

---

Environmental Assessment  
for  
Construction of Primary Care Clinic/  
Demolition of Existing MTF Complex  
MacDill AFB, Florida

---



Headquarters Air Mobility Command

Scott AFB, IL

April 2004

# Report Documentation Page

*Form Approved*  
*OMB No. 0704-0188*

Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

1. REPORT DATE <b>APR 2004</b>	2. REPORT TYPE	3. DATES COVERED <b>00-00-2004 to 00-00-2004</b>			
4. TITLE AND SUBTITLE <b>Environmental Assessment for Construction of Primary Care Clinic/Demolition of Existing MTF Complex MacDill AFB, Florida</b>		5a. CONTRACT NUMBER			
		5b. GRANT NUMBER			
		5c. PROGRAM ELEMENT NUMBER			
6. AUTHOR(S)		5d. PROJECT NUMBER			
		5e. TASK NUMBER			
		5f. WORK UNIT NUMBER			
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) <b>MACTEC Engineering and Consulting, Inc, 4919 West Laurel Street, Tampa, FL, 33607</b>		8. PERFORMING ORGANIZATION REPORT NUMBER			
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)		10. SPONSOR/MONITOR'S ACRONYM(S)			
		11. SPONSOR/MONITOR'S REPORT NUMBER(S)			
12. DISTRIBUTION/AVAILABILITY STATEMENT <b>Approved for public release; distribution unlimited</b>					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT <b>unclassified</b>	b. ABSTRACT <b>unclassified</b>	c. THIS PAGE <b>unclassified</b>	<b>Same as Report (SAR)</b>	<b>109</b>	

**FINDING OF NO SIGNIFICANT IMPACT**  
**CONSTRUCTION OF PRIMARY CARE CLINIC/DEMOLITION OF MTF COMPLEX**  
**MACDILL AIR FORCE BASE, FLORIDA**

**Agency:** United States Air Force (USAF), Headquarters, Air Mobility Command

**Background:** Pursuant to the President's Council on Environmental Quality (CEQ) regulations, Title 40 Code of Federal Regulations (CFR) Parts 1500-1508, as they implement the requirements of the National Environment Policy Act (NEPA) of 1969, 42 U.S.C. § 4321, et seq., and the Air Force Environmental Impact Analysis Process, as promulgated in 32 CFR Part 989, the U.S. Air Force conducted an assessment of the potential environmental consequences associated with implementation of the following Proposed Action: to construct a new Primary Care Clinic and demolish the existing Military Treatment Facility (MTF) complex. The environmental assessment considered all potential impacts of the Proposed Action and alternatives, both as solitary actions and in conjunction with other proposed activities. The Finding of No Significant Impact (FONSI) summarizes the results of the evaluation of the Proposed Action and alternatives. The discussion focuses on activities that have the potential to change both the natural and human environments.

**Proposed Action:** Construct a new Primary Care Clinic in an effort to provide sufficient space and state-of-the-art medical services to service personnel, dependents, and retirees in the area. In addition, the Proposed Action includes the demolition of the inappropriately sited existing MTF complex located within the Base Housing District. The demolition would provide a significant area of space for future base housing use.

**Alternatives:** Three alternatives to the Proposed Action were evaluated during the environmental impact analysis process. The first alternative evaluated was the Renovate the Existing Composite Medical Facility Alternative, which included the renovation of the existing Composite Medical Building, augmented by the construction of a three-story building addition. The second alternative evaluated was the Construct a Replacement MTF/Demolish the Existing MTF Complex Alternative, which included the construction of a new MTF, as well as an associated parking lot, followed by the demolition of the existing Composite Medical Facility. The No Action Alternative would include no construction, other than minor code and policy modifications to the building, or demolition activities, and no changes to the current operation of the MTF. The environmental assessment process identified the Proposed Action as the preferred course of action since it would best suit the needs of the base, and would not result in significant environmental impacts. The environmental consequences associated with implementation of the Proposed Action are summarized in the following sections.

**Air Quality:** Fugitive dust and construction vehicle exhaust will be generated during construction and demolition activities; however, these emissions will not constitute a major source of air pollutants. The estimated values for carbon monoxide (CO), volatile organic compounds (VOC), nitrogen oxides (NO<sub>x</sub>), sulfur oxides (SO<sub>x</sub>), and particulate matter (PM<sub>10</sub>) were determined to be less than USEPA *de minimis* values and less than 10% of the Hillsborough County emissions inventory; therefore, an air conformity analysis is not necessary.

**Noise:** Noise levels will increase temporarily during construction; however, the increased noise levels would not be continuous and it is believed that the work force at the base will accept the temporary increase in noise since they will benefit from the project.

*Finding of No Significant Impact  
Construction of Primary Care Clinic/Demolition of Existing MTF Complex*

**Wastes, Hazardous Materials and Stored Fuels:** Representative materials will be sampled for lead-based paint and asbestos, and, if present, abated prior to demolition of the MTF complex. Consequently, the Proposed Action will not result in significant impacts from hazardous materials or wastes. Implementation of the Proposed Action will not impact stored fuels.

**Water Resources:** There will be no significant impacts to surface or groundwater quality during construction and operation of the new Primary Care Clinic, or as a result of demolition of the existing MTF complex.

**Floodplains:** Currently, 80 percent of MacDill AFB is located within the coastal floodplain. The 20 percent of the installation that is not located within the floodplain is primarily used for airfield operations and support. Construction of the new Primary Care Clinic will take place outside of the 100-year coastal floodplain, on the northern portion of the base. The existing MTF complex, slated for demolition under the Proposed Action, lies within the 100-year floodplain, on the east side of the base. Consequently, implementation of the Proposed Action would result in the removal of numerous buildings, and approximately 17 acres of impervious cover from the floodplain.

**Land Use:** The Proposed Action would involve construction of a new Primary Care Clinic on approximately 22 acres currently designated as vacant land use, resulting in a land use change to institutional. Demolition of the existing MTF complex would change approximately 22 acres of institutional land to vacant land use. Consequently, no impacts to land use would result from the Proposed Action.

**Transportation Systems:** An increase in traffic in the northeast portion of the base would result during implementation of the Proposed Action, due to the increase in construction-related activities. These impacts are considered to be minor and short-term.

The Proposed Action would result in a similar number, or a slight decrease in the number of vehicles entering the base, as a result of the decreased number of 6<sup>th</sup> MDG personnel, hospital patients, and visitors. These potential impacts of additional vehicles are considered to be augmented by the relocation of a new Primary Care Clinic near the main entrance of the base, eliminating the need for hospital visitors to drive an additional 2 ½ miles each way along the base's perimeter and through the housing district. As a result, implementation of the Proposed Action would provide a long-term, minor positive impact on Base transportation.

**Safety and Occupational Health:** Construction and operation of the new Primary Care Clinic, and demolition of the existing MTF complex, would not pose safety hazards beyond those typically experienced with construction projects or operation of a public hospital. Prior to demolition of the existing facility, a comprehensive asbestos and lead-based paint survey will be completed. Upon completion of the surveys, a qualified abatement subcontractor will be hired to remove and dispose of any identified asbestos containing material and lead-based paint. Implementing this approach will greatly reduce the potential for health and safety impacts to construction workers. If these precautions are implemented as described, the Proposed Action will not have a significant impact on safety and occupational health.

**Socioeconomic Resources:** Implementation of the Proposed Action will have a major short-term economic benefit for the Tampa community.

*Finding of No Significant Impact  
Construction of Primary Care Clinic/Demolition of Existing MTF Complex*

**Biological Resources:** Adverse impacts on wetlands (including wetland communities of Tampa Bay), wildlife, aquatic life, or protected species would not occur during the construction or the demolition operations of the Proposed Action. Consultation with the United States Fish and Wildlife Service indicates that there will be no adverse impacts on threatened or endangered species during construction and operation of the new Primary Care Clinic. Jurisdictional wetlands will not be filled, altered or impacted by construction and operation of the new Primary Care Clinic or by the demolition associated with the project.

**Cultural Resources:** There will be no impact to cultural resources with construction of the Primary Care Clinic or the demolition of the existing MTF complex.

**Airspace/Airfield Operations:** Construction of a new or demolition of the existing facility would not impact airspace/airfield operations.

**Environmental Management (including Geology and Soils):** When completed, the Primary Care Clinic would participate in Base recycling programs to reduce solid waste disposal volumes. During construction and demolition activities, soil erosion in disturbed areas will be controlled by implementation of a sediment and erosion control plan as well as best management practices.

**Environmental Justice:** No disproportionately high or adverse effects on minority or low-income populations will occur as a result of the construction, demolition, or from the long-term operation of the new Primary Care Clinic.

**Indirect and Cumulative Impacts:** There are no site-specific direct, indirect, or cumulative impacts associated with the construction and demolition activities, or from the long-term operation of the new Primary Care Clinic. The construction and demolition activities of the Proposed Action were considered in conjunction with other on-going or planned construction projects, and together they do not constitute a significant cumulative impact.

**Unavoidable Adverse Impacts:** There are no unavoidable significant impacts associated with the construction/demolition activities, or from the long-term operation of the new Primary Care Clinic.

**Relationship Between Short-term Uses and Enhancement of Long-term Productivity:** Implementation of the Proposed Action would have a positive effect on long-term productivity by providing sufficient, well-organized space and a state-of-the-art Primary Care Clinic for use by the 6<sup>th</sup> Medical Group. Additionally, the relocation of the facility close to the main entrance of the base would provide a significant improvement to access for off-base visitors.

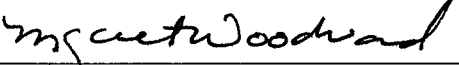
**Irreversible and Irretrievable Commitment of Resources:** The construction and demolition activities of the Proposed Action would irreversibly commit funds, manpower and costs related to constructing a useable facility for the installation.

**Florida Coastal Zone Management:** In accordance with the Federal Coastal Zone Management Act (CZMA) and the Florida CZMA, this Federal action must be consistent “to the maximum extent practicable” with the Florida Coastal Management Program (CMP). Appendix A to the EA contains the Air Force’s Consistency Statement and finds that the conceptual proposed action and alternative plans presented in the EA are consistent with Florida’s CMP. In accordance with Florida statutes, the

*Finding of No Significant Impact  
Construction of Primary Care Clinic/Demolition of Existing MTF Complex*

Air Force has submitted a copy of the attached EA to the State of Florida for a coastal zone consistency evaluation. The state concurs that the action is consistent with Florida's CMP.

**FINDING OF NO SIGNIFICANT IMPACT:** Based upon my review of the facts and analyses contained in the attached Environmental Assessment, which is hereby incorporated by reference, I conclude that implementation of the Proposed Action will not have a significant environmental impact, either by itself or cumulatively with other projects at MacDill AFB. Accordingly, the requirements of NEPA, the regulations promulgated by the Council on Environmental Quality and the Air Force are fulfilled and an Environmental Impact Statement is not required. The Tampa Tribune published a Notice of Availability on November 25, 2003. No comments were received during the public comment period ending December 24, 2003. A similar notice was also published in the MacDill Thunderbolt on March 19, 2004. One comment from the public was received addressing the means MacDill uses to provide health care. The comment did not present any environmental concerns with the Proposed Action or alternatives. A copy of comment is included in Appendix C of the EA. The signing of this Finding of No Significant Impact (FONSI) completes the environmental impact analysis process under Air Force regulations.



**MARGARET H. WOODWARD**  
Colonel, USAF  
Commander, 6 Air Mobility Wing

30 Oct 05

**DATE**

Attachment: Environmental Assessment

**TABLE OF CONTENTS**

**1.0 PURPOSE OF AND NEED FOR PROPOSED ACTION ..... 1**

1.1 PURPOSE OF THE PROPOSED ACTION ..... 1

1.2 NEED FOR THE PROPOSED ACTION ..... 1

1.3 OBJECTIVES OF THE PROPOSED ACTION ..... 2

1.4 SCOPE OF THE ENVIRONMENTAL REVIEW ..... 2

1.5 ENVIRONMENTAL PERMIT REQUIREMENTS ..... 3

**2.0 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES..... 3**

2.1 DETAILED DESCRIPTION OF THE PROPOSED ACTION ..... 4

2.1.1 Background ..... 4

2.1.2 Proposed Action ..... 4

2.2 DESCRIPTION OF ALTERNATIVE ACTIONS ..... 7

2.2.1 Renovate the Existing MTF Alternative..... 7

2.2.2 Construct a Replacement MTF/Demolish the Existing MTF Complex  
 Alternative ..... 7

2.2.3 Alternatives Eliminated from Further Study ..... 8

2.3 DESCRIPTION OF THE NO ACTION ALTERNATIVE..... 8

2.4 COMPARISON OF ENVIRONMENTAL EFFECTS OF THE PROPOSED ACTION  
 AND ALTERNATIVES ..... 8

**3.0 AFFECTED ENVIRONMENT..... 8**

3.1 AIR QUALITY ..... 9

3.2 NOISE 9

3.3 WASTES, HAZARDOUS MATERIALS, AND STORED FUEL ..... 10

3.4 WATER RESOURCES ..... 11

3.5 FLOODPLAINS..... 11

3.6 LAND USE ..... 12

3.7 TRANSPORTATION ..... 12

3.8 SAFETY AND OCCUPATIONAL HEALTH..... 13

3.9 SOCIOECONOMICS ..... 13

**4.0 ENVIRONMENTAL CONSEQUENCES..... 13**

4.1 AIR QUALITY ..... 14

4.1.1 Proposed Action ..... 14

4.1.2 Renovate the Existing MTF Alternative..... 14

4.1.3 Construct a Replacement MTF/Demolish the Existing MTF Complex  
 Alternative ..... 15

4.1.4 No Action Alternative ..... 15

4.1.5 Cumulative Air Quality Impacts ..... 15

4.2 NOISE 15

4.2.1 Proposed Action ..... 15

4.2.2 Renovate the Existing MTF Alternative..... 16

4.2.3 Construct a Replacement MTF/Demolish the Existing MTF Complex  
 Alternative ..... 16

4.2.4 No Action Alternative ..... 17

4.3 WASTES, HAZARDOUS MATERIAL, AND STORED FUEL..... 17

---

4.3.1	Proposed Action .....	17
4.3.2	Renovate the Existing MTF Alternative.....	19
4.3.3	Construct a Replacement MTF/Demolish the Existing MTF Complex Alternative.....	20
4.3.4	No Action Alternative .....	21
4.4	WATER RESOURCES.....	21
4.4.1	Proposed Action .....	21
4.4.2	Renovate the Existing MTF Alternative.....	22
4.4.3	Construct a Replacement MTF/Demolish the Existing MTF Complex Alternative.....	22
4.4.4	No Action Alternative .....	23
4.5	FLOODPLAINS.....	23
4.5.1	Proposed Action .....	23
4.5.2	Renovate the Existing MTF Alternative.....	24
4.5.3	Construct a Replacement MTF/Demolish the Existing MTF Complex Alternative.....	24
4.5.4	No Action Alternative .....	24
4.6	LAND USE .....	25
4.6.1	Proposed Action .....	25
4.6.2	Renovate the Existing MTF Alternative.....	25
4.6.3	Construct a Replacement MTF/Demolish the Existing MTF Complex Alternative.....	25
4.6.4	No Action Alternative .....	25
4.7	TRANSPORTATION .....	26
4.7.1	Proposed Action .....	26
4.7.2	Renovate the Existing MTF Alternative.....	26
4.7.3	Construct a Replacement MTF/Demolish the Existing MTF Complex Alternative.....	26
4.7.4	No Action Alternative .....	27
4.8	SAFETY AND OCCUPATIONAL HEALTH.....	27
4.8.1	Proposed Action .....	27
4.8.2	Renovate the Existing MTF Alternative.....	28
4.8.3	Construct a Replacement MTF/Demolish the Existing MTF Complex Alternative.....	28
4.8.4	No Action Alternative .....	28
4.9	SOCIOECONOMICS .....	29
4.9.1	Proposed Action .....	29
4.9.2	Renovate the Existing MTF Alternative.....	29
4.9.3	Construct a Replacement MTF/Demolish the Existing MTF Complex Alternative.....	29
4.9.4	No Action Alternative .....	29
4.10	OTHER ITEMS WITH NO POTENTIAL IMPACTS .....	30
4.11	CUMULATIVE IMPACTS .....	30
<b>5.0</b>	<b>CONCLUSIONS.....</b>	<b>31</b>
<b>6.0</b>	<b>MANAGEMENT REQUIREMENTS .....</b>	<b>31</b>
6.1	AIR QUALITY .....	31

6.2 HAZARDOUS MATERIALS/WASTES..... 31  
6.3 WATER RESOURCES..... 31  
6.4 SAFETY AND OCCUPATIONAL HEALTH..... 32  
6.5 BIOLOGICAL RESOURCES..... 32  
**7.0 PERSONS CONTACTED ..... 33**  
**8.0 LIST OF PREPARERS ..... 34**  
**9.0 REFERENCES ..... 34**

**FIGURES**

- Figure 1-1 Project Location and Vicinity Map, Construction of Primary Care Clinic/Demolition of Existing MTF Complex, MacDill Air Force Base
- Figure 2-1 Demolish Existing MTF Complex Site Plan, Construction of Primary Care Clinic/Demolition of Existing MTF Complex, MacDill Air Force Base
- Figure 2-2 Construct Primary Care Clinic Site Plan, Construction of Primary Care Clinic/Demolition of Existing MTF Complex, MacDill Air Force Base
- Figure 2-3 Primary Care Clinic Civil Engineering Site Plan, Construction of Primary Care Clinic/Demolition of Existing MTF Complex, MacDill Air Force Base
- Figure 3-1 Environmental Constraints in Vicinity of Proposed Primary Care Clinic, Construction of Primary Care Clinic/Demolition of Existing MTF Complex, MacDill Air Force Base
- Figure 3-2 Environmental Constraints in Vicinity of Existing MTF Complex, Construction of Primary Care Clinic/Demolition of Existing MTF Complex, MacDill Air Force Base
- Figure 3-3 100-Year Floodplain Map, Construction of Primary Care Clinic/Demolition of Existing MTF Complex, MacDill Air Force Base

**TABLES (within text)**

Table 4.1.1 Proposed Action Air Emissions at MacDill AFB

**TABLES (in Tables Section at back)**

Table 2.1 Comparison of Environmental Consequences, Primary Care Clinic-Military Construction, MacDill Air Force Base

Tables 4A-F Total Estimated Air Emissions for Projects at MacDill AFB – FY2003 to FY2007

**APPENDICES**

APPENDIX A	AF FORM 813	A-1
APPENDIX B	CONSISTENCY STATEMENT	B-1
APPENDIX C	AGENCY COORDINATION LETTERS AND COMMENTS	C-1
APPENDIX D	AIR EMISSION CALCULATIONS	D-1
APPENDIX E	STATEMENT OF BASIS - SWMU 21 (OLD REFUELING AREA)	E-1

## **1.0 PURPOSE OF AND NEED FOR PROPOSED ACTION**

This Environmental Assessment (EA) identifies, describes, and evaluates potential environmental impacts associated with the proposed construction of a new Primary Care Clinic, and the demolition of the existing Medical Treatment Facility (MTF) complex at MacDill Air Force Base (AFB) (the Proposed Action), as well as alternatives to the Proposed Action, including the Renovate the Existing MTF Alternative, Construct a Replacement MTF/Demolish the Existing MTF Complex Alternative, and the No Action Alternative.

### **1.1 PURPOSE OF THE PROPOSED ACTION**

The purpose of the Proposed Action is to replace a substandard MTF with a new Primary Care Clinic at the base. The services this new facility would provide would be limited to Primary Care, limited Specialty Care, and certain Ancillary services to eligible patients. Other medical services not provided by the MacDill Primary Care Clinic would be provided at a local hospital through a facility-sharing agreement. In addition, the Proposed Action is intended to remove an aging, substandard MTF complex, inappropriately located within the Base Housing District, and make this space available for future housing development, when needed.

### **1.2 NEED FOR THE PROPOSED ACTION**

Medical treatment services at MacDill are currently provided at the MTF complex located along the eastern boundary of the site. The existing MTF is an aging, substandard facility in a degraded condition.

Due to space limitations at the Composite Medical Building (Building 711 and its additions), many services are currently located in other buildings, with the 6<sup>th</sup> Medical Group (MDG) occupying open space, where available. With related services located in physically separate locations, the efficiency of the 6<sup>th</sup> MDG is adversely impacted.

As such, MacDill AFB seeks to build a new Primary Care Clinic on the base. This EA examines the potential for impacts from the establishment of a new facility, and also from the demolition of the existing MTF complex. The need for this EA was originally outlined on AF Form 813, Request for Environmental Impact Analysis, a copy of which is included in Appendix A.

### **1.3 OBJECTIVES OF THE PROPOSED ACTION**

Establishment of a new facility would benefit military personnel, dependents, and retirees who must currently receive their healthcare in a substandard facility in degraded condition. Completion of Proposed Action would provide a state-of-the-art Primary Care Clinic for use by the 6<sup>th</sup> MDG. The 6<sup>th</sup> MDG would provide Primary Care, limited Specialty Care, and Ancillary services in the new clinic. All other Specialty Care, Ambulatory, Surgery, and Inpatient services would be outsourced to the TRICARE network.

In addition to providing a state-of-the-art facility, MacDill wishes to upgrade its facilities to meet current code, policy, and force protection guidelines. The existing MTF does not meet these objectives. The existing Composite Medical Building (Building 711 and its additions) has shortcomings related to fire and electrical codes, does not meet the intended accessibility requirements of the Americans with Disabilities Act (ADA), and does not meet certain anti-terrorism requirements of the *Unified Facilities Criteria, DoD Minimum Antiterrorism Standards for Buildings, 31 Jul 2002*.

Relocating the Primary Care Clinic near the main gate of MacDill AFB allows for easier access for off-base personnel and visitors, and reduces unnecessary vehicular traffic volume on interior base roadways. Relocation of the facility would be in line with the base's *2010 Plan* (Master Development Plan).

### **1.4 SCOPE OF THE ENVIRONMENTAL REVIEW**

This EA examines the potential for impacts to the environment resulting from the military construction (MILCON) of a Primary Care Clinic at MacDill AFB, Florida (Figure 1-1). This environmental analysis has been conducted in accordance with the President's Council on Environmental Quality (CEQ) regulations, Title 40 of the Code of Federal Regulations (CFR)

§§1500-1508, as they implement the requirements of the National Environmental Policy Act (NEPA) of 1969, 42 U.S.C. §4321, et seq., and 32 CFR Part 989, Environmental Impact Analysis Process.

The Federal Coastal Zone Management Act (CZMA) required Federal agencies carrying out activities subject to the Act to provide a “consistency determination” to the relevant state agency. The Air Force’s Consistency Determination is contained in the Consistency Statement in Appendix B. This EA, including the Air Force’s Consistency Statement, was submitted to the Florida State Clearinghouse for a multi-agency review. This EA was also made available for public review. The Florida Department of Community Affairs, with input from state and county agencies, determined that the proposed project is consistent with the Florida Coastal Management Program (Appendix C). Public comments are also included in Appendix C.

## **1.5 ENVIRONMENTAL PERMIT REQUIREMENTS**

It is anticipated that completion of this project would require application for a storm water management permit from the Southwest Florida Water Management District (SWFWMD) for the construction of the proposed Primary Care Clinic and impervious areas of the parking lots. In addition, since the site is larger than one acre in area, a National Pollutant Discharge Elimination System (NPDES) Phase II storm water construction permit would be required.

In addition, a National Emissions Standard for Hazardous Air Pollutants (NESHAP) notification, along with a NESHAP asbestos-containing material survey report and fee for demolition would be provided to the Environmental Protection Commission of Hillsborough County.

## **2.0 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES**

This section provides a description of the Proposed Action and alternatives to the Proposed Action. The Proposed Action involves the construction of a new Primary Care Clinic for the 6<sup>th</sup> MDG to provide adequate Primary Care, limited Specialty Care, and certain ancillary services to base personnel, dependents, and retirees in the area. Under the Proposed Action, services not provided at the Primary Care Clinic on MacDill AFB, such as surgery, would be rendered at a local area hospital, where 6<sup>th</sup> MDG personnel will utilize private facilities to provide such

services. The Proposed Action also includes demolition of the antiquated existing MTF complex. Three alternatives to the Proposed Action were considered as part of this EA, including the Renovate the Existing MTF Alternative, the Construct a Replacement MTF/Demolish the Existing MTF Complex Alternative, and the No Action Alternative.

## **2.1 DETAILED DESCRIPTION OF THE PROPOSED ACTION**

### **2.1.1 Background**

Land on the southern tip of the Interbay Peninsula was selected for an army airbase in 1939, and MacDill AFB became an airbase in 1941. The base hospital (Composite Medical Building - Building 711) was constructed in 1956. Since that time, the building has been modified, and additions to the building were completed in 1977. The area surrounding the MTF has seen a growth in enlisted housing, and the MTF currently lies near the eastern border of base, surrounded by an area known as the Base Housing District (Figure 2-1). The existing facility is currently undersized, substandard, and poorly located within the base. As the services and functions of the base hospital have expanded over the years, there has been an increased need for space, and many of the services and personnel of the 6<sup>th</sup> MDG have been located in nearby buildings and available space. Multiple activities housed in physically-separated locations have negatively impacted operational efficiencies of the 6<sup>th</sup> MDG.

The 6<sup>th</sup> MDG currently occupies twenty-four buildings, with all but four of these buildings located proximate to the existing base hospital. These buildings are cumulatively referred to as the existing MTF complex. The MTF complex covers approximately 22 acres of land, of which an estimated 17 acres are covered by buildings and pavement. These buildings cumulatively total approximately 250,000 square feet of functional space on MacDill AFB.

### **2.1.2 Proposed Action**

The Proposed Action would include the construction of a new Primary Care Clinic, as well as an associated parking lot, in the north-central section of the base. Services that would be provided by this facility would be limited to Primary Care, limited Specialty Care, and certain ancillary services. Other services currently provided for on-base, including intensive care and surgical

services, would be provided by 6<sup>th</sup> MDG staff stationed off-base. Many of these services and 6<sup>th</sup> MDG personnel would be stationed in the Tampa General Hospital facility, and medical services would be provided from this local area hospital. These actions, when considered together, would provide a net improvement in the quality of services provided.

The proposed site selected for construction is currently open land, within one-half mile of the main gate (Dale Mabry Highway) to the base, and near the existing base Pharmacy (PharmaCare) (Figure 2-2).

The Proposed Action includes the construction of an approximately 100,000 square foot (in plan) concrete and steel, multi-story building which would provide approximately 168,000 square feet of usable floor space as certain portions of the building would be open from the first floor to the ceiling (Figure 2-3).

A parking lot would be constructed on property contiguous to the proposed Primary Care Clinic. The new parking lot would be a permanent asphalt parking lot and would provide approximately 700 parking spaces. The new parking area would be designed to manage storm water, and appropriately sized and permitted storm water retention areas would be constructed adjacent to the parking lots. The site selected for the new parking lot would be along the northern and western sides of the proposed Primary Care Clinic, with a patient drop-off/pick-up loop at the main entrance on the north side of the building. Appropriately-sized emergency power generators and fuel storage tanks would be installed. Building standoff distances would meet current DoD antiterrorism construction requirements.

The Proposed Action would include the construction of a new, main entrance drive from North Boundary Boulevard, into the northern parking lot for the Primary Care Clinic. A deceleration lane would be added to North Boundary Boulevard to accommodate vehicles turning into the clinic without disrupting the flow of traffic along this primary base thoroughfare.

Construction of permanent parking lots would include permanent asphalt surface, curbing, striping, and storm water treatment/attenuation areas. Construction of the parking lot would require application for a project-specific storm water management permit from the SWFWMD. This project would also require a Phase II storm water construction permit.

The Proposed Action also includes the demolition of the existing MTF complex. This demolition would be initiated after construction of the new Primary Care Clinic is completed, and all services and personnel are transferred to the new facility or the off-base TRICARE network facility. As well as the Composite Medical Building (Building 711 and its additions), the Proposed Action addresses the subsequent demolition of all of the MTF complex buildings, as well as associated parking lots, curbing, sidewalks, etc. currently used by the 6<sup>th</sup> MDG. The more significant buildings within the complex include the following:

- Building 691 – Records Storage
- Building 696 – Medical Log Warehouse
- Building 697 – Education and Training
- Building 710 – TRICARE
- Building 712 – Heating Facilities (Boiler Plant)
- Building 714 – Dormitory
- Building 719 – Bioenvironmental Engineering Flight (BEF)
- Building 722 – Electrical Power Station Building

The more ancillary “buildings” within the complex include the liquid oxygen storage building, electrical generation buildings, the water storage tanks, etc.

Upon completion of the demolition activities, the disturbed areas of the site would be covered with sod or hydro-seeded to establish groundcover and return the area to an open field.

In addition, the following facilities would remain in service for use by the 6<sup>th</sup> MDG: Building 926, PharmaCare, and the BX Satellite Pharmacy. Building 250, Building 82 (Education and Training), and Building 83 (Storage), would not be demolished and would remain available for alternative uses. Ultimately, the remaining buildings in the MTF complex will be demolished; however, some demolition may be completed at a later date or as part of another project.

Implementation of the Proposed Action would result in a decrease in the number of 6<sup>th</sup> MDG personnel on-base, as certain preventative, intensive, surgical, and acute services would be shifted off-base, to be provided by 6<sup>th</sup> MDG stationed at nearby hospitals; or by clinics within the TRICARE network.

## **2.2 DESCRIPTION OF ALTERNATIVE ACTIONS**

Alternative actions considered for further evaluation focused upon the renovation of existing facilities, and/or new construction of additional space to augment the operations of the existing MTF. The alternatives retained for further evaluation are identified as the Renovate the Existing MTF Alternative, the Construct a Replacement MTF/Demolish the Existing MTF Complex, and the No Action Alternative.

### **2.2.1 Renovate the Existing MTF Alternative**

The Renovate the Existing MTF Alternative includes the complete renovation of the existing Composite Hospital Building (Building 711 with its additions), coupled with construction of a new addition to the hospital building to provide the additional space necessary to accommodate an expansion of services to be provided by the 6<sup>th</sup> MDG. The supplemental construction would create an additional 162,000 square feet of floor space within a three-story addition. Modifications to parking lots would also be completed in order to meet the set-back requirements of the *Unified Facilities Criteria, DoD Minimum Antiterrorism Standards for Buildings, 31 Jul 2002*. The remaining facilities within the existing MTF complex would not be significantly altered.

This alternative provides for a significant increase in floor space, as compared to current conditions. However, this alternative does not completely meet the objective of improved efficiency, as some services provided by the 6<sup>th</sup> MDG would still be in physically separate locations. In addition, the implementation of this alternative would not meet the objectives of the Base Master Development Plan.

### **2.2.2 Construct a Replacement MTF/Demolish the Existing MTF Complex Alternative**

The Construct a Replacement MTF/Demolish the Existing MTF Complex Alternative would include the construction of a new MTF, as well as an associated parking lot, at the same location as the Proposed Action.

This alternative includes the construction of a 365,000 square foot (approximately 200,000 square foot in plan), three-story, concrete and steel building. Construction of approximately 1,000 parking spaces would be completed. An associated 10,000 square foot War Reserve Material (WRM) Warehouse building would also be constructed southeast of the new MTF.

This alternative provides for a new, state-of-the art facility for all the medical services currently provided on-base, and includes a modest net increase in floor space, as compared to current conditions. However, implementation of this alternative would result in the construction of some unnecessary facilities, as it is the intention of the AMC to shift preventative, intensive, surgical, and acute services off-base to TRICARE network facilities concurrent with this MILCON.

### **2.2.3 Alternatives Eliminated from Further Study**

No alternatives were considered and eliminated from further study as part of this EA.

## **2.3 DESCRIPTION OF THE NO ACTION ALTERNATIVE**

Under the No Action Alternative, no new medical facilities would be constructed and the existing facility would continue to be used. If this alternative were implemented, some building code and policy modifications would still be required for Building 711. These modifications include accessibility improvements to meet ADA requirements, electrical upgrades, improvements to the back-up generation system to meet emergency planning requirements, and set-back changes within the parking lot to meet current antiterrorism requirements.

## **2.4 COMPARISON OF ENVIRONMENTAL EFFECTS OF THE PROPOSED ACTION AND ALTERNATIVES**

Table 2.1 (back of text) is a summary of the potential environmental impacts of the Proposed Action, the Renovate the Existing MTF Alternative, the Construct a Replacement MTF/Demolish the Existing MTF Complex Alternative, and the No Action Alternative.

## **3.0 AFFECTED ENVIRONMENT**

This section describes the characteristics of the existing natural and man-made environment that could be affected by the Proposed Action, the Renovate the Existing MTF Alternative, the Construct a Replacement MTF/Demolish the Existing MTF Complex, or the No Action Alternative. This section establishes the basis for assessing impacts of the alternatives on the affected environment provided in Section 4.0.

### **3.1 AIR QUALITY**

The Clean Air Act (CAA), as amended in 1977 and 1990, provides the basis for regulating air pollution to the atmosphere. The United States Environmental Protection Agency (USEPA) set air quality standards for six “criteria” pollutants: carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), ozone (O<sub>3</sub>), sulfur oxides (SO<sub>x</sub>), measured as sulfur dioxide (SO<sub>2</sub>), lead (Pb), and particulate matter with an aerodynamic diameter less than or equal to 10 micrometers (PM<sub>10</sub>). These standards are the cornerstone of the CAA. Although not directly enforceable, they are the benchmark for the establishment of emission limitations by the states for the pollutants USEPA determines may endanger public health or welfare.

The Environmental Protection Commission of Hillsborough County (EPC) is responsible for issuing and enforcing the CAA Title V Air Operation Permit (Permit No. 0570141-001-AV issued 21 Oct 99) for MacDill AFB. The 1998 air emission inventory at MacDill AFB found the installation is a major source of nitrogen oxides with potential emissions of 184 tons per year.

The USEPA tracks compliance with the air quality standards through designation of a particular region as “attainment” or “non-attainment.” MacDill AFB is located in Hillsborough County within the West Central Florida Intrastate Air Quality Control Region (AQCR). Hillsborough

County currently meets the EPA air quality standards for all criteria pollutants (60 FR 62748, December 7, 1995). The county was formerly non-attainment for ozone, but is currently in maintenance of attainment.

### **3.2 NOISE**

The meaning of noise for this analysis is undesirable sound that interferes with speech communication and hearing, or is otherwise annoying (unwanted sound). In June 1980, the Federal Interagency Committee on Urban Noise published guidelines (FICUN 1980) relating day-night average sound level (DNL) values to compatible land uses. Most Federal agencies have identified 65 decibels (dB) DNL as a criterion that protects those most affected by noise and that can often be achieved on a practical basis. The Air Installation Compatible Use Zone (AICUZ) Study (1998) plotted the DNL from 65 to 80 dB for a typical busy day at the base. The DNL contours reflect the aircraft operations at MacDill AFB. The DNL 65 dB contour covers the main runway, and extends about one mile southwest over Tampa Bay, and about 1 ½ miles northeast over Hillsborough Bay. A second, smaller DNL 65 dB contour is centered near the southeastern end of the inactive runway (taxiway).

The easternmost 65 dB contour at the northeastern end of the runway intersects the northwest portion of the proposed parking lot for the new clinic. The location of the proposed Primary Care Clinic is more than 300 feet outside the current 65 dB contour.

In 2010, a fleet of 32 new KC-767A Tanker Transports has been proposed for bed-down at MacDill AFB, with the intent of replacing our aging fleet of twelve KC-135 Stratotankers and enhancing the capabilities of the 6<sup>th</sup> Air Mobility Wing. The KC-767A is inherently quieter than the KC-135 it is intended to replace. Although the net increase in aircraft would add to the number of flights at the base, initial calculations by the Air Force indicate the 65 dB contour is not expected to shift significantly as a result. A formal evaluation of the potential changes to the AICUZ contours is scheduled to be completed in 2004.

### **3.3 WASTES, HAZARDOUS MATERIALS, AND STORED FUEL**

Hazardous wastes generated at MacDill AFB include solvents, fuels, lubricants, stripping materials, used oils, waste paint-related materials, and other miscellaneous wastes. The responsibility for managing hazardous waste lies with the generating organization and 6<sup>th</sup> CES/CEV. Wastes come from approximately 50 locations throughout the base and are managed at satellite accumulation points base-wide.

Approximately 105 operations base-wide use hazardous materials. Hazardous materials on-base include various organic solvents, chlorine, freon, paints, thinners, oils, lubricants, compressed gases, pesticides, herbicides, nitrates, and chromates. A detailed tracking and accounting system is in place to identify potentially hazardous materials and to ensure that base organizations are approved to use specific hazardous materials.

The base receives jet fuel (JP-8) at the Defense Fuel Supply Point (DFSP) by pipeline from Port Tampa. JP-8 storage capacity at DFSP and MacDill AFB is over 7.5 million gallons. Diesel, gasoline, and heating oil are stored throughout MacDill AFB in small to medium-sized Underground Storage Tanks (USTs) and Aboveground Storage Tanks (ASTs) ranging in size from 50 to 12,000 gallons, including a 12,000-gallon heating oil AST and two 5,000-gallon diesel USTs at the existing MTF.

All generated waste water is treated at the base's waste water treatment plant. The plant is permitted to treat a volume of 1.2 million gallons per day (mgd). Currently, the plant operates at an average of approximately 0.6 mgd. All treated waste water is currently reused on-base by reclamation, principally through spray application at the golf course located at the southeast quadrant of the base.

### **3.4 WATER RESOURCES**

Surface water flows at the base are primarily from storm water runoff. Most of the base drains toward the southern tip of the Interbay Peninsula; however, the easternmost section of the base drains toward Hillsborough Bay.

The USEPA issued a National Pollutant Discharge Elimination System (NPDES) multi-sector storm water general permit to MacDill AFB in July 2003. This permit authorizes the discharge of storm water associated with industrial activity. In accordance with 40 CFR 112, the base has developed a Spill Prevention Control and Countermeasures (SPCC) Plan and a Facility Response Plan given the location of the base adjacent to navigable waters and shorelines, as well as the amount of fuel storage capacity existing on site.

### **3.5 FLOODPLAINS**

According to information provided by the Federal Emergency Management Agency (FEMA Maps dated 1982-1991), 80 percent of the base is within the 100-year floodplain. The maps indicate that all the residential, industrial, and institutional (medical and education) land uses on the base are within the 100-year floodplain, along with most of the commercial and aviation support areas. The majority of the 20 percent of land that is above the floodplain is designated for airfield operations.

The extent of the floodplain is an important consideration for MacDill AFB because EO 11988, Floodplain Management Guidelines, regulates the uses of these areas. The objective of this presidential order is to avoid, to the extent possible, the long and short-term adverse impacts associated with occupancy and modification of floodplains. To comply with EO 11988, before taking any action, the Air Force must evaluate the impacts of specific proposals in the floodplain.

The proposed new Primary Care Clinic and parking lot would be located outside of the 100-year floodplain (Figure 3-1). The existing MTF complex, proposed for demolition, lies at an elevation of less than 10 feet above mean sea level (MSL), and is within the 100-year floodplain.

### **3.6 LAND USE**

Land use at MacDill AFB includes airfield, industrial, commercial, institutional (educational and medical), residential, recreational, and vacant land. The proposed Primary Care Clinic site is currently designated as vacant land, while the existing MTF complex proposed for demolition is designated as institutional land.

### **3.7 TRANSPORTATION**

MacDill AFB is served by four operating gates at Dale Mabry Highway, Bayshore Boulevard, MacDill Avenue, and Manhattan Avenue. The Dale Mabry, MacDill, and Bayshore gates are used for government and personal vehicles (commuter traffic). The Manhattan gate is used as the large vehicle (contractor trucks, deliver vehicles, RVs) entry point. Large vehicles are inspected and their credentials and destination are confirmed before entering the base.

The transportation system on-base consists of arterials, collectors, and local streets that connect with the off-base network through the three gates. On-base arterial facilities include North and South Boundary Boulevards, Bayshore Boulevard, Marina Bay Drive, and Tampa Point Boulevard. The 1998 traffic study determined that service levels for traffic on-base are generally acceptable.

### **3.8 SAFETY AND OCCUPATIONAL HEALTH**

The MacDill AFB Asbestos Management Plan identifies procedures for management and abatement of asbestos. Prior to renovation or demolition activities, asbestos sampling is performed and, if present, the asbestos is removed in accordance with applicable Federal and state regulations.

Numerous limited-scope asbestos surveys have been completed at the existing composite hospital (Building 711 and its additions), and at several of the ancillary buildings. These files are maintained on-base at 6 CEV/CES, Building 147, Room 304. Typically, these surveys were completed prior to small-scale renovation projects. Asbestos fibers were identified as being present in at least 10 of the 12 screening reports on file, with asbestos containing materials (ACMs) typically including roofing materials, piping, and pipe wrap.

The base engineer assumes that all structures constructed prior to 1978 possibly contain lead-based paint (LBP). When required, LBP abatement is accomplished in accordance with applicable Federal and State regulations, and base procedures, prior to demolition activities to prevent any health hazards.

### **3.9 SOCIOECONOMICS**

The Economic Impact Region (EIR) for MacDill AFB is the geographic area within a 50-mile radius of the base subject to significant base-related economic impacts. According to the 1998 Economic Resource Impact Statement for MacDill AFB the total economic impact of MacDill AFB on the EIR was \$3.5 billion with over 105,000 jobs supported. Purchase of local labor, goods, and services to support base operations provides a total annual economic impact of \$1.34 billion. Retiree income provides a total economic impact of \$2.19 billion. The direct impact on local income produced by base expenditures is \$494 million.

### **4.0 ENVIRONMENTAL CONSEQUENCES**

The effects of the Proposed Action and alternatives on the affected environment are discussed in this section.

#### **4.1 AIR QUALITY**

##### **4.1.1 Proposed Action**

Air quality impacts would occur during construction of the Primary Care Clinic and the demolition of the existing MTF complex; however, these air quality impacts would be temporary.

Fugitive dust (suspended and PM<sub>10</sub> particulate matter) and construction vehicle exhaust emissions would be generated during construction. Dust generated by equipment and construction activities would fall rapidly within a short distance from the source. If required, areas of exposed soil could be sprayed with water daily to suppress dust.

The anticipated pollutant emissions for the Proposed Action have been calculated given the general size and scope of the project. These estimates are presented in Appendix D and are compared to Hillsborough County Emissions Inventory totals in Table 4.1.1 below.

**Table 4.1.1 Proposed Action Air Emissions at MacDill AFB**

<b>Pollutant</b>	<b>Proposed Action Annual Emissions (tpy)<sup>a</sup></b>	<b>Hillsborough County Emissions Inventory<sup>b</sup> (tpy)</b>	<b>Net Change (%)</b>	<b>De minimis Values<sup>d</sup> (tpy)</b>	<b>Above/ Below De minimis</b>
CO	25.12	19,272	0.13	100	Below
VOC	9.89	27,703	0.04	100	Below
NO <sub>x</sub>	34.52	82,563	0.04	100	Below
SO <sub>x</sub>	1.84	NA	--	100	Below
PM <sub>10</sub> <sup>c</sup>	3.54	NA	--	100	Below
Pb	--	53	--	25	--

<sup>a</sup>Includes sum of both construction of Primary Care Clinic and demolition of existing MTF.

<sup>b</sup>Based on stationary permitted emissions presented in 1997 Ozone Emissions Inventory, EPC.

<sup>c</sup>PM10 estimated as 50 percent of the 1990 tpy reported for TSP

<sup>d</sup>Source: 40 CFR 93.153, November 30, 1993

tpy Tons per year

% Percent

#### **4.1.2 Renovate the Existing MTF Alternative**

The principal activity of this alternative is the interior renovation of the existing facility, coupled with the construction of a building addition. The construction activities with the potential for affecting air quality, especially earthwork and demolition, would be significantly lower than from the Proposed Action.

#### **4.1.3 Construct a Replacement MTF/Demolish the Existing MTF Complex Alternative**

This alternative involves the construction of a new MTF, coupled with the subsequent demolition of the existing MTF Complex. The size and scope of work that would be completed under this alternative is similar to that of the Proposed Action; therefore, potential for affecting air quality, especially earthwork and demolition, would be similar to that resulting from implementation of the Proposed Action.

#### **4.1.4 No Action Alternative**

Because the status quo would be maintained, there would be no impacts to air quality under the No Action Alternative.

#### **4.1.5 Cumulative Air Quality Impacts**

Other projects are proposed for construction on MacDill AFB during the 18-month period needed to complete the MTF project. None of these projects are immediately adjacent to the proposed project site; however, they have been included in the cumulative emissions analysis since they are located on MacDill AFB. Table 4A summarizes the air emissions for each of these projects. Tables 4B through 4F provide the cumulative annual air emissions for each project for Fiscal Years (FY) 2003 through FY 2007, respectively. As Tables 4B through 4F demonstrate, the cumulative annual emission estimates fall below the *de minimus* level of 100 tons per year for all five pollutants evaluated.

### **4.2 NOISE**

#### **4.2.1 Proposed Action**

The closest noise sensitive receptors in the vicinity of the proposed Primary Care Clinic construction site include the occupants of the AAFES gas station (Building 924), the Burger King (Building 930), and the base Credit Union (Building 934). For the demolition of Building 712, the nearest potential receptors are the occupants of the dormitory (Building 714) located approximately 200 feet to the southeast. Beyond the MTF complex, the nearest potential receptors are the eastern-most residents of base housing along Pitsenbarger Circle and Cabbage Circle, located less than 400 feet to the west.

The adjacent receptors would probably experience noise impacts from construction and/or construction-related vehicles. The magnitude of these impacts would be directly related to the proximity of the occupied facility to the construction or demolition site. In addition, the impacts vary according to the activity occurring on any particular day, and impacts would cease when construction is completed. Based on a cumulative average construction noise level of approximately 85 dB at 50 feet from the center of the project site (depending upon the current stage of the project), occupants of these nearby buildings would be negatively impacted. However, these impacts are temporary and considered minor.

#### **4.2.2 Renovate the Existing MTF Alternative**

The principal activity of this alternative is the interior renovation of the existing facility, coupled with the construction of a building addition. These construction activities, by necessity, would be completed in a phased manner, as the operations of the existing facility cannot be suspended. Additionally, completion of the construction during typical non-business hours would not provide much benefit, as the hospital is operational and occupied 24 hours a day. Occupants within the building, including both personnel and patients, would have the highest potential impacts, and impacts would be more acute than those from the Proposed Action.

#### **4.2.3 Construct a Replacement MTF/Demolish the Existing MTF Complex Alternative**

This alternative involves the construction of a new MTF, coupled with the demolition of the existing MTF complex. As with the Proposed Action, noise sensitive receptors in the vicinity of the proposed MTF construction include the occupants of the AAFES gas station (Building 924), the Burger King (Building 930), and the base Credit Union (Building 934). For the demolition of the existing MTF complex, the nearest potential receptors are the occupants of the dormitory (Building 714), located approximately 200 feet to the southeast, and the eastern-most residents of base housing along Pitsenbarger Circle and Cabbage Circle located less than 400 feet west of the complex.

Under this alternative, potential noise impacts would occur during the construction and demolition activities. However, these impacts are temporary and considered minor.

#### **4.2.4 No Action Alternative**

Under the No Action Alternative only insignificant, relatively minor short-term noise impacts would occur, from the minor construction activities associated with code and policy improvements that would be completed at Building 711.

### **4.3 WASTES, HAZARDOUS MATERIAL, AND STORED FUEL**

The following section describes sanitary wastewater treatment, solid waste collection and disposal, hazardous material and waste management, and stored fuels management.

#### **4.3.1 Proposed Action**

An increase in the generation of solid waste would occur during and subsequent to construction activities for the Proposed Action. The base has sufficient resources to manage the temporary increase in solid waste and the local landfills have sufficient capacity to accept the additional solid waste.

The construction of numerous restroom facilities, showers, baths, and/or other facilities are included in the Proposed Action. Implementation of the Proposed Action is not anticipated to result in a significant change in the total volume of waste water to the base sanitary sewer system, as the number of hospital visitors and base personnel would remain unchanged or even decrease. During project design, a determination would be made as to the need to upgrade the capabilities of the sanitary sewer lift station servicing the area of the proposed Primary Care Clinic.

Hazardous wastes/materials, such as paint, adhesives, and solvents, may be on site during the construction work for the Proposed Action. All construction related hazardous wastes/materials, including petroleum products, would be removed and disposed of according to base procedures, as well as applicable State and Federal regulations. In general, medical and radiological medical waste volume would decrease as the number of patients on-base decreases. However, a short-term increase in waste may occur due to disposal of stored or unusable materials associated with the existing MTF complex that is not transferred to the new facility. No impacts from hazardous materials or waste are anticipated from completion of the project.

The site selected for construction of the new Primary Care Clinic under the Proposed Action is located near two inactive Installation Restoration Program (IRP) sites (SWMU-13 and SWMU-21). The planned north-south entranceway to the hospital bisects SWMU-13, and the northern end of the planned parking lot encroaches upon the southern limits of the site. The existing MTF complex is located near one IRP site (Site 52), at the Hospital Dormitory. None of the constituents of concern at these sites represent an immediate threat to life and health.

SWMU-13 is located along the south side of North Boundary Road west of Kingfisher Street (Figure 3-1). This location was a former Civil Engineering storage yard where wood was treated in a pit with creosote prior to 1945. No surficial evidence of the pit remains. Soil samples collected in September 1997 did not identify any creosote-contaminated soils, and no impacted

soils were noted during the construction of the nearby AAFES Fuel Station or the Burger King restaurant. This site was granted "No Further Action" status by the Florida Department of Environmental Protection in November 1998.

SWMU-21 is the current Civil Engineering storage area and Grounds Maintenance area, located to the south of the proposed Primary Care Clinic construction area (Figure 3-1). SWMU-21 was utilized as an aircraft refueling area until the early 1950's, and ASTs were present through 1994. No USTs have been identified at this site. Impacts to the site include soils contaminated with polynuclear aromatic hydrocarbons. Corrective measures at this location include Land Use Controls (LUCs) to mitigate contact and disturbance of these impacted soils. The base is currently in compliance with the LUCs for SWMU-21. A copy of the IRP's *Statement of Basis - SWMU 21 (Old Refuel Area)* is included in Appendix E.

Site 52 is identified as the Hospital Dormitory UST Area (Figure 3-2). The site is located just south of the existing hospital, behind the hospital dormitory. Site 52 formerly contained a single 2,000-gallon UST, used to store fuel oil to heat the dormitory. The tank reportedly was in service from 1959 through 1991. Fuel was transferred to the mechanical room of the dormitory via underground piping. A 750-gallon discharge was reported in December 1990. The UST was taken out of service in 1991, as the heating system was converted to natural gas. Impacted soils have been over-excavated from this area on two occasions; at the time of tank removal and during a second excavation in 1996. To date, the assessment work completed has identified the presence of remaining contaminated soils and free product on the groundwater table.

Implementation of the Proposed Action creates the potential for encountering contaminated media known to be present in the vicinity of the existing hospital dormitory. Consequently, the construction contractor would be required to prepare a site-specific health and safety plan that meets the requirements of 29 CFR 1910.120(b)(4), and this plan must be reviewed and approved by Bioenvironmental Engineering Flight and the IRP Manager. In addition, during excavation or soil removal activities in the vicinity of Site 52, the construction contractor must use workers that have received 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) training with an 8-hour annual refresher in accordance with 29 CFR 1910.120.

If contaminated media are encountered during construction work around the proposed Primary Care Clinic or at the existing MTF complex, the MacDill IRP Manager would be contacted to insure that the material is managed in accordance with IRP guidelines. Based on these conditions, the Proposed Action should not represent a significant impact on the management and disposal of hazardous material or waste.

The removal of the emergency generator tanks at the existing hospital would be off-set by the installation of new generator tanks at the new Primary Care Clinic. Therefore, the Proposed Action would have no impact on stored fuels management.

#### **4.3.2 Renovate the Existing MTF Alternative**

An increase in the generation of solid waste would occur during and subsequent to construction activities for the Renovate the Existing MTF Alternative. The base has sufficient resources to manage the temporary increase in solid waste and the local landfills have sufficient capacity to accept the additional solid waste.

This alternative includes the construction of some additional floor space to the existing facility; moderately increasing the overall number of restroom facilities, showers, baths, and or other facilities. Implementation of the Renovate the Existing MTF Alternative would result in a moderate increase in the volume of waste water to the base sanitary sewer system; however, the system has sufficient capacity to handle the increase.

#### **4.3.3 Construct a Replacement MTF/Demolish the Existing MTF Complex Alternative**

This alternative involves the construction of a new MTF, coupled with the demolition of the existing MTF complex. An increase in the generation of solid waste would occur during construction activities for the Proposed Action. The base has sufficient resources to manage the temporary increase in solid waste and the local landfills have sufficient capacity to accept the additional solid waste.

The construction of numerous restroom facilities, showers, baths, and or other facilities are included in this alternative. Implementation of this alternative would result in increased volumes of waste water to the base sanitary sewer system, as the number of hospital visitors and base

personnel would increase. As with the Proposed Action, a determination would be made during project design as to the need to upgrade the capabilities of the sanitary sewer lift station servicing this area.

Hazardous wastes/materials, such as paint, adhesives, and solvents, and medical and radiological medical wastes may be on-site during the construction/demolition work for this alternative. All construction-related hazardous wastes/materials, including petroleum products, would be removed and disposed of according to base procedures, as well as applicable State and Federal regulations. Medical and radiological medical waste volume would increase, and would continue to be handled according to current procedures. No impacts from hazardous materials or waste are anticipated from completion of the project.

Implementation of this alternative would also have potential impacts with contaminated media, especially in the vicinity of the existing MTF. Therefore, as with the Proposed Action, the construction contractor would have to complete a site-specific health and safety plan that meets the requirements of 29 CFR 1910.120(b)(4), and utilize appropriately-trained workers.

#### **4.3.4 No Action Alternative**

Under the No Action Alternative, no impacts to wastes, hazardous materials, or stored fuel would occur since construction or changes to the MTF complex would not be implemented. The code and policy changes to the building are considered to be inconsequential.

### **4.4 WATER RESOURCES**

#### **4.4.1 Proposed Action**

Some soil erosion would occur during construction and demolition activities; however, implementation of a sediment and erosion control plan, including use of best management practices (BMPs) such as silt fencing and hay bales, would dramatically reduce erosion and avoid potential storm water violations.

The project would also involve demolition activities, including the removal of numerous storm water drainage structures from the existing MTF complex. Storm water in this area is externally drained; storm water from impervious surfaces is directed to drains and ditches that connect directly to the nearby Hillsborough Bay. Upon completion of the demolition activities, the area would be designated as vacant land without impervious cover. Therefore, a long-term, positive impact to surface waters would result.

Under the Proposed Action, there are no direct or indirect discharges to groundwater. Construction of the new parking lots and proposed roadways would be off-set by the demolition of an estimated 17 acres of impervious cover at the existing MTF complex. In addition, the new parking lots would include appropriately sized storm water treatment/attenuation areas. The storm water retention areas would collect surface water runoff from the parking lots and allow it to infiltrate into the ground, recharging the groundwater in the surficial aquifer.

Implementation of the Proposed Action would result in an equal number or a slight decrease in the number of 6<sup>th</sup> MDG staff, as well as a decrease in the number of patients and visitors to the base. As a result, no increases in potable water usage would occur.

#### **4.4.2 Renovate the Existing MTF Alternative**

As with the Proposed Action, some soil erosion would occur during construction activities; however, implementation of a sediment and erosion control plan including use of BMPs would dramatically reduce erosion and avoid potential storm water violations. There would be no long-term impacts to water resources upon completion of the renovation under this alternative. No long-term impacts to surface waters would result.

Under this alternative, there are no direct or indirect discharges to groundwater. Completion of an addition to the existing MTF would result in an increase in storm water which would need to be managed. Storm water from this new construction would need to be managed in accordance with current guidelines, and could not be directed to the existing drainage system. Implementation of this alternative would require the construction of internally-drained retention areas.

#### **4.4.3 Construct a Replacement MTF/Demolish the Existing MTF Complex Alternative**

Some soil erosion would occur during construction and demolition activities; however, implementation of a sediment and erosion control plan including use of BMPs such as silt fencing and hay bales, would dramatically reduce erosion and avoid potential storm water violations.

This alternative would also involve demolition activities, including the removal of numerous storm water drainage structures from the existing MTF complex. Storm water in this area is externally drained; storm water from impervious surfaces is directed to drains and ditches that connect directly to the nearby Hillsborough Bay. Upon completion of the demolition activities, the area would be designated as vacant land without impervious cover. Therefore, a long-term, positive impact to surface waters would result.

Under the Proposed Action, there are no direct or indirect discharges to groundwater. Construction of the new parking lots and proposed roadways would be off-set by the demolition of an estimated 17 acres of impervious cover at the existing MTF complex. In addition, the new parking lots would include appropriately sized storm water treatment/attenuation areas. The storm water retention areas would collect surface water runoff from the parking lots and allow it to infiltrate into the ground, recharging the groundwater in the surficial aquifer.

Implementation of this alternative would involve an increase in the number of 6<sup>th</sup> MDG staff, as well as an increase the number of patients and visitors to the base. As a result, increases in potable water usage would occur. These increases are considered minor in the context of the total number of staff, military personnel, resident dependents, and visitors base-wide on a given day.

#### **4.4.4 No Action Alternative**

The No Action Alternative would not construct or modify any of the drainage structures around the existing MTF complex; therefore, would not result in significant impacts to water resources.

## **4.5 FLOODPLAINS**

In accordance with the requirements of EO 11988, the Air Force must demonstrate that there is no practicable alternative to carrying out the Proposed Action within the floodpool or floodplain. The existing MTF complex is within the 100-year coastal floodplain. As a result, implementation of the Proposed Action, the Construct a Replacement MTF/Demolish the Existing MTF Complex Alternative, or the Renovate the Existing MTF Alternative would involve construction and/or demolition activities in the 100-year floodplain. Consequently, impacts to the floodplain must be addressed.

### **4.5.1 Proposed Action**

The proposed location of the Primary Care Clinic and associated parking areas are located to the north (outside) of the 100-year floodplain line that crosses the base. The finished floor elevation would be completed to at least 11 feet in order to withstand a 100-year flood event. The existing MTF complex, slated for demolition following the completion of the new facility, lies at less than 10 feet above MSL, and is within the 100-year floodplain. Following demolition, this area would be graded, vegetated, and designated as vacant land.

Implementation of the Proposed Action would generally have a positive impact to the floodplain, due to a decrease in total impervious surface that lies within the 100-year contour. The Proposed Action would decrease the total impervious surface lying within the floodplain by approximately 17 acres. This decrease in impervious surface would reduce the potential for runoff which causes pollutant loading on Hillsborough Bay. The Proposed Action would also have a positive impact with regard to human safety, health, and welfare, as required by Executive Order 11988, by removing a heavily-occupied facility, and relocating patients with limited mobility outside of an area subject to flooding.

#### **4.5.2 Renovate the Existing MTF Alternative**

The existing MTF complex lies within the 100-year floodplain. Construction of an addition to the existing MTF would result in an increase in impervious cover estimated at less than one acre - a minor negative impact the floodplain. This increase in impervious surface would increase the potential for runoff, which causes pollutant loading on Hillsborough Bay.

#### **4.5.3 Construct a Replacement MTF/Demolish the Existing MTF Complex Alternative**

The proposed location of the MTF facility and associated parking areas are located to the north (outside) of the 100-year floodplain line that crosses the base. The existing MTF complex, slated for demolition following the completion of the new facility, lies at less than 10 feet above MSL, and is within the 100-year floodplain. Following demolition, this area would be graded, vegetated, and designated as vacant land.

Implementation of this alternative would generally have a positive impact to the floodplain, due to a decrease in total impervious surface that lies within the 100-year contour. This alternative would decrease the total impervious surface lying within the floodplain by approximately 17 acres. This decrease in impervious surface would reduce the potential for runoff which causes pollutant loading on Hillsborough Bay.

#### **4.5.4 No Action Alternative**

The No Action Alternative would continue operation of the existing MTF complex. This alternative would not alter the potential for loss or damage resulting from floods or increase the impacts of floods on human safety, health and welfare. Consequently, this alternative would have no impact on floodplain values.

### **4.6 LAND USE**

#### **4.6.1 Proposed Action**

The Proposed Action would involve construction of a new Primary Care Clinic on approximately 22 acres currently designated as vacant land use, resulting in a land use change to institutional.

Demolition of the existing MTF complex would change approximately 22 acres of institutional land to vacant land use. Consequently, no net impacts to land use would result from the Proposed Action.

Coordination with the U.S. Fish and Wildlife Service has been completed to insure compliance with the Endangered Species Act. Agency correspondence letters are included in Appendix C.

#### **4.6.2 Renovate the Existing MTF Alternative**

The existing MTF complex is designated as institutional land. Under the Renovate the Existing MTF Alternative, no changes to land use would result.

#### **4.6.3 Construct a Replacement MTF/Demolish the Existing MTF Complex Alternative**

The Construct a Replacement MTF/Demolish the Existing MTF Complex Alternative would involve construction of a new MTF on approximately 22 acres currently designated as vacant land use, resulting in a land use change to institutional. Demolition of the existing Building 711 would change approximately five acres of institutional land to vacant land use. Demolition of the existing MTF complex would change approximately 22 acres of institutional land to vacant land use. Consequently, no net impacts to land use would result from the Proposed Action.

#### **4.6.4 No Action Alternative**

Under the No Action Alternative, no impacts to land use would be incurred.

### **4.7 TRANSPORTATION**

#### **4.7.1 Proposed Action**

An increase in traffic in the north-central portion of the base would result during implementation of the Proposed Action, due to the increase in construction-related activities. These negative impacts are considered to be minor and short-term.

Upon completion, the Proposed Action would result in a similar number, or a slight decrease in the number of vehicles entering the base, as a result of the decreased number of 6<sup>th</sup> MDG

personnel, hospital patients, and visitors. These potential impacts of additional vehicles are considered to be augmented by the relocation of the new MTF near the main entranceway of the base, eliminating the need for hospital staff and visitors to drive an additional 2 ½ miles each way along the base's perimeter and through the Base Housing District. As a result, implementation of the Proposed Action would provide a long-term, positive impact on base transportation.

#### **4.7.2 Renovate the Existing MTF Alternative**

Implementation of the Renovate Existing MTF Alternative would result in minor adverse short-term traffic impacts resulting from construction-related traffic entering and exiting the base. Completion of this alternative would also result in an increased number of 6<sup>th</sup> MDG personnel, and an increase in patients and visitors entering the base. All of this additional traffic would travel along the base roads, and past the housing area to reach the MTF. The increases in vehicle traffic and the route through the more-heavily traveled parts of the base would result in long-term negative impacts to transportation.

#### **4.7.3 Construct a Replacement MTF/Demolish the Existing MTF Complex Alternative**

An increase in traffic in the north-central portion of the base would result from implementation of the Construct a Replacement MTF/Demolish the Existing MTF Complex Alternative, due to the increase in construction-related activities. These negative impacts are considered to be minor and short-term.

Implementation of this alternative would result in an increased number of vehicles entering the base as the number of 6<sup>th</sup> MDG personnel, patients, and visitors increase. These potential impacts of additional vehicles would be off-set by the relocation of the new MTF to near the main entranceway of the base, eliminating the need for staff and visitors to drive an additional 2 ½ miles each way along the base's perimeter and through the Base Housing District. Some patients and medical staff would still be required to drive through the base and housing area to reach other portions of the medical center that would not be relocated to near the main gate under this alternative. Nevertheless, completion of this alternative would provide a long-term, positive impact on base transportation.

#### **4.7.4 No Action Alternative**

Under the No Action Alternative no significant impacts to transportation would be incurred.

### **4.8 SAFETY AND OCCUPATIONAL HEALTH**

#### **4.8.1 Proposed Action**

The proposed construction activities for the project would pose safety hazards to the workers similar to those associated with typical industrial construction projects, such as falls, slips, heat stress, and machinery injuries. Construction would not involve any unique hazards and all construction methods would comply with Occupational Safety and Health Administration (OSHA) requirements to ensure the protection of workers and the general public during construction. Diligent, but not controlling, governmental oversight of contractor activities would help assure OSHA compliance.

The demolition portion of the project is anticipated to encounter ACM since these materials have been identified during completion of limited surveys. In addition, the demolition may encounter LBP. Prior to initiating demolition activities, the demolition contractor shall hire a qualified independent environmental consulting firm to perform a comprehensive asbestos and LBP survey for the existing facility. Once the surveys have been completed and the hazardous materials identified, the demolition contractor shall hire a qualified environmental abatement subcontractor to remove and dispose of the ACM and LBP. The same environmental firm shall perform environmental monitoring during the abatement work in accordance with Air Force, USEPA, and other applicable environmental regulations. All waste disposal manifests shall be turned over to the government upon completion of the demolition work.

The Proposed Action would involve demolition activities near an IRP site (Site 52); however, appropriate measures have been included in the project to reduce the potential for contact with contaminated media and to protect workers from exposure. None of the constituents of concern at the site represent an immediate threat to life and health. Consequently, no impacts to safety and occupational health would be incurred with implementation of the Proposed Action.

#### **4.8.2 Renovate the Existing MTF Alternative**

As with the Proposed Action, this alternative would pose safety hazards to the workers similar to those associated with typical industrial construction projects, such as falls, slips, heat stress, and machinery injuries. Construction would not involve any unique hazards and all construction methods would comply with OSHA requirements to ensure the protection of workers and the general public during construction.

Surveying, sampling, and abatement of any ACM and/or LBP would be addressed in the same manner as the Proposed Action.

#### **4.8.3 Construct a Replacement MTF/Demolish the Existing MTF Complex Alternative**

This Alternative would pose safety hazards to the workers similar to those associated with the Proposed Action. Implementation of this alternative would not involve any unique hazards and all construction methods would comply with OSHA requirements to ensure the protection of workers and the general public during construction.

Surveying, sampling, and abatement of any ACM and/or LBP would be addressed in the same manner as the Proposed Action.

#### **4.8.4 No Action Alternative**

No impacts on safety and occupational health would be incurred under the No Action Alternative.

### **4.9 SOCIOECONOMICS**

#### **4.9.1 Proposed Action**

The Proposed Action would cost approximately \$50.3 million to complete, based on 2003 cost estimates. This action would result in an approximately 10 percent increase in the nearly \$494 million in annual expenditures MacDill AFB provides to the local economy, constituting a major short-term beneficial impact.

#### **4.9.2 Renovate the Existing MTF Alternative**

The Renovate the Existing MTF Alternative would cost approximately \$78.4 million to complete, based on 2003 cost estimates. This action would result in an approximately 16 percent increase in the nearly \$494 million annual expenditures MacDill AFB provides to the local economy, also constituting a major short-term beneficial impact to the area.

#### **4.9.3 Construct a Replacement MTF/Demolish the Existing MTF Complex Alternative**

The Construct a Replacement MTF/Demolish the Existing MTF Complex Alternative would cost approximately \$113.1 million to complete, based on 2003 cost estimates. This action would result in an approximately 23 percent increase in the nearly \$494 million in annual expenditures MacDill AFB provides to the local economy, constituting a major short-term beneficial impact.

#### **4.9.4 No Action Alternative**

Under the No Action Alternative, upgrades to bring the facility more into compliance with current codes and procedures would be completed, such as accessibility improvements to meet ADA requirements, improvements to the back-up generation system, and parking lot set-back changes to meet antiterrorism guidelines. These improvements would cost approximately \$9.9 million to complete, based on 2003 cost estimates, and represent a minor short-term beneficial impact to the area.

#### **4.10 OTHER ITEMS WITH NO POTENTIAL IMPACTS**

In addition to the resources discussed in the previous sections, the potential impacts to the biological and cultural resources, geology and soils, and Airspace and Airfield Operations were evaluated. Based upon this evaluation, there are no potential impacts likely to any of these resources resulting from the implementation of the Proposed Action or any of the considered alternatives.

The Proposed Action or any of the alternatives would also not affect minority or low-income populations. There are no minority or low-income populations in the area of the Proposed Action or the alternatives; thus, there will not be disproportionately high or adverse impacts on such

populations. No adverse environmental impacts would occur outside MacDill AFB. Therefore, no adverse effects on minority and low-income populations would occur with implementation of the Proposed Action, or from implementation of any of the alternatives, at MacDill AFB.

#### **4.11 CUMULATIVE IMPACTS**

As indicated in Table 2.1, the Proposed Action, when examining it as a portion of the total proposed and/or ongoing construction projects on MacDill AFB, would result in minor beneficial cumulative impacts to floodplains, transportation, and socioeconomics, due to a decrease in total impervious surface that lies within the 100-year contour, a slight decrease in the number of vehicles entering the base as a result of the decreased number of 6<sup>th</sup> MDG personnel, hospital patients, and visitors, and an approximately 10 percent increase in the annual expenditures MacDill AFB provides to the local economy.

When examining it as a portion of the total proposed and/or ongoing construction projects on MacDill AFB, the Proposed Action would have no significant cumulative impacts to air quality, noise, waste management, water resources, safety and occupational health, biological resources, geology and soils, cultural resources, environmental justice, or airspace and airfield operations, as outlined in Table 2.1 and Table 4A.

### **5.0 CONCLUSIONS**

Based upon the analyses presented in this environmental assessment, it appears the Proposed Action alternative would not have a significant affect upon the quality of the human environment.

### **6.0 MANAGEMENT REQUIREMENTS**

#### **6.1 AIR QUALITY**

Use reasonable precautions to control the emissions of unconfined particulate matter during construction activities in accordance with Florida Administrative Code (FAC) Rule 62-296.

Ensure that all hazardous materials used during construction comply with the MacDill AFB Hazardous Materials Management Program's requirements for low volatile organic compound content.

## **6.2 HAZARDOUS MATERIALS/WASTES**

Ensure hazardous materials are approved and tracked through MacDill AFB's Hazardous Materials Management Program. Coordinate characterization and disposal of any hazardous or special waste with MacDill AFB's Environmental Compliance Program. Coordinate with MacDill AFB's Pollution Prevention Program to ensure recycling of demolition wastes, if possible. Ensure that any soil removed from Site 52 is tested for contaminants of concern and, if contaminated, properly disposed.

## **6.3 WATER RESOURCES**

Submit appropriate applications to permit storm water retention areas and NPDES construction for all of the proposed parking lots. Ensure BMPs, such as silt screens and placement of hay bales, are employed during construction to prevent erosion and storm water violations during all construction activities. Ensure that the new construction complies with all applicable water and energy conservation requirements in Executive Order 13123, *Greening the Government Through Efficient Energy Management*.

## **6.4 SAFETY AND OCCUPATIONAL HEALTH**

Ensure construction activities comply with OSHA standards or more stringent standards if applicable. Ensure that a site specific health and safety plan is prepared prior to initiating construction at Site 52 and ensure that all workers completing excavation or dirt moving activities in this area have 40-hour HAZWOPER training and the annual 8-hour refresher course.

## **6.5 BIOLOGICAL RESOURCES**

Ensure that any ground surface area disturbed during construction are re-seeded or revegetated with native flora.

## 7.0 PERSONS CONTACTED

Lt. Col John E. Keoshian  
Staff Engineer  
Environmental Planning Branch  
Scott AFB, IL 62225  
618-229-0841

Lt. Col Rex Langston  
Health Facilities Officer  
AFELM HFO-ER  
60 Forsyth Street, Suite 8M30  
Atlanta, GA 30303  
404-562-4245

Major Jeb S. Kelly  
Medical Logistics Flight Command  
MacDill AFB, FL 33621  
813-827-9101

Anthony Gennarro  
MacDill Air Force Base  
Installation Restoration Program  
7621 Hillsborough Loop Dr.  
MacDill AFB, FL 33621-5207

Mark Tyl  
6 CES/CECE  
MacDill AFB, FL 33621  
813-828-0456

Bryan Pridgen  
U.S. Fish and Wildlife Service  
9549 Koger Boulevard, Suite 111  
St. Petersburg, FL 33702  
727-570-5398

Laura Kammerer  
Division of Historical Resources  
Compliance Review Section  
500 S. Bronough St.  
Tallahassee, FL 32399-0250  
1-800-847-7278

Mr. Jerry Rejko  
Boeing 767 Tanker Programs  
P.O. Box 516  
St. Louis MO 63166  
314-234-1173

Jasmine Raffington  
FL Coastal Management Program  
Florida State Clearing House  
2555 Shumard Oak Boulevard  
Tallahassee, FL 32399-2100  
850-414-6568

## 8.0 LIST OF PREPARERS

Mr. R. Daniel Lewis, P.G.  
MACTEC Engineering and Consulting, Inc.  
4919 West Laurel Street  
Tampa, Florida 33607  
Voice: (813) 289-0750  
Fax: (813) 289-5474  
e-mail: [RDLewis@MACTEC.com](mailto:RDLewis@MACTEC.com)

Ms. Kelly Bishop  
MACTEC Engineering and Consulting, Inc.  
4919 West Laurel Street  
Tampa, Florida 33607  
Voice: (813) 289-0750  
Fax: (813) 289-5474  
e-mail: [KLBishop@MACTEC.com](mailto:KLBishop@MACTEC.com)

Mr. Jason Kirkpatrick  
6 CES/CEVN  
7621 Hillsborough Loop Dr.  
MacDill AFB, Florida 33621-5207  
Voice: (813) 828-0459  
Fax: (813) 828-2212  
e-mail: [jason.kirkpatrick@macdill.af.mil](mailto:jason.kirkpatrick@macdill.af.mil)

## 9.0 REFERENCES

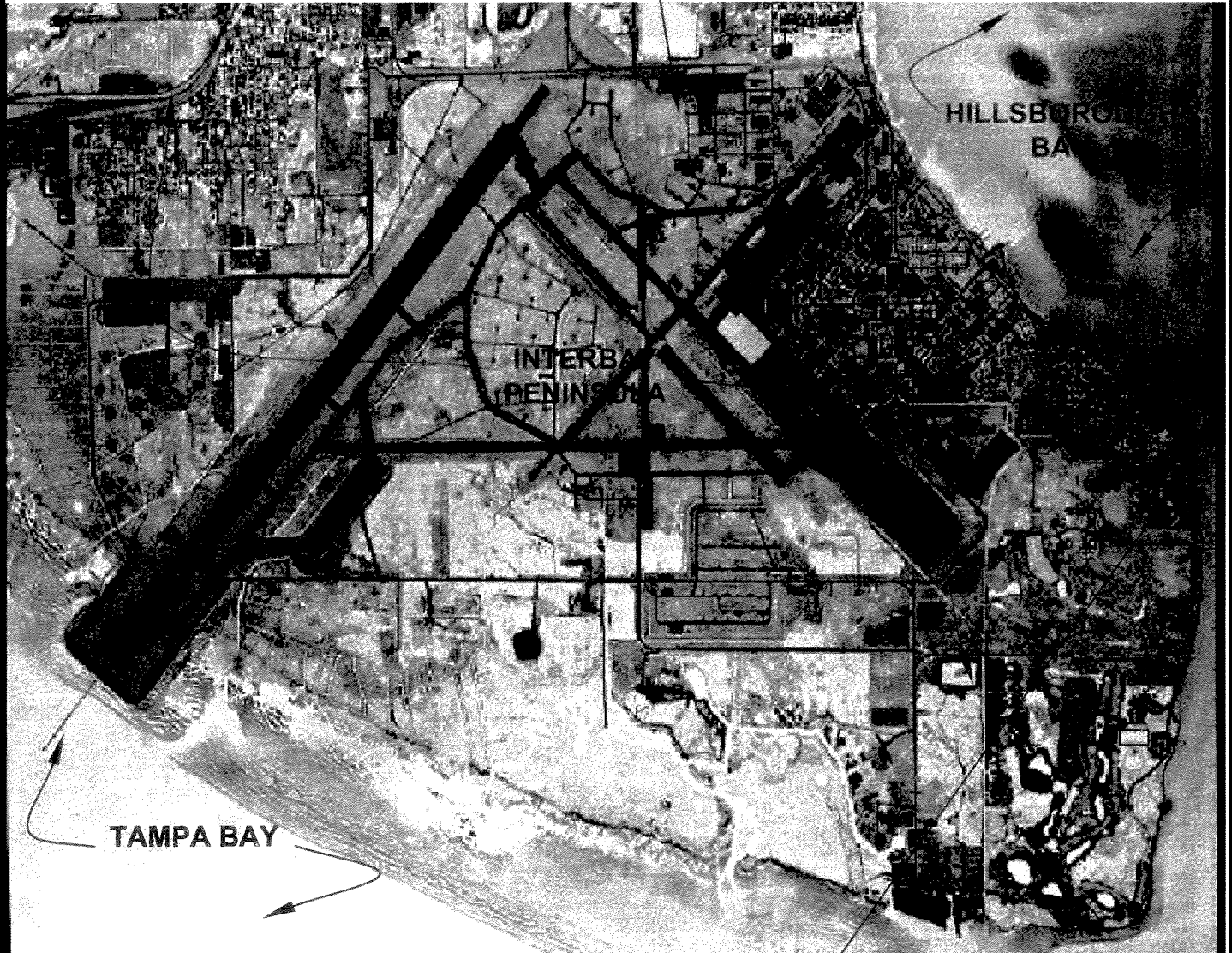
- |  |  |
|--|--|
| Advisory Council on<br>Historic Preservation, 1986.  | <i>36 CFR Part 800: Protection of Historic Properties.</i> U.S.<br>Government Printing Office, Washington, D.C.  |
| American Weather Service<br>(AWS), 1993.   | AWS Climatic Brief, Air Force Combat Climatology Center, Air<br>Weather Service, Scott AFB, October 1993.  |
| Englehardt, Hammer, and<br>Associates, 2004.<br>Florida Natural Areas<br>Inventory (FNAI), 1996. | Base Housing Master Plan General Site Plan<br>Future MFH Housing Phases, March 2004.<br>Florida Natural Areas Inventory, 1996. Biological Survey of<br>MacDill Air Force Base. |
| MacDill Air Force Base   | Lead-based Paint and Asbestos Records, Building 147, Room 304.   |
| MacDill Air Force Base<br>Installation Restoration<br>Program, 2001.                             | Statement of Basis - SWMU 21 (Old Refuel Area)   |
| MACTEC Engineering &<br>Consulting, Inc., 2003.  | Report of Preliminary Geotechnical Exploration for MacDill AFB<br>Proposed New Hospital, June 25, 2003.  |
| Sherlock, Smith & Adams,<br>2003   | Draft Economic Analysis for 6 <sup>th</sup> Medical Group, MacDill Air<br>Force Base, Florida, 11 April 2003.  |

- USAF, 1992. U.S. Air Force, 1986. From the 1940s to Now ... A Historical Synopsis of the 56<sup>th</sup> Tactical Training Wing ... and MacDill Air Force Base, Florida. 56 FW Historian's Office, MacDill AFB.
- USAF, 1994. U.S. Air Force, 1994. Environmental Assessment, Transfer and Reuse of Part of MacDill Air Force Base, Florida.
- USAF, 1995. Compilation of Air Pollutant Emission Factors, Volume I: Stationary Point and Area Sources, 5<sup>th</sup> Edition (AP-42), United States Environmental Protection Agency, Research Triangle Park, January 1995 (Supplement A, February 1996).
- USAF, 1996. U.S. Air Force, 1996. Biological Survey of MacDill Air Force Base – Final Report.
- USAF, 1996. U.S. Air Force, 1996. Endangered Species Management Plan MacDill Air Force Base, Florida.
- USAF, 1996. U.S. Air Force, 1996. Cultural Resources Management Plan (CRMP) MacDill Air Force Base, Florida.
- USAF, 1996. U.S. Air Force, 1996. Air Installation Compatible Use Zone (AICUZ) Study, MacDill AFB, Tampa.
- USAF, 1997. Economic Resource Impact Statement MacDill Air Force Base, Florida.
- USAF, 1998. U.S. Air Force, 1998. Delineation Study of the Waters of the United States Including the Landward Extent of Wetlands and Surface Waters MacDill Air Force Base Tampa, Hillsborough County, Florida.
- USAF, 1998. U.S. Air Force, 1998. Entry Gate Development Study MacDill Air Force Base, Florida.
- USAF, 1999. U.S. Air Force, 1999. DRAFT Title V Permit No. 0570141-001-AV MacDill Air Force Base, Florida.
- USAF, 2000. U.S. Air Force, 2000. Integrated Natural Resource Management Plan (INRMP) MacDill Air Force Base, Florida.
- USAF, 2002. U.S. Air Force, 2002. MacDill 2010 Plan MacDill Air Force Base, Florida.
- USEPA, 1971. Noise from Construction Equipment and Operation, Building Equipment and Home Appliances.

- USEPA, 1985.                      Compilation of Air Pollutant Emission Factors, Volume II: Mobile Sources, 4<sup>th</sup> Edition (AP-42), USEPA, Ann Arbor, September 1985 (Supplement A, January 1991).
- USEPA, 1988.                      Gap Filling PM<sub>10</sub> Emission Factors for Selected Open Area Dust Sources (EPA-450/4-88-003), United States Environmental Protection Agency, Research Triangle Park, February 1988.
- USEPA, 1995.                      Compilation of Air Pollutant Emission Factors, Volume I: Stationary Point and Area Sources, 5<sup>th</sup> Edition (AP042), USEPA, Research Triangle Park, January 1995 (Supplement A, February 1996).
- State of Florida, 1981.           Florida Coastal Management Program.

**FIGURES**

**Proposed New Primary  
Care Clinic Location**



**EXISTING MTF**



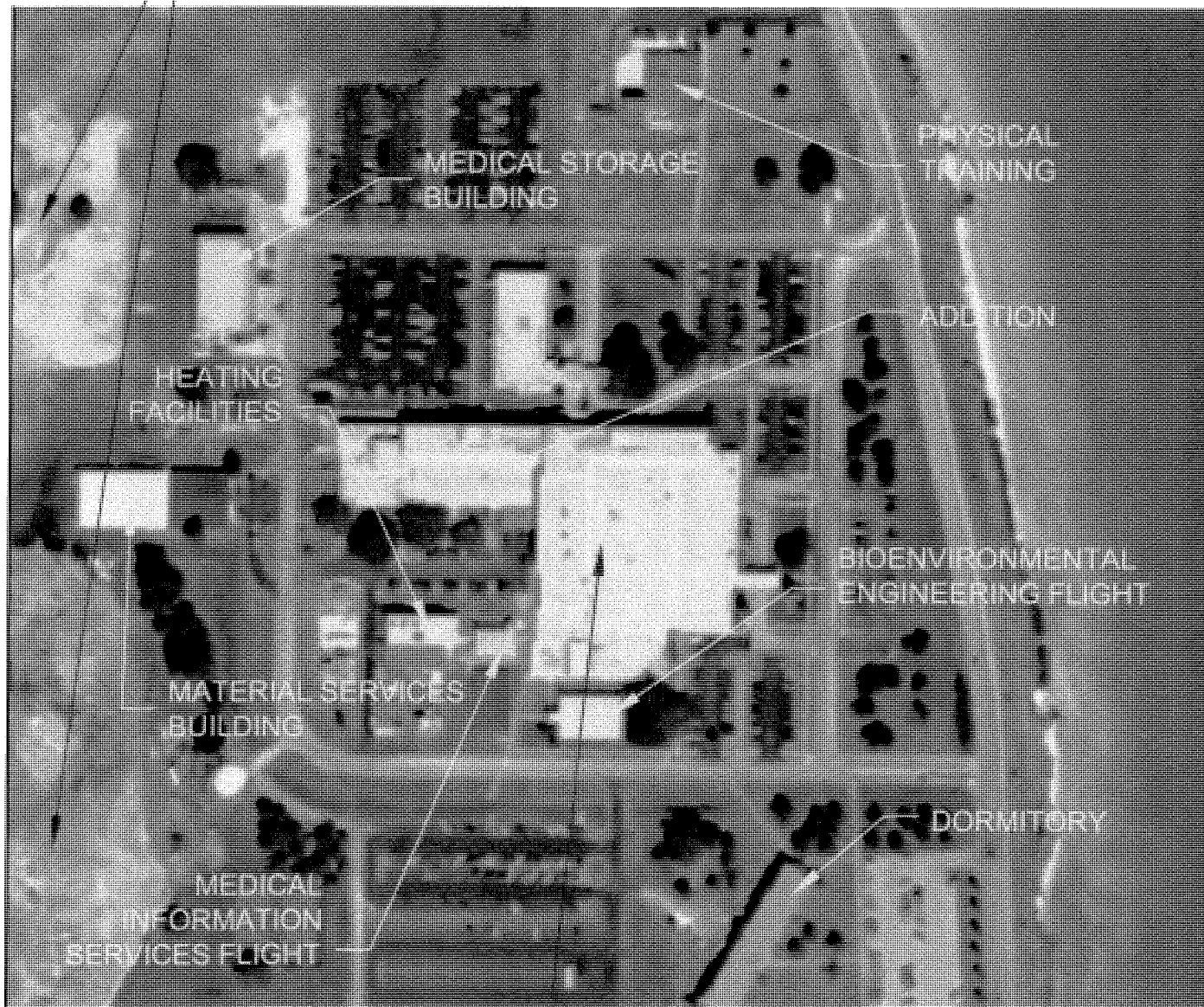
0 1500 3000 4500  
APPROXIMATE SCALE IN FEET

Prepared/Date: BLB 11/19/03  
Checked/Date:

**Construction of Primary Care Clinic/  
Demolition of Existing MTF Complex  
MacDill Air Force Base**

**Project Location and Vicinity Map  
Figure 1-1**

### BASE HOUSING DISTRICT



Composite Medical Building



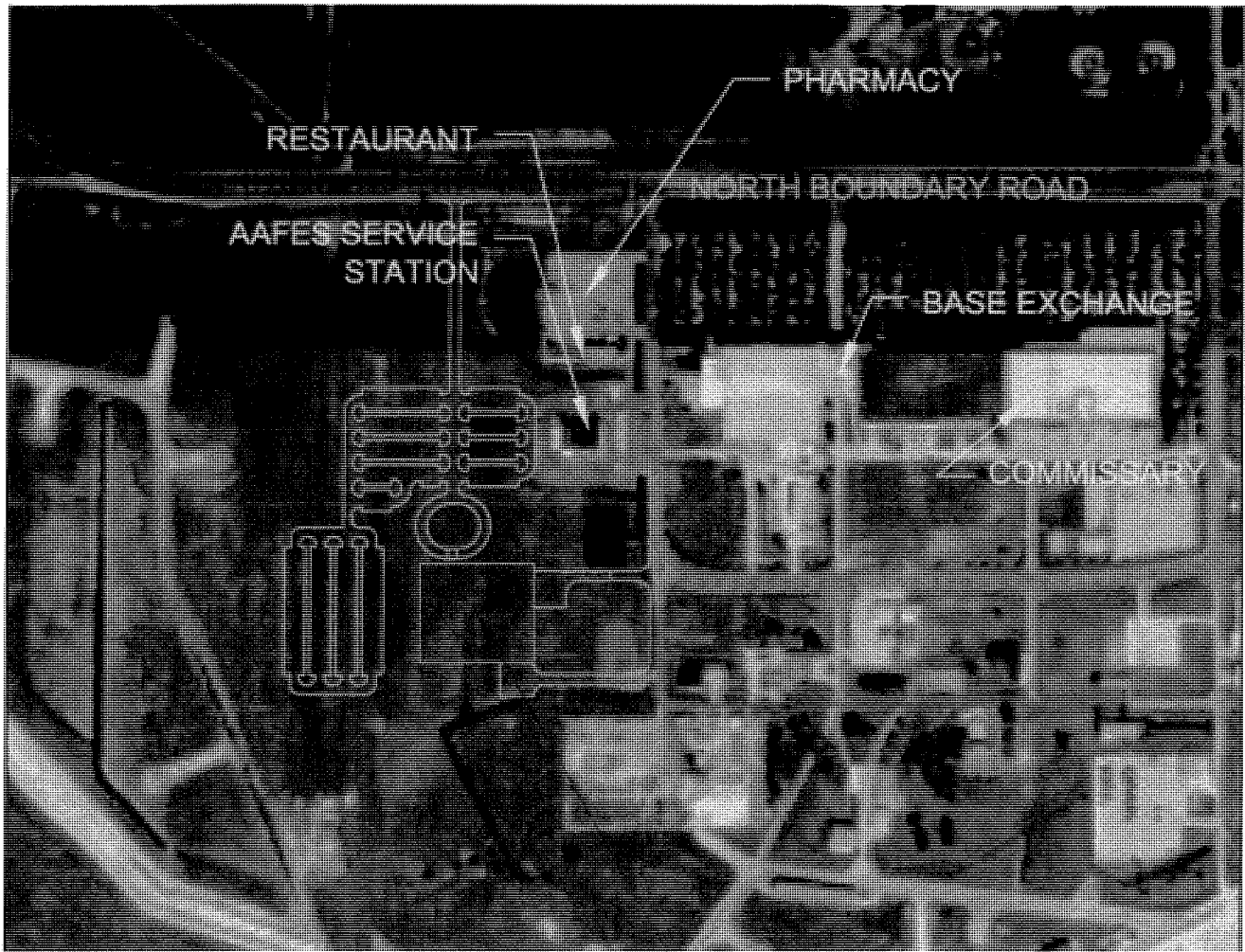
NOT TO SCALE

Reference:  
MapQuest.com

Prepared/Date: BLB 07/25/03  
Checked/Date:

**Construction of Primary Care Clinic/  
Demolition of Existing MTF Complex  
MacDill Air Force Base**

**Demolish Existing MTF Complex  
Site Plan  
Figure 2-1**



Proposed New Primary Care Clinic Location



NOT TO SCALE

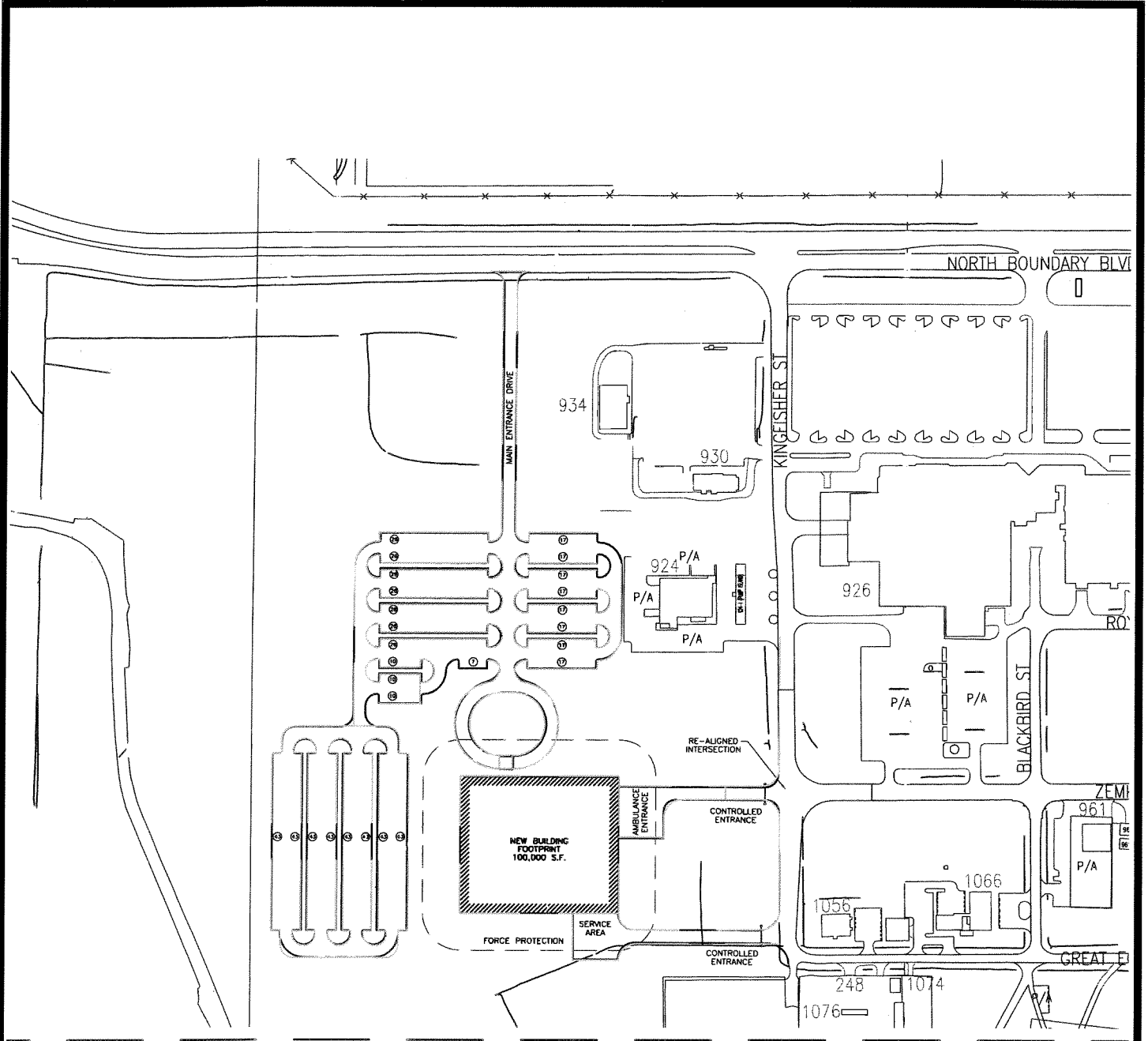
Reference:  
 New Hospital Site Location, Exhibit III-E-7,  
 SS&A, Project No. 2002-039, Dated: 03/31/03;  
 Mapquest

Prepared/Date: BLB 07/11/03

Checked/Date:

**Construction of Primary Care Clinic/  
 Demolition of Existing MTF Complex  
 MacDill Air Force Base**

**Construct Primary Care Clinic  
 Site Plan  
 Figure 2-2**



Reference:  
 New Hospital Site Location, Exhibit III-E-7,  
 SS&A, Project No. 2002-039, Dated: 03/31/03



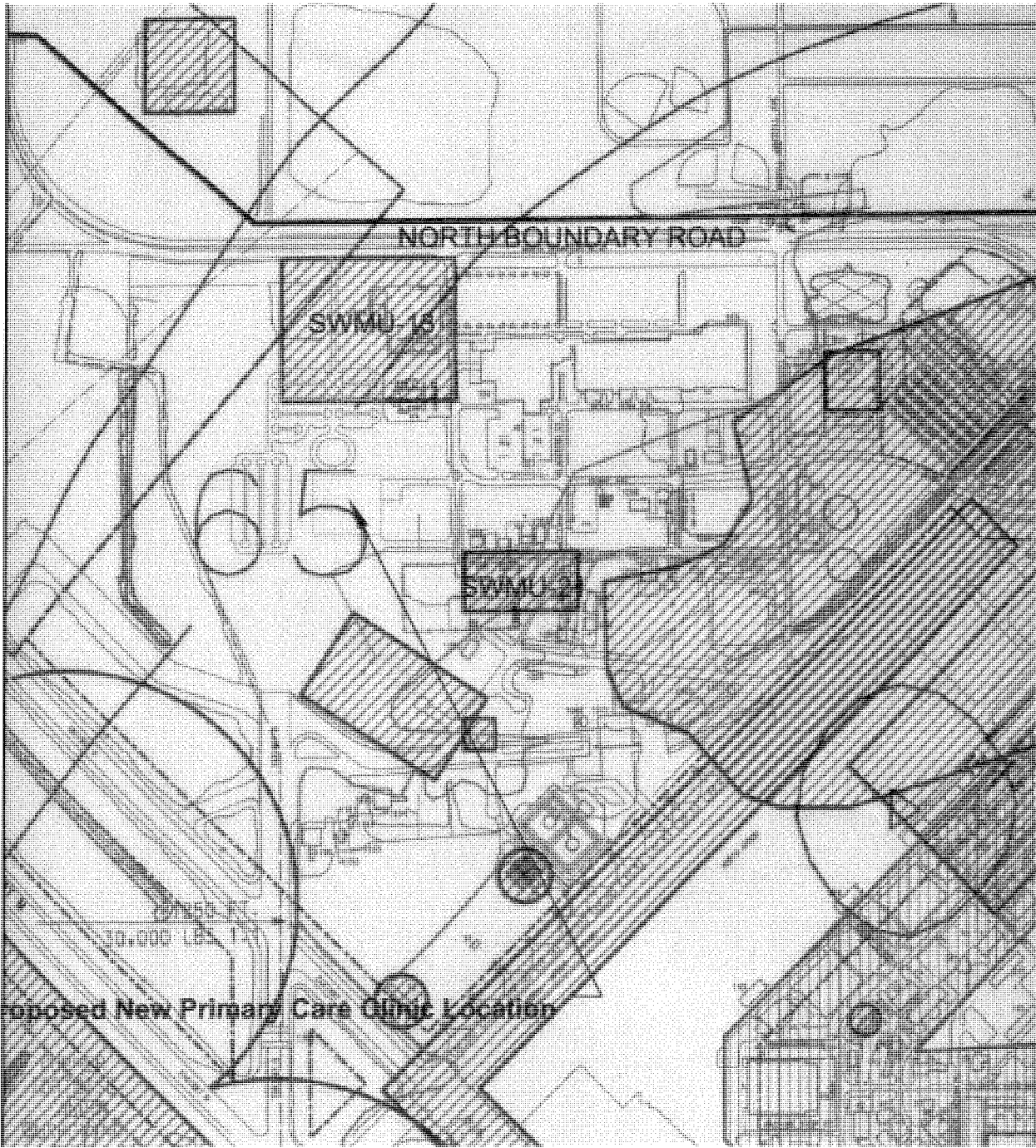
NOT TO SCALE

Prepared/Date: BLB 07/14/03

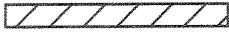






Checked/Date:

**Construction of Primary Care Clinic/  
 Demolition of Existing MTF Complex  
 MacDill Air Force Base**

**Primary Care Clinic Civil Engineering  
 Site Plan  
 Figure 2-3**



**LEGEND**

	IRP SITES
	EXPLOSIVE CLEAR ZONE
	NOISE CONTOUR
	NATURAL RESOURCES
	FORCE PROTECTION
	WETLANDS
	100 YEAR FLOODPLAIN

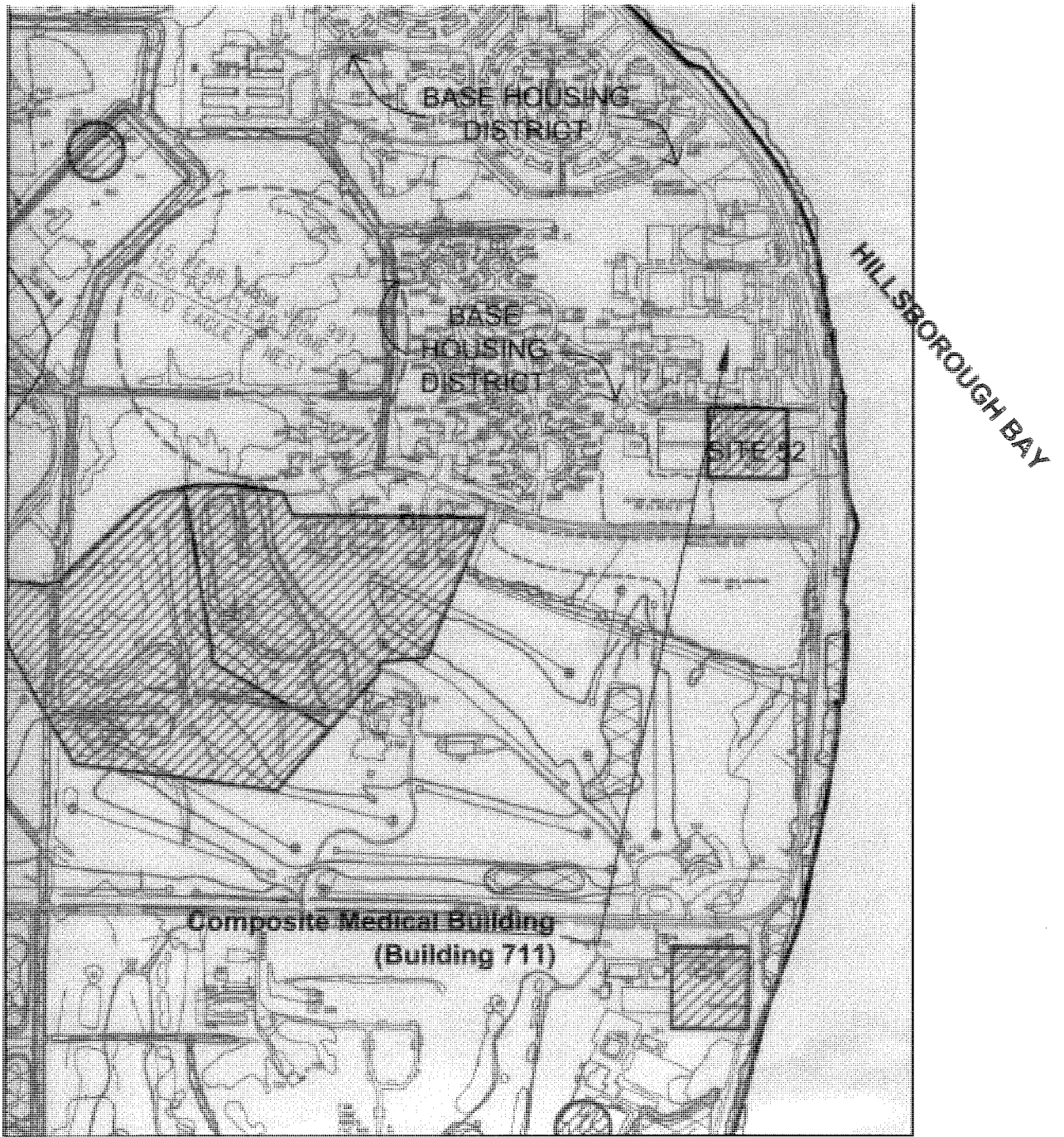


SCALE: 1" = 600'








Reference:  
 Composite Installation Constraints and Opportunities, MacDill, AFB  
 Drawing CADD name: D-06-01.dgn  
 Sheet No. D-06, Dated: 24 JUL 03

**Construction of Primary Care Clinic/  
 Demolition of Existing MTF Complex  
 MacDill Air Force Base**

**Environmental Constraints  
 In Vicinity of Proposed  
 Primary Care Clinic  
 Figure 3-1**



**LEGEND**

-  IRP SITES
-  EXPLOSIVE CLEAR ZONE
-  NOISE CONTOUR
-  NATURAL RESOURCES
-  FORCE PROTECTION
-  WETLANDS
-  100 YEAR FLOODPLAIN



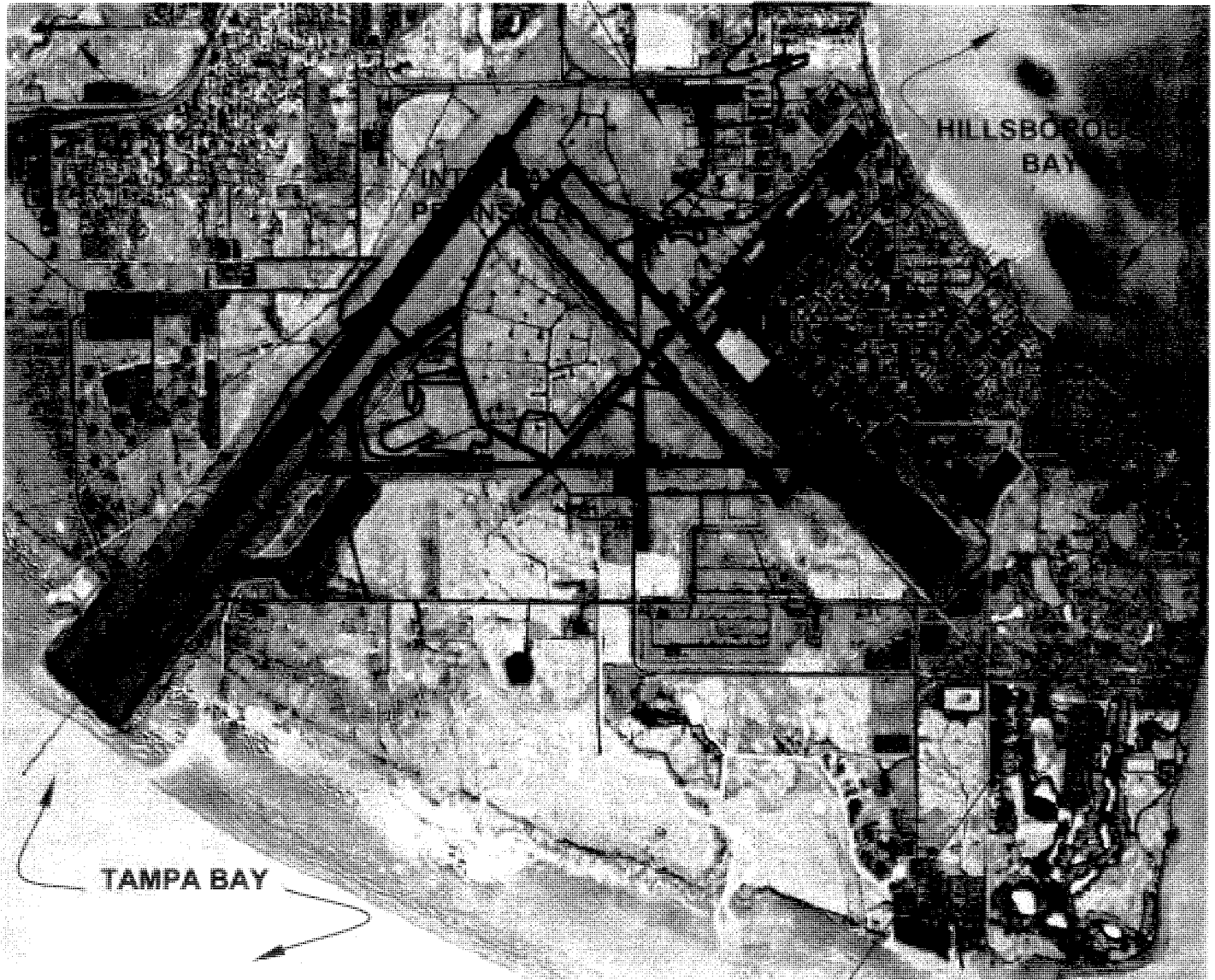
SCALE: 1" = 600'

Reference:  
 Composite Installation Constraints and Opportunities, MacDill, AFB  
 Drawing CADD name: D-06-01.dgn  
 Sheet No. D-06, Dated: 24 JUL 03

**Construction of Primary Care Clinic/  
 Demolition of Existing MTF Complex  
 MacDill Air Force Base**

**Environmental Constraints  
 In Vicinity of Existing MTF Complex  
 Figure 3-2**

**Proposed New  
Primary Care Clinic Location**



TAMPA BAY

HILLSBOROUGH BAY

EXISTING MTF



0 1500 3000 4500

APPROXIMATE SCALE IN FEET

**LEGEND**

— 100 YEAR FLOOD PLAIN (ALL AREAS SOUTH OF LINE)

Reference:

SHEET NO. D-06, COMPOSITE INSTALLATION CONSTRAINTS AND OPPORTUNITIES. DRAWING CADD NAME: D-06-01.DGN Dated 06/18/02

Prepared/Date: BLB 07/11/03

Checked/Date:

**Construction of Primary Care Clinic/  
Demolition of Existing MTF Complex  
MacDill Air Force Base**

**100-Year Floodplain Map  
Figure 3-3**

**TABLES**

**Table 2.1 Comparison of Environmental Consequences**

**Construction of Primary Care Clinic/Demolition of MTF Complex**

**MacDill AFB, Florida**

Environmental Resources	Alternative A - Proposed Action	Alternative B - Renovate the Existing MTF	Alternative C - Construct/Demolish MTF Complex	Alternative D - No Action Alternative
Air Quality	Short-term - <i>Minor Adverse</i> Long-term - No Impact Cumulative - No Impact	Short-term - <i>Minor Adverse</i> Long-term - No Impact Cumulative - No Impact	Short-term - <i>Minor Adverse</i> Long-term - No Impact Cumulative - No Impact	Short-term - No Impact Long-term - No Impact Cumulative - No Impact
Noise	Short-term - <i>Minor Adverse</i> Long-term - No Impact Cumulative - No Impact	Short-term - <i>Minor Adverse</i> Long-term - No Impact Cumulative - No Impact	Short-term - <i>Minor Adverse</i> Long-term - No Impact Cumulative - No Impact	Short-term - No Impact Long-term - No Impact Cumulative - No Impact
Hazardous Materials/Wastes/Stored Fuels	Short-term - <i>Minor Adverse</i> Long-term - No Impact Cumulative - No Impact	Short-term - <i>Minor Adverse</i> Long-term - No Impact Cumulative - No Impact	Short-term - <i>Minor Adverse</i> Long-term - No Impact Cumulative - No Impact	Short-term - No Impact Long-term - No Impact Cumulative - No Impact
Water Resources	Short-term - <i>Minor Adverse</i> Long-term - No Impact Cumulative - No Impact	Short-term - <i>Minor Adverse</i> Long-term - No Impact Cumulative - No Impact	Short-term - <i>Minor Adverse</i> Long-term - No Impact Cumulative - No Impact	Short-term - No Impact Long-term - No Impact Cumulative - No Impact
Floodplains	Short-term - No Impact Long-term - <i>Minor Beneficial</i> Cumulative - <i>Minor Beneficial</i>	Short-term - <i>Minor Adverse</i> Long-term - <i>Minor Adverse</i> Cumulative - <i>Minor Adverse</i>	Short-term - <i>Minor Adverse</i> Long-term - <i>Minor Adverse</i> Cumulative - <i>Minor Adverse</i>	Short-term - No Impact Long-term - No Impact Cumulative - No Impact
Transportation	Short-term - <i>Minor Adverse</i> Long-term - <i>Minor Beneficial</i> Cumulative - <i>Minor Beneficial</i>	Short-term - <i>Minor Adverse</i> Long-term - <i>Minor Adverse</i> Cumulative - <i>Minor Adverse</i>	Short-term - <i>Minor Adverse</i> Long-term - <i>Minor Beneficial</i> Cumulative - <i>Minor Beneficial</i>	Short-term - No Impact Long-term - No Impact Cumulative - No Impact
Safety and Occupational Health	Short-term - <i>Minor Adverse</i> Long-term - No Impact Cumulative - No Impact	Short-term - <i>Minor Adverse</i> Long-term - No Impact Cumulative - No Impact	Short-term - <i>Minor Adverse</i> Long-term - No Impact Cumulative - No Impact	Short-term - No Impact Long-term - No Impact Cumulative - No Impact
Socioeconomics	Short-term - <i>Minor Beneficial</i> Long-term - <i>Minor Beneficial</i> Cumulative - <i>Minor Beneficial</i>	Short-term - <i>Minor Beneficial</i> Long-term - No Impact Cumulative - No Impact	Short-term - <i>Minor Beneficial</i> Long-term - No Impact Cumulative - No Impact	Short-term - <i>Minor Beneficial</i> Long-term - No Impact Cumulative - No Impact
Biological Resources	Short-term - No Impact Long-term - No Impact Cumulative - No Impact	Short-term - No Impact Long-term - No Impact Cumulative - No Impact	Short-term - No Impact Long-term - No Impact Cumulative - No Impact	Short-term - No Impact Long-term - No Impact Cumulative - No Impact

Environmental Resources	Alternative A - Proposed Action	Alternative B - Renovate the Existing MTF	Alternative C - Construct/Demolish MTF Complex	Alternative D - No Action Alternative
Geology and Soils	Short-term - No Impact Long-term - No Impact Cumulative - No Impact	Short-term - No Impact Long-term - No Impact Cumulative - No Impact	Short-term - No Impact Long-term - No Impact Cumulative - No Impact	Short-term - No Impact Long-term - No Impact Cumulative - No Impact
Cultural Resources	Short-term - No Impact Long-term - No Impact Cumulative - No Impact	Short-term - No Impact Long-term - No Impact Cumulative - No Impact	Short-term - No Impact Long-term - No Impact Cumulative - No Impact	Short-term - No Impact Long-term - No Impact Cumulative - No Impact
Environmental Justice	Short-term - No Impact Long-term - No Impact Cumulative - No Impact	Short-term - No Impact Long-term - No Impact Cumulative - No Impact	Short-term - No Impact Long-term - No Impact Cumulative - No Impact	Short-term - No Impact Long-term - No Impact Cumulative - No Impact
Airspace and Airfield Operations	Short-term - No Impact Long-term - No Impact Cumulative - No Impact	Short-term - No Impact Long-term - No Impact Cumulative - No Impact	Short-term - No Impact Long-term - No Impact Cumulative - No Impact	Short-term - No Impact Long-term - No Impact Cumulative - No Impact

**TABLE 4A**  
**Total Air Emissions for Projects at MacDill AFB**  
**Construction of Primary Care Clinic/Demolition of MTF Complex**

Pollutants	Primary Care Clinic (construction)	Medical Treatment Facility (demolition)	USCENTCOM	Control Tower/ Crash Rescue	Working Dog Kennel	MPC Park (Pelican Pier)	Naval Reserve Center	CENT. Wall & Parking Lots	USSOCOM	Hydrant Fueling System	Military Service Station	Runway Pavement Repairs	Project Totals	Hills City Emissions 1997	Net Change	De minimis	Above/Below De minimis
CO	23.72	1.40	19.52	5.39	1.36	2.55	6.77	0.21	17.03	30.97	0.11	2.60	111.63	19,272	0.58%	100	NA
VOC	8.88	1.01	7.4	2.81	0.88	1.40	3.40	0.3	6.58	10.38	0.21	1.88	45.13	27,703	0.16%	100	NA
NO <sub>x</sub>	28.07	6.45	21.71	6.09	1.53	3.37	7.59	0.96	19.44	33.84	0.24	12.02	141.31	82,563	0.17%	100	NA
SO <sub>x</sub>	1.41	0.43	1.06	0.3	0.08	0.18	0.37	0.06	0.96	1.64	0.01	0.80	7.3	NA		100	NA
PM <sub>10</sub>	2.41	1.13	1.7	0.49	0.13	0.33	0.60	0.17	1.58	2.57	0.04	2.10	13.25	NA		100	NA
Pb													0	53		25	NA
<b>Estimated Start/End Date</b>	12/2006 to 12/2007	1/2008 to 6/2008	7/2005 to 6/2007	11/2003 to 6/2005	11/2003 to 11/2004	10/2003 to 4/2004	4/2003 to 10/2004	8/2002 to 4/2003	1/2004 to 12/2005	8/2001 to 1/2004	6/2003 to 6/2004	10/2001 to 3/2004					

\*\*Note: All values in tons per year unless otherwise noted.  
 Net change = Project totals / Hillsborough County emissions

Above/Below De minimis = Project totals above or below de minimis  
 NA = not available/not applicable

YEAR 2002 THROUGH 2007 EMISSIONS WERE ESTIMATED BY TAKING AN APPROPRIATE PERCENTAGE OF THE TOTAL EMISSIONS DETERMINED ABOVE.  
 SEE TABLES 4B through 4F BELOW

**TABLE 4B**  
**Emissions for Year 2003**

Estimated % of Time During 2003 That Project Would Be Active	Primary Care Clinic (construction)	Medical Treatment Facility (demolition)	USCENTCOM	Control Tower/ Crash Rescue	Dog Kennel/ Demo	MPC Park (Pelican Pier)	Naval Reserve Center	CENT. Wall & Parking Lots	USSOCOM	Hydrant Fueling System	Military Service Station	Runway Pavement Repairs	2003 Project Totals	De minimis	Above/Below De minimis
		0%	0%	0%	16%	16%	25%	25%	50%	0%	92%	50%	25%		
<b>Pollutants</b>															
CO	0.00	0.00	0.00	0.86	0.22	0.05	0.64	3.39	0.00	28.49	0.06	0.65	34.35	100	Below
VOC	0.00	0.00	0.00	0.45	0.14	0.08	0.35	1.70	0.00	9.55	0.11	0.47	12.84	100	Below
NO <sub>x</sub>	0.00	0.00	0.00	0.97	0.24	0.24	0.84	3.80	0.00	31.13	0.12	3.01	40.35	100	Below
SO <sub>x</sub>	0.00	0.00	0.00	0.05	0.01	0.02	0.05	0.19	0.00	1.51	0.01	0.20	2.02	100	Below
PM <sub>10</sub>	0.00	0.00	0.00	0.08	0.02	0.04	0.08	0.30	0.00	2.36	0.02	0.53	3.43	100	Below
Pb													0	25	Below

**TABLE 4C**  
**Emissions for Year 2004**

Estimated % of Time During 2004 That Project Would Be Active	Primary Care Clinic (construction)	Medical Treatment Facility (demolition)	USCENTCOM	Control Tower/ Crash Rescue	Dog Kennel/ Demo	MPC Park (Pelican Pier)	Naval Reserve Center	CENT. Wall & Parking Lots	USSOCOM	Hydrant Fueling System	Military Service Station	Runway Pavement Repairs	2004 Project Totals	De minimis	Above/Below De minimis
		0%	0%	0%	100%	92%	33%	0%	50%	100%	8%	0%	25%		
<b>Pollutants</b>															
CO	0.00	0.00	0.00	5.39	1.25	0.07	0.00	3.39	17.03	2.48	0.00	0.65	30.25	100	Below
VOC	0.00	0.00	0.00	2.81	0.81	0.10	0.00	1.70	6.58	0.83	0.00	0.47	13.30	100	Below
NO <sub>x</sub>	0.00	0.00	0.00	6.09	1.41	0.32	0.00	3.80	19.44	2.71	0.00	3.01	36.76	100	Below
SO <sub>x</sub>	0.00	0.00	0.00	0.30	0.07	0.02	0.00	0.19	0.96	0.13	0.00	0.20	1.87	100	Below
PM <sub>10</sub>	0.00	0.00	0.00	0.49	0.12	0.06	0.00	0.30	1.58	0.21	0.00	0.53	3.28	100	Below
Pb													0	25	Below

**TABLE 4D**  
**Emissions for Year 2005**

Estimated % of Time During 2005 That	Primary Care Clinic (construction)	Medical Treatment Facility (demolition)	USCENTCOM	Control Tower/ Crash Rescue	Dog Kennel/ Demo	MPC Park (Pelican Pier)	Naval Reserve Center	CENT. Wall & Parking Lots	USSOCOM	Hydrant Fueling System	Military Service Station	Runway Pavement Repairs	2005 Project Totals	De minimis	Above/Below De minimis	
	0%	0%	67%	50%	0%	0%	0%	0%	92%	0%	0%	25%				
	<b>Pollutants</b>															
	CO	0.00	0.00	13.08	2.70	0.00	0.00	0.00	0.00	15.67	0.00	0.00	0.65	32.09	100	Below
	VOC	0.00	0.00	4.96	1.41	0.00	0.00	0.00	0.00	6.05	0.00	0.00	0.47	12.89	100	Below
	NO <sub>x</sub>	0.00	0.00	14.55	3.05	0.00	0.00	0.00	0.00	17.88	0.00	0.00	3.01	38.48	100	Below
	SO <sub>x</sub>	0.00	0.00	0.71	0.15	0.00	0.00	0.00	0.00	0.88	0.00	0.00	0.20	1.94	100	Below
	PM <sub>10</sub>	0.00	0.00	1.14	0.25	0.00	0.00	0.00	0.00	1.45	0.00	0.00	0.53	3.36	100	Below
	Pb												0	25	Below	

**TABLE 4E**  
**Emissions for Year 2006**

Estimated % of Time During 2005 That	Primary Care Clinic (construction)	Medical Treatment Facility (demolition)	USCENTCOM	Control Tower/ Crash Rescue	Dog Kennel/ Demo	MPC Park (Pelican Pier)	Naval Reserve Center	CENT. Wall & Parking Lots	USSOCOM	Hydrant Fueling System	Military Service Station	Runway Pavement Repairs	2006 Project Totals	De minimis	Above/Below De minimis
	50%	0%	33%	0%	0%	0%	0%	0%	33%	0%	0%	0%			
	<b>Pollutants</b>														
	CO	11.86	0.00	6.44	0.00	0.00	0.00	0.00	5.62	0.00	0.00	0.00	23.92	100	Below
	VOC	4.44	0.00	2.44	0.00	0.00	0.00	0.00	2.17	0.00	0.00	0.00	9.05	100	Below
	NO <sub>x</sub>	14.04	0.00	7.16	0.00	0.00	0.00	0.00	6.42	0.00	0.00	0.00	27.61	100	Below
	SO <sub>x</sub>	0.71	0.00	0.35	0.00	0.00	0.00	0.00	0.32	0.00	0.00	0.00	1.37	100	Below
	PM <sub>10</sub>	1.21	0.00	0.56	0.00	0.00	0.00	0.00	0.52	0.00	0.00	0.00	2.29	100	Below
	Pb												0	25	Below

**TABLE 4F**  
**Emissions for Year 2007**

Estimated % of Time During 2005 That	Primary Care Clinic (construction)	Medical Treatment Facility (demolition)	USCENTCOM	Control Tower/ Crash Rescue	Dog Kennel/ Demo	MPC Park (Pelican Pier)	Naval Reserve Center	CENT. Wall & Parking Lots	USSOCOM	Hydrant Fueling System	Military Service Station	Runway Pavement Repairs	2007 Project Totals	De minimis	Above/Below De minimis
	50%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
	<b>Pollutants</b>														
	CO	11.86	1.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.26	100	Below
	VOC	4.44	0.00	2.44	0.00	0.00	0.00	0.00	2.17	0.00	0.00	0.00	9.05	100	Below
	NO <sub>x</sub>	14.04	0.00	7.16	0.00	0.00	0.00	0.00	6.42	0.00	0.00	0.00	27.61	100	Below
	SO <sub>x</sub>	0.71	0.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.14	100	Below
	PM <sub>10</sub>	1.21	1.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.34	100	Below
	Pb												0	25	Below

**APPENDIX A**

AIR FORCE FORM 813

# REQUEST FOR ENVIRONMENTAL IMPACT ANALYSIS

Report Control Symbol  
RCS:  
**35402-30**

**INSTRUCTIONS:** Section I to be completed by Proponent, Sections II and III to be completed by Environmental Planning Function. Continue on separate sheets as necessary. Reference appropriate item number(s).

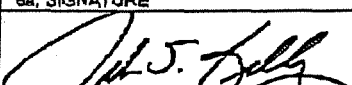
## SECTION I - PROPONENT INFORMATION

<b>1. TO (Environmental Planning Function)</b> 6 CES/CEV	<b>2. FROM (Proponent Organization and functional address symbol)</b> 6MDG/6MDSS/SGSL	<b>2a. TELEPHONE NO.</b> 813-827-9110
---	--	--

**3. TITLE OF PROPOSED ACTION**  
6 MDG Facility Replacement

**4. PURPOSE AND NEED FOR ACTION (Identify decision to be made and need date)**  
(See attached)

**5. DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES (DOPAA) (Provide sufficient details for evaluation of the total action)**  
(See attached)

<b>6. PROPONENT APPROVAL (Name and Grade)</b> JEB S. KELLY, MAJOR	<b>6a. SIGNATURE</b> 	<b>6b. DATE</b> 8 JAN 03
--	---	-----------------------------

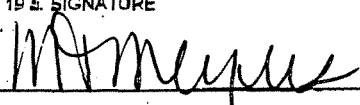
## SECTION II - PRELIMINARY ENVIRONMENTAL SURVEY (Check appropriate box and describe potential environmental effects including cumulative effects) (+ = positive effect; 0 = no effect; - = adverse effect; U = unknown effect)

		+	0	-	U
<b>7. AIR INSTALLATION COMPATIBLE USE ZONE/LAND USE (Noise, accident potential, encroachment, etc.)</b> <i>Link 1/9/03</i>	<input checked="" type="checkbox"/>				
<b>8. AIR QUALITY (Emissions, attainment status, state implementation plan, etc.)</b> <i>AP 1/10/03</i>					<input checked="" type="checkbox"/>
<b>9. WATER RESOURCES (Quality, quantity, source, etc.)</b> <i>significant increase in the impervious cover in this area will impact water quantity/drainage. ST-13</i>				<input checked="" type="checkbox"/>	
<b>10. SAFETY AND OCCUPATIONAL HEALTH (Asbestos/radiation/chemical exposure, explosives safety quantity distance, bird/wildlife aircraft hazard, etc.)</b> <i>Asbestos &amp; Lead Surveys &amp; Noise Data L</i>					<input checked="" type="checkbox"/>
<b>11. HAZARDOUS MATERIALS/WASTE (Use/storage/generation, solid waste, etc.)</b> <i>AS needed</i>			<input checked="" type="checkbox"/>		
<b>12. BIOLOGICAL RESOURCES (Wetlands/floodplains, threatened or endangered species, etc.)</b> <i>Link 1/9/03</i>					<input checked="" type="checkbox"/>
<b>13. CULTURAL RESOURCES (Native American burial sites, archaeological, historical, etc.)</b> <i>Link 1/9/03</i>			<input checked="" type="checkbox"/>		
<b>14. GEOLOGY AND SOILS (Topography, minerals, geothermal, Installation Restoration Program, seismicity, etc.)</b>					<input checked="" type="checkbox"/>
<b>15. SOCIOECONOMIC (Employment/population projections, school and local fiscal impacts, etc.)</b> <i>Link 1/9/03</i>					<input checked="" type="checkbox"/>
<b>16. OTHER (Potential impacts not addressed above.)</b> <i>Link 1/9/03</i>					<input checked="" type="checkbox"/>

## SECTION III - ENVIRONMENTAL ANALYSIS DETERMINATION

<b>17.</b>		PROPOSED ACTION QUALIFIES FOR CATEGORICAL EXCLUSION (CATEX) # _____; OR
	<input checked="" type="checkbox"/>	PROPOSED ACTION DOES NOT QUALIFY FOR A CATEX; FURTHER ENVIRONMENTAL ANALYSIS IS REQUIRED.

**18. REMARKS**  
MacDill AFB is located in a maintenance area for the following criteria pollutants: Ozone. Direct emissions from construction and indirect emissions from visiting traffic and/or follow-on operations, when totaled are less than the *de minimus* amounts in 40 CFR 93.153; therefore, a conformity determination is not required. An Environmental Assessment will be prepared.

<b>19. ENVIRONMENTAL PLANNING FUNCTION CERTIFICATION (Name and Grade)</b> MARK J. MEYERS, Col, USAF Vice Commander, 6 AMW	<b>19 a. SIGNATURE</b> 	<b>19 b. DATE</b> 13 Feb 03
---	--	--------------------------------

#### **4. PURPOSE AND NEED FOR PROPOSED ACTION**

MacDill AFB seeks to build a new Primary Care Clinic at the Base. The services this new facility would provide would be limited to Primary Care, limited Specialty Care, and certain ancillary services to eligible patients. Other medical services not provided by the MacDill Primary Care Clinic would be provided at a local hospital through a facility-sharing agreement. In addition, the Proposed Action is intended to remove the existing Medical Treatment Facility (MTF) complex, inappropriately located within the Base Housing District, which would create space for future housing development, when needed. Also, relocating the hospital near the main gate of MacDill AFB would permit easier access for off-base personnel and reduce unnecessary traffic volume in the interior portions of the base.

Medical treatment services at MacDill are currently provided at the MTF complex; an aging, substandard facility in a degraded condition. Additionally, due to space limitations at the Composite Medical Building (Building 711 and its additions), many services are currently located in other buildings, with the 6th Medical Group (MDG) occupying open space, where available. With related services located in physically separate locations, the efficiency of the 6th MDG is adversely impacted.

In addition to providing a state-of-the-art facility, MacDill wishes to upgrade its facilities to meet current code, policy, and force protection guidelines. The existing MTF does not meet these objectives. The existing Composite Medical Building (Building 711 and its additions) has shortcomings related to fire and electrical codes, does not meet the intended accessibility requirements of the Americans with Disabilities Act, and does not meet certain Department of Defense anti-terrorism set-back requirements.

#### **5. DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES**

The Proposed Action involves approximately 25 acres, west and southwest of the current Burger King location on which to build this new facility. The preferred action is to construct the new facility on this site. The new facility would be approximately 168,000 gross square feet (GSF), and parking commensurate with such a facility. The Proposed Action would also include construction of a new entry/exit road off of North Boundary Road to provide access to the new hospital and could involve slight modifications to North Boundary Road. The site proposed for construction is currently undeveloped except for the Civil Engineering storage yard at the southeast corner of the site and some permitted stormwater treatment ponds on the east central portion of the site. The proposed construction site is located outside the 100-year floodplain on MacDill AFB. The Proposed Action would constitute a substantial change in the existing condition of the proposed site due to disruption of existing free land and coverage of said land with parking areas and the building.

Implementation of the proposed action would also include demolition of the existing base hospital, which is approximately 250,000 GSF. In addition, several outbuildings around the

**APPENDIX B**

CONSISTENCY STATEMENT

## APPENDIX B CONSISTENCY STATEMENT

This consistency statement will examine the potential environmental consequences of the Proposed Action and ascertain the extent to which the consequences of the Proposed Action are consistent with the objectives of Florida Coastal Management Program (CMP).

Of the Florida Statutory Authorities included in the CMP, impacts in the following areas are addressed in the EA: beach and shore preservation (Chapter 161), historic preservation (Chapter 267), economic development and tourism (Chapter 288), public transportation (Chapters 334 and 339), saltwater living resources (Chapter 370), living land and freshwater resource (Chapter 372), water resources (Chapter 373), environmental control (Chapter 403), and soil and water conservation (Chapter 582). This consistency statement discusses how the proposed options may meet the CMP objectives.

### CONSISTENCY DETERMINATION

#### Chapter 161: Beach and Shore Preservation

No disturbances to the base's canals are foreseen under the Proposed Action or Alternative Actions.

#### Chapter 267: Historic Preservation

The Air Force and the Florida State Historic Preservation Officer have determined that the Proposed Action will have no effect on historic properties associated with the Base.

#### Chapter 288: Economic Development and Tourism

The EA presents the new employment impact and net income impact of the Proposed Action and alternative. The options would not have significant adverse effects on any key Florida industries or economic diversification efforts.

#### Chapter 372: Saltwater Living Resources

The EA addresses potential impacts to local water bodies. Water quality impacts were surveyed for existing conditions at the Proposed Action and alternatives. Results indicate that no impacts would result from the Proposed Action or alternatives.

### Chapter 372: Living Land and Freshwater Resources

Threatened and endangered species, major plant communities, conservation of native habitat, and mitigation of potential impacts to the resources are addressed in the EA. The Proposed Action and alternatives would not result in permanent disturbance to native habitat and should not significantly impact threatened or endangered species.

### Chapter 373: Water Resources

There would be no impacts to surface water or groundwater quality under the Proposed Action or alternatives as discussed in the EA.

### Chapter 403: Environmental Control

The EA addresses the issues of conservation and protection of environmentally sensitive living resources; protection of groundwater and surface water quality and quantity; potable water supply; protection of air quality; minimization of adverse hydrogeologic impacts; protection of endangered or threatened species; solid, sanitary, and hazardous waste disposal; and protection of floodplains and wetlands. Where impacts to these resources can be identified, possible mitigation measures are suggested. Implementation of mitigation will, for the most part, be the responsibility of MacDill AFB.

### Chapter 582: Soil and Water Conservation

The EA addresses the potential of the Proposed Action and alternatives to disturb soil and presents possible measures to prevent or minimize soil erosion. Impacts to groundwater and surface water resources also are discussed in the EA.

## CONCLUSION

The Air Force finds that the conceptual Proposed Action and alternatives plans presented in the EA are consistent with Florida's CMP.

**APPENDIX C**

AGENCY COORDINATION LETTERS AND COMMENTS

DEC 31 2003

**THE TAMPA TRIBUNE**  
**Published Daily**  
**Tampa, Hillsborough County, Florida**

State of Florida            }  
County of Hillsborough } ss.

Before the undersigned authority personally appeared Charles Wilson, who on oath says that he is the Credit Manager of The Tampa Tribune, a daily newspaper published at Tampa in Hillsborough County, Florida; that the attached copy of advertisement being a

**LEGAL ADVERTISEMENT**

in the matter of PUBLIC NOTICE - UNITED STATES

was published in said newspaper in the issues of November 25, 2003  
THE TAMPA TRIBUNE

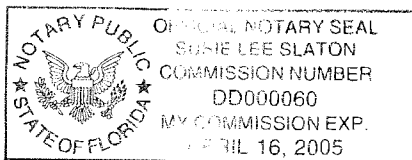
Affiant further says that the said The Tampa Tribune is a newspaper published at Tampa in said Hillsborough County, Florida, and that the said newspaper has heretofore been continuously published in said Hillsborough County, Florida, each day and has been entered as second class mail matter at the post office in Tampa, in said Hillsborough County, Florida for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that she has neither paid nor promised any person, this advertisement for publication in the said newspaper.

Charles Wilson

Sworn to and subscribed by me, this 30th day  
of December, A.D. 2003

Personally Known  or Produced Identification \_\_\_\_\_  
Type of Identification Produced \_\_\_\_\_

Susie Lee Slaton





Tribune photo by FRED FOX

sed to close at midnight, he keeps it open if people are I don't chase people out."

ers waiting for loads of thes.

The menu includes late-ht munchies like chicken rgs, sausage links, sand-thes and hamburgers. And, of course, there's beer, soda l coffee.

"I have a bunch of regulars ning during the evening," nder says. The regulars, he 's, include a mix of south npa: students, profession- and working-class folks.

Carrie Ferguson, 23, a hair-sser in St. Petersburg, made e drive tonight across the y to meet Hughes and Boyt-, her friends. It's only her ond time at the Laundro-it and she has never before shed her clothes here, but e said she enjoyed the con-t.

Charles Hill, 53, has been ming here for 10 years. He ed to work at a nearby thrift op and one day decided to p by. Hill now lives in Gib-

son-ton and works in a flower bouquet distributor in North Tampa but still comes here al-most every day.

Drinking a beer, Hill is watching a 1970s movie on TV. He says the sausage biscuits here are "pretty good."

The official closing time is midnight, but Bender says that varies.

"As long as I've got people coming here, I'll stay open," he says. "I don't chase people out."

It's not unusual for custom-ers to get so relaxed, Bender says, that they completely for-get why they came here in the first place.

"I think I forgot my laundry four or five times," Hill says. "I had too many beers."

Reporter Cassio Furtado can be reached at (813) 259-7616.



Applies to a Compact or smaller car rented from 11/26/03 through 12/1/03 (10:00 a.m.) for a five-day total of \$49.95 with 500 miles. Taxes, surcharges, vehicle licensing fee at .39 per day, excess miles at .20 each and optional damage waiver at \$15.99 per day are extra. Larger cars at similar savings.

Valid at participating non-airport West Central Florida locations. Availability is limited and restrictions apply, so call today for details.



Pick Enterprise. We'll pick you up.

360830

Just dial 1 800 850-9785 and mention customer number NWS-4299.

LEGAL ADVERTISEMENT

### PUBLIC NOTICE - UNITED STATES AIR FORCE

The Air Force public comment Environmental Process (EIAP) a project at Force Base. Construction of



(AF) seeks on AF Impact Analysis documents for MacDill Air The Primary Care

Clinic/Demolition of the Medical Treatment Facility (MTF) Complex project would construct a new Primary Care Clinic, and associated parking lot in the north-central section of MacDill AFB. This project would construct approximately 168,000 square feet of space to provide state-of-the-art Primary Care medical services at the Base. In addition, this project would include the demolition of the existing, aging MTF Complex. MacDill AFB has evaluated this action in accordance with Executive Order 11988 - Floodplain Management, and believes there is no practical alternative to completing demolition activities within the floodplain.

### NOTICE OF AVAILABILITY

The EIAP documents satisfy the requirements of the National Environmental Policy Act (NEPA). The documents are available for public review and comment from November 26<sup>th</sup>, 2003 through December 27<sup>th</sup> at the Tampa/Hillsborough County Public Library, located at 900 N. Ashley Drive, Tampa, FL 33606. The documents may be found in the Humanities Section of the Main Library. Address written comments to the 6 AMW Public Affairs, 8209 Hangar Loop Drive, Suite 14, MacDill AFB, FL 33621-5502. The telephone number is (813) 828-2215.

3860

November 25, 2003

For convenient home delivery, call (813) TRIBUNE.



**DEPARTMENT OF THE ARMY**  
MOBILE DISTRICT, CORPS OF ENGINEERS  
OFFICE OF THE AREA ENGINEER  
BOX 6230, MACDILL AFB, FLORIDA 33608-0230

REPLY TO  
ATTENTION OF:

Florida Area Office  
Construction Division

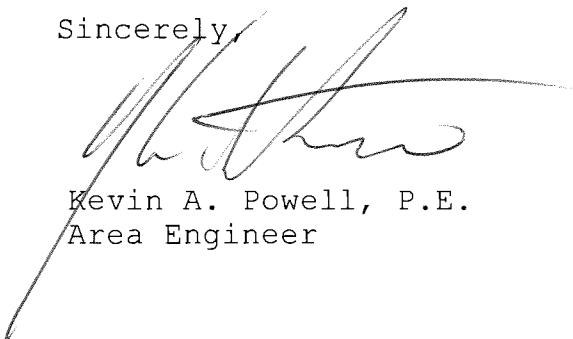
MACTEC Engineering and Consulting  
4919 W. Laurel Street  
Tampa, FL 33607

Subject: Environmental Assessment  
Construction of Primary Care clinic/Demolition of MTF complex  
MacDill AFB FL  
MACTEC Project 6515-03-0046.01

Gentlemen:

In reference to the above draft report, there are no comments.

Sincerely,



Kevin A. Powell, P.E.  
Area Engineer



FLORIDA DEPARTMENT OF STATE

**Glenda E. Hood**

Secretary of State

DIVISION OF HISTORICAL RESOURCES

Ms. Kelly Bishop  
MACTEC Engineering and Consulting, Inc.  
4919 W. Laurel Street  
Tampa, Florida 33607

November 21, 2003

RE: DHR Project File Number: 2003-9931  
Received by DHR November 17, 2003 *see 11/21/03*  
Environmental Assessment – Finding of No Significant Impact (FONSI)  
Proposed Construction of Primary Carte Clinic and the Demolition of the Existing Medical  
Treatment Facility (MTF) Complex, MacDill AFB, Hillsborough County

Dear Ms. Bishop:

Our office received and reviewed the above referenced project in accordance with Section 106 of the *National Historic Preservation Act of 1966*, as amended and *36 CFR Part 800: Protection of Historic Properties* and the *National Environmental Policy Act of 1969*, as amended. The State Historic Preservation Officer is to advise Federal agencies as they identify historic properties (listed or eligible for listing, in the *National Register of Historic Places*), assess effects upon them, and consider alternatives to avoid or minimize adverse effects.

Based on the information provided, it is the opinion of this office that the proposed project will have no effect on historic properties.

If you have any questions concerning our comments, please contact Scott Edwards, Historic Preservationist, by electronic mail [sedwards@dos.state.fl.us](mailto:sedwards@dos.state.fl.us), or at 850-245-6333 or 800-847-7278.

Sincerely,

*Frederick P. Gaska, Deputy SHPO*  
Janet Snyder Matthews, Ph.D., Director, and  
State Historic Preservation Officer

500 S. Bronough Street • Tallahassee, FL 32399-0250 • <http://www.flheritage.com>

Director's Office  
(850) 245-6300 • FAX: 245-6435

Archaeological Research  
(850) 245-6444 • FAX: 245-6436

Historic Preservation  
(850) 245-6333 • FAX: 245-6437

Historical Museums  
(850) 245-6400 • FAX: 245-6433

Palm Beach Regional Office  
(561) 279-1475 • FAX: 279-1476

St. Augustine Regional Office  
(904) 825-5045 • FAX: 825-5044

Tampa Regional Office  
(813) 272-3843 • FAX: 272-2340



**DEPARTMENT OF THE AIR FORCE  
6TH AIR MOBILITY WING (AMC)  
MACDILL AIR FORCE BASE, FLORIDA**

J8/B C EV  
CEC


**MEMORANDUM FOR U.S. FISH AND WILDLIFE SERVICE**

**FROM: 6 CES/CD**  
7621 Hillsborough Loop Drive  
MacDill AFB Florida 33621-5207

**SUBJECT: U.S. Fish and Wildlife Service Coordination on Demolition/Construction of  
Medical Treatment Facility at MacDill Air Force Base (AFB)**

1. The U.S. Air Force intends to construct a new Medical Treatment Facility (MTF). The proposed project includes the construction of an approximately 200,000 square foot (in plan) concrete and steel building up to three stories in height. The new facility would include approximately 10,000 square feet of parking. Some minor roadway changes, such as construction of a new entrance road to permit access to the MTF from North Boundary Road, as well as a deceleration lane on North Boundary Road, would be included in the project. An emergency entrance would be added along the building's east side, connecting to Kingfisher Street. The proposed construction site is located just south of the base Burger King west of Kingfisher Street within a developed area of the base that is designated as industrial land use. The proposed construction site is currently an area mown/maintained lawn.
2. The project also includes the demolition of the existing MTF complex located within the Base Family Housing District. This demolition would be initiated upon completion of the new MTF and the transfer of all services and personnel to the new facility. In addition to the Composite Medical Building (Building 711), approximately eight ancillary MTF complex buildings, as well as associated parking lots, curbing, sidewalks, etc. would be demolished, and the area re-vegetated.
3. A representative from the MacDill AFB Natural Resources staff surveyed both sites to determine if any threatened or endangered species inhabit the sites. The proposed new MTF or the existing complex have not been identified as critical habitat for any threatened or endangered species. Consequently, MacDill AFB believes that the proposed demolition/construction project would not adversely impact threatened or endangered species. If the U.S. Fish and Wildlife Service agrees with this assessment, please document your concurrence by stamp or signing where indicated below. If you would like to inspect the proposed construction site, please contact the MacDill AFB Natural Resources staff.

4. If you have any questions or require additional information on the proposed project, please contact Mr. Jason Kirkpatrick at (813) 828-0459.

  
GENE A. ROGERS, GS-13  
Deputy Base Civil Engineer

Attachment:

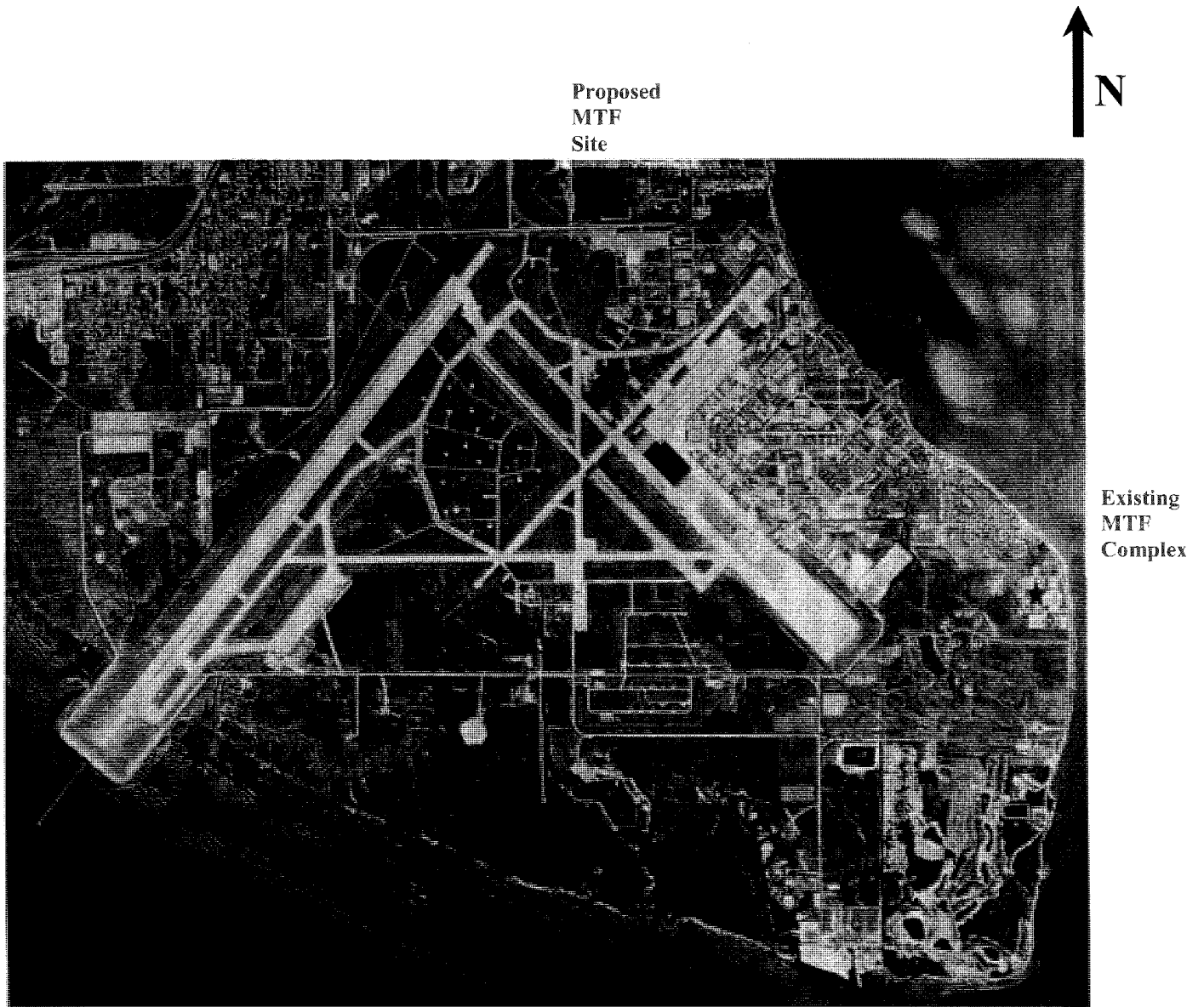
Figure 1: Proposed Demolition/Construction of Medical Treatment Facility at MacDill Air Force Base

MEMORANDUM FOR 6 CES/CD

The U.S. Fish and Wildlife Service agrees that the proposed construction/demolition project described above will not adversely impact threatened or endangered species on MacDill Air Force Base.

  
\_\_\_\_\_  
U.S. Fish and Wildlife Service Representative

8/14/03  
Date



Proposed  
MTF  
Site



Existing  
MTF  
Complex

**Figure 1: Proposed Demolition/Construction of Medical Treatment Facility,  
MacDill Air Force Base, Florida**

(Not to Scale)

## Bishop, Kelly

---

**From:** Lewis, Dan  
**Sent:** Monday, January 19, 2004 10:45 AM  
**To:** Bishop, Kelly  
**Subject:** CONSTRUCTION OF PRIMARY CARE CLINIC



Card for Habitat  
(411 B)

-----Original Message-----

**From:** NMFS HCDPC [mailto:NMFS.HCDPC@noaa.gov]  
**Sent:** Wednesday, December 10, 2003 5:07 PM  
**To:** MACTEC Engineering Bishop; Kirkpatrick Jason w Contr 6 CES/CEVN; Rolfes Sharon; Sramek Mark  
**Subject:** CONSTRUCTION OF PRIMARY CARE CLINIC

Ms. Kelly Bishop  
Environmental Business Unit Manager  
MACTEC Engineering and Consulting  
4919 W. Laurel Street  
Tampa, Florida 33607

Dear Ms. Bishop:

The National Marine Fisheries Service (NOAA Fisheries) has reviewed your office's Draft Environmental Assessment (EA), dated November 7, 2003, for the construction of a new primary care clinic and the demolition of the existing medical treatment facility (MTF) located on MacDill Air Force Base (AFB) in Hillsborough County, Florida. The proposed construction of the new primary care clinic structure is necessary to replace the existing substandard MTF located on MacDill AFB.

Based upon our review of the information provided, NOAA trust resources which occur within the project area have been adequately identified in the Draft EA. Owing to the locations of the proposed construction activities and subsequent operation of the facilities, adverse impacts to NOAA trust resources would not occur through completion of the project. NOAA Fisheries concurs with the findings which are outlined by MACTEC Engineering and Consulting in the Draft EA.

If you have questions with regard to our evaluation of the Draft EA, please contact Mark Sramek in our St. Petersburg, Florida office. Mr. Sramek may be reached at the letterhead address or by calling (727) 570-5311.



Jeb Bush  
Governor

# Department of Environmental Protection

JAN 8 2003

Marjory Stoneman Douglas Building  
3900 Commonwealth Boulevard  
Tallahassee, Florida 32399-3000

David B. Struhs  
Secretary

December 31, 2003

Ms. Kelly Bishop  
MACTEC Engineering and Consulting  
4919 West Laurel Street  
Tampa, Florida 33607

RE: U. S. Air Force – Environmental Assessment for Construction of Primary Care Clinic/Demolition of Existing MTF Complex – MacDill Air Force Base, Hillsborough County, Florida.  
SAI # FL200311184605C

Dear Ms. Bishop:

The Florida State Clearinghouse, pursuant to Presidential Executive Order 12372, Gubernatorial Executive Order 95-359, the Coastal Zone Management Act, 16 U.S.C. §§ 1451-1464, as amended, and the National Environmental Policy Act, 42 U.S.C. §§ 4321, 4331-4335, 4341-4347, as amended, has coordinated a review of the referenced Environmental Assessment.

Based on the information contained in the document and the enclosed comments provided by our reviewing agencies, the state has determined that the subject federal action is consistent with the Florida Coastal Management Program.

Thank you for the opportunity to review this project. If you have any questions regarding this letter, please contact Ms. Lauren P. Milligan at (850) 245-2163.

Sincerely,

Sally B. Mann, Director  
Office of Intergovernmental Programs

SBM/lm

Enclosures

"More Protection, Less Process"

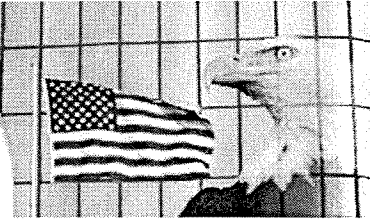
Printed on recycled paper.



# Florida

Department of Environmental Protection

"More Protection. Less Process"



**Categories**

[DEP Home](#) | [Contact DEP](#) | [Search](#) | [DEP Site Map](#)

<b>Project Information</b>	
<b>Project:</b>	FL200311184605C
<b>Comments Due:</b>	December 17, 2003
<b>Letter Due:</b>	January 02, 2004
<b>Description:</b>	DEPARTMENT OF THE AIR FORCE - ENVIRONMENTAL ASSESSMENT FOR CONSTRUCTION OF PRIMARY CARE CLINIC/DEMOLITION OF EXISTING MTF COMPLEX - MACDILL AIR FORCE BASE, HILLSBOROUGH COUNTY, FLORIDA.
<b>Keywords:</b>	USAF - PRIMARY CARE CLINIC/MTF COMPLEX - MACDILL AFB, HILLSBOROUGH
<b>CFDA #:</b>	12.200
<b>Agency Comments:</b>	
TAMPA BAY RPC - TAMPA BAY REGIONAL PLANNING COUNCIL	
HILLSBOROUGH - HILLSBOROUGH COUNTY	
ENVIRONMENTAL POLICY UNIT - OFFICE OF POLICY AND BUDGET, ENVIRONMENTAL POLICY UNIT	
COMMUNITY AFFAIRS - FLORIDA DEPARTMENT OF COMMUNITY AFFAIRS	
Released Without Comment	
STATE - FLORIDA DEPARTMENT OF STATE	
No Comment	
TRANSPORTATION - FLORIDA DEPARTMENT OF TRANSPORTATION	
No Comment	
ENVIRONMENTAL PROTECTION - FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION	
No Comment	
SOUTHWEST FLORIDA WMD - SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT	
No Comment	

For more information please contact the Clearinghouse Office at:

AGENCY CONTACT AND COORDINATOR (SCH)  
 3900 COMMONWEALTH BOULEVARD MS-47  
 TALLAHASSEE, FLORIDA 32399-3000  
 TELEPHONE: (850) 245-2161  
 FAX: (850) 245-2190

Visit the [Clearinghouse Home Page](#) to query other projects.

[Copyright and Disclaimer](#)  
[Privacy Statement](#)

COUNTY: HILLSBOROUGH

SAI - USAF - MD

2003 - 10057

DATE: 11/17/2003

COMMENTS DUE DATE: 12/17/2003

CLEARANCE DUE DATE: 1/2/2004

SAI#: FL200311184605C

MESSAGE:

<b>STATE AGENCIES</b>	<b>WATER MNGMNT. DISTRICTS</b>	<b>OPB POLICY UNIT</b>	<b>RPCS &amp; LOC GOVS</b>
COMMUNITY AFFAIRS	SOUTHWEST FLORIDA WMD	ENVIRONMENTAL POLICY UNIT	
ENVIRONMENTAL PROTECTION			
X STATE			
TRANSPORTATION			

The attached document requires a Coastal Zone Management Act/Florida Coastal Management Program consistency evaluation and is categorized as one of the following:

- Federal Assistance to State or Local Government (15 CFR 930, Subpart F). Agencies are required to evaluate the consistency of the activity.
- Direct Federal Activity (15 CFR 930, Subpart C). Federal Agencies are required to furnish a consistency determination for the State's concurrence or objection.
- Outer Continental Shelf Exploration, Development or Production Activities (15 CFR 930, Subpart E). Operators are required to provide a consistency certification for state concurrence/objection.
- Federal Licensing or Permitting Activity (15 CFR 930, Subpart D). Such projects will only be evaluated for consistency when there is not an analogous state license or permit.

**Project Description:**

DEPARTMENT OF THE AIR FORCE - ENVIRONMENTAL ASSESSMENT FOR CONSTRUCTION OF PRIMARY CARE CLINIC/DEMOLITION OF EXISTING MTF COMPLEX - MACDILL AIR FORCE BASE, HILLSBOROUGH COUNTY, FLORIDA.

**To: Florida State Clearinghouse**

AGENCY CONTACT AND COORDINATOR (SCH)  
 3900 COMMONWEALTH BOULEVARD MS-47  
 TALLAHASSEE, FLORIDA 32399-3000  
 TELEPHONE: (850) 245-2161  
 FAX: (850) 245-2190

**EO. 12372/NEPA Federal Consistency**

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> No Comment | <input checked="" type="checkbox"/> No Comment/Consistent |
| <input type="checkbox"/> Comment Attached      | <input type="checkbox"/> Consistent/Comments Attached     |
| <input type="checkbox"/> Not Applicable        | <input type="checkbox"/> Inconsistent/Comments Attached   |
|  | <input type="checkbox"/> Not Applicable                   |

**From:** Division of Historical Resources  
 Division/Bureau: Bureau of Historic Preservation

Reviewer: S. Edwards JHC Frederick P. Garbe  
 Date: 11-21-03 11/21/03 Deputy SHPO  
NHPA/x:2003-9931 + 2003-7182 11/21/03

03 NOV 20 AM 9:56  
 RECEIVED  
 BUREAU OF HISTORIC PRESERVATION

RECEIVED  
 NOV 26 2003  
 OIP/OLGA

COUNTY: HILLSBOROUGH

DATE: 11/17/2003

COMMENTS DUE DATE: 12/17/2003

CLEARANCE DUE DATE: 1/2/2004

SAI#: FL200311184605C

MESSAGE:

<b>STATE AGENCIES</b>	<b>WATER MNGMNT. DISTRICTS</b>	<b>OPB POLICY UNIT</b>	<b>RPCS &amp; LOC GOVS</b>
COMMUNITY AFFAIRS	SOUTHWEST FLORIDA WMD	ENVIRONMENTAL POLICY UNIT	
ENVIRONMENTAL PROTECTION			
STATE			
X TRANSPORTATION			

The attached document requires a Coastal Zone Management Act/Florida Coastal Management Program consistency evaluation and is categorized as one of the following:

- Federal Assistance to State or Local Government (15 CFR 930, Subpart F). Agencies are required to evaluate the consistency of the activity.
- Direct Federal Activity (15 CFR 930, Subpart C). Federal Agencies are required to furnish a consistency determination for the State's concurrence or objection.
- Outer Continental Shelf Exploration, Development or Production Activities (15 CFR 930, Subpart E). Operators are required to provide a consistency certification for state concurrence/objection.
- Federal Licensing or Permitting Activity (15 CFR 930, Subpart D). Such projects will only be evaluated for consistency when there is not an analogous state license or permit.

**Project Description:**

DEPARTMENT OF THE AIR FORCE - ENVIRONMENTAL ASSESSMENT FOR CONSTRUCTION OF PRIMARY CARE CLINIC/DEMOLITION OF EXISTING MTF COMPLEX - MACDILL AIR FORCE BASE, HILLSBOROUGH COUNTY, FLORIDA.

**To: Florida State Clearinghouse**

AGENCY CONTACT AND COORDINATOR (SCH)  
 3900 COMMONWEALTH BOULEVARD MS-47  
 TALLAHASSEE, FLORIDA 32399-3000  
 TELEPHONE: (850) 245-2161  
 FAX: (850) 245-2190

**EO. 12372/NEPA Federal Consistency**

- No Comment
- Comment Attached
- Not Applicable
- No Comment/Consistent
- Consistent/Comments Attached
- Inconsistent/Comments Attached
- Not Applicable

**From:**

Division/Bureau: Modal Planning & Development  
 Reviewer: Carin Watkins  
 Date: 12-16-03



An Equal Opportunity Employer

# Southwest Florida Water Management District

2379 Broad Street, Brooksville, Florida 34604-6899  
(352) 796-7211 or 1-800-423-1476 (FL only)  
SUNCOM 628-4150 TDD only 1-800-231-6103 (FL only)  
On the Internet at: WaterMatters.org

**Tampa Service Office**  
7601 Highway 301 North  
Tampa, Florida 33637-6759  
(813) 985-7481 or  
1-800-836-0797 (FL only)  
SUNCOM 578-2070

**Bartow Service Office**  
170 Century Boulevard  
Bartow, Florida 33830-7700  
(863) 534-1448 or  
1-800-492-7862 (FL only)  
SUNCOM 572-6200

**Sarasota Service Office**  
6750 Fruitville Road  
Sarasota, Florida 34240-9711  
(941) 377-3722 or  
1-800-320-3503 (FL only)  
SUNCOM 531-6900

**Lecanto Service Office**  
3600 West Sovereign Path  
Suite 226  
Lecanto, Florida 34461-8070  
(352) 527-8131  
SUNCOM 667-3271

December 5, 2003

- Thomas G. Dabney, II**  
Chair, Sarasota
- Watson L. Haynes, II**  
Vice Chair, Pinellas
- Janet D. Kovach**  
Secretary, Hillsborough
- Maggie N. Dominguez**  
Treasurer, Hillsborough
- Edward W. Chance**  
Manatee
- Ronnie E. Duncan**  
Pinellas
- Pamela L. Fentress**  
Highlands
- Ronald C. Johnson**  
Polk
- Heidi B. McCree**  
Hillsborough
- T. G. "Jerry" Rice**  
Pasco
- Judith C. Whitehead**  
Hernando

- David L. Moore**  
Executive Director
- Gene A. Heath**  
Assistant Executive Director
- William S. Bilenky**  
General Counsel

Ms. Lauren Millagin  
Florida State Clearinghouse  
Florida Department of Environmental Protection  
3900 Commonwealth Boulevard, Mail Station 47  
Tallahassee, Florida 32399-3000

**Subject: Department of the Air Force-Environmental Assessment for Construction of Primary Care Clinic/Demolition of Existing MTF Complex-MacDill Air Force Base, Hillsborough County, Florida; SAI#: FL200311184605C**

Dear Ms. Millagin:

The staff of the Southwest Florida Water Management District (District) has conducted a consistency evaluation for the referenced project. Consistency findings are divided into four categories and are based solely on the information provided in the subject application.

FINDING	CATEGORY
X	Consistent/No Comment
	Consistent/Comments Attached
	Inconsistent/Comments Attached
	Consistency Cannot be Determined Without an Environmental Assessment Report/Comments Attached

The District appreciates the opportunity to participate in the review of this application. Please be advised that our review does not constitute permit approval under Chapter 373, Florida Statutes, or any rules promulgated thereunder, nor does it stand in lieu of normal permitting procedures in accordance with Florida Statutes and District rules.

RECEIVED

DEC 10 2003

OIP/OLGA

Ms. Lauren Millagin  
December 5, 2003  
Page 2

If you have any questions or if I can be of further assistance, please contact me in the District's Planning Department.

Sincerely,

A handwritten signature in cursive script that reads "Trisha Neasman".

Trisha Neasman, AICP  
Government Planning Coordinator

## Bishop, Kelly

---

**From:** Habitat [NMFS.HCDPC@noaa.gov]  
**Posted At:** Wednesday, December 10, 2003 5:22 PM  
**Conversation:** [Fwd: CONSTRUCTION OF PRIMARY CARE CLINIC]  
**Posted To:** Microsoft Outlook Embedded Message  
  
**Subject:** [Fwd: CONSTRUCTION OF PRIMARY CARE CLINIC]

FOR Kelly Bishop

----- Original Message -----

**Subject:** CONSTRUCTION OF PRIMARY CARE CLINIC  
**Date:** Wed, 10 Dec 2003 16:07:26 -0600  
**From:** Habitat <NMFS.HCDPC@noaa.gov>  
**Organization:** NOAA  
**To:** MACTEC Engineering Bishop <kbishop@lawco.com>, "Kirkpatrick, Jason" <jason.kirkpatrick@macdill.af.mil>, "Rolfes, Sharon" <Sharon.Rolfes@noaa.gov>, "Sramek, Mark" <Mark.Sramek@noaa.gov>

Ms. Kelly Bishop  
Environmental Business Unit Manager  
MACTEC Engineering and Consulting  
4919 W. Laurel Street  
Tampa, Florida 33607

Dear Ms. Bishop:

The National Marine Fisheries Service (NOAA Fisheries) has reviewed your office's Draft Environmental Assessment (EA), dated November 7, 2003, for the construction of a new primary care clinic and the demolition of the existing medical treatment facility (MTF) located on MacDill Air Force Base (AFB) in Hillsborough County, Florida. The proposed construction of the new primary care clinic structure is necessary to replace the existing substandard MTF located on MacDill AFB.

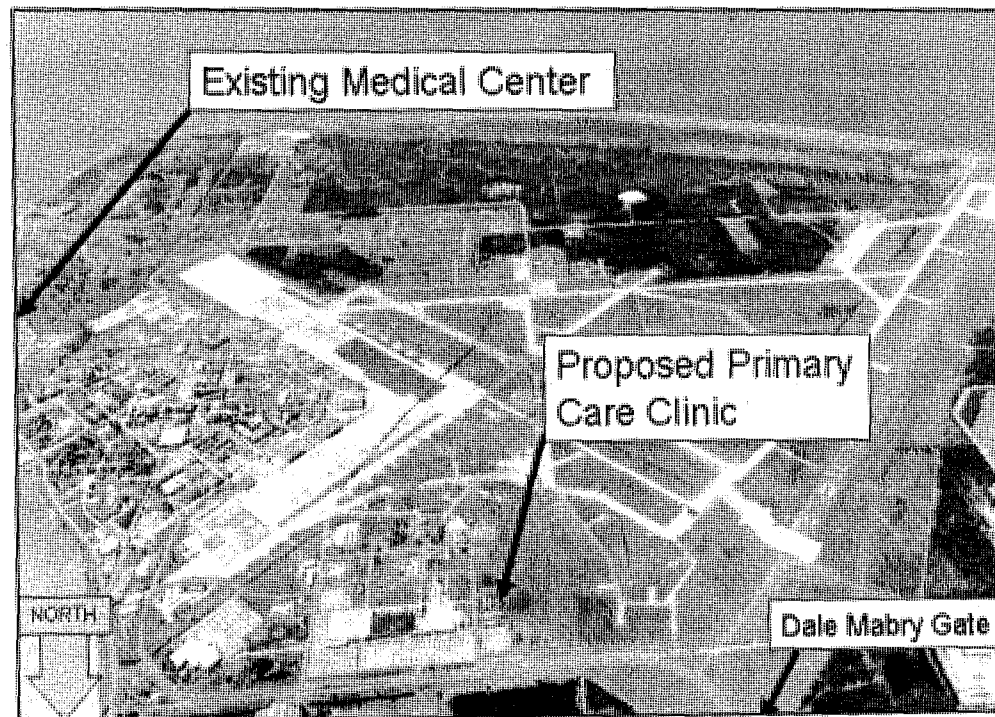
Based upon our review of the information provided, NOAA trust resources which occur within the project area have been adequately identified in the Draft EA. Owing to the locations of the proposed construction activities and subsequent operation of the facilities, adverse impacts to NOAA trust resources would not occur through completion of the project. NOAA Fisheries concurs with the findings which are outlined by MACTEC Engineering and Consulting in the Draft EA.

If you have questions with regard to our evaluation of the Draft EA, please contact Mark Sramek in our St. Petersburg, Florida office. Mr. Sramek may be reached at the letterhead address or by calling (727) 570-5311.

## Asking for feedback on proposed base medical facility

**A**s part of the Environmental Impact Analysis Process the Air Force is providing public notification and seeking comment on its plans to replace the MacDill Hospital, the 6th Medical Group's main facility. The fiscal year 06 Military Construction Project would construct a new Primary Care Clinic facility in the north-central portion of MacDill, immediately south of the Burger King. The new location would improve access to the Medical Group for off-base personnel and reduce traffic volumes on interior portions of the base, including Bayshore Avenue.

Services provided by the new facility would be limited to Primary Care, limited Specialty Care and certain ancillary services. Some services currently provided on base are being evaluated to be provided by 6th Medical Group staff working out of the Tampa General Hospital facility near downtown Tampa. Once the new medical facility is constructed, the existing structure and several ancillary buildings would be demolished. If you would like to see a copy of the Draft Environmental Assessment, or have any comments or concerns regarding the environmental impact analysis for this project, contact the Base Public Affairs office at 6th AMW Public Affairs, 8208 Hangar Loop Drive, Suite 14, MacDill AFB, FL 33621-5502. The telephone number is 828-2215.



BASE PUBLIC AFFAIRS  
6<sup>TH</sup> AMW PUBLIC AFFAIRS  
8208 HANGER LOOP DRIVE  
SUITE 14  
MAC DILL AFB, FL. 33621-5502

March 26, 2004

GENTLEMEN:

REFERENCE IS MADE TO THE FOLLOWING ARTICLE THAT APPEARED IN THE MAC DILL THUNDERBOLT:

12

MacDill 73

## Asking for feedback on prop

A part of the Environmental Impact Analysis Process the Air Force is providing public notification and seeking comment on its plans to replace the MacDill Hospital, the 6th Medical Group's main facility. The fiscal year 06 Military Construction Project would construct a new Primary Care Clinic facility in the north-central portion of MacDill, immediately south of the Burger King. The new location would improve access to the Medical Group for off-base personnel and reduce traffic volumes on interior portions of the base, including Bayshore Avenue.

Services provided by the new facility would be limited to Primary Care, limited Specialty Care and certain ancillary services. Some services currently provided on base are being evaluated to be provided by 6th Medical Group staff working out of the Tampa General Hospital facility near downtown Tampa. Once the new medical facility is constructed, the existing structure and several ancillary buildings would be demolished. If you would like to see a copy of the Draft Environmental Assessment, or have any comments or concerns regarding the environmental impact analysis for this project, contact the Base Public Affairs office at 6th AMW Public Affairs, 8208 Hanger Loop Drive, Suite 14, MacDill AFB, FL 33621-5502. The telephone number is 828-2215.

IT IS BEYOND ALL COMPREHENSION THAT YOU WOULD CONSIDER TEARING DOWN THE PRESENT HOSPITAL AT MAC TO PUT INTO PLACE WHAT SOUNDS LIKE A SMALLER VERSION OF A HOSPITAL. IF THE NEW FACILITY IS TO HAVE 'LIMITED' SERVICES, THIS IMPLIES THAT THERE ULTIMATELY WILL BE A REDUCTION IN AVAILABLE MEDICAL SERVICE FOR OUR ACTIVE SERVICE PERSONNEL AND VETERANS.

THE ARTICLE INDICATES THAT SOME SERVICES CURRENTLY BEING PROVIDED ON BASE WOULD BE HANDLED OUT OF A TAMPA BAY HOSPITAL. ONCE YOU TAKE SERVICES FROM MAC DILL AND HAVE A HOSPITAL FACILITY INVOLVED THE COSTS TO THE GOVERNMENT WILL SKYROCKET.

PAGE 2 BASE PUBLIC AFFAIRS MARCH 26, 2004

THE HOSPITAL AT MAC WAS JUST RENOVATED. INSTEAD OF THINKING ABOUT TEARING DOWN THIS FINE HOSPITAL, WHY NOT GO THIS ROUTE, WHICH WOULD BE MORE SENSIBLE.

BEEF UP THE PRESENT HOSPITAL AT MAC DILL.

ONCE AGAIN ALLOW SENIORS OVER 65 TO USE THE FACILITY, WITHOUT RESTRICTIONS. IMPROVE SPECIALTY CLINICS AND BRING THE PRESENT HOSPITAL UP TO SUCH STANDARDS AS WALTER REED. WE HAVE A LOT OF VETERANS THAT WILL BE REQUIRING MEDICAL SERVICES DURING AND AFTER THEIR CAREERS. MANY INJURED VETERANS FROM THE IRAQ CONFLICT ARE GOING TO REQUIRE MEDICAL ATTENTION FOR THEIR ENTIRE LIVES.

MY HUSBAND AND I USED THE SERVICES AT THE MAC DILL HOSPITAL FOR SEVERAL YEARS. THAT WAS BEFORE 65-YEAR-OLD INDIVIDUALS WERE EXCLUDED FROM BASE SERVICES AT THE HOSPITAL. WE HAD PRIMARY CARE, SPECIALIZED CARE, ETC. THE BASE DOCTORS AND PERSONNEL ARE REALLY TOP NOTCH. THE USE OF THE BASE FACILITIES SAVED THE GOVERNMENT AN ABSORBENT AMOUNT OF MONEY. THE DOCTORS IN THE OUTSIDE ARENA OF CIVILIAN MEDICAL CARE CHARGE MEDICARE AMOUNTS THAT ONE MIGHT CONSIDER ARE EXCESSIVE.

THE NEWSPAPER STATED TODAY THAT MEDICARE COSTS MIGHT RISE ANOTHER 17 PERCENT. IF THE GOVERNMENT WOULD JUST USE SOME SENSIBLE THOUGHT ABOUT THE USE OF FACILITIES SUCH AS THE MAC DILL HOSPITAL FOR PRESENT SERVICE PERSONNEL, INCLUDE ALL SENIORS. THIS ACTION WOULD REDUCE THE COSTS OF MEDICARE. WE HAVE A BABY BOOMER POPULATION THAT IS GOING TO RETIRE SHORTLY. MANY OF THESE PEOPLE WILL BE VETERANS. INSTEAD OF HAVING THIS LARGE POPULATION USE CIVILIAN DOCTORS FACILITIES SUCH AS MAC DILL COULD BE USED FOR THE VETERAN POPULATION.

IF YOU WERE TO SAY THAT IT WAS BEING CONSIDERED TO BUILD A NEW MAC DILL HOSPITAL TO BEEF UP IT'S OPERATIONS FOR ALL SERVICEMEN AND RETIREES I WOULD SAY THIS WOULD BE A WONDERFUL WAY AND SENSIBLE WAY TO SPEND TAX PAYERS MONEY. THIS WOULD MAKE A LOT MORE SENSE THAN TO PUT INTO PLACE \$300,000.00 PARK IN MAC DILL.

VERY TRULY YOURS,

MRS. CARMELA P. MORTON  
9665 45TH WAY  
PINELLAS PK., FL. 33782-3705

CC: CONGRESSMAN BILL YOUNG  
360 CENTRAL AVENUE  
SUITE 1480  
ST. PETERSBURG, FL. 33701-3836

**APPENDIX D**

AIR EMISSION CALCULATIONS FOR PROJECT

**DEMOLITION OF MTF COMPLEX  
MAC DILL AFB, FLORIDA**

**TABLE 4E - DEMOLITION SITE AIR EMISSIONS ESTIMATES (EXISTING MTF COMPLEX SITE ONLY)  
(Combustive Emissions of ROG, NOx, SO2, CO and PM10 Due to Construction)**

27-Apr-04

Input:

Total Building Area: 0 ft<sup>2</sup>  
 Total Paved Area: 0 ft<sup>2</sup>  
 Total Disturbed Area: 22.0 acres  
 Construction Duration: 0.3 years  
 Annual Construction Activity: 110 days/yr

**Estimation:**  
0

Demolition of existing Medical Treatment Facility Complex  
 (following construction) @ 250,000 sq.ft.  
 Total = +/- 200,000 sq. ft. (in plan)  
 x 1.3 (margins of area) = **260,000** sq. ft.  
 Pavement Area Estimated at **300,000** sq. ft.  
**Duration: 0.3 years**

**Results:[Average per Year Over the Construction Period]**

	ROG	NOx	SO2	CO	PM10
Emissions, lb/day	18.33	117.33	7.80	25.39	20.53
Emissions, tons/yr	1.01	6.45	0.43	1.40	1.13

**Calculation of Unmitigated Emissions**

Summary of Input Parameters

	ROG	NOx	SO2	CO	PM10
Total new acres disturbed:	22.00	22.00	22.00	22.00	22.00
Total new acres paved:	0.00	0.00	0.00	0.00	0.00
Total new building space, ft <sup>2</sup> :	0	0	0	0	0
Total years:	0.30	0.30	0.30	0.30	0.30
Area graded, acres in 1 yr:	73.33	73.33	73.33	73.33	73.33
Area paved, acres in 1 yr:	0.00	0.00	0.00	0.00	0.00
Building space, ft <sup>2</sup> in 1 yr:	0	0	0	0	0

## Annual Emissions by Source (lbs/day)

	ROG	NOx	SO2	CO	PM10
Grading Equipment	18.3	117.3	7.8	25.4	20.5
Asphalt Paving	0.00	0.0	0.0	0.0	0.0
Stationary Equipment	0.0	0.0	0.0	0.0	0.0
Mobile Equipment	0.0	0.0	0.0	0.0	0.0
Architectural Coatings (Non-Res)	0.0	0.0	0.0	0.0	0.0
Total Emissions (lbs/day):	18.33	117.33	7.80	25.39	20.53

## Emission Factors

Reference: Air Quality Thresholds of Significance, SMAQMD, 1994.

Source	SMAQMD Emission Factor				
	ROG	NOx	SO2 *	CO *	PM10
Grading Equipment	2.50E-01 lb/acre/day	1.60E+00 lb/acre/day	0.11 lb/acre/day	0.35 lb/acre/day	2.80E-01 lb/acre/day
Asphalt Paving	2.62E-01 lb/acre/day	NA	NA	NA	NA
Stationary Equipment	1.68E-04 lb/day/ft <sup>2</sup>	1.37E-04 lb/day/ft <sup>2</sup>	9.11E-06 lb/day/ft <sup>2</sup>	2.97E-05 lb/day/ft <sup>2</sup>	8.00E-06 lb/day/ft <sup>2</sup>
Mobile Equipment	1.60E-04 lb/day/ft <sup>2</sup>	1.61E-03 lb/day/ft <sup>2</sup>	7.48E-05 lb/day/ft <sup>2</sup>	0.0016 lb/day/ft <sup>2</sup>	1.20E-04 lb/day/ft <sup>2</sup>
Architectural Coatings (Non-Res)	8.15E-02 lb/day/ft	NA	NA	NA	NA

\* Factors for grading equipment and stationary equipment are calculated from AP-42 for diesel engines using ratios with the NOx factors.  
Factors for mobile equipment are calculated from ratios with Mobile5a 2001 NOx emission factors for heavy duty trucks for each site.

**DEMOLITION OF MTF COMPLEX**  
**TABLE 4E - DEMOLITION SITE AIR EMISSIONS ESTIMATES (EXISTING MTF COMPLEX SITE ONLY)**  
**MacDill AFB, FLORIDA**  
**TABLE - CONSTRUCTION EMISSION FACTOR**

Calculation of PM10 Emissions Due to Site Preparation (Uncontrolled).  
 Revised 16 June 1997.

User Input Parameters / Assumptions

Acres graded per year:	73.3	acres/yr
Grading days/yr:	241	days/yr (From "grading")
Exposed days/yr:	180	days/yr graded area is exposed
Grading Hours/day:	8	hr/day
Soil piles area fraction:	0.01	(Fraction of site area covered by soil piles)
Soil percent silt, s:	15	%
Soil percent moisture, M:	8	%
Annual rainfall days, H:	107	days/yr that rainfall exceeds 0.01 inch (Tampa, FL)
Wind speed > 12 mph %, I:	12	%
Fraction of TSP, J:	0.45	(SCAQMD recommendation)
Mean vehicle speed, S:	5	mi/hr (On-site)
Dozer path width:	5	ft
Qty construction vehicles:	9	vehicles
On-site VMT/vehicle/day:	5	mi/veh/day (Excluding bulldozer VMT during grading)

**Emissions Due to Soil Disturbance Activities**

Operation Parameters (Calculated from User Inputs)

Grading duration per acre	26.3	hr/acre
Bulldozer mileage per acre	1.7	VMT/acre (Miles traveled by bulldozer during grading)

Construction VMT per day                    44 VMT/day  
 Construction VMT per acre                144.6 VMT/acre    (Travel on unpaved surfaces within site)

Equations Used (Corrected for PM10)

Operation	Empirical Equation	Units	AP-42 Section (4th Edition)
Bulldozing	$0.75(s^{1.5})/(M^{1.4})$	lbs/hr	8.24, Overburden
Grading	$(0.60)(0.051)S^{2.0}$	lbs/VMT	8.24, Overburden
Vehicle Traffic	$(3.72/(M^{4.3}))^{*.6}$	lbs/VMT	8.24, Overburden

Source: Compilation of Air Pollutant Emission Factors, Vol. I, USEPA AP-42.  
 Section 8.24, Western Surface Coal Mining (4th Edition)

Calculation of PM10 Emission Factors for Each Operation

Operation	Emission Factor (mass/ unit)	Operation Parameter	Emission Factor (lbs/ acre)
Bulldozing	2.37 lbs/hr	26.3 hr/acre	62.3 lbs/acre
Grading	0.77 lbs/VMT	1.7 VMT/acre	1.3 lbs/acre
Vehicle Traffic	0.00 lbs/VMT	144.6 VMT/acre	0 lbs/acre

**Emissions Due to Wind Erosion of Soil Piles and Exposed Graded Surface**

Reference: CEQA Air Quality Handbook, SCAQMD, April 1993.

Soil Piles EF =  $1.7(s/1.5)[(365 - H)/235](I/15)(J) = (s)(365 - H)(I)(J)/(3110.2941)$ , p. A9-99.

Soil Piles EF = 6.7 lbs/day/acres covered by soil piles

Consider soil piles area fraction so that EF applies to graded area

Soil piles area fraction: 0.01 (Fraction of site area covered by soil piles)  
 Soil Piles EF = 0.067 lbs/day/acres graded

Graded Surface EF = 26.4 lbs/day/acre (recommended in CEQA Manual, p. A9-93).

### Calculation of Annual PM10 Emissions

Source	Emission Factor	Graded Acres/yr	Exposed days/yr	Emissions lbs/yr	Emissions tons/yr
Bulldozing	62.3 lbs/acre	73.33	NA	4,569	2
Grading	1.3 lbs/acre	73.33	NA	95	0
Vehicle Traffic	0.0 lbs/acre	73.33	NA	0	0
Erosion of Soil Piles	0.1 lbs/acre/day	73.33	180	884	0
Erosion of Graded Surface	26.4 lbs/acre/day	73.33	180	348,480	174
<b>TOTAL</b>				<b>354,028</b>	<b>177</b>

**DEMOLITION OF MTF COMPLEX**  
**TABLE 4E - DEMOLITION SITE AIR EMISSIONS ESTIMATES (EXISTING MTF COMPLEX SITE ONLY)**  
**MacDill AFB, FLORIDA**  
**TABLE - CONSTRUCTION (GRADING) EMISSIONS**

Estimate of time required to grade a specified area.

Updated 17 June 1997.

Input Parameters

Construction area           73 acres/yr  
 Qty Equipment:               9

Assumptions.

Terrain is mostly flat.

Terrain is populated with medium brush; trees are negligible.

An average of 6" soil is removed during stripping.

An average of 6" soil is excavated from one half of the site and backfilled to the other half of the site; no soil is hauled off-site or borrowed.

200 hp bulldozers are used for site clearing.

300 hp bulldozers are used for stripping, excavation, and backfill.

Vibratory drum rollers are used for compacting.

Stripping, Excavation, Backfill and Compaction require  
 an average of two passes each.

Excavation and Backfill are assumed to involve only half of the site.

Calculation of days required for one piece of equipment to grade the specified area.

Reference: Means Heavy Construction Cost Data, 6th Ed., R. S. Means, 1992.

Means Line No.	Operation	Description	Output	Units	Acre/(equip)(day)	(Equip)(day)/acre	Acres/yr	(Equip)(days)/yr
021 108 0550	Site Clearing	Dozer & rake, medium brush	0.6	acre/day	0.6	1.67	73.33	122.22
021 144 0300	Stripping	Topsoil & stockpiling, adverse soil	1,650	cu. yd/day	2.05	0.49	73.33	35.85
022 242 5220	Excavation	Bulk, open site, common earth, 150' haul	800	cu. yd/day	0.99	1.01	36.67	36.97
022 208 5220	Backfill	Structural, common earth, 150' haul	1,950	cu. yd/day	2.42	0.41	36.67	15.17
022 226 5020	Compaction	Vibrating roller, 6" lifts, 3 passes	1,950	cu. yd/day	2.42	0.41	73.33	30.34
<b>TOTAL</b>								<b>240.55</b>

Calculation of days required for the indicated pieces of equipment to grade the designated acreage.

(Equip)(day)/yr:           240.55

Qty Equipment:            9

Grading days/yr:         240.55

Round to	241 grading days/yr
----------	---------------------

**CONSTRUCTION OF NEW PRIMARY CARE CLINIC  
MAC DILL AFB, FLORIDA  
TABLE 4E - CONSTRUCTION SITE AIR EMISSIONS ESTIMATES (CONSTRUCTION AREA ONLY)  
(Combustive Emissions of ROG, NO<sub>x</sub>, SO<sub>2</sub>, CO and PM<sub>10</sub> Due to Construction)**

27-Apr-04

Input:

Total Building Area: 130,000 ft<sup>2</sup>  
 Total Paved Area: 350,000 ft<sup>2</sup>  
 Total Disturbed Area: 20.0 acres  
 Construction Duration: 1.2 years  
 Annual Construction Activity: 260 days/yr

**Estimation:**

New Primary Care Facility @168,000 sq.ft.  
 Estimated 100,000 sq. ft. in Plan  
 (portions assumed to be multi-storied)  
 Building Total = + / - 100,000 sq. ft.  
 x 1.3 (margins of area) = **130,000** sq. ft.  
 Pavement Area Estimated at **350,000** sq. ft.  
**Duration: 1.2 years**

**Results:[Average per Year Over the Construction Period]**

	ROG	NO <sub>x</sub>	SO <sub>2</sub>	CO	PM <sub>10</sub>
Emissions, lb/day	68.28	215.93	10.86	182.42	18.53
Emissions, tons/yr	8.88	28.07	1.41	23.72	2.41

**Calculation of Unmitigated Emissions**

## Summary of Input Parameters

	ROG	NO <sub>x</sub>	SO <sub>2</sub>	CO	PM <sub>10</sub>
Total new acres disturbed:	20.00	20.00	20.00	20.00	20.00
Total new acres paved:	8.03	8.03	8.03	8.03	8.03
Total new building space, ft <sup>2</sup> :	130,000	130,000	130,000	130,000	130,000
Total years:	1.20	1.20	1.20	1.20	1.20
Area graded, acres in 1 yr:	16.67	16.67	16.67	16.67	16.67
Area paved, acres in 1 yr:	6.70	6.70	6.70	6.70	6.70
Building space, ft <sup>2</sup> in 1 yr:	108,333	108,333	108,333	108,333	108,333

## Annual Emissions by Source (lbs/day)

	ROG	NOx	SO2	CO	PM10
Grading Equipment	4.2	26.7	1.8	5.8	4.7
Asphalt Paving	1.75	0.0	0.0	0.0	0.0
Stationary Equipment	18.2	14.8	1.0	3.2	0.9
Mobile Equipment	17.3	174.4	8.1	173.4	13.0
Architectural Coatings (Non-Res)	26.8	0.0	0.0	0.0	0.0
Total Emissions (lbs/day):	68.28	215.93	10.86	182.42	18.53

## Emission Factors

Reference: Air Quality Thresholds of Significance, SMAQMD, 1994.

Source	SMAQMD Emission Factor				
	ROG	NOx	SO2 *	CO *	PM10
Grading Equipment	2.50E-01 lb/acre/day	1.60E+00 lb/acre/day	0.11 lb/acre/day	0.35 lb/acre/day	2.80E-01 lb/acre/day
Asphalt Paving	2.62E-01 lb/acre/day	NA	NA	NA	NA
Stationary Equipment	1.68E-04 lb/day/ft <sup>2</sup>	1.37E-04 lb/day/ft <sup>2</sup>	9.11E-06 lb/day/ft <sup>2</sup>	2.97E-05 lb/day/ft <sup>2</sup>	8.00E-06 lb/day/ft <sup>2</sup>
Mobile Equipment	1.60E-04 lb/day/ft <sup>2</sup>	1.61E-03 lb/day/ft <sup>2</sup>	7.48E-05 lb/day/ft <sup>2</sup>	0.0016 lb/day/ft <sup>2</sup>	1.20E-04 lb/day/ft <sup>2</sup>
Architectural Coatings (Non-Res)	8.15E-02 lb/day/ft	NA	NA	NA	NA

\* Factors for grading equipment and stationary equipment are calculated from AP-42 for diesel engines using ratios with the NOx factors.  
Factors for mobile equipment are calculated from ratios with Mobile5a 2001 NOx emission factors for heavy duty trucks for each site.

**CONSTRUCTION OF NEW PRIMARY CARE CLINIC**  
**TABLE 4E - CONSTRUCTION SITE AIR EMISSIONS ESTIMATES (CONSTRUCTION AREA ONLY)**  
**MacDill AFB, FLORIDA**  
**TABLE - CONSTRUCTION EMISSION FACTOR**

Calculation of PM10 Emissions Due to Site Preparation (Uncontrolled).  
 Revised 16 June 1997.

User Input Parameters / Assumptions

Acres graded per year:	16.7 acres/yr	
Grading days/yr:	55 days/yr	(From "grading")
Exposed days/yr:	180 days/yr	graded area is exposed
Grading Hours/day:	8 hr/day	
Soil piles area fraction:	0.01	(Fraction of site area covered by soil piles)
Soil percent silt, s:	15 %	
Soil percent moisture, M:	8 %	
Annual rainfall days, H:	107 days/yr	that rainfall exceeds 0.01 inch (Tampa, FL)
Wind speed > 12 mph %, I:	12 %	
Fraction of TSP, J:	0.45	(SCAQMD recommendation)
Mean vehicle speed, S:	5 mi/hr	(On-site)
Dozer path width:	5 ft	
Qty construction vehicles:	2 vehicles	
On-site VMT/vehicle/day:	5 mi/veh/day	(Excluding bulldozer VMT during grading)

**Emissions Due to Soil Disturbance Activities**

Operation Parameters (Calculated from User Inputs)

Grading duration per acre	26.4 hr/acre	
Bulldozer mileage per acre	1.7 VMT/acre	(Miles traveled by bulldozer during grading)

Construction VMT per day                    10 VMT/day  
 Construction VMT per acre                33 VMT/acre    (Travel on unpaved surfaces within site)

Equations Used (Corrected for PM10)

Operation	Empirical Equation	Units	AP-42 Section (4th Edition)
Bulldozing	$0.75(s^{1.5})/(M^{1.4})$	lbs/hr	8.24, Overburden
Grading	$(0.60)(0.051)S^{2.0}$	lbs/VMT	8.24, Overburden
Vehicle Traffic	$(3.72/(M^{4.3}))^{*.6}$	lbs/VMT	8.24, Overburden

Source: Compilation of Air Pollutant Emission Factors, Vol. I, USEPA AP-42.  
 Section 8.24, Western Surface Coal Mining (4th Edition)

Calculation of PM10 Emission Factors for Each Operation

Operation	Emission Factor (mass/ unit)	Operation Parameter	Emission Factor (lbs/ acre)
Bulldozing	2.37 lbs/hr	26.4 hr/acre	62.6 lbs/acre
Grading	0.77 lbs/VMT	1.7 VMT/acre	1.3 lbs/acre
Vehicle Traffic	0.00 lbs/VMT	33 VMT/acre	0 lbs/acre

**Emissions Due to Wind Erosion of Soil Piles and Exposed Graded Surface**

Reference: CEQA Air Quality Handbook, SCAQMD, April 1993.

Soil Piles EF =  $1.7(s/1.5)[(365 - H)/235](I/15)(J) = (s)(365 - H)(I)(J)/(3110.2941)$ , p. A9-99.

Soil Piles EF = 6.7 lbs/day/acres covered by soil piles

Consider soil piles area fraction so that EF applies to graded area

Soil piles area fraction: 0.01 (Fraction of site area covered by soil piles)  
 Soil Piles EF = 0.067 lbs/day/acres graded

Graded Surface EF = 26.4 lbs/day/acre (recommended in CEQA Manual, p. A9-93).

### Calculation of Annual PM10 Emissions

Source	Emission Factor	Graded Acres/yr	Exposed days/yr	Emissions lbs/yr	Emissions tons/yr
Bulldozing	62.6 lbs/acre	16.67	NA	1,043	1
Grading	1.3 lbs/acre	16.67	NA	22	0
Vehicle Traffic	0.0 lbs/acre	16.67	NA	0	0
Erosion of Soil Piles	0.1 lbs/acre/day	16.67	180	201	0
Erosion of Graded Surface	26.4 lbs/acre/day	16.67	180	79,200	40
<b>TOTAL</b>				<b>80,466</b>	<b>40</b>

**CONSTRUCTION OF NEW PRIMARY CARE CLINIC**  
**TABLE 4E - CONSTRUCTION SITE AIR EMISSIONS ESTIMATES (CONSTRUCTION AREA ONLY)**  
**MacDill AFB, FLORIDA**  
**TABLE - CONSTRUCTION (GRADING) EMISSIONS**

Estimate of time required to grade a specified area.

Updated 17 June 1997.

Input Parameters

Construction area            17 acres/yr  
 Qty Equipment:                2

Assumptions.

Terrain is mostly flat.

Terrain is populated with medium brush; trees are negligible.

An average of 6" soil is removed during stripping.

An average of 6" soil is excavated from one half of the site and backfilled to the other half of the site; no soil is hauled off-site or borrowed.

200 hp bulldozers are used for site clearing.

300 hp bulldozers are used for stripping, excavation, and backfill.

Vibratory drum rollers are used for compacting.

Stripping, Excavation, Backfill and Compaction require an average of two passes each.

Excavation and Backfill are assumed to involve only half of the site.

Calculation of days required for one piece of equipment to grade the specified area.

Reference: Means Heavy Construction Cost Data, 6th Ed., R. S. Means, 1992.

Means Line No.	Operation	Description	Output	Units	Acre/(equip)(day)	(Equip)(day)/acre	Acres/yr	(Equip)(days)/yr
021 108 0550	Site Clearing	Dozer & rake, medium brush	0.6	acre/day	0.6	1.67	16.67	27.78
021 144 0300	Stripping	Topsoil & stockpiling, adverse soil	1,650	cu. yd/day	2.05	0.49	16.67	8.15
022 242 5220	Excavation	Bulk, open site, common earth, 150' haul	800	cu. yd/day	0.99	1.01	8.33	8.40
022 208 5220	Backfill	Structural, common earth, 150' haul	1,950	cu. yd/day	2.42	0.41	8.33	3.45
022 226 5020	Compaction	Vibrating roller, 6" lifts, 3 passes	1,950	cu. yd/day	2.42	0.41	16.67	6.89
<b>TOTAL</b>								<b>54.67</b>

Calculation of days required for the indicated pieces of equipment to grade the designated acreage.

(Equip)(day)/yr:            54.67  
 Qty Equipment:            2  
 Grading days/yr:           54.67

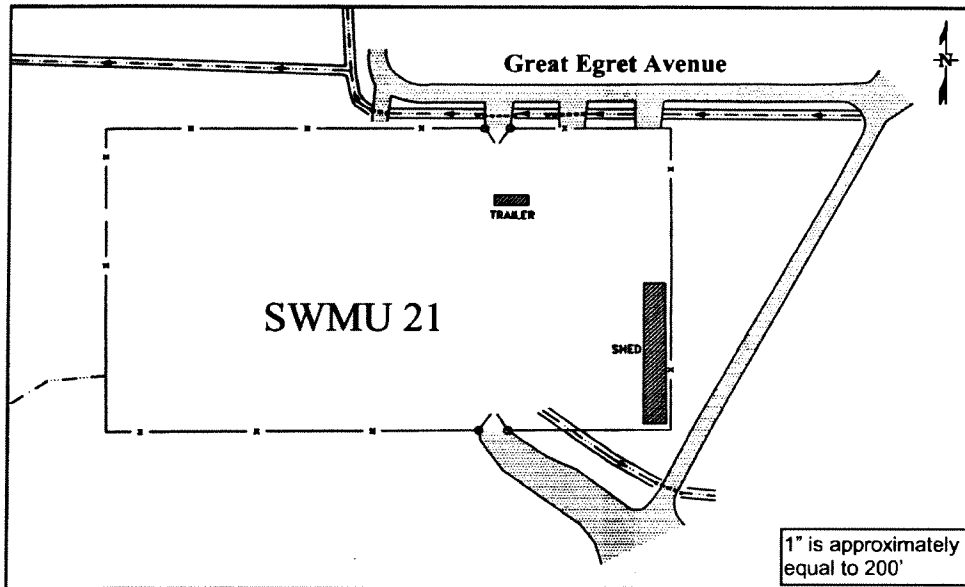
Round to	55 grading days/yr
----------	--------------------

**APPENDIX E**

STATEMENT OF BASIS - SWMU 21 (OLD REFUEL AREA)



**MacDill Air Force Base**  
**Installation Restoration Program**  
**MacDill AFB, Florida**  
***Statement of Basis - SWMU 21 (Old Refuel Area)***



**Introduction**

This Statement of Basis is part of the cleanup process and is a requirement of the U.S. Environmental Protection Agency (USEPA) Hazardous and Solid Waste Amendments (HSWA) Corrective Action Portion of the Resource and Conservation and Recovery Act (RCRA) Permit, referred to as the "HSWA" permit. Its purpose is multi-fold: 1) identify remedies evaluated; 2) identify the proposed remedy and rationale for its selection; and 3) provide information on how the public can become involved in the selection process. Proposed corrective action for Solid Waste Management Unit (SWMU) 21 will consist of non-residential land use controls (LUCs).

Public comment and participation during the approval of this measure are requested.

This Statement of Basis summarizes information obtained during previous investigations conducted at SWMU 21. Detailed information concerning this site are presented in *Site Investigation Summary Report for Site 21 – Old Refuel Area, MacDill AFB*, (September 1997), and *Proposed Corrective Measures for Site 21* (October 1999), which can be found in the Administrative Record, located at the information repository at the University of Tampa Library at the address which follows.

The public is encouraged to comment and participate in the selection of the final corrective action alternative. The public is also encouraged to review the Administrative Record. The USEPA, along with the Florida Department of Environmental Protection (FDEP), will approve a final corrective action alternative for SWMU 21 after the public comment period has ended and the comments received are reviewed and considered.

### **Public Comment Period and Public Meeting**

The public is encouraged to provide comments regarding the corrective action alternative provided in the *Proposed Corrective Measures for Site 21* (October 1999) and this Statement of Basis. The regulations 40 CFR§124.5 and §270.41 require a 45-day comment period for each draft permit modification.

#### **Important Dates to Remember**

Public Comment Period Begins:

**December 18, 2001**

(One day after the date of publication of public notice in *The Tampa Tribune*)

Public Comment Period Ends:

**February 4, 2002**

Please note, written comments must be postmarked no later than **midnight, February 4, 2002**. A public meeting will be held, if requested. Anyone may request a public meeting by contacting James Cason (FDEP) or Anthony Gennaro (MacDill AFB) at the addresses listed in the following section. During the public meeting, USEPA, FDEP, and the U.S. Air Force will be available to respond to oral comments and questions.

The Administrative Record for SWMU 21 is available at:

Merl Kelce Library  
University of Tampa  
401 West Kennedy Blvd.  
Tampa, Florida 33606  
(813) 253-6231

Hours: Monday-Thursday 8 a.m. to Midnight  
Friday 8 am to 5 pm  
Saturday 10 am to 6 pm  
Sunday 1 pm to Midnight

### **Next Steps**

Following the 45-day public comment period, FDEP will issue a final decision on SWMU 21. The decision will detail the remedy chosen for SWMU 21 and will include responses to oral and written comments received during the public comment period in the Responsiveness Summary.

The final decision will be used to modify the base HSWA permit when it is renewed.

To request further information, please contact:

Anthony Gennaro  
(6 CES/CEVR)  
7621 Hillsborough Loop Drive  
MacDill AFB, Florida 33621-5207  
(813) 828-0764  
[anthony.gennaro@macdill.af.mil](mailto:anthony.gennaro@macdill.af.mil)

or

James Cason  
Florida Dept. of Environmental Protection  
2600 Blair Stone Road, MS 4535  
Tallahassee, FL 32399-2400  
(850) 921-4230  
[james.cason@dep.state.fl.us](mailto:james.cason@dep.state.fl.us)

Please submit written comments to James Cason at the address above.

### **Proposed Remedy**

The proposed remedy for SWMU 21 consists of non-residential land use controls (LUCs).

## **SWMU 21 Description**

MacDill Air Force Base (the Base) is located within the city limits of Tampa, Florida, on the southernmost tip of the Interbay Peninsula between Hillsborough Bay and Tampa Bay. SWMU 21, the Old Refuel Area, is located in the north-central portion of the Base and is bordered to the north by Great Egret Avenue, to the east and south by an unpaved road leading to aircraft taxiways and to the west by a large grassy area. SWMU 21 was reportedly used as an aircraft refueling area until the early 1950s.

Other activities at the SWMU have included storage, maintenance, and a vehicle impound area. The storage yard is approximately 340 feet by 600 feet. A fence surrounds the storage area, with locked gates located along Great Egret Avenue. An interior north-south fence bisects the storage area. The western storage area, which is the Civil Engineering storage yard, contains various equipment and supplies. This area is mostly covered with grass with some areas of gravel. The eastern storage area is used to store lumber and roofing materials; a large open structure, in the center of this area, is being used to store lumber. The eastern area is covered mainly by asphalt. A section of the western storage area has been fenced and includes the Grounds Maintenance.

## **SWMU 21 History and Investigations**

SWMU 21 was used as an aircraft refueling area until the early 1950s. Past site activities include Civil Engineering storage and Military Police vehicle impoundment. A hardstand used to anchor aircraft was located on the southeast portion of the site and aboveground storage tanks were present in that area. Transformers suspected of containing polychlorinated biphenyls (PCBs) and heavy equipment have been stored onsite.

Previous investigations performed at SWMU 21 are summarized below.

- In August 1988, the USEPA Environmental Services Division

conducted a sampling investigation to determine whether hazardous materials had migrated from the former refuel area. One sediment sample, collected from a ditch located south of SWMU 21, indicated an elevated concentration of a PCB compound (Aroclor-1254) and presumptive evidence of a petroleum product. Based on the investigation the USEPA recommended further investigation at SWMU 21 in the *Final RCRA Facility Assessment for MacDill Air Force Base* (RFA) dated November 19, 1990.

- SWMU 21, initially, was included in a group of SWMUs for which remedial investigations and feasibility studies (RI/FS) were to be performed. In April 1993, SWMU 21 was placed into the petroleum program based on historical information that the site was a former aircraft refueling area.
- In September 1993, a petroleum contamination assessment (CA) was performed at SWMU 21, and included soil, groundwater, and sediment investigations. Based on investigation results, the SWMU did not appear to be impacted by petroleum contamination as defined in Chapter 17-770, Florida Administrative Code (FAC), and groundwater did not appear to be adversely impacted by past or current activities.
- In June 1995 FDEP requested additional investigation at SWMU 21 to further assess the poly-nuclear aromatic hydrocarbons (PAHs) contamination in soils. Concentrations of PAHs were detected in soils at levels exceeding FDEP clean soil criteria. These compounds were attributed to constituents associated with heavy equipment that had been stored onsite. A preliminary risk evaluation (PRE)

was prepared to assess the potential risks posed by contaminated soils based on the current and future land use.

- Between mid-1996 and early 1997, USEPA, FDEP, and MacDill AFB agreed that no further evaluation was necessary under the petroleum program. Since no contaminants detected on site were attributable to a petroleum release, it was determined that additional corrective action would be performed under the guidance of the USEPA HSWA permit.
- In April 1997, additional surface soil and groundwater sampling was performed at SWMU 21. Soil samples were collected to further delineate the extent of PAH contamination at locations where concentrations exceeded FDEP industrial soil cleanup target levels. Soil sampling indicated concentrations of benzo(a)pyrene and dibenz(a,h)anthracene above FDEP industrial soil cleanup target levels. The extent of PAH contamination was delineated at those soil sample locations. Groundwater sampling results indicated that concentrations of metals were below state and federal drinking water regulations (Chapter 62-550, FAC, and federal MCLs), and a recommendation was made to FDEP for No Further Action involving groundwater at SWMU 21. On October 2, 1997, FDEP concurred with this recommendation. EPA also concurs with the no further action recommendation for groundwater.

### **Summary of SWMU 21 Risks**

Analyses were conducted to estimate the health or environmental problems that could result if soil contamination at SWMU 21 was not remediated. These analyses were performed by calculating health-based risks based on soil concentrations. The objective of corrective

action is to eliminate the potential for future residents to be exposed to contaminated soils. No ecological risks were identified for this site.

During the initial analysis, the focus was on incidental ingestion, dermal contact, and inhalation exposure pathways for adult residents, child residents, and industrial workers. Risk calculations indicate that the excess cancer risk exceeded the level of risk acceptable to FDEP.

The later analysis focused on the major contaminant of concern, benzo(a)pyrene, which presented the greatest cancer risk in soil. Cancer and non-cancer risk values were below USEPA action levels, but the cancer risk for benzo(a)pyrene was greater than FDEP levels. Although it was anticipated that SWMU 21 would continue to be used for industrial purposes, both residential and industrial scenarios were evaluated. Residential land-use scenarios presented the greatest potential cancer risk.

### **Interim Measure**

An Interim Measure (IM) was performed in September 1998 to remove soils containing concentrations of PAHs in excess of FDEP industrial soil cleanup target levels. The IM involved the excavation and removal of contaminated soils to a depth of 2 feet below land surface at three separate locations. Soils containing concentrations less than industrial levels but above residential levels remain in place.

### **Summary of Proposed Corrective Action Alternatives**

The evaluation of alternatives for corrective action was performed in accordance with the EPA Final Corrective Action Guidance. The alternatives evaluated for SWMU 21 include the no-action alternative and the implementation of land use controls.

By law the no-action alternative must be considered to provide a baseline to compare to

the other alternatives. This alternative would not address the remaining soil contamination and would involve no cost.

Land use controls at SWMU 21 will prohibit direct contact with contaminated surface soils by future residents. SWMU 21 is presently used for industrial purposes (Civil Engineering storage area and Grounds Maintenance area). Land use at SWMU 21 will remain industrial (non-residential) in accordance with the MacDill AFB comprehensive land use control plan. No further assessment activities under the MacDill AFB HSWA Permit are required under non-residential land use.

### **Memorandum of Agreement**

On December 23, 1999, USEPA, FDEP, and MacDill AFB entered into a Memorandum of Agreement (MOA) for MacDill AFB, which allows land use controls to be applied to sites where contamination remains. A Land Use Control Implementation Plan (LUCIP) is developed to present land use control objectives and specify actions required to achieve the objectives.

### **Scope of Corrective Action**

Soils with concentrations that exceed FDEP industrial soil cleanup target levels have been removed at SWMU 21. The USEPA and FDEP have concurred that non-residential land use controls are the proposed remedy for SWMU 21. Land use controls may be applied to a site to protect human health. Land use controls include controls on access, prohibitive directives, and institutional controls, which are legal mechanisms for ensuring compliance with required non-residential land use limitations. These controls are easy to implement and would effectively prevent the exposure of potential future residents to soils that contain constituents at concentrations that exceed residential levels and will allow continued use of the site by the Air Force. The costs to implement land use controls are minimal.

The following land use controls will be

implemented to achieve the:

- Incorporate SWMU 21 in the MOA by attaching a LUCIP and upon approval by EPA, FDEP, and MacDill AFB.
- Notation in the MacDill AFB comprehensive plan designating SWMU 21 to be used for non-residential purposes.
- Conduct quarterly inspections and annual certification by MacDill AFB personnel to confirm non-residential land use.
- If the decision is made later to change the land use or transfer ownership of the property encompassing SWMU 21 to any other entity, SWMU 21 will be re-evaluated in accordance with the terms specified in the MOA.

### **Evaluation of Proposed Remedy**

The proposed corrective measure remedy for SWMU 21 is administrative non-residential land use controls. This section profiles the performance of the proposed remedy against the four general standards and the five remedy decision factors.

1. **Overall Protection** – Land use controls provide adequate protection of human health by controlling risk through non-residential land use.
2. **Attainment of Media Cleanup Standards** – The IM removal action excavated identified soils at SWMU 21 that contained PAH concentrations in excess of FDEP industrial soil standards. Land use controls are then used to prevent exposure of future residents to soils that contain PAH concentrations that exceed FDEP residential soil standards.
3. **Control of Potential Sources of Releases** – Potential sources of contamination are no longer located onsite.

4. Compliance with Waste Management Standards – This standard would not apply to land use controls as a proposed remedy.
5. Long-Term Reliability/Effectiveness – Although the IM removal action was performed to prevent the unacceptable exposure to industrial workers onsite, non-residential land use controls will provide long-term effectiveness in eliminating exposure of adult and child residents to soils containing PAH concentrations in excess of FDEP residential soil standards by preventing people from residing onsite. MacDill AFB would maintain the land use controls through inspections and certification.
6. Reduction of Toxicity, Mobility, or Volume of Wastes – By performing an IM removal action, the toxicity, mobility, and volume of waste were reduced. The toxicity is reduced through the removal of soils containing PAH concentrations in excess of the FDEP industrial soil standards. Contaminant mobility and the volume of waste are reduced by excavating soils to a depth of 2 feet below land surface and filling the excavation with 2 feet of clean soil.
7. Short-Term Effectiveness – The IM removal action was performed to reduce the exposure of industrial workers to soils contaminated in excess of FDEP industrial soil standards.
8. Implement ability – The MOA and the SWMU 21 LUCIP will be coordinated to detail land use control objectives and specify actions required to achieve the objectives before implementation of land use controls.
9. Cost – The cost to implement land use controls will be minimal, including preparation of a LUCIP, quarterly inspections, and annual certification by MacDill AFB.

### Summary

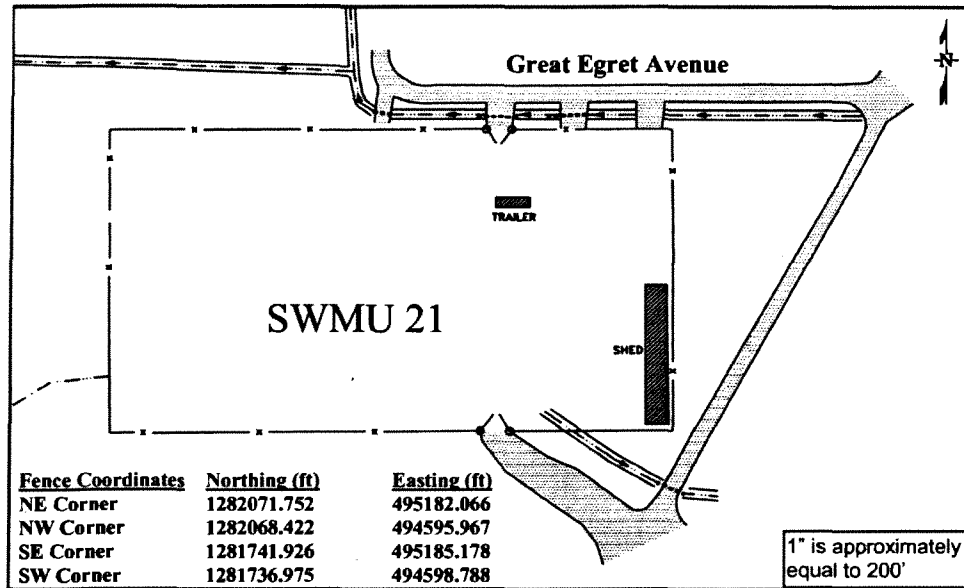
Soils at SWMU 21 containing PAH concentrations above the FDEP industrial soil cleanup target levels were removed during 1998. Land use controls will prevent the site from being used for residential purposes, thus eliminating the potential for human exposure to the soils under a residential land-use scenario. USEPA and FDEP concur that the combination of the removal action and the proposed land use controls will protect human health, attain media cleanup standards consistent with industrial cleanup criteria, and reduce the toxicity, mobility, and volume of waste at the site.



Place  
Stamp  
Here

James Cason  
Florida Dept. of Environmental Protection  
2600 Blair Stone Road, MS 4535  
Tallahassee, FL 32399-2400

**Land Use Control Implementation Plan**  
**SWMU 21 – Old Refuel Area**  
**MacDill Air Force Base (AFB), Florida**



**Site Description**

SWMU 21 is the Civil Engineering storage area and Grounds Maintenance area (approximately 340 feet by 600 feet). A fence surrounds this storage area, with locked gates located along Great Egret Avenue. An interior north-south fence bisects the storage area. The western storage area is the Civil Engineering storage yard and contains various equipment and supplies throughout the area. This area is mainly grass covered with some gravel. The eastern storage area is used to store lumber and roofing materials; a large open structure is located in the center of this area and is being used to store lumber. The eastern area is covered mainly by asphalt. A section of the western storage area has been fenced and houses the Grounds Maintenance area.

SWMU 21 was used as an aircraft refueling area until the early 1950s. Past site activities at the site include Civil Engineering storage and Military Police vehicle impoundment. A hardstand used to anchor aircraft was located on the southeast portion of the site. Around 1994, two 550-gallon above-ground storage tanks were present onsite. Transformers suspected of containing polychlorinated biphenyls (PCBs) and heavy equipment have been stored onsite.

An Interim Measure (IM) was performed in September 1998 to remove soils containing concentrations of polynuclear aromatic hydrocarbons (PAHs) in excess of Florida Department of Environmental Protection (FDEP) industrial soil cleanup target levels (SCTLs) under Chapter 62-777, Florida Administrative Code (FAC). The IM involved the excavation and removal of contaminated soils to a depth of 2 feet below land surface at three separate locations and placement of clean fill in the excavated areas. As a result of IM activities, soils exceeding FDEP industrial SCTLs of benzo(a)pyrene were excavated and treated offsite; soils containing concentrations less than industrial levels but above residential levels remain in place.

Groundwater sampling from the most recent sampling event (April 1997) indicated concentrations below State and Federal drinking water regulations [Chapter 62-550, FAC, primary drinking water standards and Federal maximum contaminant levels (MCLs)]. FDEP and EPA concurred with the recommendation for No Further Action for groundwater in October 1997.

#### **Site Location**

In general, the site is bordered to the north by Great Egret Avenue, to the east by an unpaved road leading to aircraft taxiways, to the south by Site 26 (Engine Test Cell), and to the west by a large grassy area. A chain-link fence that surrounds the site defines the boundary of SWMU 21 (see figure on page 1). Each fence corner of SWMU 21 has been surveyed to serve as SWMU 21 reference points. The coordinates are indicated on the site map presented on page 1 of this Land Use Control Implementation Plan (LUCIP).

#### **Land Use Control (LUC) Objectives**

Land use controls (LUCs) at SWMU 21 will allow the site to remain non-residential and protect human health by limiting exposure to surface and subsurface soils that present unacceptable risk. No further assessment activities under the MacDill AFB Corrective Action Program are warranted under non-residential land use. The LUC is based on PAHs in soil samples at concentrations that exceed FDEP residential SCTLs under Chapter 62-777, FAC, and exceedences of the FDEP target risk level of  $1 \times 10^{-6}$  for future residential exposure scenarios.

#### **LUC(s) Implemented to Achieve Objectives**

For as long as LUCs are necessary to protect human health, restrictions will limit the development and reuse of the area that encompasses SWMU 21. Allowable reuse includes Industrial, Commercial, and Recreational. Residential (including housing, daycare, and schools) uses are prohibited. Quarterly inspections and annual certification

by MacDill AFB will be conducted to confirm that all necessary LUCs have been implemented and are being properly maintained in accordance with the procedures set forth in Paragraph V of the Memorandum of Agreement (MOA) between the USEPA, FDEP, and MacDill AFB dated December 23, 1999.

Specific Restrictions on Groundwater Use: Groundwater restrictions are not required because FDEP accepted No Further Action for groundwater at SWMU 21 in 1997. The No Further Action status was based upon data presented in the *Draft Investigation Summary Report for Site 21, Old Refuel Area*, (BVSPC, 1997).

Specific Restrictions on Soil Use: Both surface and subsurface soil concentrations may exceed FDEP residential SCTLs; therefore, excavation, drilling, or other disturbance of contaminated surface soil, or any activities that may expose contaminated subsurface soils near the site, under a residential use scenario is prohibited, until such time when soil cleanup goals for residential use are met. Surface and subsurface soil concentrations do not exceed industrial cleanup levels; therefore, no restrictions under an industrial use scenario are required.

Establishment of Institutional Controls: This LUCIP will be referenced in all MacDill Air Force Base Utility Maps and in the MacDill AFB Comprehensive Plan. In conjunction with the MacDill AFB Utility Maps and Comprehensive Plan, this LUCIP is included as an Appendix to the MOA. No maintenance or construction activities are planned without referring to these documents. SWMU 21 will be designated for non-residential purposes only. Any proposed changes in permissible uses at SWMU 21 that may result in the development of SWMU 21 for residential use shall be evaluated by a licensed engineering professional and MacDill AFB IR Program Office to determine whether or not the proposed changes will present a significant risk of harm to health, safety, public welfare or the environment. Any such changes in use of the site are subject to review by USEPA region 4 and FDEP, as provided in the MOA.

Future Property Conveyance. Should the decision later be made to transfer ownership of the property encompassing SWMU 21 to any other agency, private person, or entity, then the Air Force shall provide notification to USEPA and FDEP and review the Land Use Controls as specified in Paragraph IX of the MOA.

**Decision Documents**

SWMU 21 decision documents follow:

*Proposed Corrective Measures for Site 21, Old Refuel Area, Revision 0, Black & Veatch Special Projects Corp., October 1999.*

*Draft Investigation Summary Report for Site 21, Old Refuel Area, Black & Veatch Special Project Corp., September 1997.*