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STAFF SUMMARY SHEET

TO	ACTION	SIGNATURE (Surname), GRADE AND DATE	TO	ACTION	SIGNATURE (Surname), GRADE AND DATE
1 MSG/CC	Coord	<i>[Signature]</i> Col 8 Nov 04	6 AFSOC/CEV	Coord	<i>[Signature]</i> Col 8 Nov 04
2 RQW/CCEA	Log in	<i>[Signature]</i>	7 AFSOC/CE	Coord	<i>[Signature]</i> Col 10 Jan 05
3 RQW/CCE	Review	<i>[Signature]</i> 9 Nov 04	8 AFSOC/PA	Coord	<i>[Signature]</i> Maj. May, 6 Jan 05
4 RQW/CC	Coord	<i>[Signature]</i> 11/7	9 AFSOC/DS	Coord	<i>[Signature]</i> 1/12 11/28
5 RQW/CCEA	Log out		10 AFSOC/CV	Sign	<i>[Signature]</i> 14 Oct 04

SURNAME OF ACTION OFFICER AND GRADE

SYMBOL

PHONE

TYPIST'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 Stone Road Widening Environmental Assessment, Moody AFB, GA

18 Oct 04

SUMMARY

1. PURPOSE: Acquire AFSOC/CV signature on attached FONSI/FONPA (Tab 1) and Environmental Assessment (EA) document which finalizes the environmental impact analysis for the Stone Road Widening Project. This project will facilitate increased vehicular traffic associated with the base housing privatization project.

2. 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 widening of Stone Road at Moody AFB. The subject EA resulted in a FONSI/FONPA relative to the desired action.

3. 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 0.0321 acres of wetlands would be impacted by the proposed action, but that there is no other practicable alternative.

4. In accordance with 32 CFR 989 and HQ USAF/IL memorandum, 8 Mar 01 (Tab 3), AFSOC/CV is authorized to approve the final FONSI and FONPA.

5. RECOMMENDATION: AFSOC/CV sign the attached FONSI/FONPA at Tab 1 where indicated.



DAVID L. CARLON, Lt Col, USAF
Commander

Tabs

1. FONSI/FONPA
2. Environmental Assessment (EA)
3. HQ USAF/IL Memorandum, 8 Mar 01

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11/28/04
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STONE ROAD WIDENING PROJECT
MOODY AIR FORCE BASE, GEORGIA
FINDING OF NO SIGNIFICANT IMPACT and
FINDING OF NO PRACTICABLE ALTERNATIVE

1.0 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

1.1 Proposed Action

Moody Air Force Base (AFB) proposes to conduct a road-widening project for Stone Road, also known as Crash Trail 1. Following the construction of additional military housing on private property south of the installation, Stone Road will become the main thoroughfare for military personnel to access the installation from the housing area. Currently, Stone Road consists of two lanes of traffic comprising 20 feet of pavement width, and measuring 28 feet wide from ditch to ditch. Based on an analysis of predicted traffic increases associated with the housing area, the current pavement width of Stone Road will be insufficient to safely handle the increased traffic flow. Additionally, there are no paved shoulders or sidewalks adjacent to the road, which creates a safety hazard and which affords no protection to the road pavement from crumbling or undercutting. Therefore, Stone Road must 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.

Under the proposed action, Stone Road would be widened from a 28-foot overall corridor width to a 70-foot overall corridor width. Each lane would be widened by an additional two foot of pavement, increasing the overall pavement width from 20 feet to 24 feet. Additionally, one foot of ribbon curbing and a five-foot paved shoulder would be added on each side of the road. The remaining 34 feet of corridor space would contain a single sidewalk, drainage ditches, and all other disturbances associated with the widening of the road and with the construction of utilities associated with the new housing area (e.g. wastewater, drinking water, electrical). Stone Road would be equally widened from its intersection with Burma Road to the point where the base boundary restricts widening to the west; from that point to the proposed entrance to the new housing area adjacent to the current archery range, all road widening activities will take place on the east and north side of the road. The proposed route will deviate from the existing pavement location at the curve located adjacent to the base boundary. At this point, the road will enter the forested area in an effort to reduce the severity of the curve.

1.2 Alternatives

The six alternatives to the proposed action are: 1) widening Stone Road pavement from 20 feet to 24 feet but without the addition of a sidewalk; 2) widening Stone Road from its current two-lane configuration to four lanes without the addition of sidewalk; 3) widening Stone Road from its current two-lane configuration to four lanes with the

addition of a sidewalk; 4) widening Stone Road from the proposed entrance to the new housing area to the east where it joins Burma Road near Mission Lake; 5) creating a new north-south road from the proposed entrance to the new housing area to Burma Road; and, 6) the no action alternative.

1.3 Alternatives Eliminated from Further Evaluation

Two alternatives were eliminated from further consideration because the area of potential effect would be identical to alternatives that were being evaluated in the environmental assessment. The only difference between these and the other analyzed alternatives was the absence of a sidewalk. To analyze these alternatives would be redundant.

Alternative 4 involved widening Stone Road from the proposed entrance of the new housing area east to the intersection with Burma Road near Mission Lake. This alternative was deemed impracticable because the Base Recovery After Attack (BRAAT) strip would have to be destroyed and because this portion of Stone Road traverses a heavily used recreational area and ephemeral stream. The impacts of widening this portion of Stone Road would result in significant negative impacts on recreational use of Mission Lake and would require modification of the stream channel to facilitate the new road width. For these reasons, this alternative was dropped from consideration and was not evaluated further in the environmental assessment.

Alternative 5 involved the construction of a new road with a north-south orientation leading from the new housing area to Burma Road. This road would be constructed to ensure it met the traffic requirements related to the new housing area, including adequate lane width, ribbon curbing, paved shoulders, and sidewalks. This alternative was deemed impracticable because of the presence of two environmental restoration program (ERP) sites along the proposed route and because the proposed routing would result in significant disturbances to wetlands and waters of the U.S. in areas that have not been previously affected by installation activities. In order to build the road through this area, significant amounts of fill would have to be added to the site. For these reasons, this alternative was dropped from consideration and was not evaluated further in the environmental assessment.

There were no practicable alternatives, evaluated or not, that would not result in impacts to wetlands and waters of the U.S.

2.0 SUMMARY OF ENVIRONMENTAL IMPACTS

Temporary increases in air emissions would occur, and a limited corridor of native vegetation, including about 200 merchantable pine trees, would be removed. The widening of Stone Road would require the relocation of the archery range and the paintball range. Six environmental restoration program groundwater monitoring wells would have to be abandoned and relocated at a cost of about \$36,000. Additionally, implementation of the proposed action would result in impacts to 1,400 square feet (.0321 acres) of wetlands and waters of the U.S.

implementation of the proposed action would result in impacts to 1,400 square feet (.0321 acres) of wetlands and waters of the U.S.

None of these effects were considered significant. Therefore, there would not be any significant impacts to the environment as a result of implementation of the proposed action or any of the evaluated alternatives. Also, there were no significant cumulative effects noted that would occur as a result of implementation of the proposed action or any of the evaluated alternatives.

3.0 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, "Stone Road Widening" 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 is warranted, and an environmental impact statement is not required. Pursuant to Executive Order (EO) 11988 and 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.



JOHN H. FOLKERTS
Major General, USAF
Vice Commander



Date

STONE ROAD WIDENING PROJECT
ENVIRONMENTAL ASSESSMENT

1.0 PURPOSE OF AND NEED FOR THE PROPOSED ACTION

1.1 Background, Purpose, and Need for the Proposed Action

Moody Air Force Base (AFB) proposes to conduct a road-widening project for Stone Road, also known as Crash Trail 1. Following the construction of additional military housing on private property south of the installation, Stone Road will become the main thoroughfare for military personnel to access the installation from the housing area. Currently, Stone Road consists of two lanes of traffic comprising 20 feet of pavement width, and measuring 28 feet wide from ditch to ditch. Based on an analysis of predicted traffic increases associated with the housing area, the current pavement width of Stone Road will be insufficient to safely handle the increased traffic flow. Additionally, there are no paved shoulders or sidewalks adjacent to the road, which creates a safety hazard and which affords no protection to the road pavement from crumbling or undercutting. Therefore, Stone Road must 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.

1.2 Location of Proposed Action

Moody Air Force Base is located in south-central Georgia about 10 miles northeast of Valdosta. The proposed project area, Stone Road, is located in the southwestern corner of the installation adjacent to the installation's southern boundary. Refer to Figures 1 and 2 for the general location of Moody AFB and the project location.

1.3 Scope of the Environmental Review

Issues which could potentially be impacted by the proposed action include:

- Air Resources
- Cultural Resources
- Environmental Restoration Program (ERP) Sites
- Outdoor Recreation
- Real Property
- Soil Resources
- Vegetation Resources
- Wetlands and Waters of the U.S.
- Wildlife Resources

1.4 Applicable Regulatory Requirements

Based on the scope of the environmental review, it has been determined that the following laws and regulations apply to the proposed action and are considered in this environmental document:

- 32 Code of Federal Regulations 989, *The Environmental Impact Analysis Process*
- Air Force Instruction 32-7064, *Integrated Natural Resources Management*
- Clean Air Act
- Clean Water Act
- Executive Order 11988, *Floodplain Management*
- Executive Order 11990, *Protection of Wetlands*
- Farmland Protection Policy Act, 7 USC 4201 et seq
- Georgia Erosion and Sedimentation Control Act
- National Environmental Policy Act
- National Historic Preservation Act
- Resource Conservation and Recovery Act
- Sikes Act

2.0 DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

2.1 Minimum Selection Criteria

The Air Force considered several alternatives to the Proposed Action. In the initial screening of these alternatives, the Air Force took into consideration minimum selection criteria. Only those alternatives that met these criteria were considered suitable for detailed analysis. The selection criteria were conformance to existing laws, Air Force Special Operations Command, Department of the Air Force, and Department of Defense policy and regulations, compatibility with the Base Master Plan and the Moody AFB military mission, and satisfactorily meeting the needed requirements (e.g., able to sufficiently handle traffic flow patterns associated with the new housing area).

2.2 Detailed Description of the Proposed Action

Under this alternative, Stone Road would maintain its current two-lane configuration, but would be widened from a 28-foot overall corridor width to a 70-foot overall corridor width. Each lane would be widened by an additional two foot of pavement, increasing the overall pavement width from 20 feet to 24 feet. Additionally, one foot of ribbon curbing and a five-foot paved shoulder would be added on each side of the road. The remaining 34 feet of corridor space would contain a single sidewalk, drainage ditches, and all other disturbances associated with the widening of the road and with the construction of utilities associated with the new housing area (e.g. wastewater, drinking water, electrical). Under this proposal, Stone Road would be equally widened from its intersection with Burma Road to the point where the base boundary restricts widening to the west (Figure 3); from that point to the proposed entrance to the new housing area adjacent to the current archery range, all road widening activities will take place on the east and north side of the road. The proposed route will deviate from the existing pavement location at the curve located adjacent to the base boundary. At this point, the road will enter the forested area in an effort to reduce the severity of the curve. The environmental effects of this alternative will be further analyzed in this document.

2.3 Alternatives

The six alternatives to the proposed action are: 1) widening Stone Road pavement from 20 feet to 24 feet but without the addition of a sidewalk; 2) widening Stone Road from its current two-lane configuration to four lanes without the addition of sidewalk; 3) widening Stone Road from its current two-lane configuration to four lanes with the addition of a sidewalk; 4) widening Stone Road from the proposed entrance to the new housing area to the east where it joins Burma Road near Mission Lake; 5) creating a new north-south road from the proposed entrance to the new housing area to Burma Road; and, 6) the no action alternative.

2.3.1 Alternative 1

Under this alternative, Stone Road would be widened from its current 20 feet of pavement width to 24 feet as described under the detailed description of the proposed

action in 2.2 above. However, this alternative would include only the addition of ribbon curbing and paved should and would not include the addition of a sidewalk. Because the environmental effects of this action would be similar to those described under the proposed action, this alternative will not be further analyzed in this document.

2.3.2 Alternative 2

Under this alternative, Stone Road would be widened from its current two-lane configuration with a 28-foot width to an four-lane configuration with paved shoulders and sidewalks. The overall corridor width of the four-lane configuration will be about 80 feet. The road would consist of 48 feet of pavement with one foot of ribbon curb on each side of the pavement and with a five-foot shoulder on each side. The remaining 32 feet of corridor space would contain a single pedestrian sidewalk, the drainage ditches, and all other disturbances associated with the widening of the road and with the construction of utilities associated with the new housing area (e.g. wastewater, drinking water, electrical). Under this proposal, Stone Road would be equally widened from its intersection with Burma Road to the point where the base boundary restricts widening to the west (Figure 3); from that point to the proposed entrance to the new housing area adjacent to the current archery range, all road widening activities will take place on the east and north side of the road. The environmental effects of this alternative will be analyzed in this document.

2.3.3 Alternative 3

Under this alternative, Stone Road would be widened from a two-lane configuration to a four-lane configuration and would be identical to Alternative 2 in terms of pavement width, ribbon curb, shoulder width, and overall corridor width. The only difference between the two proposals is that this alternative would not include the construction of a pedestrian sidewalk. Because the environmental effects of this action would be similar to those under Alternative 2, this alternative will not be further analyzed in this document.

2.3.4 Alternative 4

Under this alternative, Stone Road would maintain its current two-lane configuration, but would be widened from a 28-foot overall corridor width to a 70-foot overall corridor width from the proposed entrance of the new housing area east to where Stone Road intersects with Burma Road (Figure 4). Each lane would be widened by an additional two foot of pavement, increasing the overall pavement width from 20 feet to 24 feet. Additionally, one foot of ribbon curbing and a five-foot paved shoulder would be added on each side of the road. The remaining 34 feet of corridor space would contain a single sidewalk, drainage ditches, and all other disturbances associated with the widening of the road and with the construction of utilities associated with the new housing area (e.g. wastewater, drinking water, electrical).

Based upon the minimum selection criteria outlined in 2.1 above, this alternative was deemed infeasible. In order to widen Stone Road to the east, the Base Recovery After

Attack (BRAAT) strip would have to be destroyed. This site is an essential training area for the Civil Engineering Squadron and an essential part of the military mission. An environmental assessment was prepared for the construction of the BRAAT strip in 1999 which determined that this was the best possible location for the BRAAT strip. It would be very difficult to relocate this essential training area if this alternative was selected for implementation.

Additionally, this portion of Stone Road traverses a heavily used recreational area and crosses an ephemeral stream. The impacts of widening this portion of Stone Road would result in significant negative impacts on recreational use of Mission Lake and would require modification of the stream channel to facilitate the new road width.

For these reasons, this alternative was dropped from consideration and will not be evaluated further under this environmental assessment.

2.3.5 Alternative 5

Under this alternative, Stone Road would not be widened. Instead, a new road with a north-south orientation would be constructed that would lead from the new housing area to Burma Road (Figure 5). This road would be constructed to ensure it met the traffic requirements related to the new housing area, including adequate lane width, ribbon curbing, paved shoulders, and sidewalks.

However, based upon the minimum selection criteria outlined in 2.1 above, this alternative was deemed infeasible. There are two ERP sites located north of the new housing area. While there is limited soil contamination in the area, these old landfill sites are not suitable for the construction of a road because it would be difficult to obtain the required soil compaction for the road base in areas with shallow landfill trenches filled with refuse. Additionally, this proposed routing would result in disturbances to wetlands and waters of the U.S. in areas that have not been previously affected by installation activities. In order to build the road through this area, significant amounts of fill would have to be added to the site.

For these reasons, this alternative was dropped from consideration and will not be evaluated further under this environmental assessment.

2.3.6 No Action Alternative

Under this alternative, Stone Road would not be widened. The environmental effects of this alternative will be further analyzed in this document.

2.4 Evaluated Alternatives.

Following initial screening and review of the proposed alternatives, the following alternatives were determined feasible and will be carried forward for evaluation under this environmental assessment:

a. Proposed Action -- Widening Stone Road, Maintaining Two-Lane Configuration. It was determined that by evaluating this alternative, the environmental effects of both the proposed action and Alternative 1 would be considered. Therefore, either the Proposed Action or Alternative 1 could be selected for implementation if there are no significant environmental effects anticipated as a result of the analysis of the Proposed Action.

b. Alternative 2 -- Widening Stone Road to Four Lanes. It was determined that by evaluating this alternative, the environmental effects of both Alternative 2 and Alternative 3 would be considered. Therefore, either of these alternatives could be selected for implementation if there are no significant environmental effects anticipated as a result of the analysis of Alternative 2.

c. No Action Alternative

3.0 AFFECTED ENVIRONMENT

3.1 Introduction

The physical and biological components of the proposed project area are described in Moody AFB's Integrated Natural Resources Management Plan, and in the Moody AFB Natural Heritage Inventory Final Report. These documents are available for review in the Environmental Flight. Only information specific to the proposed project location will be discussed here.

None of the analyzed alternatives would have adverse effects to areas of critical environmental concern, coastal zones, wilderness areas, wild or scenic rivers, hazardous waste sites, archaeological remains, historic sites, or Native American religious concerns.

3.2 Air Resources

The Clean Air Act dictates that National Ambient Air Quality Standards (NAAQS), established by the Environmental Protection Agency, must be maintained nationwide. The NAAQS have included standards for six "criteria" pollutants: ozone, nitrogen oxide, carbon monoxide, particulate matter (10 microns or less), sulfur dioxide, and lead. Lowndes County is an attainment area for all NAAQS "criteria" pollutants. Specifically, in regards to the Clean Air Act and regulation of installation emissions, Moody AFB is classified as an area source and is considered a major source for criteria air pollutants. Moody AFB currently operates under a Synthetic Minor Permit for Hazardous Air Pollutants (HAPs); that permit was issued on 31 August 1998.

3.3 Cultural Resources

A Phase I Archeological Survey of the project area was accomplished as part of a base-wide survey in 1995. No significant cultural sites were recorded in the proposed project area. The archeological site recorded nearest the area of potential effect (APE) is located about 6,720 feet east of the APE (Site 9LW71); this site was determined to be potentially eligible for National Register Listing. The nearest historic building potentially eligible for National Register Listing is the Water Tower (Building 618), located approximately 3,800 feet north-northeast of the proposed project location (Figure 6).

3.4 Environmental Restoration Program (ERP) Sites

One ERP site is located within the boundaries of the proposed project area. The Southwest Landfill (LF-03) is located approximately 800 feet south of Burma Road and west of Mission Lake. The southern boundary of the landfill is adjacent to Stone Road for a large portion of its east-west configuration (Figure 7). Landfill LF-03 operated from 1955 to 1972. The entire landfill area was reported to consist of trenches 14 feet deep, which were filled with general MAFB refuse. No large quantities of hazardous wastes were reported to have been disposed of at the site; however, small quantities of solvent and oil waste are suspected to have been disposed of at the site. Other wastes

disposed of at the site include leaves, branches, grass clippings, and sludge from the Moody AFB sewage treatment plant. A final corrective action for groundwater cleanup is currently being implemented by the ERP office at Moody AFB. As part of their actions, six groundwater monitoring wells have been installed within the proposed project boundary area, and land use controls are being implemented.

3.5 Outdoor Recreation

There are two major outdoor recreational facilities located immediately adjacent to the proposed project area (Figure 8). The Moody AFB Paintball Range "Splatter Swamp" is located west of Stone Road across from the recreational vehicle parking area. This site was constructed in 2003 and is managed by the Services Squadron Community Support Flight. The range is open for use primarily on weekends, and receives heavy use by base personnel. It is currently one of the installation's most popular recreational facilities.

The Moody AFB Archery Range is located north of Stone Road adjacent to the base boundary. This range features static targets with ground and elevated shooting positions. This site is also managed by the Services Squadron Community Support Flight and receives heavy use primarily in the fall and winter. However, the range is open daily for use by installation personnel.

3.6 Real Property

Georgia Power maintains an easement for a power line which crosses Stone Road at two locations within the proposed project area. Additionally, the Oglethorpe Power Corporation maintains an easement for a 115 kv substation and transmission line at the intersection between Stone Road and Burma Road. See Figure 8 for the location of these assets. No other real property assets would be affected by the proposed project.

3.7 Soil Resources

The majority of soils underlying the proposed project area at Stone Road are classified as loamy sands, either Pelham loamy sand, Clarendon loamy sand, or Tifton loamy sands (Tifton loamy sand and Tifton urban land complex) (Figure 9). There is a small area classified as Olustee sand.

Clarendon soils are defined as moderately well drained loamy sands. This soil is nearly level, with slopes of less than 2%. The topsoil is about eight inches thick and is comprised of dark gray loamy sand. The subsoil extends to about 65" and is a sandy clay loam. This soil is low in natural fertility and organic matter and is strongly acidic with moderate permeability. Clarendon soils are classified as prime farmland soils by the Natural Resources Conservation Service (NRCS).

The two Tifton soils are both well drained loamy sands with slight slopes averaging between 2 and 5%. The Tifton urban complex soils are generally more level as a result of significant mechanical shaping. The topsoil is about eight inches deep and consists of a

brown loamy sand. The subsoil extends to a depth of more than 60 inches, and is a sandy clay. These soils are moderate in fertility and low in organic matter, and have moderate permeability.

Olustee sand is a poorly drained, nearly level soil comprised primarily of sand. The topsoil consists of a very dark gray sand about seven inches thick. It is underlain by a weakly cemented, very dark grayish brown sand that extends to a depth of about 12 inches. The subsoil is about 65 inches deep, and is comprised of a gray sandy clay loam mottled with brown. This soil is low in fertility and organic matter and has moderate permeability.

Pelham loamy sands are poorly drained, nearly level soils. The topsoil is about eight inches thick and consists of a black loamy sand. The subsoil is a gray loamy sand with mottling that extends to a depth of 65 inches. This soil is low in natural fertility and has moderate amounts of organic matter. This soil has a low potential for most nonfarm uses because of flooding and wetness. Pelham loamy sands are classified as hydric soils in Georgia by the NRCS.

3.8 Vegetation Resources

The vegetation adjacent to Stone Road ranges from bottomland hardwood species to upland pine species, depending on elevation, soil type, and distance from wetlands and waters of the U.S. For descriptive purposes, the road is divided into four zones, each with different vegetation types (Figure 10).

The vegetation in Zone 1 consists of bottomland hardwood species associated with the wetlands in this area. The dominant tree species adjacent to the road consist of blackgum and maple. The vegetation in Zone 2 consists of a mixed hardwood-pine forest, comprised mainly of water oaks, laurel oaks, and other native species. The pines in the forest are predominantly loblolly and slash pines, both native species. The vegetation in Zone 3 consists of a loblolly and slash pine mixed forest that is approximately 40 years of age. This forest has not been managed silviculturally in several years, and exhibits signs of stress, disease, and parasites. Areas adjacent to the southern boundary of the installation have been pioneered by exotic species, including wisteria and chinaberry trees. Finally, the vegetation in Zone 4 consists of a slash pine and loblolly pine plantation that is approximately 30 years old. These trees were planted on an old landfill site, and are inhibited in their growth by the landfill cap and the material in the landfill trenches. These trees are stressed and are showing signs of poor vigor, disease, and parasites.

3.9 Wetlands and Waters of the U.S.

Moody AFB is located in the upper Suwannee River watershed, with the proposed project area falling within the Grand Bay Watershed. An installation-wide wetland survey was conducted in 1998 by IT, Inc. This survey shows that Stone Road crosses both a jurisdictional wetland and an unnamed creek that is classified as a water of the U.S. This

site is located approximately 415 feet south of the intersection with Burma Road. A single 24-inch diameter culvert underlies the road in this location to facilitate the passage of water from the unnamed creek underneath the road. Eventually, this unnamed creek drains into the western reaches of Mission Lake, from thence into Grand Bay Creek and the Alapaha River, and finally into the Suwannee River enroute to the Gulf of Mexico.

3.10 Wildlife Resources

Because of the current land-use as a road corridor, wildlife resources on the site are primarily limited to migratory songbirds typically found in urban and suburban settings, such as northern mockingbirds, brown thrashers, American robins, pine warblers, yellow-rumped warblers, and blue jays. Other transient migratory species would occur seasonally, such as cedar waxwings and ruby-crowned kinglets. Some individual birds may utilize the trees and other associated plantings for nesting and roosting, but these areas would not be considered attractive for these purposes because of their proximity to an active installation road. Other wildlife species that may cross the area enroute to other habitat would include white-tailed deer, cottontail rabbits, raccoons, and opossums.

A small subpopulation of state-listed gopher tortoises exists near the proposed project site. This colony once consisted of eight burrows, with five active burrows located within the proposed project corridor (Figure 11). However, to facilitate the construction of a base boundary fence, three adult and two subadult gopher tortoises were captured and relocated to a larger colony and their burrows were destroyed. The gopher tortoise is considered a keystone species, and its burrows provided homes for up to 200 commensal species, including the federally listed eastern indigo snake.

General surveys for rare, threatened, and endangered (RTE) species were conducted in 1993-94 by The Nature Conservancy and in 1995 by Geo-Marine. Surveys specifically for the federally threatened eastern indigo snake and the federally threatened flatwoods salamander were conducted in 2002 and 2003-2004, respectively. With the exception of the state-listed gopher tortoise, no other RTE species were recorded on the proposed project site.

4.0 Environmental Consequences

4.1 Air Resources

4.1.1 Proposed Action -- Widen Stone Road, Keeping Two-Lane Configuration

Disturbances to air resources as a result of implementation of the proposed action would be primarily limited to emissions from construction equipment. Because these emissions would be temporary and of limited daily duration, they would not result in significant increases in air emissions. Also, since the proposed project does not include the establishment of a permanent source of air emissions, no modifications to existing air permits will be required.

The amount of vehicle use on Stone Road is forecasted to increase following the completion of the project. However, since there will not be an increase in personnel assigned to Moody AFB, there will not be an increase in vehicle use at the installation level. The vehicles that will utilize Stone Road are currently using other roads within the base boundary. Therefore, even though traffic patterns in the area may change, there will not be an increase in non-stationary air emissions on the installation. The current air emissions from non-stationary sources has already been evaluated and permitted under existing air permits. Therefore, there will be no significant effects on air resources as a result of implementation of the proposed action.

4.1.2 Alternative 2 -- Widen Stone Road to Four Lanes

Disturbances to air resources would be similar to those of the proposed action; therefore, there would be no significant effects on air resources as a result of implementation of this alternative.

4.1.3 No Action Alternative

There would be no significant effects on air resources as a result of implementation of this alternative.

4.2 Cultural Resources

4.2.1 Proposed Action -- Widen Stone Road, Keeping Two-Lane Configuration

The proposed location for this project has a history of soil disturbance, including agricultural operations prior to 1940, the construction of Stone Road, the clearing of the area for the Georgia Power electrical line, and the operations at the LF-03 landfill. Based on the Phase I cultural survey and the project location, intact archaeological and historic resources are not likely to be found in the APE. Therefore, no significant effects to cultural resources are anticipated. However, per 36 CFR 800, the Georgia State Historic Preservation Division Office (SHPO) will be consulted prior to implementation.

4.2.2 Alternative 2 -- Widen Stone Road to Four Lanes

The effects on cultural resources as a result of implementation of this alternative will be similar to those described for the proposed action in 4.2.1 above. Even though this alternative involves the disturbance of an additional 10 foot wide corridor, the same history of disturbance affected this additional corridor width. Therefore, there should not be any significant effects to cultural resources as a result of implementation of this alternative. However, per 36 CFR 800, if this alternative was selected for implementation, the Georgia SHPO would be consulted.

4.2.3 No Action Alternative

There are no anticipated effects on cultural resources as a result of the proposed action.

4.3 Environmental Restoration Program (ERP) Sites

4.3.1 Proposed Action -- Widen Stone Road, Keeping Two-Lane Configuration

The source of the groundwater contamination identified during the LF-03 Supplemental RCRA Facility Investigation (SRFI) appears to be the landfill trenches located on the western edge of the LF-03 boundary. Contaminated groundwater occurs at depths from 26 to 40 feet below ground surface, representing the shallow and intermediate water-bearing zones. On the basis of risk assessment, no further action is recommended for soils at LF-03. The SRFI concluded that groundwater is the only medium at the site warranting further action. Details of the risk evaluation are provided in the SRFI report (IT, 2003). Contamination in soil at LF-03 is considered minor. The site risk assessment concluded that chemicals detected in soil and sediment do not pose significant threats to the health of any human receptors evaluated.

The groundwater contaminant plume is on Base property, and restrictions on excavation and installation of wells that could result in exposure to contaminated groundwater are in place. Air Force control of these restrictions at the Base will insure that the proposed remedy will remain protective of human health and the environment until cleanup goals are achieved. Therefore, there will not be any significant effects on ERP sites or worker health and safety as a result of implementation of the proposed action.

There are six groundwater monitoring wells located along Stone Road that will potentially be impacted during the proposed construction needed to widen the road. These wells will need to be sampled and abandoned prior to the start of construction in the area. These tasks will take six days to accomplish. The abandonment of the six wells will require additional time and materials. These costs are listed in the table below.

Since there are not any other wells in close proximity to these, these wells will need to be replaced to prevent a lapse in data from this area. The costs for these wells will include drilling, installation, development, surveying, waste disposal, and oversight by

appropriate ERP personnel. The approximate costs for these tasks are listed below in table 1.

Replacement charges for Six Monitoring Wells	
Drilling	\$21387.00
Surveying	\$918.00
IDW	\$4380.00
ERP Oversight	\$4521.00
Abandonment	\$4482.00
Approximate Total	\$35,688.00

Table 1. Southwest Landfill well replacement costs.
(equipment mobilization costs not included)

4.3.2 Alternative 2 -- Widen Stone Road to Four Lanes

The implementation of this alternative would have the same effects on the ERP sites as the proposed action. The six groundwater monitoring wells would have to be sampled, abandoned and then relocated at a cost provided in the table at 4.3.1 above. Since the contamination on the site appears to be limited to groundwater contamination, there will not be any significant effects on the ERP sites or on worker health and safety as a result of implementing this alternative.

4.3.3 No Action Alternative

There would be no significant effects on ERP sites as a result of implementing this alternative.

4.4 Outdoor Recreation

4.4.1 Proposed Action -- Widen Stone Road, Keeping Two-Lane Configuration

The proposed action would require the existing archery range to be relocated. The 70-foot corridor width intersects with the elevated shooting platform, which means that all range equipment, targets, and shooting areas, would have to be demolished and relocated. However, since there are ample areas located throughout the installation for the relocation of the archery range, this is not considered a significant effect.

Additionally, the proposed action would require the relocation of portions of the paintball range. Since the paintball range only consists of static targets placed throughout forested areas, the range can easily be shifted to the west of its current location. This area was previously approved for use as part of the paintball range but has never been incorporated into the range layout.

The relocation of the archery range and the paintball range would result in temporary disruptions of service to installation personnel. However, as noted in 3.5 above, these areas are not used at the same frequency or intensity on a daily or annual basis. There would be little to no disturbance to archery range users if the range was relocated during off-peak times; the same holds true for the paintball range. Since users of the archery range are not charged a fee for use, there would not be any economic impacts as a result of the temporary disruption of service. It is anticipated that the shifting of the paintball boundary could be accomplished within one work week, which means that the range would be open for use on the weekend as usual, resulting in no economic impact. Therefore, there would not be any significant effects on outdoor recreation as a result of implementation of this alternative.

4.4.2 Alternative 2 -- Widen Stone Road to Four Lanes

The implementation of this alternative would result in similar effects to outdoor recreation as documented in 4.4.1 above. Therefore, there would not be any significant effects on outdoor recreation as a result of implementation of this alternative.

4.4.3 No Action Alternative

There would not be any environmental effects as a result of continuation of this alternative.

4.5 Real Property

4.5.1 Proposed Action -- Widen Stone Road, Keeping Two-Lane Configuration

In the Georgia Power easement, there are three power poles north of Stone Road that would have to be relocated to implement the proposed action. The terms of the easement agreement allow the installation to request Georgia Power assets be relocated if they interfere with military activities. These three poles would have to be relocated either further north along the Georgia Power easement on federal property or shifted south onto the new housing area. Regardless of which option is chosen, the relocation of these poles would not result in a significant effect on real property resources.

The single power pole in the easement area located immediately east of Stone Road would not be impacted by implementation of the proposed action. Also, the Oglethorpe Power Corporation substation located at the intersection of Stone Road and Burma Road would not be affected by the proposed action since the road widening in that portion of the road would be limited to the eastern side. Therefore, there will not be any significant effects on real property resources as a result of implementation of this alternative.

4.5.2 Alternative 2 -- Widen Stone Road to Four Lanes

The implementation of this alternative would result in similar effects to the proposed action. Therefore, there would not be any significant effects on real property resources as a result of implementation of this alternative.

4.5.3 No Action Alternative

There would not be any environmental effects as a result of continuation of this alternative.

4.6 Soil Resources

4.6.1 Proposed Action -- Widen Stone Road, Keeping Two-Lane Configuration

Generally, the soil types in the proposed project area are recognized by the NRCS as being suitable for construction purposes. However, there are concerns with two of the soils present within the proposed project area corridor.

The Clarendon loamy sand soil series is classified as a prime farmland soil under the Farmland Protection Policy Act, administered by the NRCS. This law was promulgated to reduce the substantial decrease in the amount of open farmland in the United States. Specifically, federal agencies were directed to prevent the unnecessary and irreversible conversion of farmland to nonagricultural uses. Based on this understanding, Moody AFB analyzed the potential impact to open farmland in Lowndes County as a result of implementation of the proposed action. It was determined that since the portion of the proposed project area comprised of Clarendon loamy sand has not been used for agricultural purposes for at least 60 years, the paving of this resource would not be considered the conversion of farmland to a nonagricultural use. Therefore, there would not be any significant effects on prime farmland as a result of implementation of the proposed action.

The Pelham loamy sand complex is classified as a hydric soil, which means that it is unsuitable for construction purposes because of wetness and flooding potential. This portion of the proposed road widening project would have to receive additional earthen fill to stabilize the road and would require the lengthening of the culvert currently in place underneath the road. The environmental effects on this hydric soil will be addressed in Section 4.8 below.

4.6.2 Alternative 2 -- Widen Stone Road to Four Lanes

The effects of this alternative would be similar to the effects of the proposed action. The increase in corridor width by 10 feet would be inconsequential as far as impacts to the soil resources. Therefore, there would be no significant effects on soil resources as a result of this alternative.

4.6.3 No Action Alternative

There are no anticipated effects on soil resources as a result of this alternative.

4.7 Vegetation Resources

4.7.1 Proposed Action -- Widen Stone Road, Keeping Two-Lane Configuration

The proposed project would require the removal of all vegetation within the 70-foot road corridor (approximately six acres). As a result, the proposed project would require the removal of about 200 pine trees adjacent to Stone Road, as well as numerous hardwood trees and other woody and herbaceous vegetation. The pine trees are considered merchantable timber, and would be sold under a small lot timber sale, resulting in proceeds for the Moody AFB Forestry program. The remaining timber and vegetation would be cleared with dozers and either disposed of off-site or placed in a pile outside the 70-foot corridor for firewood for base residents.

The majority of vegetation in the proposed road corridor consists of native vegetation commonly found throughout south Georgia, with the remaining vegetation consisting of exotic species (e.g. wisteria, Chinaberry) scheduled for removal in accordance with DoD directives. None of the vegetation in the area is considered to be rare or unique in the south Georgia landscape. These areas are currently not under forest management because of their proximity to the installation administration area and the presence of the two ERP sites.

The Moody AFB INRMP currently calls for the improvement and establishment of approximately 2,600 acres of forested ecosystems on the installation. The removal of approximately six acres of common south Georgia vegetation under this action would not result in a significant environmental effect.

4.7.2 Alternative 2 -- Widen Stone Road to Four Lanes

Implementation of this alternative would require the removal of all vegetation within an 80-foot road corridor (approximately 10 acres). As a result, about 350 pine trees would be removed, as well as numerous hardwood trees and other woody and herbaceous vegetation. The timber and vegetation would be removed as described in 4.7.1 above.

As indicated in 4.7.1 above, the Moody AFB INRMP currently calls for the improvement and establishment of approximately 2,600 acres of forested ecosystems on the installation. The removal of approximately 10 acres of common south Georgia vegetation under this action would not result in a significant environmental effect.

4.7.3 No Action Alternative

There would not be a significant effect on vegetation resources as a result of implementation of this alternative.

4.8 Wetlands and Waters of the U.S.

4.8.1 Proposed Action -- Widen Stone Road, Keeping Two-Lane Configuration

Under the proposed action, the existing culvert in the unnamed creek would have to be extended by approximately 20 feet to accommodate the increased road width. It is estimated that the extension of the culvert in this area will impact approximately 800 square feet of wetlands and waters of the state immediately to the west of the current stream crossing through emplacement of a culvert and associated fill. Additionally, the establishment of the 70-foot wide road corridor would impact approximately 60 linear feet of wetlands with a width of 10 feet (600 square feet) south of the existing stream crossing. This area would be filled with soil and compacted to facilitate the completion of the road widening project. In total, implementation of the proposed action would result in impacts to 1,400 square feet (.0321 acres) of wetlands and waters of the U.S. Figure 12 shows the areas that would potentially be impacted by implementation of this action.

In accordance with the provisions of the Clean Water Act and the Georgia Erosion and Sedimentation Control Act, appropriate erosion and sedimentation control best management practices (BMPs) would be put in place to minimize impacts outside of the 70-foot wide road corridor. Such BMPs would likely include silt fencing to prevent sediments from impacting residual wetlands, riprap, and other approved methods. All required permits and approvals associated with actions in wetlands and waters of the U.S., as identified in 5.0 below, would be obtained prior to implementation of the action.

Moody AFB has entered into a partnership with the U.S. Fish and Wildlife Service, the Georgia DNR, The Nature Conservancy, and private landowners to cooperatively manage the 12,000 acres of wetlands existing in the Grand Bay-Banks Lake ecosystem. As part of this initiative, wetland areas on the installation will be managed to improve ecological functioning. Because of this initiative and because of the extremely small size of the projected impacted wetlands (0.0321 acres) in relation to the overall acreage of wetlands in the area under management, it has been determined that the loss of this amount of wetlands would not lead to a significant effect on wetlands, waters of the U.S., or wetland ecological functioning on Moody AFB.

4.8.2 Alternative 2 -- Widen Stone Road to Four Lanes

Under this alternative, the existing culvert in the unnamed creek would have to be extended by approximately 20 feet to accommodate the increased road width. It is estimated that the extension of the culvert in this area will impact approximately 1,000 square feet of wetlands and waters of the state immediately to the west of the current stream crossing through emplacement of a culvert and associated fill. Additionally, the establishment of the 80-foot wide road corridor would impact approximately 60 linear feet of wetlands with a width of 20 feet (1,200 square feet) south of the existing stream crossing. This area would be filled with soil and compacted to facilitate the completion of the road widening project. In total, implementation of the proposed action would

result in impacts to 2,200 square feet (.0505 acres) of wetlands and waters of the U.S. Figure 13 shows the areas that would potentially be impacted by implementation of this action.

In accordance with the provisions of the Clean Water Act and the Georgia Erosion and Sedimentation Control Act, appropriate erosion and sedimentation control best management practices (BMPs) would be put in place to minimize impacts outside of the 80-foot wide road corridor. Such BMPs would likely include silt fencing to prevent sediments from impacting residual wetlands, riprap, and other approved methods. All required permits and approvals associated with actions in wetlands and waters of the U.S., as identified in 5.0 below, would be obtained prior to implementation of the action.

Moody AFB has entered into a partnership with the U.S. Fish and Wildlife Service, the Georgia DNR, The Nature Conservancy, and private landowners to cooperatively manage the 12,000 acres of wetlands existing in the Grand Bay-Banks Lake ecosystem. As part of this initiative, wetland areas on the installation will be managed to improve ecological functioning. Because of this initiative and because of the extremely small size of the projected impacted wetlands (0.0505 acres) in relation to the overall acreage of wetlands in the area under management, it has been determined that the loss of this amount of wetlands would not lead to a significant effect on wetlands, waters of the U.S., or wetland ecological functioning on Moody AFB.

4.8.3 No Action Alternative

There would not be any significant environmental effects on wetland resources as a result of the continuation of this alternative.

4.9 Wildlife Resources

4.9.1 Proposed Action -- Widen Stone Road, Keeping Two-Lane Configuration

Implementation of the proposed action may result in temporary disturbances to animals that are using the habitat adjacent to Stone Road, including those who migrate back and forth across the road enroute to other habitat areas. However, the wildlife species in the area are accustomed to disturbances of the scope and nature of the proposed project. For example, the existing road currently receives moderate vehicle traffic, and heavy equipment associated with the ERP management program and grounds maintenance is not uncommon at various times of the year. Additionally, the road construction activities will be temporary in nature and will not result in long-term disturbances. Any increases in traffic flow as a result of the new housing area are likely to be heaviest early in the morning, again at noon, and then once again following normal work hours. Wildlife species quickly become habituated to human movement patterns and modify their own periods of activities outside of these times. Vehicle-animal collisions on the installation are very infrequent, and since there will not be an overall increase in vehicle use on the installation, the frequency of collisions is not likely to increase. Therefore, because of

these reasons, there would not be any significant effects to wildlife resources as a result of implementation of this action.

Because of the lack of possible impacts to RTE species, the U.S. Fish and Wildlife Service will not be consulted on this action per the requirements of the Endangered Species Act.

4.9.2 Alternative 2 -- Widen Stone Road to Four Lanes

The implementation of this alternative should produce environmental effects on wildlife resources similar to those of the proposed action addressed in 4.9.1 above. Therefore, there would not be any significant effects to wildlife resources as a result of implementation of this alternative.

4.9.3 No Action Alternative

There are no anticipated effects on wildlife resources as a result of continuation of this action.

4.10 Cumulative Effects

4.10.1 Definition of Cumulative Effects

The Council on Environmental Quality (CEQ) implementing guidelines for NEPA require that both the direct 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?

4.10.2 Scope of Cumulative Effects Analysis

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 resource with the potential to be affected cumulatively was determined to be wetlands and waters of the U.S.

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.

The time frame for cumulative effects analysis would 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 would be included for analysis.

4.10.3 Past, Present, and Reasonably Foreseeable Actions

Numerous other activities, conducted by private and local, state, and federal government agencies, have been conducted on Moody AFB and within the Grand Bay-Banks Lake ecosystem during the past two years, and more actions are expected to continue into the future. For the purposes of analysis, only those actions with the potential to directly affect wetlands and waters of the U.S. will be addressed.

Past and Present Actions Relevant to the Proposed Action

- *Replacement of Water Control Structures, Banks Lake National Wildlife Refuge (NWR).* In 2002 the U.S. Fish and Wildlife Service (USFWS) replaced the main water control structure at Banks Lake NWR. Banks Lake NWR is located north-northeast of Moody AFB and forms the northern-most boundary of the Grand Bay-Banks Lake ecosystem.
- *Replacement of Water Control Structures, Grand Bay Wildlife Management Area (WMA).* In 2003 the Georgia Department of Natural Resources (DNR) relocated two water control structures on Dudley's Hammock within Grand Bay WMA. Grand Bay WMA consists of 5,800 acres of state-owned and AF-owned property in Lowndes and Lanier counties, Georgia.

Reasonably Foreseeable Actions Relevant to the Proposed Action

- *Private Residential Housing Construction.* Over the past five years, several single-family residential homes and subdivisions have been constructed within the Grand

Bay-Banks Lake ecosystem. Construction has been extremely noticeable within the general area immediately south of Moody AFB near Bemiss Road, Studstill Road, and Knights Academy Road. It is anticipated that such construction would continue in the future as the population of Lowndes County continues to grow.

- *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.

4.10.4 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. 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 one disjunct acre of wetlands. If either the Proposed Action or Alternative 2 were to be implemented, the additional loss of up to 0.051 acres would not likely result in significant cumulative effects.

Construction, both private and commercial, would likely be restricted to upland areas near major roads. There would be no loss or direct impacts to wetlands or waters of the U.S. 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.

Table 4-1 -- Predicted effects of each of the alternatives

Issues/Concerns	Proposed Action (Widen Stone Road, Keeping Two Lane Configuration)	Alternative 2 (Widen Stone Road to Four Lanes)	No Action Alternative
Air Resources	Temporary increase in emissions during construction. No significant effect.	Temporary increase in emissions during construction. No significant effect.	No significant effect.
Cultural Resources	No significant effect.	No significant effect.	No significant effect.
Environmental Restoration Program (ERP) Sites	Six monitoring wells would have to be abandoned and replaced. No significant effect.	Six monitoring wells would have to be abandoned and replaced. No significant effect.	No significant effect.
Outdoor Recreation	Archery range would have to relocate. Paintball range would have to move west. Slight disruption in service. No significant effect.	Archery range would have to relocate. Paintball range would have to move west. Slight disruption in service. No significant effect.	No significant effect.
Real Property	No significant effect expected.	No significant effect expected.	No significant effect.
Soil Resources	Prime farmland soils will be disturbed, but no conversion of agricultural lands. No significant effect.	Prime farmland soils will be disturbed, but no conversion of agricultural lands. No significant effect.	No significant effect.

Table 4-1 -- Predicted effects of each of the alternatives (continued)

Issues/Concerns	Proposed Action (Widen Stone Road, Keeping Two Lane Configuration)	Alternative 2 (Widen Stone Road to Four Lanes)	No Action Alternative
Vegetation Resources	About six acres of common south Georgia vegetation will be removed. No significant effect.	About six acres of common south Georgia vegetation will be removed. No significant effect.	No significant effect.
Wetlands and Waters of the U.S.	About 0.03 acres of wetlands would be filled. No significant effect.	About 0.05 acres of wetlands would be filled. No significant effect.	No significant effect.
Wildlife Resources	Temporary disturbance. No significant effect.	Temporary disturbance. No significant effect.	No significant effect.
Cumulative Effects	No anticipated significant cumulative effects.	No anticipated significant cumulative effects.	No anticipated significant cumulative effects.

5.0 Permits and Required Consultations and Approvals

5.1 Storm Water. If either the proposed action or Alternative 2 were to be implemented, Moody AFB would have to obtain coverage under the State of Georgia General Permit No. GAR100001, Authorization to Discharge Under the National Pollutant Discharge Elimination System: Storm Water Discharges Associated with Construction Activity for Stand Alone Construction Projects. 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.

5.2 Georgia Erosion and Sedimentation Control Act. If either the proposed action or Alternative 2 were 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.

5.3 Section 404D, Clean Water Act. If either the proposed action or Alternative 2 were to be implemented, the Regulatory Branch of the U.S. Army Corps of Engineers would have to be consulted to determine if the action is exempted from the requirements to obtain a permit under the Clean Water Act or if the installation should seek to obtain coverage under Nationwide Permit #14, Linear Transportation Projects.

5.4 Executive Order 11990, *Protection of Wetlands*. If either the proposed action or Alternative 2 were to be implemented, a Finding of No Practicable Alternative would have to be approved by HQ, AFSOC, prior to any disturbances in wetlands.

5.5 National Historic Preservation Act. In accordance with Section 106 of the National Historic Preservation Act, if either the proposed action or Alternative 2 were to be implemented, the State Historic Preservation Office would have to be consulted prior to the implementation of any ground disturbance.

5.6 Environmental Restoration Program Construction Waiver. In accordance with AFSOC directives, the ERP Program Manager at Moody AFB would have to be consulted to determine if a construction waiver is required for the proposed action or Alternative 2. If required, the construction waiver would have to be forwarded to HQ, AFSOC, for approval.

6.0 Public Notification and Review

In accordance with 32 CFR 989 and 347 RQW/JA directives, 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

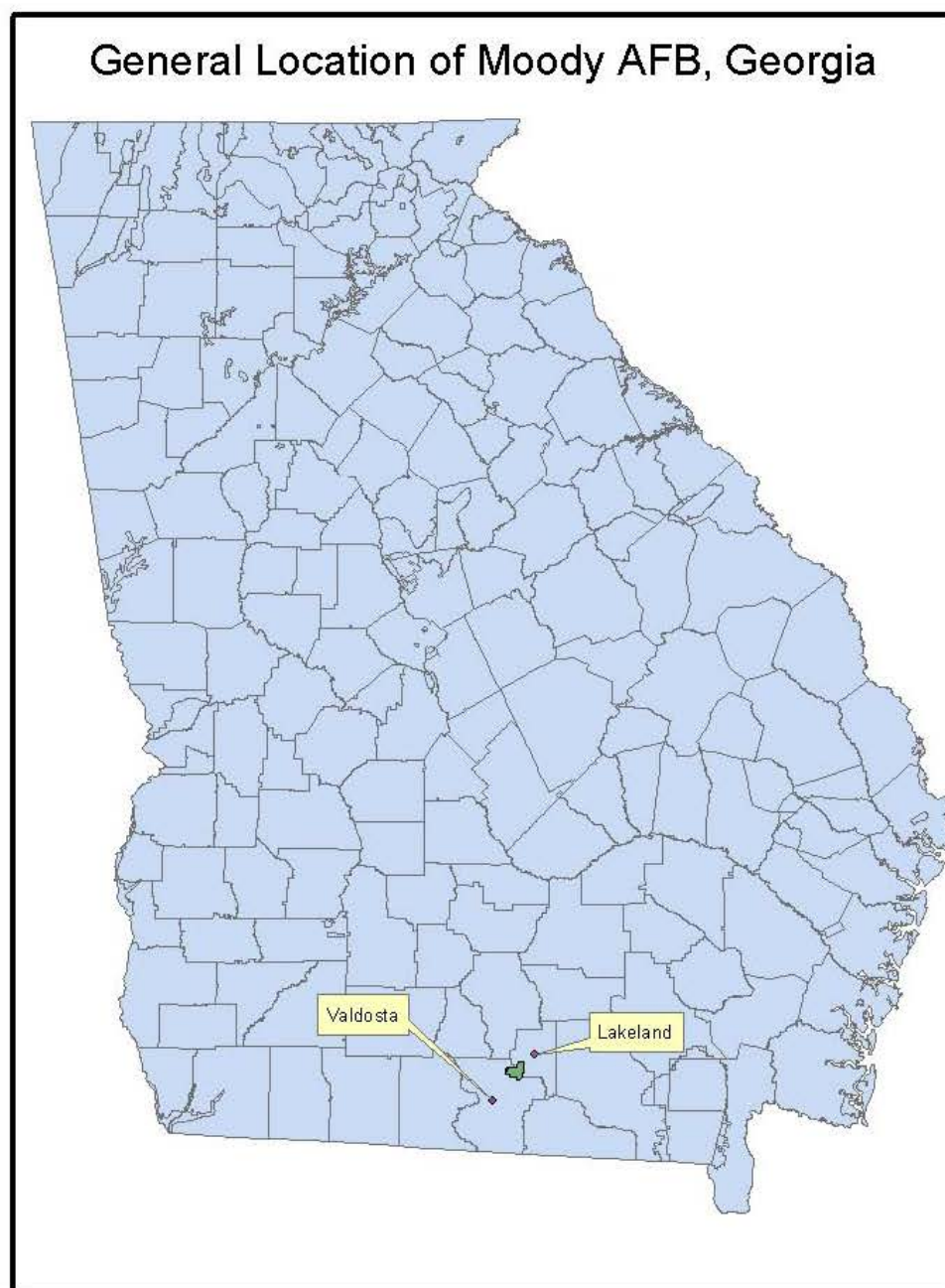
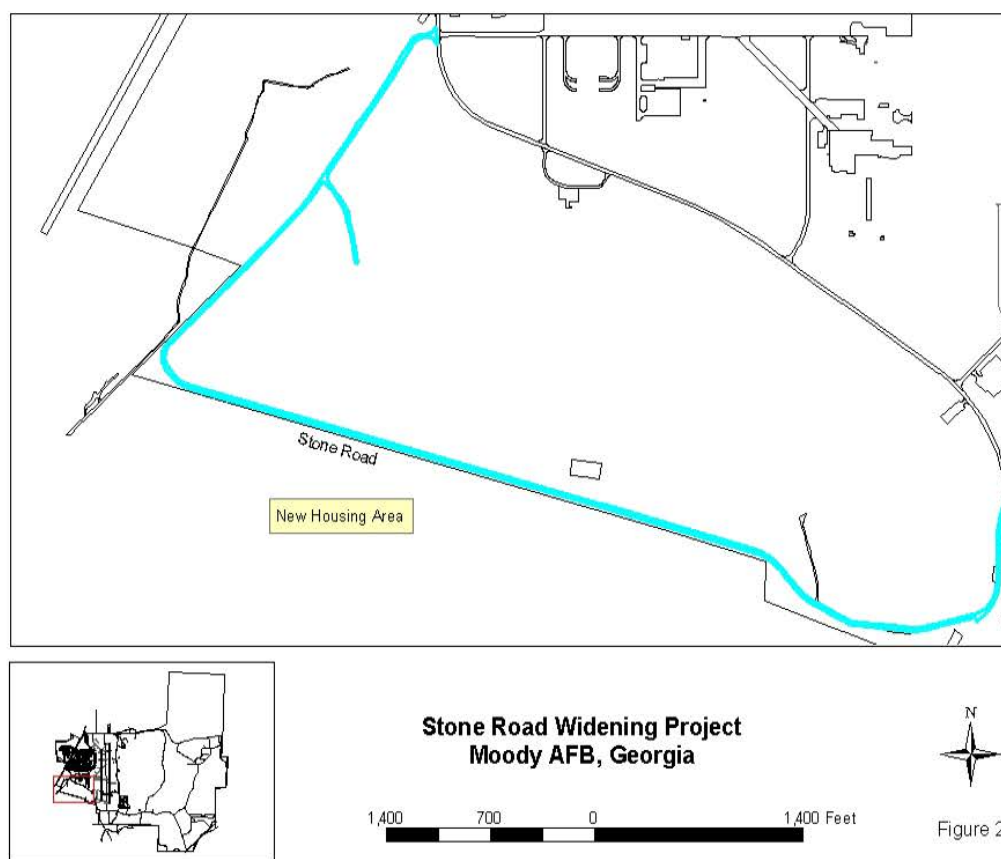


Figure 1



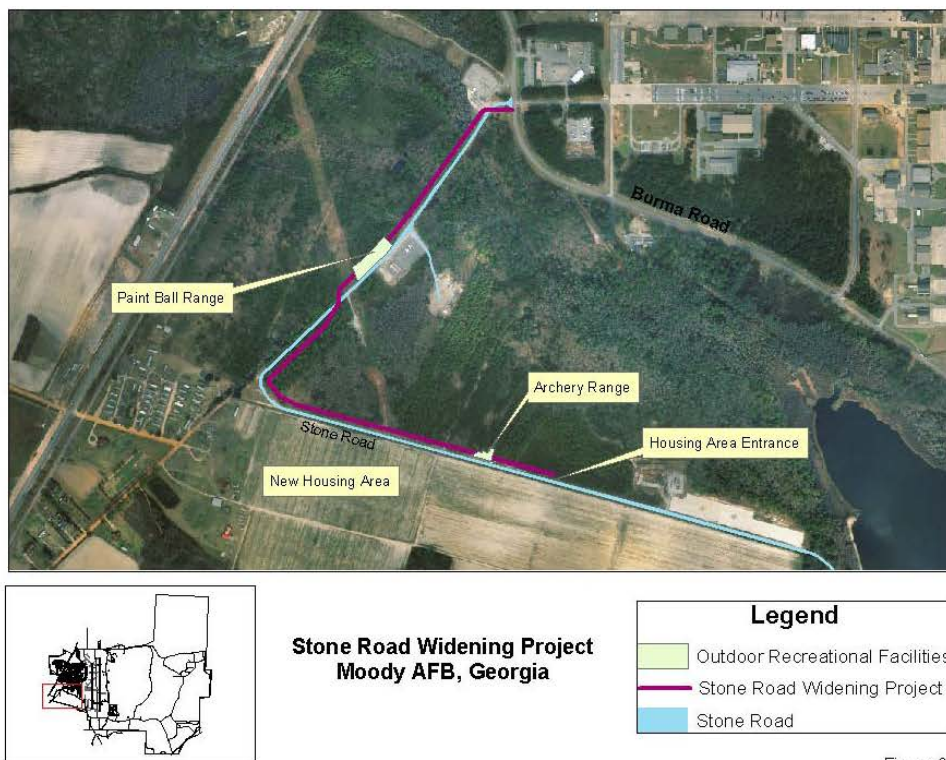




Figure 4

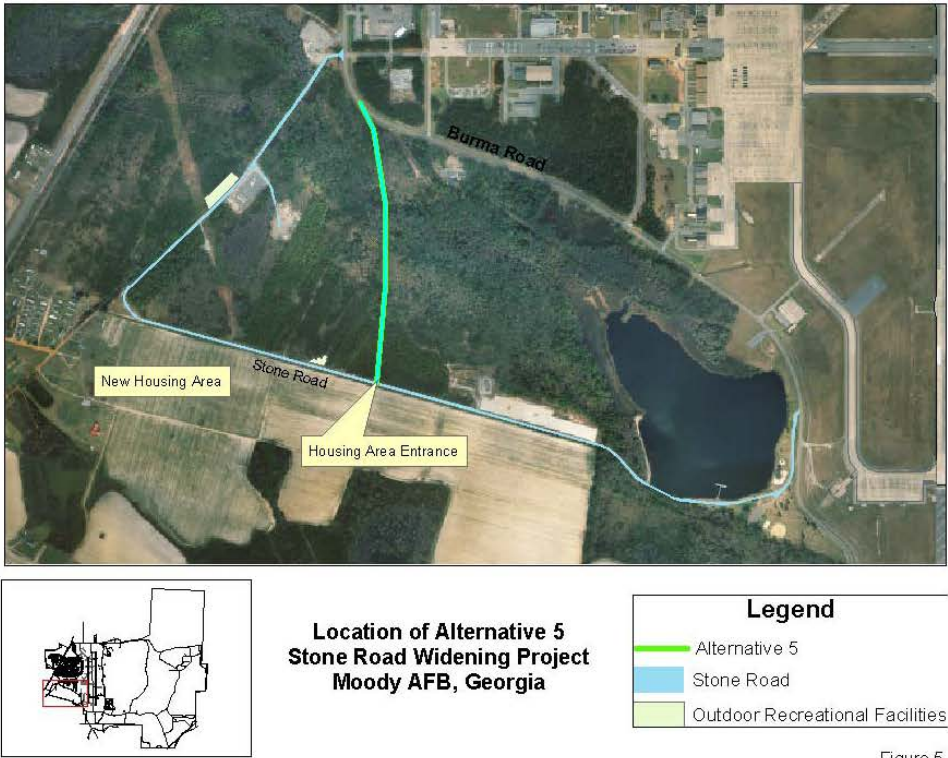


Figure 5

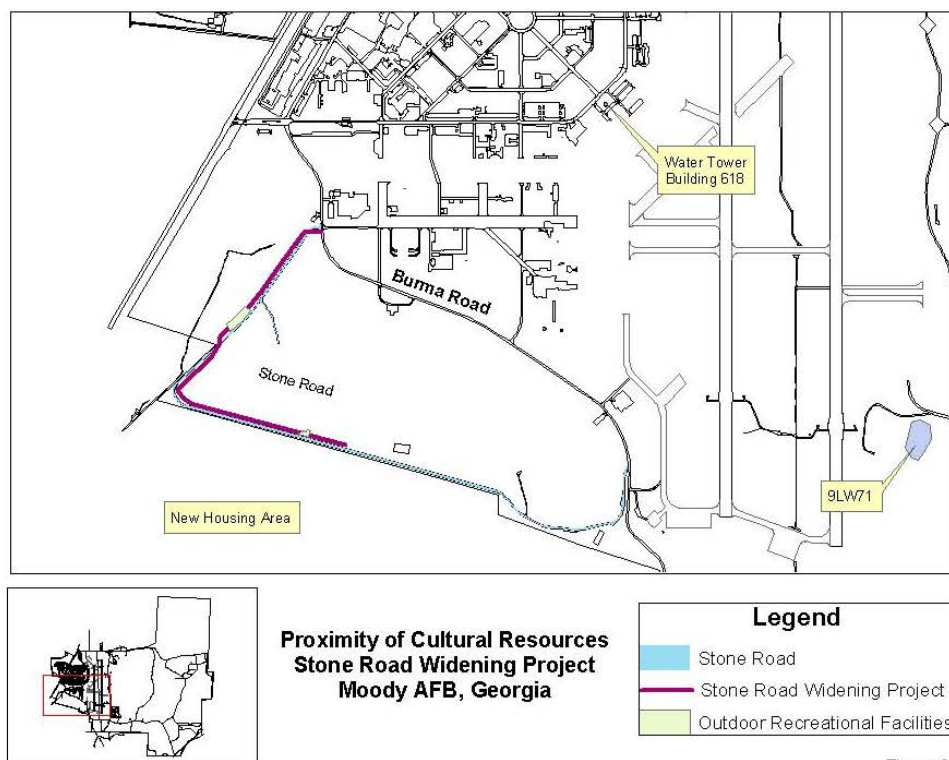


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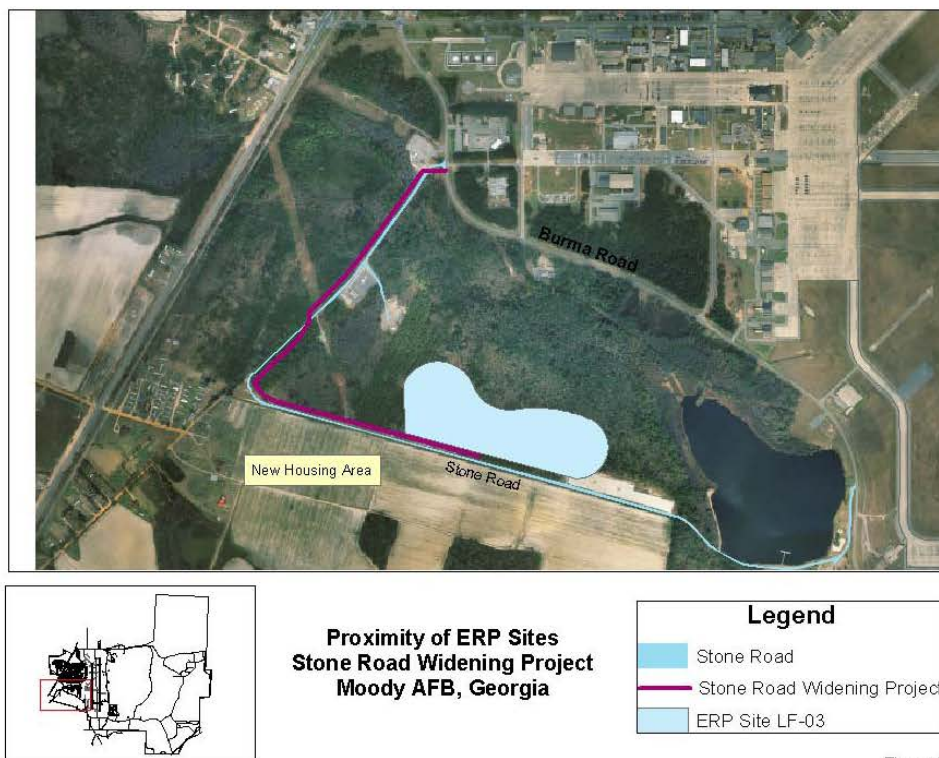


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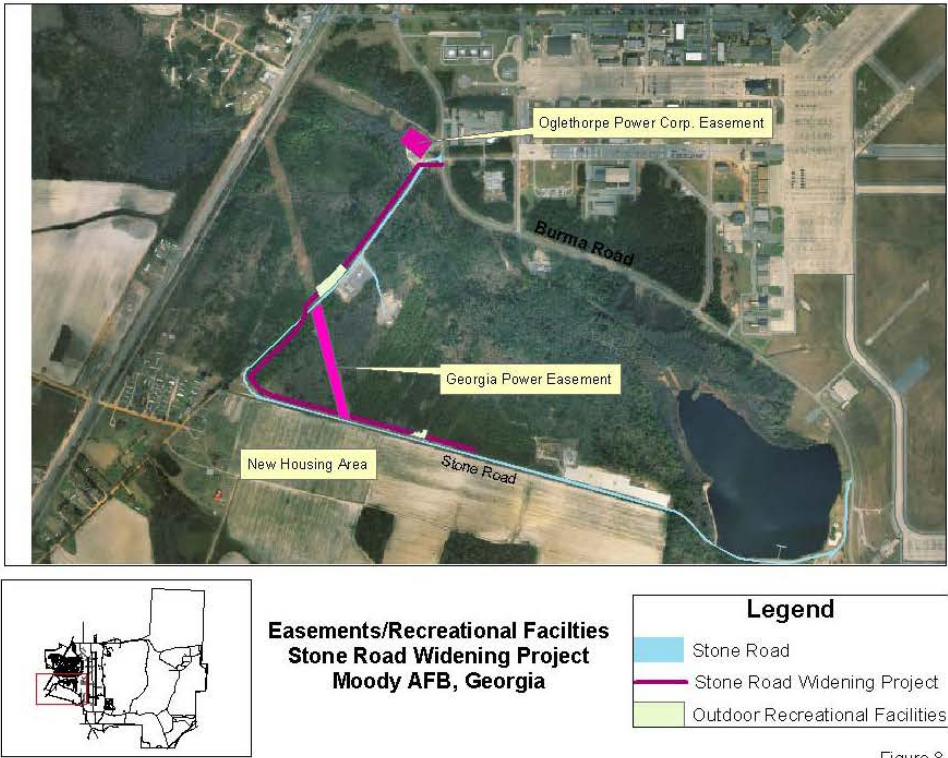


Figure 8

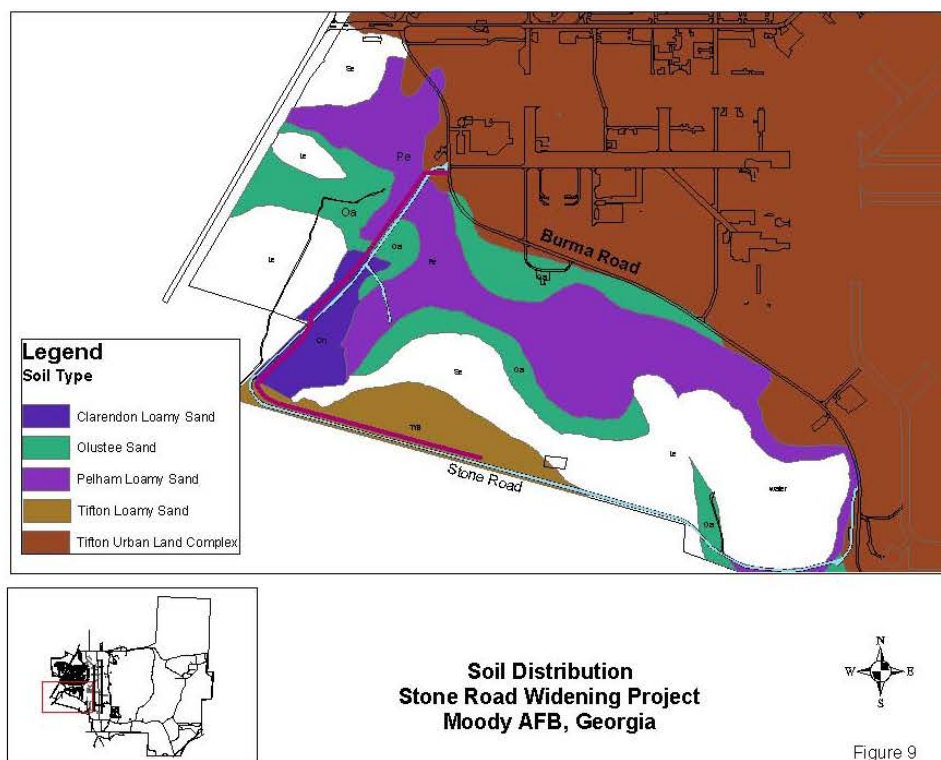




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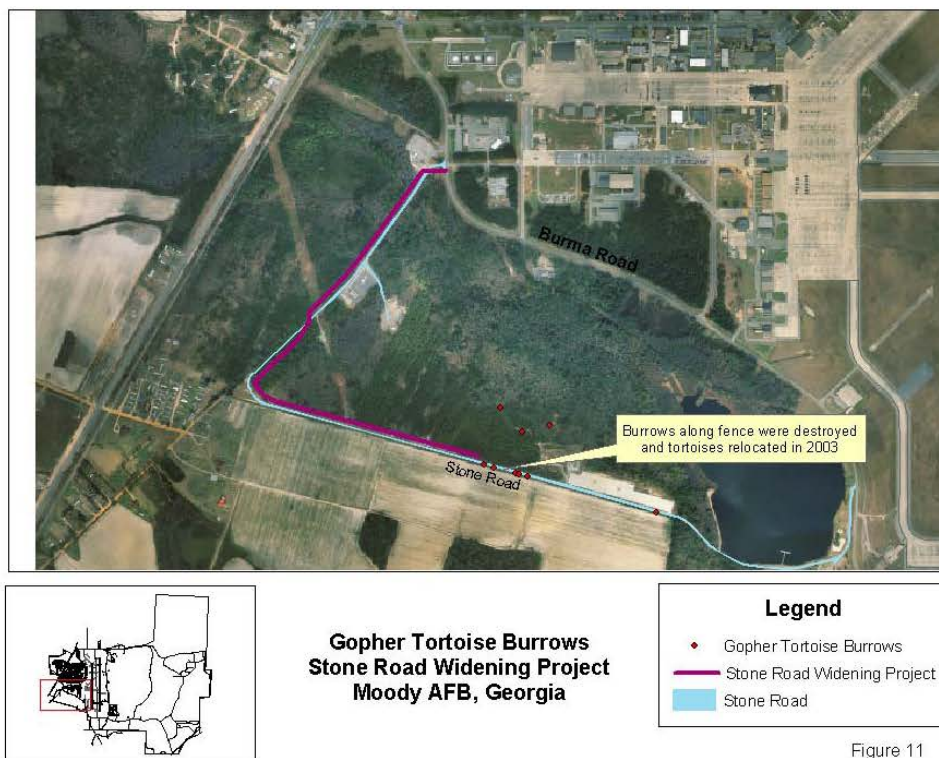


Figure 11

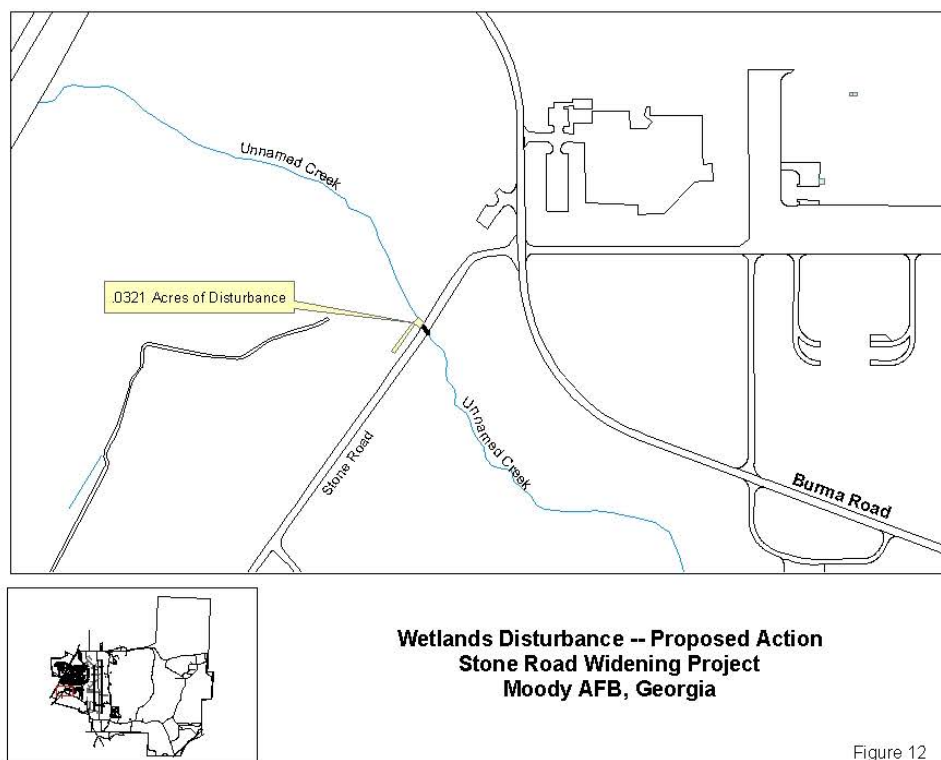


Figure 12

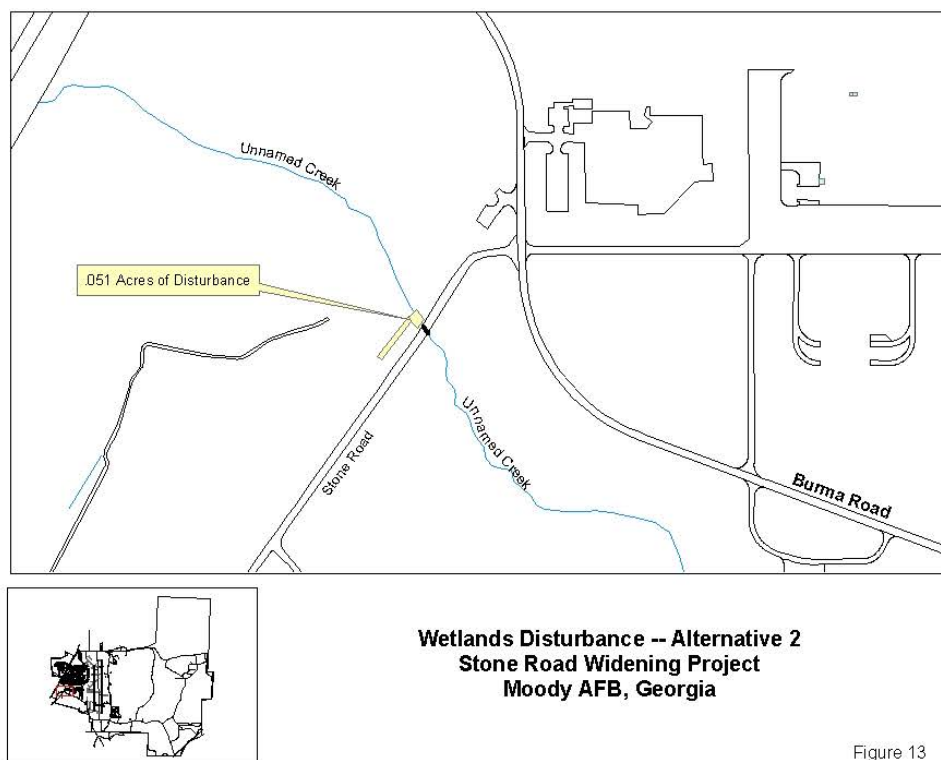


Figure 13