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SECRETARY OF THE AIR FORCE**

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Civil Engineer

**FAMILY HOUSING PLANNING,
PROGRAMMING, DESIGN, AND
CONSTRUCTION**

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This instruction implements Department of Defense (DoD) Manual 4165.63, *DoD Housing Management*, Unified Facilities Criteria (UFC) 4-711-01, *Design: Family Housing*, Air Force Policy Directive (AFPD) 32-60, *Housing*, and enforces guidelines, standards, and policies as outlined in the *Air Force Family Housing Guide for Planning, Programming and Construction*. This instruction applies to major commands (MAJCOM) and installations, including the Air National Guard (ANG) in Title 10 United States Code (U.S.C.) status and Air Force Reserve Command (AFRC) units. The authorities to waive wing/unit level requirements in this publication are identified with a Tier number (“T-0, T-1, T-2, T-3”) following the compliance statement. See AFI 33-360, *Publications and Forms Management*, 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 publication OPR for non-tiered compliance items. Refer recommended changes and questions about this publication to the office of primary responsibility (OPR) using AF IMT 847, Recommendation for Change of Publication. Route the AF IMT 847 from installation, through MAJCOM, to HQ USAF/A4CFH. Ensure all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Manual (AFMAN) 33-363, *Management of Records*, and disposed of in accordance with the Air Force Records Disposition Schedule (RDS) located in the Air Force Records Information Management Systems (AFRIMS). If there is any conflict between statements in this Air Force Instruction (AFI) and the Air Force Records Information Management System (AFRIMS) regarding retention of records, AFRIMS applies.

SUMMARY OF CHANGES

This publication has been rewritten to implement SAF/AA Compliance Statement Review comments and should be reviewed in entirety. The one hundred thirteen CSR changes improve clarity and accuracy within the AFI but do represent a single policy change. Changes were performed to bring document into compliance with SAF/AA publishing/writing guidelines.

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Chapter 1

PHILOSOPHY AND RESPONSIBILITIES

1.1. Philosophy:

1.1.1. The Family Housing Planning Programming and Development process provides for construction of new Family Housing homes and neighborhoods and renovations of existing Family Housing homes and neighborhoods. Providing the correct amount of family housing at the appropriate size and quality level via the congressionally mandated process is the goal of this process. Correct requirement identification and compliance with design standards are critical to the proper and legal functioning of the process.

1.1.1.1. The Family Housing program has a complicated network of legislative regulations spread over more than 12 substantial United States Code (U.S.C.) citations. Each chapter requires a full, comprehensive review to ensure correct use of this AFI.

1.2. HQ USAF Responsibilities:

1.2.1. **Secretary of the Air Force (SECAF).** The SECAF is responsible for, and has all legal authority necessary to conduct, the affairs of the Department of the Air Force. The Secretary of the Air Force (SECAF), pursuant to 10 USC §§ 8013-8016, may establish offices and officials within the Secretariat to assist the Secretary in carrying out his/her responsibilities. (SAF/IEE).

1.2.2. **Assistant Secretary of the Air Force for Installations Environment and Energy (SAF/IE).** The SAF/IE reports to and serves as an agent of the SECAF, within assigned policy and program domains, and provides guidance, direction, and oversight for all matters pertaining to the formulation, review, and execution of plans, policies, programs, and budgets within his/her area of responsibility.

1.2.3. **Deputy Assistant Secretary of the Air Force for Environment, Safety and Infrastructure, SAF/IEE.** The SAF/IEE is subordinate to the SAF/IE and is responsible for all matters pertaining to Air Force built and natural infrastructure, to include Military Family Housing.

1.2.3.1. Approves requests for the installation of lawn irrigation systems for GOQs.

1.2.3.2. Approves Housing project requests that are larger than certain cost thresholds. (See 2.9.1)

1.2.3.3. Provides notification to Congress for “after-the-fact” exceed threshold projects. (See 2.9.3.3.1.5 and 2.9.4.2.2)

1.2.3.4. Approves exemption of work on historical features of GOQs from the annual OMR limit. (2.9.3.3.3.1)

1.2.3.5. Approves GOQ project requests to exceed the GOQ M&R limit and notifies Congress. (See 2.9.6.2.1)

1.2.3.6. Notifies Congress of leases exceeding \$20,000 per unit per year. (See 2.11.5)

1.2.4. Deputy Chief of Staff, Logistics, Installations and Mission Support, Director of Civil Engineers, (HQ USAF/A4C). Formulates guidance governing the Air Force MILCON program, directs development of Air Force capital investment strategies, and advocates for resources through the Air Force Corporate Structure, OSD, OMB, and Congress. Reviews requests to exceed established project expenditure limitations and approves, denies, or forwards as required.

1.2.4.1. Approves expenditures in excess of the M&R surplus housing limitation of \$3,800 per unit per FY.

1.2.4.2. Approves MAJCOM Civil Engineer Family Housing disposal divestiture requests.

1.2.4.3. Approves Housing project requests with costs within certain thresholds. (See 2.9.1)

1.2.5. Deputy Chief of Staff, Logistics, Installations and Mission Support, Director of Civil Engineers, Facilities, Environment and Energy Division, Housing (HQ USAF/A4CFH). The Operations Division formulated housing policy and procedures including the following:

1.2.5.1. Develops the Housing Requirements and Market Analysis (HRMA) reports.

1.2.5.2. Builds the Housing Community Profiles.

1.2.5.3. Develops the Family Housing Master Plan (FHMP).

1.2.5.4. Develops family housing and design standards.

1.2.5.5. Determines new construction, construction improvement, and operation and maintenance requirements.

1.2.5.6. Approves requests from MAJCOMs to waive the 3-year limit. (See 2.4.1)

1.2.5.7. Issues annual exceed threshold M&R project call letter to MAJCOMs.

1.2.5.8. Provides program oversight of the housing privatization program. (See 2.12.2.1)

1.2.6. Deputy Chief of Staff, Logistics, Installations and Mission Support, Director of Civil Engineers, Facilities, Environment and Energy, Facilities (HQ USAF/A4CFC). Formulates guidance and procedures governing the Air Force MILCON program, develops Air Force capital investment strategies, validates facility requirements, and presents the MILCON program to the Air Force corporate structure. Advocates for MILCON resources through the Air Force Corporate Structure, OSD, OMB, and Congress. Coordinates construction programs requiring interagency approvals, such as defense access roads, medical facilities, defense fuels, and energy conservation.

1.2.6.1. Issues annual BES call letter to MAJCOMs.

1.2.6.2. Issues design instructions allowing family housing projects design phase to begin. (See 4.1.1)

1.2.6.3. Issues design (P714) funds each year. (See 4.3.1)

1.2.6.4. Reprograms FH projects when required by unforeseen conditions. (See 5.3.1)

1.3. Major Commands, Field Operating Agencies and Direct Reporting Units. Develop and submit MILCON programs in accordance with guidance issued by AF/A4CF and all applicable Air Force Instructions. Provide instructions and guidance to installation commanders for planning and submitting MILCON programs; to include review and validation of scope, cost estimates, and validation and prioritization of all facility requirements.

1.3.1. MAJCOM Civil Engineer signs DD1391s for M&R projects that require SAF/IEE approval.

1.3.2. MAJCOM Civil Engineer signs DD Form 1391C: *MAJCOM Civil Engineer and General Officer Certificate for GOQ Projects*.

1.3.3. MAJCOM Civil Engineer approves requests to exceed the annual M&R or OMR limit. (see 2.9.3.3.1.2)

1.3.4. Approves family housing leases. (See 2.11.5)

1.3.5. Air Force Installation and Mission Support Center (AFIMSC). THIS SECTION NOT USED.

1.3.6. **Air Force Civil Engineer Center (AFCEC).** Consult with MAJCOM/DRU and BCE during Requirement Document 2 (RD2) phase in the project programming process. Provide PM design/construction experience into project requirements definition. AFCEC performs project design manager/construction manager (DM/CM) functions for MILCON. As the program manager and DM/CM, AFCEC manages execution of design and construction in coordination with the project delivery team (PDT). The DM/CM determines the execution strategy in concert with USAF policies and goals along with MAJCOM and installation engineer PDT members. Additionally, AFCEC formulates comprehensive planning guidance and provides technical planning assistance and support to installations, Major Commands (MAJCOMs), Field Operating Agencies (FOAs) and AF/A4C.

1.4. Installation Responsibilities:

1.4.1. **The Installation Commander (hereinafter referred to as the “Commander”) shall:** Identify, plan, and program facilities to support their assigned missions. Prioritize and submit MILCON programs to their assigned MAJCOM. **(T-1)** Additionally, Commanders shall:

1.4.1.1. Sign the Certificate of Compliance for Critical Planning Actions after Installation Facilities Board approval. **(T-1)**

1.4.1.2. Approve antiterrorism and mission-related permanently installed communications requirements for FH dwelling units. **(T-1)**

1.4.2. **The Installation Base Civil Engineer (BCE) shall:** Ensure all renovation/operation/construction projects in family housing (including the unique GOQ limits) receive appropriate approvals and stay within established limits. Sign appropriate project documents. **(T-0)**

1.4.2.1. Sign DoD 1391 Forms. **(T-0)**

1.4.2.2. Approve Housing Community Profile. **(T-1)**

1.4.2.3. For GOQs, considering GOQ resident input, prioritizes requirements for work in the GOQ. (See 2.9.6.1) (T-0)

1.4.2.4. Approve self-help projects. (See 2.9.7) (T-1)

1.4.3. Installation Management Flight – Housing Management Office (HMO) Housing Management. Serves as the base office of primary responsibility for this instruction.

1.4.3.1. Coordinates the programming of projects recommended by the Housing Master Plan for improvement, repair and sustainment of family housing as well as the demolition or change in use of surplus facilities.

Chapter 2

PLANNING AND PROGRAMMING

2.1. Purpose. This chapter implements laws, incorporates DoD and Air Force policies, and provides basic guidance unique to family housing (FH) planning, programming, design and construction. The FH program is different from other facilities programs in statutory authorities, policy directions, budget and funding requirements and type of construction. It has unique rules, limitations, and restrictions in planning, programming, budgeting, and execution that are different from other military construction and real property operation and maintenance (O&M) programs.

2.2. Program Overview:

2.2.1. Acquisition programs include:

- 2.2.1.1. New and replacement construction.
- 2.2.1.2. Domestic leasing.
- 2.2.1.3. Foreign leasing.
- 2.2.1.4. Private-sector financing (FH Privatization).
- 2.2.1.5. No-cost acquisition.
- 2.2.1.6. Interservice transfer.

2.2.2. Other programs include:

- 2.2.2.1. Improvement (including minor improvements).
- 2.2.2.2. Maintenance and Repair (M&R) (including minor alterations).
- 2.2.2.3. Restoration or replacement for damaged or destroyed housing.
- 2.2.2.4. Disposal of surplus housing.

2.3. Planning Policy:

2.3.1. **Air Force Family Housing Master Plan (FHMP).** The Air Force FHMP is a corporate plan that provides a prioritized investment strategy for providing adequate homes through the Military Housing Privatization Initiative (MHPI), traditional construction programs, and O&M funding. An intensive investigative process is accomplished at each installation, which defines their housing requirement by considering the local community's ability to provide housing support, and assessing the condition and requirements for upgrading any required on-base housing. Director of Civil Engineers Facilities Management Division (AF/A4CF) and Director of Civil Engineers, Operations Division, Housing Branch (AF/A4CFH) use the Air Force FHMP to prepare budget submissions, and to prioritize and allocate housing program funds for the following program requirements: privatization scored-costs (P-711/P-713); new/replacement (P-711); improvement (P-713); operations (P-721); leasing (P-723/P-724/P-725/P-726) M&R (P-722); privatization (P-727) and utilities (P-728).

2.3.2. Installation Family Housing Master Plans (IFHMP). Bases and MAJCOMs, in conjunction with AF/A4CFH, are responsible for developing IFHMPs. IFHMPs are consolidated to produce the Air Force FHMP. To develop the IFHMPs, MAJCOMs and bases use Housing Requirements and Market Analyses (HRMA), Housing Community Profiles (HCP), and a privatization decision analysis. Requirements are met through the traditional FH construction (new, replacement and improvement) program. The IFHMP is updated every 2 years and funded by AF/A4CFH.

2.3.3. Housing Requirements and Market Analysis (HRMA). Consistent with Office of the Secretary of Defense (OSD) policy, installations must rely on local community housing first and may only provide FH to maintain a minimum FH requirement (floor housing requirement) and to compensate for shortfalls of adequate, affordable housing in the local housing market. **(T-0)**

2.3.3.1. MAJCOMs and Installations, in conjunction with AF/A4CFH shall:

2.3.3.1.1. Perform an HRMA to ensure plans are made to only replace, improve, construct, or acquire units the Air Force needs.

2.3.3.1.2. Comply with the *Housing Requirements and Market Analysis (HRMA) Guidance Manual* and supplemental policy guidance. **(T-0)**

2.3.3.1.3. Support projects with HRMAs that are less than 4 years old to identify housing requirement. **(T-1)**

2.3.3.2. AF/A4CFH funds HRMA updates every 4 years, or as necessary, for installations with government-owned Family Housing.

2.3.3.3. AF/A4CFH funds HRMA updates for installations with privatized Family Housing on an as-needed basis.

2.3.4. Housing Community Profile (HCP) Requirements. MAJCOMs and bases, under direction and guidance of AF/A4CFH, must develop an HCP to construct, replace, improve, maintain, repair, and dispose of surplus FH facilities.

2.3.4.1. HCPs include the following:

2.3.4.1.1. Family Housing unit existing condition analysis and recommendations to resolve all deficiencies identified in analysis.

2.3.4.1.2. Floor plan concepts for improvement of existing unit types.

2.3.4.1.3. Projected program requirements.

2.3.4.1.4. Plans for land use as defined in the Installation General Plan.

2.3.4.1.5. Uses for existing housing inventory.

2.3.4.1.6. Housing community areas such as playgrounds and parks.

2.3.4.1.7. Housing infrastructure and support facilities.

2.3.4.1.8. Requirements data based on the most current HRMA.

2.3.4.1.9. Disposal plan for surplus housing units.

2.3.4.1.10. Condition assessment matrix (CAM) scores.

2.3.4.1.11. Sustainment requirement for existing units.

2.3.4.1.12. Improvement/replacement analysis.

2.3.4.1.13. Replacement concepts and costs.

2.3.4.1.14. Investment (Improvement and Replacement Phasing Plan).

2.3.4.1.15. Privatization investment strategy.

2.3.4.1.16. Base Civil Engineer approval. **(T-2)**

2.3.4.2. AF/A4CFH funds HCP updates every 4 years. Tabletop updates may be completed on an interim basis (every 2 years) or as necessary when major mission or execution delays occur.

2.3.4.3. An HCP may not be developed for bases where the housing inventory is fully privatized. A limited HCP (up to 50 percent submittal) may be prepared for a base to be fully privatized if the limited HCP is necessary to develop the privatization project concept.

2.3.5. General Officer Quarters (GOQ) Master Plan. The Air Force developed the GOQ Master Plan to ensure MAJCOMs and bases appropriately plan, program and budget for the GOQ requirement. The plan contains an individual facility profile (IFP) for each GOQ, which captures facility condition data, identifies major and minor M&R requirements, and provides recommendations and cost estimates for each GOQ based on a whole-house perspective. The IFP is incorporated into the HCP and FHMP.

2.3.5.1. Bases and MAJCOMs must ensure GOQ construction, replacement, and improvement is programmed within revitalization projects already identified in the FHMP and that they are based on the GOQ Master Plan. **(T-1)** MAJCOMs and bases will program GOQ M&R, and investment requirements as whole-house improvement (P-713) or replacement (P-711) projects. **(T-0)** Bases must comply with the requirements identified in the IFP or seek approval from AF/A4CFH to deviate. **(T-1)**

2.3.5.2. Bases must prepare an annual 5-year plan to budget for GOQ costs, which are supported by the IFP. **(T-1)**

2.3.5.3. Congress has established an annual GOQ OMR threshold of \$35,000. The sum of management (P-721.1), services (P-721.2), furnishings (P-721.4), miscellaneous (P-721.5) and M&R (P-722) annual expenditures for a GOQ cannot exceed \$35,000 without prior notification to Congress. If total OMR costs exceed the threshold, bases must submit notification to Congress in advance of the work being performed (**Paragraph 2.9.3**). **(T-0)**

2.3.5.4. Bases must ensure Major M&R and minor alteration work are supported by recommendations in the IFP. Out-of-cycle requests for such work may be submitted only when the work is for safety, health, or security purposes and so urgent and compelling that it cannot wait for the next annual budget submission. **(T-1)** Bases must ensure Out-of-cycle security requests are supported by the installation Joint Staff Integrated Vulnerability Assessment (JSIVA). **(T-1)**

2.3.5.5. Refer to the General Officer Quarters Guide, Volumes 1 and 2, and AFI 32-6003, *General Officer Quarters*, for additional policies and guidance for GOQs.

2.3.6. Surplus Housing:

2.3.6.1. Dispose of surplus inadequate housing IAW the HCP and the FHMP disposal plan. Requirements for approval of disposal/divestitures of FH units are provided in AFI 32-6001, *Family Housing Management* (also see AFI 32-9004, *Disposal of Real Property*).

2.3.6.2. Retain surplus adequate housing where the installation has maintained a 3-year average occupancy rate of 97 percent. Limit work on surplus adequate housing to health, safety and minimal cosmetic repairs, and dispose of at the end of the useful operating/economic life. In calculating the occupancy rate for purposes of identifying surplus units to retain, remove units from the inventory that are undergoing M&R above that normally required for change of occupancy maintenance.

2.3.6.3. M&R funding for surplus housing M&R expenditures is limited to \$3,800 per unit per FY. Bases must submit all expenditures above this limit to the The Air Force Director of Civil Engineers (AF/A4C) for review and approval.

2.3.6.4. Surplus housing may be permanently converted to other uses. Diversion (temporary conversion) of surplus housing units is not permitted. Convert only units considered adequate based on the current HCP condition assessment matrix (CAM). However, units considered inadequate due only to functional suitability deficiencies, but otherwise are in adequate condition, may be converted. Permanent conversions change Air Force real property records and therefore determine the source of funds for the conversion, follow-on maintenance, repair and construction work. For permanent conversion requests the MAJCOM and installation must demonstrate a valid need for the proposed new use. (T-1)

2.3.7. **Inadequate Housing.** Bases may improve or replace inadequate housing only if the housing requirement is validated by a current HRMA.

2.3.8. **Disposal/Divestiture.** MAJCOMs must include in the FHMP their program for disposal/divestiture of surplus units (as defined in the HRMA), inadequate units that are replaced via Military Construction (MILCON) and units conveyed as part of a privatization initiative.

2.3.8.1. MAJCOM Civil Engineers request approval from AF/A4C for FH disposals/divestitures on a unit-by-unit basis. Requirements for approval of disposals/divestitures are provided in AFI 32-6001.

2.3.8.2. Bases must comply with:

2.3.8.2.1. McKinney-Vento Act (Title 42 U.S.C. § 11411) before disposing of any government-owned units. McKinney-Vento Act requires the identification and publication of surplus housing to make the property available for application to assist the homeless. (T-0)

2.3.8.2.1.1. Surplus housing disposed of through a privatization initiative is exempt from the provisions of the McKinney-Vento Act.

2.3.8.2.1.2. Surplus housing may also be transferred to Operation Walking Shield according to the National Defense Authorization Act for Fiscal Year 2010, section 2308.

2.3.8.2.2. Prior consent and annual reporting requirements for disposing of Capehart and Wherry housing, IAW AFI 32-6001. (T-1)

2.4. Programming Policy:

2.4.1. Bases are restricted from undertaking a replacement, improvement, minor improvement, major M&R or minor alteration project on a new or improved dwelling or non-dwelling unit within 3 years after initial occupancy.

2.4.1.1. The 3-year limit does not apply when:

2.4.1.1.1. A project addresses health, safety, or life-threatening situations.

2.4.1.1.2. A project falls under the auspices of a larger program such as a general energy-efficiency upgrade program.

2.4.1.1.3. The work is necessary to prevent further damage to the dwelling following a natural disaster or other emergency.

2.4.1.2. In other cases, including host nation funded new construction; MAJCOMs seek approval from AF/A4CFH by submitting Department of Defense (DD) Form 1391, *FY__ Military Construction Project Data*, with full justification for not meeting the 3-year limit.

2.4.1.3. For self-help projects, AF/A4CFH waives the 3-year limit for projects less than \$2,500. The waiver is for simple, minor projects such as installing ceiling fans, fences and flowerbeds. The waiver is not intended for large projects such as kitchen or bathroom renovations.

2.4.2. Programming size standards for constructing, acquiring and improving FH units are in [Attachment 2](#).

2.4.3. The *Air Force Family Housing Guide* gives general guidance for calculating gross/net floor areas.

2.4.4. Housing units may be increased above the programming benchmark for new construction up to ten percent for the following housing categories:

2.4.4.1. GOQ occupied by an incumbent designated by OSD as a Special Command Position (SCP).

2.4.4.2. Installation Commander.

2.4.4.3. Command Chief (CCM) or Service equivalent residing on a military installation.

2.4.5. Housing units may be increased up to 300 net square feet (28 net square meters) for indoor activity rooms in FH located in harsh climates. Bases in harsh climates are those with more than 7,500 heating degree-days or 5,500 cooling degree-days annually according to UFC 3-40-02 *Design: Engineering Weather data*. Eligible bases with FH are listed in the *Air Force Family Housing Guide*.

2.4.6. Outdoor living spaces include patios, enclosed patios, decks, lanais, balconies, back porches, and breezeways (converted to enclosed patios). Front entry porches, which are typically part of the main entry of the house and are not enclosed, are not counted against the combined outdoor living space limit, unless they are increased in size and function, or are

connected to another interior or exterior living area. Size limits in [Table 1.1](#) apply for combined outdoor living spaces:

Table 1.1. Outdoor Living Space Limits

Rank		Maximum Square Footage	Minimum Square Footage
JENL (E1-E3)/JNCO (E4-E6)		150	120
SNCO (E7-E8)/CGO (O1-O3)		200	120
Prestige (E9)/FGO (O4-O5)		250	120
SO (O6)		300	120
GO (O7+)		350	120
JENL	Junior Enlisted		
JNCO	Junior Noncommissioned Officer		
SNCO	Senior Noncommissioned Officer		
CGO	Company Grade Officer		
FGO	Field Grade Officer		
SO	Senior Officer		
GO	General Officer		

2.4.7. Base Civil Engineer must ensure new FH with more than 12 units per building comply with the design requirements for antiterrorism design standards as defined in Unified Facilities Criteria (UFC) 4-010-01, *DoD Minimum Antiterrorism Standards for Buildings*. (T-0) FH with 12 or fewer units per building is exempt from the minimum antiterrorism requirements in UFC 4-010-01. The DoD antiterrorism standards are minimum requirements. The MAJCOMs may set more stringent antiterrorism building standards to meet specific threats identified and justified by integrated JSIVA, or MAJCOM, service, or installation vulnerability assessments.

2.4.8. Environmental requirements:

2.4.8.1. Installations shall accomplish the planning actions called for in AFI 32-1021 *Planning and Programming Military Construction (MILCON) Projects* for every MILCON project. (T-1)

2.4.8.1.1. These planning results should be approved by the Installation Facilities Board before obtaining the Certificate of Compliance for Critical Planning Actions (see AFI 32-1021, Paragraph 2.3) signed by the installation commander, documenting completion of these actions. MAJCOM/FOA/DRUs review these certificates to ensure installations have fulfilled all compliance requirements, and retain them for future reference and use. Although this certificate is only completed once,

MAJCOM/FOA/DRUs shall ensure required actions take place when and as needed. (T-0)

2.4.8.2. Installations shall comply with applicable federal, state, interstate and local environmental regulations, as well as DoD and Air Force environmental policies. Examples include: underground storage tanks, asbestos, radon, lead-based paint and any other requirements as defined by environmental regulations (AFI 32-7001 *Environmental Management*). (T-0)

2.4.8.3. Installations shall identify requirements, and develop plans for environmental compliance, and address these requirements in projects to maintain, repair, improve, replace or construct FH, using applicable housing funds (AFPD 32-70, *Environmental Quality*). (T-1)

2.4.8.4. Installations shall ensure completion of an environmental impact analysis in accordance with AFI 32-7062, *Comprehensive Planning*, 2 years prior to the program. (T-1)

2.4.8.5. Installations shall complete an environmental baseline survey IAW AFI 32-7066, *Environmental Baseline Surveys in Real Estate Transactions* no later than 6 months before start of construction, and complete an environmental assessment IAW 32 CFR Part 989 no later than 12 months before start of construction. (T-1)

2.4.8.6. Installation shall comply with environmental restoration requirements contained in AFI 32-7020, *The Environmental Restoration Program*. (T-1)

2.4.9. Follow the following requirements for historic housing facilities:

2.4.9.1. Use Military Family Housing (MFH) funds to maintain historic housing units in livable condition.

2.4.9.2. Installations must consult with the State Historic Preservation Office (SHPO), and in some instances the Advisory Council on Historic Preservation (ACHP), before repairing, improving, renovating, or demolishing historic housing facilities. Consultation is complete only when the Air Force, SHPO, and ACHP (if applicable) have signed a Memorandum of Agreement (MOA) or Programmatic Agreement (PA) that resolves the adverse effects of the action. The installation Cultural Resource Manager and AFCEC, as appropriate, are responsible for developing MOAs and PAs. (16 U.S.C. § 470; 36 CFR 800, Protection of Historic Properties; AFI 32-7065). (T-0)

2.4.9.3. Consider major upgrading or alternative uses of historic housing or support facilities if requirements for M&R funds become excessive. While preservation and alternate uses are preferred, demolition is appropriate when there is no economically viable use for the structure.

2.4.10. Installations must use Housing Community Profiles to develop M&R project requirements. Combine requirements identified for the execution FY with requirements identified for FY +1 and FY+2 to create a 3-year requirement project. (T-1) If project exceeds the threshold limits (non-GOQ FH M&R Threshold (**Paragraph 2.9.3.1**)) then comply with Congressional notification requirements (**Paragraph 2.9.5**). Do not reduce scope to purposely stay beneath the Non-GOQ Major Maintenance and Repair Threshold (**Paragraph 2.9.4**). (T-1)

2.4.10.1. Do not split the “3-year requirement project” between an improvement project (P-713) and an M&R project (P-722); and both the statutory improvements cost limits and the M&R thresholds apply.

2.4.10.2. For GOQ projects, in the same way, combine requirements for the execution FY and requirements identified for FY+1 and FY+2 to create a 3-year requirement project. **(T-1)** Do not reduce scope to purposely stay beneath the GOQ Major Maintenance and Repair Threshold (**Paragraph 2.9.3.1**). **(T-1)**

2.4.10.3. For P-713 improvement projects the statutory improvements cost limit (**Paragraph 2.8.2**) applies during the construction period. The M&R thresholds (**Paragraph 2.9**) resume after initial occupancy following project completion.

2.4.10.4. Multiple incremental improvement projects, that when combined together significantly alter a housing unit, are prohibited (**Paragraph 2.8.3**).

2.4.10.5. Threshold limits apply per unit, not project.

2.4.11. Lawn irrigation systems may be included for housing units where one of the following conditions exist: (1) Any yard size for personnel, regardless of rank, where the average annual rainfall is less than 20 inches (arid and semi-arid climates) (see approved listing of installations in the *Air Force Family Housing Guide*) according to UFC 3-400-02 *Design: Engineering Weather Data* or (2) the yard is one-half an acre or greater (lot size, less footprint of housing unit), regardless of rank.

2.4.11.1. Lawn irrigation systems for GOQs require approval by the Deputy Assistant Secretary of the Air Force for Environment, Safety and Infrastructure (SAF/IEE) prior to installation, regardless of criterion met or fund sources used.

2.4.12. For GOQ improvement, minor improvement, new and replacement, and M&R exceed threshold projects; signatures of the MAJCOM/A4 and General Officer in the resident’s chain of command are required on DD Form 1391c, *MAJCOM CIVIL ENGINEER and General Officer Certificate for GOQ Projects*, (**Attachment 4**) to certify the project meets the GOQ Master Plan IFP. MAJCOMs and bases must use the IFP recommendation, GOQ Master Plan, local GOQ standards and the projected FHMP investment schedule as guidelines for GOQ investment. **(T-1)**. If there are compelling or unforeseen reasons that cause deviation from the GOQ IFP, bases must document the circumstances with a life-cycle cost analysis, and provide either photos or other justification supporting early replacement/repair decisions. **(T-1)**

2.4.13. The number of units proposed in acquisition, privatization and construction projects should target the projected housing requirement as determined through the HRMA process.

2.4.13.1. Ensure the number of new units proposed in acquisition, privatization and construction projects does not exceed 90 percent of the projected housing deficit.

2.5. Approval Levels. **Attachment 3** shows project approval levels and delegation authority.

2.6. Funding Policy (AFPD 65-5, *Cost and Economics*; AFPD 65-6, *Budget*; AFI 65-601, *Volume 1, Budget Guidance and Procedures*; AFMAN 65-604, *Appropriation Symbols and Budget Codes*):

2.6.1. Military Family Housing (MFH) Funds. MAJCOMs and bases use MFH funds to acquire, construct, replace, improve, operate, lease, maintain and repair housing and ancillary support facilities. Ancillary housing support facilities include:

2.6.1.1. Housing Management offices, maintenance facilities and supply and storage facilities (self-help stores).

2.6.1.2. Recreational, athletic and other community support facilities and infrastructure located in FH areas for the exclusive use by housing area residents.

2.6.1.3. Utility distribution systems and associated protective or control devices, including transformers, switch gears, manholes and hydrants located in FH areas for the exclusive support of the housing area.

2.6.2. Fund Types:

2.6.2.1. P-711. New construction funds used to acquire, construct and replace housing; funds also used to demolish FH units and ancillary support facilities, when they are associated with a replacement or construction project.

2.6.2.2. P-713. Improvement funds used to improve housing. Funds also used to demolish FH units and ancillary support facilities, when associated with an improvement project.

2.6.2.3. P-714. Planning and design funds used to design projects for new and replacement construction and improvement programs.

2.6.2.4. P-721. Operations funds, used to operate housing.

2.6.2.5. P-722. M&R funds used to maintain and repair government-owned FH; also used to demolish FH units and ancillary support facilities when not associated with a replacement or improvement project, and may also be design funds for M&R projects.

2.6.2.6. P-723/724/725/726. Leasing funds used to lease, operate and maintain leased FH units and ancillary support facilities.

2.6.2.7. P-727. Privatization funds used to cover costs associated with the identification, definition, acquisition, oversight and execution of FH privatization projects (**Paragraph 2.12**).

2.6.2.8. P-728. Utilities funds used to cover the costs of utilities.

2.6.2.9. DoD Family Housing Improvement Funds (FHIF) used to acquire, construct, replace and improve FH units and ancillary support facilities under the military housing privatization program. New construction funds (P-711) and improvement funds (P-713), are transferred to DoD FHIF by the OSD Comptroller for FH privatization projects.

2.6.3. Funding FH Communications. MFH funds are used to fund permanently installed equipment to meet communications requirements, such as fiber optic cables. Distribution branch lines, exclusively used by housing, are funded with MFH funds. Use non-MFH funds to pay for Communications equipment that is readily removable and mission-required.

2.6.4. Prohibition of Non-MFH M&R Funding for FH M&R. The annual DoD Appropriations Act prohibits the use of base O&M funds (Element of Expense/Investment Code [EEIC] 521, 522, 524) to maintain and repair FH units, including any areas within the

FH unit used to conduct official DoD business. The annual Military Construction Appropriations Act requires that FH O&M funds are the exclusive source of funds for M&R of all FH units.

2.6.5. Diverted (temporarily converted) Units. Use M&R (P-722) funds to maintain FH units diverted for other uses.

2.6.6. Funding Antiterrorism and Force Protection Requirements. Use MFH funds for antiterrorism measures required exclusively for FH (**Paragraph 2.4.7**).

2.7. New and Replacement Construction Program (P-711 Funds):

2.7.1. **Authority.** The Air Force may acquire, construct or replace FH units and ancillary support facilities under the authority of 10 U.S.C. § 2821-2824.

2.7.2. **Congressional Authorization and Appropriation.** Congress approves, by line item, new and replacement construction projects.

2.7.3. **Economic Analysis (EA).** An EA is required to support new construction requirements. When a repair by replacement project is being considered, MAJCOMs and bases must develop an EA or an EA Waiver if the estimated repair cost exceeds 75% of the FH unit replacement cost (AFI 65-501, *Economic Analysis*). (**T-1**)

2.7.4. **Compliance with the Family Housing Master Plan (FHMP).** For nonhistoric units, when total repair and/or improvement costs exceed 75 percent of the replacement cost, as identified in the FHMP, a housing project is programmed as a replacement construction project. New construction must address deficits identified in the FHMP. AF/A4CF advocates for funding according to the FHMP priorities. MAJCOMs and bases develop projects for each location. Additionally, MAJCOMs and bases must ensure these projects follow and are compliant with the FHMP and GOQ Master Plans. (**T-1**)

2.7.5. **Major Land Acquisition Approval.** DODI 4165.71 *Real Property Acquisition* established the major land acquisition approval requirement. Obtain OSD approval for any land purchase, lease, permit or other agreement exceeding 1,000 acres in size or \$1M in cost. MAJCOM must obtain approval prior to submitting any project involving major land acquisition in the applicable Budget Estimate Submission (BES). The Directorate of Installation Center of Excellence of Air Force Civil Engineer Center (AFCEC/CI) is responsible for processing the approval request.

2.7.6. **Prohibition of Advance Land Acquisition and Site Preparation.** Congress prohibits any funds to be used solely to (1) acquire land, (2) provide for site preparation, or (3) install utilities for any FH units, unless the housing units are authorized by law and funds for such units are appropriated.

2.7.7. **Project Documentation.** For each project, submit the following forms to AF/A4CF for approval:

2.7.7.1. DD Form 1391 and DOD Cost Model for new and replacement construction projects (see **Attachment 4** for sample forms).

2.7.7.2. DD Form 1523, *Military Family Housing Justification*, for acquisition projects (see **Attachment 4** for sample forms).

2.7.7.3. DD Form 1391, *Sample Deficiency Detail Data (DDD) Sheets for Support Facilities Projects* (see [Attachment 4](#) for sample forms).

2.8. Improvement Program (P-713 Funds):

2.8.1. **Overview.** This program improves the existing FH inventory to meet whole-house and whole-neighborhood standards and covers required M&R to extend the life of the house for 25 years. Improvement projects include:

- 2.8.1.1. Altering, adding, expanding, or extending the life of an existing housing facility.
- 2.8.1.2. Upgrading related housing support facilities such as housing management offices and housing maintenance facilities.
- 2.8.1.3. Upgrading or constructing other exclusive-use community support facilities such as parking areas, utilities, bus shelters and playgrounds.
- 2.8.1.4. Upgrading exclusive-use utility distribution systems such as electric, gas, water and sewage disposal.

2.8.2. **Statutory Limit for Improvement Cost.** Congress sets the statutory unit-cost limit for housing improvements and concurrent M&R (10 U.S.C. § 2825).

2.8.2.1. Congress set the current limit at:

- 2.8.2.1.1. A cost of \$50,000, multiplied by the area cost factor (ACF), per housing unit at the time of the contract award.
- 2.8.2.1.2. A cost of \$60,000, multiplied by the ACF, per housing unit at the time of the contract award for improvements necessary to make the unit suitable for handicapped family members.

2.8.2.2. For foreign source housing units, the three-year limitation is \$35,000, base should program three-year requirements in one year when they exceed \$35,000 and request waiver in the annual budget request.

- 2.8.2.2.1. Cost increase after contract award resulting from varying foreign currency exchange rate do not constitute a violation of this limit.

2.8.2.3. This limit does not apply to projects authorized for restoring or replacing damaged or destroyed housing units.

2.8.2.4. Exclusions for communications, security and antiterrorism equipment. The costs associated with the installation, maintenance, or repair of communications, security and antiterrorism equipment required by the resident in the performance of assigned duties can be excluded from the application of the statutory improvement cost limit (See [Paragraph 2.9.2.5](#)).

2.8.2.5. Waivers to statutory improvement cost limit:

- 2.8.2.5.1. AF/A4CF issues a call letter to MAJCOMs every year to prepare the BES. MAJCOMs identify those improvement projects where the costs of the most expensive unit (See [Paragraph 5.3.5.4](#)) exceed the statutory improvement cost limit. Projects are included in the annual President's Budget (PB) for approval by Congress. See the *Air Force Family Housing Guide* for a timeline.

2.8.2.5.2. To request a waiver, bases must perform an EA IAW AFI 65-501 *Economic Analysis* and show improving the facility is more cost effective than other alternatives. (T-0)

2.8.2.5.3. SAF/IEE is the approval authority to waive the cost limit after a 21-day congressional notification period. For out-of-cycle requests, the congressional notification package includes a “marked-up” DD Form 1391 showing the cost revisions to the original document and an EA. Following the 21-day notification period, if there are no congressional objections or concerns, the Air Force is authorized to proceed.

2.8.3. Programming Improvement Projects:

2.8.3.1. Program improvement projects to whole-house and whole-neighborhood criteria, even if the projected costs exceed the statutory improvement cost limit. If projected costs exceed the limit, bases must perform an EA to determine whether to program the project under the improvement program or the construction (replacement) program. Identify rank and bedroom mix on the DD Form 1391. (T-1)

2.8.3.2. Program improvements and necessary M&R work, as well as minor alterations aimed at bringing units up to whole-house standards. Ensure improvement projects comply with the base HCP.

2.8.4. Programming Minor Improvement Projects (MIP):

2.8.4.1. Plan minor improvement projects for low-cost, small-scale projects to improve existing housing facilities or housing community areas to include concurrent maintenance or repair work.

2.8.4.2. A minor improvement project (P-713) is defined as an improvement project where the per-unit cost does not exceed the statutory improvement cost limit. In calculating the statutory improvement cost limit, include the total cost of improvement, major M&R and minor alteration work planned or accomplished during the current FY.

2.8.5. Out-of-Cycle Improvement Projects:

2.8.5.1. MAJCOMs may apply to AF/A4CF for approval of urgent, out-of-cycle requirements that address safety, health or other life-threatening issues.

2.8.5.2. SAF/IEE is the approval authority for requests for out-of-cycle improvements, contingent on the availability of funds. Out-of-cycle improvement projects may not exceed the improvement cost limit.

2.8.6. **Conjunctive Funding for Host Nation Funded Projects.** When a host nation government funds housing construction to meet Air Force housing requirements at less than Air Force standards, the installation then programs an improvement project (P-713) to provide the conjunctive funding required for constructing housing to Air Force standards. The conjunctive funding requirement is programmed to coincide with the host nation funded program year.

2.8.7. **Improvement Project Approval Levels.** Improvement projects approval levels are listed in [Attachment 3](#).

2.8.8. **Improvement Project Form.** See [Attachment 4](#) for a sample of DD Form 1391, *Improvement Projects*.

2.9. Maintenance and Repair (M&R) Program (P-722 Funds):

2.9.1. **Authority and Overview.** The Air Force may maintain and repair FH units and ancillary support facilities under the authority of 10 U.S.C. § 2833. This program covers minor alterations and major and minor M&R ([Attachment 1](#), Terms) required to preserve FH units and support facilities, and also covers M&R thresholds ([Attachment 3](#)).

2.9.2. **Minor Alterations.** Minor alteration is construction-type work normally performed in support of an M&R project.

2.9.2.1. Minor alteration projects can improve housing units, support facilities and streets (including sidewalks), parking areas, utility systems and recreation facilities. Fund minor alteration projects with P-722 funds and use the approval limits listed in [Attachment 3](#).

2.9.2.2. Do not use minor alteration authority to increase the size of a unit or the number of rooms in a unit.

2.9.2.3. MAJCOM Authority:

2.9.2.3.1. Non-GOQs. MAJCOM/A4Cs are authorized to approve non-GOQ FH minor alterations costing less than \$7,500 annually per unit and less than \$750,000 per project using FH O&M (P-722) funds. Generally, this authority is used concurrently with the repair of FH units; however, some circumstances may warrant the use of the authority without repair. This authority can be used for interior and exterior work consistent with the *Air Force Family Housing Guide*.

2.9.2.3.2. GOQs. MAJCOM/A4Cs are authorized to approve GOQ minor alterations for interior and exterior work consistent with Air Force GOQ standards and the Air Force GOQ Master Plan. Minor alteration work on GOQs can be accomplished up to \$3,000 annually and the MAJCOM can delegate this authority to the installation Base Civil Engineer (BCE). Minor alteration work exceeding \$3,000 and up to but not exceeding \$7,500 annually, requires MAJCOM Vice Commander (MAJCOM/CV) approval. No general officer can approve work on his/her own unit. For single installation MAJCOMs and Direct Reporting Units (DRU), the approval authority is the Air Force Assistant Vice Chief of Staff (AF/CVA). For MAJCOM Commanders (MAJCOM/CC) or other O-10s, the approval authority is Air Force Vice Chief of Staff (AF/CV). Minor alterations to a GOQ must be properly documented in the annual GOQ cost report submitted to Congress (**T-0**), and must be accomplished within the GOQ OMR threshold. (**T-1**)

2.9.2.4. Non-Dwelling Units. Subject to the approval limits in [Attachment 3](#), use the minor alteration authority on non-dwelling units to increase the size of the facility, extend streets, construct new parking areas, increase the capacity of utility systems and expand recreation areas.

2.9.2.5. Antiterrorism/Force protection FH Communications Exclusion. Antiterrorism and mission-related, permanently installed communications requirements for FH dwelling units are not subject to the minor alteration limits, but do count against the annual O&M limit. Identify antiterrorism requirements subject to this exclusion through

JSIVA, or MAJCOM, Service, or installation vulnerability assessments, and ensure they are approved by the installation commander. Documentation of the assessment and approval for antiterrorism requirements should be kept on file with project approval documentation. Antiterrorism and communications work is still subject to the GOQ and non-GOQ M&R thresholds.

2.9.2.6. MAJCOMs and bases track the cost and scope of work for minor alterations to ensure the per-unit and per-project limits are not exceeded (**Attachment 3**) and that no restrictions are violated. (T-1)

2.9.3. GOQ Maintenance and Repair (M&R), and Operations, Maintenance and Repair (OMR) Annual Thresholds. There are two statutory limitations (10 U.S.C. § 2831 and annually recurring provisions in the Military Construction Appropriation Acts) that limit the annual expenditure of the following funds on any GOQ:

2.9.3.1. M&R Threshold. Military Construction Appropriation Acts place an annual ceiling of \$35,000 on M&R expenditures per GOQ, per FY. GOQ expenditures counted against the M&R annual limit include change of occupancy, minor/routine M&R, major M&R, grounds maintenance and minor alterations. FY05 MILCON Appropriation Act allows for after-the-fact notification based on unforeseen environmental remediation.

2.9.3.2. OMR Threshold. 10 U.S.C. § 2831 placed a ceiling of \$35,000 on OMR expenditures per GOQ, per FY. GOQ expenditures counted against the OMR annual limit include management (P-721.1), services (P-721.2), furnishings (P-721.4) and M&R (P-722). M&R expenditures include change of occupancy, minor/routine M&R, major M&R, grounds maintenance and minor alterations. 10 U.S.C. § 2831 allows for after-the-fact notification based on unforeseen environmental remediation or safety and security as defined below. Congressional report language explaining 10 U.S.C. § 2831 allows restoration costs for GOQ historical features, which are exempted from the annual OMR limit. These costs are counted against the annual M&R limit and may not be waived.

2.9.3.3. The M&R or OMR thresholds may not be exceeded without prior notification to Congress or approval to notify Congress after-the fact. An after-the-fact notification may only be accomplished if the requirement arose after the PB was submitted. Approval to notify the Congress after-the-fact is restricted to unforeseen environmental remediation (M&R or OMR threshold) or resident safety and security (OMR threshold only) as defined below.

2.9.3.3.1. Exception for Environmental Remediation. The Military Construction Appropriation Acts and 10 U.S.C. § 2831 allow after-the-fact notification to Congress if the GOQ annual M&R or OMR threshold (\$35,000 or as notified) is exceeded solely due to costs associated with unforeseen environmental remediation costs resulting from an on-going M&R action. Work executed under this exemption should be limited to that required to ensure resident safety and health from environmental conditions.

2.9.3.3.1.1. The MAJCOM Civil Engineer is the approval authority to exceed the annual M&R or OMR limit (\$35,000 or as notified).

2.9.3.3.1.2. MAJCOMs will notify the Air Force Director of Civil Engineers, Operations Division (AF/A4CF) within 15 days of approval to exceed the annual

M&R or OMR limit due to unforeseen environmental hazard remediation. The notification package includes a copy of the approval letter plus a DD Form 1391 (with backup detailed cost estimates) documenting revised project costs including the planned remediation plan, start date of the original M&R project (prior to discovery of the remediation work) and a summary of current and projected end-of-the-year OMR costs for the GOQ. If approved, MAJCOM Civil Engineer provides a copy of the approval letter to the installation.

2.9.3.3.1.3. File a copy of the after-the-fact notification approval memo in the GOQ project folder and the GOQ cost report files.

2.9.3.3.1.4. Submit a copy of the after-the-fact notification approval memo to AF/A4CFH with the annual cost report for the GOQ.

2.9.3.3.1.5. SAF/IEE notifies Congress after the fact, as required.

2.9.3.3.2. Exception for Safety and Security. Provided that the GOQ M&R threshold is not also exceeded, 10 U.S.C. § 2831 allows after-the-fact notification to Congress if the annual GOQ OMR limit (\$35,000 or as notified) is exceeded to protect the safety and security of the residents or because of a combination of environmental remediation and safety and security costs. Since the recurring Military Construction Appropriation Act does not allow for this exception, this authority cannot be used to notify Congress after-the-fact of exceeding the M&R limit (\$35,000 or as notified). This exception is provided to allow the Services to respond in a timely manner to correct imminent, documented threats to GOQ resident safety or security. Appropriate documentation of the requirement and its urgency should include Antiterrorism/Force Protection or threat assessments, JSIVA reports, and Risk Assessment Codes (RAC) and/or safety evaluation reports.

2.9.3.3.2.1. The MAJCOM Civil Engineer is the approval authority to exceed the \$35,000 OMR limit due to resident safety and security issues. This authority may not be used to exceed the \$35K M&R limit. Ensure approval is obtained prior to starting any work that causes the GOQ annual OMR costs to exceed the annual limit. MAJCOMs provide a copy of the approval memo to the installation.

2.9.3.3.2.2. MAJCOMs must notify AF/A4C within 15 days of MAJCOM Civil Engineer approval to exceed the \$35,000 OMR limit for resident safety or security. Ensure the notification package includes a copy of the exception approval memo, detailed documentation of the safety or security issue (e.g., safety reports, threat evaluations, JSIVA report), a DD Form 1391 (with backup detailed cost estimates), and a summary of current and projected end-of-the-year OMR costs for the GOQ.

2.9.3.3.2.3. File a copy of the after-the-fact notification approval memo in the GOQ project folder and the OMR cost files.

2.9.3.3.2.4. Submit a copy of the after-the-fact notification approval memo with the annual cost report for the GOQ.

2.9.3.3.2.5. SAF/IEE notifies Congress after the fact, as required.

2.9.3.3.3. Historical Restoration Costs. Report costs for restoration of GOQs historical features as part of the annual M&R costs; however, they can be exempted from counting against the 10 U.S.C. § 2831 OMR limit (due to Congressional report language explanations). Work on any other system or component not specifically identified as a historical feature is charged to the annual OMR limit. All M&R costs (for historical features or otherwise) count against the Military Construction Appropriation Acts M&R limit. SAF/IEE is the approval authority for historical restoration exemptions. Work to repair, maintain or replace historical features on GOQs eligible for or currently on the historical register can qualify for this exclusion. To qualify for this exemption, ensure the historical features cited must be reflected in appropriate SHPO documents (see 2.9.3.3.3.2 below).

2.9.3.3.3.1. SAF/IEE is the approval authority to exempt work on historical features from the annual OMR limit. Approval to exempt work of this type must be obtained prior to starting any work that will causes the GOQ annual OMR costs to exceed the OMR limit.

2.9.3.3.3.2. Forward requests for SAF/IEE approval to AF/A4C for processing. Ensure the request package includes a copy of the SHPO documents validating the items being worked on are historical features, a DD Form 1391 (with backup detailed cost estimates), and a summary of current and projected end-of-year OMR costs for the GOQ. If approved, AF/A4C provides a copy of the approval letter to the MAJCOM.

2.9.3.3.3.3. File a copy of the exception approval memo in the GOQ project folder and the OMR cost files.

2.9.3.3.3.4. Submit a copy of the exception approval memo with the annual cost report for the GOQ.

2.9.4. **Non-GOQ Major Maintenance and Repair (M&R) Threshold:**

2.9.4.1. This threshold is set at \$20,000 per unit, and:

2.9.4.1.1. Places an annual obligation limit on major M&R and alteration work, accomplished by job order, work order or contract; on non-GOQ units.

2.9.4.1.2. Excludes costs for design and contract claims.

2.9.4.1.3. Applies to the cost of housing units and ancillary support facilities up to the 5-foot (1.5 meters) line outside of the housing unit and any support facility.

2.9.4.2. Exception for Environmental Hazard Remediation for Non-GOQs:

2.9.4.2.1. The cost to correct unforeseen environmental hazards, such as removing asbestos, mitigating radon, removing and abating lead-based paint and correcting other known legislative environmental hazards in an on-going contract may exceed M&R thresholds. MAJCOMs must notify AF/A4CF at the end of March and September each year, listing each instance where M&R thresholds were exceeded because of unforeseen environmental hazard remediation. Ensure the notification package includes a DD Form 1391 with backup detailed cost estimates documenting revised project costs including the planned remediation and a summary of current and projected end-of-year M&R costs for the non-GOQ.

2.9.4.2.2. SAF/IEE notifies Congress after the fact, as required.

2.9.5. Funding and Budget Constraints:

2.9.5.1. Address significant needs in all categories of FH, including GOQs, with limited housing O&M budgets. The Air Force does not budget for nor does it expect to spend the full amount of the GOQ or Non-GOQ annual thresholds annually on each unit.

2.9.5.2. An M&R project is defined as a project to maintain and restore a facility, system or component to such a condition that it can be used for its originally designated functional purpose.

2.9.5.2.1. In determining the total cost for approval and notification purpose, an M&R project applies aggregate (FY +2) M&R requirements and all phases of a multi-year M&R project to a single facility, system or component.

2.9.5.2.2. An M&R project cannot be programmed to provide new facilities, additions to existing facilities, or functional conversions that expand footprint or functional space or change the function of a space.

2.9.5.2.3. For infrastructure (including utility system) project, a facility, system or component is defined by a category group such as 811 (electrical power generation), 812 (electrical distribution system), 831 (water treatment & disposal), 832 (sanitary sewer), 841 (water supply treatment & storage), 843 (fire hydrants), and 871 (storm sewer) etc. Similar facility, system, and component that service a discreet function should be grouped in one project. It may be programmed to more than one project if it is non-contiguous, non-adjacent, and geographically separated and each services its function independently. Different utility systems may be programmed in a project when they are feasible and cost effective to bundle together.

2.9.5.3. AF/A4CF issues a call letter to MAJCOMs each year to prepare the BES. MAJCOMs identify those M&R projects where GOQ and non-GOQ thresholds are to be exceeded. Projects are included in the annual PB for approval by Congress.

2.9.5.3.1. Execute work approved over the GOQs and non-GOQs M&R thresholds no later than 1 year following the program year.

2.9.5.3.2. Do not exceed the annual M&R and OMR thresholds for GOQs until Congress has approved the PB. After approval to exceed GOQ M&R or OMR threshold is received, MAJCOM Civil Engineers must provide to AF/A4C on 1 September of the budget year a list of all projects that have not been awarded yet. For each project, ensure the list includes the reasons why it has not been awarded and the plans to award the project in the remaining portion of the budget year. The base level project file will include a copy of this list. (T-2)

2.9.5.3.3. Do not increase the per-unit cost threshold for non-GOQs more than five percent without prior written approval by AF/A4C. AF/A4C may only approve an increase in project costs by up to 25 percent of the high unit cost (HUC) (See **Paragraph 5.3.5.4**) and the total project cost cannot exceed 25 percent of the approved project threshold.

2.9.5.3.4. The project scope may be reduced for non-GOQs by up to 25 percent of the project previously notified to Congress. However, the project scope may not be reduced when costs are increased above per-unit or project cost thresholds.

2.9.5.3.5. Do not exceed the 25 percent flexibility for non-GOQs without prior congressional renotification.

2.9.6. **Out-of-Cycle Notification to Exceed GOQ or Non-GOQ M&R Thresholds.**

2.9.6.1. In the year of execution, the BCE, with GOQ resident assistance, prioritizes requirements to stay within the monetary limit. If unforeseen urgent requirements arise, consider deferring other less critical work to stay within the GOQ and non-GOQ thresholds. Out-of-cycle requests to exceed the GOQ and non-GOQ thresholds are considered only in extraordinary circumstances.

2.9.6.1.1. GOQ out-of-cycle budget submissions are allowed only when there is an extremely urgent situation, typically relating to risks to health, life or safety. Out-of-cycle requests are limited to proposed work so urgent and compelling it cannot wait for the next annual budget submission; it could not reasonably have been foreseen at the time of budget submission; cost of the work causes the GOQ to exceed the \$35,000 OMR limit and possibly the M&R limit; and work does not constitute an alteration, addition or improvement.

2.9.6.1.2. Out-of-cycle requests to exceed the \$35,000 limit are scrutinized by numerous Air Staff and Air Force Secretariat officials. After-the-fact notifications are not allowed except as described in paragraph 2.9.3. SAF/IE must review and approve out-of-cycle notifications. Approved requests are then submitted to Congress for notification. Congress has 30 days to act on the notification to exceed the M&R limit. Time periods for notification to exceed the OMR limit only, may be shorter. Submissions should include: **(T-0)**

2.9.6.1.2.1. Strong justification for why work is being done out-of-cycle, including reasons the requirement was not included in the budget submission, urgency and impact of the delay. **(T-1)**

2.9.6.1.2.2. Comprehensive narrative for each GOQ project, including validation the work is identified in the GOQ IFP. If the work is not included in the GOQ plan, provide a detailed explanation of the work.

2.9.6.1.2.3. A completed DD Form 1391 to show specific project work to be accomplished on the unit and to identify costs additional to the threshold.

2.9.6.1.2.4. Detailed cost breakout (including line item details).

2.9.6.1.2.5. Photographs depicting repair requirements.

2.9.6.1.2.6. A statement signed by the GOQ resident acknowledging the work.

2.9.6.1.2.7. A project certification statement signed by the MAJCOM Civil Engineer.

2.9.6.1.2.8. Detailed breakout of other anticipated costs for the FY, including, but not limited to, specific projects approved by SAF/IEE and all OMR costs.

2.9.6.2. MAJCOMs may apply to AF/A4CFH for consideration of urgent M&R requirements. Include DD Form 1391 in supporting documentation, and explain why the MAJCOM did not identify the requirement for budget submission, the urgency of the requirement and the impact of the delay. SAF/IEE is the approval authority for out-of-cycle projects and notifies Congress.

2.9.6.3. Congress limits submission of out-of-cycle M&R projects exceeding the GOQ M&R threshold to once per year. GOQ out-of-cycle notification may be submitted only for emergency requirements (health, safety, or life-threatening conditions). AF/A4CF initiates a project call to MAJCOMs near the FY midpoint.

2.9.7. **Self-Help Work.** Self-help work is for simple, minor M&R projects (including minor alteration) on government-owned FH units, and is not intended for large or complicated improvement or replacement projects. Self-help projects are funded with MFH O&M funds and should not exceed \$2,500. BCE ensures self-help work complies with Air Force housing standards and appropriate codes, safety and functionality. **(T-1)**. If the BCE approves self-help projects with the condition that the unit is returned to its original configuration, the resident is responsible for restoring the unit to its original condition before clearing the unit. The cost of self-help work combined with other minor alteration and M&R work performed by contracts or service orders may not exceed approval levels, Air Force size standards, improvement cost limits, or (for GOQs) annual GOQ or non-GOQ thresholds.

2.9.8. **Common Utility Infrastructure.** For maintenance, repair and minor alteration, only the first 5 feet of utility infrastructure, measured from the footprint of the unit, are considered dwelling costs. Utilities include water, electricity, gas, wastewater, stormwater, communications and alarm systems. This does not apply to the alarm system itself, but does apply to communications lines connecting the alarm to a central off-site system. For driveways and sidewalks exclusively serving a specific dwelling, all costs are considered a dwelling cost and subject to the appropriate limits. MAJCOMs and bases must count all dwelling costs towards the GOQ and non-GOQ M&R thresholds. **(T-1)**

2.9.9. **Sample Forms.** See [Attachment 4](#) for sample DD Form 1391, *M&R Project*.

2.10. Foreign Lease Program (P-723/724 Funds). The Air Force may lease FH in a foreign country under the authority of 10 U.S.C. § 2828(c) and 10 U.S.C. § 2834. See AFI 32-6001, Chapter 10.

2.11. Domestic Lease Program (P-725/726 Funds). The Air Force may lease FH units constructed or rehabilitated near a military installation within the United States under the authority of 10 U.S.C. § 2828(a). See AFI 32-6001, Chapter 10.

2.12. Military Housing Privatization Initiative (MHPI):

2.12.1. **Authority.** The Air Force may use a wide variety of guarantees, leases, investments and loans to provide for the acquisition or construction of FH and ancillary support facilities by private developers, using the authority of 10 U.S.C. [Chapter 169](#), Subchapter IV, § 2871 through § 2885. The authority is limited to the United States and its territories (foreign locations excluded). Authority includes the following:

2.12.1.1. Utilities and Services.

2.12.1.2. Direct loans and loan guarantees.

2.12.1.3. Leasing of housing.

2.12.1.4. Investments.

2.12.1.5. Rental guarantees.

2.12.1.6. Differential lease payments.

2.12.1.7. Conveyance or lease of existing properties and facilities.

2.12.2. Housing Privatization Responsibilities:

2.12.2.1. AF/A4CFH provides program management and oversight, and is the liaison between the Air Force and the Office of the Deputy Undersecretary of Defense, Installations and Environment, Facilities, Energy and Privatization directorate, the advocate for Air Force projects.

2.12.2.2. AF/A4CFH validates housing requirements and developing housing programs, including privatization projects, consistent with the Air Force FHMP. AF/A4CFH also works jointly with MAJCOMs to determine whether to execute housing requirements as a privatization initiative or as a traditional military construction project.

2.12.2.3. MAJCOMs and installations develop housing requirements and identify potential privatization projects, and may play an extensive or limited role in executing privatization projects, depending on the authority or combination of authorities used.

2.12.3. Congressional Notification:

2.12.3.1. Proposal Solicitation. SAF/IEE and the Deputy Assistant Secretary of the Air Force, Budget (SAF/FMB) provide congressional notification 30 days prior to soliciting privatization request for proposals. AF/A4CFH coordinates notification packages with the Air Force Civil Engineer Center, prior to staffing for SAF/IEE and SAF/FMB signature and notification to Congress of Air Force intent to solicit a project.

2.12.3.2. Contract Award and Transfer of Funds. Contract award and transfer of funds notifications are two separate and distinct congressional notifications. Per 10 U.S.C. § 2871, the term “contract” includes any contract, lease or other agreement entered into under the privatization authorities. The Air Force closes a real estate transaction or deal, with a private sector developer as opposed to awarding a contract. Prior to closing a privatization deal the legislation requires a congressional notification with a 30-day waiting period. AF/A4CFH coordinates notification packages with AFCEC prior to staffing for SAF/IEE and SAF/FMB signature and notification to Congress of the Air Force intent to close a deal. If required to support the privatization project, appropriated funds (P-711 and/or P-713) are transferred to the DoD Family Housing Improvement Fund (FHIF) prior to project closing. A congressional notification and a 30-day waiting period are required before P-711 and/or P-713 funds can be transferred to the DoD FHIF. AF/A4CFH identifies the funding transfer requirements and coordinates with SAF/FMB prior to submission to DUSD Facilities, Energy and Privatization (I&E). Following coordination with OMB, DUSD (I&E) forwards the transfer of funds request to the OSD Comptroller (C). OSD (C) notifies Congress of Air Force intent to transfer P-711 and/or P-713 funds to the DoD FHIF.

2.12.4. Funding Privatization Projects:

2.12.4.1. Housing Privatization Program funds (P-727) include all costs associated with planning, development, solicitation, selection and closing MHPIs, and specifically for:

2.12.4.1.1. Environmental assessments, baseline surveys, or supplemental studies, initial pro forma and EA development and required property surveys.

2.12.4.1.2. Industry forums and requests for proposal development.

2.12.4.1.3. Project management office expenses, including contract costs, temporary duty (TDY), training and non-material support costs, until initial construction.

2.12.4.1.4. The cost of construction surveillance during the initial development period and portfolio management costs for closed privatization projects.

2.12.4.1.5. Support consultants and higher headquarters oversight and supervision.

2.12.4.2. AFCEC must not use P-727 funds for any construction, demolition, supplies, or service contract requirements to support the execution of an MHPI.

2.12.4.3. Privatization project scored costs are funded through the DoD FHIF. Funds are transferred into the FHIF from P-711/P-713 appropriations. Congressional approval is necessary to transfer funds into the FHIF. The DoD FHIF is centrally managed by OSD.

2.12.5. **Project Documentation.** For each project, submit a DD Form 1391, *Privatization Project*, (see [Attachment 4](#) for sample form). Identify any land acquisition requirement on the DD Form 1391.

2.13. No-Cost Acquisition Program:

2.13.1. The Air Force may acquire FH units at no cost to the government under authority of 10 U.S.C. § 2822. This program does not require line-item authorization.

2.13.2. SAF/IEE is the approval authority for no-cost acquisition projects before the installation acquires FH units.

2.14. Interservice Transfer Program. DoD permits the transfer of FH among the Services without compensation under authority of 10 U.S.C. § 2571. The Secretaries of the respective services and OSD are the approval authorities for transfers.

2.15. Restoration/Replacement for Damaged or Destroyed Housing Program (P-711/713/722 Funds).

2.15.1. This program provides funds for restoring or replacing FH units damaged by fire, hurricanes, earthquakes, storms or other disasters.

2.15.2. After-the-fact notification for restoration of damaged or destroyed housing is limited to projects exceeding non-GOQ M&R threshold. It does not apply to projects exceeding GOQ OMR threshold.

2.15.3. Procedures are as follows:

2.15.3.1. Use P-722 funds for immediate temporary repair to make units livable. **(T-0)**

2.15.3.2. Program permanent repairs as soon as possible, using P-722 funds. **(T-0)**

2.15.3.3. Program replacement facility projects, using P-711 funds. **(T-0)**

2.15.3.4. Include known maintenance, repair and improvement requirements resulting from unforeseen events. (T-1)

2.15.3.5. Notify SAF/IEE through MAJCOMs and AF/A4CFH when restoring damaged or destroyed housing units due to unforeseen events, not from long-term deterioration, and when performing emergency work exceeding the M&R thresholds. (T-1)

2.15.3.6. Include in the cost estimate, a per-unit cost to restore each unit in multifamily structures. (T-1)

2.15.3.7. SAF/IEE approves the after-the-fact notification memos to Congress, and SAF/FMB signs the notification memos to the Appropriations Committees.

2.15.4. MAJCOMs submit to AF/A4CFH any per-unit restoration cost that exceeds 75 percent of replacement costs or \$100,000, whichever is less; or any changes to the programmed amount (PA) for a previously approved project that exceeds the 75 percent or \$100,000 threshold. Identify the total extent of damage and other projects programmed to restore damaged or destroyed units.

2.15.4.1. AF/A4CFH processes after-the-fact notification, semiannually. MAJCOM submissions for the after-the-fact congressional notification should arrive in AF/A4CFH no later than the first day of the first and third quarters of each FY. Only projects with low bids are processed.

2.15.4.2. SAF/IEE approves and provides after-the-fact notification to Congress for projects that exceed either 75 percent of the replacement costs, or \$100,000 per unit.

2.15.5. The statutory improvement cost limit (**Paragraph 2.8.2**) does not apply to damaged or destroyed facilities.

2.15.6. The approval authority, as delegated in **Attachment 3**, determines the need for repair or replacement due to damage caused by unforeseen events and not from long-term deterioration.

2.15.7. See **Attachment 3** for approval levels and **Attachment 4** for sample DD Form 1391, *Restoration Projects*.

Chapter 3

DESIGN CRITERIA

3.1. Design Standards. Ensure FH designs follow statutory limitations, concepts in the housing community plan and the *Air Force Family Housing Guide*, regardless of the funding source. MAJCOMs and bases must ensure design and construction conform to local, national and federal building codes. (T-0)

3.2. Whole-Neighborhood Design Criteria. Develop whole-neighborhood designs to improve FH neighborhoods by:

- 3.2.1. Improving homes using whole-house revitalization guidelines.
- 3.2.2. Creating a sense of neighborhood identity for each family.
- 3.2.3. Ensuring that the housing area meets the needs of its residents.
- 3.2.4. Making the housing area attractive and a source of pride.

3.3. Whole-House Design Criteria. Develop whole-house designs to enhance functional layout, systems and equipment in housing units and support facilities. The design work updates an existing house to current construction codes and contemporary quality living standards and extends the useful life of the housing unit 25 years.

3.3.1. Whole-house designs typically include:

- 3.3.1.1. Adding and altering space.
- 3.3.1.2. Upgrading mechanical, electrical and utilities systems.
- 3.3.1.3. Adding energy conservation features.
- 3.3.1.4. Repairing building structure, components and equipment.
- 3.3.1.5. Improving yards, walks and driveways.

3.3.2. The *Air Force Family Housing Guide* provides the following:

- 3.3.2.1. Requirements for whole-house design. It addresses functional layout and basic amenities, minimal floor areas, room dimensions, energy criteria and environmental issues.
- 3.3.2.2. Handicapped design criteria for FH IAW the Uniform Federal Accessibility Standards (UFAS), Americans with Disabilities Act (ADA) and Architectural Barriers Act (ABA). Each base must ensure five percent of its FH inventory is handicap adaptable. (T-0)
- 3.3.2.3. Fire safety criteria, including requirements for fire sprinkler systems, smoke detectors and carbon monoxide detectors.
- 3.3.2.4. Environmental remediation criteria, including handling and removing asbestos-containing materials, preventing the entry of radon gas and assessing, managing and abating lead-based paint in housing.

3.3.2.5. Additional detailed GOQ design guidance is provided in the *GOQ Guide Volume Two: GOQ Standards for Programming, Design and Construction*.

3.3.2.6. Consider using renewable forms of energy in FH projects. For energy conservation methods and cost effective techniques to design new and replacement construction and improvement projects, also consider the following:

3.3.2.6.1. Renewable energy sources (particularly passive or active solar energy systems).

3.3.2.6.2. High efficiency equipment, lighting and appliances with appropriate controls.

3.3.2.6.3. Increased insulation in floors, walls, ceilings and roofs.

3.3.2.6.4. Radiant barriers.

3.3.2.6.5. Energy efficient windows and doors with insulated or low-emissivity (Low-E) glass and panels, double or triple glazing, thermal breaks and weather-stripping.

3.3.2.6.6. Air lock entries on exterior doors where winter temperatures drop to -10 degrees Fahrenheit (-23 degrees Celsius) or lower.

3.3.2.6.7. Window shading to reduce interior overheating caused by solar gain.

3.3.2.7. Prohibited materials, finishes and equipment based on considerations such as maintenance, fire safety, environmental restrictions and energy efficiency.

3.3.2.8. Electrical and mechanical design criteria to be followed, as well as applicable codes to determine the electrical and mechanical design requirements.

3.3.2.9. Minimum noise level reductions for FH improvement and construction. Also, review the *Air Installation Compatible Use Zone Report (AICUZ)* for each project to ensure that adequate sound attenuation is incorporated into the design of FH units.

3.3.2.10. Guidance for installing irrigation systems, as well as a list of approved installations meeting rainfall conditions (**Paragraph 2.4.11**).

3.3.2.11. Antiterrorism requirements (paragraph **2.4.7**).

3.3.2.12. Sustainable development concepts, to be incorporated into the planning, design, construction, environmental management operation, maintenance and disposal of facilities and infrastructure projects, consistent with budget and mission requirements. A sustainable facility achieves optimum resource efficiency and constructability while minimizing adverse impacts to built and natural environments through all phases of its life cycle.

3.3.3. Follow the guidelines in the *Air Force Housing Support Facilities Guide* to plan and design Housing Management Offices, housing maintenance facilities and storage warehouses.

Chapter 4

DESIGN, MANAGEMENT AND PROJECT EXECUTION OF NEW AND REPLACEMENT, AND IMPROVEMENT PROJECTS

4.1. Project Execution. Each new and replacement construction and improvement project must comply with the HCP, develop whole-house and whole-neighborhood projects together, and for GOQs, must comply with the GOQ IFP. (T-1)

4.1.1. Following a request from the MAJCOM, Director of Civil Engineers, Facilities, Environment and Energy Division, Facilities Branch (AF/A4CFC) issues a design instruction, allowing the architectural-engineering (A-E) design phase to begin. The design phase ends when a construction contract is awarded (10 U.S.C. § 9540; 10 U.S.C. § 2855).

4.1.2. The design manager is responsible for the following:

4.1.2.1. Selecting A-E according to AFI 32-1023, *Design and Construction Standards and Execution of Facility Construction Projects* (Chapter 3).

4.1.2.2. Designing to satisfy project requirements and deliver the highest quality project within the program budget.

4.1.2.3. Awarding A-E contracts by October of the programmed FY, minus 2 years.

4.1.2.4. Completing designs by June of the programmed FY, minus 1 year.

4.1.2.5. Completing the environmental impact analysis process by October of the programmed FY, minus 2 years or ensures completion by AFCEC.

4.1.2.6. Awarding construction contracts 1 month after Air Force receives annual appropriation.

4.2. Project Delivery Methods. The traditional design-bid-build delivery method requires an invitation for bid while the nontraditional, turnkey and design-build delivery methods require a request for proposal (RFP).

4.3. Design Funds:

4.3.1. AF/A4CF issues design (P-714) funds to AFCEC each year.

4.3.2. AFCEC manages design funds and keeps track of design costs for each project.

4.3.2.1. Use design (P-714) funds for:

4.3.2.1.1. Paying for A-E services, including project-specific environmental impact analyses and installation level in-house costs when investigating project sites.

4.3.2.1.2. Preparing contract drawings and specifications, RFPs.

4.3.2.1.3. Preparing HCPs.

4.3.2.2. Use FH (P-721) funds for:

4.3.2.2.1. Feasibility studies.

4.3.2.2.2. Economic analyses.

- 4.3.2.2.3. Preparing as-built drawings and alternative site studies.
 - 4.3.2.2.4. Preparing nonproject specific environmental impact assessments and statements, or developing and justifying construction project requirements.
 - 4.3.2.2.5. Administrative or management costs during the source selection process for turnkey or design-build projects.
 - 4.3.2.2.6. HRMA.
 - 4.3.2.2.7. FHMP.
- 4.3.3. Use HCP design concept scope to develop the final technical design of the construction project or the RFP.
- 4.3.4. The Air Force is required by 10 U.S.C. § 2807 to notify Congress 21 days before obligation of funds for A-E design contracts over \$1M. 10 U.S.C. § 9540(b) limits the A-E fee for producing plans and specifications for a FH project, to six percent of the PA.

4.4. Programming, Design and Construction Execution Reporting:

- 4.4.1. MAJCOMs report to AF/A4CF the design and construction status of FH projects. Report status of programming, design and construction in a timely manner, using Automated Civil Engineer System-Project Management (ACES-PM).
- 4.4.2. MAJCOMs review, validate and update programming, design and construction information. Identify projects under design, which exceed PA and/or decrease scope within PA, or revise rank and bedroom mix, to AF/A4CF for a review of programming options.
- 4.4.3. AF/A4CF:
- 4.4.3.1. Issues design instruction (DI) based on approved DD Form 1391 (PA/scope and rank and bedroom mix) and AFCEC request.
 - 4.4.3.2. Uses ACES-PM data to oversee the Air Force FH program.
 - 4.4.3.3. At the AFCEC request, issues authority to advertise (ATA) when project design is reported 100 percent in ACES-PM.
 - 4.4.3.4. Issues construction funds based on a validated bid report entered into ACES-PM by AFCEC.

4.5. MILCON Design Authority:

- 4.5.1. AF/A4CF:
- 4.5.1.1. Delegates three percent design authority to AFCEC for A-E selection, predefinition conference and preliminary A-E negotiations.
 - 4.5.1.2. Issues 35 percent design instructions on FH projects on delivery of the BES to OSD.
 - 4.5.1.3. Issues 100 percent design instructions on FH projects on 35 percent design completion as validated by ACES-PM.

4.6. Advanced Authority to Advertise (ATA) FY-Plus-1-Year Family Housing (FH) Projects. AF/A4CF generally issues ATA FY projects after AFCEC confirm projects are 100 percent designed and ready to advertise and after passage of the FY DoD funding bills. However,

AFCEC may realize certain benefits from advertising projects early. AF/A4CF will issue advance ATA for FY, plus 1 year for FH projects before all congressional committees have marked the MILCON bill on the following conditions:

- 4.6.1. The project must be 100 percent designed (as shown in ACES-PM) by 15 July of the year prior to appropriation.
- 4.6.2. The project has a current working estimate less than or equal to the PA, given that the PA is subject to change with congressional reduction and foreign currency withholds.
- 4.6.3. The project has successfully passed three congressional committee marks.
- 4.6.4. The bid acceptance period is flexible for extensions until the MILCON bill is passed and funds are available for issuance.

4.7. Design/Construction Agent. Under U.S.C. § 2851 and DoDD 4270.5, *Military Construction*, specific design/construction agents are designated based on geographical areas.

- 4.7.1. For CONUS locations (including Alaska, Hawaii and Guam), the Air Force may use AFCEC as design/construction agent.
- 4.7.2. For overseas (foreign) locations, the Air Force may only use the Army Corps of Engineers or the Naval Facilities Engineering Commands as its design/construction agent for new and replacement construction projects. These agencies are responsible for the following geographical regions:
 - 4.7.2.1. Army Corps of Engineers: Europe (excluding Spain, Portugal, Italy, Greece) United Kingdom, Japan, Korea and Turkey.
 - 4.7.2.2. Naval Facilities Engineering Commands: Greece, Italy, Portugal (including the Azores) and Spain.

Chapter 5

CONSTRUCTION MANAGEMENT AND PROJECT OVERSIGHT OF NEW AND REPLACEMENT AND IMPROVEMENT PROJECTS

5.1. MILCON Project Construction Management. Construction agents must prepare a comprehensive management plan to define roles and responsibilities for participants in the construction management process. (T-1) Ensure the plan provides a mechanism for resolving conflicts and serves as a tool for managing and controlling schedules.

5.2. Cost Control. AFCEC must:

5.2.1. Avoid reprogramming projects, if at all possible.

5.2.2. Submit a cost control management plan to AF/A4CF when a project exceeds 120 percent of the PA. (T-1)

5.3. Cost/Scope Variation and Reprogramming:

5.3.1. AF/A4CF reprograms FH projects IAW 10 U.S.C. § 2853 when unforeseen conditions arise during construction causing cost increases.

5.3.2. MAJCOM Civil Engineers submit a written justification for reprogramming that includes:

5.3.2.1. Current working estimates based on valid bids or proposals, including bid extensions.

5.3.2.2. EA, if required, justifying an upward adjustment of High Unit Cost (HUC).

5.3.2.3. Impact of terminating the contract.

5.3.2.4. DD Form 1391, marked with changes.

5.3.2.5. Justification for reprogramming.

5.3.3. Use the following procedures for approving changes to FH projects including: cost increases exceeding PA, scope reductions and scope increases:

5.3.3.1. AF/A4CF approves cost increases less than 20 percent over the PA or \$2M, whichever is less, and scope reductions of less than 20 percent. Requests for AF/A4CF approval may come from AFCEC division chiefs or higher.

5.3.3.2. AF/A4C approves cost increases over the PA between 20 and 25 percent or \$2M, whichever is less and scope reductions from 20 to 25 percent. AFCEC submits all requests for AF/A4C approval.

5.3.3.3. Congressional notification is necessary for all cost variations (increase/decrease) or scope reductions greater than 25 percent, or greater than \$2M, whichever is less.

5.3.3.3.1. SAF/IEE must approve (before notifying Congress) cost variations or scope reductions greater than 25 percent of the PA, or greater than \$2M, whichever is less.

- 5.3.3.3.2. Requests for SAF/IEE approval and congressional notification are submitted by AFCEC and sent to AF/A4CF. AF/A4CF processes the request and forwards the request to SAF/IEE.
- 5.3.3.3.3. A reduction of 25 percent or more from the scope of a project is considered scope reduction and a congressional notification is necessary before enacting the reduction. The congressional notification is independent of any request to reprogram funds that are excess to a project due to a scope reduction.
- 5.3.3.4. AFCEC submits all requests for congressional approval.
- 5.3.3.5. A variation of 25 percent or more taken from the PA while maintaining the scope of a project is considered cost variation and requires congressional notification. The 14-day prior notification is independent of any request to reprogram funds that are excess to a project due to a scope reduction.
- 5.3.4. Include the following in requests for approval of changes to projects including cost increases exceeding the PA and/or scope reductions:
- 5.3.4.1. Current working estimates based on valid bid proposals.
- 5.3.4.2. Thorough justification for the request, including an analysis of the cause for the change.
- 5.3.4.3. Impact if not approved.
- 5.3.4.4. Plan to prevent future occurrences (except scope increases).
- 5.3.5. Use the following procedures for changes to the HUC in the approved budget submission:
- 5.3.5.1. Improvement Projects Exceeding Statutory Improvement Cost Limit. In compliance with 10 U.S.C. § 2825, congressional notification is made by the budget submission for improvement projects wherein the HUC exceeds the statutory improvement cost limit.
- 5.3.5.1.1. During project execution, obtain AF/A4C approval if the unit costs are expected to exceed by up to 25% the HUC identified on the DD Form 1391 that is included in the approved budget submission.
- 5.3.5.1.2. During project execution, SAF/IEE and AF/A4C approval is necessary if the unit costs are expected to exceed by 25% or more the HUC identified on the DD Form 1391 that is included in the approved budget submission.
- 5.3.5.2. Improvement Projects Less than the Statutory Improvement Cost Limit. The congressional budget submittal only includes DD Form 1391 for projects estimated to exceed the statutory improvement cost limit. Therefore, if a DD Form 1391 with an HUC is not included, by default, the approved unit cost is less than the statutory improvement cost limit. If, during project execution, costs are projected to exceed the statutory improvement cost limit, the base must accomplish the statutory requirement to notify Congress. (T-0). A 21-day notice-and-wait to Congress is necessary prior to executing the improvements. Once congressional notification is complete, **Paragraph 5.3.5.1** applies.

5.3.5.3. Requests for AF/A4C or SAF/IEE approval to exceed HUC and requests for congressional notification, as outlined in **Paragraph 5.3.5.1** and **5.3.5.2**, respectively, are generated by AFCEC and require MAJCOM/CE coordination before being submitted to AF/A4CF.

5.3.5.4. Utilities and Infrastructure Inclusion. The high unit (most expensive unit) cost should be calculated to include utilities and infrastructure that are the exclusive use of the unit. For example, include sewer lateral for sewer line, water branch for water line, patio, porch, walkways, privacy fencing and driveway in the cost calculation since it exclusively services the housing unit.

5.3.6. Costs associated with legally required environmental hazard remediation are excluded from the application of cost variations/reprogramming thresholds, if the remediation could not have been reasonably anticipated at the time the project was approved originally by Congress.

5.4. Substituting Improvement Projects with Replacement Projects. If an EA shows the authorized improvement project is no longer cost-effective after a review of post-design or bid cost estimate, AFCEC may request to substitute the improvement project with a replacement project at the improvement project programmed amount. SAF/IEE approves for project substitutions.

5.5. Scope Verification prior to Execution of Family Housing Construction and Improvement Projects When total housing requirements are modified by a new HRMA and justify a change to the previously determined scope of a MFH MILCON project, written justification is necessary prior to award. AFCEC coordinates with the MAJCOM and base to confirm whether the original scope is still valid, or if an adjustment in scope is necessary based on the new HRMA. If a change in scope is warranted, AFCEC provides AF/A4CF and AF/A4CF with the recommended new scope and all supporting documentation for approval.

5.6. Inspection Policy. Each FH construction project delivery team must:

- 5.6.1. Ensures a quality project is delivered on time and IAW the terms of the contract.
- 5.6.2. May not accept any FH units without a prefinal and final inspection.
- 5.6.3. Must ensure the contractor completes prefinal punch list items before final inspection.

5.7. Financial Closeout:

- 5.7.1. AFCEC financially close out a project within 4 months after physical completion.
- 5.7.2. SAF/FMBIC and AF/A4CFH withdraws surplus funds identified by the AFCEC.
- 5.7.3. AFCEC reopen a project account in ACES-PM for a claim that warrants funding to be processed by AF/A4CFH.

5.8. Architectural-Engineering (A-E) Liability. AFCEC pursue A-E liability for design deficiencies when the liability results from:

- 5.8.1. Errors or omissions in design or construction.
- 5.8.2. Failure to meet standards.
- 5.8.3. Breach in contracts that damages the government.

5.8.4. Additional construction contract cost.

JOHN COOPER
Lieutenant General, USAF
DCS/Logistics, Engineering and Force Protection

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

- 10 U.S.C. § 2571, *Interchange of Property and Services*
- 10 U.S.C. § 2821, *Requirement for Authorization of Appropriations for Construction and Acquisition of Military Family Housing*
- 10 U.S.C. § 2822, *Requirement for Authorization of Number of Family Housing Units*
- 10 U.S.C. § 2824, *Authorization for Acquisition of Existing Family Housing in Lieu of Construction*
- 10 U.S.C. § 2825, *Improvements to Family Housing Units*
- 10 U.S.C. § 2828, *Leasing of Military Family Housing*
- 10 U.S.C. § 2831, *Military Family Housing Management Account*
- 10 U.S.C. § 2833, *Family Housing Support*
- 10 U.S.C. § 2835, *Long-Term Leasing of Military Family Housing to be Constructed*
- 10 U.S.C. § 2853, *Authorized Cost and Scope of Work Cost Variations*
- 10 U.S.C. § 2855, *Law Applicable to Contracts for Architectural and Engineering Services and Construction Design*
- 10 U.S.C. § 2871-2885, Subchapter IV, Alternative Authority for Acquisition and Improvement of Military Housing
- 10 U.S.C. § 9540, *Architectural and Engineering Services*
- 10 U.S.C. § 2807, *Architectural and Engineering Services and Construction Design*
- 10 U.S.C., **Chapter 169**, § 2851, *Supervision of Military Construction Projects*
- 16 U.S.C. § 470, *National Historic Preservation Act*
- 42 U.S.C. 11411, *McKinney-Vento Act*
- 36 CFR 800, *Protection of Historic Properties*
- AFPD 32-60, *Housing*, 10 November 2009
- AFPD 32-70, *Environmental Quality*, 4 November 2011
- AFPD 65-5, *Cost and Economics*, 3 October 2013
- AFPD 65-6, *Budget*, 1 May 1998
- AF Form 847, *Recommendation for Change of Publication*
- AFI 32-1021, *Planning and Programming Military Construction (MILCON) Projects*, 14 June 2010
- AFI 32-1023, *Designing and Constructing Military Construction Projects*, 21 April 2010
- AFI 32-6001, *Family Housing Management*, 21 August 2006

AFI 32-6003, *General Officer Quarters*, 27 September 2010
 AFI 32-6007, *Privatized Family Housing*, 19 September 2012
 AFI 32-7001, *Environmental Management*, 4 November 2011
 AFI 32-7020, *The Environmental Restoration Program*, 16 April 2014
 AFI 32-7061, *The Environmental Impact Analysis Process*, 28 March 2014
 AFI 32-9004, *Disposal of Real Property*, 3 May 2007
 AFI 33-360, *Publications and Forms Management*, 25 September 2013
 AFI 65-501, *Economic Analysis*, 29 August 2011
 AFI 65-601, Volume 1, *Budget Guidance and Procedures*, 16 August 2012
 AFMAN 33-363 *Management of Records*, 28 May 2014
 AFMAN 65-604, *Appropriation Symbols and Budget Codes (Fiscal Year 2014)*, 5 November 2013
Air Force Family Housing Guide for Planning, Programming, Design and Construction
 (referred to herein as *Air Force Family Housing Guide*)
General Officer Quarters Guide GOQ Resident's Handbook Volume One, August 2002
General Officer Quarters Guide GOQ Standards for Programming, Design & Construction
Volume Two, August 2002
Air Force Housing Market Analysis Guidance Manual
Air Force Housing Support Facilities Guide
 DoD 4165.63-M, *DoD Housing Management*, 28 October 2010
 UFC 3-400-02 *Design: Engineering Weather Data*, 28 February 2003
 UFC 4-010-01, *DoD Antiterrorism Minimum Standards*
 UFC 4-711-01, *Design: Family Housing*

Adopted Forms

DD Form 1391, *FY __ Military Construction Project Data*

DD Form 1523, *Military Family Housing Justification*

Abbreviations and Acronyms

A-E—Architectural-Engineering or Architect-Engineer

ABA—Architectural Barriers Act

ACES-PM—Automated Civil Engineer System-Project Management

ACF—Area Cost Factor

ADA—Americans with Disabilities Act (also, Anti-Deficiency Act in related AFIs)

AF—Air Force (as used on forms)

AF/A4C—Directorate of Civil Engineers

AF/A4CI—Directorate of Civil Engineers, Installations Strategy and Plans Division

AF/A4CF—Directorate of Civil Engineers, Facilities, Environment and Energy Division

AF/A4CFH—Directorate of Civil Engineers, Facilities, Environment and Energy Division, Housing Management

AF/CV—Air Force Vice Chief of Staff

AF/CVA—Air Force Assistant Vice Chief of Staff

AFCEC—Air Force Civil Engineer Center

AFI—Air Force Instruction

AF IMT—Air Force Information Management Tool

AFMAN—Air Force Manual

AFPD—Air Force Policy Directive

AFRC—Air Force Reserve Command

AFRIMS—Air Force Records Information Management System

AFRPA—Air Force Real Property Agency

ANG—Air National Guard

AT/FP—Anti-Terrorism/Force Protection

ATA—Authority to Advertise

BCE—Base Civil Engineer

Bdrm—Bedroom

BES—Budget Estimate Submission

CAM—Condition Assessment Matrix

CCM—Command Chief Master Sergeant

CFR—Code of Federal Regulations

CGO—Company Grade Officer

COM—Change of Occupancy Maintenance

CONUS—Continental United States

DD—Department of Defense (as used on forms)

DDD—Deficiency Detail Data

DI—Design Instruction

DoD—Department of Defense

DoDD—Department of Defense Directive

DoDI—Department of Defense Instruction

DRU—Direct Reporting Unit
DUSD—Deputy Under Secretary of Defense
DUSD (I&E)—Deputy Under Secretary of Defense, Facilities, Energy and Privatization
EA—Economic Analysis
EEIC—Element of Expense/Investment Code
FGO—Field Grade Officer
FH—Family housing
FHIF—Family Housing Improvement Fund
FHMP—Family Housing Master Plan
FY—Fiscal year
FYDP—Future Years Defense Program
GO—General Officer
GOQ—General Officer Quarters (government-owned or privatized)
GSF—Gross Square Feet
GSM—Gross Square Meters
HCP—Housing Community Profile
HRMA—Housing Requirements and Market Analysis
HUC—High Unit Cost
IAW—In Accordance With
IFHMP—Installation Family Housing Master Plan
IFP—Individual Facility Profile
JENL—Junior Enlisted
JNCO—Junior Non-Commissioned Officer
JSIVA—Joint Staff Integrated Vulnerability Assessment
Low-E—Low Emissivity (glass)
M—Million (dollars)
M&R—Maintenance and Repair
MAJCOM—Major Command
MFH—Military Family Housing (Funds)
MHPI—Military Housing Privatization Initiative
MILCON—Military Construction
MIP—Minor Improvement Project

NSF—Net Square Feet

NSM—Net Square Meters

O&M—Operation and Maintenance

OMB—Office of Management and Budget

OMR—Operations and Maintenance and Repair

OPR—Office of Primary Responsibility

OSD—Office of the Secretary of Defense

OSD(C)—Office of the Secretary of Defense Comptroller

PA—Programmed Amount

PB—President's Budget

PM—Project Manager

RAC—Risk Assessment Code

RDS—Records Disposition Schedule

RFP—Request for Proposal

SAF/FMB—Deputy Assistant Secretary of the Air Force for Budget

SAF/FMBI—Deputy Assistant Secretary of the Air Force for Budget, Directorate of Budget Investment

SAF/IE—Assistant Secretary of the Air Force for Installations, Environment and Energy

SAF/IEE—Deputy Assistant Secretary of the Air Force for Environment, Safety and Infrastructure

SCP—Special Command Position

SECAF—Secretary of the Air Force

SHPO—State Historic Preservation Office

SIOH—Supervision Inspection and Overhead

SNCO—Senior Non-Commissioned Officer

SO—Senior Officer

TDY—Temporary Duty

UFAS—Uniform Federal Accessibility Standards

UFC—Unified Facilities Criteria

U.S.C—United States Code

UN—Units

Terms

Change of Occupancy Maintenance (COM)—Minor M&R work done on housing units when occupancy changes. Includes interior painting; repairing floors, walls and ceiling finishes; and repairing electrical and plumbing fixtures. Does not include other maintenance or repair work, which may have been deferred until change of occupancy to avoid inconveniencing the residents.

Conversion—A permanent change in use of a FH facility requiring a permanent change of category code on real property inventory records from a FH unit to a non-FH facility category code.

Diversion (previously known as temporary conversion)—Temporary change in the designated use of a facility, normally not to exceed 3 years. Diversion requires a real property inventory record annotation of the applicable temporary facilities construction category code, but does not change category code on real property inventory records.

Dwelling Units—A single structure or part of a multi-family building, with other facilities directly associated with the unit. Examples include carports, garages, driveways, patios, walks, privacy fences, or other attached facilities and utility service lines (from the dwelling unit to the main utility line).

General Officer Quarters (GOQ)—A housing unit, including grounds, walks, driveways and other paved areas and structures designated for the exclusive use of general officers, their families or guests.

Historic Housing Facilities—Facilities currently on, or eligible for nomination to the National Register of Historic Places; or facilities that figure significantly in state or local history. Consult the State Historic Preservation Office (SHPO) and other interested parties on undertakings involving historic housing as per the National Historic Preservation Act.

Housing Area—An identifiable grouping of FH facilities planned, developed and maintained in a residential character.

Housing Community Profile (HCP)—A long range planning and programming document, consistent with land use as defined in the base comprehensive plan, which maps out development of the entire housing area to incorporate whole-house and whole-neighborhood concepts, including:

- Developing elements of neighborhood vehicular and pedestrian circulation based on siting, density, landscaping, parking, playgrounds, recreation areas and utilities.
- Reconfiguring floor layouts, if necessary, to make housing more functional, livable and accessible.
- Extending the life of a unit for another 25 years by adding, expanding, or converting space.
- Housing unit as defined as a single structure or part of a multifamily buildings that include a carport, garage, driveway, or other associated parking, patio, privacy fence, utility service lines and other attached facilities.

Housing Requirements and Market Analysis (HRMA)—A formalized method used to estimate current and projected housing deficits or surpluses at any given installation. Professional economists trained in social sciences and familiar with principal data sources and analysis techniques conduct these analyses working as independent consultants. They justify the

need for the Air Force to acquire or construct new FH units, replace existing FH units, or undertake whole-house or whole-neighborhood improvement projects.

Major Maintenance and Repair (M&R)—Work necessary to fix or replace systems and their components nearing the end of their useful lives. Bases generally contract out for this work. The work includes:

- Restoring or replacing components of facilities damaged by fire, storm, or other disaster.
- Restoring or replacing equipment (over 1 horse power), utility systems, or plants.
- Restoring or replacing structural members in their original locations, foundations, roofs, exterior structures or walls, interior partitions, electrical, plumbing, heating, ventilation and air conditioning and real property installed equipment.
- Any project where the cost of materials and labor exceed \$2,500.
- Addition of insulation where either no insulation or inadequate insulation exists.
- Installation of carpet, vinyl wall coverings and wall paneling in existing facilities (when the flooring or walls require repair).
- Complete exterior painting, landscaping and planting of trees or shrubs.
- An upgrade to contemporary standards may be considered major M&R if (1) the work is consistent with projected facility life, utilization and sound engineering practices and (2) the upgrade would provide a better product and/or be more economical than the existing product. Perform an engineering analysis.

Minor Alterations—Construction/Improvement work accomplished with P-722 funds. Minor alterations work installs or constructs systems, features, or functional spaces that do not currently exist, replaces items still within their service life, or changes spaces that already exist (relocates walls, adds or removes openings, or otherwise reconfigures existing spaces). Projects can be interior or exterior work but may not add, expand, or extend the physical dimensions of the house or increase net floor area. Replacement of failed or unserviceable components with contemporary standard components or materials, consistent with local GOQ standards, is not minor alteration if justified by a life-cycle analysis considering planned and programmed work. Anti-Terrorism/Force Protection requirements supported by documented vulnerability assessments are excluded from minor alteration cost limits.

Minor Improvement—Improvement project (P-713) where the per-unit cost does not exceed the statutory improvement cost limit (see **Attachment 3**). In calculating the statutory improvement cost limit, include the total cost of all improvement, major M&R and minor alteration work planned or accomplished during the current FY.

Minor Maintenance and Repair (M&R)—Day-to-day M&R work performed in response to service calls or urgent job orders accomplished by contract or in-house forces.

Net Floor Area—Space within the interior faces of exterior walls and party walls of living units, with the exclusions as stated in **Attachment 2**.

Non-Dwelling Units (Ancillary Support Facilities)—Communal facilities directly associated with a housing area or facilities outside the housing area that solely support FH. Examples include roads, common-use parking areas, bus shelters, playgrounds, common-use walks, utility mains and FH management offices and shops.

Programmed Amount (PA)—Total project cost, including construction, contingencies, supervision, inspection and overhead.

Project—All work necessary to produce a complete and usable facility, or a complete and usable improvement and M&R to an existing facility. Do not split the work to avoid limits, restrictions and thresholds.

Replacement Cost—Cost of replacing an existing FH unit built to its authorized size and whole-house standards. MAJCOMs and bases estimate the unit cost together with the cost to replace supporting facilities using the DoD Family Housing Cost Model. Calculate unit cost per net floor area according to the DoD pricing guide, multiply this by authorized net floor area and adjust the total by the ACF and project size factor. For supporting facilities, calculate the cost based on a specifically proposed site, using engineering cost estimates for:

- Site improvements.
- Streets.
- Utility Mains.
- Landscaping.
- Recreation.
- Any other features such as demolition or environmental hazard remediation.

Surplus Housing—Housing that is no longer needed to support an installation FH requirement as determined by the HRMA.

Attachment 2

FAMILY HOUSING (FH) UNIT PROGRAMMING SIZE STANDARDS

Pay Grade	Bedrooms	Improvement Minimum				Replacement/ New Construction Minimum				Replacement/ New Construction Programming Benchmark				Replacement/ New Construction Maximum				Garages			
		Improvement Target				Improvement Maximum															
		NSF	NSM	GSF	GSM	NSF	NSM	GSF	GSM	NSF	NSM	GSF	GSM	NSF	NSM	GSF	GSM	Detached Units	Attached Units		
JENL (E1-E3) JNCO (E4-E6)	2	870	81	1,080	100	950	88	1,180	110	1,080	100	1,340	124	1,210	112	1,500	139	2 car	1-2 car		
	2/M	980	91	1,220	113	1,070	99	1,330	124	1,180	110	1,480	137	1,300	121	1,630	151	2 car	1-2 car		
	3	1,100	102	1,370	127	1,200	111	1,490	138	1,310	122	1,630	151	1,420	132	1,760	164	2 car	1-2 car		
	4	1,230	114	1,530	142	1,350	125	1,670	155	1,570	146	1,950	181	1,790	166	2,220	206	2 car	1-2 car		
	5	1,420	132	1,760	164	1,550	144	1,920	178	1,850	172	2,300	214	2,150	200	2,670	248	2 car	1-2 car		
SNCO (E7-E8) CGO (O1-O3)	2	870	81	1,080	100	950	88	1,180	110	1,200	111	1,490	138	1,440	134	1,790	166	2 car	1-2 car		
	2/M	1,050	98	1,300	121	1,150	107	1,420	132	1,350	125	1,670	155	1,540	143	1,920	178	2 car	1-2 car		
	3	1,230	114	1,530	142	1,350	125	1,670	155	1,500	139	1,860	173	1,650	153	2,050	190	2 car	1-2 car		
	4	1,330	124	1,650	153	1,450	135	1,800	167	1,730	161	2,150	200	2,020	188	2,500	232	2 car	1-2 car		
	5	1,420	132	1,760	164	1,550	144	1,920	178	2,020	188	2,510	233	2,490	231	3,090	287	2 car	1-2 car		
FGO (O4-O5) E9/PRESTIGE	3	1,280	119	1,590	148	1,400	130	1,740	162	1,630	151	2,020	188	1,850	172	2,300	214	2 car	1-2 car		
	4	1,420	132	1,760	164	1,550	144	1,920	178	1,860	173	2,310	215	2,180	203	2,700	251	2 car	1-2 car		
ISNCO (E9)	4	1,490	138	1,850	172	1,620	150	2,010	187	1,940	180	2,410	224	2,180	203	2,700	251	2 car	1-2 car		
SO (O6)	4	1,560	145	1,930	179	1,700	158	2,110	196	2,030	189	2,520	234	2,350	218	2,920	271	2 car	1-2 car		
IC SO (O6)	4	1,710	159	2,120	197	1,870	174	2,320	216	2,230	207	2,770	257	2,350	218	2,920	271	2 car	1-2 car		
GO (O7+)	4	1,920	178	2,380	221	2,100	195	2,600	242	2,690	250	3,330	309	3,270	304	4,060	377	2 car	1-2 car		
SCP GO (O7+)	4	2,110	196	2,620	243	2,310	215	2,860	266	2,960	275	3,660	340	3,270	304	4,060	377	2 car	1-2 car		
		Improvement Range												Replacement/New Construction Range							

NOTE: Detached homes are authorized two-car garages; attached homes are authorized one- or two-car garages, based on site and funding allowances

GROSS FLOOR AREA:

Standards

All interior spaces (finished and unfinished) within the exterior faces of exterior walls and center line of party walls (in multiplex units) of housing units with the following areas of exclusion:

- Carports and Garages
- Exterior bulk storage (detached from the conditioned space of the house)
- Exterior mechanical rooms (detached from the conditioned space of the house), sized only for mechanical equipment.
- Trash enclosures
- Porches, open or closed, which are not heated or cooled, but retain the basic characteristics of a porch
- Terraces, patios, decks, balconies and entrance stoops

NET FLOOR AREA:

Standards The space within the interior faces of exterior walls and party walls of living units, with the following exclusions:

- Carports and garages
- Exterior bulk storage (detached from the conditioned space of the house)
- Trash enclosures
- Porches, open or closed, which are not heated or cooled, but retain the basic characteristics of a porch
- Terraces, patios, decks, balconies and entrance stoops
- Utility rooms (laundry rooms)
- Interior bulk storage
- Washer and dryer space, if not located in separate utility or laundry room (not to exceed 30 square feet)
- Furnace or boiler equipment, domestic water heater, heat pump and solar equipment, if any, if not located in a separate utility room
- Stairways on each floor (including intermediate landings between floors)
- Stair landing at each floor level above the first floor (not to exceed 10 square feet per floor)
- Unfinished space under stairs
- Unfinished attic space
- Unfinished and finished basement space
- Common stairways, halls and entries in multi-family dwellings
- Areas required solely for installed solar energy systems, including collection and storage equipment and mass walls as well as interior spaces required by and designed specifically for passive solar energy systems
- Increase required to meet accessibility standards (not to exceed 75 square feet)
- Mechanical rooms and chases
- Fireplaces

IC - Installation Commander

GSF - Gross Square Feet

NSF - Net Square Feet

GSM - Gross Square Meters
NSF - Net Square Feet

NOTE: Detached homes are authorized two-car garages; attached homes are authorized one- or two-car garages, based on site and funding allowances

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- Increase required to meet accessibility standards (not to exceed 75 square feet)
- Mechanical rooms and chases
- Fireplaces

IC - Installation Commander

GSF - Gross Square Feet

NSF - Net Square Feet

GSM - Gross Square Meters

NSF - Net Square Feet

Attachment 3

PROJECT APPROVAL LEVELS AND DELEGATION OF AUTHORITY

TYPE OF WORK	FUND TYPE	SAF/IEE	MAJCOM/CE ⁽³⁾	MAJCOM ⁽³⁾ DELEGATION AUTHORITY
Maintenance and Repair (M&R) (Non-GOQ)	P-722	In excess of 50% but less than 70% replacement cost, <u>or</u> In excess of \$7.5M per project	\$20,000 ⁽¹⁾ per unit per year and less than 50% replacement cost, \$5M per project (8)	<u>Major M&R Work:</u> Cost not too exceed \$1M per project (not below Deputy Base Civil Engineer (BCE)) <u>Minor M&R Work:</u> Lowest practical level
Operation, Maintenance and Repair (OMR) (GOQ)	P-721 P-722	In excess of 50% but less than 70% replacement cost, <u>or</u> In excess of \$7.5M per project	\$35,000 ⁽¹⁾ per unit per year and less than 50% replacement cost, \$5M per project (8)	<u>Major M&R Work:</u> Cost not too exceed \$1M per project (not below Deputy BCE) <u>Minor M&R Work:</u> Lowest practical level
Minor Alterations⁽⁴⁾⁽²⁾	P-722	Project or unit cost exceeding MAJCOM limits	<u>Non-GOQ Unit:</u> \$7,500 ⁽¹⁾ per unit per year, \$750,000 per project <u>GOQ Unit:</u> \$7,500 per unit per year (MAJCOM/CV) ⁽³⁾ <u>Non-Dwelling Unit:</u> \$30,000 per project	<u>GOQ Housing Unit:</u> \$3,000 per unit per year (not below BCE) <u>Non-GOQ Housing Unit:</u> Lowest practical level
Improvements	P-713	Not to exceed statutory improvement cost limit	Note ⁽⁵⁾	Note ⁽⁵⁾
Minor Improvements	P-713	GOQ projects ⁽⁶⁾	<u>Dwelling Unit:</u> \$200,000 per project not to exceed statutory improvement cost limit, except GOQ projects. Senior Officer Quarter project (MAJCOM/CV) <u>Non-Dwelling Unit:</u> \$30,000 per project	Note ⁽⁵⁾
Restoration⁽⁷⁾	P-711 P-713 P-722	Greater than 70% replacement cost or \$100,000 per unit	Less than 70% replacement cost or \$100,000 per unit, whichever is less	Less than 70% replacement cost or \$100,000 per unit (not below Installation Commander)

Construction	P-711	Note ⁽⁵⁾	Note ⁽⁵⁾	Note ⁽⁵⁾
<p>(1) Operation, M&R thresholds of \$35,000 and M&R threshold of \$20,000 include the minor alteration threshold (\$7,500) except as noted in (2).</p> <p>(2) Anti-terrorism/Force Protection and mission-related permanently installed communication requirements for FH dwelling units are not subject to minor alteration limits. Identify antiterrorism requirements subject to this execution through Joint Service Integrated Vulnerability Assessments (JSIVA), or MAJCOM, Service or installation vulnerability assessments, and ensure they are approved by the installation commander. Antiterrorism and communications work are still subject to the statutory M&R limits for \$35,000 per unit for GOQs and \$20,000 per unit for non-GOQs.</p> <p>(3) No general officer can approve work on his/her unit; for single installation MAJCOMs and Direct Reporting Units (DRU), the approval authority is the AF/CVA. For all other MAJCOMs, approval authority is the AF/CV.</p> <p>(4) All minor alteration costs including those for FP and mission-related permanently installed communications requirements cost against the \$30,000 limit for non-dwelling units.</p> <p>(5) No authority.</p> <p>(6) AF/A4C approves non-dwelling unit MIPs exceeding the \$30,000 limit and non-GOQ dwelling unit MIPs exceeding the \$200,000 limit.</p> <p>(7) Applies only to Non-GOQs</p> <p>(8) AF/A4C approves an M&R project when the cost exceeds \$5M but less than \$7.5M</p>				

Attachment 4

SAMPLE CHECKLISTS/INSTRUCTIONS

Following sample checklists are located in the AF/A4C Portal, Housing Policy & Standards page, at link below, then select AFI 32-6002 tab.

<https://cs1.eis.af.mil/sites/ceportal/ProgramGroups/Housing/Pages/PolicyandStandards.aspx>.

SAMPLE DD FORM 1391C, MAJCOM CIVIL ENGINEER AND GENERAL OFFICER CERTIFICATE FOR GOQ PROJECTS.

SAMPLE DD FORM 1391, IMPROVEMENT PROJECT.

SAMPLE DD FORM 1391, PRIVATIZATION PROJECT.

SAMPLE DEFICIENCY DETAIL DATA (DDD), SUPPORT FACILITIES PROJECT.

SAMPLE DD FORM 1391, SUPPORT FACILITIES PROJECT.

SAMPLE DD FORM 1523, FAMILY HOUSING (FH) JUSTIFICATION, REPLACEMENT CONSTRUCTION PROJECT.

SAMPLE DOD FAMILY HOUSING (FH) COST MODEL, REPLACEMENT PROJECT.

SAMPLE DD FORM 1391, REPLACEMENT PROJECT.

SAMPLE DD FORM 1523, FAMILY HOUSING (FH) JUSTIFICATION, NEW CONSTRUCTION PROJECT (DEFICIT REDUCTION).

SAMPLE DD FORM 1391, DOD FAMILY HOUSING (FH) COST MODEL, NEW CONSTRUCTION PROJECT (DEFICIT REDUCTION).

SAMPLE DD FORM 1391, NEW CONSTRUCTION PROJECT.