health System (MHS) Facility Portfolio Management*; and UFC 4-510-01, *Design: Military Medical Facilities*.

5.2.2.1.2. Project Justification, Submittal, and Program Development. Reference UFC 4-510-01, Chapter 2, *Planning*.

5.2.2.1.3. Medical Unspecified Minor Military Construction Requirements. Installations and MAJCOMs shall process Medical Unspecified Minor Construction requirements in the same manner as medical MILCON projects. **(T-2)**. OASD (HA) funds approved projects from the Defense Health Program. Commanders will ensure that projects programmed under the unspecified minor construction authority shall comply with DoDI 6015.17. **(T-0)**.

5.2.2.1.4. Medical Relocatable Facilities. Medical relocatable facilities are provided in accordance with guidance in **Chapter 2** of this Instruction.

5.2.2.2. Liquid Fuels Facilities. Liquid fuels facilities handling Defense Energy Support Center owned products are the responsibility of the Defense Logistics Agency (DLA) for MILCON funding and advocacy. In response to the annual DLA program call, CONUS installations submit MILCON fuels projects to Air Force Petroleum Agency for prioritization and release to DLA. Air Mobility Command, U.S. Air Forces Central Command, U.S. Air Forces in Europe, and Pacific Air Forces submit their projects directly to their Combatant Commands. Combatant Commands will submit the MILCON fuels projects to DLA, in accordance with DLA Manual 4270.1, DLA Facilities Projects Manual, and DoDM 4140.25, Volume 1, *DoD Management of Energy Commodities: Overview*. **(T-0)**. Also, see AFI 23-201, *Fuels Management*, and UFC 3-460-01, *Design: Petroleum Fuel Facilities*, for additional guidance. Submit information copies to AF/A4CF.



5.2.2.2.1. DLA fuels project data are not maintained in an approved Air Force project management database. Microsoft Word® document generated DD Forms 1391 should be used for fuel projects.

5.2.2.2.2. Bases or MAJCOMs shall contact Air Force Petroleum Office to request DLA funds during the planning phase to develop the requirement, assess the site, and prepare DLA required project documents as needed. **(T-2)**.

5.2.2.2.3. If a site survey is performed IAW **Attachment 3** indicates presence of regulated substances (e.g. POL contamination) at the DLA project site, then a site mitigation plan should be developed during advanced planning to identify how the regulated substances present on-site should be managed to minimize impact to the project.

5.2.2.3. North Atlantic Treaty Organization (NATO) Security Investment Program (NSIP). Facilities and equipment required to support U.S. NATO-assigned forces and NATO operational plans should be funded, to the maximum extent possible, through the NSIP in accordance with latest version of DoDD 2010.5, *The North Atlantic Treaty Organization (NATO) Security Investment Program*.

5.2.2.4. DoD Education Activity (DoDEA). DoDEA is a Department of Defense field activity operating under the direction and authority of the Undersecretary of Defense for Personnel and Readiness in accordance with DoDD 1342.20, *Department of Defense Education Activity (DoDEA)*. DoDEA is responsible for all aspects of providing education programs to eligible DoD dependents, including facilities construction. DoDEA plans and programs its MILCON projects centrally.

5.2.2.5. Foreign Military Sales Construction (FMS). 22 USC § 2751 et seq., *Arms Export Control*, establishes legal controls on the import and export of defense articles and defense services and codifies the Arms Export Control Act. 22 USC § 2769 authorizes construction services sales to eligible foreign countries. Air Force installations must ensure that proposed FMS construction facilities, built on their installations, are solely for foreign government use. **(T-0)**. Facilities required for Air Force use, which may also be available for FMS, must be constructed with appropriated funds. **(T-0)**. FMS construction facilities built on Air Force installations are not Air Force real property assets unless the foreign government transfers title to the Air Force an appropriate statutory authority. Unless title is thus conveyed to the Air Force, installations must ensure that the land on which the facility is built is leased to the foreign government. **(T-0)**. Installations must consult the Office of the Air Force Deputy General Counsel (Installations, Energy and Environment) through AFCEC regarding such leases. **(T-1)**. All FMS construction on Air Force installations is subject to the EIAP and must be approved by AF/A4C and SAF/IEE. **(T-1)**.

5.2.2.6. Energy Resilience and Conservation Investment Program (ERCIP). ERCIP is a subset of the Defense-Wide MILCON Program specifically intended to fund projects that improve energy resilience, contribute to mission assurance, save energy, and reduce DoD's energy costs. ERCIP accomplishes this through construction of new, high-efficiency energy systems and technologies or through modernizing existing energy systems. Programming Guidance can be found at the ERCIP web-site at [https://www.acq.osd.mil/eie/IE/FEP\\_ECIP.html](https://www.acq.osd.mil/eie/IE/FEP_ECIP.html). Overarching DoD policy for ERCIP can be found at [https://www.acq.osd.mil/eie/IE/FEP\\_Policy\\_Program\\_Guidance.html](https://www.acq.osd.mil/eie/IE/FEP_Policy_Program_Guidance.html).

**5.3. Project Identification and Validation.** Project development is one of the most important actions in MILCON programming and is documented using a DD Form 1391. The DD Form 1391, by itself, should explain and justify the project to all levels of the Air Force, OSD, Office of Management and Budget, and Congress. Justification data should clearly describe the impact on mission, people, productivity, life-cycle cost, etc., if the project is not accomplished. BCEs will develop the initial planning documents to support each MILCON project. **(T-2)**. Commanders will ensure changes to the DD Form 1391 from the initial planning stages to President's Budget submission are tracked and filed for record in the project folder at the installation. **(T-2)**.

5.3.1. Project Identification. With the exception of Corporate Initiative projects, installation commanders determine which facility needs cannot be met with existing facilities. Installation commanders review, validate, and prioritize installation MILCON facility requirements. **(T-2)**. When it is determined a facility should be constructed or upgraded, the BCE will prepare and submit a DD Form 1391, with all other applicable documentation. **(T-1)**. DD Form 1391 shall comply with DoD 7000.14R, *Financial Management Regulation*, Chapter 17 instructions and AF/A4C DD-1391 preparation business rules. **(T-0)**. Documentation (typically obtained from facility users/tenants) should include a fully justified case for accomplishing the project. A project is considered initiated for programming once it is entered into an approved Air Force project management database. New Mission MILCON requirements should be identified and advocated through the respective command lead who serves as the principal integrator for their assigned Service Core Function. For ANG projects, the BCE submits DD Form 1390S and DD Form 1391 to NGB/A4. For AFRC projects, the BCE submits DD Form 1390S and DD Form 1391 to HQ AFRC/A4.

5.3.2. Requirements. To ensure only developed projects are included in budget requests, each project submitted for prioritization and inclusion in the first budget year at the MILCON Working Group must include a DD Form 1391, completed Certificate of Compliance, economic analysis (or approved waiver), completed planning documents including a planning charrette report (PCR) or equivalent which may be approved by AFCEC/CP, and a cost estimate based on those planning documents. **(T-1)**. Products of the 35% design, discussed in AFI 32-1023, *Designing and Constructing Military Construction Projects*, are utilized during programming. As required by Congress and OSD, the DD Form 1391 which goes into the President's Budget Request shall reflect the scope and cost estimate from a 35% design. **(T-0)**.

5.3.3. Planning Charrette Reports (Level I and Level II) for MILCON projects. Planning Charrette Reports-Levels I and II (PCR-I and PCR-II) document and provide a basis for understanding, describing and quantifying project requirements. PCR-I and PCR-II also provide the basis for cost and scope development and refinement of the draft DD Form 1391. The Designer of Record (DOR) shall use the PCR-II obtained from AFCEC, COE/NAVFAC, or Installation Contracting Office as the principle basis of project design or Request for Proposal (RFP) development. **(T-1)**. The Planning Charrette Report (PCR) primary purpose is to clearly identify all the project requirements and associated scope. This template is intended to be used as either a PCR I or PCR II. The PCR I is the first significant planning effort executed by the installation either in-house or via contract to develop the first draft Department of Defense (DD) Form 1391. The PCR II is conducted once the MILCON Working Group has determined the project is worth further definition, and is usually executed via contract through a design agent. All sections of this report template are mandatory for development of a PCR

II. Only those sections with headings highlighted blue are mandatory for a PCR I, though all sections should be evaluated for significant impacts to scope. **Note:** Refer to AFCEC guidance for documents and processes used to support FSRM project planning and development. For example, charrette reports (CRs) are used for FSRM projects, but not for MILCON projects.

5.3.3.1. PCR-I. The BCE should initiate the PCR-I as early as possible involving as many stakeholders of the Project Delivery Team (PDT) as practical. Inclusion of environmental planning and the environmental impact analysis process (EIAP) staff is critical to ensure the approach for environmental impact analysis can be shaped and environmental issues can be avoided, through siting, if possible.

5.3.3.2. PCR-II. The DM/CM, which is always AFCEC for MILCON projects, initiates a PCR-II. It further defines/validates the need, provides a refined draft DD Form 1391, and seeks opportunities to optimize cost and scope with updates to the scope and cost to the DD Form 1391. Cost, scope optimization, and economic analysis are required throughout the life of Air Force construction projects and shall be included in both the PCR-I and PCR-II. (T-2).

5.3.3.3. PCR Funding. The PCR-I and PCR-II are considered advanced planning activities; therefore use funds available for operation and maintenance for their preparation. Centralized O&M funding is one option for funding PCRs as outlined in the AFCAMP business rules. Other O&M funds may also be used. See the Whole Building Design Guide (WBDG) website for PCR guidance. Ensure that development of the PCR-I and PCR-II requirements follow those in the HAF-AFCEC PgMP found at <https://www.wbdg.org/ffc/af-afcec/policies-and-guidance-af-design-and-construction/program-management-plan-for-air-force-milcon-execution>.

5.3.3.4. PCR Template. The PCR template is housed on the Forms & Templates section of the AFCEC/CF SharePoint ® site under MILCON Program Management. <https://portal.afcec.hedc.af.mil/CF/CFT/MILCON/SitePages/Home.aspx>

## Chapter 6

### NONAPPROPRIATED FUND PROJECTS

**6.1. Nonappropriated Fund Projects.** Nonappropriated funds provide facilities that improve the morale and welfare of Air Force personnel and family members by providing enhanced recreation, services, and resale activities and programs that are not authorized for construction with congressionally appropriated funds. Nonappropriated fund projects are funded with monies not appropriated by Congress such as private donations, Army and Air Force Exchange Service (AAFES) dividends, Defense Commissary Agency (DeCA) surcharges, and revenue generated from Services MWR or lodging activities. For APF funded projects associated with or related to facilities housing NAF activities, follow APF planning and programming rules and authorities for APF fund type.

**6.2. Fund Sources for NAF Projects.** Facility categories are a primary factor in determining the proper fund source for NAF projects. Use AFI 65-106, *Appropriated Fund Support of Morale, Welfare, And Recreation (MWR) And Other Nonappropriated Fund Instrumentalities (NAFIs)*, Table 2.1 and Table 4.2 to determine the facility category and fund source. The three identifiable categories or groupings of Morale, Welfare and Recreation (MWR) facilities are Category-A: Mission Sustaining Activities; Category-B: Basic Community Support Activities; and Category-C: Revenue Generating Activities. In addition there are lodging facilities as a separate non-MWR category. A discussion of each follows:

6.2.1. Category A—Mission Sustaining Activities. These programs promote the physical and mental well-being of military personnel. They support the basic military mission and are funded with Appropriated Funds (APF). Restrict use of NAFs to specific instances where the law or policy limits Appropriated Funds. Programs in this category have virtually no capacity for generating NAF revenues.

6.2.2. Category B – Basic Community Support Activities. These programs support the military mission by satisfying the basic physiological and psychological needs of military members and their families. They provide community support systems for the mobile military population. These programs differ from those in Category A, in part, because of their limited ability to generate NAF revenues. Approved remote and isolated locations have additional Category B APF support; see AFI 65-106, Table 3.1 for details.

6.2.3. Category C – Revenue Generating Activities. These programs provide recreational and resale activities that benefit military morale. They foster community spirit and provide alternatives for off-duty pursuits. These programs are the most profitable, and should fund most of their expenses.

6.2.4. Other Activities. This final group includes activities that are not in one of the above groups. They are privately funded and not authorized APF support unless specifically authorized in this instruction. DoD has directed use of nonappropriated funds to construct, maintain and repair lodging facilities. See Directive Type Memorandum (DTM) 18-007, *Conversion of DoD Temporary Duty and Permanent Change of Station Lodging to Fully Nonappropriated Fund Operations, Maintenance, and Construction*, 21 Nov 18, for specific guidance. **Note:** Maintenance and repair of banks and credit unions are funded in accordance with the lease agreement for the facility. For support to Fisher Houses reference AFI 65-106.

6.2.5. Waiver to Fund Source. Occasionally, unique situations or exigencies may require deviation or exception to the basic funding policy. Except as noted below, authority to waive the fund source remains with the Principal Deputy Under Secretary of Defense, Personnel and Readiness or PDUSD (P&R). The installation must completely justify requests for waiver, regardless of cost. **(T-1)**. Deputy Director of Civil Engineers, Deputy Assistant Secretary of the Air Force (Environment, Safety and Infrastructure), and PDUSD (P&R) will review these requests on a case-by-case basis. Support requests with the same programming documentation required for project approval. Installation must make sure funds are available for the project and are authorized by the funding authority. **(T-0)**. Include this information in the waiver request. Show how and why the waiver is in the best interest of the Air Force.

6.2.6. Nonappropriated Funding for Projects Normally Funded with APFs. For OCONUS youth centers, youth courts, and youth playing fields, SAF/FMC may approve the use of NAF funding when APFs are certified as unavailable. This certification requires the MAJCOM comptroller to state the following criteria have been satisfied: (1) the installation submitted the project to the MAJCOM for consideration in its MILCON (major and minor construction) or APF modernization budget; (2) the project was not prioritized high enough to be funded within the AFIMSC, Air Force Reserve or Air National Guard total obligation authority for any APF source; (3) the MAJCOM certifies that the project is of higher priority than all other non-funded NAF construction and modernization requirements. Waiver requests should be submitted through AFSVC to AF/A1S, AF/A4C and SAF/FMB for funding consideration and SAF/FMC for approval. The waiver request must include certification that the project meets all three criteria. **(T-1)**.

6.2.7. Appropriated Funding for NAF Facility Requirements. APFs are the appropriate fund source for facility requirements supporting NAF activities that are driven by: (1) restationing actions, (2) facility relocation for the convenience of the Government, (3) constructing facilities denied by a Status of Forces Agreement or other international agreement, or (4) if a facility is destroyed by a natural disaster (see 32 CFR Part 842 Subpart C, *Personnel Claims*, paragraph 22(a)), by fire, or by terrorism. In these cases, appropriated funds are the appropriate fund source for all construction. Installations will not use APF, MWR, or Lodging funds to construct or relocate facilities for private organizations. **(T-0)**.

6.2.7.1. Establishing, Activating, and Expanding a Military Installation. An expansion is a major increase in authorized and assigned personnel strength over a short period of time. For example, a 25 percent increase of assigned personnel over a two year period as noted in DoDI 1015.15, *Establishment, Management, and Control of Nonappropriated Fund Instrumentalities and Financial Management of Supporting Resources*, Footnote 12, Enclosure 4. Evolutionary expansion over time would not qualify.

6.2.7.2. Relocating Facilities for the Convenience of the Government. When a government requirement displaces a NAF activity (to include any Category B or C facility, regardless of original fund source), the installation may include the costs of removal, relocation, or construction of a replacement for the NAF facility in the military construction DD Form 1391 documentation. Replacement facilities could include either newly constructed facilities or alteration of existing buildings. Examples are: installation-initiated consolidations or traffic circulation issues. Another example would be the requirement to move facilities out of the Clear Zone/Accident Potential Zone (CZ/APZ).

6.2.7.3. Constructing NAF Facilities Denied by a Status of Forces Agreement or Other International Agreement. Installations will submit replacement of facilities to which access has been denied by a Status of Forces Agreement or other international agreement for APF consideration. **(T-0)**.

6.2.7.4. Utility Runs. Use of APFs is authorized to expand or extend utilities from the base system to connect to the site boundaries or nearest manhole, whichever is closest to the facility under construction. An exception that would not qualify for appropriated funding is long utility runs solely for the irrigation of golf courses.

6.2.7.5. Mixing Nonappropriated and Appropriated Fund Construction Funds. See [Paragraph 2.7.5.1](#) for guidance.

6.2.8. Projects Funded by APF and NAF. Combining APF maintenance and repair with a NAF maintenance and repair or NAF construction project is allowable within certain restrictions and controls. 10 USC § 2492, *Nonappropriated fund instrumentalities: contracts with other agencies and instrumentalities to provide and obtain goods and services*, authorizes the establishment of contracts or agreements between NAFIs and APF organizations that may serve as a vehicle to provide and obtain goods and/or services beneficial to the efficient management and operation of the exchange system or the morale, welfare, and recreation system. Submit separate NAF documents and APF documents to the proper approval authority. See [Chapter 2](#) to view details for programming projects from multiple funding sources and [Chapter 3](#) to view details on maintenance, repair, and approval levels. Site Development and Allied Support Funded by APF. DoDI 1015.15, Footnote 13, Enclosure 4, includes guidance on use of APF for site development, environmental remediation, demolition, excessive utility connections and other activities identified as allied support. This applies to all projects funded by NAF including AAFES and DeCA.

6.2.9. Use of Appropriated Funds or Nonappropriated Funds for Maintenance and Repair. Most maintenance and repair applies to work needed to maintain buildings, grounds, and facility systems (electrical, mechanical, plumbing, roofing, foundations, windows, doors, etc.). APFs are the appropriate fund source for this type of maintenance and repair of all categories (A, B, and C), to include AAFES facilities. Installations will not use APFs to repair functionally unique items required to support Category C activities with the exception of Remote and Isolated locations. **(T-0)**. Note that funding for all nonstandard signage, e.g., those using logos in nonstandard colors, are considered functionally unique.

6.2.9.1. Waivers. For all categories of facilities, installations must obtain a waiver allowing use of NAF for maintenance and repair if APF is not available. **(T-0)**.

6.2.9.2. Fund Source Availability. NAF is the fund source for functionally unique items to support Category C activity operations with the exception of Remote and Isolated locations. Functionally unique items make the facility usable for the activity it contains, but are not considered part of the normal facility system. Some work in Category B activities can use NAFs or APFs depending on availability of funds without a waiver (See AFI- 65-106). Addition, rearrangement, or removal of non-load-bearing walls is subject to availability of APFs and does not require a waiver to fund source if funds are available (See AFI 65-106. Submit waiver requests to AF/A4CF for routing through AF/A1SR to SAF/FMC.

6.2.10. Project Approval for NAF Funded Work. NAF construction and repair projects must be approved by the appropriate approval authority as detailed in the latest official delegation memorandums. **(T-1)**. Projects requiring approval greater than the installation commander's approval limit require installations submit a completed DD Form 1391 signed by the Base Civil Engineer to AFCEC/CP for routing to the appropriate approval authority. Commanders will concur with the 1391 by signing an accompanying Certificate of Compliance in accordance with signature level requirements stated in **Paragraph 2.1.1 (T-1)**. For all construction projects exceeding \$750,000, installations must submit to Air Force Services Center (AFSVC/SVXFC) the completed DD Form 1391, 1391C, Fiscal Year 20XX Military Construction Project Data, and when appropriate additional requested supporting documentation for inclusion in the annual NAF Construction Report to Congress. **(T-1)**.

6.2.10.1. Supervision, Inspection, and Overhead (SIOH). SIOH is a civil engineer responsibility and an APF cost if performed by installation civil engineering employees (includes government and A-76 contractor employees). SIOH is a NAF cost if performed by contract, Army Corps of Engineers, AFCEC, overhires, or overtime by installation CE personnel. The civil engineering agency has the authority to provide their own Title II services. **(T-1)**. In all other instances, if the installation CE is unable to perform SIOH, the AFSVC Indefinite Delivery/Indefinite Quantity Construction Management Inspection Contract (Title II Services) should be utilized to ensure lowest cost to the project.

6.2.10.2. Design Services. Design is an APF cost if performed by in-house personnel (includes government and contractor employees). Design is a NAF cost if performed by overhires or contract; including USACE, AFCEC, and NAVFAC. Installations will use NAFs to fund all contract design services. **(T-1)**. Use published standard designs and design guides as applicable (see standard design guidance in AFI 32-1023, paragraph 4.2.1.2.).

6.2.10.3. Design Instruction. For a typical annual program of construction projects with funded costs of over \$1,000,000, AFSVC will request Design Instructions from AF/A4CF through AFCEC, AFRC/A4 or NGB/A4 to authorize designs to proceed, upon completion of the Project Validation Assessment for centrally funded projects. **(T-2)**. AFCEC/CF will manage Design Instructions for advertisement and award with coordination by AFSVC and AF/A4CF. **(T-2)**.

6.2.10.4. Golf Courses. Installations will use NAFs as the normal source of funds for golf courses, maintenance facilities, golf clubhouses and parking, and golf cart storage, construction, maintenance, and repair. **(T-1)**. APFs may be used for maintenance and repair in certain cases: the clubhouse, cart storage facilities attached to a clubhouse, and parking lots. Additionally, base-wide services such as mosquito fogging, control of ticks, rats, forest pests, etc., may be provided as a common service. As a rule, do not use APFs for golf course grounds maintenance and repair. This includes maintenance facilities, latrines, shelters, pump houses, sprinkler systems, and driving ranges, etc. Specialized pest control services such as herbicide and pesticide treatment of fairways, greens, water hazards, sand traps, etc. may be provided on a reimbursable basis.

6.2.10.4.1. Golf Course Programming Guidance. For the purpose of construction and major repair project approval, divide a golf course into the following separate entities:



6.2.10.4.1.1. Golf Course Playing Area (to include the course itself and tee boxes, fairways, traps, bunkers, greens, golf cart paths, driving range, practice putting green, trees and shrubs, water hazards, shelters, latrines, and snack bars on the course, and irrigation system –including sprinklers, piping, ponds, water wells, and other irrigation appurtenances).

6.2.10.4.1.2. Golf Clubhouse (to include parking lot and golf cart storage if the cart storage is attached to the clubhouse).

6.2.10.4.1.3. Maintenance Facilities (program each building with a separate facility number as a separate project). This includes golf cart storage facilities that are not attached to the clubhouse.

6.2.10.4.2. Remote and Isolated Locations. The PDUSD (P&R) officially designates certain installations as "remote and isolated" locations. With this designation, the installation will increase the use of APFs to maintain golf course facilities. **(T-0)**. The following breaks out the appropriate fund source for various golf course requirements at remote and isolated locations.

6.2.10.4.2.1. Appropriated Fund Support. APFs are authorized for routine golf course grounds maintenance and repair at remote and isolated locations. Routine grounds maintenance and repair includes mowing of grass; maintaining greens, tees, fairways; irrigating; applying fertilizer and soil amendments; verticutting greens; aerating; top dressing of greens; green collars and tees; over seeding; repairing damaged areas; weeding; removing debris; providing routine maintenance of maintenance facilities; cart storage facilities; latrines and shelters; cart paths and bridges; course maintenance facilities; changing holes; marking the course; maintaining trees and shrubs; maintaining sand traps and bunkers; maintaining water hazards; maintaining irrigation distribution systems; controlling erosion; applying pest control products as needed; controlling pest; and restoring grounds destroyed by fire or other natural disasters.

6.2.10.4.2.2. Nonappropriated Fund Support. For exceptionally large repair projects, such as when SAF/IEE approval is given, NAFs are the appropriate fund source for additions, alterations, and replacements to the golf course playing area and golf maintenance facilities either by contract or reimbursement to APFs at remote and isolated locations. Also use NAFs to construct golf clubhouses and cart storage facilities.

6.2.10.4.3. Unrelated Costs. APFs are the appropriate fund source for maintenance costs for facilities or environmental features adjacent to or within the boundaries of the golf course that would exist if the golf course was not there. Do not report these costs in golf course maintenance. This includes, but is not limited to, perimeter roads, drainage ditches, culverts, fences, structures, cemeteries, tree removal, waterways, or appurtenances (power lines, runway approach lights, etc.).



6.2.10.4.4. Damage due to Natural Disaster, Fire, or Terrorism. APFs may be used to restore grounds destroyed by natural disasters (hurricane, tornadoes, earthquakes, floods, etc.), fire, or terrorism. In the case of flooding, this refers to levels that exceed the 100-year flood as defined by FEMA and where the location is not currently identified as a flood hazard area; refer to 44 CFR Part 72, *Procedures and Fees for Processing Map Changes*. Do not use APFs to correct situations such as recurrent flooding (except where the course controls base water run-off during storms), or normal erosion of a river or creek exacerbated by an above normal amount of rain or snow. Repair of vandalism does not qualify for APF funding under this section.

6.2.11. Army and Air Force Exchange Service Facilities (AAFES). Unless exempted in this instruction, AAFES funds all construction and minor construction projects with related supervision, inspection, and overhead, equipment purchase, and installation. This includes DoD-approved remote and isolated locations. AAFES Board of Directors provides all authority for AAFES projects. The AAFES Director/CEO funds projects within amounts delegated by the Board of Directors. The AAFES Director/CEO in turn delegates approval authority to overseas region commanders and CONUS region directors. Projects that exceed the AAFES Director/CEO's approval authority are presented at an AAFES Board meeting for funding approval. The AAFES Director/CEO will approve all projects with a funded construction cost of up to \$750,000. **(T-0)**. For construction, the AAFES command engineer must submit to AF/A4CF for all project approval packages exceeding \$750,000 for inclusion in the next annual NAF report to Congress. **(T-1)**.

6.2.11.1. Army Air Force Exchange Service (AAFES) Responsibilities. AAFES will:

6.2.11.1.1. Serve as the program manager for AAFES maintenance, repair and construction projects. **(T-2)**.

6.2.11.1.2. Work with installations to obtain site approvals and technical sufficiency for project design. **(T-2)**.

6.2.11.1.3. Coordinate AAFES construction projects exceeding \$1.0M and maintenance/repair projects exceeding \$5.0M with the installation, MAJCOMs, AFCEC and AF/A4C. **(T-2)**.

6.2.11.1.4. Work with the installation, MAJCOMs, AFCEC and AF/A4C to properly advocate for APF for APF eligible work. **(T-2)**.

6.2.11.1.5. Prepare the Annual NAF Construction Report to Congress for AAFES funded construction projects. Submit through SAF/IEE to PDUSD (P&R). **(T-2)**.

6.2.11.2. AF/A4C Responsibilities. AF/A4C will work with MAJCOMs and installations to properly program projects for AAFES facilities. Resolve nonappropriated and appropriated funded responsibility issues. **(T-2)**.

6.2.11.3. Installation Commander Responsibilities. Installation commanders will:

6.2.11.3.1. Ensure installation participates in planning, pre-design, charrette and design conferences. **(T-2)**.

6.2.11.3.2. Review project documentation for inclusion of specific installation information and requirements. **(T-2)**. Coordinate on the DD Form 1391 when AAFES funded projects exceed AAFES and installation approval authorities.

6.2.12. Multipurpose Facilities. Commanders should consider constructing multipurpose facilities, similar to modern municipal recreation centers and college student unions, designed for optimum use. Most multi-use facilities include revenue-generating activities such as fast food outlets, delis, dining rooms, concession areas, sports bars, and amusement machines, as well as mission-sustaining functions (fitness centers, community centers, libraries, etc.). Therefore, commanders can use a pro-rated share of APFs and NAFs for construction with prior Deputy Assistant Secretary of the Air Force (Environment, Safety and Infrastructure) approval. A contract or agreement, can also be established with approval from Deputy Assistant Secretary of the Air Force (Environment, Safety and Infrastructure). Installations must submit requests to AFCEC/CP, AFRC/A4 or NGB/A4 for transmittal to AF/A4CF, for processing. **(T-1)**.

6.2.13. Short-term Facility Requirements. If a NAF construction or repair project generates the requirement for short-term facilities (temporary or relocatable), installations will use NAFs to pay all costs associated with the facility programmed as a funded cost of the NAF construction or repair project. **(T-1)**. If an APF construction or repair project on a NAF facility generates the requirement for short-term facilities, use APFs to pay all costs associated with the facility programmed as a funded cost of the APF construction or repair project. **(T-1)**. If a requirement is generated by both APF and NAF construction or repair work, installations will share a temporary facility for the APF and NAF activities. **(T-1)**. Costs may be split equitably using a standard measure such as correlating costs with square footage used.

6.2.14. Appropriated Fund Maintenance and Repair Support to Facilities Leased or Constructed with Nonappropriated Funds. Do not use APFs for maintenance or repair of facilities leased or constructed with NAFs until the Air Force acquires title to the facilities. The AF acquires title through acceptance of the final DD Form 1354. If the NAF activity, private organization, or a concession retains ownership (does not apply to AAFES) of the facility, installations will not use APFs to maintain or repair the facility or equipment (AFI 65-106). **(T-1)**. However, within available resources, the Civil Engineer staff may perform maintenance and repair on a reimbursable basis provided beneficial occupancy is taken and the items are not part of a construction project punch-list. See DAFI 32-9005, for details on transfer of ownership.

6.2.15. Commissary Surcharge. According to 10 USC § 2685, *Adjustment of or surcharge on selling prices in commissary stores to provide funds for construction and improvement of commissary store facilities*, funds originating from the adjustment of sale prices of goods and services sold in commissary store facilities are considered Commissary Surcharge Funds. Installations shall only use these funds to acquire (including acquisition by lease), construct, convert, expand, improve, repair, maintain, and equip the physical infrastructure of commissary stores and central product processing facilities of the Defense Commissary system; and to cover environmental evaluation and construction costs, including surveys, administration, overhead, planning, and design, related to activities described in this paragraph. **(T-0)**. The term physical infrastructure includes real property and equipment (installed and free standing, including computer equipment), necessary to provide a complete and usable commissary store or central product processing facility. See DoDI 7700.20, *Commissary Surcharge, Nonappropriated Fund (NAF), and Privately Financed Construction Policy*.

6.2.15.1. Defense Commissary Agency (DeCA) Responsibilities. DeCA will:

- 6.2.15.1.1. Serve as the program manager for commissary facilities construction. **(T-2)**.
- 6.2.15.1.2. Assist installation commanders, as needed, in the completion of siting approval, justification, and documentation for DeCA projects. **(T-2)**.
- 6.2.15.1.3. Coordinate the Air Force Commissary projects with AF/A4C through installation. **(T-2)**.
- 6.2.15.1.4. Prepare the annual construction report for DeCA-sponsored projects and submit the report through the PDUSD (P&R) to Congress. **(T-2)**.
- 6.2.15.2. AF/A4C Responsibilities. AF/A4C will:
  - 6.2.15.2.1. Coordinate with DeCA and AF/A1S on the DeCA facility program. **(T-2)**.
  - 6.2.15.2.2. Assist bases with properly programming DeCA projects and resolve funding responsibility issues. **(T-2)**.
  - 6.2.15.2.3. Provide funding for the expansion of commissaries as a result of installation growth. **(T-2)**.
- 6.2.15.3. Installation Commander Responsibilities. Installation commanders will:
  - 6.2.15.3.1. Ensure installation participation in planning, pre-design, charrette and design conferences. **(T-2)**.
  - 6.2.15.3.2. Review project documentation for inclusion of specific installation information and requirements. **(T-2)**. Coordinate the DD Form 1391 for DeCA funded projects, as the project is work on Air Force Real Property.

### **6.3. Project Approvals.**

- 6.3.1. Maintenance and Repair Project Approval Levels. The current approval delegation memorandum details the approval level for maintenance and repair projects on facilities where NAFs are specified fund source for construction.
- 6.3.2. Requirements and Conditions on Projects Reported to the Congress. The annual NAF report includes major construction projects planned for award within the next fiscal year. DoDI 7700.18, *Commissary Surcharge, Nonappropriated Fund (NAF), and Privately Financed Construction Reporting Procedures*, provides guidance on the annual NAF report. PDUSD (P&R) forwards the report to the Senate and House Armed Services Committees. Make sure the projects are at least 35 percent (design-build can be 15 percent) designed before submitting them to AF/A4CF, for inclusion in the report. For AF Centrally funded NAF projects, designs must be at least 35% by the time PDUSD (P&R) forwards the report to HASC/SASC. **(T-1)**.
- 6.3.3. Submittal Process. Installation and AFIMSC staffs must obtain PDUSD (P&R) approval for projects costing above current major construction reporting threshold. **(T-0)**. The installation will initiate the projects and submit its annual program to AFCEC, AFRC/A4 or NGB/A4 which then forwards the program to AF/A4CF, for submittal to Deputy Assistant Secretary of the Air Force (Environment, Safety and Infrastructure), the PDUSD (P&R), and the Congress. **(T-0)**. AAFES projects are submitted directly to AF/A4CF. Follow guidance from AF/A4CF for the annual report.

6.3.4. President's Budget Submissions. AF/A4CF will assemble a summary list of projects supporting NAF activities that are submitted in the President's Budget Request for MILCON appropriations.

6.3.5. Proposed Public-Private Ventures (PPV). AAFES/RE and Air Force Services Center (AFSVC/SVXF) shall submit to AF/A4CF a summary list of proposed PPV projects anticipated for contract award during the upcoming fiscal year. **(T-0)**. The format conforms to Enclosure 9 of DoDI 7700.18.

6.3.6. Capital Investment Summary. AAFES/RE and Air Force Services Center (AFSVC) shall submit to AF/A4CF their capital investment program summaries in accordance with Enclosure 10 of DoDI 7700.18. **(T-0)**.

## Chapter 7

### OTHER CONSTRUCTION AUTHORITIES

**7.1. Contingency Construction Authority and Limitations.** Congress may authorize specific, unique authorities for facility construction supporting contingency operations (e.g., Public Law 108-136, *National Defense Authorization Act for Fiscal Year 2004*, Section 2808—as amended and extended by subsequent Defense Authorization Acts). When such authority is provided, provisions of this Chapter will apply to the extent they are consistent with such authority and any Undersecretary of Defense (Comptroller) (USD(C)) implementation guidance. Consult with AF/A4C as to the current status of such authority and applicable locations. The fund source for facilities provided under this chapter will be Air Force O&M Appropriation 3400.

7.1.1. This section applies to construction projects necessary to meet urgent military operational requirements of a temporary nature in support of a declaration of war, a national emergency under section 201 of the National Emergencies Act (50 USC § 1621, *Declaration of Emergency by President; Publication in Federal Register; Effect on Other Laws; Superseding Legislation*), or a contingency operation as defined in 10 USC § 101, *Definitions*, paragraph (a)(13).

7.1.2. Refer to DoDD 3000.10, *Contingency Basing Outside the United States*, for guidance regarding facility programming actions that may be undertaken in support of contingency basing outside the U.S. See AFI 10-504, *Overseas Force Structure Changes and Host Nation Notification*, for guidance regarding procedures for all basing actions affecting overseas installations.

7.1.3. This section applies to that geographical area for which the combatant command conducting the contingency operation is responsible and then only in the area where actual operations are being conducted. The requirement for projects carried out under this authority should be in immediate and direct support of combat operations or force protection for those engaged in combat operations. It does not apply to a rear echelon even if that echelon provides support to the front-line troops.

7.1.4. This section is intended to address contingency facility requirements costing more than the unspecified minor construction threshold stated in 10 USC § 2805(c) or where the United States does not have operation control and Title 10 statutes are not applicable. Requirements costing less than the unspecified minor construction threshold stated in 10 USC § 2805(c) may be accomplished using other available authority, such as 10 USC § 2805(a) authority, if applicable to the geographical area.

7.1.5. This section applies to an operational requirement expected to be temporary. This guidance is offered as a means by which to program contingency facility requirements identified too late for inclusion in a normal facility programming cycle such as MILCON.

7.1.6. Without regard to standard Air Force or DoD facility construction standards, any facility provided under the authority of this chapter will be designed and built as a temporary facility. **(T-1)**. The exception to this requirement is when the host nation requires a higher standard to obtain its approval or where the temporary standard and the permanent standard are essentially identical. The DD Form 1391 should explain any exceptions. The applied construction standard will recognize that the facility is being provided to meet a temporary need and will be abandoned at termination of operational requirements. No facilities provided under authority of this chapter will be built with the expectation they will eventually be turned over to and used by other organizations beyond the original Air Force requirement. **(T-1)**. All such facilities will meet appropriate safety standards and force protection requirements applicable in the area, but will not necessarily be expected to meet the safety standards and force protection requirements that would apply to permanent construction. **(T-1)**.

7.1.7. This section does not apply to construction to be carried out at a military installation, as defined under 10 USC §2801(c), or at a location where the U.S. is reasonably expected to have a long-term interest or presence unless otherwise provided in specific authorizing legislation. In context of this Chapter, a military installation is defined as a location where the U.S. Armed Forces have operational control by virtue of a written basing agreement.

7.1.8. No facility supporting morale, welfare, and recreation activities will be provided under the authority of this chapter. **(T-1)**.

7.1.9. Characteristics of Projects.

7.1.9.1. Projects to which the authority of this section may be applied include erection of facilities, acquisition of temporary interests in land, and design.

7.1.9.2. The requirement for such projects should be in immediate and direct support of combat operations or force protection for those engaged in combat operations. This authority is particularly applicable in countries, friendly or not, where the United States does not currently have a significant permanent military presence.

7.1.9.3. Such projects may combine work typically considered as construction with work considered as Facility Operation (FO) (e.g., leasing a trailer, security, refuse, or custodial service etc.).

7.1.9.4. Such projects may include repair of pre-existing facilities.

7.1.9.5. Use relocatable or semi-permanent construction to the maximum extent possible. The types of structures normally used should be trailers, tension fabric structures, K-spans, air-supported domes, or pre-engineered buildings. More permanent construction materials should normally not be used, unless specifically required for security, force protection, or mission operations. Any departure from the use of semi-permanent construction needs to be well-documented and justified on the DD Form 1391. Program projects with all costs being funded for the structure, transportation, erection, site preparation, and related costs.

7.1.10. Approval Limitations. Repair projects require approval at the same levels as those stated for garrison repair projects in **Chapter 3**. Projects using contingency construction authority require approval by the OSD Comptroller (USD(C)). Submit contingency construction project requests to AF/A4C, who will coordinate projects with SAF/GCN before sending to SAF/IEE for review of conformance with Air Force programming guidance for O&M-funded projects promulgated in this Instruction. With coordination by SAF/IEE, the Deputy Assistant Secretary for Budget (SAF/FMB) will seek approval of the proposal by USD(C) before proposed work may proceed. Re-approval thresholds stated in **Chapter 3** for repair and **Chapter 5** for construction apply.

7.1.11. Documentation. All projects constructed under this authority must be documented on a standard DD Form 1391 project document and signed by the appropriate approving official including the approval date. **(T-1)**. The document must clearly identify the military operation the work supports, and define the period of time the facility will be required, based on known planning factors. **(T-1)**. The document must explain the urgency and how the temporary construction will satisfy the mission requirements. **(T-1)**. The document can be classified, or not, depending on the operational details and dates written in the text, and current classification guidance for the military contingency. Personnel will mark classified documents in accordance with AFM 16-1404, *Information Security Program: Overview, Classification and Declassification*. **(T-1)**. Classification of a project's information neither excuses nor waives compliance with the requirements of this chapter. Particular care needs to be exercised to document compliance with all conditions of specific authority provided by Congress and/or required by USD(C).

7.1.11.1. DD Form 1391. Facilities that are part of a single undertaking (i.e., are accomplished at the same time, for the same general need, and are required for the same time period) can be listed on a single DD Form 1391 provided each facility to be approved under this authority is identified separately with its associated justification, purpose, and cost. See AF/A4CF DD Form 1391 preparation business rules for the "umbrella" DD Form 1391 structure. It is important to identify each facility requirement as part of the same undertaking so a cost for each facility requirement can readily be identified, as well as work accountability through project execution.

7.1.11.2. General costs such as site preparation should be spread over the associated facilities with which it is associated. Facilities that are satisfying separate facility requirements (e.g., administrative, base operations, maintenance, utilities) but satisfy a general purpose, such as a beddown, should be submitted and approved as part of the same undertaking. Facilities meeting different contingencies, not being accomplished at the same time, or are required for differing periods of time, should be programmed on separate DD Form 1391s.

7.1.12. Certification. Programmers must ensure DD Form 1391s forwarded to Air Staff for approval contain the following signed certification from the Air Force component senior Civil Engineer: "I have reviewed the DD Form 1391 for this project and certify that the document is accurate. This construction has been directed by higher headquarters to accomplish specified operational requirements. I certify that the project described above is in compliance with Department of Defense regulations, as implemented by Air Force Instruction 32-1020, and the FY\_\_ National Defense Authorization Act." **(T-1)**. Include the signed certification in the approval documentation, using a DD Form 1391c. Adhere to the provisions of any applicable international agreements to ensure compatibility with applicable host nation construction criteria.

7.1.13. Related Authority. The authority provided in this chapter is separate from the provisions of temporary short-term facilities defined in **Chapter 2** and is not related.

**7.2. Restoration or Replacement of Damaged or Destroyed Facilities (10 USC § 2854).** While 10 USC § 2854 provides authorization, projects conducted under this authority must be funded with previously appropriated MILCON or appropriations made available for operation and maintenance. **(T-1)**. Commanders will ensure that Air National Guard entities follow similar procedures for project approval and reprogramming, but work directly with SAF/IEE and SAF/FMB and coordinate with AF/A4CF. **(T-1)**.

7.2.1. Criteria for Projects. If eligible, other repair (10 USC § 2811) and construction (10 USC §2805) authorities should be used. Title 10 USC § 2854 authority shall be used only when restoring or replacing a facility that was in use or planned for use at the time of the damage or destruction and only when the conditions described in **Paragraph 1.3.1.2.6** are satisfied. **(T-1)**. Restoration or replacement projects programmed under 10 USC § 2854 authority should not provide larger facilities than those damaged or destroyed, except that installations may provide for limited increases as a result of economy of design or compliance with new criteria. Installations cannot use these projects to correct space deficiencies. **(T-1)**.

7.2.2. O&M Funding. Title 10 USC § 2854 authority may be used to program un-allocated O&M funds to replace a facility that has been damaged or destroyed only when the following conditions are met: (i) the damage or destruction was the result of a natural event or terrorism incident; (ii) deferral of the replacement project for inclusion in the next regular MILCON program would be inconsistent with the national security or the protection of health, safety or environmental quality; and (iii) in the case of damage to a facility rather than destruction, a replacement project is more cost-effective than repairing the facility. **(T-0)**. While there is no cost limitation on any single project described in this paragraph, the total aggregated cost of O&M-funded projects across the Air Force shall not exceed \$50 million in one fiscal year. **(T-0)**.

7.2.3. MILCON Funding. SAF/IEE may approve funding a replacement project under 10 USC § 2854 authority using unobligated funds from authorized and appropriated MILCON programs. A reprogramming request must be submitted to the OSD Comptroller. **(T-1)**.



7.2.4. Project Justification and Submittal. Installations will submit project justifications as specified in the published storm damage business rules, which are located at <https://org2.eis.af.mil/sites/13945/RMA/RMAS/SitePages/Storm%20Damage.aspx>. **(T-2)**. Commanders will ensure that the submittal includes a DD Form 1391, a DD Form 1391c, and any additional information requested. **(T-2)**. The submittal should explain the urgency and indicate, for each facility, the cause of damage or destruction. The Base Civil Engineer shall certify the following: (i) the project is for restoration or replacement of facilities damaged or destroyed; (ii) any scope increase is a result of economy of design or compliance with new criteria; (iii) deferral of the replacement project for inclusion in the next regular MILCON program would be inconsistent with the national security or the protection of health, safety or environmental quality; and (iv) in the case of damage to a facility rather than destruction, a replacement project is more cost-effective than repairing the facility. **(T-2)**.

7.2.5. Congressional notification. Projects using authority 10 USC § 2854 must be submitted to SAF/IEE for approval and notification to the appropriate Congressional committees. **(T-0)**. All notifications must include the justification for the project, the current estimate of the cost, the source of funds for the requested project, and justification for using this authority. **(T-0)**.

7.2.5.1. O&M-funded projects. The notification must also include: (1) in the case of damage to a facility rather than destruction, a certification that the replacement project is more cost-effective than repair or restoration; and (2) a certification that deferral of the replacement project for inclusion in the next Military Construction Authorization Act would be inconsistent with national security or the protection of health, safety or environmental quality. **(T-0)**. The project may not be carried out until 7 days after the notification is submitted, in accordance with 10 USC § 2854(c).

7.2.5.2. MILCON-funded projects. The project may not be carried out until 14 days after the notification is submitted, in accordance with 10 USC § 2854(c)

## Chapter 8

### \*RELOCATABLE FACILITIES

**8.1. Relocatable facilities (RLFs).** This chapter describes when relocatable facilities (RLFs) may be used, the management and approval process for RLFs, and funding options for RLFs. Any relocatable facility requires approval by AFCEC, AFRC/A4, NGB/A4, or SAF/IEE in accordance with [Paragraph 8.5](#).

**8.2. Definition.** In accordance with DoD policy, a relocatable facility is a piece of general equipment used as a facility on a temporary basis and is specially designed and constructed to be readily erected, disassembled, transported, stored, and re-used. Examples include, but are not limited to, trailers, CONEX boxes, sheds on skids, tension fabric structures, and air supported domes. **(T-0).** An RLF's connection to the ground is intended for relocation and not permanence. A relocatable facility is not installed as part of any other military vehicle, military mobile equipment (vehicle mounted or wheeled and towable), or equipment which is accounted for in its designated Accountable Property System of Record (APSR).

### 8.3. Scope.

8.3.1. An RLF is used as a tool for meeting a temporary facility requirement and not a solution to an enduring facility requirement.

8.3.2. An RLF may be acquired through either a purchase or lease when it is the most feasible and economical solution and in the best interest of the Department to support the mission. RLFs may also be provided by a contractor as a service provision of an associated repair or construction project's contract.

8.3.3. An RLF may be a temporary building, a temporary structure, or a temporary linear structure.

8.3.4. RLFs are considered general equipment and must be captured and accounted for as general equipment on the appropriate APSR. **(T-0).**

8.3.5. RLFs are used to satisfy interim, short-term facility requirements, normally seven years or less.

8.3.6. These facilities should be functional yet austere. Planners, programmers, and project managers shall ensure these facilities have no appearance of permanence, such as brick exteriors, brick building signs, or extensive landscaping. **(T-2).**

8.3.7. Leased space used as swing space fulfills a role similar to an RLF. Approval and funding guidance for leased space in this role falls within the scope of this chapter.

8.3.8. This chapter does not apply to:

8.3.8.1. Work and living space provided with military expeditionary equipment which is documented in a unit's table of allowance. Requirements for relocatable facilities in support of military operations can be found in UFC 1-201-01, *Non-Permanent DoD Facilities In Support Of Military Operations*.

8.3.8.2. Weather covers used solely to shelter communications, radar and electronic equipment from the elements when installed and integral to the procurement and

installation of the communications-radar-electronic equipment. These spaces are not occupied by personnel except to perform periodic equipment maintenance.

8.3.8.3. Mobile military equipment, such as communications vans and emergency management and command post trailers.

8.3.8.4. Tents, modular sheds less than 500 square feet, and temporary contractor-used trailers.

8.3.8.5. Temporary government construction administration trailers located on or in the vicinity of a construction or repair project site.

8.3.8.6. Non-relocatable facilities. Non-relocatable facilities must follow construction procurement and accountability rules (unless allowed to be provided as a service). **(T-1)**. This Chapter does not address non-relocatable facilities.

8.3.8.7. Guidance in this chapter does not preclude the provision of facilities (relocatable or non-relocatable) as a service.

**8.4. When Relocatable Facilities May Be Used.** Relocatable facilities may be used to satisfy facility requirements for:

8.4.1. A transitory mission or a temporary surge in mission requirements (research program testing phases, pilot programs, etc.).

8.4.2. Response to disaster relief.

8.4.3. In advance of a future facility solution (a programmed MILCON or renovation project, personnel relocation, etc.). See Paragraphs [8.5.2.2](#) and [8.5.2.3](#).

8.4.4. Swing space to accommodate personnel, equipment, or utilities while awaiting the completion of permanent space via an associated, ongoing facility construction or repair project.

8.4.5. Support of a mission with a known mobile requirement, such as the need to frequently move a field office to different sites on a training range or temporary work shelters. RLFs supporting a known mobile requirement require AFCEC, AFRC/A4, or NGB/A4 approval, but may be used for the duration of the requirement without an extension.

8.4.6. Support of a contingency requirement. A contingency is a situation requiring military operations in response to natural disasters, terrorists, subversives, or as otherwise directed by appropriate authority to protect United States interests. RLFs supporting a named continuing military contingency operation do not require AFCEC, AFRC/A4, or NGB/A4 approval and may be used for the duration of the operation. A contingency operation is a military operation designated by the Secretary of Defense as an operation in which Service members are or may become involved in military actions, operations, or hostilities against an enemy of the United States or against an opposing military force; or results in the call or order to, or retention on, active duty of Service, or any other provision of law during a war or during a national emergency declared by the President or Congress pursuant to section 10 USC § 101(a)(13).

**8.5. Management and Approval.** All RLFs require approval before being placed in service, except those in support of a named continuing military operation (see [Paragraph 8.4.6](#)). RLF management and approval guidance outlined below includes leased swing space as appropriate. In accordance with OSD policy, approval to use RLFs may not be delegated below a general officer or senior executive service civilian equivalent located at a centralized headquarters organization. For the Regular Air Force (RegAF), AFCEC manages the relocatable facility program and holds approval responsibility for use of RLFs to include extending use beyond the initial approved duration (see [Paragraph 8.5.2](#) for use duration and approval thresholds). AFRC/A4 and NGB/A4 similarly hold approval and extension responsibility for their respective units. If necessary, AFCEC, AFRC/A4, and NGB/A4 may establish approval criteria beyond what is provided below.

8.5.1. The requiring installation shall submit all RLFs for approval to AFCEC, AFRC/A4, or NGB/A4. **(T-1)**. At joint bases the supporting service shall submit approval requests to AFCEC for RLFs required by either the supporting or supported service. **(T-1)**. When a tenant unit requires an RLF approval, the host installation shall submit for approval to the installation's respective approving authority. **(T-1)**. For instance, an RLF approval request for an Air National Guard unit located on an active duty installation should be routed to AFCEC for approval.

8.5.1.1. Supporting data shall, at minimum, include the validated facility space requirement, mission requirement, confirmation no other existing space is available, evidence of alternatives considered, justification of chosen course of action, expected duration, funded and unfunded costs, and a comparative cost analysis which includes, if applicable, a lease-purchase analysis. **(T-1)**. Consider facility space utilization, asset operating costs, and asset condition when making planning considerations. If an RLF is needed in advance of a future repair or construction project (not swing space), the request shall identify the project for which the RLF is interim. **(T-1)**.

8.5.1.1.1. The BCE shall explain the use and disposition of RLFs in the RLF approval request package and provide the cost. **(T-1)**.

8.5.1.1.2. If the RLF is intended to be swing space, the request shall identify the associated project and intended year of execution. **(T-1)**.

8.5.1.1.3. The project sponsor will provide a certification to the approving authority that the RLF will be used on a temporary basis for a length of time not to exceed the maximum time of use allowed by this AFI. **(T-1)**.

8.5.2. Seven years is the maximum allowable initial duration of use for an RLF. **(T-0)**. Extensions for use of an RLF beyond seven years requires SAF/IEE approval. **(T-1)**. Fourteen years is the maximum duration of use for an RLF. **(T-0)**. An extension beyond seven years may be approved when one of the following criterion has been met.

8.5.2.1. The RLF is supporting a continuing military contingency operation. RLFs supporting a named contingency operation are exempt from the limitations on time of use. See [Paragraph 8.4.6](#).

8.5.2.2. A permanent facility has been authorized and funds have been appropriated by Congress, approved for funding in AFCEC's Construction Tasking Order, or approved for funding by the requiring organization. In these cases, the relocatable facility may be retained in use until construction or repair of the permanent facility is complete.

8.5.2.3. A permanent facility has been programmed, submitted for prioritization in the MILCON Working Group, and is prioritized in the Air Force's Future Years Defense Plan, or for non-MILCON projects, the project has been submitted in the Air Force Comprehensive Asset Management Program (AFCAMP) and is prioritized in the 5-year Integrated Task Order. Projects funded outside of the MILCON and AFCAMP programs must demonstrate being programmed and prioritized for funding by the requiring organization. **(T-1)**.

8.5.2.4. For the space requirements described in **Paragraph 8.4** with appropriate justification and clear delineation the facility requirement is temporary.

8.5.3. AFCEC, AFRC/A4 or NGB/A4 must approve transfer of an RLF to another user if different than approved. **(T-1)**. If an RLF is approved for a different successive user, the use duration "clock" resets.

8.5.4. Programmers shall program an RLF which is not swing space as a standalone project. **(T-1)**. The RLF's allied support constitutes the project, which would be classified as construction or repair, and the RLF is listed as an equipment item funded from another appropriation. See funding requirements in **Paragraph 8.6** and **Table 8.1**.

8.5.5. Leased relocatable facilities. Lease documents shall contain provisions for removal of the RLFs at the expiration of the lease. **(T-1)**. When an RLF is leased as equipment, allied support costs cannot be included in the lease (except as noted in **Paragraph 8.5.11.2**). Allied support costs classified as construction must be funded as a construction project (minor construction if costs are under the statutory cost limit specified in 10 USC § 2805(c) or 10 USC § 2805(d)). **(T-0)**.

8.5.5.1. Use of off-base leased space as swing space (**Paragraph 8.4.4**) requires approval by AFCEC (or AFRC/A4 or NGB/A4 as applicable) prior to pursuing the lease. **(T-1)**.

8.5.5.2. Approval to use off-base leased space for swing space will follow the same rules and guidelines as seeking approval to use an RLF. **(T-1)**.

8.5.6. Comparative Analysis Requirement. In accordance with AFI 65-501, *Economic Analysis*, a comparative analysis product (the AFI describes several types of comparative analysis products to include an economic analysis) must accompany the RLF approval request showing the most economically-beneficial procurement option. In accordance with AFI 65-501, *Economic Analysis*, Paragraph 1.5.7, a lease-purchase analysis may be used to satisfy this requirement if there are no feasible non-relocatable alternatives. **(T-1)**. See AFMAN 65-506, *Economic Analysis*, Paragraph A14.1 Lease-Purchase Decisions for additional guidance. The comparative analysis may be supported by considerations in **Paragraph 8.5.1.1** The comparative analysis should show the point in time or cost at which the benefit of one option over the other changes. In the comparison the analyst may include data for continuing a lease beyond the intended use, which can then be used should a use extension be necessary.

8.5.7. Engineering Evaluation Requirement. RLFs must meet building, fire, and safety requirements in accordance with Unified Facilities Criteria (UFC) 1-200-01, *DoD Building Code*, and 3-600-01 (Reference (l)), and antiterrorism requirements in accordance with UFC 4-010-01 (Reference (m)), and Air Force construction standards (e.g., live and lateral loads). **(T-0)**. The BCE will ensure an engineering evaluation is performed to certify the RLF meets fire and safety requirements, antiterrorism requirements, and all construction standards

established by the Air Force. **(T-0)**. RLFs should use sustainable design and energy efficient operating practices when time, material, and funds permit. The BCE will ensure the installation fire department conducts annual fire risk management surveys/inspections, in accordance with DoDI 6055.06, *DoD Fire and Emergency Services (F&ES) Program*, for RLFs which provide occupant space. **(T-0)**.

8.5.8. Environmental Impact Analysis Process (EIAP). EIAP applies when acquiring and siting RLFs. **(T-0)**. See AFI 32-1015, *Integrated Installation Planning*, Chapter 5.

8.5.9. Reporting.

8.5.9.1. Installations will send a Relocatable Facility Inventory Report to AFCEC, AFRC/A4, or NGB/A4 by 1 November each year, and will include information as of 30 September for the fiscal year. **(T-1)**. The format and necessary reporting for the Relocatable Facility Inventory Report is found in DoDI 4165.56, *Relocatable Buildings*, Figure 1. *Relocatable Buildings Reporting Spreadsheet*. The report will include leased space being used as swing space and any RLFs provided by a contractor as a service. **(T-1)**. The reports will indicate those RLFs and leased swing space approved for longer than seven years. **(T-1)**. AFRC/A4 and NGB/A4 will compile the reports from their installations and send the compiled report to AFCEC by 10 November of each year. **(T-1)**.

8.5.9.2. AFCEC is responsible for assembling the annual RLF report required by DoDI 4165.56 and will use the *Relocatable Buildings Inventory Spreadsheet* template shown in Figure 1 of DoDI 4165.56. **(T-0)**. AFCEC will send the RLF report to AF/A4CF by 1 December of each year. **(T-1)**. AF/A4CF will submit the RLF report to ASD (A&S) through SAF/IEE by 31 December of each year. **(T-0)**.

8.5.10. Siting Relocatable Facilities. Siting for RLFs must be approved by installation commanders through the Facilities Board. **(T-1)**. Ensure siting is consistent with the installation development plan, and avoid, when possible, siting on primary thoroughfares and in high visibility areas. **(T-1)**. Ensure siting criteria also meets fire standoff distance requirements of UFC 3-600-01. **(T-1)**. Landscaping and screening material should be employed only to the extent necessary to meet minimum military requirements.

8.5.11. Adding allied support where it does not currently exist for RLFs is classified as construction. If the allied support for an RLF constitutes a repair to an existing facility, contact AFCEC/CPD or AF/A4CF for programming guidance.

8.5.11.1. Allied support includes, but is not limited to: foundations, concrete mounting slabs, site preparation, utility connections, stairways, porches or breezeways between units, etc. Adding or extending underground utility connections (e.g., stub up) is classified as construction.

8.5.11.2. As general equipment, costs for set-up and installation of RLFs are expenses charged to the appropriation which funded the equipment. Set-up and installation costs include costs for all above-ground utilities, extensions, and connections to utilities, as well as any features of the general equipment items which are not improvements to the land. When these features are provided as set-up and installation costs, they are not categorized as allied support.



**8.6. Programming and Funding Relocatable Facilities.** The following paragraphs describe how to program and fund RLFs: (1) not used as swing space; (2) used as swing space associated with a MILCON appropriated project; and (3) used as swing space associated with a project funded with appropriations available for operation and maintenance. See the AF/A4CF FSRM and MILCON DD Form 1391 business rules for details on documenting swing space RLFs and leased space programming. See **Table 8.1** for a summary relocatable facility funding guide. See **Paragraph 8.5.11** for allied support guidance.

8.6.1. Relocatable Facility Not Used as Swing Space.

8.6.1.1. Programming. Program non-swing space RLFs as standalone projects (e.g., in advance of a future space solution, in response to disaster relief, surge response, mobile requirement, contingencies). **(T-1)**. The RLF's allied support comprises the project, which would be classified as construction or repair, and the RLF is listed as an equipment item funded from another appropriation. Equipment costs include RLF acquisition, leasing, delivery to the site, erection, assembly, disassembly, packaging, transporting, maintenance, operation, sustainment, and refurbishment. For cost limit determinations, the cost of the RLF is based on the cost of the completely assembled facility and not on its separate components. For example, a prefabricated structure composed of multiple trailers or modular units intended to be joined is considered to be a single facility for determining its cost.

8.6.1.2. Funding.

8.6.1.2.1. Purchased RLFs are funded with either appropriations available for operation and maintenance or procurement appropriations depending on whether or not the cost exceeds the expense and investment threshold pursuant to DoD 7000-14.R, Volume 2A, Chapter 1 (\$250,000 as of the publishing of this Instruction). **(T-0)**. Equipment procurement exceeding this cost limit must be funded with procurement appropriations. **(T-0)**. However, allied support work classified as construction must be funded with either appropriations available for operation and maintenance or MILCON appropriations pursuant to cost limits in 10 USC § 2805. **(T-0)**.

8.6.1.2.2. Leased relocatable (including off-base leased space) facilities are funded with operation and maintenance appropriations.

8.6.1.2.3. The mission requirement owner driving the need for the relocatable facility is responsible for providing funds for the RLF unless: (1) the RLF is provided in response to disaster relief funded through the Storm Damage tracking and funding process managed by AFCEC; or (2) host-tenant or other agreements provide otherwise, in which case funding would follow as specified in the agreement.

8.6.1.2.4. The mission requirement owner driving the need for the RLF is responsible for providing funds for the RLF's allied support unless: (1) a military construction appropriation is required for the allied support; (2) the RLF is provided in response to disaster relief funded through the Storm Damage tracking and funding process managed by AFCEC; or (3) host-tenant or other agreements provide otherwise, in which case funding would follow as specified in the agreement.

8.6.2. Relocatable Facility Used as Swing Space Associated with a MILCON Appropriated Project.



8.6.2.1. Contractor provides swing space as a service provision of the contract. This is the preferred method for providing swing space.

8.6.2.1.1. Programming. The swing space is a contractor-provided service necessary to execute the project and is a funded cost to the project. This type of swing space is not the property of the government and is neither categorized as equipment or real property. Allied support necessary for contractor-provided swing space is properly classified as construction or repair and is a funded cost to the associated project.

8.6.2.1.2. Funding. When the contractor of a MILCON-appropriated project provides swing space as a service provision of the contract, the swing space is funded as part of the project, including the allied support.

8.6.2.2. The government purchases or leases the swing space.

8.6.2.2.1. Programming.

8.6.2.2.1.1. Relocatable facilities under the guidance of this Chapter must be purchased or leased as general equipment. **(T-0)**. For cost limit determinations, the cost of the RLF is based on the cost of the completely assembled facility and not on its separate components. For example, a prefabricated structure composed of multiple trailers or modular units intended to be joined is considered to be a single facility for determining its cost.

8.6.2.2.1.2. Costs for swing space RLFs purchased or leased as general equipment or off-base leased swing space are not “funded costs” to the associated project. Unfunded costs include relocatable facility acquisition, leasing, delivery to the site, erection, assembly, disassembly, packaging, transporting, maintenance, operation, sustainment, and refurbishment. However, any allied support costs classified as construction or repair for RLFs acquired as equipment are funded costs to the associated project.

8.6.2.2.2. Funding.

8.6.2.2.2.1. See [Paragraph 8.6.1.2.1](#) and [Paragraph 8.6.1.2.2](#) for funding requirements for purchased and leased relocatable facilities.

8.6.2.2.2.2. For new mission and beddown MILCON projects, the mission owner is responsible for securing funding for associated RLFs to include leased swing space. For existing mission (non-beddown) MILCON projects AFIMSC is responsible for securing funding for associated RLFs to include leased swing space.

8.6.3. Relocatable Facility Used as Swing Space Associated with a Project Funded with Appropriations Available for Operation and Maintenance (Unspecified Minor Construction or Repair).

8.6.3.1. Contractor provides swing space as a service provision of the contract.

8.6.3.1.1. Programming. See [Paragraph 8.6.2.1.1](#).

8.6.3.1.2. Funding. When the contractor of a repair or unspecified minor construction project provides swing space as a service provision of the contract, the swing space is funded as part of the project, including allied support. However, allied support work classified as construction with costs exceeding the cost limit specified in 10 USC § 2805(c) must be funded with a MILCON) appropriation. **(T-0)**. The cost of allied support work classified as construction must be summed with other construction costs in the associated project for cost limit determination. **(T-0)**.

8.6.3.2. The government purchases or leases the swing space.

8.6.3.2.1. Programming. See [Paragraph 8.6.2.2.1](#).

8.6.3.2.2. Funding.

8.6.3.2.2.1. See [Paragraph 8.6.1.2.1](#) and [Paragraph 8.6.1.2.2](#) for funding requirements for purchased and leased relocatable facilities.

8.6.3.2.2.2. The mission requirement owner driving the need for the RLF (to include leased swing space) is responsible for providing funds for the RLF unless

8.6.3.2.2.2.1. The associated project is funded by the Air Force's centralized funding, such as centralized FSRM (in this case the centralized program or AFIMSC would fund the associated relocatable facility) or

8.6.3.2.2.2.2. The RLF is provided in response to disaster relief which is funded through AFCEC's Storm Damage tracking and funding process unless host-tenant or other agreements provide otherwise, in which case funding would follow as specified in the agreement. **(T-1)**.

8.6.3.2.2.3. The mission requirement owner driving the need for the RLF is responsible for providing funds for the RLF's allied support unless

8.6.3.2.2.3.1. A military construction appropriation is required for the allied support;

8.6.3.2.2.3.2. The associated project is funded by Air Force's centralized funding, such as centralized FSRM (in this case the centralized program or AFIMSC would fund the allied support); or

8.6.3.2.2.3.3. The RLF is provided in response to disaster relief which is funded through AFCEC's Storm Damage tracking and funding process unless host-tenant or other agreements provide otherwise, in which case funding would follow as specified in the agreement. **(T-1)**.

8.6.4. For RLFs planned for multiple, successive users (successive RLF space requirements) or successive projects, the BCE will work with the RLF program manager (AFCEC, AFRC/A4, or NGB/A4) on a case-by-case basis to follow RLF guidance as closely as possible and find a suitable funding option. **(T-2)**. These RLFs are not directly associated with any single project, and therefore, must be programmed as separate, standalone projects. **(T-2)**. See [Paragraph 8.6.1.1](#) for programming these RLFs--treat them as non-swing space relocatable facilities. Even though these RLFs will not be directly associated with any single project, projects which use these RLFs must state it in the project's DD Form 1391. **(T-1)**.

**8.7. NAF Relocatable Facility Requirements (see Paragraph 6.2.13).**

**8.8. Maintenance of Relocatable Facilities.** When leased an RLF lease shall stipulate the lessor provides maintenance and repairs through the lease cost. **(T-2)**. When purchased or leased the funding organization is responsible for funding the sustainment cost of its RLFs. **(T-1)**. The BCE is not responsible for maintenance or repair on RLFs, but is responsible for the non-expense (see [Paragraph 8.5.11.2](#)) allied support associated with the RLF (e.g., the foundations, site preparation, and utility connections). **(T-1)**.

**8.9. Inventory, Reuse, and Disposition of Relocatable Facilities.** Upon termination of the need for an RLF, the BCE shall ensure use of the RLF is discontinued and the RLF is removed. **(T-1)**. The organization which funded procurement of the RLF is responsible for funding removal and disposal of the facility (using the same type of funds used for procurement). If the using activity or installation has an alternate use or requirement for the facility, they must process a new request to AFCEC, AFRC/A4 or NGB/A4 for temporary use of the facility. **(T-1)**. In accordance with the *USAF Environmentally Responsible Facilities Guide*, operation and disposal of RLFs must follow all applicable guidance and direction. **(T-1)**.

8.9.1. Relocatable facilities, except for off-base leased swing space and those used for swing space provided by an associated project's contractor as a service, must be accounted for on an applicable custodian equipment property account. **(T-0)**. Ensure the Accountable Property System of Record (APSR) used for RLFs includes the appropriate information necessary to maintain General Equipment accountability in accordance with DoDI 5000.64, *Accountability and Management of DoD Equipment and Other Accountable Property*. **(T-0)**. The additional data elements outlined in DoDI 4165.56, Figure 1, *Relocatable Facilities Reporting Spreadsheet*, required for RLF management and oversight purposes may be maintained in either the APSR, if applicable, or a managerial system.

8.9.2. An RLF purchased or leased as equipment cannot be converted to real property, except in rare circumstances (e.g., the property has a documented manufacturer certification meeting the expected useful lifespan timeframes of either semi-permanent or permanent construction types and the original intent of use and requirement supported by the RLF has substantively changed). **(T-0)**. See DoDI 4165.56, *Relocatable facilities*, for further guidance on converting an RLF to real property.

**Table 8.1. Funding Guide for Relocatable Facilities and Their Allied Support.**

RELOCATABLE FACILITIES FUNDING GUIDE			
How Acquired	Type of Funding	Fund Provider	If swing space relocatable facility, is cost of facility a funded cost to the associated project?
Purchased as General Equipment	If the cost is greater than the expense/investment threshold, the fund type is Other Procurement (3080). If the cost is less than the expense/investment threshold, the fund type can be from funds available for operation and maintenance.	The mission requirement owner is responsible for securing funding for the relocatable facility, unless the relocatable facility is swing space <b>and</b> the associated project is funded by the Air Force’s centralized O&M program (in this case AFIMSC would be responsible for securing funding for the associated relocatable facility) or the relocatable facility is provided in response to disaster relief funded through the Storm Damage tracking and funding process managed by AFCEC	No, except allied support costs classified as construction or repair

Leased as General Equipment or Off-base Leased Swing Space	The fund type can be from funds available for operation and maintenance.	The mission requirement owner is responsible for securing funding for the relocatable facility or leased swing space, unless the relocatable facility is swing space <b>and</b> the associated project is funded by the Air Force's centralized O&M program (in this case the AFIMSC would be responsible for securing funding the relocatable facility) or the relocatable facility is provided in response to disaster relief funded through the Storm Damage tracking and funding process managed by AFCEC.	No, except allied support costs classified as construction or repair
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**Attachment 1**

**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION**

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10USC § 2208, *Working-capital funds*

10USC § 2353, *Contracts: acquisition, construction, or furnishing of test facilities and equipment*

10USC § 2465, *Prohibition on contracts for performance of firefighting or security-guard functions*

10USC § 2492, *Nonappropriated fund instrumentalities: contracts with other agencies and instrumentalities to provide and obtain goods and services*

10USC § 2685, *Adjustment of or surcharge on selling prices in commissary stores to provide funds for construction and improvement of commissary store facilities*

10USC § 2801, *Scope of Chapter; Definitions*

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10USC § 2804, *Contingency construction*

10USC § 2805, *Unspecified minor construction*

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AF Form 332, *Base Civil Engineer Work Request*

AF Form 813, *Request for Environmental Impact Analysis*

AF Form 847, *Recommendation for Change of Publication*

DD Form 1354, *Transfer and Acceptance of DoD Real Property*

DD Form 1390, *FY \_\_\_ Military Construction Program*

DD Form 1390S, *FY \_\_\_ Guard and Reserve Military Construction*

DD Form 1391, *FY \_\_\_ Military Construction Project Data*

DD Form 1391c, *FY \_\_\_ Military Construction Project Data (continuation)*

Standard Form 1151, *Non- expenditure Transfer Authorization*

### ***Abbreviations and Acronyms***

**AAFES**—Army & Air Force Exchange Service

**ABA**—Architectural Barriers Act

**ACC**—Architectural Barriers Act Asphalt Cement Concrete

**AF**—Air Force

**AFCAMP**—Air Force Comprehensive Asset Management Plan

**AFCEC**—Air Force Civil Engineer Center

**AFI**—Air Force Instruction

**AFIMSC**—Air Force Installation and Mission Support Center

**AFMAN**—Air Force Manual

**AFPD**—Air Force Policy Directive

**AFRC**—Air Force Reserve Command

**AFRCH**—Air Force Reserve Command Handbook

**AFSVC**—Air Force Services Center

**AMP**—Asset Management Plan

**ANG**—Air National Guard

**ANGH**—Air National Guard Handbook

**AT**—Antiterrorism

**AR**—Army Regulation

**BCE**—Base Civil Engineer

**CE**—Civil Engineer

**CFR**—Code of Federal Regulations

**COR**—Contracting Officer Representative

**CST**—Construction Surveillance Technicians

**DAFMAN**—Department of the Air Force Manual

**DASH**—Dashboard

**DAR**—Defense Access Road

**DECA**—Defense Commissary Agency

**DHA**—Defense Health Agency

**DLA**—Defense Logistics Agency

**DLA-E**—Defense Logistics Agency-Energy

**DM/CM**—Design and Construction Project Managers

**DoD**—Department of Defense

**DoDD**—Department of Defense Directive

**DoDEA**—DoD Education Activity

**DoDI**—Department of Defense Instruction

**DoDM**—Department of Defense Manual

**DoT**—Department of Transportation  
**DRU**—Direct Reporting Unit  
**EA**—Economic Analysis  
**EEIC**—Element of Expense Investment Code  
**EIAP**—Environmental Impact Analysis Process  
**EO**—Executive Order  
**EQ**—Environmental Quality  
**ERCIP**—Energy Resilience and Conservation Investment Program  
**FAC**—Facility Analysis Code  
**FHWA**—Federal Highway Administration  
**FIAR**—Financial Improvement and Audit Readiness  
**FO**—Facility Operation  
**FOA**—Field Operating Agencies  
**FMS**—Foreign Military Sales Construction  
**FY**—Fiscal Year  
**HAF**—Headquarters Air Force  
**GFE**—Government Furnished Equipment  
**IDS**—Intrusion Detection System  
**LCCE**—Life-Cycle Cost Estimate  
**MAJCOM**—Major Command  
**MII**—Micro Computer Aided Cost Estimating System 2nd Generation  
**MILCON**—Military Construction  
**MWR**—Morale, Welfare, and Recreation  
**NAF**—Nonappropriated Funds  
**NATO**—North Atlantic Treaty Organization  
**NAVFAC**—Naval Facilities Engineering Command  
**NDAA**—National Defense Authorization Act  
**NEPA**—National Environmental Policy Act  
**NHPA**—National Historic Preservation Act  
**O&M**—Operation & Maintenance  
**OMB**—Office of Management and Budget  
**OSD**—Office of the Secretary of Defense

**PACES**—Parametric Cost Estimating System  
**PCAS**—Post Construction Award Services  
**PEC**—Program Element Code  
**PPB&E**—Planning, Programming, Budgeting, and Execution  
**PPV**—Public-Private Ventures  
**PRV**—Plant Replacement Value  
**PVA**—Project Validation Assessment  
**RD&P**—Requirements Definition & Programming  
**RDT&E**—Research, Development, Test, and Evaluation  
**RPIE**—Real Property Installed Equipment  
**SAF**—Secretary of the Air Force  
**SCIF**—Sensitive Compartmented Information Facility  
**SDD**—Sustainable Design and Development  
**SDDC**—Surface Deployment and Distribution Command  
**SIOH**—Supervision, Inspection and Overhead  
**SHPO**—State Historic Preservation Officer  
**SME**—Subject Matter Expert  
**SO**—System Owner  
**S/R&M**—Sustainment, Restoration, and Modernization  
**THPO**—Tribal Historic Preservation Officer  
**UFC**—Unified Facilities Criteria  
**UMC**—Unspecified minor construction  
**UMMC**—Unspecified Minor Military Construction  
**USACE**—U.S. Army Corps of Engineers  
**USC**—United States Code  
**USAF**—United States Air Force  
**WCF**—Working Capital Fund

### *Terms*

**Aircraft Sunshade**—A structure with the sole purpose of providing minimal protection for personnel from the elements (sun, wind, rain, snow, etc.) with a roof and a maximum of two sides. Aircraft sunshades generally fulfill a long-term requirement and are not considered as relocatable facilities per the definition of DoDI 4165.56. AF/A4L establishes AF guidance on aircraft sunshades (refer to DAFI 21-101, *Aircraft and Equipment Maintenance Management*). Aircraft sunshade procurement will be made in accordance with AFMAN 65-605, Volume 1, Chapter 9, Funding Relocatable Buildings, STSs and Aircraft Sunshades, Funding for Relocatable Buildings, Stress Tension Shelters, Aircraft Sun Shades, and Other Modular Structures. **(T-1)**.

**Allied Support**—Allied support includes utilities roads, sidewalks, parking, fencing, signage, lighting (exterior and not attached to the asset), foundations, and other site preparation.

**Collective Protection**—Systems that protect those inside a building, room, shelter or tent against chemical, biological, and radiological contamination through the combination of impermeable structural materials, air filtration equipment, air locks, and over-pressurization. See AFMAN 10-2503, *Operations in a Chemical, Biological, Radiological, and Nuclear (CBRN) Environment*.

**Companion Project**—A project that enables a separate project. For example, the construction of an AAFES facility requires the demolition of another facility. The demolition project is a companion project. The programming documents for each project should reference the other. **Note:** [If a requirement (related work in a single facility) includes multiple work classifications (e.g. repair or minor construction), these are not companion projects—they are interdependent elements of the requirement.]

**Concurrent Project**—A separate project in a facility that is independently a complete and usable improvement to the facility from another coinciding project in the facility. For example, a repair project to replace the roof on a facility is concurrent to a construction project that adds to the facility. Each project is independent of the other; however, they are cross-referenced in the programming documents.

**Energy Resilience and Conservation Investment Program (ERCIP)**—ERCIP is a subset of the Defense-Wide MILCON Program specifically intended to fund projects that improve energy resilience, contribute to mission assurance, save energy, and reduce DoD's energy costs. ERCIP accomplishes this through construction of new, high-efficiency energy systems and technologies or through modernizing existing energy systems.

**Facility**—A real property asset consisting of a building, structure, or linear structure.

**Facilities Operation (FO)**—The FO program encompasses those services performed on an installation that are related to real property such as refuse collection, grounds maintenance, and custodial service. FO also includes Civil Engineer (CE) combat capabilities [i.e. Prime Base Engineer Emergency Force (PRIME BEEF)]. The FO program includes manpower authorizations, support equipment, contracts, and associated costs belonging exclusively to and required to plan, manage, and execute the functions defined throughout this document. The FO program excludes sustainment, restoration and modernization of facilities, environmental services (such as disposal of hazardous waste), Installation Services (IS), and mission-funded costs which are funded through other Program Element Codes (PECs). The PEC for 3400 O&M FO is \*\*\*79F.



**Funded and Unfunded Costs**—See AFMAN 65-605, Volume 1, Chapter. See clarifying guidance on troop labor, design, and GFE in this Instruction.

**Host**—A unit or activity that has management control of facilities, and provides services or facilities to another unit or activity (tenant). Within the Air Force, the host is the Air Force MAJCOM that has jurisdiction over the installation and other real property (including use rights such as leases, permits, easements, and licenses). Also, the host may be the organization which has been designated by the MAJCOM, or by HQ USAF as a supplier (reference AFI 25-201, *Intra-Service, Intra-Agency, And Inter-Agency Support Agreements Procedures*), to furnish tenant support.

**Historic Property**—Any district, site, building, structure, or object included on or eligible for inclusion on the National Register of Historic Places (National Register). 36 CFR Part 60.4, *Criteria for Evaluation*, explains criteria for determining eligibility for listing to the National Register.

**Installation Development Plan**—The product that provides the installation commander and other decision-makers a condensed picture of an installation's capability to support the mission with its physical assets and delivery systems. It is a general assessment of the installation's infrastructure and attributes for the purpose of gauging development potential.

**Joint Use**—Concurrent use of host facilities and equipment by both host and tenant, as required by the mission of each user.

**Major Force Program**—A major force program is an aggregation of related budget items that can be used to track resources that support a macro-level combat or support mission, such as special operations forces.

**Military Installation Resilience**—The capability of a military installation to avoid, prepare for, minimize the effect of, adapt to, and recover from extreme weather events, or from anticipated or unanticipated changes in environmental conditions, that do, or have the potential to, adversely affect the military installation or essential transportation, logistical, or other necessary resources outside of the military installation that are necessary in order to maintain, improve, or rapidly reestablish installation mission assurance and mission-essential functions.

**Modernization**—May include either repair or construction work. Includes the alteration of facilities or components solely to implement new or higher standards (including regulatory changes) or to accommodate new functions. Includes work associated with functional conversion and work classified as construction.

**National Register of Historic Places (National Register)**—The Federal government's official list of buildings, structures, districts, sites, and objects that are significant in American history, architecture, archaeology, engineering, or culture, and are thereby considered for preservation. The National Register is administered by the Department of the Interior, National Park Service. Criteria for eligibility, and the procedures for nomination, making changes to listed properties, and for removing properties from the National Register are detailed in 36 CFR Part 60.4

**Overhead**—Includes personnel services and related expenses (such as travel, transportation, printing and binding, rents and utilities, contractual services, supplies, and materiel) used to perform the following: project management and administration; inspection and supervision of construction; and direct administrative support of these two categories.

**Parametric Estimate**—An estimate using pre-developed algorithms and cost models using the AFCEC approved software. Currently, PACES is the approved software for parametric estimates. Parametric estimates should not include guidance unit costs.

**Phases**—Interdependent portions of a project which achieves an overall requirement or objective (e.g. renovating a facility, repairing a system), and are complete and usable on their own. Phases will have unique project numbers. See [Paragraph 2.5.1](#) for more details about project phases.

**Plant Replacement Value (PRV)**—Represents a modeled cost, in current year dollars, to design and construct a notional facility to replace an existing facility at the same location. The notional replacement facility will perform the same functions as the existing facility, within the same capacity (size) as calculated in the assigned Facility Analysis Code (FAC) primary unit of measure. The notional replacement facility will also be constructed to current standards of materials and design consistent with DoD policies. PRV does not represent the actual cost to construct a specific, existing facility, and should not be used as a cost estimate. **Note:** [PRV for a single facility does not include the costs for land acquisition, site preparation, earthwork, landscaping, supporting facilities, associated facilities, or studies and surveys outside normal planning and design for construction.] Additionally, it does not include costs not associated with recapitalization or replacement construction such as demolition or environmental mitigation and remediation. Refer to UFC 3-701-01 *DoD Facilities Pricing Guide*, for the PRV formula and factors.

**Project**—Includes the maintenance, repair, and construction work necessary to produce a complete and usable single facility or a complete and usable improvement to an existing facility.

**Project Splitting**—The splitting of a project into separate parts where: it is done solely to reduce costs below an approval threshold or the minor construction ceiling; or each part is not in itself complete and usable; or the total project is not complete until all parts are complete.

**Real Property Installed Equipment**—Installed real property building equipment item affixed or built into the facility which is an integral part of the facility.

**Replacement Cost**—Replacement cost is “the estimated cost of a military construction project to replace the facility”. See [Chapter 2](#) for guidance for determination of replacement costs. This definition is to be used solely for programming in compliance with Chapter 169 in Title 10 of the U.S. Code and may not be consistent with the real property definition for replacement cost.

**Restoration**—Includes repair and replacement work to restore facilities collaterally damaged due to inadequately sustained components, premature aging, natural disaster, fire, accident or other causes. This is considered non-life cycle repair of real property.

**State Historic Preservation Officer (SHPO)**—The official appointed by the Governor of each State and territory to carry out the functions defined in the National Historic Preservation Act (NHPA), and to administer the State Historic Preservation Program. SHPOs provide advice and assistance to Federal agencies regarding their Cultural Resources Management programs and historic preservation responsibilities. Throughout this Instruction, SHPO is understood to mean Tribal Historic Preservation Officer (THPO) where consulting a designated THPO is appropriate.

**Support Agreement**—A host-tenant support agreement between Air Force units drawn up under AFI 25-201.

**Sustainment**—Includes resources for cyclical maintenance and scheduled repair activities to maintain the inventory of real property assets through its expected life. It includes regularly scheduled adjustments and inspections, preventative maintenance tasks, and emergency response and service calls for minor repairs. It also includes major repairs or replacement of facility components (usually accomplished by contract) that are expected to occur periodically throughout the facility life cycle. This work includes regular roof replacement, refinishing of wall surfaces, repairing and replacement of heating and cooling systems, replacing tile carpeting, and similar type work. Sustainment does not include restoration, modernization, environmental compliance, historical preservation, or costs related to unexpected events, which are funded elsewhere.

**System Owner (SO)**—The entity who owns a privatized utility system on an installation.

**Tribal Historic Preservation Officer (THPO)**—The official appointed by an Indian Tribe in accordance with the NHPA to administer the Tribal Historic Preservation Program and assume duties and functions for tribal lands similar to those that the SHPO has for State lands. The Secretary of Interior designates tribes with THPO responsibilities. Air Force installations will need to consult with the THPO, instead of the SHPO, on undertakings on or over Indian tribal lands where a Tribe has been granted THPO responsibilities by the Secretary of the Interior.

**Undertaking**—Any project, activity, action, or program wholly or partly funded under the direct or indirect jurisdiction of a Federal agency. Includes projects and activities that are executed by or on behalf of a Federal agency; Federally funded; require a Federal permit, license or approval; or are subject to State or local regulation administered through delegation or approval authority by a Federal agency.

Attachment 2

NETWORKED FACILITY DETERMINATION

Table A2.1. Networked Facility Determination.

Networked Facility	<b>Networked Facility Components</b> <i>(those which are interconnected within the networked facility)</i> <b>Note:</b> FAC = Facility Analysis Category
<u>Airfield Pavements:</u> <b>Interconnected</b> assets within the 2-digit DoD Category Group “11”.	<ul style="list-style-type: none"> <li>- Airfield Runways (3-digit DoD Basic Category - 111)               <ul style="list-style-type: none"> <li>-- Associated Lighting, Runway (6-digit Category Code - 136664)</li> <li>-- Associated Utility Vaults (4-digit DoD FAC - 8927)</li> <li>-- Associated Aircraft Pavement Shoulder (4-digit DoD FAC - 1165)</li> <li>-- <b>Exclude</b> Runway, Unsurfaced (4-digit DoD FAC - 1114)</li> </ul> </li>   <li>- Airfield Taxiways (3-digit DoD Basic Category - 112)               <ul style="list-style-type: none"> <li>-- Associated Taxiway Lighting (6-digit Category Code - 136667)</li> <li>-- Associated Utility Vaults (4-digit DoD FAC - 8927)</li> <li>-- Associated Aircraft Pavement Shoulder (4-digit DoD FAC - 1165)</li> </ul> </li>   <li>- Airfield Aprons (3-digit DoD Basic Category - 113)               <ul style="list-style-type: none"> <li>-- Associated Airfield Pavement Lighting (4-digit DoD FAC - 1361)</li> <li>-- Associated Utility Vaults (4-digit DoD FAC - 8927)</li> <li>-- Associated Aircraft Pavement Shoulder (4-digit DoD FAC - 1165)</li> </ul> </li>   <li>- Compass Calibration Pad, Surfaced (4-digit DoD FAC - 1161)               <ul style="list-style-type: none"> <li>-- Associated Airfield Pavement Lighting (4-digit DoD FAC - 1361)</li> <li>-- Associated Utility Vaults (4-digit DoD FAC - 8927)</li> <li>-- Associated Aircraft Pavement Shoulder (4-digit DoD FAC - 1165)</li> </ul> </li>   <li>- Aircraft Washing Pad, Surfaced (4-digit DoD FAC - 1163)               <ul style="list-style-type: none"> <li>-- Associated Airfield Pavement Lighting (4-digit DoD FAC - 1361)</li> <li>-- Associated Utility Vaults (4-digit DoD FAC - 8927)</li> <li>-- Associated Aircraft Pavement Shoulder (4-digit DoD FAC - 1165)</li> </ul> </li>   <li>- Miscellaneous Airfield Pavement, Surfaced (4-digit DoD FAC - 1164)</li> </ul>

<b>Networked Facility</b>	<b>Networked Facility Components</b> <i>(those which are <b>interconnected</b> within the networked facility)</i> <b>Note:</b> FAC = Facility Analysis Category
<p><u>Aircraft Fuel Dispensing Facilities:</u> <b>Interconnected</b> assets within the 3-digit DoD Basic Category “121”, to include associated components as listed to the right.</p>	<ul style="list-style-type: none"> <li>- Aircraft Fueling Facility (4-digit DoD FAC - 1211)</li> <li>- Aircraft Defueling Facility (4-digit DoD FAC - 1212)</li> <li>- Aircraft Operating Fuel Storage (4-digit DoD FAC - 1241)</li> <li>- Other Operating Fuel Storage (4-digit DoD FAC - 1244)</li> <li>- POL Pipeline (4-digit DoD FAC - 1251)</li> <li>- POL Piping (4-digit DoD FAC - 1252)</li> <li>- Liquid Fuel Loading/Unloading Facility (4-digit DoD FAC - 1261)</li> <li>- POL Pump Station (4-digit DoD FAC - 1262)</li> <li>- Bulk Liquid Fuel Storage (4-digit DoD FAC - 4111)</li> <li>- Large Bulk Liquid Fuel Storage (4-digit DoD FAC - 4112)</li> <li>- Cut-and-Cover Bulk Liquid Fuel Storage (4-digit DoD FAC - 4113)</li> <li>- Small Bulk Storage (4-digit DoD FAC - 4114)</li> <li>- Miscellaneous Storage Tank and Basin (4-digit DoD FAC - 8951)</li> </ul>
<p><u>Marine Fuel Dispensing Facilities:</u> <b>Interconnected</b> assets within the 3-digit DoD Basic Category “122”, to include associated components as listed to the right.</p>	<ul style="list-style-type: none"> <li>- Marine Fueling Facility (4-digit DoD FAC - 1221)</li> <li>- Marine Operating Fuel Storage (4-digit DoD FAC - 1242)</li> <li>- Other Operating Fuel Storage (4-digit DoD FAC - 1244)</li> <li>- POL Pipeline (4-digit DoD FAC – 1251)</li> <li>- POL Piping (4-digit DoD FAC - 1252)</li> <li>- Liquid Fuel Loading/Unloading Facility (4-digit DoD FAC - 1261)</li> <li>- POL Pump Station (4-digit DoD FAC - 1262)</li> <li>- Bulk Liquid Fuel Storage (4-digit DoD FAC - 4111)</li> <li>- Large Bulk Liquid Fuel Storage (4-digit DoD FAC - 4112)</li> <li>- Cut-and-Cover Bulk Liquid Fuel Storage (4-digit DoD FAC - 4113)</li> <li>- Small Bulk Storage (4-digit DoD FAC - 4114)</li> <li>- Miscellaneous Storage Tank and Basin (4-digit DoD FAC - 8951)</li> </ul>
<p><u>Land Vehicle Fuel Dispensing Facilities:</u> <b>Interconnected</b> assets within the 3-digit DoD Basic Category “123”, to include</p>	<ul style="list-style-type: none"> <li>- Vehicle Fueling Facility (4-digit DoD FAC - 1231)</li> <li>- Vehicle Operating Fuel Storage (4-digit DoD FAC - 1243)</li> <li>- Other Operating Fuel Storage (4-digit DoD FAC - 1244)</li> <li>- POL Pipeline (4-digit DoD FAC - 1251)</li> <li>- POL Piping (4-digit DoD FAC - 1252)</li> </ul>

<p><b>Networked Facility</b></p>	<p><b>Networked Facility Components</b>  <i>(those which are <b>interconnected</b> within the networked facility)</i>  <b>Note:</b> FAC = Facility Analysis Category</p>
<p>associated components as listed to the right.</p>	<ul style="list-style-type: none"> <li>- Liquid Fuel Loading/Unloading Facility (4-digit DoD FAC - 1261)</li> <li>- POL Pump Station (4-digit DoD FAC - 1262)</li> <li>- Bulk Liquid Fuel Storage (4-digit DoD FAC - 4111)</li> <li>- Large Bulk Liquid Fuel Storage (4-digit DoD FAC - 4112)</li> <li>- Cut-and-Cover Bulk Liquid Fuel Storage (4-digit DoD FAC - 4113)</li> <li>- Small Bulk Storage (4-digit DoD FAC - 4114)</li> <li>- Miscellaneous Pump Station (4-digit DoD FAC - 8924)</li> <li>- Miscellaneous Storage Tank and Basin (4-digit DoD FAC - 8951)</li> </ul>
<p><u>Communication Lines:</u>  <b>Interconnected</b> assets within the 3-digit DoD Basic Category “135”, to include associated components as listed to the right.</p>	<ul style="list-style-type: none"> <li>- Communication Lines (4-digit DoD FAC - 1351)</li> <li>- Associated Utility Vaults (4-digit DoD FAC - 8927)</li> <li>- Associated Utility Tunnels (4-digit DoD FAC - 8931)</li> </ul>
<p><u>Electrical Power:</u>  <b>Interconnected</b> assets within the 2-digit DoD Category Group “81”, to include associated components as listed to the right.</p>	<ul style="list-style-type: none"> <li>- Electrical Power Distribution Line, Overhead (4-digit DoD FAC - 8121)</li> <li>- Exterior Lighting, Pole (4-digit DoD FAC - 8122)</li> <li>- Electrical Power Distribution Line, Underground (4-digit DoD FAC - 8123)</li> <li>- Electric Power Substation (4-digit DoD FAC - 8131)</li> <li>- Electric Power Switching Station (4-digit DoD FAC - 8132)</li> <li>- Electric Power Transformers (4-digit DoD FAC - 8133)</li> <li>- Associated Utility Vaults (4-digit DoD FAC - 8927)</li> <li>- Associated Utility Tunnels (4-digit DoD FAC - 8931)</li> <li>- Exclude all Electric Power Source assets (3-digit DoD Basic Category - 811)</li> </ul>
<p><u>Heat Transmission and Distribution Lines:</u>  <b>Interconnected</b> assets within the 3-digit DoD Basic Category “822”, to include associated components as listed to the right.</p>	<ul style="list-style-type: none"> <li>- Heat Distribution Line (4-digit DoD FAC - 8221)</li> <li>- Miscellaneous Pump Station (4-digit DoD FAC - 8924)</li> <li>- Associated Utility Tunnels (4-digit DoD FAC - 8931)</li> <li>- Associated Utility Channels (4-digit DoD FAC - 8932)</li> </ul>

<b>Networked Facility</b>	<b>Networked Facility Components</b> <i>(those which are <b>interconnected</b> within the networked facility)</i> <b>Note:</b> FAC = Facility Analysis Category
<u>Heat Gas Transmission:</u> <b>Interconnected</b> assets within the 3-digit DoD Basic Category “824”, to include associated components as listed to the right.	<ul style="list-style-type: none"> <li>- Heat Gas Storage (4-digit DoD FAC - 8232)</li> <li>- Heat Gas Distribution Line (4-digit DoD FAC - 8241)</li> </ul>
<u>Chilled Water (Air Conditioning) Transmission and Distribution Lines:</u> <b>Interconnected</b> assets within the 3-digit DoD Basic Category - 827”, to include associated components as listed to the right.	<ul style="list-style-type: none"> <li>- Chilled Water and Refrigerant Distribution Line (4-digit DoD FAC - 8271)</li> <li>- Miscellaneous Pump Station (4-digit DoD FAC - 8924)</li> <li>- Associated Utility Tunnels (4-digit DoD FAC - 8931)</li> <li>- Associated Utility Channels (4-digit DoD FAC - 8932)</li> </ul>
<u>Sewage and Industrial Waste Treatment and Disposal:</u> <b>Interconnected</b> assets within the 3-digit DoD Basic Category “831”, to include associated components as listed to the right.	<ul style="list-style-type: none"> <li>- Septic Tank and Drain Field (4-digit DoD FAC - 8314)</li> <li>- Septic Lagoon and Settlement Ponds (4-digit DoD FAC - 8315)</li> <li>- Sewage Lift Stations (4-digit DoD FAC - 8316)</li> <li>- Sewer and Industrial Waste Line (4-digit DoD FAC - 8321)</li> <li>- Associated Utility Tunnels (4-digit DoD FAC - 8931)</li> <li>- Associated Utility Channels (4-digit DoD FAC - 8932)</li> <li>- <b>Exclude</b> all Sewage Treatment assets (4-digit DoD FAC - 8311)</li> <li>- <b>Exclude</b> all Industrial Waste Treatment assets (4-digit DoD FAC - 8312)</li> <li>- <b>Exclude</b> all Water Separation Facility assets (4-digit DoD FAC - 8313)</li> <li>- <b>Exclude</b> all Storm Drainage Disposal (6-digit Category Code - 871183)</li> </ul>
<u>Potable Water Distribution System:</u> <b>Interconnected</b> assets within the 3-digit DoD Basic Category “842”, to include associated components as listed to the right.	<ul style="list-style-type: none"> <li>- Water Storage, Potable (4-digit DoD FAC - 8413)</li> <li>- Water Distribution Line, Potable (4-digit DoD FAC - 8421)</li> <li>- Water Pump Facility, Potable (4-digit DoD FAC - 8422)</li> <li>- Associated Utility Tunnels (4-digit DoD FAC - 8931)</li> <li>- Associated Utility Channels (4-digit DoD FAC - 8932)</li> </ul>

<p><b>Networked Facility</b></p>	<p><b>Networked Facility Components</b>  <i>(those which are <b>interconnected</b> within the networked facility)</i>  <b>Note:</b> FAC = Facility Analysis Category</p>
<p><u>Fire Protection Water Facilities:</u> <b>Interconnected</b> assets within the 3-digit DoD Basic Category “843”, to include associated components as listed to the right.</p>	<ul style="list-style-type: none"> <li>- Water Distribution Line, Fire Protection (4-digit DoD FAC - 8432)</li> <li>- Water Impoundment, Fire Protection (4-digit DoD FAC - 8433)</li> <li>- Water Pump Facility, Fire Protection (4-digit DoD FAC - 8434)</li> <li>- Water Tank, Fire Protection (4-digit DoD FAC - 8435)</li> <li>- Associated Utility Tunnels (4-digit DoD FAC - 8931)</li> <li>- Associated Utility Channels (4-digit DoD FAC - 8932)</li> <li>- <b>Exclude</b> all Water Source, Fire Protection assets (4-digit DoD FAC - 8431)</li> </ul>
<p><u>Non-potable Water Distribution System:</u> <b>Interconnected</b> assets within the 3-digit DoD Basic Category “845”, to include associated components as listed to the right.</p>	<ul style="list-style-type: none"> <li>- Water Storage, Non-potable (4-digit DoD FAC - 8442)</li> <li>- Water Distribution Line, Non-potable (4-digit DoD FAC - 8451)</li> <li>- Water Pump Facility, Non-potable (4-digit DoD FAC - 8452)</li> <li>- Associated Utility Tunnels (4-digit DoD FAC - 8931)</li> <li>- Associated Utility Channels (4-digit DoD FAC - 8932)</li> </ul>
<p><u>Roads, Bridges, and Tunnels:</u> <b>Interconnected</b> assets within the 3-digit DoD Basic Category “851”, to include associated components as listed to the right.</p>	<ul style="list-style-type: none"> <li>- Road, Surfaced (4-digit DoD FAC - 8511)</li> <li>- Vehicle Bridge (4-digit DoD FAC - 8513)</li> <li>- Vehicular Tunnel (4-digit DoD FAC - 8514)</li> <li>- Traffic Control Signals (4-digit DoD FAC - 8541)</li> <li>- Vehicle Parking, Surfaced assets (4-digit DoD FAC - 8521) [<b>Exclude</b> those serving a single building]</li> <li>- Vehicle Parking and Staging Area, Unsurfaced assets (4-digit DoD FAC - 8522) [<b>Exclude</b> those serving a single building]</li> <li>- Vehicle Staging Area, Surfaced assets (4-digit DoD FAC - 8523) [<b>Exclude</b> those serving a single building]</li> <li>- Miscellaneous Paved Area assets (4-digit DoD FAC - 8526) [<b>Exclude</b> those serving a single building]</li> <li>- <b>Exclude</b> all Driveway assets (6-digit Category Code - 851145)</li> <li>- <b>Exclude</b> all Road, Unsurfaced assets (4-digit DoD FAC - 8512)</li> </ul>
<p><u>Sidewalks and Other Pavements:</u> <b>Interconnected</b> assets within the 3-digit DoD</p>	<ul style="list-style-type: none"> <li>- Sidewalk and Walkway (4-digit DoD FAC - 8524)</li> <li>- Pedestrian Bridge (4-digit DoD FAC - 8525)</li> </ul>



<b>Networked Facility</b>	<b>Networked Facility Components</b> (those which are <i>interconnected</i> within the networked facility) <b>Note:</b> FAC = Facility Analysis Category
Basic Category “852”, to include associated components as listed to the right.	<ul style="list-style-type: none"> <li>- <b>Exclude</b> all Vehicle Parking, Surfaced assets (4-digit DoD FAC - 8521)</li> <li>- <b>Exclude</b> all Vehicle Parking and Staging Area, Unsurfaced assets (4-digit DoD FAC - 8522)</li> <li>- <b>Exclude</b> all Vehicle Staging Area, Surfaced assets (4-digit DoD FAC - 8523)</li> <li>- <b>Exclude</b> all Miscellaneous Paved Area assets (4-digit DoD FAC - 8526)</li> </ul>
<u>Railroad Tracks:</u> <b>Interconnected</b> assets within the 3-digit DoD Basic Category “860”, to include associated components as listed to the right.	<ul style="list-style-type: none"> <li>- Railroad Track (4-digit DoD FAC - 8601)</li> <li>- Railroad Bridge (4-digit DoD FAC - 8611)</li> </ul>
<u>Grounds Drainage:</u> <b>Interconnected</b> assets within the 3-digit DoD Basic Category “871”, to include associated components as listed to the right.	<ul style="list-style-type: none"> <li>- Storm Drainage (4-digit DoD FAC - 8711)</li> <li>- Retaining Structure assets (4-digit DoD FAC - 8712) [<b>Note:</b> only those contributing to grounds drainage]</li> <li>- Grounds Drainage Dams (4-digit DoD FAC - 8713)</li> <li>- Levees and Dikes for Ground Drainage (4-digit DoD FAC - 8714)</li> <li>- Storm Water Ponds (4-digit DoD FAC - 8715)</li> <li>- Sewer and Industrial Waste Line (4-digit DoD FAC – 8715) - Storm Drainage Disposal (6-digit Category Code - 871183)</li> <li>- Sewer and Industrial Waste Line (4-digit DoD FAC – 8715) [<b>Note:</b> only those contributing to grounds drainage]-</li> <li>- Miscellaneous Pump Station (4-digit DoD FAC - 8924)</li> </ul>
<u>Grounds Fencing, Gates, and Guard Towers:</u> <b>Interconnected</b> assets within the 3-digit DoD Basic Category “872”, to include associated components as listed to the right.	<ul style="list-style-type: none"> <li>- Boundary Fence and Wall (4-digit DoD FAC - 8721)</li> <li>- Security Fence (4-digit DoD FAC - 8722)</li> </ul>

<b>Networked Facility</b>	<b>Networked Facility Components</b> <i>(those which are <b>interconnected</b> within the networked facility)</i> <b>Note:</b> FAC = Facility Analysis Category
<u>Installation Gas Distribution Line</u> : <b>Interconnected</b> assets within the 4-digit DoD Facility Analysis Category “8930”, to include associated components as listed to the right.	- Installation Gas Distribution Line (4-digit DoD FAC - 8930)

## Attachment 3

## CERTIFICATE OF COMPLIANCE

Figure A3.1. For Critical Planning Actions.

Command:

Base, State, Country (if Overseas):

Project Title:

Project Number (Block 7 of DD Form 1391):

I. INSTRUCTIONS: Annotate applicable statement below with an X and follow subsequent directions.

\_\_\_\_ This project requires approval/authorization at Headquarters Air Force or higher: place one X in the most appropriate response for each topic area below to show status of compliance. When responding to a statement requiring additional data, fill in the blank with appropriate information. If none of the printed statements are appropriate, add or attach an appropriate comment. The BCE and the first cross functional manager above the Civil Engineer Squadron shall sign the certificate and submit it to the AFCEC/CP, AFRC/A4 or NGB/A4 with the DD Form 1391 package for approval.

\_\_\_\_ This project requires approval at AFCEC, AFRC/A4 or NGB/A4: the coordination and completion of the remaining Certificate of Compliance items is not required. However, the BCE, or designated Flight Chief (may not be delegated lower), shall sign the CoC signifying the items listed below were used to inform planning actions and requirements development for this project.

\_\_\_\_ This project is at the installation approval level: a signed Certificate of Compliance is not required. However, the below items can, and should, be used to inform planning actions and project development.

II. PLANNING:

1. Environmental Impact Analysis Process (32 CFR Part 989):

\_\_\_\_ Categorical exclusion (CATEX) number \_\_\_\_\_ applies. (See AF Form 813)

\_\_\_\_ Environmental Assessment/Finding of No Significant Impact: Signed \_\_\_\_\_ (date).

\_\_\_\_ Final EIS/Record of Decision: Signed \_\_\_\_\_ (date).

\_\_\_\_ Foreign nation or protected global resource exemption number \_\_\_\_\_ applies.

2. Wetlands (AFI 32-7003):

\_\_\_\_ Project is not sited in or adjacent to a wetland.

\_\_\_\_ Requirements of Clean Water Act, Section 404 & 401 in progress.

\_\_\_\_ Section 401 Certification completed \_\_\_\_\_ (date).

3. Floodplains (AFI 32-7003 and UFC 3-201-01 ):

- Project is not sited in or partially within 100-year flood plain.
- Project is sited in or partially within 100-year flood plain. AFI 32-7064 process completed on: \_\_\_\_\_ (date).
- Project is sited in or partially within a 100-year flood plain. 100-year flood plain and flood mitigation design features comply with UFC 3-201-01.
- Repair of facility is greater than \$7.5M and is on a facility already located in a 100-year flood plain. The vulnerability of the mechanical and electrical subsystems was evaluated and necessary measures are incorporated into the project to mitigate the vulnerabilities.

4. Coastal Zone Management (AFI 32-7003):

- Project does not directly affect a state coastal zone.
- Consistency determination completed on \_\_\_\_\_ (date).

5. Coastal Barrier Resources (AFI 32-7003):

- Project is not sited within the Coastal Barrier Resources System.
- Project exempt from the Coastal Barrier Resources Act (CBRA).
- Consultation with the Regional Director, United States Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) concluded \_\_\_\_\_ (date).

6. Threatened and Endangered Species (AFI 32-7003):

- Project has no potential for affecting threatened or endangered species or critical habitats.
- Based on consultation with USFWS/NMFS or host nation liaison on \_\_\_\_\_ (date), threatened or endangered species in the vicinity of the project will not be affected.
- Consultation with USFWS/NMFS underway in accordance with the Endangered Species Act.
- Formal consultation with the Regional Director, USFWS completed on \_\_\_\_\_ (date).
- Biological opinion issued by USFWS on \_\_\_\_\_ (date).

7. Cultural Resources Management (AFI 32-7003):

- Properties affected by project are addressed in a Programmatic Agreement that was fully executed with the State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation (ACHP) on \_\_\_\_\_ (date).
- Project area has been surveyed and no historic properties were identified; the SHPO was notified by letter dated \_\_\_\_\_.
- Survey identified historic properties but the project will have no effect on them; written concurrence by the SHPO is dated \_\_\_\_\_.
- After consultation, SHPO concurred the project will have no adverse effect on historic properties by written correspondence dated \_\_\_\_\_.
- Project will have an adverse effect on historic properties. A Memorandum of Agreement (MOA) mitigating the adverse effect was executed on \_\_\_\_\_ (date).
- Project will affect a site or property of interest to Native Americans. Appropriate Native American Tribe or Group contacted on \_\_\_\_\_ (date).

## 8. Interagency and Intergovernmental Coordination for Environmental Planning:

Coordination of proposed project with the state Single Point of Contact or other agencies is not required.

Proposed project was coordinated with the state Single Point of Contact or other agencies on \_\_\_\_\_ (date). (Specify any other agencies.)

## 9. Environmental Permits (AFMAN 32-1067 and AFMAN 32-7002):

No permits are required.

No permits required, but regulatory agency notification required prior to construction (e.g., underground storage tank removals)

## 10. Potentially Regulated Substances (AFI 32-1001 and AFMAN 32-7002)

## a. Asbestos:

Survey completed: \_\_\_\_\_ (date)

Not present

Present (Describe mitigation, or state why mitigation is not necessary.)

## b. Lead-Based Paint:

Survey completed: \_\_\_\_\_ (date)

Not present

Present (Describe mitigation, or state why mitigation is not necessary.)

## c. Ozone depleting substance:

Survey completed: \_\_\_\_\_ (date)

Not present

Present (Describe mitigation, or state why mitigation is not necessary.)

## d. Polychlorinated biphenyls (PCBs):

Not present

Present (Describe mitigation, or state why mitigation is not necessary.)

## e. Radon:

Not present

Survey underway

Present (Describe mitigation, or state why mitigation is not necessary.)

## f. Other known hazardous or toxic substances and pollutants (e.g., contaminated soils):

Not present

Survey underway

Present (Describe mitigation, or state why mitigation is not necessary.)

## 11. Environmental Restoration Program:

Facility is not sited on or near an ERP site.

Facility is sited near an ERP site approximately \_\_\_\_\_ feet away.

Facility is on an ERP site.

The site is project is funded and expected to be remediated and/or closed out on \_\_\_\_\_ (date), prior to commencement of construction activities.

The nature of the site contamination does not preclude the type of construction activity proposed.

There is a Compliance Agreement (CA) associated with this site and this project does not hinder the ability to meet the requirements of the CA.

- A Remedial Investigation Feasibility Study was completed on \_\_\_\_\_ (date) to accurately delineate the extent of the contamination.
- Cost of remedial action is included as part of project scope.

12. Air Pollutants (AFMAN 32-7002):

a. Generation:

- Will not be generated by the operation or construction of this facility.
- Will be generated by the operation or construction of this facility. Describe type and amount of substances expected to be generated, existing control systems, and the need for additional controls.

b. Conformity:

- Conformity analysis required and was completed on: \_\_\_\_\_ (date).
- Conformity analysis not required.

13. Water Pollutants (AFMAN 32-1067 and AFMAN 32-7002):

- Facility will not generate water pollutants.
- Facility construction will not cause soil erosion.
- Facility will generate water pollutants. Describe type and amount along with minimization, treatment, and disposal plan.
- Facility construction will cause erosion and require an erosion control plan.

14. Solid and Hazardous Wastes (AFMAN 32-7002):

- Facility will not be used for managing solid or hazardous wastes.
- Facility will be used for managing solid or hazardous wastes.

15. Underground Storage Tanks (AFMAN 32-1067) (Check all that apply):

- No underground storage tanks are involved.
- New underground storage tanks will be installed.
- Existing tanks on the project site will be removed on : \_\_\_\_\_ (date).
- Regulatory agency was notified on \_\_\_\_\_ (date).
- Cost of contamination clean-up is included as part of project.
- Contamination does not exist.
- Contamination unknown, survey accomplished on : \_\_\_\_\_ (date).
- Existing tanks on the project site will be retained.
- Contamination exists.

16. Air Installation Compatible Use Zone (AFI 32-1015):

- Facility is sited within acceptable noise level according to the Air Installation Compatible Use Zone Study. No noise level reduction is required.
- Facility is not sited in compliance with Air Installation Compatible Use Zone Study. Noise level reduction of \_\_\_\_\_ will be provided in design and construction.

## 17. Installation Development Plan (AFI 32-1015):

\_\_\_ Facility is sited in accordance with the Installation Development Plan, or in accordance with the prescribed system (Comprehensive Planning Platform) and is within a compatible land use area.

\_\_\_ Facility is not sited in accordance with the Installation Development Plan, or in accordance with the prescribed system (Comprehensive Planning Platform) and is not within a compatible land use area for the following reason: \_\_\_\_\_.

## 18. Airfield Clearance Criteria (UFC 3-260-01):

\_\_\_ Facility is in compliance with airfield clearance criteria, including clear zone, accident potential zones, frangibility requirements, and airfield airspace (height obstruction) criteria and poses no potential threat to flight safety.

\_\_\_ A permanent waiver of airfield/air space clearance criteria was obtained on \_\_\_\_\_ (date).

\_\_\_ Facility has been evaluated for impacts on airfield support equipment (e.g. instrument landing system, tactical air navigation)

## 19. Air Space Use:

\_\_\_ Project does not affect air space use and does not require filing of the Obstruction Evaluation/Airport Airspace Analysis (OE/AAA) 7460-1 form to the Regional Office of the FAA.

\_\_\_ Regional FAA approval obtained on \_\_\_\_\_ (date). Obstruction marking and lighting recommendations are included in the project.

## 20. Explosives Quantity/Distance Siting and Safety Clearance Criteria:

a. Projects (new construction, facility modification, or change in use) involving explosives storage or handling.

\_\_\_ Explosives safety siting approval/waiver obtained on \_\_\_\_\_ (date).

b. Projects not involving explosives (new construction, facility modification, or change in use).

\_\_\_ Wing Safety coordination obtained on \_\_\_\_\_ (date).

\_\_\_ Project is not sited within explosives clear zones.

\_\_\_ Explosives safety siting approval obtained on \_\_\_\_\_ (date).

## 21. Air Base Survivability, Hardening, Chemical Protection Levels and Priorities, Camouflage, Concealment and Deception ():

\_\_\_ Project affects air base operability for the following reason: \_\_\_\_\_.

\_\_\_ Project requires Conventional Hardening to \_\_\_\_\_ level. (UFC 3-340-01)

\_\_\_ Project requires Airborne Chemical, Biological, And Radiological Protection to \_\_\_\_\_ level. (UFC 4-024-01)

\_\_\_ Project requires Class I (Filtration with Pressurization) Collective Protection. (UFC 4-024-01)

22. Allowance for the Physically Handicapped:
- Project must provide all design features for handicapped.
  - Project must provide access and limited features.
  - Project must provide access but no other features.
  - Design features for handicapped are not required.
  - Design features will not be provided for the following reason: \_\_\_\_\_.
23. Real Estate Requirements (AFI 32-9001, DAFI 32-9005, and UFC 1-300-08):
- Project does not require acquisition of real estate interest.
  - Project requires acquisition of a real estate interest over \$750,000.
  - Land interest is to be acquired through minor land authority.
  - Other (explain): \_\_\_\_\_.
24. Antiterrorism/Force Protection: Antiterrorism/force protection measures included in this project are based on a completed installation terrorist threat assessment and a completed Command or Joint Staff Installation Vulnerability Assessment.
- Antiterrorism/force protection measures included in this project satisfy requirements established by a completed installation Physical Security and Force Protection Plan (DoDI O-2000.16. Standard 4).
- Antiterrorism Force Protection Officer signature obtained: \_\_\_\_\_ (date)
- Project meets or exceeds the requirements of DoD Antiterrorism Construction Standards.
25. Excess Space:
- Possible facility reuse and consolidation opportunities have been considered and excess space in existing facilities is not available to satisfy the requirement.
26. Temporary Facilities Incident to Construction:
- Temporary facilities are not required for this project.
  - Temporary facilities are required for this project and will be demolished or removed upon completion.
27. Communications and Information Support:
- Site survey has been completed and there are no impacts to satellite radar or sensor line of site.
  - The communications equipment, information technology systems, pre-wiring costs, and other requirements for this project have been identified and are included in the project cost estimate and all other applicable project documents. A copy of the communication cost estimate is attached to the DD Form 1391.
28. Sustainable Design and Development:
- Project meets the requirements of UFC 1-200-02.
  - Project meets the requirements of UFC 3-210-10.
  - Project will qualify for third-party green building certification (the DoD version of either the US Green Building Council/Green Business Certification Inc. Guiding Principles Assessment or Green Building Initiative Guiding Principles Compliance system).



## 29. Seismic Considerations:

- Seismic planning and design complies with UFC 3-301-01 *Structural Engineering*.
- Seismic evaluations performed for existing facilities.
- Seismic deficiencies identified and mitigations for existing buildings including the nonstructural components are mitigated by project completion.

## 30. Joint Use Certification (include selection on DD Form 1391):

- Mission requirements, operational considerations, and location are incompatible with use by other components.
- This is an installation utility/infrastructure project, and does not qualify for joint use at this location. However, all tenants on this installation are benefited by this project.
- This facility can be used by other components on an as available basis; however, the scope of the project is based on Air Force requirements.
- This facility is programmed for joint use with \_\_\_\_\_ (identify the component the facility is jointly used with); however, it is fully funded by the Air Force.
- The facility is programmed for joint use with \_\_\_\_\_ (identify the component(s) the facility is jointly used with) and is conjunctively funded by \_\_\_\_\_ (identify the participating component(s)).

## 31. Sensitive Compartmented Information Facilities (SCIF)

- Not Applicable
- Site Security Manager/Accrediting Official has provided security requirements, including construction standards and construction oversight (e.g. escorts, construction surveillance technicians, cleared American guards).
- Estimated costs of SCIF construction, escorts and construction surveillance technicians, including any support to be provided by the installation that can be identified as additional costs that would not have been incurred were it not for the project, are included.
- Waiver is approved for any requirements that exceed standards specified in IC Tech Spec – for ICD/ICS 705, *Technical Specifications for Construction and Management of Sensitive Compartmented Information Facilities, current version*.

## 32. Facility Conversion

- Completion of this project results in a Category Code change for/within the facility
- Completion of this project *does not* result in a Category change for/within the facility

## 33. Basing Action, Mission Growth, Personnel Increase

- This project is a result of a basing action, growth in mission, or increase in the number of personnel
- If so, indicate which is the causing action(s) \_\_\_\_\_
- This project is *not* a result of a basing action, growth in mission, or increase in the number of personnel

I concur with the above statements.

Base Civil Engineer (date)

\_\_\_\_\_  
First Cross Functional Commander above BCE (date)

## Attachment 4

### EXAMPLES OF WORK CLASSIFICATION

#### A4.1. Maintenance.

A4.1.1. Examples of maintenance work include, but are not limited to:

A4.1.1.1. Rebalancing an HVAC system.

A4.1.1.2. Inspecting or performing corrective maintenance fire detection and suppression systems.

A4.1.1.3. Repainting the exterior or interior of facilities Element of Expense Investment Code (EEIC) 521xx.

A4.1.1.4. Performing spall repair or crack sealing on the airfield.

A4.1.1.5. Cleaning out storm drainage systems on a periodic basis.

A4.1.1.6. Chip sealing a road surface.

A4.1.1.7. Restriping airfields and base parking lots.

A4.1.1.8. Inspecting, recertifying, or performing corrective maintenance on collective protection systems.

A4.1.2. The following services or commodities invest in (or sustain) real property; therefore, these are examples of maintenance work.

A4.1.2.1. Real property installed appliance maintenance.

A4.1.2.2. Elevator inspections.

A4.1.2.3. Utility surveys.

A4.1.2.4. Real property installed hoist and crane testing.

A4.1.2.5. Hood and duct cleaning.

A4.1.2.6. Bridge inspections.

A4.1.2.7. Collective protection system maintenance, filter replacement and periodic system recertification.

A4.1.2.8. Grounds maintenance. Grounds maintenance not associated with a facility project is normally funded from the Facilities Operation (FO) (PEC\*\*\*79F) account.

#### A4.2. Repair.

A4.2.1. Examples of repair work include, but are not limited to:

A4.2.1.1. Interior rearrangements and restorations of an existing facility can be classified as repair. Repairs may include the movement or reinforcement of existing interior load-bearing members within a facility.

A4.2.1.2. Replacement of one type of roof system (e.g., a flat roof) with another, more reliable or economical type of roof (e.g., sloped roof).

A4.2.1.3. Installation of exterior appurtenances as a means of complying with building fire and safety codes and access laws (e.g., fire escapes and elevators, even if enclosed, and ramps directly adjoining facilities).

A4.2.1.4. The expansion of existing or installation of new fire protection systems in existing facilities, to include reservoirs, deluge storage tanks, pipes, pumps, valves, connections, and other integral parts if undertaken to comply with appropriate UFC or building codes.

A4.2.1.5. Installation of backflow prevention devices in accordance with building and uniform plumbing codes on drinking water systems.

A4.2.1.6. A repair project may increase the durability and load-bearing capacity of an existing facility (recorded in the real property records) used to support vehicular or aircraft traffic (such as a road, runway, taxiway, shoulder, aircraft parking apron, or vehicle parking area) to include improving its wearing surface, but may not expand the wearing surface unless the additional surface is required only to meet applicable international, Federal, DoD or AF standards, directives, or codes.

A4.2.1.6.1. Replacement or addition of required components may include expansion of the paved footprint and depth of any course (to include in situ subgrade) if required to comply with international, Federal, DoD or AF standards, directives, or codes. For example, a repair project may expand or add paved shoulders to a runway facility to comply with paragraph 3-9 of UFC 3-260-01 and a repair project may add curbing to and existing fuel vehicle parking area if required by code or documented standard.

A4.2.1.6.2. Work to sustain, restore, or modernize an existing facility used to support vehicular or aircraft traffic that is within the existing footprint of the wearing surface may be classified as repair. This includes work to add, alter, or replace systems which reside, completely or partially, within the existing pavement cross section but do not extend beyond the footprint of the wearing surface.

A4.2.1.7. Existing components of pavement networked facilities (see [Attachment 2](#)) may be repaired by replacement.

A4.2.1.8. If a new capability requires expansion of wastewater treatment plant or water treatment plant facility footprint (such as addition of a tertiary waste treatment process where none existed previously), the programmer needs to classify the work as construction. **(T-0)**. However, existing components (4-digit DoD FAC facilities per [Paragraph 2.7.17](#) and interconnected distribution) of the wastewater treatment plants and water treatment plants can be replaced, functionally sized (justified by code, standard, or demonstrated industry practice), or modernized with state-of-the-art equipment with the work classified as repair. The replacement components can be installed in a new location if required to keep the existing plant operational throughout project execution.

A4.2.1.9. As part of a government-owned utility system repair, the system components may be functionally sized (justified by code, standard, or demonstrated industry practice) and modernized to current requirements (for example, replacing 8-inch pipe with 12-inch pipe). Clearly defined justification should be provided when sizing for possible growth or modernization (e.g., demonstrated industry practice) as part of a repair project.

A4.2.1.10. Work to relocate above ground government-owned utilities below grade may be considered repair provided the utility follows the same general route and does not install new utility service.

A4.2.1.11. To prevent future unnecessary pavement repairs, duct banks below pavements may be reasonably-sized for future growth requirements.

A4.2.1.12. Storm Drainage. Storm drainage ditches are considered facilities and should be captured on installation real property records (category code 871101). If interconnected with other grounds drainage assets, they are considered components of a networked facility (see [Attachment 2](#)). Storm drainage ditches may be replaced with the work classified as repair, to include relocation, and installation of drainage pipes. However, adding a storm drainage ditch or pipe where one does not exist is properly classified as construction.

A4.2.1.13. Landscaping (to include grading and planting work) of previously improved land done in conjunction with a facility project is classified as repair. Landscaping unimproved land in conjunction with a facility project is classified as construction. Landscaping improved or unimproved land, not done in conjunction with a facility project, and which does not itself result in the creation of an identifiable facility, is considered maintenance. For example, grading required solely to remove airfield obstructions or hazards to navigation and seeding to control erosion should be classified as maintenance.

A4.2.1.14. Artificial Turf. Programmers may classify the replacement of natural turf on existing recreation fields or other improved surfaces with artificial turf as repair. Installing artificial turf on unimproved land or surface would be properly classified as construction.

A4.2.1.15. Existing collective protection systems can be replaced with functionally-sized, state-of-the-art systems as repair.

A4.2.1.16. To classify any other work which adds an exterior component which did not previously exist, but is necessary to bring a facility into compliance with other codes as repair, address on a case-by-case basis with AF/A4C.

A4.2.2. Examples of repair work in the sustainment category include, but are not limited to:

A4.2.2.1. Repairing a roof on a lifecycle basis (built up roof, standing seam metal roof, etc.).

A4.2.2.2. Replacing government-owned utility poles periodically.

A4.2.2.3. DELETE.

A4.2.2.4. Repairing a water line break caused by inadequate sustainment.

A4.2.2.5. Replacing the floor covering in a facility.

A4.2.2.6. Mill and overlay existing pavement.

A4.2.2.7. Replacing government-owned wastewater treatment process components as required for maintenance on a cyclical basis as required to satisfy the installation wastewater permit (sustainment maintenance or sustainment repair).

A4.2.2.8. Replacing overhead electrical power lines with underground lines when the existing lines have reached the end of their economic life. The underground lines need to generally follow the same path as the overhead lines and cannot contain additional feeders but can be properly sized. Similarly, the replacement of other interior or exterior utility lines (sewer, water, gas, or electrical) that have reached the end of their economic life-cycle is sustainment so long as the lines follow the same path as the existing lines and do not expand to new areas. Also, these utility lines can be properly sized.

A4.2.2.9. Replacement of HVAC systems, in kind or to current standards, which have reached the end of their useful life.

A4.2.2.10. Replacement of collective protection systems, in kind or to current standards, which have reached the end of their useful life.

A4.2.2.11. Full replacement of cathodic protection to include exterior painting, interior lining, replacing sacrificial components, and associated connections.

A4.2.3. Examples of repair work in the restoration category include, but are not limited to:

A4.2.3.1. Repairing collateral facility damage caused by a leaking roof (i.e. collapsed ceiling, drywall, floor, etc., resulting from lack of sustainment) [Repairing the roof will be sustainment repair unless the leak was caused by a damaged roof.]

A4.2.3.2. Repairing damage to a facility caused by a natural disaster (fire, tornado, hurricane, flood, earthquake, etc.)

A4.2.3.3. Repairing a government-owned water line damaged by natural disaster or accidental damage (not caused by insufficient sustainment).

A4.2.3.4. Repairing a facility (to include structural members) as a result of an explosion.

A4.2.3.5. Completely replacing an existing road due to failure before the end of its expected useful life, but requires repair and replacement is the best course of action.

A4.2.3.6. Completely replacing a runway or taxiway that has not achieved its reasonably expected useful life (concrete, base course, drainage system, etc.), but requires repair and replacement is the best course of action.

A4.2.3.7. Replacing a facility component or system that was poorly designed and/or never worked properly. However, if initially funded by military construction appropriations, and it never worked properly, then military construction appropriations will need to be used to correct the deficiency.

A4.2.4. Examples of repair work in the modernization category include, but are not limited to:

A4.2.4.1. Replacing the existing lighting with a more energy efficient system before the end of its useful life.

A4.2.4.2. Converting a library to administrative space within existing dimensions [**Note:** Any conversion work exterior to existing dimensions is properly classified as construction and could be funded with R&M if the construction cost is within the minor construction threshold.]

A4.2.4.3. Reconfiguring or modifying a facility to accommodate new modular furniture.

A4.2.4.4. Modernizing a facility (new walls, ceiling, floor covering, etc.) to house a new function (administrative, shop, etc.) or to beddown a new mission (as long as work is within existing facility exterior dimensions).

A4.2.4.5. Installing a new fire suppression system to comply with an updated fire code, as described in **Paragraph 2.7.15** This example also applies to seismic improvements.

A4.2.4.6. Replacing a functioning facility component solely for modernization, subject to the limitations.

A4.2.4.7. Adding striping to previously-existing, unstriped pavement to meet standards or codes.

A4.2.4.8. Replacing a runway or taxiway (concrete, base course, drainage system, etc.) in accordance with **Paragraph 3.3.3**.

A4.2.4.9. Replacing overhead electrical power lines with underground lines and other interior or exterior utility lines (sewer, water, gas, or electrical) **in accordance with Paragraph 3.3.3** The new underground lines need to generally follow the same path as the overhead lines and cannot contain additional feeders but can be properly sized. Similarly, the replacement of other interior or exterior utility lines need to follow the same general path as the existing lines and cannot expand to new areas with the work being classified as repair. These replacement utility lines can be properly sized.

**A4.3. Construction.** The following will, as a minimum, be classified as construction unless clearly falling within the definition of repair (see **Paragraph 1.3.1.2.2**):

A4.3.1. Creating new or enlarging existing real property facilities (volume or footprint).

A4.3.2. Purchase and installation of RPIE exterior to existing dimensions of a facility when the RPIE did not previously exist. RPIE determinations are made by AF/A4C in accordance with applicable General Services Administration and DoD policy.

A4.3.3. Expansion of any part of a facility's foundation system beyond its current footprint and elevation, or expansion of functional space beyond existing external dimensions, including, but not limited to, ground level landings and sidewalk systems, and balconies.

A4.3.4. Installation of building systems not presently installed that exceed existing external dimensions.

A4.3.5. All work required to relocate a facility, including transportation, site work at the new location, and restoration of the vacated site. The intent of this example is for a project which includes moving a building or other vertical structure.

A4.3.6. Upgrading the surface of unpaved roads, walks, trails, parking areas, driveways, runways, and taxiways not captured on the real property records. See **Paragraph A4.2.1.6** for guidance on improving facilities supporting vehicular or aircraft traffic as a repair project.

A4.3.7. Expanding or enlarging the wearing surface of an existing facility used to support vehicular or aircraft traffic (such as a road, runway, taxiway, aircraft parking apron, or vehicle parking area) unless the additional surface is required only to meet applicable safety codes or standards. This would include additional lanes to a road to support increased traffic demand.

A4.3.8. Changing the permanent route of roads, walks, trails, or other real property transportation systems, except when done solely to reduce the cost resulting from, or to avoid, unacceptable traffic disruption during repair or where required by code, such as clear zone criteria. Costs to temporarily reroute traffic during repair projects are an integral part of the repair and should be classified as repair.

A4.3.9. Installation real property transportation paths, walkways, roadways, curbs, gutters, bike or jog paths, benches, lighting, accessories, and other real property support structures not currently in place.

A4.3.10. Installation of bicycle or jogging paths and related benches, lighting, or other real property support structures.

A4.3.11. Installation of underground storm water conveyance systems not currently in place.

A4.3.12. DELETE.

A4.3.13. Installation of a protective cap on a solid waste landfill. Scope of work includes but is not limited to required sediment and erosion controls; establishing proper subgrade slopes; installing landfill gas vent wells and stone trenches; installing geosynthetic gas vent, liner, or drainage layers; final cover soils; and the relocation or consolidation of waste material found unexpectedly outside the reported limits of waste.

A4.3.14. Adding or installing a new treatment component to a wastewater or water treatment plant that did not previously exist and that creates new footprint for the plant.

A4.3.15. Landscaping unimproved land in conjunction with a facility project is classified as construction.

A4.3.16. Installing artificial turf on unimproved land or surface is properly classified as construction.

A4.3.17. Allied support (e.g., site work, foundations, utilities, etc.) to non-RPIE is considered real property and is a Civil Engineer responsibility. Adding allied support for real property that did not previously exist is properly classified as construction. For guidance regarding allied support for temporary facilities, see [Paragraph 2.8](#).

A4.3.18. Any acquisition of land is classified as construction. If land acquisition is associated with another project, it is a funded cost to the project. Independent land acquisition is programmed as a construction project.

## Attachment 5

### FUNDED AND UNFUNDED COSTS

**A5.1. Funded Costs.** Funded project costs are those costs used to determine the project cost for purposes such as approval authority (including need to notify the appropriate congressional committee) and appropriate source of funds. The following are funded project costs (the list may not be all inclusive):

A5.1.1. Construction Equipment. Project execution costs applicable to maintenance and operation of government-owned construction equipment or applicable to contractor or government construction equipment rental expense.

A5.1.2. Real Property Installed Equipment (RPIE). The cost of all permanently installed RPIE (government-furnished or contractor-furnished) is a funded cost. An exception is government-owned equipment obtained on a non-reimbursable basis. In accordance with DoDI 7000.14-R Volume 3 Chapter 17, *Accounting Requirements for Military Construction Projects*, Paragraph 170302.E.2, **(T-0)**. DoD Components are precluded from using materials, supplies, or items of RPIE on their own unspecified minor construction projects on a non-reimbursable basis. Information regarding RPIE is provided in DAFI 32-9005, *Real Property Accountability*, and AFMAN 65-605, Volume 1. For medical projects, refer to MIL-STD-1691, *Construction and Material Schedule for Military Medical, Dental, Veterinary and Medical Research Laboratories*, to determine which equipment should be accounted as funded costs. “Funded” medical equipment is described as Logistics Category “A” within MIL-STD-1691.

A5.1.3. Labor. Labor costs include foreign national construction units, except as noted below with respect to DoD Working Capital Funds (WCF) activities, and exclude U.S. military labor. Labor costs for in-house civilian employees are calculated based on guidance in DoDI 7000.14-R, *DoD Financial Management Regulation*. **(T-0)**. When the work is accomplished by contract, include the labor component of all contract costs except labor costs attributable to pre-award execution planning and design. The cost of military labor shall not be included as a funded project cost except for the cost of military personnel assigned to DoD WCF activities. **(T-0)**. DoD WCF activities shall be reimbursed by their customers for the cost of military labor as prescribed in DoDI 7000.14-R Volume 11A Chapter 1, *General Reimbursement Procedures and Supporting Documentation*, Paragraph 010203.B and DoDI 7000.14-R Volume 11B Chapter 13, *Cost Accounting Requirements for Depot Maintenance*, Paragraph 130804.. **(T-0)**. Troop labor temporary duty (TDY) costs are funded costs to the project unless TDY costs are provided by the troop labor organization from its training budget, in which case these are unfunded costs to the project.

A5.1.4. Land. The cost of any land procured for the proposed project or an independent land acquisition. See [Paragraph 5.1.3.16](#) for classifying land acquisition. Refer to [Paragraph 3.12.2.8](#) for unfunded costs associated with land procurement.



A5.1.5. Material. The cost of direct material (government-furnished and contractor-furnished) used in accomplishing the project except government-owned material obtained on a non-reimbursable basis from another agency. Materials purchased for troop labor projects are funded costs to the project for which they were purchased. Only materials used on the project should be capitalized. Wasted materials (substantial losses due to fire, theft, etc.) on troop labor projects are not capitalized and do not count against the project cost threshold. This does not apply to incidental wastage (e.g., lumber ends, bent nails, non-reusable scraps). Excess materials used on another project become funded costs of the latter project. Materials for troop labor projects may be incrementally procured in different fiscal years.

A5.1.6. Estimated (for programming) or actual (during execution) contractor overhead and profit, and/or that portion of installation overhead or support costs that can be identified as representing additional costs that would not have been incurred were it not for the project, reference DoDI 7000.14-R Volume 3 Chapter 17, *Accounting Requirements For Military Construction Projects*, Paragraph 170401.E. Overhead is typically estimated at a rate in the range of 15%, but can vary on contract type, complexities, and location. In accordance with Federal Acquisition Regulation (FAR) Subpart 15.404-4, *Profit*, paragraph (c)4(i)(C) for cost-plus-fixed-fee contracts which are not research related or are not architect-engineer services for public works or utilities, profit shall not exceed 10% of the contract's estimated cost, excluding profit. **(T-0)**.

A5.1.7. Government Supervision, Inspection, and Overhead (SIOH) incident to a real property facilities project or program (see 10 USC § 2802 and DoDI 7000.14-R Volume 3 Chapter 17, *Accounting Requirements for Military Construction Projects*, Paragraphs 170401 and 170402). SIOH is a funded cost based as a percentage of the total contract cost and must be included in the overall project cost. **(T-1)**. For purposes of determining approval, re-approval and notification thresholds, SIOH must be accounted for both in programming and during execution. **(T-1)**. SIOH may also be referred as S&A (Supervision & Administration). SIOH can include:

A5.1.7.1. Post award construction contract administration.

A5.1.7.2. Technical direction and coordination of awarded projects.

A5.1.7.3. Land planning studies or reports, appraisal, and title search after congressional authorization of a land acquisition or exchange.

A5.1.7.4. Construction project management and administration not otherwise identified above, such as: constructability review; source selection team participation regarding construction issues; construction quality assurance; testing of materials; claims analysis; forensic work; and expert consultation, litigation, or other costs related to determining A&E or construction contractor liability.

A5.1.7.5. For SIOH performed by the U.S. Army Corps of Engineers (USACE) or the Naval Facilities Engineering Command (NAVFAC) refer to the applicable agent's district office for current rates and note the reference in Block 11 of the DD Form 1391. Ensure costs included as SIOH are among those listed in **Paragraph 2.9** See AF/A4C DD Form 1391 preparation business rules for guidance about stating the SIOH cost in the DD Form 1391.

A5.1.7.6. Title II services and in-house SIOH costs are typically included in SIOH. When additional service is required above normal SIOH, it must be added as a separate line item in Block 9. **(T-1)**. Do not title these services as "Title II Services". Programmers must specify what the services are. Provide justification for additional services in Block 11, ADDITIONAL. **(T-1)**.

A5.1.8. Reimbursable cost of materials, supplies, services, and items of installed capital equipment obtained from surplus stocks at estimated fair market value. **Note:** Acquisition of such materials, supplies, and items from those sources on a non-reimbursable basis is prohibited.

A5.1.9. Transportation. The costs applicable to transportation of materials, supplies, installed capital equipment, and government-owned material and capital equipment necessitated by a particular project. Projects accomplished by deployable Air Force units (Rapid Engineer Deployable Heavy Operational Repair Squadron Engineer (RED HORSE), Prime Base Engineer Emergency Force (BEEF), etc.) shall include these costs only when a deployment is intended for the sole purpose of accomplishing that particular project. **(T-1)**. Transportation costs incurred by deployable units shall not be included as a funded project cost when the deployment is conducted for training purposes. **(T-1)**. Transportation costs for materials transferred between supply offices are not included as a funded project cost. See AFI 10-209, *RED HORSE Program*, for additional Troop Training Program guidance.

A5.1.10. Travel. Travel costs incurred by DoD civilian employees and military personnel incurred in performance of a work order or project shall be charged as a funded cost when such travel can be identified specifically to the order or project, in accordance with DoDI 7000.14-R Volume 11A Chapter 1, *General Reimbursement Procedures And Supporting Documentation*, Paragraph 010203.C. **(T-0)**.

A5.1.11. Disposal. Removal and disposal of construction debris, including costs to reimburse the base for solid waste management.

A5.1.12. Contamination Cleanup. Programmers and project managers shall treat removal and disposal of contaminated material (e.g., soil, fuel, asbestos containing material, and mold) identified in anticipation of or during a facility maintenance, repair, construction, or demolition project (within the project footprint) as a funded cost of the project. **(T-1)**.

**A5.2. Unfunded Costs.** Unfunded project costs are excluded from approvals or determinations relating to the funded costs of facilities projects referenced in the DoDI 7000.14-R Volume 3 Chapter 17, *Accounting Requirements for Military Construction Projects*, Para. 170501. These costs must still be accounted for as project costs and may be included in the capitalized cost for real property referenced in the DoDI 7000.14-R Volume 4 Chapter 24, *Real Property*. **(T-0)**. Programmers and project managers shall consider the following as unfunded project costs (the list may not be all inclusive).

A5.2.1. Military labor. All costs funded from Military Personnel Appropriations, except for the cost of military personnel assigned to DoD WCF activities. DoD WCF activities shall be reimbursed by their customers for the cost of military labor. **(T-0)**. See DoDI 7000.14-R Volume 11A Chapter 1, *General Reimbursement Procedures And Supporting Documentation*, Paragraph 010203.B.1.

A5.2.2. Depreciation. Costs applicable to the depreciation of government-owned equipment.

A5.2.3. Surplus stock from sources outside the Air Force. Cost of materials, supplies, and items of RPIE obtained for a project on a non-reimbursable basis from sources outside the Air Force are not included in the project cost (e.g. excess distributions from other government agencies).

A5.2.4. Gifts from private parties if accepted in accordance with law. See AFI 51-506, *Gifts to the Department of the Air Force from Domestic and Foreign Sources*.

A5.2.5. Personal property equipment procurement and installation.

A5.2.6. Design Services. Design for projects funded with funds available for operation and maintenance is not required to be reported to congressional committees regardless of cost. 10 USC § 9540, *Architectural and Engineering Services*, authorizes the SECAF to engage architect-engineer services firms to produce and deliver designs, plans, drawings, and specifications at a cost not to exceed 6% of the estimated cost of construction (including repair), which is reiterated in Federal Acquisition Regulation, Paragraph 15.404-4(c)(4)(i)(B). This 6% design limitation is applicable only to negotiated Architectural and Engineering (A&E) contracts negotiated under Brooks Act procedures and not sealed-bid, design-build projects. See the AF/A4C DD Form 1391 preparation business rules for designating design-build design costs on the DD Form 1391. As described in the following paragraphs, planning and design are unfunded costs and are excluded from the cost for purposes of determining compliance with the amounts established in 10 USC § 2805 for unspecified minor construction and 10 USC § 2811 for repair:

A5.2.6.1. Pre-construction contract award design costs associated with preparation and review of contract solicitation documents, including design plans and specifications (completed through either A&E contracts or in-house) in accordance with DoDI 7000.14-R Volume 3 Chapter 17, *Accounting Requirements for Military Construction Projects*, Paragraphs 170302.E.1 and 170501.C.

A5.2.6.2. Post-construction contract award design costs in accordance with DoDI 7000.14-R Volume 3 Chapter 17, *Accounting Requirements for Military Construction Projects*, Paragraphs 170302.E.1 and 170501.C.

A5.2.7. Engineering Services. Services other than Design Services that may be performed by A&E firms prior to award of a contract for a repair or unspecified minor construction project include site investigations, surveys, subsurface investigations, existing facility investigations, and presentation materials. These services are considered to be advance planning activities and would be classified as an unfunded project cost. These services are not subject to the 6% statutory fee limitation for design.

A5.2.8. Land. Surveys, site investigations, appraisals, and other actions required for procuring land. These services are considered to be advance planning activities and would be classified as an unfunded project cost.

A5.2.9. Advance Planning activities are incidental to a project but are typically not included as a funded project cost. Planning activities specified in the DoDI 7000.14-R Volume 3 Chapter 17, *Accounting Requirements for Military Construction Projects*, Para. 170502 include requirements development, installation master planning, preparing environmental impact assessments, etc.