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STAFF SUMMARY SHEET

	TO	ACTION	SIGNATURE (Surname), GRADE AND DATE		TO	ACTION	SIGNATURE (Surname), GRADE AND DATE
1	RQW/JA	Coord	<i>Deirdre A. Baker</i> 26 May 05 Maj, USAF Deputy STA	6	RQW/CCEA	Log out	<i>[Signature]</i> 26 May 05
2	MSG/CC	Coord	<i>[Signature]</i> 26 May 05	7	AFSOC/CEV	Coord	<i>[Signature]</i> 26 May 05
3	RQW/CCEA	Log in	<i>[Signature]</i> 26 May 05	8	AFSOC/JA	Coord	<i>[Signature]</i> 26 May 05
4	RQW/CC	Review	<i>[Signature]</i> 26 May 05	9	AFSOC/CE	Sign	
5	RQW/CC	Coord	<i>[Signature]</i> 26 May 05	10			

SURNAME OF ACTION OFFICER AND GRADE	SYMBOL	PHONE	TYPYST'S INITIALS	SUSPENSE DATE
Mitchell, GS-13	CES/CEV	DSN 460-3069	gwl	

SUBJECT	DATE
Finding of No Significant Impact (FONSI) and Finding of No Practicable Alternative (FONPA) for the Magnolia Grove Housing Area, Moody AFB	25 May 05

SUMMARY

- PURPOSE:** Acquire AFSOC/CE signature on attached FONSI/FONPA (Tab 1) and Environmental Assessment (EA) document which finalizes the environmental impact analysis for the Magnolia Grove Housing Area project. This project will result in the construction of private housing for Moody AFB military personnel on an area immediately south of Moody AFB.
- BACKGROUND:** Pursuant to the Council on Environmental Quality regulations, 40 CFR Parts 1500-1508 (NEPA), and AFI 32-7061 (EIAP) as promulgated in 32 CFR 989, an assessment was conducted of the potential environmental consequences resulting from the proposed construction of military family housing on private property immediately south of Moody AFB. The subject EA resulted in a FONSI/FONPA relative to the desired action.
- DISCUSSION:** The EA considers all the potential impacts of the proposed action and alternatives, including the No Action Alternative. The FONSI concludes that there are no significant direct, indirect, or cumulative impacts associated with the proposed action. The FONPA concludes that approximately 0.31 acres of jurisdictional regulated wetlands and 3.6 acres of non-jurisdictional non-regulated wetlands would be impacted by the proposed action, but that there is no other practicable alternative.
- RECOMMENDATION:** AFSOC/CE sign the attached FONSI/FONPA at Tab 1 where indicated.

[Signature]
 DAVID L. CARLON, Lt Col, USAF
 Commander

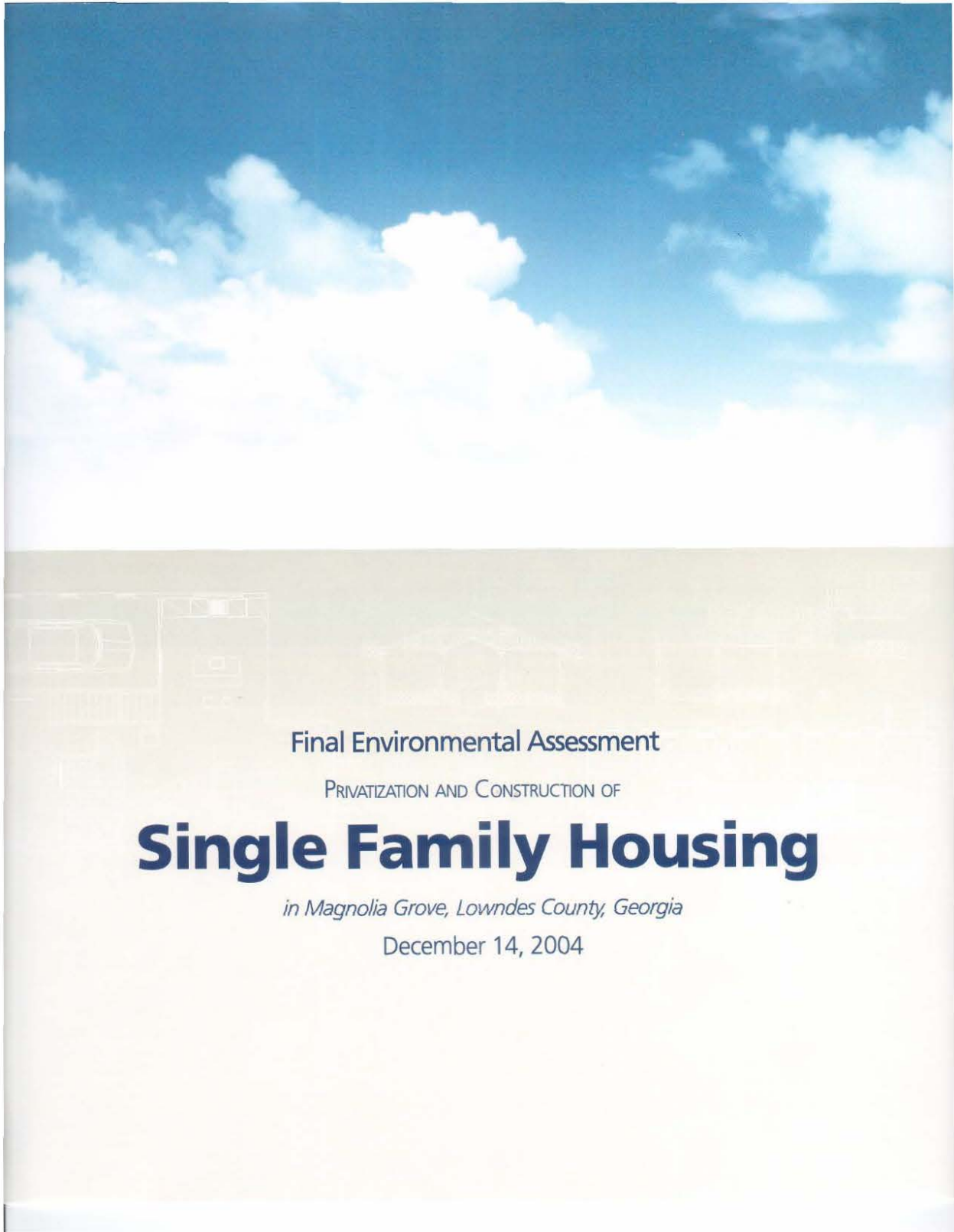
- Tabs
- FONSI/FONPA
 - Environmental Assessment (EA)

Report Documentation Page

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Final Environmental Assessment

PRIVATIZATION AND CONSTRUCTION OF

Single Family Housing

in Magnolia Grove, Lowndes County, Georgia

December 14, 2004

***Finding of No Significant Impact (FONSI)/Finding of No Practicable Alternative (FONPA)
for the Privatization and Construction of Single Family Housing on Magnolia Grove
Lowndes County, Georgia***

Pursuant to the Council on Environmental Quality (CEQ) Regulations (40 CFR Parts 1500-1508) for implementing the procedural provisions of the National Environmental Policy Act (42 U.S.C. 4321 et seq.), and 32 CFR 989, *Environmental Impact Analysis Process*, Moody Air Force Base (AFB), Georgia conducted an environmental assessment (EA) of the potential environmental and socioeconomic effects of construction of new housing units by a private entity on the Magnolia Grove (MG) Neighborhood.

Purpose and Need

Consistent with the Military Housing Privatization Initiative (MHPI), the purpose of the proposed action is to improve military family housing and ancillary supporting facilities at Moody Air Force Base (AFB) by accepting the offer of a private contractor to provide adequate housing for military members. The proposed action is needed to provide affordable, quality housing and ancillary facilities to the military members and their families through a private Development Entity's (DE) construction of family dwellings on private land.

Proposed Action

Moody AFB proposes to accept the offer of a DE to construct up to 395 units in the western portion of a 703-acre area just south of the base known as Magnolia Grove and make dwellings available to military members. Moody AFB has entered into a privatization agreement with the DE under the AF Military Housing Privatization Initiative for future occupancy of the housing units by military members. The construction of family dwellings on MG is a private action and not an Air Force action. A land lease agreement between the Air Force and the DE would not be required because the MG is private-owned land not government owned.

Alternatives Considered

Alternatives besides the preferred and no action alternatives considered were: Private Sector Reliance, and a Leasing Alternative. These two alternatives, discussed in Section 2.4, were deemed infeasible and were not analyzed in the EA. The only alternatives analyzed were the preferred alternative and the no action alternative.

Under the No-Action Alternative, the Air Force would not accept the DE's offer to construct family units on MG and make available to military members.

Factors Considered in Determining That No Environmental Impact Statement Is Required

The EA, which is incorporated by reference into this draft Finding of No Significant Impact (FONSI) and Finding of No Practical Alternative (FONPA), examined the potential effects of the proposed action and the no action alternative. Implementation of the proposed action would result in a combination of short-term and long-term minor adverse and long-term major beneficial effects.

There would be negligible impacts to schools in Lowndes County and environmental justice.

Long-term beneficial effects to air quality would be realized with military members living in MG and driving fewer road miles to and from work than where they presently live off-base.

Short-term minor adverse effects would be expected on soils, vegetation, transportation, Threatened and Endangered Species, wildlife, hazardous materials and waste, surface water, storm water, and wastewater. Short-term minor adverse effects would be expected on air quality and noise due to construction activities. A groundwater remediation effort is currently ongoing at the Moody AFB Burma Road Landfill (LF-01) ERP site. A portion of the groundwater contamination has migrated onto off-base property, and extends approximately 500 feet from the Moody AFB boundary fence. Groundwater restrictions, in conjunction with the Moody AFB groundwater remediation effort at LF-01, must be implemented to protect human health by minimizing the potential for human exposure to groundwater contamination. The surficial aquifer and an unnamed aquifer are the main water bearing formations in the area, and these formations are currently not used as a potable water sources. Restrictions will be put in place to prevent the groundwater from being used as a potable water source or for lawn irrigation in the future.

Long-term minor annoyance effects would be expected from noise generated by near-by aircraft flight patterns over the eastern portion of MG. Long-term minor adverse effects would be expected from solid waste generation in the new MG housing area. The proposed action would not build new dwellings on or near the majority of wetlands in the eastern portion of the MG. However, the proposed acreage of MG for development of dwellings is the western and southern 300 acres and contains 22.24 acres of wetlands. A nation-wide permit was obtained from the U.S. Army Corps of Engineers (USACE) to allow the impact of 0.31 acres of jurisdictional wetlands. Additionally, a small (3.6 acres) isolated non-jurisdictional wetland would be filled and developed. Because this wetland is non-jurisdictional, it is not regulated by the USACE and neither permits or mitigation are not required to impact this area. The DE purchased 1.28 wetland mitigation credits from an approved mitigation bank as directed by the USACE to facilitate the impact to the 0.31 acres of jurisdictional regulated wetlands that would be impacted. There were no practicable alternatives, evaluated or not, that would not result in impacts to wetlands and/or waters of the U.S.

Cultural resources surveys identified two prehistoric archaeological sites within the proposed MG development area that are potentially eligible for inclusion in the National Register of Historic Places (NRHP). A Phase II archeological survey was conducted to determine if these sites weresignificant. The SHPO was consulted on the results of the Phase II to determine what level (if any) of mitigation and/or educational efforts must be made to ensure compliance with the NHPA. On May 27, 2005 the SHPO concluded "No Historic Properties Affected" and no subsequent mitigation required.

Mitigation


In addition to Best Management Practices (BMPs), specific mitigation actions identified include performing construction only during the daylight hours, obtaining a Lowndes County Land Disturbance Permit, obtaining storm water permits for run-off during construction, developing a Storm Water Pollution Prevention Plan, and upgrading potable and sewer water systems. The purchase of wetland mitigation credits was required by the U.S. Army Corps of Engineers (USACE) pursuant to the issuance of a Nation-wide permit. Coordination with the State Historic Preservation Office (SHPO) is complete, no mitigation required.

Conclusion

The attached EA was prepared and evaluated pursuant to the National Environmental Policy Act (Public Law 91-190, 42 U.S.C. 4321 *et seq.*) and according to 32 Code of Federal Regulations 989, *The Environmental Impact Analysis Process*. Based on the findings of the environmental assessment, no significant impact is anticipated from implementation of the proposed action. I have concluded that the proposed project titled, "Privatization and Construction of Single Family Housing on Magnolia Grove," does not constitute a "major Federal action significantly affecting the quality of the human environment" when considered individually or

cumulatively in the context of the referenced act, including both direct and indirect impacts. Therefore, issuance of a Finding of No Significant Impact (FONSI) is warranted and an environmental impact statement is not required.

The EA also states that a small portion of jurisdictional and non-jurisdictional wetlands will be impacted. However, the Pursuant to Executive Order (EO) 11990, the authority delegated in Secretary of the Air Force Order 791.1, and taking the above information into account, I find there is no practicable alternative to this action and that the issuance of a Finding of No Practicable Alternative (FONPA) is warranted.



MARK D. WRIGHT, Colonel, USAF
The Civil Engineer

23 Jun 05

Date

EXECUTIVE SUMMARY

This environmental assessment (EA) evaluates the potential environmental effects of a private developing entity (DE) constructing single family dwellings on the Magnolia Grove (MG) Neighborhood for use by military members under the Military Housing Privatization Initiative (MHPI). The EA was prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, the Council on Environmental Quality (CEQ) regulations implementing NEPA, and the Air Force's implementing regulations at 32 CFR 989, *The Environmental Impact Analysis Process*.

Description of Proposed Action and Alternatives

The DE proposes to construct up to 395 units in the western portion of a 703-acre area just south of the base known as Magnolia Grove and to offer these dwellings to Moody AFB for military members and their families to occupy under the MHPI.

Alternatives besides the preferred and no action alternatives considered were: Private Sector Reliance, and a Leasing Alternative. The drawbacks to these two alternatives, discussed in Section 2.4, lead to only analyzing the preferred alternative and the no action alternative.

Under the No-Action Alternative, the Air Force would not support the construction of new housing units on Magnolia Grove.

Summary of Environmental Consequences

Initial analysis of resources indicated that construction of new housing units on MG would result in a combination of short- and long-term minor adverse effects, and long-term major benefits. Within the MG, a portion of the property would change from farmland to residential use. The proposed residential land use would be compatible with surrounding land uses; no significant impacts to land use are anticipated. Small quantities of construction-type hazardous materials such as adhesives and pipe cement may be stored and utilized during housing construction activities under the Proposed Action. Hazardous materials would be stored in unoccupied units and would be removed upon completion of construction. Construction-type hazardous waste would be generated by the housing construction contractor during construction activities and would be handled in accordance with all Federal, state and local regulations. Proposed construction activities would not affect the current Air Force remediation activities on MG. No impacts to Air Force Environmental Restoration Program (ERP) sites are anticipated. The groundwater monitoring wells and associated utilities would be avoided by the DE construction activities, and groundwater restrictions, in conjunction with the Moody AFB groundwater remediation effort at LF-01, will be implemented to protect human health by minimizing the potential for human exposure to groundwater contamination. Asbestos Containing Materials (ACM), Lead-Based Paints (LBP), and radon would not be expected to be a concern since there are no existing structures except open bays for agricultural vehicles on MG at the present time. Existing transformers on MG need to be analyzed for polychlorobenzene (PCB) compounds and disposed of accordingly if they contain PCB. Recent survey for pesticides revealed that the land is not contaminated with pesticides or agricultural organic chemicals above regulatory limits (ESI July 2004). Pest management would be required on MG after construction of the new housing units. Any future application of pesticides would be conducted in accordance with applicable laws and pesticide label directions. Appropriate management practices and application of pesticides by appropriately licensed personnel would preclude significant impacts within the MG.

Construction activities would increase the potential for soil erosion and sedimentation. However, implementation of best management practices detailed in an approved construction storm water National Pollutant Discharge Elimination System (NPDES) permit and the accompanying erosion and sediment control plan would minimize this potential impact. This permit would be obtained by the DE from the Georgia Environmental Protection Division prior to initiation of construction activities. The DE would also be required to obtain a Lowndes County Land Disturbance Permit.

During construction, negligible air quality impacts would occur. Air quality impacts would not exceed any ambient air quality standards or inhibit the region of influence from maintaining the National Ambient Air Quality Standards; therefore, no significant impacts to air quality are anticipated under the Proposed Action. Long-term major beneficial effects would be realized as the residents of the new MG housing units would drive fewer miles to and from work each day reducing the pollutant emissions. Short-term intermittent minor adverse effects would be expected from construction noise during the development phases. Long-term minor noise annoyance from daily aircraft flights from Moody AFB flying over the eastern portion of MG would be expected. However, flights are conducted only during daylight hours and the new residents of MG will be informed of this activity. MG residents would be exposed to intermittent noise levels of 60-65 dBA from nearby T-6 aircraft during the daylight hours. Vegetation would be disturbed and wildlife potentially displaced in the MG due to construction activities associated with the Proposed Action. However, there are no sensitive vegetation types, and impacts to wildlife would be temporary; no significant impacts are anticipated. No Threatened and Endangered Species (T&E) were observed within the MG during the 2004 T&E survey. However, gopher tortoise shells and burrows were identified in the area during the survey. If during construction, gopher tortoises are observed, all construction activities would cease, all actions would be taken to protect the species, and DE would notify the Moody AFB Natural Resources Manager immediately. A nationwide permit has been obtained from the U.S. Army Corps of Engineers (USACE) for the proposed impact to 0.31 acres of jurisdictional wetlands as a stream crossing. As part of this permit, the DE has purchased 1.28 wetland mitigation credits from an approved mitigation bank. Additionally, because of impacts to both jurisdictional and non-jurisdictional wetlands, a Finding of No Practicable Alternative (FONPA) decision from the Air Force would be required in accordance with Executive Order 11990, *Protection of Wetlands*.

The DE would be responsible for supplying all utilities to the MG area. Cultural resources surveys identified five prehistoric archaeological sites within the proposed MG development area with two of those being potentially eligible for inclusion in the National Register of Historic Places (NRHP). However, a Phase II survey was conducted and it was determined that these sites are not eligible for listing. The SHPO concurred with this finding in their May 27, 2005 letter.

Mitigation

In addition to Best Management Practices (BMPs) implemented to reduce potential soil erosion and sedimentation, specific mitigation actions identified include performing construction only during the daylight hours, obtaining storm water permits for run-off during construction, developing a Storm Water Pollution Prevention Plan (SWPPP), obtaining a 404 Wetlands permit from the USACE, obtaining a Lowndes County Land Disturbance Permit, and installation of potable and sewer water systems in the MG. As part of the nationwide permit obtained to disturb 0.31 acres of jurisdictional wetlands, the DE has purchased 1.28 wetland mitigation credits. If additional jurisdictional wetlands would be disturbed, the DE would be required to consult with the USACE for additional wetland mitigation. A Finding of No Practicable Alternative (FONPA) decision from the Air Force would be required. Consultation with the SHPO on the results of the archeological findings for the Magnolia

Grove Housing area is complete. No mitigation efforts are required.

Finding of No Significant Impact/Finding of No Practical Alternative

Based on analyses contained in the EA, the proposed action would not result in significant impacts to the natural or human environment. Issuance of a Finding of No Significant Impact (FONSI) and Finding of No Practicable Alternative (FONPA) is appropriate; an environmental impact statement need not be prepared.

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SECTION 1.0

PURPOSE, NEED, AND SCOPE

1.1 BACKGROUND

The Air Force operates and maintains approximately 104,000 family housing units at its installations throughout the United States. More than 50 percent of the units do not meet current modern standards and requires either major improvement or replacement. Despite this, at most installations the demand for adequate housing on-base exceeds supply. The lack of adequate Military Family Housing (MFH) forces many military members and their families to live in housing in need of repair, renovation, replacement, or to live off-base, where the cost and quality of housing vary considerably. Often, the cost to the military member and their families to live off-base are 15 to 20 percent greater than the cost to live on-base. The Air Force estimates that as much as \$7 billion would be needed to bring its housing up to current standards and to address the deficit of housing with an additional 5,000 new housing units (AFCEE, 2004).

In recognition of these problems, Congress enacted Section 2801 of the 1996 Defense Authorization Act (Public Law 104-106, codified at Title 10 of the *United States Code* [U.S.C.] Sections 2871-2885). Also known as the Military Housing Privatization Initiative (MHPI), this provision of law creates alternative authorities for improvement and construction of military family housing. The legislative intent of Congress in enacting these additional authorities was to enable the military to obtain private sector funding to satisfy Family Housing requirements. By leveraging scarce public funding, the Air Force can obtain private sector funds for construction, maintenance, management, renovation, replacement, rehabilitation, and development of Air Force MFH and ancillary supporting facilities.¹ The Department of Defense has asked the Air Force to upgrade all required, inadequate housing before Fiscal Year (FY) 2007.

On January 23, 2003, Moody AFB released a Request For Proposal for the Privatization of Military Family Housing (MFH) at Moody AFB. This RFP goal is to privatize all existing military family housing at Moody AFB and engage in an agreement with a private entity to supply adequate off-base housing units for military members and their families. The Government would lease land and convey 301 existing housing units on Moody AFB property, built between 1965 and 1972, and other improvements by fee ownership to a Development Entity (DE). The overall goal of this Request for Proposal was to meet the total housing requirement at Moody AFB of 606 units. The DE would:

- Construct a total of 400 additional units within 72 months of award, comprised of 395 new off-base units, 94 replacement units for Quiet Pines Housing Area (QPHA), and construct 10 Senior Officer Quarters and 1 General Officer Quarters in QPHA.
- The 395 off-base units would be within a thirty-minute commute of the main gate of the installation.

The DE awarded this contract was American Eagle Community Development.

¹ According to 10 U.S.C. 2871, the term *ancillary supporting facilities* means “facilities related to military housing units, including child care centers, day care centers, tot lots, community centers, housing offices, dining facilities, unit offices, and other similar facilities for the support of military housing.”

Two previous Environmental Assessments (EAs) for the privatization of MFH have been accomplished and approved by Moody AFB. These documents are:

- *Environmental Assessment for Quiet Pines Housing Area and Southwest Land Gift Property*, Moody AFB, Georgia, February 2001. FONSI signed April 12, 2001.
- *Environmental Assessment for the Privatization of Quiet Pines Housing Area Northeast Parcel and Golf Course Driving Range Property*, Moody AFB, Georgia, February 2002. FONSI signed February 21, 2002.

These two EAs determined that the privatization, demolition and refurbishment of existing housing units, and construction of new housing units in the QPHA would result in no significant impact to the environment. The demolition, refurbishment, and new build of housing units in the QPHA partially satisfies the housing requirements of Moody AFB, however, an additional 395 units would need to be built off-base to satisfy Moody's end housing unit requirement.

1.2 PURPOSE OF AND NEED FOR THE PROPOSED ACTION

Consistent with the MHPI authorities, the purpose of the proposed action is to make available adequate off-base housing for military members and their families at Moody Air Force Base (AFB). The proposed action is needed to provide affordable, quality housing and ancillary facilities to military member and their families through construction of new dwellings by a private entity on private land that meet current Air Force standards. The goals of the MHPI are:

- Ensure that eligible military members and their families have access to quality, attractive, and affordable housing by upgrading inadequate existing family housing and by building new housing to address housing conditions at Moody AFB.
- Improve the appearance and functions of the residential community, while meeting environmental stewardship responsibilities.
- Provide ancillary supporting facilities that enhance Moody AFB's residential community.
- Maintain positive relations with the communities that surround Moody AFB through public meetings and public news media.
- Provide for the effective management and operation of existing, renovated, and new housing units and ancillary supporting facilities on a long-term basis.

The Moody AFB Family Housing Master Plan (Moody AFB, 1999) discloses that privatization of the Quiet Pines Housing Area (QPHA) is a viable option because it meets the criteria for privatization. Magnolia Grove (MG) would meet the same criteria for privatization. The life cycle costs for privatization are less than the costs for continued government ownership, and the QPHA and MG are geographically separate and severable from the rest of the base.

1.3 LOCATION AND MISSION

Moody AFB is located in the south-central Georgia in Lowndes and Lanier Counties approximately 9 miles northeast of Valdosta. Moody AFB is home to the 347th Rescue Wing and is comprised of four

groups: Mission Support, Operations, Medical, and Maintenance. The base is home to one HH-60G rescue squadron, one HC-130P rescue squadron, one pararescue squadron, and two major tenant units. The mission of Moody AFB is to organize, train, and employ combat-ready HH-60 and HC-130P rescue squadrons. The wing executes worldwide peace time and Combat Search and Rescue (CSAR) operations in support of humanitarian and national security interests. Moody AFB is an Air Force Special Operations Command base. Moody AFB hosts and supports the 479th Flying Training Group, the 820th Security Forces Group, Air Education and Training Command, and Air Combat Command. Population impact on the local community is 8,866 military and family members, 2,050 civilian and family members and 15,000 retirees and family members. The installation has 300 Air Force Family Housing (AFH) units located in QPHA on the west side of State Highway 125 (a.k.a. Parker Green Highway) directly across from Moody AFB. Magnolia Grove, a 703-acre parcel of privately owned property, is farmland and undeveloped land directly south and adjacent to Moody AFB. The location of Moody AFB is shown in Figure 1-1.

1.4 SCOPE OF ANALYSIS

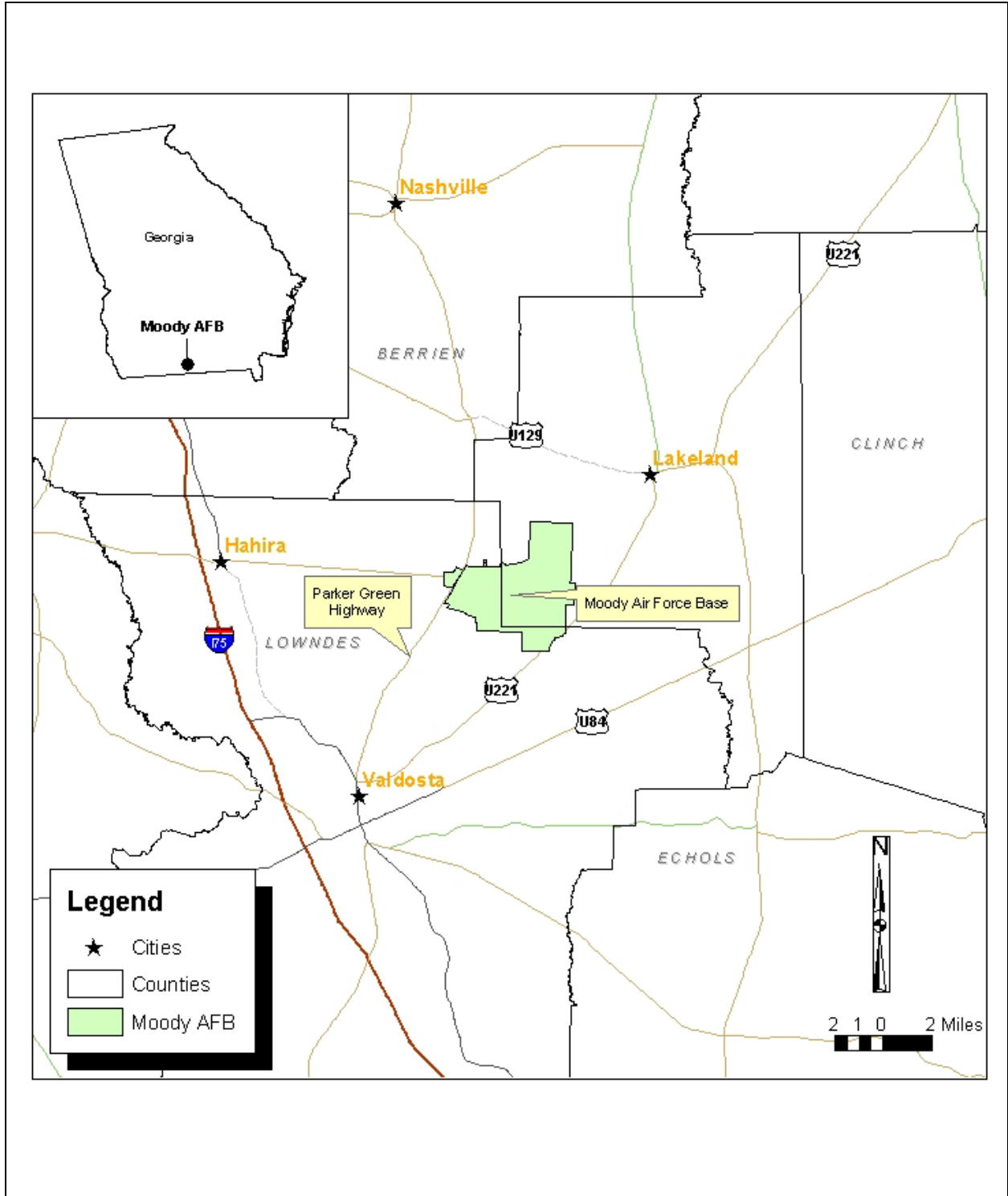
This environmental assessment (EA) has been developed in accordance with the National Environmental Policy Act (NEPA) and implementing regulations issued by the Council on Environmental Quality (Title 40 of the *Code of Federal Regulations* [CFR], Parts 1500 – 1508) and the 32 CFR 989. Its purpose is to consider the environmental effects of proposed actions, evaluate possible alternatives, and disclose these considerations to the public.

The EA identifies, documents, and evaluates the potential impacts on human health and the environment of implementing the construction of single-family dwellings by a private DE on MG. The proposed action involves the construction of up to 395 new housing units by the DE on MG.

Section 2.0 describes the proposed action and alternatives to the proposed action, including a no action alternative, and explains why certain alternatives are not evaluated in detail. Section 3.0 describes existing environmental conditions at MG that could be affected by the proposed action, identifies potential environmental effects that could occur upon implementation of each of the alternatives evaluated, and provides a summary of findings and conclusions.

This EA also evaluates the environmental and socioeconomic effects that would be expected to occur upon implementation of the proposed action within the Region of Influence (ROI). The ROI for this EA is considered to be Lowndes and Lanier Counties. Because of cost, financial, environmental, or other reasons, certain choices, such as alternative housing sites greater than 30 minutes from the base housing densities, housing formats (high-rise vs. low-rise), types of ancillary supporting facilities, and timing of specific Moody AFB actions, were eliminated from further consideration.

An interdisciplinary team of environmental scientists, biologists, ecologists, geologists, planners, economists, engineers, archeologists, historians, lawyers, and military technicians reviewed the proposed action in light of existing conditions and have identified relevant major beneficial and minor adverse effects associated with the action. The document analyzes direct effects (those caused by the proposed action and occurring at the same time and place) and indirect effects (those caused by the proposed action and occurring later in time or farther removed in distance but still reasonably foreseeable). The potential for cumulative effects is also addressed, and mitigation measures are identified where appropriate.



Installation Location Map

Figure 1-1

1.5 PUBLIC INVOLVEMENT

Moody AFB invites public participation in the NEPA process. All agencies, organizations, and members of the public having a potential interest in the proposed action, including minority, low-income, disadvantaged, and Native American groups, are urged to participate in the decision making process.

The Air Force's NEPA guidance provides for public participation in the NEPA process. If the EA concludes that the proposed action would not result in significant environmental effects, Moody AFB may issue a draft Finding of No Significant Impact (FONSI) and Finding of No Practical Alternative (FONPA). Moody AFB would then observe a 30-day period during which time agencies and the public may submit comments on the proposed action, the EA, or the draft FONSI/FONPA. Upon consideration of any comments received from the public or agencies, Moody AFB may approve the FONSI/FONPA and implement the proposed action. If, however, during the development of the EA or public comment period, it is determined that significant effects would be likely, the Air Force would issue a Notice of Intent (NOI) to prepare an Environmental Impact Statement (EIS).

Throughout this process, the public may obtain information on the status and progress of the proposed action and the EA through the Moody AFB Public Affairs Office at (229) 257- 5107 or the Moody AFB Environmental Flight at (229) 257-5881.

1.6 FRAMEWORK FOR ANALYSIS

A decision on whether to proceed with the proposed action rests on numerous factors, such as Moody AFB's mission requirements, schedule, availability of funding, and environmental considerations. In addressing environmental considerations, Moody AFB is guided by several relevant statutes (and implementing regulations) and Executive Orders that establish standards and provide guidance on environmental and natural resources management and planning. These include the National Environmental Policy Act (NEPA), Clean Air Act (CAA), Clean Water Act (CWA), Noise Control Act (NCA), Endangered Species Act (ESA), Farmland Protection Policy Act (FPPA), National Historic Preservation Act (NHPA), Archaeological Resources Protection Act (ARPA), Resource Conservation and Recovery Act (RCRA), Toxic Substances Control Act (TSCA), Executive Order 11988 (*Floodplain Management*), Executive Order 11990 (*Protection of Wetlands*), Executive Order 12088 (*Federal Compliance with Pollution Control Standards*), Executive Order 12898 (*Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*), and Executive Order 13045 (*Protection of Children from Environmental Health Risks and Safety Risks*). Where useful to better understanding, key provisions of these statutes and Executive Orders are described in more detail in the text of the EA.

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SECTION 2.0

PROPOSED ACTION, IMPLEMENTATION AND ALTERNATIVES

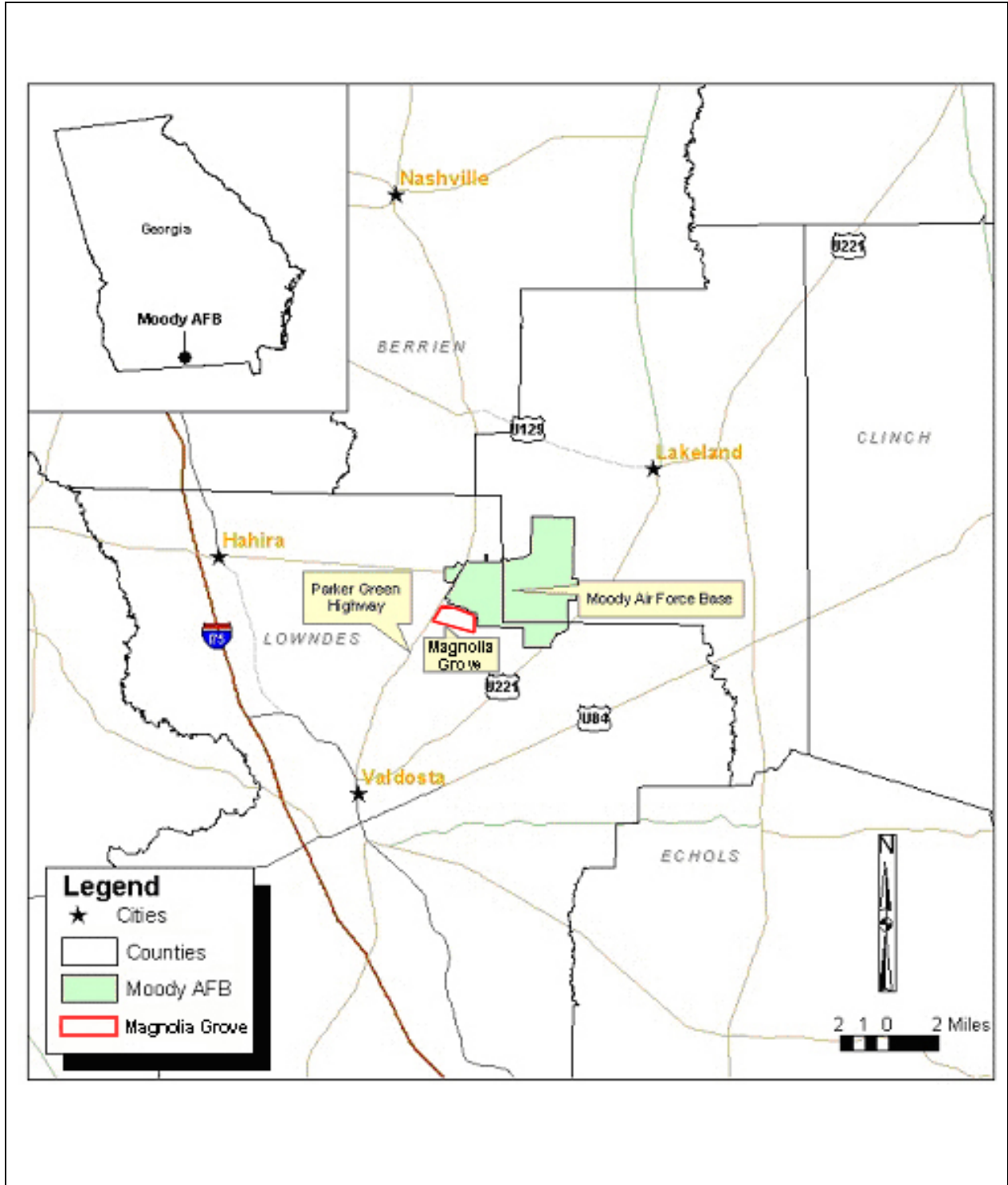
This section presents information on proposed action for construction of up to 395 new housing units on privately owned land adjacent to Moody AFB. Section 2.1 describes the proposed action, and Section 2.2 the implementation of the proposed action, Section 2.3 describes the DE Plan Provisions, and Section 2.4 discusses the alternatives.

2.1 PROPOSED ACTION

Development of the proposed action was an iterative process during which the plans were fine tuned to meet Moody AFB's housing needs for attaining affordable, quality housing and other facilities as well as minimizing or avoiding any potential environmental impacts, especially impacts to wetlands. Moody AFB proposes to accept the offer of a Development Entity (DE) to construct up to 395 units in the western portion of a 703-acre area just south of the base known as Magnolia Grove and make dwellings available to military members. A land lease agreement between the Air Force and the DE would not be required because the MG is private-owned land not government owned.

Implementation of the proposed action would include increasing the military available housing inventory by up to 395 new units to provide an end-state inventory of approximately 606 units, revising the mix of family housing to better meet current military family requirements, and providing landscaping improvements, parks, and playgrounds. Figure 2-1 shows the new housing footprint. The final number of housing units to be built would be in accordance with the closing documents and based upon final approval of the DE plan presented by the private contractor.

The initial development plan would be implemented over a 4 to 5 year period beginning in June 2005.



MHPI Property Location

Figure 2-1

2.2 IMPLEMENTATION OF THE PROPOSED ACTION

The proposed action would include a number of actions to be undertaken by Moody AFB and DE. Under the proposed action, development must respect and respond to the existing natural and built environment in order to minimize impacts and to capitalize on the value of existing conditions. Planning must be consistent with the following environmental principles:

- Housing areas will be designed to respect the existing natural systems of topography, vegetation, and drainage.
- Developed areas will be designed to minimize ground works, aboveground utilities, and drainage.
- Existing landscape will be preserved in all possible situations.
- The landscape will be populated largely with native plant materials.
- A water-management system will be designed to handle both quantity and quality of storm water runoff and comply with the storm water permit and associated SWPPP.
- Community design will reduce dependency on the automobile.
- An open-space network will be used to link larger spaces, corridors, and fragments with a system of pedestrian/bike trails.
- The sense of community will be heightened with improved and linked open spaces, strategically placed tree locations, trails systems, activity areas, and street layouts to enhance the quality of outdoor life.
- Existing built and non-built landscapes will be accessed and integrated with the new.

2.3 DEVELOPMENT ENTITY PLAN PROVISIONS

2.3.1 Development Strategy

In developing the proposed action, Moody AFB and the DE considered several options for implementing the proposed action. Implementation of the proposed action would require that the DE operate and maintain the MG family housing units for a period of 50 years (with an optional 25-year extension), as well as construct, operate, and maintain the ancillary supporting facilities, including associated parking lots and sidewalks. The DE would develop a plan to provide Moody AFB an additional 395 family housing units on MG.

2.3.2 Utilities

The DE would develop a utility program that promotes energy conservation and reduced utility consumption. The DE would be responsible for providing all utilities and associated systems including electricity, gas, potable water, sewer system, storm water and wastewater discharge, and solid waste removal from housing units in the MG. Air Force Environmental Restoration Program (ERP) utilities operating remedial systems on MG must be protected from damage. The ERP utilities will be maintained by the Air Force.

2.3.3 *Implementation Commencement*

Assuming acceptance of the DE Plan by Moody AFB, implementation of the proposed action would begin in June 2005.

2.3.4 *Siting of New Housing*

The following siting criteria have been considered in establishing the footprint for the MHPI family housing.

Proximity to Moody AFB. New family housing and ancillary supporting facilities would be located near Moody AFB. One criteria of the RFP for the privatization action was to develop new housing within 30 minutes of Moody AFB. This close proximity results in fewer miles driven by the military member to and from work compared to living scattered throughout the Valdosta area. It also results in residents being close to existing supporting facilities such as community clubs, the Base Exchange (BX), the commissary, and auto service stations.

Sufficient Size. Lack of adequate acreage for proposed housing could adversely affect an otherwise pleasing atmosphere by creating too high a building density. Allocation of an adequate amount of property would result in a density that strikes an appropriate balance between the residents' desire for space and an appropriate use of land resources.

Physical Features. Any site for family housing must not be located on steep terrain; in areas heavily incised by watercourses; or within any stream buffers, wetland buffers, or floodplains.

Compatible Land Use. The siting of family housing parcels must not result in incompatible land uses (e.g., construction of housing within airfield runway accident potential zones or clear zones, within or near high-noise areas, on contaminated properties, or adjacent to off-base industrial property).

Minimal Loss of Natural, Cultural and Ecological Resources. The siting of family housing should avoid loss of natural, ecological, and cultural resources such as wetlands, listed or sensitive species or their habitat, wildlife species' travel corridors, archeological sites, and structures eligible for the NRHP.

Military Security. Family housing parcels must be located so as not to enable or encourage residents to interfere with military security requirements or to pose a risk of breach of military security.

Operational Safety. Family housing parcels should be located away from operational areas to avoid potential safety risks to residents. Housing parcels should not be located in areas where residents would be required to travel past or through military training areas.

2.4 *ALTERNATIVES CONSIDERED*

Moody AFB has identified four alternatives for its proposed action, including the no action alternative. These alternatives are presented below.

2.4.1 *The Preferred Alternative*

Implementation of the proposed action is Moody AFB's preferred alternative. The DE Plan would involve off-base sites in order to provide quality community housing consistent with MHPI communities: e.g., by the following factors: military family quality of life (QOL), operating expenses, property tax burden, access to neighborhood schools, ability to meet the portfolio bedroom

requirements, facility conditions, site location, and a reasonable commuting distance. This preferred alternative is evaluated in detail in Section 3.0 of this document.

2.4.2 The Private Sector Reliance Alternative

Under this alternative, Moody AFB would rely on the private sector to meet the additional housing needs of personnel assigned to the installation. The alternative is premised, in part, on the view that competitive marketplace forces would lead to the creation of sufficient affordable, quality family housing. Data vary, but in general experience shows that military member and their families living off-base must cover between 15 and 20 percent of their costs out-of-pocket. Additionally, the military members would live a further distance from the base resulting in more miles driven each day to and from work, as well as to and from the supporting facilities such as commissary and BX. Under the Private Sector Reliance Alternative the security of military personnel and families could not be guaranteed. Military personnel response time to the base in case of an emergency would likely be lengthened if the private sector reliance alternative is utilized. Lastly, the recent recommendations of the Base Realignment and Closure Committee (BRAC) will bring over 1,000 new military/civil personnel and their families to Moody. If these BRAC recommendations are approved, there will be a significant impact to an already stressed private sector housing market. For these reasons, this alternative is not desirable and is not further evaluated in this EA.

2.4.3 The Leasing Alternative

Statutory authorities exist for Moody AFB to ensure availability of adequate, affordable housing through use of long-term leases of housing for military family use. Key aspects of the two laws providing these authorities are summarized below.

Long-term leasing of military family housing to be constructed. Family housing obtained through use of this authority, which appears at 10 U.S.C. 2835, is most often referred to as “Section 801 housing.” Under this authority, the Air Force may, through competitive contract procedures, have a developer build or renovate (to residential use) family housing units near an installation. Housing units under this authority must meet DoD specifications. The Air Force may then lease the units for use as family housing for a period of not more than 20 years.

Military housing rental guarantee program. Family housing obtained through use of this authority, which appears at 10 U.S.C. 2836, is most often referred to as “Section 802 housing.” Under this authority, the Air Force may award a competitive contract to a private developer or a state or local housing authority to construct or rehabilitate housing on or near an installation having a shortage of housing for personnel with or without accompanying dependents. Under the contract, the Air Force guarantees the occupancy levels of the housing units, at rental rates comparable to those for similar units in the same general market. Housing units under this authority must comply with DoD specifications or, at the discretion of the Service secretary, local building codes. A rental guarantee agreement may not exceed 25 years in duration; it may be renewed only for housing located on government-owned land. The agreement may provide that utilities, trash collection, snow removal, and entomological services be furnished by the Air Force at no cost to the occupant to the same extent such services are provided to occupants of base housing.

Air Force-wide there has been only limited experience with either of the foregoing authorities. An important drawback of the Section 801 and Section 802 housing programs is related to what is known as budget “scoring,” the method of accounting for federal government obligations as required by the Budget Enforcement Act of 1990. Scoring ensures that all government obligations are accounted for when long-term liability is incurred (during the first year of a project). Scoring guidelines issued by the federal Office of Management and Budget require that a project be fully funded with sufficient

budget authority in its first year to cover the government's long-term commitment. In other words, all potential costs associated with long-term leasing or rental guarantee programs must be recognized in the first year, and they must be considered part of the Air Force's total obligational authority (the total monies appropriated by Congress for use by the Air Force in a given year). For some privatization projects, such as military leased housing, the Air Force's obligations for scoring purposes amount to the net present value of the total rent under the lease. These amounts can be nearly as great as the sums required under traditional military construction financing for Air Force-initiated construction of similar facilities.

The Section 801 housing program and Section 802 rental guarantee program only partially address the purpose of and need for the proposed action. Because of the scoring guidelines, the Air Force would obtain very little or no leverage benefit.

The enactment of new authorities in the MHPI suggests Congress's recognition that the drawbacks of Section 801 and Section 802 outweigh the potential benefits to the Air Force. Although use of the authorities in either Section 801 or Section 802 or both would be possible, their use would not be reasonable when compared with the better flexibility and economic advantages of the new authorities offered by the MHPI to the Air Force and the military member families. Accordingly, the off-base leasing alternative is not further evaluated in this EA.

2.4.4 *The No Action Alternative*

Council on Environmental Quality (CEQ) regulations requires inclusion of the no action alternative. The no action alternative serves as a baseline against which the impacts of the proposed action and alternatives can be evaluated.

Under the no action alternative, Moody AFB would not accept the offer from the DE to construct housing units and make them available for military member occupancy.

SECTION 3.0

AFFECTED ENVIRONMENT AND CONSEQUENCES

The affected environmental baseline and consequences of the proposed action on natural resources and socioeconomics in the QPHA has previously been addressed in the two EAs referenced in Section 1.1. The signed FONSI for each of these EAs disclosed that the privatization of the MFH effects on the parcels QPHA will not result in significant effects on the human environment or socioeconomics. This section will focus on the effects of the construction of single family dwellings in the Magnolia Grove (MG) area, and also discuss cumulative effects from the Moody AFB housing privatization of the Quiet Pines Housing Area (QPHA) and MG proposed areas. As mentioned in the preparer's note in Section 1.0, minor changes in the consequences may occur once the Development Entity (DE) Plan is finalized. Tab A is reserved for the DE Plan.

3.1 LAND USE

3.1.1 Affected Environment

Land use in the vicinity of Moody AFB is primarily rural, residential and agricultural. Most area surrounding the base is classified as open, agricultural, and low-density. Several small areas of commercial development exist along Parker Greene Highway (Figure 1-1). The MG area is designated farmland and undeveloped unimproved lands. The undeveloped and unimproved land on the eastern portion of the MG is designated as delineated jurisdictional wetlands. This area would not to be used or developed under this proposed action but still must be assessed for impacts from implementation of the proposed action and alternatives. The western portion of MG would be developed by the DE as a residential area for construction by the DE of up to 395 new housing units. The western portion of MG contains additional jurisdictional and non-jurisdictional isolated wetlands and is discussed in Sections 3.7.1.3 and 3.7.2.1.

3.1.2 Consequences

3.1.2.1 Proposed Action

No significant effects would be expected other than changing the land use designation. Under the proposed action, the MG would be developed for residential use. The MG area classification would need to be changed from farmland to residential. The redesignation is underway between the DE and Lowndes County. Applicable federal, state and local standards and regulations would be adhered to, and zoning would be coordinated with local authorities. The MG site would be appropriate for building housing units following site preparation, grading, structure fill, foundation and earthwork, and compaction criteria completed in accordance with the subsurface exploration report for MG housing project area (Geosciences-TTL, 2004). The DE would employ the same planning guidelines and codes used for all military residential areas, as well as Lowndes County planning and construction guidelines.

3.1.2.2 No Action Alternative

No impacts would be expected from not implementing the proposed action.

3.2 AESTHETICS AND VISUAL RESOURCES

3.2.1 Affected Environment

The existing western area of the MG planned for development is currently agricultural. This area was recently used for peanut production. The remaining eastern portion of the MG area is swamp and wetland areas and there are no historical, monumental or critical viewsheds. The view is mostly open and aesthetically pleasing with open green fields and trees.

3.2.2 Consequences

3.2.2.1 Proposed Action

Temporary minor insignificant impacts to the aesthetics and visual resources would be expected. There would be temporary minor impacts to the aesthetics quality during construction; however, long-term impacts of this phase of the proposed action would result in positive aesthetic impacts as a result of incorporation of trees, native vegetation, and local architecture design into the new development.

3.2.2.2 No Action Alternative

No impacts would be expected from not implementing the proposed action.

3.3 DEILS AND GEOLOGY

3.3.1 Affected Environment

3.3.1.1 Soils

Moody AFB is situated in the Tifton Upland District of the Lower Coastal Plain formed from deep sedimentary sands and clays. Alluvial soils near streams and tributaries originate from material eroded from the uplands. Predominant soils in the area are associated with the Tifton-Pelham-Fuquay, Dasher or Swamp-Istokpoga, Mascotte-Albany-Pelham, and Leefield-Pelham-Clarendon (Moody AFB, 1996). Moody AFB is underlain by sedimentary rocks of pre-Cretaceous through Quaternary age that consist of limestone, dolostone, clay and sand to depth of 5,000 feet. The east and southeastern portions of MG are Bayboro loam characterized as being deep, very poorly drained soil that ponds during certain portions of the year. This eastern portion of MG is part of the Grand Bay Ecological Area and is designated as jurisdictional wetlands. This portion of MG would not be used for construction of housing units. The western portion (approximately 350 acres) is agricultural with some jurisdictional and isolated non-jurisdictional wetlands and is planned for development.

During June 2004, ESI performed a Phase II Environmental Site Assessment (ESA) of the MG Neighborhood parcel (ESI, July 2004). During this assessment, soil and groundwater samples were taken and analyzed for chemical contamination. Representative soil and groundwater samples were collected from the MG area as designated in the Soil and Groundwater Sample Location Map seen in Tab C. The results of laboratory analyses of soil and groundwater samples from the test areas of MG revealed that the level of contamination for all samples was either below the method detection limits or below the applicable regulatory levels (ESI, July 2004).

3.3.1.2 Prime Farmland

Prime farmland soils are protected under the Farmland Protection Policy Act (FPPA) of 1981. The intent of the act is to minimize the extent to which federal programs contribute to the unnecessary or irreversible conversion of farmland soils to nonagricultural uses. The act also ensures that federal programs are administered in a manner that, to the extent practicable, will be compatible with private, state, and local government programs and policies to protect farmland. The Natural Resources Conservation Service (NRCS) is responsible for overseeing compliance with the FPPA and has developed rules and regulations for implementation of the act (see 7 CFR Part 658; revised January 1, 1998). Approximately 138 acres (92%) of the 150 agricultural acres scheduled for development are comprised of Tifton soils and are considered to be prime farmland by the NRCS.

3.3.1.3 Mineral Resources

No mining or quarrying occurs within or adjacent to the MG property.

3.3.2 Consequences

3.3.2.1 Proposed Action

Soils. Short-term minor adverse effects would be expected. The proposed action would involve earth disturbance of approximately 350 acres. Increased runoff and erosion would likely occur during site construction due to removal of vegetation, exposure of soil, and increased susceptibility to wind and water erosion. However, these effects would be minimized by using appropriate best management practices (BMPs) for controlling runoff, erosion, and sedimentation. Recommended BMPs to reduce soil erosion and sedimentation include silt fences, straw bale dikes, diversion ditches, riprap channels, water bars, and water spreaders. A Lowndes County Land Disturbing Permit would be required from Lowndes County in accordance with Georgia Erosion and Sedimentation Control Act (GESCA).

All housing construction would be conducted in accordance with a Storm Water Permit and a Storm Water Pollution Prevention Plan (SWPPP) prepared in accordance with EPA's National Pollutant Discharge Elimination System (NPDES) regulations and the GESCA (GA DNR, 2003). In accordance with these regulations, the SWPPP will include an erosion control plan and describe the use and implementation of suggested BMPs. Effects on soils would be limited to those areas where new construction is expected. The DE would be responsible for obtaining all NPDES permits and Lowndes County Land Disturbance Permits required on the MG.

Contamination of soils with pesticides or organic chemicals in the proposed development area is below applicable regulatory levels (ESI, July 2004).

Prime Farmland. Long-term minor adverse impacts would be expected on prime farmland. Prime farmland soil types located in the MG western area comprise 92% of the agricultural land proposed for development. Federal agencies are generally required to conduct a Farmland Conversion Impact Rating to determine if impacts to prime farmlands could be minimized through the use of alternative sites or through redesign of proposed developments. However, the acquisition or use of farmland by the Department of Defense for national defense purposes is exempted by Section 1547(b) of the FPPA, 7 USC 4208 (b). The development of the Magnolia Grove area to facilitate secure housing for Moody AFB personnel would qualify as a national defense purpose as identified under the FPPA. Therefore, there are no additional requirements to consider impacts to prime farmlands.

Mineral Resources. No effects would occur. No mineral resources are quarried or mined on the installation or on the properties under consideration.

3.3.2.2 No Action Alternative

No effects on topographic, geologic, soil, prime farmland, or mineral resources would be expected from the proposed action if not implemented.

3.4 AIR QUALITY

3.4.1 Affected Environment

3.4.1.1 Regulatory Framework

Air quality is regulated at the national level through regulations promulgated under the Clean Air Act (CAA) of 1970 and its subsequent amendments. The act directed the U.S. Environmental Protection Agency (EPA) to establish National Ambient Air Quality Standards (NAAQS) for air pollutants that endanger public health and the environment. EPA subsequently adopted air quality standards for six criteria pollutants: ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), inhalable particulate matter (PM-2.5 and PM-10), and lead (Pb) particles (Table 3-1). The CAA requires state or local governments to monitor ambient levels of these pollutants and to develop air quality management plans to ensure compliance with the NAAQS. Areas that violate these standards are designated “nonattainment” areas for the relevant pollutants.

**Table 3-1
National Ambient Air Quality Standards (Primary)**

Pollutant	Standard Value	Standard Type
Carbon Monoxide (CO)		
8-hour average	9 ppm	Primary
1-hour average	35 ppm	Primary
Nitrogen Dioxide (NO ₂)		
Annual arithmetic mean	0.053 ppm	Primary and secondary
Ozone (O ₃)		
1-hour average	0.12 ppm	Primary and secondary
Lead (Pb)		
Quarterly average	1.5 µg/m ³	Primary and secondary
Particulate (PM-2.5)		
Annual arithmetic mean	15 µg/m ³	Primary and secondary
24-hour average	65 µg/m ³	Primary and secondary
Particulate (PM 10)		
Annual arithmetic mean	50 µg/m ³	Primary and secondary
24-hour average	150 µg/m ³	Primary and secondary
Sulfur Dioxide (SO ₂)		
Annual arithmetic mean	0.03 ppm	Primary
24-hour average	0.14 ppm	Primary
3-hour average	0.50 ppm	Secondary

Source: USEPA, 2004

3.4.1.2 Air Emissions

Moody AFB lies in Lowndes and Lanier Counties, which are attainment areas for all NAAQS “criteria” pollutants. Moody AFB is considered a minor source of HAPS and operates under a Synthetic Minor Permit (issued on July 22, 2004), which covers these pollutants. The MG area is not a source of HAPS and does not require an air permit.

3.4.2 Consequences

3.4.2.1 Proposed Action

Short-term intermittent minor adverse effects would be expected within the ROI as a result of construction activities. Heavy construction equipment and trucks would emit minor amounts of NO_x,

PM-10, CO, DE_x, and VOCs. The proposed construction activities are estimated to occur over a 4-5 year period. The calculated emissions from these construction activities are shown in Table 3-2.

Table 3-2
Total Annual Air Emissions From Construction Activities

Pollutant	Total Emissions (tons/yr)
Carbon monoxide (CO)	9.94
Nitrogen oxides (NO _x)	10.95
Particulate Matter (PM-10)	0.87
Sulfur oxides (DE _x)	0.72
Volatile organic compounds (VOCs)	1.71

Source: AECATS II, 2004. EPA-42 Emission Factors used.

Long-term major beneficial effects on air quality would be realized as the military occupants of the new housing units in MG would drive fewer miles to and from work since their new residence would be closer to the base, thereby resulting in an appreciable reduction in pollutant emissions from their automobiles.

Although these construction activities would produce dust and particulate matter, these actions pose no significant impact on air quality. Fugitive dust emissions can easily be controlled and minimized by using standard construction practices such as:

- Periodically wetting the area of construction,
- Covering open equipment used to convey materials likely to create air pollution, and
- Promptly removing spilled or tracked dirt from streets.

No long-term indirect adverse effects would be expected within the ROI from automobile emissions since there would be no increase in personnel assigned to Moody AFB as a result of the proposed action.

Since the construction of housing units are not the action of the Air Force and is in an attainment area, the General Conformity Rule does not apply. The totals emissions of criteria pollutants as a result of the proposed action would not violate any NAAQS or other CAA Title. The proposed activity would not result in any increase of stationary sources. Housing units would be heated using natural gas. The proposed action would not generate significant quantities of HAPs.

3.4.2.2 No Action Alternative

Under the no action alternative there would be no implementation of the proposed action and therefore no additional effects on air quality.

3.5 NOISE

3.5.1 Affected Environment

The Noise Control Act of 1972 (Public Law 92-574) directs federal agencies to comply with applicable federal, state, interstate, and local noise control regulations. Sound quality criteria promulgated by EPA, the U.S. Department of Housing and Urban Development (HUD), and the DoD have identified noise levels to protect public health and welfare with an adequate margin of safety. These levels are considered acceptable guidelines for assessing noise conditions in an environmental setting. Noise levels below 65 decibels (dB) are considered normally acceptable in suitable living environments. A-weighted decibels (dBA) are used to describe the hearing range of humans.

Responses to noise vary, depending on the type and characteristics of the noise, the expected level of noise, the distance between the noise source and the receptor, the receptor's sensitivity, and the time of day. The most conspicuous problems related to noise are hearing loss and hearing impairment due to masking. Other health impacts include stress and exacerbation of mental health problems; high blood pressure and ischemic heart disease; sleep loss, distraction, and loss of productivity; and a general reduction in the quality of life and opportunities for tranquility. Table 3-3 lists the sound level of some familiar sources.

One significant response to noise is annoyance. A person's expectation of a sound level associated with an activity has a direct bearing on the level of annoyance. The annoyance might be personal or experienced as a group. The five factors identified as being indicators for estimating community complaint reaction to noise are type of noise, amount of repetition, type of neighborhood, time of day, and amount of previous exposure.

Table 3-3
Sound Levels of Various Sources

Source	Sound Level (dB)
Near jet plane at takeoff	140
Gun muzzle blast	140
Threshold of pain	120
Loud rock music	115
Car horn	115
Thunder	110
Chainsaw	100
Lawn mower at 50 feet	90
Jack hammer	88
Dozer	85
Backhoe	80
Alarm clock	75
Normal conversation	60
Light traffic	50
Refrigerator	40
Rustle of leaves	20
Normal breathing	10

Sources: USEPA, 1974.

Military Noise Sources. Training flight activities are the primary sources of noise at Moody Air Force Base. These activities include the use of fixed and rotary-wing aircraft. The airfield at Moody AFB is a daily active airfield with several pilot training flights each day. Noise impacts from Moody AFB aircraft have been identified and assessed in previous environmental documents and mapped.

3.5.2 Consequences

3.5.2.1 Proposed Action

Construction Noise. Short-term minor adverse effects would be expected. Implementation of the proposed action would be expected to result in additional sources of noise during construction activities due to the operation of construction equipment and construction activities in general. Noise produced by construction equipment varies considerably depending on the type of equipment used and its operation and maintenance. The noise level at 300 feet from the construction site would be approximately 70 –75 dBA. Construction noise would be intermittent during the day rather than continuous. The receptors closest to the construction activities include persons occupying the existing facilities nearest to the construction sites. The minor adverse effects associated with noise would be confined to daytime hours during the normal workweek, Monday through Friday. Construction activities would be limited to daylight hours to reduce the noise stress and annoyance to the majority of the residents.

Aircraft noise. Long-term minor annoyance effects would be expected from the aircraft operations from Moody AFB. Existing flight paths of the Moody AFB aircraft include the eastern portion of the MG. Although this flight pattern is not directly over the proposed new housing units and occurs primarily during daylight hours, the flight of numerous aircraft would result in minor annoyance to the MG residents. Residents of MG would be briefed prior to their occupancy on the potential noise annoyance from the Moody AFB aircraft. Information in the previous environmental assessments indicates the noise level over the proposed MG development area would be approximately 60-65 dB (day-night average sound level). This range of noise level is within the noise Zone I criteria for compatibility of residential land use. In the eastern portion of the MG not scheduled for housing development, the noise level would be approximately 65-70 dB. No residences would be constructed in the areas subject to LDN greater than 65 dB.

3.5.2.2 No Action Alternative

Under the no action alternative there would be no implementation of the proposed action and therefore no additional effects on noise.

3.6 WATER REDEURCES

3.6.1 Affected Environment

3.6.1.1 Surface, Storm, and Ground Water

Moody AFB and the MG area are situated within the Suwannee River Basin, which discharges to the northeastern Gulf of Mexico. Water flow through Moody AFB is generally south and southeast towards Grand Bay. Water flow from MG is generally to the east and southeast towards Grand Bay. Storm water from the main base is discharged by a series of drainage ditches. Storm water from the

northwest portion of the airfield forms the headwaters of Beatty Creek, which is north of the MFH units within the QPHA (U.S. Air Force, 1996). Installation storm water does not flow into the MG area. Agricultural runoff drains the MG area.

Groundwater in this region occurs in two primary water-bearing zones: a surficial aquifer and the Floridan aquifer system. The surficial aquifer is 13 to 16 feet bgs and quality of water consider good, however, Moody AFB does not draw from this source. The Floridan aquifer is 200 bgs and serves as the major source of water for Moody AFB and the surrounding region. The groundwater movement in the MG area is generally in a south/southeastern direction toward Grand Bay.

During June 2004, ESI performed a Phase II Environmental Site Assessment (ESA) of the MG Neighborhood parcel (ESI, July 2004). During this assessment soil and groundwater samples were taken and analyzed for chemical contamination. Representative soil and groundwater samples were collected from the MG area as designated in the Soil and Groundwater Sample Location Map seen in Tab C. The results of laboratory analyses of soil and groundwater samples from the test areas of MG revealed that the level of contamination for all samples was either below the method detection limits or below the applicable regulatory levels (ESI, July 2004).

3.6.1.2 Floodplains

The MG is not located within the 100-year floodplain as mapped by the Federal Emergency Management Agency (FEMA). The eastern portion of the MG area is located in wetlands and is prone to localized flooding. However, the wetland areas in the western portion are subject to occasional isolated flooding.

3.6.2 Consequences

3.6.2.1 Proposed Action

Surface, Storm, and Ground Water. Short- and long-term minor adverse effects would be expected. In the short term, there would be an increased potential for sediment-laden storm water runoff during construction. However, BMPs and good construction practices would be used to minimize the potential problem. After construction, there would be increased runoff from the new building foundations, roads, and parking areas. This runoff could affect the flow and volume of water in nearby drains and ditches during storm events. Pollutants in the runoff could include hydrocarbons, suspended solids, nutrients, and possibly metals.

All housing construction would be conducted in accordance with a Storm Water Permit and a Storm Water Pollution Prevention Plan (SWPPP), as well as the approved Lowndes County Land Disturbing Permit, dated 2 November 2004. Best management practices specified in the storm water permit and the Lowndes County Land Disturbing permit would reduce erosion and the sedimentation of surface water bodies.

Erosion control techniques proposed for implementation by the DE may include establishing filter strips adjacent to bodies of water; terracing; seeding and mulching; gully healing through filling and shaping; using temporary and permanent structures to stabilize gullies; constructing runoff diversions, berms, and sediment traps/basins; planting cover vegetation; using chemical binders to stabilize reclaimed sites; using natural or man-made fibrous mats, or other stabilizing materials; and restricting or limiting vehicular traffic in specific areas or for specific periods of time.

A groundwater remediation effort is currently ongoing at the Moody AFB Burma Road Landfill (LF-01) ERP site. A portion of the groundwater contamination has migrated onto the MG property, extending approximately 500 feet from the Moody AFB boundary fence. The area of groundwater contamination is in the eastern portion of the MG property and is not part of the proposed MG development. However, groundwater restrictions, in conjunction with the Moody AFB groundwater remediation effort at LF-01, must be implemented to protect human health by minimizing the potential for human exposure to groundwater contamination. The surficial aquifer and an unnamed aquifer are the main water bearing formations in the area, and these formations are currently not used as a potable water sources. However, restrictions must be in place to prevent the groundwater from being used as a potable water source. Soil contamination from the use of pesticides or agricultural organic chemicals in the proposed development area is below applicable regulatory levels (ESI, July 2004).

Floodplains. No effect on floodplains in the area would be expected as a result of the proposed action, however, caution should be taken to ensure elevation of the new housing units are safe from flooding.

3.6.2.2 *No Action Alternative*

No effects on surface water, groundwater, or floodplains would be expected.

3.7 **BIOLOGICAL REDEURCES**

3.7.1 *Affected Environment*

3.7.1.1 *Vegetation*

Vegetation associated with MG is primarily planted crops with scattered trees, scrubs and wetlands. An assessment of the MG proposed project site conducted on 17, 18, and 19 November 2003 resulted in the determination that the site is characterized by 11 land use categories (Moody AFB, 2003). These land areas are defined as Borrow Areas; Upland, Agricultural Row Crops; Upland, Bamboo; Upland, Coniferous Forest; Upland, Disturbed Lands; Upland, Oak Forest; Upland, Temperate Hammock; Wetland, Lacustrine Limnetic Open Water; Wetland, Lacustrine Littoral Emergent; Wetland, Palustrine Forest Broad-Leaf Deciduous; and Wetland, Palustrine Forested Needle-Leaf Evergreen. Wetland land uses were determined using the 1988 U.S. Department of the Interior, Fish and Wildlife Service, National Wetlands Inventory.

Borrow Areas classifies 0.17 acre of historically excavated land that currently comprise open water areas with sharply sloped banks vegetated by water oak (*Quercus nigra*), Chinese tallow (*Sapium sebiferum*), slash pine (*Pinus elliottii*), southern red cedar (*Juniperus virginica*), saltbush (*Baccharis halimifolia*), fetterbush (*Lyonia lucida*), Carolina willow (*Salix caroliniana*), wax myrtle (*Myrica cerifera*), blackberry (*Rubus betulifolius*), southern fox grape (*Vitis rotundifolia*), and greenbrier (*Smilax* sp.).

Upland, Agricultural Row Crops classifies 325.26 acres of the site historically used to cultivate various crops, including peanuts, tobacco, cotton, cucumbers, and melons. This portion of the site appeared to be inactive at the time of the site assessments. This site was used for commercial peanut production in 2004.

Upland, Bamboo classifies 1.02 acres consisting entirely of bamboo (*Bambusa vulgaris*). Upland, Coniferous Forest classifies 64.27 acres defined by slash pine, sycamore (*Platanus occidentalis*), Chinese tallow, water oak, American beautyberry (*Callicarpa americana*), Carolina willow, southern red cedar, wax myrtle, fetterbush, swamp privet (*Forestiera acuminata*), greenbrier, southern fox grape, honeysuckle (*Lonicera* sp.), poison ivy (*Toxicodendron radicans*), Boston fern (*Nephrolepis* sp.), and three to four inches of leaf litter.

Upland, Disturbed Lands classifies 3.15 acres defined by slash pine, water oak, Carolina willow, American beautyberry, saltbush, blackberry, southern fox grape, giant cane (*Arundinaria gigantea*), and broomsedge (*Andropogon* sp.).

Upland, Oak Forest classifies 3.15 acres dominated by water oak, with lesser amounts of slash pine and southern red cedar.

Upland, Temperate Hammock classifies 7.94 acres defined by live oak (*Quercus virginiana*), water oak, red maple (*Acer rubrum*), American beautyberry, greenbrier, southern fox grape, ebony spleenwort (*Asplenium platyneuron*), honeysuckle, cinnamon fern (*Osmunda cinnamomea*), Spanish moss (*Tillandsia usneoides*), and two to three inches of leaf litter.

Wetland, Lacustrine Limnetic Open Water classifies 4.92 acres of surface water, approximately four feet deep. Vegetation, including Carolina willow, wax myrtle, maidencane (*Panicum hemitomon*), and soft rush (*Juncus effusus*) occur along the perimeter of this community.

Wetland, Lacustrine Littoral Emergent classifies 6.29 acres that immediately surround the Wetland, Lacustrine Limnetic Open Water areas. The Wetland, Lacustrine Littoral Emergent areas are vegetated by Chinese tallow, salt bush, and netted chainfern (*Woodwardia areolata*).

Wetland, Palustrine Forest Broad-leaf Deciduous classifies 67.76 acres of water oak, red maple, bald cypress (*Taxodium distichum*), slash pine, blackgum (*Nyssa sylvatica*), fetterbush, greenbrier, and two to three inches of leaf litter.

Wetland, Palustrine Forested Needle-leaf Evergreen classifies 11.03 acres having a perimeter of red bay (*Persea borbonia*), slash pine, saltbush, wax myrtle, and southern fox grape. The interior of this community consists of bald cypress, red maple, black gum, buttonbush (*Cephalanthus occidentalis*), maidencane, netted chainfern, and cinnamon fern.

3.7.1.2 Threatened and Endangered Species and Other Wildlife

The MG property provides potentially suitable habitat for the following wildlife resources listed as protected in Lowndes County: alligator snapping turtle (*Macrolemys temminckii*), eastern indigo snake (*Drymarchon corais couperi*), gopher tortoise (*Gopherus polyphemus*), red-cockaded woodpecker (*Picoides borealis*), southern bald eagle (*Haliaeetus leucocephalus*), and wood stork (*Mycteria americana*). During the 17, 18, and 19 November 2003 assessment and the March 2004 T&E survey of the project site conducted by ESI, several gopher tortoise burrows were observed within the MG project site boundaries, indicating that a population of this species resides within on the subject site. No indications of the presence of any of the other listed species was noted on the project site during the assessment; however, potentially suitable alligator snapping turtle habitat is found on the project site within the Wetland, Lacustrine Limnetic Open Water and Wetland, Palustrine Forested Needle-leaf Evergreen habitats (ESI, April 2004). These water bodies may be too stagnant and acidic for this species, consequently reducing their potential to occur on the site.

Eastern indigo snakes, which historically have been documented as late as 1996 on Moody AFB, potentially may occur throughout all portions of the site, particularly those areas that are inhabited by gopher tortoises. The Upland Coniferous Forest community, could provide potentially suitable foraging habitat for red-cockaded woodpeckers, however, discussions with Georgia Department of Natural Resources indicate that the closest suitable foraging and roosting habitat for this species is at least 30 miles from the site. The Borrow Area; Wetland, Lacustrine Limnetic Open water; Wetland, Lacustrine Littoral Emergent; and Wetland, Palustrine Forested Needle-Leaf Evergreen communities provide potentially suitable foraging habitat for both southern bald eagle and wood stork, and they may use these habitats opportunistically. No nests for either of these species were observed during the assessments.

During the March 2004 T&E survey, neither RCW nesting colonies nor foraging habitat were located. No indigo snakes were sighted on the property. Gopher tortoise shells and burrows were observed during this survey. Communication with the Georgia Department of Natural Resources confirmed the results of the March 2004 survey.

The upland portions of the project site provide a variety of suitable habitat for commonly occurring wildlife species, such as the black racer (*Coluber constrictor*), eastern diamondback rattlesnake (*Crotalus adamanteus*), cattle egret (*Bubulcus ibis*), black vulture (*Coragyps atratus*), turkey vulture (*Cathartes aura*), osprey (*Pandion haliaetus*), red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*B. lineatus*), northern bobwhite (*Colinus virginianus*), blue jay (*Cyanocitta cristata*), Carolina wren (*Thryothorus ludovicianus*), northern mockingbird (*Mimus polyglottus*), mourning dove (*Zenaidura macroura*), summer tanager (*Piranga rubra*), yellow warbler (*Dendroica petechia*), several other species of sparrow and wood warbler, various other common and migratory passerine species, Virginia opossum (*Didelphis virginiana*), eastern cottontail (*Sylvilagus floridanus*), gray fox (*Urocyon cinereoargenteus*), striped skunk (*Mephitis mephitis*), white-tailed deer (*Odocoileus virginianus*), eastern gray squirrel (*Sciurus carolinensis*), and eastern woodrat (*Neotoma floridana*).

The project site wetlands provide suitable habitat for spring peeper (*Hyla crucifer*), southern chorus frog (*Pseudacris nigrita*), eastern newt (*Notophthalmus viridescens*), tiger salamander (*Ambystoma tigrinum*), American alligator (*Alligator mississippiensis*), common box turtle (*Terrapene carolina*), ground skink (*Scincella lateralis*), eastern glass lizard (*Ophisaurus ventralis*), southern water snake (*Nerodia fasciata*), rough earth snake (*Virginia striatula*), great blue heron (*Ardea herodias*), little blue heron (*Egretta caerulea*), yellow-crowned night heron (*Nycticorax violaceus*), green heron (*Butorides striatus*), snowy egret (*Egretta thula*), great egret (*Casmerodius albus*), least bittern (*Ixobrychus exilis*), white ibis (*Eudocimus albus*), ring-necked duck (*Aythya collaris*), wood duck (*Aix sponsa*), mallard (*Anas platyrhynchos*), American widgeon (*Anas americana*), green-winged teal (*Anas crecca*), blue-winged teal (*Anas discors*), and bufflehead (*Bucephala albeola*).

Wildlife species observed during the site assessments include American alligator, black racer, cattle egret, great egret, mallard, red-tailed hawk, wood duck, sandhill cranes, and white-tailed deer.

3.7.1.3 Wetlands

Wetlands occupy approximately 40 percent (290 acres) of MG in the eastern and southern boundaries of the property. There are no plans to use the area that is located in the eastern acres of MG. The proposed acreage of MG for development of housing units is the western 350 acres that is mostly farmland with 22.24 acres of wetlands. These wetlands consist of Lacustrine Limnetic Open Water, Lacustrine Littoral Emergent, and Palustrine Forested Needle-leaf Evergreen. Vegetation associated with these wetlands was identified in Paragraph 3.7.1.1, Vegetation.

3.7.2 Consequences

3.7.2.1 Proposed Action

Vegetation. Short-term minor adverse effects would be expected. The majority of the MG project sites comprises cultivated land without any tree or shrub resources. The remainder of the MG site is forested uplands and wetlands. Existing trees and shrubs within these areas would have to be removed as a result of the proposed action. However, the final development plan for the new housing facility includes landscaping, which will result in the installation of several species of native ornamental trees and shrubs throughout the developed site. Although the project site currently does not comprise federally owned land, the proposed landscaping plan will follow the guidelines of a 26 April 1994 directive, "Environmentally and Economically Beneficial Practices on Federal Landscaped Grounds," mandating that federal policies promote the planting of native species. Because the primary benefit of the existing trees and shrubs are for aesthetics and shading and because they will be replaced with native species designed to provide similar benefits, there will be no significant impacts as a result of implementing this action.

Threatened and Endangered Species and Other Wildlife. No impacts are expected since no T&E species were observed in the project area during recent surveys. Although gopher tortoise shells and inactive burrows were discovered during the T&E survey, no active gopher tortoise burrows were observed (ESI, April 2004). With regards to the red-cockaded woodpecker, discussions with Georgia Department of Natural Resources biologists indicate that the closest suitable foraging and roosting habitat for this species is more than 30 miles from the project site, too far for colonization. Although portions of the site are vegetated by pines that are desirable in age for red-cockaded woodpecker foraging habitat, these trees are limited in number and most likely do not comprise an area great enough for adequate red-cockaded woodpecker foraging habitat. In addition, no red-cockaded woodpeckers or cavities were observed during the assessments. No bald eagle or wood stork nesting sites were identified on the MG area, and none are known in the general vicinity. Any use of the property by these species would likely be transient foraging. If these species were to establish nesting sites, consultations would be undertaken with the U.S. Fish and Wildlife Service to determine whether protective measures would be employed.

No active gopher tortoise burrows were identified during the field surveys; therefore, there should not be any impacts to gopher tortoises as a result of implementation of the proposed action. If gopher tortoises are discovered during construction, measures will be taken to prevent damage to burrows. Indigo snakes are not likely to occur on the western portion of the MG area proposed for development because of the absence of suitable wintering dens (e.g. gopher tortoise burrows) and suitable vegetated foraging sites. Although indigo snakes have been historically reported from the Grand Bay Range portion of Moody AFB, installation-wide surveys conducted in 2002 failed to identify any indigo snakes. The closest verified sighting of indigo snakes on Moody AFB is about 5 miles northeast of the proposed MG development area on Grand Bay Range. Alligator snapping turtles may potentially occur in several open-water habitats on the site; however, these areas are not proposed for impact and would not be affected by the proposed action. Consequently, this species should not be affected by the proposed development.

Wetlands. The proposed action does not involve disturbances to the jurisdictional wetlands located in the eastern portion of the MG area. However, the proposed acreage for development of MG family dwellings in the western 300 acres contains 22.24 acres of jurisdictional wetlands and a single isolated non-jurisdictional wetland. A nationwide permit has been obtained from the U.S. Army Corps of Engineers (USACE) for the proposed impact to 0.31 acres of jurisdictional wetlands as a

stream crossing. As part of this permit, the DE has purchased 1.28 wetland mitigation credits from an approved mitigation bank. A copy of the correspondence with the USACE is located at Tab B. The single isolated non-jurisdictional wetland will be filled and developed as part of the proposed action. However, the fill of this wetland is not considered significant because of the lack of surrounding vegetation and loss of ecological integrity.

In accordance with Executive Order 11990, a Finding of No Practicable Alternative (FONPA) will be prepared for approval by the AFSOC Civil Engineer.

3.7.2.2 No Action Alternative

No impacts on vegetation, wildlife, threatened and endangered species, natural fauna, or wetlands would be expected

3.8 CULTURAL REDEURCES

3.8.1 Affected Environment

A records search was conducted at the Georgia Archaeological Site File in Athens, Georgia, in October 2004 to determine if any archeological sites were previously known from the property. This records search did not identify any known archeological or historical sites on the proposed development area. Several sites were identified within the boundaries of Moody AFB; however, the closest significant site is located approximately 10,000 feet northeast of the MG property.

A Phase I Archeological Survey of the proposed project area was accomplished during 2004-2005. Surveys conducted in the fall of 2004 included a systematic walkover of the previously disturbed agricultural fields on a 10-12 meter grid, and systematic shovel tests at 30-meter intervals. Follow-up surveys conducted in the winter of 2005 included a systematic walkover of areas not covered during the fall surveys. Additionally, systematic shovel testing was conducted at 30 and 90-meter intervals, with delineation shovel tests at 10-meter intervals. As a result of the survey, five archaeological sites (9LW87-9LW91) were recorded and ten isolated finds were documented. Recovered artifacts, including points, flakes, steatite, and prehistoric ceramic sherds, indicated that the property was occupied during the Early and Middle Archaic and again during a more recent, yet unspecified prehistoric period, as identified by the recovery of plain sand tempered sherds.

Based on the Phase I surveys, two of the archeological sites were considered potentially eligible for listing on the National Register of Historic Places (NRHP). Upon recommendation of the State Historic Preservation Office (SHPO), a Phase II survey was conducted to determine the significance of these two sites and to determine if they are eligible for listing. A single dilapidated agricultural structure was also identified during the cultural resources survey, but was determined to be without architectural merit and is not considered historic or significant. Copies of the archeological surveys are located in Tab B.

3.8.2 Consequences

3.8.2.1 Proposed Action

A Phase II survey was conducted to determine the significance of the two sites considered potentially eligible for listing on the NRHP. This survey indicated that the two sites were not eligible for listing. The results of this survey are being coordinated with the SHPO to ensure compliance with Section

106 of the National Historic Preservation Act. The DE will comply with all provisions of the SHPO consultation, including mitigation and educational efforts.

Should other archeological resources be discovered during construction, construction activities in these areas would cease immediately and consultation between the Air Force, the DE, and the SHPO would be initiated.

3.8.2.2 No Action Alternative

No effects on cultural resources would be expected.

3.9 DECIOECONOMICS

3.9.1 Affected Environment

Moody AFB contributes approximately \$153 million annually to the area economy. Included in this contribution are expenditures for payroll, off-base housing, construction and service contracts, direct medical expenses, contributions to local charities, tuition assistance, and estimated contractor payrolls associated with new construction at Moody AFB.

Government and government enterprises, services, retail trade, farming, and manufacturing are the primary sources of employment in the ROI. The population of Valdosta is approximately 43,000. Moody has a population of 3,600 active duty personnel, 5,229 military family members, and 450 civilians. The population of Valdosta increases by 10 percent each decade.

Moody presently has 303 family housing units available for military family members. Moody Housing Office has a long waiting list for availability of on base housing. The majority of military families live off base in the surrounding communities and commute to Moody AFB.

3.9.2 Consequences

3.9.2.1 Proposed Action

Short-term minor adverse and long-term major beneficial effects would be expected. With the availability of more on-base housing, family members may vacate their local community rentals and move onto base quarters. This would result in an increase of available apartments in the local communities. However, with the rapid growth of the Valdosta area and the availability of higher education, the rental community would not suffer the effects for a long period. There would be long-term beneficial effects for the military families, as they would occupy housing attractive to the military families.

The outskirts of Moody AFB and the Parker Greene Highway are continually experiencing additional new business enterprise growth. The new MG housing area development would enhance the local business community.

Moody AFB has coordinated the MG with the Lowndes County school system and the school officials feel any impact from the proposed action would be negligible.

3.9.2.2 No Action Alternative

Under the no action alternative there would be no implementation of the proposed action and therefore no additional effects on socioeconomics.

3.10 TRANSPORTATION

Transportation in and around the MG is achieved via road networks, rail routes, and air systems. Pedestrian walks, bike paths, and trails are also used to a limited extent for travel within the housing and cantonment area. This section describes the proposed area's transportation resources, their relative use, and their importance to the surrounding communities.

3.10.1 Affected Environment

The evaluation of the existing roadway segments focuses on capacity, which reflects the ability of the network to serve the traffic demand and volume. The capacity of a roadway depends mainly on the street width, number of lanes, intersection control, and other physical factors. Depending on the project and the database available, traffic volumes typically are reported as the daily number of vehicular movements (e.g., travel by passenger vehicles and trucks) in both directions on a segment of roadway, averaged over a full calendar year (average annual daily traffic, or AADT) or as the number of vehicular movements on a road segment during the peak hour. Both values are useful indicators in determining the extent to which the roadway segment is used and in assessing the potential for congestion and other problems.

3.10.1.1 Regional Roads

The MG is served by State Highway 125 that is a four-lane highway. This highway has a Level of Service (LOS) A and B rating indicating that the traffic moves freely and average speeds are maintained.

3.10.1.2 On-Base Roads

Moody has an extensive network of on-base roads for daily commuter travel and to move equipment. Roads on base are in good shape and receive the necessary maintenance when required. Military officials have indicated that LOS is high during all hours of the day.

3.10.2 Consequences

3.10.2.1 Proposed Action

Short-term minor adverse and long-term minor beneficial effects on traffic would be expected. Construction of new roads would be required in undeveloped areas where new housing would be built. During the construction phase, traffic congestion could occur, particularly during rush hours as vehicles enter and exit the base or transport construction and demolition debris from the project sites to the landfill. Such effects could be minimized by limiting construction vehicle access to one entry and exit into the MG area gate, placing construction staging areas in locations that would minimize construction vehicle traffic, and minimizing construction vehicle movement during rush hours on the installation. In addition, road cuts to accommodate utility construction and installation would be expected and could create additional short-term traffic delays. Long-term beneficial effects on traffic would be expected through implementation of a well-executed DE Plan. Construction of housing in previously undeveloped areas should be designed to reduce nonresidential vehicle traffic in housing

areas, incorporate traffic calming measures in the vicinity of housing and schools, and create a more pedestrian-friendly environment. Impacts to on-base roads would be expected. Stone Road would be widened to accommodate the increased traffic flow. A separate EA with FONSI/FONPA has been prepared for this action. This EA is available for review in the Moody AFB Environmental Office.

Long-term major beneficial effects on transportation would also be expected. Military airmen and family members living in the new MG housing area would have less distance to travel than if they lived in surrounding communities. Additionally, a goal of the MHPI program is to create more pedestrian-friendly communities by incorporating recreation, retail, and administrative facilities within walking distance of the neighborhoods where residents are least likely to have access to personal vehicles. No effects would be expected on public transportation.

3.10.2.2 No Action Alternative

No effects would be expected if the proposed action is not implemented.

3.11 UTILITIES

3.11.1 Affected Environment

3.11.1.1 Potable and Waste Water

Moody AFB operates a nanofiltration drinking water plant that obtains its water from the Floridan Aquifer. The treated drinking water is distributed to base personnel and base housing residents. Moody AFB has its own sewer system and water treatment plant for wastewater.

The MG Area proposed for development is currently agricultural, and there are no potable water wells or wastewater systems on the site.

3.11.1.2 Electricity

Colquitt Electric Membership Corporation supplies Moody AFB substations with electric power. Electricity is distributed throughout the base and housing areas from the substations. Colquitt EMC has established an overhead primary electrical service to the MG property. The DE would be responsible for supplying electricity for the new housing units in MG.

3.11.1.3 Natural Gas

Moody AFB purchases natural gas and transport delivery through SCANA. The DE is currently negotiating with Atlanta Light and Gas to provide natural gas to the MG property. The DE would be responsible for supplying natural gas for the new housing units in MG.

3.11.2 Consequences

3.11.2.1 Proposed Action

Potable and Waste Water. There would be minimal impacts from the installation of potable drinking water and waste water distribution lines to the proposed areas of new construction on the MG property. The DE has successfully negotiated with Lowndes County to bring water and sewer lines to the MG. The Lowndes County drinking water distribution lines will be connected to the MG distribution line during the construction process.

The Lowndes County wastewater lines do not currently run to the MG area. A county project is underway to run wastewater lines from the Val-Del Road to Davidson Road (adjacent to the MG property), a distance of about 10 miles. This line will not be available for use for approximately two years. In the meantime, the wastewater from the MG property will be routed to the Moody AFB wastewater system via a 200-300 foot county wastewater line to be installed along the western right-of-way of Bemiss Road. This action would run a 12 inch gravity fed sewer line from the county termination point to sewer manhole located in front of Building 1219 on Moody AFB; this facility connects to a separate gravity fed line from the old RAPCON facility to existing Moody AFB wastewater lines. The Moody AFB Wastewater plant has the capacity to handle the projected waste from the MG area until the line is diverted to the county system in less than two years.

The action to install this county wastewater line along the Bemiss Road right-of-way and the drinking water and wastewater distribution lines in the MG area would have short-term minimal effects during the construction phase.

The construction of new housing equipped with water-efficient control devices such as low-flow showerheads, faucets, and toilets, would also decrease the demand on available water.

Energy. No effects would be expected. Installing energy-efficient interior and exterior lighting fixtures and interior appliances in new housing units would likely reduce the overall energy demand. In addition, metering utilities in each unit and establishing a predetermined cost cap would likely encourage conservation practices among housing occupants. New utility lines would be installed underground.

3.11.2.2 No Action Alternative

No effects would be expected.

3.12 HAZARDOUS AND TOXIC SUBSTANCES

3.12.1 Affected Environment

Specific environmental statutes and regulations govern hazardous material and hazardous waste management activities at Moody AFB and the MG area. For the purpose of this analysis, the terms *hazardous waste*, *hazardous materials*, and *toxic substances* include those substances defined as hazardous by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the Resource Conservation and Recovery Act (RCRA), or the Toxic Substances Control Act (TSCA). In general, they include substances that, because of their quantity, concentration, or physical, chemical, or toxic characteristics, might present substantial danger to public health or welfare or the environment when released into the environment. Household quantities of hazardous materials are exempt from RCRA.

To identify areas where possible storage, release, or disposal of hazardous substances or petroleum products or their derivatives has occurred, the DE prepared an Environmental Baseline Survey (EBS) of the proposed MG development area. The EBS also identified any existing non-CERCLA-related environmental or safety issues (e.g., ACM and LBP) that would limit or preclude use of the property for the proposed action. A summary of the findings in the EBS is included in the following sections (Moody AFB, 2003).

3.12.1.1 Hazardous Materials Management

Moody AFB maintains a Facility Response Plan (Moody AFB 1999b) and a Spill Prevention, Control, and Countermeasures Plan [(SPCCP) (Moody AFB, 1999c)], prepared in accordance with Air Force Manual 32-4013, Hazardous Materials emergency Planning and Response Guide. These plans comply with Air Force Instruction (AFI) 32-4002, Hazardous Materials emergency and Response Planning Program; US EPA requirements for SPCCPs; Emergency Planning and Community Right-to Know (EPCRA); and Occupational Safety and Health Administration (OSHA) requirements.

Hazardous materials (other than small quantities of household and maintenance hazardous materials) would not be stored in the MG area. Minimal quantities of household hazardous materials (paints, cleaners, thinners) would be expected to be stored and utilized by the housing residents. Small quantities of maintenance hazardous materials would be expected to be stored in a nearby housing maintenance trailer or sheds to service each housing area. Hazardous materials used in construction and renovation by the contractors are supplied by the contractor and would be removed immediately upon completion of the project.

All hazardous materials used must be accompanied by a material safety data sheet (MSDS) that details the hazards associated with each specific substance. Contractors working on base must comply with the Moody AFB HMMP and obtain approval for all hazardous materials brought on base. Material containing polychlorinated biphenyls (PCBs), asbestos, and lead are not allowed to be used or introduced on military installations. The DE would be responsible for compliance with all Federal, state, and local regulations and guidelines for hazardous materials storage and usage.

3.12.1.2 Hazardous Waste Management

No hazardous waste will be generated in the military housing areas on MG. The DE would be responsible for compliance with all Federal, state, and local regulation and guidelines for hazardous waste handling, storage, transportation, and disposal. During this EBS site visit small amounts of chemicals, containers, and drums were discovered on the MG property. Photos are shown in Tab C. These materials are currently the responsibility of the property owner.

3.12.1.3 Storage Tanks

There are no known underground storage tanks located on the MG. A 250-gallon aboveground storage tank (AST) containing petroleum product is in use in Area A of the MG. There is evidence of petroleum product leakage within a broad area of soil surrounding the tank. There is no evidence of secondary containment (see photos in Tab C). Two other ASTs were observed that are empty with no evidence of prior leakage. In the east-central area of MG near one of the irrigation ponds, stained soil was observed with strong odor of petroleum product. The DE would be responsible for compliance with all Federal, state, and local regulation and guidelines for USTs and ASTs on MG.

3.12.1.4 Environmental Restoration Program

The December 2003 Environmental Baseline Survey and Phase I Environmental Site Assessment Report (Moody AFB, 2003) describes the condition of the MG property. Two former ERP sites (LF-32 and LF-03) to the north and west of the MG property within the boundary of Moody AFB have been assessed and determined not to have migrated onto the MG. The Moody AFB Burma Road Landfill (LF-01) in the northeast corner of the MG, southwest of Moody AFB's Mission Lake, has

been determined to have contaminated some portions of the MG property. A groundwater remediation effort is currently ongoing at the Moody AFB Burma Road Landfill (LF-01) ERP site. A portion of the groundwater contamination has migrated onto off-base property, and extends approximately 500 feet from the Moody AFB boundary fence. Moody AFB has a Right-of-Entry agreement with the current property owners for the purpose of conducting remediation activities; this Right-of-Entry will transfer with the property once the DE assumes ownership. Groundwater restrictions, in conjunction with the Moody AFB groundwater remediation effort at LF-01, must be implemented to protect human health by minimizing the potential for human exposure to groundwater contamination. The surficial aquifer and an unnamed aquifer are the main water bearing formations in the area, and these formations are currently not used as a potable water sources. However, restrictions must remain in place to prevent the groundwater from being used as a potable water source.

3.12.1.5 Asbestos

Asbestos management is regulated by EPA and the Occupational Safety and Health Administration (OSHA). Asbestos fiber emissions into ambient air are regulated in accordance with Section 112 of the Clean Air Act, which established the National Emissions Standards for Hazardous Air Pollutants (NESHAPs). The NESHAP regulations address the demolition or renovation of buildings with ACM. TSCA and the Asbestos Hazard Emergency Response Act (AHERA) provide the regulatory basis for handling ACM in kindergarten through 12th grade school buildings. AHERA and OSHA regulations cover worker protection for employees who work around or remediate ACM.

Renovation or demolition of buildings with ACM and new construction with building materials containing ACM has the potential for releasing asbestos fibers into the air. Asbestos fibers could be released, due to disturbance or damage, from various building materials, such as pipe and boiler insulation, acoustical ceilings, sprayed-on fireproofing, and other material used for soundproofing or insulation.

Two primary categories describe ACM. Friable ACM is defined as any material containing more than 1 percent asbestos as determined using polarized light microscopy, the method specified in Appendix A, Subpart F, 40 CFR Part 763, Section 1 that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. Nonfriable ACM includes those materials that contain more than 1 percent asbestos but do not meet the rest of the criteria for friable ACM.

There are no structures presently on the MG area proposed for construction of new housing units, therefore no plans for demolition of houses and no issues of ACM exist. Additionally, all building materials used in the MG area will be ACM-free.

3.12.1.6 Pesticides

The Phase II Environmental Site Assessment Report (ESI, July 2004) revealed no soil or groundwater contaminated with pesticides or organic chemicals on MG property at a level requiring remediation or action.

3.12.1.7 Polychlorinated Biphenyls

Commercial PCBs are industrial compounds produced by chlorination of biphenyls. PCBs persist in the environment, accumulate in organisms, and concentrate in the food chain. PCBs are used in

electrical equipment, primarily in capacitors and transformers, because they are electrically nonconductive and stable at high temperatures.

The disposal of these compounds is regulated under the federal TSCA, which banned the manufacture and distribution of PCBs with the exception of PCBs used in enclosed systems. By federal definition, a "PCB transformer" contains 500 parts per million (ppm) PCBs or more, whereas a "PCB-contaminated" transformer contains PCB concentrations greater than 50 ppm but less than 500 ppm. EPA, under TSCA, regulates the removal and disposal of all sources of PCBs containing 50 ppm or more; the regulations are more stringent for PCB transformers than for PCB-contaminated equipment. Three transformers exist on MG and should be analyzed to determine if they contain PCBs and disposed of accordingly by the DE. These transformers are currently the responsibility of the property owner and will become the responsibility of the DE.

3.12.1.8 Radon

Radon is a naturally occurring, colorless, and odorless radioactive gas that is produced by the decay of naturally occurring uranium. Radon is found in high concentrations in rocks containing uranium, granite, shale, phosphate, and pitchblende. Atmospheric radon is diluted to insignificant concentrations. Radon that is present in soil, however, can enter a building through small spaces and openings, accumulating in enclosed areas such as basements. The cancer risk caused by exposure, through the inhalation of radon, is currently a topic of concern.

No federal or state standards regulate radon exposure at present. EPA has made testing recommendations for both residential structures and schools. For residential structures, using a 2- to 7-day charcoal canister test, a level between 4 and 20 picocuries per liter (pCi/L) should lead to additional screening within a few years. For levels of 20 to 200 pCi/L, additional confirmation sampling should be performed within a few months. If radon exceeds 200 pCi/L, the structure should be evacuated immediately.

An initial radon screening was conducted on Moody AFB in 1988. All sampling revealed results less than 1.4 pCi/l. No known health problems have been recorded at Moody AFB. Since there are no existing structures on MG, there are no radon concerns.

3.12.1.9 Lead-Based Paint

The Department of Housing and Urban Development (HUD) regulates LBP in public housing. OSHA regulates the protection of workers involved with LBP removal operations. LBP can also be a disposal concern if, because of the lead content, the paint chips or flakes are characterized as a hazardous waste by failing the toxicity characteristic leachate procedure analysis for lead. The DE would be required to use paints free of lead, chromium, and mercury.

3.12.2 Consequences

3.12.2.1 Proposed Action

Short-term minor adverse effects would be expected from the limited amounts of hazardous material used during construction. Solvents, greases, adhesives, paints, and asphalts might be used during the construction of new housing units. However, the construction contractor would be required to comply with all applicable environmental rules, regulations, and plans to ensure that hazardous materials are authorized for use and that the disposal of any waste generated is in accordance with all

rules and regulations. All hazardous material use, storage, and disposal would be in accordance with the applicable federal and local regulations.

There would be no impact due to ACM, lead-based paint, or radon since there are no structures on MG. As previously discussed in soils and groundwater sections, there is no actionable contamination of resources with pesticides. The remaining transformers on MG should be checked for PCBs and if positive removed in accordance with regulations.

Long-term minor adverse effects would be expected from increased use of common household hazardous materials such as paints and cleaners. However, these household items are exempt from RCRA regulations and disposed of through reuse and recycling channels.

Existing ASTs and petroleum stained soils should be excavated prior to construction worker exposure. During land clearing and construction of housing units on MG, care must be taken to avoid exposure to workers to hazardous materials. Any discolored soil, containers, or drums discovered during construction should be treated as potentially hazardous.

3.12.2.2 No Action Alternative

Under the no action alternative no effects on the amount of hazardous materials and hazardous waste would be expected.

3.13 SOLID WASTE AND RECYCLING

3.13.1 Affected Environment

Moody AFB has an active recycling program with emphasis on source segregation. One category of high importance is the recycling of Construction Debris (CD). The DE would be responsible for the disposal of any CD during the lifetime of housing construction and maintenance. The solid waste generated by MG housing units would be disposed by a DE contractor and transported to a municipal landfill. MG housing occupants would participate in a recycling program by segregating their waste for recyclable materials and reducing the waste going to landfills.

3.13.2 Consequences

3.13.2.1 Proposed Action

Long-term minor adverse effects and short-term minor adverse effects would be expected. Debris from the construction of family housing units would increase over a 5-year period relative to the solid waste generated. The DE would be required to develop a Solid Waste Management Plan detailing how they will handle construction debris and other solid waste. Long-term minor effects would be expected from the solid waste generated in the MG by 395 additional families.

3.13.2.2 No Action Alternative

Under the no action alternative there would be no implementation of the proposed action and therefore no additional effects on solid waste.

3.14 ENVIRONMENTAL JUSTICE

3.14.1 Definition of Resource

EO 12989 (Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, February 1994) requires a federal agency to “make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high human health or environmental effects of its programs, policies, and activities on minority populations and low income populations.” A memorandum from President Clinton concerning EO 12898 stated that federal agencies should collect and analyze information concerning a project’s effects on minorities or low-income groups, when required by NEPA. If such investigations find that minority or low-income groups experience a disproportionate adverse effect, then avoidance or mitigation measures are to be taken. A minority population can be defined by race, by ethnicity, or by a combination of the two classifications. According to the CEQ (1997), a minority population can be described as being composed of the following population groups: American Indian or Alaskan Native, Asian or Pacific Islander, Black, not of Hispanic origin, or Hispanic, and exceeding 50 percent of the population in an area or the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population.

The U.S. Census Bureau (USCB) defines ethnicity as either being of Hispanic origin or not being of Hispanic origin. Hispanic origin is defined as “a person of Cuban, Mexican, Puerto Rican, South or Central America, or other Spanish culture or origin regardless of race” (USCB 2001). Each year the USCB defines the national poverty thresholds, which are measured in terms of household income dependent upon the number of persons within the household. Individuals falling below the poverty threshold (\$12,674 for a household of four in 1990) are considered low-income individuals. USCB census tracts where at least 20 percent of the residents are considered poor are known as *poverty areas* (USCB 1995). When the percentage of residents considered poor is greater than 40 percent, the census tract becomes an *extreme poverty area*.

3.14.2 Region of Influence

The ROI for the proposed action is limited to the area surrounding Moody AFB, including Lanier and Lowndes Counties, Georgia.

3.14.3 Affected Environment

Neither Lanier or Lowndes Counties are considered areas of concentrated minority population and none of the locales would be considered a poverty area (Tables 3.14-1, 3.14-2).

	<i>Moody AFB ROI</i>			
	<i>Lanier County</i>		<i>Lowndes County</i>	
	Number of People	% of Population	Number of People	% of Population
White, Non-Hispanic	5100	70.4	55901	60.7
African American, Black	1837	25.4	31681	34.4

American Indian, Alaska Native	8.0	1.1	287	0.3
Asian	6	0.1	852	0.9
All other races, combination of races	218	3.0	3394	3.7
Hispanic	186	2.6	2567	2.8
Total Minority Population	2141	29.6	36214	39.3
Total Population	7241	100.0	92115	100.0

Table 3.14-2 Income Levels for Households and Per Capita Income for the Moody AFB ROI for 2000

	<i>Lanier County</i>	<i>Lowndes County</i>
Median Household Income	\$29,171	\$32,132
Per Capita Income	\$13,690	\$14,460

3.14.4 Consequences

An impact from the proposed action would be considered significant if it disproportionately affected a poverty or minority area. Implementing a proposed action or alternative could affect minority and low income populations if these populations felt adverse impacts disproportionately to the rest of the population.

3.14.4.1 Proposed Action

Since the ROI associated with the proposed project area does not include any poverty or minority areas, there will be no effects on environmental justice.

3.14.4.2 No Action Alternative

Under the no action alternative there would be no implementation of the proposed action and therefore no effects on environmental justice.

3.15 CUMULATIVE EFFECTS SUMMARY

The Council on Environmental Quality (CEQ) implementing guidelines for NEPA require that the direct, indirect, and the cumulative effects of an action be evaluated and published. Cumulative effects (impacts) are the incremental impacts of an action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions. In other words, an environmental assessment must determine if non-significant direct effects caused by implementation of the proposed action or any of the alternatives would become significant if considered in concert with other actions occurring within the area of interest, defined both

geographically and temporally. Actions overlapping with or in close proximity to the proposed action would be expected to have more potential for an incremental impact than those more geographically separated. Similarly, actions that coincide, even partially, in time would tend to offer a higher potential for cumulative effects.

To identify cumulative effects, the analysis needs to address two fundamental questions:

1. Does a relationship exist such that affected resource areas of the proposed action or alternatives might interact with the affected resource areas of past, present, or reasonably foreseeable actions?

2. If such a relationship exists, then does an assessment reveal any potentially significant impacts not identified when the proposed action is considered alone?

The scope of the cumulative effects analysis involves both the geographic extent of the effects and the time frame in which the effects could be expected to occur, as well as a description of what resources could potentially be cumulatively affected. Of all the issues and concerns presented and analyzed in this document, the only two resources with the potential to be affected cumulatively were determined to be wetlands and waters of the U.S. and noise quality.

When addressing cumulative impacts to wetlands and waters of the U.S., the geographic extent for the cumulative effects analysis is the watershed in which the proposed action and alternatives have the potential to impact, primarily concentrating on past, present, and reasonably foreseeable actions on and within Moody AFB and the Grand Bay-Banks Lake ecosystem.

When addressing cumulative impacts to noise quality, the geographic extent for the cumulative effects analysis is the ROI in which the proposed action and alternatives have the potential to impact, primarily concentrating on past, present, and reasonably foreseeable actions near the southwestern boundary of Moody AFB.

The time frame for cumulative effects analysis center on the timing of the proposed action and would continue into the foreseeable future; additionally, actions with the potential to impact wetlands and waters of the U.S. that were implemented within the past four years were included for analysis.

Reasonably Foreseeable Actions Relevant to the Proposed Action

Commercial Property Construction. Over the past five years, several commercial property sites have been developed in the Grand Bay-Banks Lake ecosystem, especially along the Bemiss Road corridor. Recent developments include fast-food restaurants, gas stations, and strip-malls. It is anticipated that commercial property development will continue along this corridor south of Moody AFB over the next several years.

- *Continued Management of Public Conservation Lands.* Two public conservation areas, the Grand Bay WMA (managed by the Georgia DNR) and the Banks Lake NWR (managed by the USFWS), are located within the Grand Bay-Banks Lake ecosystem immediately adjacent to Moody AFB. Wildlife conservation activities designed to promote the continued existence of native wildlife species will likely continue to be conducted on these areas in the future.
- *Stone Road Widening Project, Moody AFB.* Moody AFB proposes to conduct a road-widening project for Stone Road, also known as Crash Trail 1, which is adjacent to the southwest boundary

of the installation. Stone Road is anticipated to become the main thoroughfare for military personnel to access the installation from the Magnolia Grove development. Under this proposal, Stone Road would be widened from its current pavement width of 20 feet to 24 feet to improve traffic flow and safety from the new housing area to the main installation roads. Additionally, Stone Road would be modified to provide a paved shoulder and a sidewalk for pedestrian safety. This project is likely to be completed within one to two years.

Cumulative Effects Analysis

None of the identified past, present, or reasonably foreseeable actions have been determined to cause significant effects to wetlands or waters of the U.S. The replacement and relocation of water control structures on Banks Lake NWR and Grand Bay WMA resulted in small fills of wetlands, totaling less than one acre. Similarly, the Stone Road Widening Project will result in the fill of 0.03 acres of wetlands to accommodate widening the road to facilitate crossing a stream. However, the long range benefits of the projects, including improvements in the quantity and quality of wetland ecosystems with the Grand Bay-Banks Lake ecosystem, far outweigh the loss of less than one disjunct acre of wetlands. If the Proposed Action evaluated in this EA was to be implemented, the additional loss of up to 0.31 acres of regulated jurisdictional wetlands and 3.6 acres of non-regulated non-jurisdictional wetlands would not likely result in significant cumulative effects, especially since this loss will be mitigated by the purchase of 1.28 acres of wetland credits from an approved wetland mitigation bank.

Construction, both private and commercial, would likely be restricted to upland areas near major roads. There would be no net loss to jurisdictional regulated wetlands or waters of the U.S. The direct impacts to 0.31 acres of regulated wetlands would be offset by the purchase of 1.28 acres of wetland credits. A single isolated non-regulated wetland consisting of 3.6 acres would be directly impacted as a result of this action, but the impact is not deemed significant. The greatest potential for effect as a result of construction activities would be increased erosion and sedimentation filling adjacent wetlands, and eutrophication related to increased septic inputs into the ecosystem. The Grand Bay Council, comprised of representatives from the USFWS, Georgia DNR, Moody AFB, The Nature Conservancy, and private landowners, are aware of the potential for wetland degradation as a result of unregulated construction in the area. This council is currently working with county and regional planners to ensure that environmental concerns are considered when property is proposed for development. Under the proposed action, potential erosion and sedimentation deposition in wetlands would be controlled through the implementation of BMPs. Therefore, there should not be any significant cumulative effects when the proposed action or the evaluated alternatives are considered in relation with private or commercial construction.

None of the identified past, present, or reasonably foreseeable actions have been determined to cause significant effects to noise quality in the ROI. Noise impacts identified with these actions are typically related to construction activities, and are temporary in nature. None of these actions serve as a permanent noise source that might lead to annoyance by residents within the housing areas, both Magnolia Grove and Quiet Pines. Therefore, there should not be any significant cumulative effects when the proposed action or the evaluated alternatives are considered in relation with private or commercial construction.

If the proposed action was to be implemented, the DE would have to obtain coverage under the State of Georgia General Permit No. GAR100003, *Authorization to Discharge Under the National Pollutant Discharge Elimination System: Storm Water Discharges Associated with Construction Activity for Common Developments*. A Notice of Intent to discharge storm water under this permit and the applicable fee must be forwarded to the Georgia Department of Natural Resources (GDNR)

and the Lowndes County Engineering Department prior to implementation of either action. The provisions of the permit, including required water monitoring and maintenance and monitoring of erosion and sedimentation control best management practices, must be followed until the disturbed soil receives permanent stabilization. Following completion of the project, a Notice of Termination must be filed with the GDNR.

If the proposed action was to be implemented, a Lowndes County Land Disturbing Permit would have to be obtained. A permit application, including an Erosion and Sedimentation Control Plan, would have to be forwarded to the Lowndes County Engineering Department along with any applicable permit fees prior to ground-breaking activities.

If the proposed action was to be implemented, the Regulatory Branch of the U.S. Army Corps of Engineers would have to be consulted to determine if additional coverage under nationwide permits or an individual permit under the Clean Water Act would be required for construction in areas within or near jurisdictional wetlands.

If either proposed action was to be implemented, a Finding of No Practicable Alternative would have to be approved by HQ, AFSOC, prior to any disturbances in wetlands, whether they were classified as jurisdictional or isolated.

In accordance with Section 106 of the National Historic Preservation Act, the State Historic Preservation Office has been consulted in the event the proposed action was to be implemented. The consultation process, including implementation of mitigation efforts, would be completed prior to the implementation of any ground disturbance that would have an impact to cultural resources known to be present on site.

3.16 SUMMARY OF FINDINGS

The evaluation of the proposed action, identified as Moody AFB's preferred alternative, indicates that the physical and socioeconomic environments at Moody AFB and within the ROI, would not be significantly affected singularly or through any combination of direct, indirect, or cumulative effects of the proposed action. A summary of these effects are discussed below.

There would be a change in land use in the MG areas from farmland to residential.

Short-term minor adverse effects would be expected to soils, vegetation, wildlife, transportation, solid waste, surface water, storm water, groundwater, and hazardous waste. Effects to soils would be minimized by employing BMPs during construction. Native vegetation would be planted in the new housing complexes to help restore the species lost during construction. Wildlife would mostly relocate to a nearby suitable habitat. Short-term minor adverse effects would be expected to surface water, storm water and groundwater. These effects would be minimized by employing BMPs during construction, compliance with Georgia Erosion and Sedimentation Control Act, and development of a SWPPP. Restrictions must be in place to prevent the groundwater from being used as a potable water source due to the potential migration of contamination onto MG from LF-01 and LF-03. Short-term intermittent minor adverse effects would be expected to air quality and noise level annoyance during construction phases at the MG.

Long-term minor adverse effects to solid waste generation would be expected from the 395 housing units. These effects would be minimized by the DE developing a housing recycling program. Long-term minor effects to noise annoyance due to near by aircraft flights would be expected. However,

these flights are only conducted during the daylight hours and the residents are briefed prior to their occupancy. Long-term minor adverse effects to wetlands would be realized through the loss of up to 0.31 acres of regulated jurisdictional wetlands and 3.6 acres of non-regulated non-jurisdictional wetlands. However, the loss of these wetlands would be mitigated by the purchase of 1.28 acres of wetland credits from an approved wetland mitigation bank and are not considered significant.

Long-term major beneficial effects would be realized on air quality as the military occupants of the new proposed housing units would drive less miles to and from work each day.

Although no gopher tortoises were observed during the 2004 survey, construction workers need to be aware of the possibility that they could exist. If gopher tortoises are discovered during construction, all effort made to protect the species and the Moody Natural Resources manager must be contacted. Although no eastern indigo snakes were observed on the project site during the recent assessments, this species historically has been documented to occur on Moody AFB. Alligator snapping turtles may potentially occur in several open-water habitats on the site; however, these areas are not proposed for impact and would not be affected by the proposed action. Consequently, this species should not be affected by the proposed development. Cultural resources surveys identified two prehistoric archaeological sites within the proposed MG development area that were deemed ineligible for inclusion in the National Register of Historic Places (NRHP). Consultation with the SHPO is currently underway to comply with the provisions of Section 106 of the NHPA. The DE will enact any mitigation efforts required by the SHPO in regards to these two sites.

SECTION 4.0

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SECTION 6.0
PERSONS AND AGENCIES CONTACTED

In accordance with NEPA and 32 CFR 989, *The Environmental Impact Analysis Process*, the following organizations were afforded the opportunity to review and comment on an earlier draft of this document along with the general public:

- City of Valdosta
- Lowndes County Board of Commissioners
- Georgia State Historic Preservation Office
- Georgia State Clearinghouse
- Georgia Department of Natural Resources, Fitzgerald Region
- Georgia Forestry Commission, Waycross District, Firewise Community Coordinator
- U.S. Army Corps of Engineers
- Air Force Center for Environmental Excellence, San Antonio, Texas
- Dr. Brad Bergstrom, Valdosta State University
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ACRONYMS and ABBREVIATIONS

AAFES	Army and Air Force Extension Service
ACM	asbestos containing materials
ADNL	A-weighted day night limit
AFB	Air Force Base
AFCEE	Air Force Center for Environmental Excellence
AST	aboveground storage tank
BAH	Basic Allowance for Housing
Bgs	below ground surface
BMP	best management practice
CD	construction and demolition
CAA	Clean Air Act
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CFR	Code of Federal Regulations
CO	carbon monoxide
CRM	Cultural Resources Manager
CSAR	Combat Search and Rescue
CWA	Clean Water Act
dB	decibels
DE	Development Entity
DoD	Department of Defense
EA	Environmental Assessment
EBS	Environmental Baseline Survey
EPA	Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-To-Know Act
ESA	Endangered Species Act
FPPM	Farmland Protection Policy Act
FONSI	Finding of No Significant Impact
FOSL	Finding of Suitability to Lease
FOST	Finding of Suitability to Transfer
FPPA	Farmland Protection Policy Act
FY	Fiscal year
GESCA	Georgia Erosion and Sedimentation Control Act
HAP	hazardous air pollutant
HMCC	Hazardous Material Control Center
HMMP	Hazardous Material Management Plan
HSMS	Hazardous Substance Management System
HUD	Housing and Urban Development
ICRMP	Integrated Cultural Management Plan
IPM	Integrated Pest Management
LBP	lead-based paint
L _{dn}	day- night sound level
LOS	Level of Service
MFH	Military Family Housing
MG	Magnolia Groves
MHPI	Military Housing Privatization Initiative
MOA	Memorandum of Agreement
NAAQS	National Ambient Air Quality Standards

NAGPRA	Native American Graves Protection and Repatriation Act
NCA	Noise Control Act
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
MSDS	Material Safety Data Sheet
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO ₂	Nitrogen Dioxide
NRHP	National Register of Historic Places
O ₃	ozone
OSHA	Occupational Safety and Health Administration
pCi/L	Picocurie per liter
Pb	Lead
PM-10	inhalable particulate matter
ppm	parts per million
QOL	Quality of Life
QPHA	Quiet Pines Housing Area
RCRA	Recovery
ROI	region of influence
SHPO	State Historic Preservation Officer
SO ₂	Sulfur Dioxide
SPCC	Spill Prevention Contingency Countermeasure
SWPPP	Storm Water Pollution Prevention Plan
TSCA	Toxic Substances Control Act
USC	United States Code
USFWS	United States Fish and Wildlife Service
UST	underground storage tank
VSI	visual site inspection

**GEORGIA STATE CLEARINGHOUSE MEMORANDUM
EXECUTIVE ORDER 12372 REVIEW PROCESS**

TO: Gregory Lee
Dept. of the Air Force
347 CES/CEV
3485 Georgia Street
Moody AFB, GA 31699-1707

FROM: Georgia State Clearinghouse

DATE: 4/19/2005

SUBJECT: Executive Order 12372 Review

APPLICANT: Dept. of the Air Force - Moody AFB, GA

PROJECT: Final Draft EA/FONSI: Privatization and Construction of Single Family
Housing in Magnolia Grove, Lowndes Co., GA

CFDA #:

STATE ID: GA050419006

FEDERAL ID:

Correspondence related to the above project was received by the Georgia State Clearinghouse on 4/19/2005. The review has been initiated and every effort is being made to ensure prompt action. The proposal will be reviewed for its consistency with goals, policies, plans, objectives, programs, environmental impact, criteria for Developments of Regional Impact (DRI) or inconsistencies with federal executive orders, acts and/or rules and regulations, and if applicable, with budgetary restraints.

The initial review process should be completed by 5/18/2005 (*approximately*). If the Clearinghouse has not contacted you by that date, please call (404) 656-3855, and we will check into the delay. We appreciate your cooperation on this matter.

In future correspondence regarding this project, please include the State Application Identifier number shown above. If you have any questions regarding this project, please contact us at the above number.

Form SC-1
April 2003

Georgia Department of Natural Resources

Historic Preservation Division

Noel Holcomb, Commissioner

W. Ray Luce, Division Director and Deputy State Historic Preservation Officer
47 Trinity Avenue, S.W., Suite 414-H, Atlanta, Georgia 30334
Telephone (404) 656-2840 Fax (404) 657-1040 <http://www.gashpo.org>

May 27, 2005

Commander
Department of the Air Force
347th Civil Engineer Squadrom (ACC)
3485 Georgia St.
Moody Air Force Base, GA 31699-1707
Attn: Cultural Resources Manager

**RE: Moody AFB: Privatized Housing, Magnolia Grove Tract, Valdosta
Lowndes County, Georgia
HP-050502-002**

Dear Commander:

The Historic Preservation Division (HPD) has received information concerning the proposed privatized housing on the Magnolia Grove Tract adjacent to Moody AFB, Lowndes County, Georgia. Our comments are offered to assist the Department of the Air Force in complying with the provisions of Section 106 of the National Historic Preservation Act. Please note that this replaces our letter dated May 20, 2005.

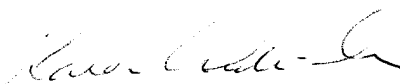
Based on the information in the archaeological survey report entitled "An Intensive Archaeological Assessment of the Magnolia Grove Tract, Lowndes County, Georgia" prepared by Environmental Services, Inc., we concur that archaeological sites 9LW87-9LW91 should be considered not eligible for inclusion in the National Register of Historic Places (NRHP). Therefore, we concur that the project will have no effect to archaeological sites. However, during project construction, if archaeological materials are discovered that were not investigated during the survey, we would recommend that work should cease until these could be evaluated.

Regarding structures, it is our understanding that there are no buildings fifty years of age or older located in the project's area of potential effect. Therefore, we agree with a finding of No Historic Properties Affected for the project as proposed.

This letter evidences compliance with Section 106. Therefore, no further steps are required regarding this undertaking. It is important to remember that any future changes to this project, as it is currently proposed, may require additional steps for Section 106 compliance. HPD encourages federal agencies and project applicants to discuss such changes with our office to ensure that potential effects to historic resources are adequately considered in project planning.

If we may be of further assistance, please contact Betsy Shirk, Environmental Review Coordinator, at 404-651-6624.

Sincerely,



Karen Anderson-Córdova
Manager
Planning and Local Assistance Unit

KAC/ECS

cc: Greg Hendryx, Environmental Services, Inc.