

**FINDING OF NO SIGNIFICANT IMPACT  
FOR  
CONSTRUCT MASS/MOBILITY PARKING LOT**

**AGENCY:** Department of the Air Force

**PROPOSED ACTION:** Construct Mass/Mobility Parking Lot

Under this alternative, Grand Forks AFB would construct a new mass/mobility parking lot outside Grand Forks AFB's main perimeter fence. Personnel and visitors would be bused onto base proper. The proposed 500 parking slots would cover an area of 212,890 square feet (5 acres). The parking lot would consist of built up gravel. The parking lot would be sloped to provide drainage. Lighting isn't being considered as part of this project but may be included in the future. The parking lot would be constructed around existing trees. Existing foundations and utilities would have to be removed as required.

**ALTERNATIVES CONSIDERED:** Under the second alternative, Grand Forks AFB would purchase land outside the base and construct a mass/mobility parking lot. The no action alternative would not construct a mass/mobility parking lot. During air shows, non-base personnel could potentially park and have access to critical and sensitive facilities. Without the mass parking lot, it would be easier for car bombs to be placed near critical facilities and damage the base's ability to operate. Under force protection standards, there must be a mass parking area for the base for Anti-Terrorism/Force Protection (AT/FP) reasons.

**ENVIRONMENTAL CONSEQUENCES:**

**Air Quality** - Construction activities would result in a short-term minimal increase of criteria air pollutants, as fuel burned by internal combustion engine power construction and earth-moving equipment. Earth moving activities would generate fugitive dust. Best management practices (BMPs) to reduce fugitive emissions would be implemented.

**Noise** - The short-term operation of heavy equipment in the construction area would generate additional noise only during construction and would cease after completion.

**Wastes, Hazardous Materials, and Stored Fuels** - The increase in hazardous and solid wastes from construction related activities would be minimal and temporary. Construction debris would be disposed of in approved location, such as the Grand Forks Municipal Landfill.

**Water Resources** – If the excavated area fills with surface water, groundwater could be exposed to contaminants by infiltration. Surface water quality could degrade in the short-term due to possible erosion and possible contamination from spills. There would be minimal impacts to ground water, surface water, and water quality if BMPs were followed.

**Biological Resources** – BMPs would be implemented to ensure that impacts to biological resources are kept to a minimum. Vegetation would be reestablished at the end of the project. Construction would have insignificant impacts to wildlife and any wildlife disturbed would be able to find similar habitat in the local area.

# Report Documentation Page

Form Approved  
OMB No. 0704-0188

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|  |                                    |                                     |                            |   |                                 |
|--|------------------------------------|-------------------------------------|----------------------------|---|---------------------------------|
| 1. REPORT DATE<br><b>13 FEB 2004</b>   |                                    | 2. REPORT TYPE                      |                            | 3. DATES COVERED<br><b>00-00-2004 to 00-00-2004</b> |                                 |
| 4. TITLE AND SUBTITLE<br><b>Environmental Assessment: Construct Mass/Mobility Parking Lot at Grand Forks AFB, North Dakota</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)<br><b>319 Civil Engineering Squadron,319 CES/CEVC,525 Tuskegee Airmen Blvd,Grand Forks AFB,ND,58205</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<br><b>Approved for public release; distribution unlimited</b>  |                                    |                                     |                            |   |                                 |
| 13. SUPPLEMENTARY NOTES  |                                    |                                     |                            |   |                                 |
| 14. ABSTRACT<br><b>This Final EA has been prepared in accordance with the National Environmental Policy Act, and assesses the potential environmental impacts of constructing a mass/mobility parking lot on Grand Forks AFB located in Grand Forks County, North Dakota. Resource areas analyzed in the EA include Air Quality; Noise, Wastes, Hazardous Materials, and Stored Fuels; Water Resources; Biological Resources; Socioeconomic Resources; Cultural Resources; Land Use; Transportation Systems Airspace/ Airfield Operations; Safety and Occupation Health Environmental Management; and Environmental Justice. In addition to the Proposed Action, the Alternative Action and the No Action Alternative were analyzed in the EA. The EA also addresses the potential cumulative effects of the associated construction activities along with other concurrent actions at Grand Forks AFB and the surrounding area.</b> |                                    |                                     |                            |   |                                 |
| 15. SUBJECT TERMS  |                                    |                                     |                            |   |                                 |
| 16. SECURITY CLASSIFICATION OF:  |                                    |                                     | 17. LIMITATION OF ABSTRACT | 18. NUMBER OF PAGES                                 | 19a. NAME OF RESPONSIBLE PERSON |
| a. REPORT<br><b>unclassified</b>   | b. ABSTRACT<br><b>unclassified</b> | c. THIS PAGE<br><b>unclassified</b> |                            |   |                                 |

Socioeconomic Resources – Secondary retail purchases would make an additional contribution to the local communities.

Cultural Resources - The proposed action has little potential to impact cultural resources. In the event that any artifacts were discovered, the contractor would halt construction and immediately notify Grand Forks AFB civil engineers who would notify the State Historic Preservation Office.

Land Use - The proposed construction would not have an impact on land use.

Transportation Systems - There would be a minimal short-term increase to traffic flows from the construction vehicles traveling to the construction site.

Airspace/Airfield Operations - The proposed action would not impact aircraft safety or airspace compatibility.

Safety and Occupational Health – The proposed action would not impact safety and occupational health.

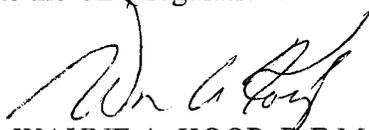
Environmental Management – The proposed action would not impact IRP Sites. BMPs would be implemented to prevent erosion. No pesticides would be used as part of the project.

Environmental Justice - There are no minority or low-income populations in the area of the proposed action or alternatives, and there would be no disproportionately high or adverse impact on such populations.

No adverse environmental impact to any of the areas identified by the AF Form 813 is expected by the proposed action, Construct Mass/Mobility Parking Lot.

**CONCLUSION:**

Based on the Environmental Assessment performed for Construct Mass/Mobility Parking Lot, no significant environmental impact is anticipated from the proposed action. Based upon this finding, an Environmental Impact Statement is not required for this action. This document and the supporting AF Form 813 fulfill the requirements of the National Environmental Policy Act (NEPA), the Council of Environmental Quality (CEQ) regulations implementing NEPA, and Air Force Instruction 32-7061, which implements the CEQ regulations.



WAYNE A. KOOP, R.E.M., GM-13  
Environmental Management Flight Chief

Date: 13 Feb 04

**AF Form 813 Continuation Page, Construct Mass/Mobility Parking Lot**

7. AICUZ/LAND USE: No effect on AICUZ or land use. The short-term operation of heavy equipment in the construction area would generate additional noise only during construction and would cease after completion.

8. AIR QUALITY: No long-term effects; however short term effects involve heavy construction equipment emissions (not a concern as they are mobile sources) and fugitive dust (mentioned on our Title V permit). Air Quality is considered good and the area is in attainment for all criteria pollutants. Fugitive emissions from construction activities are expected to be below the regulatory threshold and would be managed in accordance with NDAC 33-15-17-03. Best management practices (BMPs) to reduce fugitive emissions would be implemented to reduce the amount of these emissions.

9. WATER RESOURCES: Surface water quality could degrade in the short-term, during actual construction, due to possible erosion contributing to turbidity of runoff and due to possible contamination from spills, leaks from construction equipment. Provided BMPs are followed, there would be minimal impacts to ground water, surface water, water quality, and wetlands.

10. SAFETY AND OCCUPATIONAL HEALTH: No effect.

11. HAZARDOUS MATERIALS/WASTE: The increase in hazardous and solid wastes from construction related activities would be minimal and temporary. Construction debris would be disposed of in approved location, such as the Grand Forks Municipal Landfill, which is located within 12 miles of the construction site. Concrete and road debris could potentially be recycled. Disposition of the debris through land filling versus recycling would have to be evaluated prior to work.

12. BIOLOGICAL RESOURCES - BMPs and control measures, including silt fences and covering of stockpiles, would be implemented to ensure that impacts to biological resources be kept to a minimum. BMPs would be required to prevent the spread of noxious weeds, minimize soil erosion, and promote the establishment of native plant species. BMPs and control measures, including silt fences and covering of stockpiles, would be implemented to ensure that impacts to biological resources be kept to a minimum.

13. CULTURAL RESOURCES: No effect, no known cultural resources in the vicinity of the project. The proposed action has little potential to impact cultural resources. In the unlikely event any such artifacts were discovered during the construction activities, the contractor would be instructed to halt construction and immediately notify Grand Forks AFB civil engineers who would notify the State Historic Preservation Officer.

14. GEOLOGY AND SOILS: No effect; project area was previously disturbed.

15. SOCIOECONOMIC: This action would have a minor positive effect on the local economy. Secondary retail purchases would make an additional contribution to the local communities. The implementation of the proposed action, therefore, would provide a short-term, beneficial impact

to local contractors and retailers during the construction phase of the project.

16. OTHER: No effect.

**Final**

**Environmental Assessment**

**CONSTRUCT MASS/MOBILITY PARKING LOT**

**At  
Grand Forks AFB, North Dakota**

**20 Jan 04**

## Cover Sheet

**Agency:** United States Air Force (USAF)

**Action:** The action proposes to construct a mass/mobility parking lot at Grand Forks Air Force Base (AFB), North Dakota.

**Contacts:** 319 CES/CEVA  
525 Tuskegee Airmen Boulevard (Blvd)  
Grand Forks AFB, ND 58205

**Designation:** Final Environmental Assessment (EA)

**Abstract:** This Final EA has been prepared in accordance with the National Environmental Policy Act, and assesses the potential environmental impacts of constructing a mass/mobility parking lot on Grand Forks AFB, located in Grand Forks County, North Dakota. Resource areas analyzed in the EA include Air Quality; Noise, Wastes, Hazardous Materials, and Stored Fuels; Water Resources; Biological Resources; Socioeconomic Resources; Cultural Resources; Land Use; Transportation Systems; Airspace/Airfield Operations; Safety and Occupation Health; Environmental Management; and Environmental Justice.

In addition to the Proposed Action, the Alternative Action and the No Action Alternative were analyzed in the EA. The EA also addresses the potential cumulative effects of the associated construction activities along with other concurrent actions at Grand Forks AFB and the surrounding area.

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## ACRONYMS, ABBREVIATIONS, AND TERMS

|                    |   |
|--------------------|---|
| AAM                | Annual Arithmetic Mean  |
| ACM                | Asbestos Containing Material  |
| AFB                | Air Force Base  |
| AFI                | Air Force Instruction   |
| AICUZ              | Air Installation Compatible Use Zone                                  |
| AMC                | Air Mobility Command  |
| APZs               | Accident Potential Zones  |
| ARPA               | Archeological Resource Protection Act                                 |
| ARW                | Air Refueling Wing  |
| Ave                | Avenue  |
|                    |   |
| BASH               | Bird Aircraft Strike Hazard   |
| Blvd               | Boulevard   |
| BMPs               | Best Management Practices   |
|                    |   |
| CAA                | Clean Air Act   |
| CWA                | Clean Water Act   |
| CEQ                | Council on Environmental Quality                                      |
| CERCLA             | Comprehensive Environmental Response, Compensation, and Liability Act |
| CFR                | Code of Federal Regulations   |
| CO                 | Carbon Monoxide   |
|                    |   |
| dBa                | Decibel   |
| DNL                | Day-Night Average A-Weighted Sound Level                              |
|                    |   |
| EA                 | Environmental Assessment  |
| EIAP               | Environmental Impact Analysis Process                                 |
| EIS                | Environmental Impact Statement  |
| EO                 | Executive Order   |
| EPCRA              | Emergency Planning and Community Right-to-Know Act                    |
| ESA                | Endangered Species Act  |
|                    |   |
| F                  | Fahrenheit  |
| FEMA               | Federal Emergency Management Agency                                   |
| FONSI              | Finding of No Significant Impact                                      |
| ft                 | feet  |
| ft <sup>3</sup> /s | feet cubed per meter  |
|                    |   |
| HAP                | Hazardous Air Pollutants  |
| hr                 | hour  |
| H <sub>2</sub> S   | Hydrogen Sulfide  |
|                    |   |
| IRP                | Installation Restoration Program                                      |

|                          |  |
|--------------------------|--|
| LT                       | Long-Term  |
| MBTA                     | Migratory Bird Treaty Act                                |
| MFH                      | Military Family Housing                                  |
| mph                      | Miles Per Hour   |
| MSL                      | Mean Sea Level   |
| $\mu\text{g}/\text{m}^3$ | Micrograms Per Meter Cubed                               |
| NAAQS                    | National Ambient Air Quality Standards                   |
| NAGPRA                   | Native American Graves Protection and Repatriation Act   |
| ND                       | North Dakota   |
| NDAAQS                   | North Dakota National Ambient Air Quality Standards      |
| NDAC                     | North Dakota Administrative Code                         |
| NDDH                     | North Dakota Department of Health                        |
| NDPDES                   | North Dakota Pollutant Discharge Elimination System      |
| NEPA                     | National Environmental Policy Act                        |
| NESHAP                   | National Emission Standards for Hazardous Air Pollutants |
| NHPA                     | National Historic Preservation Act                       |
| $\text{NO}_x$            | Nitrogen Oxides  |
| $\text{NO}_2$            | Nitrogen Dioxide   |
| NPDES                    | National Pollutant Discharge Elimination System          |
| NPL                      | National Priorities List                                 |
| NRHP                     | National Register of Historic Places                     |
| NWR                      | National Wildlife Refuge                                 |
| $\text{O}_3$             | Ozone  |
| OSHA                     | Occupational Safety and Health Act                       |
| Pb                       | Lead   |
| $\text{PM}_{10}$         | Particulate Matter 10 Microns In Diameter                |
| $\text{PM}_{2.5}$        | Particulate Matter 2.5 Microns In Diameter               |
| POL                      | Petroleum Oil Lubricant                                  |
| ppm                      | Parts Per Million  |
| PSD                      | Prevention of Significant Deterioration                  |
| RACM                     | Regulated Asbestos Containing Materials                  |
| RCRA                     | Resource Conservation and Recovery Act                   |
| RI/FS                    | Remedial Investigation/Feasibility Study                 |
| SAGE                     | Strategic Air Ground Equipment                           |
| SARA                     | Superfund Amendments and Reauthorization Act             |
| $\text{SO}_2$            | Sulfur Dioxide   |
| $\text{SO}_x$            | Sulfur Dioxide   |
| St                       | Street   |

|        |   |
|--------|---|
| ST     | Short-Term                                    |
| tpy    | Tons Per Year                                 |
| TSCA   | Toxic Substance Control Act                   |
| TSI    | Thermal System Insulation                     |
| US     | United States                                 |
| USACE  | United States Army Corps of Engineers         |
| USAF   | United States Air Force                       |
| U.S.C. | United States Code                            |
| USEPA  | United States Environmental Protection Agency |
| VOCs   | Volatile Organic Compounds                    |

## EXECUTIVE SUMMARY

The United States Air Force proposes to construct a mass/mobility parking lot on Grand Forks Air Force Base (AFB), North Dakota.

**Purpose and Need:** In accordance with the Installation Security Plan, Centralized Parking will be implemented in force protection condition (FPCON) CHARLIE or higher or as directed by the 319th Air Refueling Wing Commander when there is a need to increase security around sensitive facilities or to restrict traffic flow on the installation. Base personnel would be instructed to park at designated parking areas, relieving fifty percent of the workload during those periods.

**Proposed Action:** Under the proposed action, Grand Forks AFB would construct a new mass/mobility parking lot outside Grand Forks AFB's main perimeter fence. Personnel and visitors would be bused onto base proper. The proposed 500 parking slots would cover an area of 212,890 square feet (5 acres) and consist of built up gravel sloped to provide drainage. The parking lot would be constructed around existing trees. Existing foundations and utilities would have to be removed as required.

**Alternate Location Alternative:** Under the alternative action, Grand Forks AFB would purchase land outside the base and construct and mass/mobility parking lot there. Size and specifications would remain as described in the proposed action.

**No Action Alternative:** Under the no action alternative, Grand Forks AFB would not construct a mass/mobility parking lot. During air shows, non-base personnel could potentially park and have access to critical and sensitive facilities. Without the mass parking lot, it would be easier for car bombs to be placed near critical facilities and damage the base's ability to operate. Under force protection standards, the base's security plan would not be met.

### Impacts by Resource Area

**Air Quality** - No long-term effects; however short term effects involve heavy construction equipment emissions (not a concern as they are mobile sources) and fugitive dust (mentioned on our Title V permit). Air Quality is considered good and the area is in attainment for all criteria pollutants. Fugitive emissions from construction activities are expected to be below the regulatory threshold and would be managed in accordance with NDAC 33-15-17-03. Best management practices (BMPs) to reduce fugitive emissions would be implemented to reduce the amount of these emissions.

**Noise** - The short-term operation of heavy equipment in the construction area would generate additional noise only during construction and would cease after completion.

**Wastes, Hazardous Materials, and Stored Fuels** - The increase in hazardous and solid wastes from construction related activities would be minimal and temporary. Construction debris would be disposed of in approved location, such as the Grand Forks Municipal Landfill, which is located within 12 miles of the construction site. Concrete and road debris could potentially be

recycled. Disposition of the debris through land filling versus recycling would have to be evaluated prior to work.

***Water Resources*** – Surface water quality could degrade in the short-term, during actual construction, due to possible erosion contributing to turbidity of runoff and due to possible contamination from spills, leaks from construction equipment. Provided BMPs are followed, there would be minimal impacts to ground water, surface water, water quality, and wetlands.

***Biological Resources*** – BMPs and control measures, including silt fences and covering of stockpiles, would be implemented to ensure that impacts to biological resources be kept to a minimum. BMPs would be required to prevent the spread of noxious weeds, minimize soil erosion, and promote the establishment of native plant species. BMPs and control measures, including silt fences and covering of stockpiles, would be implemented to ensure that impacts to biological resources be kept to a minimum.

***Socioeconomic Resources*** - This action would have a minor positive effect on the local economy. Secondary retail purchases would make an additional contribution to the local communities. The implementation of the proposed action, therefore, would provide a short-term, beneficial impact to local contractors and retailers during the construction phase of the project

***Cultural Resources*** - The proposed action has little potential to impact cultural resources. In the unlikely event any such artifacts were discovered during the construction activities, the contractor would be instructed to halt construction and immediately notify Grand Forks AFB civil engineers who would notify the State Historic Preservation Officer.

***Land Use*** – Siting for the proposed action has been approved by the Facility Board.

***Transportation Systems*** – The proposed construction would minor adverse impact to transportation systems on base due to construction vehicles traveling to and from the construction site.

***Airspace/Airfield Operations*** - The proposed action would not impact aircraft safety or airspace compatibility.

***Safety and Occupational Health*** – The proposed project would not impact safety or occupational health.

***Environmental Management*** – The proposed action would not impact IRP Sites. BMPs would be implemented to prevent erosion. No pesticides would be used as part of this project.

***Environmental Justice*** - EO 12898 requires federal agencies to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations. There are no minority or low-income populations in the area of the proposed action or alternatives, and, thus, there would be no disproportionately high or adverse impact on such populations.

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

This Environmental Assessment (EA) examines the potential for impacts to the environment resulting from the construction of a mass/mobility parking lot on Grand Forks Air Force Base (AFB). As required by the *National Environmental Policy Act* (NEPA) of 1969, federal agencies must consider environmental consequences in their decision making process. The EA provides analysis of the potential environmental impacts from both the proposed action and its alternatives.

### **1.1 INTRODUCTION**

Located in northeastern North Dakota (ND), Grand Forks AFB is the first core refueling wing in Air Mobility Command (AMC) and home to 48 KC-135R Stratotanker aircraft. The host organization at Grand Forks AFB is the 319th Air Refueling Wing (ARW). Its mission is to guarantee global reach, by extending range in the air, supplying people and cargo where and when they are needed and provides air refueling and airlift capability support to Air Force (AF) operations anywhere in the world, at any time. Organizational structure of the 319th ARW consists primarily of an operations group, maintenance group, mission support group, and medical group.

The location of the proposed action (and the alternative actions) would be at Grand Forks AFB, ND. Grand Forks AFB covers approximately 5,420 acres of government-owned land and is located in northeastern ND, about 14 miles west of Grand Forks, along United States (US) Highway 2. Grand Forks (population 49,321) is the third largest city in ND. Appendix A includes a Location Map. The city, and surrounding area, is a regional center for agriculture, education, and government. It is located approximately 160 miles south of Winnipeg, Manitoba, and 315 miles northwest of Minneapolis, Minnesota. The total base population, as of May 2003, is approximately 6,934. Of that, 2,849 are military, 3,747 are military dependents, and 338 civilians working on base (Grand Forks AFB, 2003).

The Dakota Military Family Housing (MFH) area is located outside Grand Forks AFB's main perimeter fence and to the east of the main gate of Grand Forks AFB. The proposed ATV training area would be collocated with the proposed mass/mobility parking lot and miscellaneous services recreation.

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

In accordance with the Installation Security Plan, Centralized Parking will be implemented in force protection condition (FPCON) CHARLIE or higher, or as directed by the commander of the 319th Air Refueling Wing Commander (319 ARW/CC) when there is a need to increase security around sensitive facilities or to restrict traffic flow on the installation. Base personnel will be instructed to park at designated parking areas, thus relieving about fifty percent of the workload during those periods. Parking lot could also be used as a Revoked/Barred from base parking lot also, thus clearing up parking spaces at the South Gate for contractors and vendors awaiting escort during higher

FPCONs. Additionally, the limited amount of parking on base cannot accommodate all deploying military members' vehicles. A mass/mobility parking lot outside the base would prevent visitors from parking near key or critical facilities, enhancing base security.

### **1.3 OBJECTIVES FOR THE ACTION**

The purpose of the proposed action is to construct a mass/mobility parking lot outside Grand Forks AFB's main perimeter fence.

### **1.4 SCOPE OF EA**

This EA identifies, describes, and evaluates the potential environmental impacts associated with construction of a mass/mobility parking lot on Grand Forks AFB. This analysis covers only those items listed above. It does not include any previous construction of facilities, parking lots, associated water drainage structures, or other non-related construction activities.

The following must be considered under the NEPA, Section 102(E).

- Air Quality
- Noise
- Wastes, Hazardous Materials, and Stored Fuels
- Water Resources
- Biological Resources
- Socioeconomic Resources
- Cultural Resources
- Land Use
- Transportation Systems
- Airspace/Airfield Operations
- Safety and Occupation Health
- Environmental Management
- Environmental Justice

### **1.5 DECISION(S) THAT MUST BE MADE**

This EA evaluates the environmental consequences from construction of a mass/mobility parking lot on Grand Forks AFB. NEPA requires that environmental impacts be considered prior to final decision on a proposed project. The Environmental Management Flight Chief will determine if a Finding of Significant Impact can be signed or if an Environmental Impact Statement (EIS) must be prepared. Preparation of an environmental analysis must be accomplished prior to a final decision regarding the proposed project and must be available to inform decision makers of potential environmental impacts of selecting the proposed action or either of the alternatives.

## 1.6 APPLICABLE REGULATORY REQUIREMENTS AND REQUIRED COORDINATION

These regulations require federal agencies to analyze potential environmental impacts of proposed actions and alternatives and to use these analyses in making decisions on a proposed action. All cumulative effects and irretrievable commitment of resources must also be assessed during this process. The Council on Environmental Quality (CEQ) regulations declares that an EA is required to accomplish the following objectives:

- Briefly provide sufficient evidence and analysis for determining whether to prepare an EIS or a Finding of No Significant Impact (FONSI).
- Aid in an agency's compliance with NEPA when an EIS is not necessary, and facilitate preparation of an EIS when necessary.

Air Force Instruction (AFI) 32-7061 as promulgated in 32 Code of Federal Regulations (CFR) 989, specifies the procedural requirements for the implementation of NEPA and the preparation of an EA. Other environmental regulatory requirements relevant to the Proposed Action and alternatives are also in this EA. Regulatory requirements including, but not restricted to the following programs will be assessed:

- AF Environmental Impact Analysis Process (EIAP) (32 CFR 989)
- AFI 32-7020, Environmental Restoration Program
- AFI 32-7040, Air Quality Compliance
- AFI 32-7041, Water Quality Compliance
- AFI 32-7042, Solid and Hazardous Waste Compliance
- AFI 32-7063, Air Installation Compatible Use Zone (AICUZ) Program
- AFI 32-7064, Integrated Natural Resource Management
- Archaeological Resources Protection Act (ARPA) [16 U.S.C. Sec 470a-11, *et seq.*, as amended]
- Clean Air Act (CAA) [42 U.S.C. Sec 7401, *et seq.*, as amended]
- Clean Water Act (CWA) [33 U.S.C. Sec 400, *et seq.*]
- CWA [33 U.S.C. Sec 1251, *et seq.*, as amended]
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended by the Superfund Amendments and Reauthorization Act (SARA) [42 U.S.C. Sec. 9601, *et seq.*]
- Defense Environmental Restoration Program [10 U.S.C. Sec. 2701, *et seq.*]
- Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986 [42 U.S.C. Sec. 11001, *et seq.*]
- Endangered Species Act (ESA) [16 U.S.C. Sec 1531-1543, *et seq.*]
- Executive Order (EO) 11514, Protection and Enhancement of Environmental Quality as Amended by EO 11991
- EO 11988, Floodplain Management
- EO 11990, Protection of Wetlands
- EO 12372, Intergovernmental Review of Federal Programs

- EO 12898, Environmental Justice
- EO 12989 Federal Actions to Address Environmental Justice in Minority Populations and Low-income Populations
- EO 13045, Protection of Children from Environmental Health Risks and Safety Risks
- Hazardous Materials Transportation Act of 1975 [49 U.S.C. Sec 1761, et seq.]
- NEPA of 1969 [42 U.S.C. Sec 4321, *et seq.*]
- National Historic Preservation Act (NHPA) of 1966 [16 U.S.C. Sec 470, *et seq.*, as amended]
- The Native American Graves Protection and Repatriation Act (NAGPRA) of 1990 [Public Law 101-601, 25 U.S.C. Sec. 3001-3013, *et seq.*]
- Noise Control Act of 1972 [42 U.S.C. Sec. 4901, *et seq.*, Public Law 92-574]
- ND Air Pollution Control Act (Title 23) and Regulations
- ND Air Quality Standards (Title 33)
- ND Hazardous Air Pollutants Emission Standards (Title 33)
- Occupational Safety and Health Act (OSHA) of 1970 [29 U.S.C. Sec. 651, et seq.]
- Resource Conservation and Recovery Act (RCRA) of 1976 [42 U.S.C. Sec. 6901, et seq.]
- Toxic Substances Control Act (TSCA) of 1976 [15 U.S.C. Sec. 2601, et seq.]

Grand Forks AFB has a National Pollutant Discharge Elimination System (NPDES) permit to cover base-wide industrial activities. Construction of the proposed action or the alternative action would disturb more than one acre requiring a separate NPDES from the North Dakota Department of Health (NDDH). The permit would allow discharge of storm water runoff until the site is stabilized by the reestablishment of vegetation or other permanent cover.

Scoping for this EA included discussion of relevant issues with members of the environmental management and bioenvironmental flights. Scoping letters requesting comments on possible issues of concern were sent to agencies with pertinent resource responsibilities. In accordance with AFI 32-7061, a copy is submitted to the ND Division of Community Services.

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

### **2.1 INTRODUCTION**

Based on the descriptions of the relevant environmental resources presented in Section 3 and the predictions and analyses presented in Section 4, this section presents a comparative summary matrix of the alternatives (the heart of the analysis) providing the decision maker and the public with a clear basis for choice among the alternatives.

This section has five parts:

- Selection Criteria for Alternatives
- Alternatives Considered but Eliminated from Detailed Study
- Detailed Descriptions of the Three Alternatives Considered
- Comparison of Environmental Effects of the Proposed Action and Alternatives
- Identification of the Preferred Alternative

### **2.2 SELECTION CRITERIA FOR ALTERNATIVES**

Selection criteria used to evaluate the Proposed and Alternative Actions include the following:

- *Criteria 1: Provide a mass/mobility parking lot for major base events.*

### **2.3 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM DETAILED STUDY**

No alternatives were eliminated from detailed study.

### **2.4 DESCRIPTION OF PROPOSED ALTERNATIVES**

This section describes the activities that would occur under three alternatives: the proposed action and the two action alternatives. These three alternatives provide the decision maker with a reasonable range of alternatives from which to choose.

#### **2.4.1 Alternative 1 (Proposed Action): Mass/Mobility Parking Lot**

Under this alternative, Grand Forks AFB would construct a new mass/mobility parking lot outside Grand Forks AFB's main perimeter fence. Personnel and visitors would be bused onto base proper. The proposed 500 parking slots would cover an area of 212,890 square feet (5 acres). The parking lot would consist of built up gravel. The parking lot would be sloped to provide drainage. Lighting isn't being considered as part of this project but may be included in the future. The parking lot would be constructed around existing trees. Existing foundations and utilities would have to be removed as required.

## 2.4.2 Alternative 2: Alternate Location

The alternative action would purchase land outside the base and construct and mass/mobility parking lot there. Size and specifications would remain the same as the proposed action.

## 2.4.3 Alternative 3 (No Action Alternative): Status Quo

Alternative 3, no action alternative, would not construct a mass/mobility parking lot. During air shows, non-base personnel could potentially park and have access to critical and sensitive facilities. Without the mass parking lot, it would be easier for car bombs to be placed near critical facilities and damage the base's ability to operate. Under force protection standards, there must be a mass parking area for the base for Anti-Terrorism/Force Protection (AT/FP) reasons.

## 2.5 DESCRIPTION OF PAST, PRESENT, AND REASONABLY FORESEEABLE FUTURE ACTIONS RELEVANT TO CUMULATIVE IMPACTS

Impacts from the Proposed Action would be concurrent with other actions occurring at Grand Forks AFB. There are several other construction and demolition projects occurring on Grand Forks AFB in the same time frame. These projects are addressed under separate NEPA documents.

## 2.6 SUMMARY COMPARISON OF THE EFFECTS OF ALL ALTERNATIVES

Potential impacts from implementing the Proposed Action, Alternative 2, and the No Action Alternative are discussed in detail in Chapter 4.

| <b>Table 2.6.1: Summary of Environmental Impacts</b> |                            |                            |                              |
|--|----------------------------|----------------------------|------------------------------|
|  | <b>Proposed Action</b>     | <b>Alternative 1</b>       | <b>No Action Alternative</b> |
| <b>Legend: ST = short-term; LT = long-term</b>       |                            |                            |                              |
| <b>Air Quality</b>                                   | Minor Adverse ST Impact    | Minor Adverse ST Impact    | None                         |
| <b>Noise</b>   | Minor Adverse ST Impact    | Minor Adverse ST Impact    | None                         |
| <b>Wastes, Hazardous Materials, and Stored Fuels</b> | Minor Adverse ST Impact    | Minor Adverse ST Impact    | None                         |
| <b>Water Resources</b>                               |                            |                            |                              |
| Groundwater  | Minor Adverse ST Impact    | Minor Adverse ST Impact    | None                         |
| Surface Water  | Minor Adverse ST Impact    | Minor Adverse ST Impact    | None                         |
| Wastewater   | None                       | None                       | None                         |
| Water Quality  | Minor Adverse ST Impact    | Minor Adverse ST Impact    | None                         |
| Wetlands   | None                       | None                       | None                         |
| <b>Biological Resources</b>                          |                            |                            |                              |
| Vegetation   | None                       | None                       | None                         |
| Wildlife   | None                       | None                       | None                         |
| Threatened and Endangered Species                    | None                       | None                       | None                         |
| <b>Socioeconomic Resources</b>                       | Minor Beneficial ST Impact | Minor Beneficial ST Impact | None                         |
| <b>Cultural Resources</b>                            | None                       | None                       | None                         |
| <b>Land Use</b>                                      | None                       | None                       | None                         |
| <b>Transportation Systems</b>                        | Minor Adverse ST Impact    | Minor Adverse ST Impact    | None                         |

| <b>Table 2.6.1: Summary of Environmental Impacts</b> |                         |                      |                              |
|--|-------------------------|----------------------|------------------------------|
|  | <b>Proposed Action</b>  | <b>Alternative 1</b> | <b>No Action Alternative</b> |
| <b>Airspace/Airfield Operations</b>                  |                         |                      |                              |
| Aircraft Safety                                      | None                    | None                 | None                         |
| Airspace Compatibility                               | None                    | None                 | None                         |
| <b>Safety and Occupational Health</b>                |                         |                      |                              |
|  | None                    | None                 | None                         |
| <b>Environmental Management</b>                      |                         |                      |                              |
| Installation Restoration Program                     | None                    | None                 | None                         |
| Geological Resources                                 | Minor Adverse ST Impact | None                 | None                         |
| Pesticide Management                                 | None                    | None                 | None                         |
| <b>Environmental Justice</b>                         |                         |                      |                              |
|  | None                    | None                 | None                         |

## 2.7 IDENTIFICATION OF PREFERRED ALTERNATIVE

The preferred action is Alternative 1 (Proposed Action): *Construct Mass/Mobility Parking Lot.*

### **3.0 AFFECTED ENVIRONMENT**

#### **3.1 INTRODUCTION**

This section succinctly describes the operational concerns and the environmental resources relevant to the decision that must be made concerning this proposed action. Environmental concerns and issues relevant to the decision to be made and the attributes of the potentially affected environment are studied in greater detail in this section.

This descriptive section, combined with the definitions of the three alternatives in Section 2, and their predicted effects in Section 4, establish the scientific baseline against which the decision-maker and the public can compare and evaluate the activities and effects of all three alternatives.

#### **3.2 AIR QUALITY**

Grand Forks AFB has a humid continental climate that is characterized by frequent and drastic weather changes. The summers are short and humid with frequent thunderstorms. Winters are long and severe with almost continuous snow cover. The spring and fall seasons are generally short transition periods. The average annual temperature is 40° Fahrenheit (F) and the monthly mean temperature varies from 6° F in January to 70° F in July. Mean annual precipitation is 19.5 inches. Rainfall is generally well distributed throughout the year, with summer being the wettest season and winter the driest. An average of 34 thunderstorm days per year is recorded, with some of these storms being severe and accompanied by hail and tornadoes. Mean annual snowfall recorded is 40 inches with the mean monthly snowfall ranging from 1.6 inches in October to 8.0 inches in March. Relative humidity averages 58 percent annually, with highest humidities being recorded in the early morning. The average humidity at dawn is 76 percent. Mean cloud cover is 48 percent in the summer and 56 percent in the winter (USAF, 2003).

**Table 3.2-1: Climate Data for Grand Forks AFB, ND**

| Month     | Mean Temperature (°F) |         |         | Precipitation (Inches) |         |         |
|-----------|-----------------------|---------|---------|------------------------|---------|---------|
|           | Daily                 |         | Monthly | Monthly                |         |         |
|           | Maximum               | Minimum |         | Mean                   | Maximum | Minimum |
| January   | 15                    | -1      | 6       | 0.7                    | 2.4     | 0.1     |
| February  | 21                    | 5       | 13      | 0.5                    | 3.2     | 0.0     |
| March     | 34                    | 18      | 26      | 1.0                    | 2.9     | 0.0     |
| April     | 53                    | 32      | 41      | 1.5                    | 4.0     | 0.0     |
| May       | 69                    | 47      | 56      | 2.5                    | 7.8     | 0.5     |
| June      | 77                    | 56      | 66      | 3.0                    | 8.1     | 0.8     |
| July      | 81                    | 61      | 70      | 2.7                    | 8.1     | 0.5     |
| August    | 80                    | 59      | 67      | 2.6                    | 5.5     | 0.1     |
| September | 70                    | 49      | 57      | 2.3                    | 6.2     | 0.3     |
| October   | 56                    | 37      | 44      | 1.4                    | 5.7     | 0.1     |
| November  | 34                    | 20      | 26      | 0.7                    | 3.3     | 0.0     |
| December  | 20                    | 6       | 12      | 0.6                    | 1.4     | 0.0     |

Source: AFCCC/DOO, October 1998

Wind speed averages 10 miles per hour (mph). A maximum wind speed of 74 mph has been recorded. Wind direction is generally from the northwest during the late fall, winter, and spring, and from the southeast during the summer.

Grand Forks County is included in the ND Air Quality Control Region. This region is in attainment status for all criteria pollutants. In 1997, the ND Department of Health (NDDH) conducted an Air Quality Monitoring Survey that indicated that the quality of ambient air in ND is generally good as it is located in an attainment area (NDDH, 1998). Grand Forks AFB has the following air permits: T5-F78004 (permit to operate) issued by NDDH and a CAA Title V air emissions permit.

The United States Environmental Protection Agency (USEPA) established the National Ambient Air Quality Standards (NAAQS), which define the maximum allowable concentrations of pollutants that may be reached, but not exceeded within a given time period. The NAAQS regulates the following criteria pollutants: Ozone (O<sub>3</sub>), carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), lead (Pb), and particulate matter. The ND Ambient Air Quality Standards (NDAAQS) were set by the State of ND. These standards are more stringent and emissions for operations in ND must comply with the Federal or State standard that is the most restrictive. There is also a standard for hydrogen sulfide (H<sub>2</sub>S) in ND.

Prevention of significant deterioration (PSD) regulations establish SO<sub>2</sub>, particulate matter 10 microns in diameter (PM<sub>10</sub>), and NO<sub>2</sub> that can be emitted above a premeasured amount in each of three class areas. Grand Forks AFB is located in a PSD Class II area where moderate, well-controlled industrial growth could be permitted. Class I areas are pristine areas and include national parks and wilderness areas. Significant increases in emissions from stationary sources (100 tons per year (tpy) of CO, 40 tpy of nitrogen oxides (NO<sub>x</sub>), volatile organic compounds (VOCs), or sulfur oxides (SO<sub>x</sub>), or 15 tpy of PM<sub>10</sub>) and the addition of major sources requires compliance with PSD regulations. There is also a 25 ton/year level for total particulate.

Air pollutants include O<sub>3</sub>, CO, NO<sub>2</sub>, SO<sub>2</sub>, Pb, and particulate matter. Ground disturbing activities create PM<sub>10</sub> and particulate matter 2.5 microns in diameter (PM<sub>2.5</sub>). Combustion creates CO, SO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> particulate matter and the precursors (VOC and NO<sub>2</sub>) to O<sub>3</sub>. Only a small amount of Hazardous Air Pollutants (HAP) are generated from internal combustion processes or earth-moving activities. The Grand Forks AFB Final Emissions Survey Report (USAF, 1996) reported that Grand Forks AFB only generated small levels HAPs, 10.3 tpy of combined HAPs and 2.2 tpy maximum of a single HAP (methyl ethyl ketone). Methyl Ethyl Ketone is associated with aircraft and vehicle maintenance and repair. Secondary sources include fuel storage and dispensing (USAF, 2001a).

| Table 3.2-2<br>National Ambient Air Quality Standards (NAAQS) and ND Ambient Air Quality Standards (NDAAQS) |                   |  |                        |   |
|---|-------------------|--|------------------------|---|
| Pollutant   | Averaging Time    | NAAQS<br>$\mu\text{g}/\text{m}^3$ (ppm) <sup>a</sup> |                        | NDAAQS<br>$\mu\text{g}/\text{m}^3$ (ppm) <sup>a</sup> |
|   |                   | Primary <sup>b</sup>                                 | Secondary <sup>c</sup> |   |
| O <sub>3</sub>  | 1 hr              | 235 (0.12)   | Same                   | Same  |
|   | 8 hr <sup>e</sup> | 157 (0.08)   | Same                   | None  |
| CO  | 1 hr              | 40,000 (35)  | None                   | 40,000 (35)   |
|   | 8 hr              | 10,000 (9)   | None                   | 10,000 (9)  |
| NO <sub>2</sub>   | AAM <sup>d</sup>  | 100 (0.053)  | Same                   | Same  |
| SO <sub>2</sub>   | 1 hr              | None   | None                   | 715 (0.273)   |
|   | 3 hr              | None   | 1,300 (0.5)            | None  |
|   | 24 hr             | 365 (0.14)   | None                   | 260 (0.099)   |
|   | AAM               | 80 (0.03)  | None                   | 60 (0.023)  |
| PM <sub>10</sub>  | AAM               | 50   | Same                   | Same  |
|   | 24 hr             | 150  | Same                   | Same  |
| PM <sub>2.5</sub> <sup>e</sup>  | AAM               | 65   | Same                   | None  |
|   | 24 hr             | 15   | Same                   | None  |
| Pb  | ¼ year            | 1.5  | Same                   | Same  |
| H <sub>2</sub> S  | 1 hr              | None   | None                   | 280 (0.20)  |
|   | 24 hr             | None   | None                   | 140 (0.10)  |
|   | 3 mth             | None   | None                   | 28 (0.02)   |
|   | AAM               | None   | None                   | 14 (10)   |
|   | Instantaneous     |  |                        | 14 (10)   |

<sup>a</sup> $\mu\text{g}/\text{m}^3$  – micrograms per cubic meter; ppm – parts per million  
<sup>b</sup>National Primary Standards establish the level of air quality necessary to protect the public health from any known or anticipated adverse effects of pollutant, allowing a margin of safety to protect sensitive members of the population.  
<sup>c</sup>National Secondary Standards establish the level of air quality necessary to protect the public welfare by preventing injury to agricultural crops and livestock, deterioration of materials and property, and adverse impacts on the environment.  
<sup>d</sup>AAM – Annual Arithmetic Mean.  
<sup>e</sup>The Ozone 8-hour standard and the PM 2.5 standards are included for information only. A 1999 federal court ruling blocked implementation of these standards, which USEPA proposed in 1997. USEPA has asked the US Supreme Court to reconsider that decision (USEPA, 2000).  
PM<sub>10</sub> is particulate matter equal to or less than 10 microns in diameter.  
PM<sub>2.5</sub> is particulate matter equal to or less than 2.5 microns in diameter.  
Source: 40 CFR 50, ND Air Pollution Control Regulations – North Dakota Administrative Code (NDAC) 33-15

### 3.3 NOISE

Noise generated on Grand Forks AFB consists mostly of aircraft, vehicular traffic and construction activity. Most noise is generated from aircraft during takeoff and landing and not from ground traffic. Noise levels are dependent upon type of aircraft, type of operations, and distance from the observer to the aircraft. Duration of the noise is dependent upon proximity of the aircraft, speed, and orientation with respect to the observer.

| Table 3.3-1<br>Typical Decibel Levels Encountered in the Environment and Industry |                         |   |  |
|---|-------------------------|---|--|
| Sound Level (dBA) <sup>a</sup>  | Maximum Exposure Limits | Source of Noise   | Subjective Impression                                  |
| 10  |                         |   | Threshold of hearing                                   |
| 20  |                         | Still recording studio; Rustling leaves   |  |
| 30  |                         | Quiet bedroom   |  |
| 35  |                         | Soft whisper at 5 ft <sup>b</sup> ; Typical library                                       |  |
| 40  |                         | Quiet urban setting (nighttime); Normal level in home                                     | Threshold of quiet                                     |
| 45  |                         | Large transformer at 200 ft   |  |
| 50  |                         | Private business office; Light traffic at 100 ft; Quiet urban setting (daytime)           |  |
| 55  |                         | Window air conditioner; Men's clothing department in store                                | Desirable limit for outdoor residential area use (EPA) |
| 60  |                         | Conversation speech; Data processing center   |  |
| 65  |                         | Busy restaurant; Automobile at 100 ft   | Acceptable level for residential land use              |
| 70  |                         | Vacuum cleaner in home; Freight train at 100 ft   | Threshold of moderately loud                           |
| 75  |                         | Freeway at 10 ft  |  |
| 80  |                         | Ringin alarm clock at 2 ft; Kitchen garbage disposal; Loud orchestral music in large room | Most residents annoyed                                 |
| 85  |                         | Printing press; Boiler room; Heavy truck at 50 ft   | Threshold of hearing damage for prolonged exposure     |
| 90  | 8 hr <sup>c</sup>       | Heavy city traffic  |  |
| 95  | 4 hr                    | Freight train at 50 ft; Home lawn mower   |  |
| 100   | 2 hr                    | Pile driver at 50 ft; Heavy diesel equipment at 25 ft                                     | Threshold of very loud                                 |
| 105   | 1 hr                    | Banging on steel plate; Air Hammer  |  |
| 110   | 0.5 hr                  | Rock music concert; Turbine condenser   |  |
| 115   | 0.25 hr                 | Jet plane overhead at 500 ft  |  |
| 120   | < 0.25 hr               | Jet plane taking off at 200 ft  | Threshold of pain                                      |
| 135   | < 0.25 hr               | Civil defense siren at 100 ft   | Threshold of extremely loud                            |

<sup>a</sup>dBA – decibals  
<sup>b</sup>ft – feet  
<sup>c</sup>hr - hours  
Source: US Army, 1978

| Table 3.3-2<br>Approximate Sound Levels (dBA) of Construction Equipment |  |     |     |     |     |       |
|---|--|-----|-----|-----|-----|-------|
| Equipment Type  | Sound Levels (dBA) at Various Distances (ft) |     |     |     |     |       |
|   | 50   | 100 | 200 | 400 | 800 | 1,600 |
| Front-end Loader  | 84   | 78  | 72  | 66  | 60  | 54    |
| Dump Truck  | 83   | 77  | 71  | 65  | 59  | 53    |
| Truck   | 83   | 77  | 71  | 65  | 59  | 53    |
| Tractor   | 84   | 78  | 72  | 66  | 58  | 52    |

Source: Thurman, 1976; US Army, 1978

Because military installations attract development in proximity to their airfields, the potential exists for urban encroachment and incompatible development. The USAF utilizes a program known as AICUZ to help alleviate noise and accident potential problems due to unsuitable community development. AICUZ recommendations give surrounding communities alternatives to help prevent urban encroachment. Noise contours are developed from the Day-Night Average A-Weighted Sound Level (DNL) data which defines the noise created by flight operations and ground-based activities. The AICUZ also defines Accident Potential Zones (APZs), which are rectangular corridors extending from the ends of the runways. Recommended land use activities and densities in the APZs for residential, commercial, and industrial uses are provided in the base's AICUZ study. Grand Forks AFB takes measures to minimize noise levels by evaluating aircraft operations. Blast deflectors are utilized in designated areas to deflect blast and minimize exposure to noise.

### **3.4 WASTES, HAZARDOUS MATERIALS, AND STORED FUELS**

Hazardous wastes, as listed under the RCRA, are defined as any solid, liquid, contained gaseous, or combination of wastes that pose a substantive or potential hazard to human health or the environment. On-base hazardous waste generation involves three types of on-base sites: an accumulation point (90-day), satellite accumulation points, and spill cleanup equipment and materials storage (USAF, 2001c). Discharge and emergency response equipment is maintained in accessible areas throughout Grand Forks AFB. The Fire Department maintains adequate fire response and discharge control and containment equipment. Equipment stores are maintained in buildings 523 and 530. Petroleum contaminated soils generated from excavations throughout the base can be treated at the land treatment facility located on base. These solid wastes are tilled or turned several times a year to remediate the soils to acceptable levels.

Hardfill, construction debris, and inert waste generated by Grand Forks AFB are disposed of at a permitted off-base landfill. All on-base household garbage and solid waste is collected by a contractor and transported to the Grand Forks County Landfill, which opened in 1982.

Recyclable materials from industrial facilities are collected in the recycling facility, off the southeast corner of building 408. Paper, glass, plastics, cardboard, and wood are collected in separate storage bins. Curbside containers are used in housing for recyclable materials. A contractor collects these materials and transports them off base.

The Environmental Management Flight manages the hazardous material through a contract with Pacific Environmental Services. Typical hazardous materials include reactive materials such as explosives, ignitables, toxics, and corrosives. Improper storage can impact human health and the safety of the environment.

Since Grand Forks AFB is a military installation with a flying mission, there are several aboveground and underground fuel storage tanks. None of the alternatives would impact fuel storage tanks.

## **3.5 WATER RESOURCES**

### **3.5.1 Ground Water**

Chemical quality of ground water is dependent upon the amount and type of dissolved gases, minerals, and organic material leached by water from surrounding rocks as it flows from recharge to discharge areas. The water table depth varies throughout the base, from a typical 1-3 ft to 10 ft or more below the surface.

Even though the Dakota Aquifer has produced more water than any other aquifer in Grand Forks County, the water is very saline and generally unsatisfactory for domestic and most industrial uses. Its primary use is for livestock watering. It is a sodium chloride type water with total dissolved solids concentrations of about 4,400 ppm. The water generally contains excessive chloride, iron, sulfate, total dissolved solids, and fluoride. The water from the Dakota is highly toxic to most domestic plants and small grain crops, and in places, the water is too highly mineralized for use as livestock water (Hansen and Kume, 1970).

Water from wells tapping the Emerado Aquifer near Grand Forks AFB is generally of poor quality due to upward leakage of poor quality water from underlying bedrock aquifers. It is sodium sulfate type water with excessive hardness, chloride, sulfate, and total dissolved solids. Water from the Lake Agassiz beach aquifers is usually of good chemical quality in Grand Forks County. The water is a calcium bicarbonate type that is relatively soft. The total dissolved content ranges from 308 to 1,490 ppm. Most water from beach aquifers is satisfactory for industrial, livestock, and agricultural uses (Hansen and Kume, 1970).

Grand Forks AFB draws 85 to 90 percent of its water for industrial, commercial and housing functions from the City of Grand Forks and 10 to 15 percent from Agassiz Water.

### **3.5.2 Surface Water**

Natural surface water features located on or near Grand Forks AFB are the Turtle River and Kellys Slough National Wildlife Refuge (NWR). Drainage from surface water channels ultimately flows into the Red River.

The Turtle River, crossing the base boundary at the northwest corner, is very sinuous and generally flows in a northeasterly direction. It receives surface water runoff from the western portion of Grand Forks AFB and eventually empties into the Red River of the North that flows north to Lake Winnipeg, Canada. The Red River drainage basin is part of the Hudson Bay drainage system. At Manvel, ND, approximately 10 miles northeast of Grand Forks AFB, the mean discharge of the Turtle River is 50.3 feet cubed per second (ft<sup>3</sup>/s). Peak flows result from spring runoff in April and minimum flows (or no flow in some years) occur in January and February.

NDDH has designated the Turtle River to be a Class II stream, it may be intermittent, but, when flowing, the quality of the water, after treatment, meets the chemical, physical, and

bacteriological requirements of the NDDH for municipal use. The designation also states that it is of sufficient quality to permit use for irrigation, for propagation of life for resident fish species, and for boating, swimming, and other water recreation.

Kelly's Slough NWR occupies a wide, marshy flood plain with a poorly defined stream channel, approximately two miles east and downstream of Grand Forks AFB. Kellys Slough NWR receives surface water runoff from the east half of the base and effluent from the base sewage lagoons located east of the base. Surface water flow of the slough is northeasterly into the Turtle River Drainage from surface water channels ultimately flowing into the Red River. Floodplains are limited to an area 250 ft on either side of Turtle River (about 46 acres on base). Appendix C contains a map depicting floodplains. Any development in or modifications to floodplains must be coordinated with the Corps of Engineers and the Federal Emergency Management Agency (FEMA).

Surface water runoff leaves Grand Forks AFB at four primary locations related to identifiable drainage areas on base. The four sites are identified as northeast, northwest, west, and southeast related to the base proper. These outfalls were approved by the NDDH as stated in the Grand Forks AFB ND Pollutant Discharge Elimination System (NDPDES) Permit NDR02-0314 Stormwater Discharges from Industrial Activity. Of the four outfall locations, the west and northwest sites flow into the Turtle River, the northeast site flows to the north ditch and the southeast outfall flows into the south ditch. The latter two flow to Kellys Slough and then the Turtle River. All drainage from these surface water channels ultimately flows into the Red River. The Bioenvironmental Engineering Office samples the four outfall locations during months when de-icing activities occur on base.

### **3.5.3 Waste Water**

Grand Forks AFB discharges its domestic and industrial wastewater to four stabilization lagoons located east of the main base. The four separate treatment cells consist of one primary treatment cell, two secondary treatment cells, and one tertiary treatment cell. Wastewater effluent is discharged under ND Permit ND0020621 into Kellys Slough. Wastewater discharge occurs for about one week, sometime between mid-April though October. Industrial wastewater at the base comprises less than ten percent of the total flow to the treatment lagoons.

### **3.5.4 Water Quality**

According to the National Water Quality Inventory Report (USEPA, 1995), ND reports the majority of rivers and streams have good water quality. Natural conditions, such as low flows, can contribute to violations of water quality standards. During low flow periods, the rivers are generally too saline for domestic use. Grand Forks AFB receives water from Grand Forks and Lake Agassiz Water. The city recovers its water from the Red River and the Red Lake River, while the water association provides water from aquifers. The water association recovers water from well systems within glacial drift aquifers (USAF, 1999). The 319th Civil Engineering Squadron tests the water received on base daily for fluorine and chlorine. The 319th

Bioenvironmental Flight collects monthly bacteriological samples to be analyzed at the ND State Laboratory.

### 3.5.5 Wetlands

About 246,900 acres in the county are drained wetland Type I (wet meadow) to Type V (open freshwater). Approximately 59,500 acres of wetland Type I to V are used for wetland habitat. Wetland Types IV and V include areas of inland saline marshes and open saline water. Kellys Slough NWR occupies a wide, marshy flood plain with a poorly defined stream channel, approximately two miles east and downstream of Grand Forks AFB. Kellys Slough NWR is the most important regional wetland area in the Grand Forks vicinity. EO 11990 requires zero loss of wetlands. Grand Forks AFB has 49 wetlands, covering 23.9 acres of wetlands (see Appendix C), including 33 jurisdictional wetlands covering 12.2 acres. Wetlands on Grand Forks AFB occur frequently in drainage ways, low-lying depressions, and potholes. Wetlands are highly concentrated in drainage ways leading from the wastewater treatment lagoons to Kellys Slough NWR. The majority of wetland areas occur in the northern and central portions of base, near the runway, while the remaining areas are near the eastern boundary and southeastern corner of base. Development in or near these areas must include coordination with the ND State Water Commission and the USACE.

## 3.6 BIOLOGICAL RESOURCES

### 3.6.1 Vegetation

Plants include a large variety of naturally occurring native plants. Because of the agrarian nature of Grand Forks County, cropland is the predominant element for wildlife habitat. Pastures, meadows, and other non-cultivated areas are overgrown with grasses, legumes, and wild herbaceous plants. Included in the grasses and legumes vegetation species are tall wheat grass, brome grass, sweet clover, and alfalfa. Herbaceous plants include little bluestem, goldenrod, green needle grass, western wheat grass, and bluegrama. Shrubs such as junberry, dogwood, hawthorn, and snowberry also are found in the area. In wetland areas, predominant species include smartweed, wild millet, cord grass, bulrushes, sedges, and reeds. These habitats for upland wildlife and wetland wildlife attract a variety of species to the area and support many aquatic species.

Various researchers, most associated with the University of ND, have studied current native floras in the vicinity of the base. Prior to 1993 field investigations, ten natural communities occurring in Grand Forks County were identified in the ND Natural Heritage Inventory (1994). Of these, only one community, Lowland Woodland, is represented within the base boundaries. Dominant trees in this community are elm, cottonwood, and green ash. Dutch elm disease has killed many of the elms. European buckthorn (a highly invasive exotic species), chokecherry, and wood rose (*Rosa woodsii*) are common in the understory in this area. Wood nettle (*Laportea canadensis*), stinging nettle (*Urtica dioica*), beggars' ticks (*Bidens frondosa*), and waterleaf (*Hydrophyllum virginianum*) are typical forbes.

One hundred and forty two total taxa, representing less than a third of the known Grand Forks County plant taxa, were identified in the ND Natural Heritage Inventory. No rare plants species are known to exist on Grand Forks AFB.

### **3.6.2 Wildlife**

Grand Forks County is primarily cropland although there are wildlife areas located within the county. Kellys Slough NWR is located a couple miles northeast of Grand Forks AFB. In addition to being a wetland, it is a stopover point for migratory birds. The Prairie Chicken Wildlife Management Area is located north of Mekinock and contains 1,160 acres of habitat for deer, sharp-tailed grouse, and game birds. Wildlife can also be found at the Turtle River State Park, The Bremer Nature Trail, and the Myra Arboretum.

There is minimal habitat for wildlife on Grand Forks AFB due to extensive development. White tail deer, eastern cottontail, and ring-neck pheasant can be found on base. The proposed project area only provides low-quality foraging habitat for small animals.

### **3.6.3 Threatened and Endangered Species**

According to the 1994 ND Natural Heritage Inventory, “There are no known federally threatened or endangered species populations on or adjacent to Grand Forks AFB.” The base does have infrequent use by migratory threatened and endangered species, such as the bald eagle and peregrine falcon, but there are no critical or significant habitats for those species present. The inventory also indicated that red-breasted nuthatch and moose are two special concern species. They have been observed on base near Turtle River. The inventory also indicated that there is no habitat on or near Grand Forks AFB to sustain a moose population. Red-breasted nuthatches prefer woodland habitats dominated by conifers. These birds are transients and pose no particular concern. The ESA does require that Federal Agencies not jeopardize the existence of a threatened or endangered species nor destroy or adversely modify designated critical habitat for threatened or endangered species.

## **3.7 SOCIOECONOMIC RESOURCES**

Grand Forks County is primarily an agricultural region and, as part of the Red River Valley, is one of the world’s most fertile. Cash crops include sugar beets, beans, corn, barley, and oats. The valley ranks first in the nation in the production of potatoes, spring wheat, sunflowers, and durum wheat. Grand Forks County’s population in 2000 was 66,109, a decrease of 6.5 percent from the 1990 population of 70,638 (ND State Data Center, No Date). Grand Forks County’s annual mean wage in Oct 2001 was \$26,715 (Job Service of ND, 2001). Grand Forks AFB is one of the largest employers in Grand Forks County. As of May 2003, Grand Forks AFB had 3,165 active duty military members and 338 civilian employees. The total annual economic impact for Grand Forks AFB is \$325,647,980.

### **3.8 CULTURAL RESOURCES**

According to the Grand Forks AFB Cultural Resources Management Plan, there are no archeological sites that are potentially eligible for the National Register of Historic Places (NRHP). A total of six archeological sites and six archeological find spots have been identified on the base. None meet the criteria of eligibility of the NRHP established in 36 CFR 60.4. There is no evidence for Native American burial grounds, or other culturally sensitive areas. Paleosols (soil that developed on a past landscape) remain a management concern requiring Section 106 compliance. Reconnaissance-level archival and archeological surveys of Grand Forks AFB conducted by the University of ND in 1989 indicated that there are no facilities (50 years or older) that possess historical significance. The base is currently consulting with the ND Historical Society on the future use of eight Cold War Era facilities. These are buildings 313, 606, 703-707, and 714.

### **3.9 LAND USE**

Land use in Grand Forks County consists primarily of cultivated crops with remaining land used for pasture and hay, urban development, recreation, and wildlife habitat. Principal crops are spring wheat, barley, sunflowers, potatoes, and sugar beets. Turtle River State Park, developed as a recreation area in Grand Forks County, is located about five miles west of the base. Several watershed protection dams are being developed for recreation activities including picnicking, swimming, and ball fields. Wildlife habitat is very limited in the county. Kellys Slough NWR (located about two miles east of the base) and the adjacent National Waterfowl Production Area are managed for wetland wildlife and migratory waterfowl, but they also include a significant acreage of open land wildlife habitat.

The main base encompasses 5,420 acres, of which the USAF owns 4,830 acres and another 590 acres are lands containing easements, permits, and licenses. Improved grounds, consisting of all covered area (under buildings and sidewalks), land surrounding base buildings, the 9-hole golf course, recreational ballfields, and the family housing area, encompass 1,120 acres. Semi-improved grounds, including the airfield, fence lines and ditch banks, skeet range, and riding stables account for 1,390 acres. The remaining 2,910 acres of the installation consist of unimproved grounds. These areas are comprised of woodlands, open space, and wetlands, including four lagoons (180.4 acres) used for the treatment of base wastewater. Agricultural outleased land (1,040 acres) is also classified as unimproved. Land use at the base is solely urban in nature, with residential development to the south and cropland, hayfields, and pastures to the north, west, and east.

### **3.10 TRANSPORTATION SYSTEMS**

Seven thousand vehicles per day travel ND County Road B3 from Grand Forks AFB's east gate to the US Highway 2 Interchange (Clayton, 2001). Two thousand vehicles per day use the off-ramp from US Highway 2 onto ND County Road B3 (Dunn, 2001). US Highway 2, east of the base interchange, handles 10,800 vehicles per day. (Kingsley and Kuntz, 2001). A four lane arterial road has a capacity of 6,000 vehicles per hour and a two lane, 3,000, based on the average

capacity of 1,500 per hour per lane. Roadways adjacent to Grand Forks AFB are quite capable of accommodating existing traffic flows (USAF, 2001a).

Grand Forks AFB has good traffic flow even during peak hours (6-8 am and 4-6 pm). There are two gates: the main gate located off of County Road B3, about one mile north of U.S. Highway 2, and the Secondary Gate located off of U.S. Highway 2, about 3/4 mile west of County Road B3. The main gate is connected to Steen Boulevard (Blvd), which is the main east-west road, and the south gate is connected to Eielson Street (St), which is the main north-south road.

### **3.11 AIRSPACE/AIRFIELD OPERATIONS**

#### **3.11.1 AIRCRAFT SAFETY**

Bird Aircraft Strike Hazard (BASH) is a major safety concern for military aircraft. Collision with birds may result in aircraft damage and aircrew injury, which may result in high repair costs or loss of the aircraft. A BASH hazard exists at Grand Forks AFB and its vicinity, due to resident and migratory birds. Daily and seasonal bird movements create various hazardous conditions. Although BASH problems are minimal, Kellys Slough NWR is a major stopover for migratory birds. Canadian Geese and other large waterfowl have been seen in the area (USAF, 2001b).

#### **3.11.2 AIRSPACE COMPATIBILITY**

The primary objective of airspace management is to ensure the best possible use of available airspace to meet user needs and to segregate requirements that are incompatible with existing airspace or land uses. The Federal Aviation Administration has overall responsibility for managing the nation's airspace and constantly reviews civil and military airspace needs to ensure all interests are compatibly served to the greatest extent possible. Airspace is regulated and managed through use of flight rules, designated aeronautical maps, and air traffic control procedures and separation criteria.

### **3.12 SAFETY AND OCCUPATIONAL HEALTH**

Safety and occupational health issues include one-time and long-term exposure. Examples include asbestos/radiation/chemical exposure, explosives safety quantity-distance, and bird/wildlife aircraft hazard. Safety issues include injuries or deaths resulting from a one-time accident. Aircraft Safety includes information on birds/wildlife aircraft hazards and the BASH program. Health issues include long-term exposure to chemicals such as asbestos and lead-based paint. Safety and occupational health concerns could impact personnel working on the project and in the surrounding area.

The National Emission Standards for Hazardous Air Pollutants (NESHAP) of the CAA designates asbestos as HAP. OSHA provides worker protection for employees who work around or asbestos containing material (ACM). Regulated ACM (RACM) includes thermal system

insulation (TSI), any surfacing material, and any friable asbestos material. Non-regulated Category I non-friable ACM includes floor tile and joint compound.

Lead exposure can result from paint chips or dust or inhalation of lead vapors from torch-cutting operations. This exposure can affect the human nervous system. Due to the size of children, exposure to lead based paint is especially dangerous to small children. OSHA considers all painted surfaces in which lead is detectable to have a potential for occupational health exposure.

### **3.13 ENVIRONMENTAL MANAGEMENT**

#### **3.13.1 INSTALLATION RESTORATION PROGRAM**

The Installation Restoration Program (IRP) is the AF's environmental restoration program based on the CERCLA. CERCLA provides for Federal agencies with the authority to inventory, investigate, and clean up uncontrolled or abandoned hazardous waste sites. There are seven IRP sites at Grand Forks AFB. These sites are identified as potentially impacted by past hazardous material or hazardous waste activities. They are the Fire Training Area/Old Sanitary Landfill Area, FT-02; New Sanitary Landfill Area, LF-03; Strategic Air Ground Equipment (SAGE) Building 306, ST-04; Explosive Ordnance Detonation Area, OT-05; Refueling Ramps and Pads, Base Tanks Area, ST-06; POL Off-Loading Area, ST-07; and Refueling Ramps and Pads, ST-08 (USAF, 1997b). Two sites are considered closed, OT-05 and ST-06. ST-08 has had a remedial investigation/feasibility study (RI/FS) completed and the rest are in long-term monitoring. Grand Forks AFB is not on the National Priorities List (NPL)

#### **3.13.2 GEOLOGICAL RESOURCES**

##### **3.13.2.1 Physiography and Topography**

The topography of Grand Forks County ranges from broad, flat plains to gently rolling hills that were produced mainly by glacial activity. Local relief rarely exceeds 100 ft in one mile, and, in parts of the lake basin, less than five ft in one mile.

Grand Forks AFB is located within the Central Lowlands physiographic province. The topography of Grand Forks County, and the entire Red River Valley, is largely a result of the former existence of Glacial Lake Agassiz, which existed in this area during the melting of the last glacier, about 12,000 years ago (Stoner et al., 1993). The eastern four-fifths of Grand Forks County, including the base, lies in the Agassiz Lake Plain District, which extends westward to the Pembina escarpment in the western portion of the county. The escarpment separates the Agassiz Lake Plain District from the Drift Plain District to the west. Glacial Lake Agassiz occupied the valley in a series of recessive lake stages, most of which were sufficient duration to produce shoreline features inland from the edge of the lake. Prominent physiographic features of the Agassiz Lake Plain District are remnant lake plains, beaches, inter-beach areas, and delta plains. Strandline deposits, associated with fluctuating lake levels, are also present and are indicated by narrow ridges of sand and gravel that typically trend northwest-southwest in Grand Forks County.

Grand Forks AFB lies on a large lake plain in the eastern portion of Grand Forks County. The lake plain is characterized by somewhat poorly drained flats and swells, separated by poorly drained shallow swells and sloughs (Doolittle et al., 1981). The plain is generally level, with local relief being less than one foot. Land at the base is relatively flat, with elevations ranging from 880 to 920 ft mean sea level (MSL) and averaging about 890 ft MSL. The land slopes to the north at less than 12 ft per mile

### **3.13.2.2 Soil Type Condition**

Soils consist of the Gilby loam series that are characterized by deep, somewhat poorly drained, moderately to slowly permeable soils in areas between beach ridges. The loam can be found from 0 to 12 inches. From 12 to 26 inches, the soil is a mixture of loam, silt loam, and very fine sandy loam. From 26 to 60 inches, the soil is loam and clay loam.

### **3.13.3 PESTICIDE MANAGEMENT**

Pesticides are handled at various facilities including Environmental Controls, Golf Course Maintenance, and Grounds Maintenance. Other organizations assist in the management of pesticides and monitoring or personnel working with pesticides. Primary uses are for weed and mosquito control. Herbicides, such as Round-up, are used to maintain areas adjacent to roadways. Military Public Health and Bioenvironmental Engineering provide information on the safe handling, storage, and use of pesticides. Military Public Health maintains records on all pesticide applicators. The Fire Department provides emergency response in the event of a spill, fire, or similar type incident.

### **3.14 ENVIRONMENTAL JUSTICE**

Environmental justice addresses the minority and low-income characteristics of the area, in this case Grand Forks County. The county is more than 93 percent Caucasian, 2.3 percent Native American, 1.4 percent African-American, 1 percent Asian/Pacific Islander, less than 1 percent Other, and 1.6 percent “Two or more races”. In comparison, the US is 97.6 percent Caucasian, 12.3 African-American, 0.9 percent Native American or Native Alaskan, 3.6 percent Asian, 0.1 Native Hawaiian or Pacific Islander, 5.5 percent Other, and 2.4 percent “Two or more races”. Approximately 12.5 percent of the county’s population is below the poverty level in comparison to 13.3 percent the state (US Bureau of the Census, 2002). There are few residences and no concentrations of low-income or minority populations around Grand Forks AFB.

## **4.0 ENVIRONMENTAL CONSEQUENCES**

### **4.1 INTRODUCTION**

The effects of the proposed action and the alternatives on the affected environment are discussed in this section. The project involves construction of a mass/mobility parking lot on Grand Forks AFB.

### **4.2 AIR QUALITY**

#### **4.2.1 Alternative 1 (Proposed Action)**

No long-term effects; however short term effects involve heavy construction equipment emissions (not a concern as they are mobile sources) and fugitive dust (mentioned on our Title V permit). Construction activities would result in a short-term minimal increase of criteria air pollutants, as fuel (gasoline and diesel) that is burned by internal combustion engine power construction and earth-moving equipment. Heavy construction equipment would generate the most emissions. The constituents of exhaust include CO, NO<sub>x</sub>, and VOCs. Earth moving activities would generate fugitive dust (PM<sub>10</sub>). Fugitive emissions from construction activities are expected to be below the regulatory threshold and would be managed in accordance with NDAC 33-15-17-03. Fugitive dust emissions and construction vehicle exhaust would be generated by all phases of construction, but the dust would be controlled to the maximum extent possible by utilizing wind barriers and stabilizing the exposed soil. Best Management Practices (BMPs) to reduce fugitive emissions, such as daily watering of the disturbed ground and replacing ground cover in disturbed areas as quickly as possible, would be implemented to the maximum extent possible to reduce the amount of these emissions. Any complaints would be dealt with in an efficient and effective manner. This short-term increase in combustion related pollutants would occur only during construction and impacts to air quality would not be significant. Air Quality in ND is considered good and the area is in attainment for all criteria pollutants.

#### **4.2.2 Alternative 2**

Impacts would be similar to those generated under the proposed action.

#### **4.2.3 Alternative 3 (No Action)**

The no action alternative would not impact air quality.

### **4.3 NOISE**

#### **4.3.1 Alternative 1 (Proposed Action)**

The short-term operation of heavy equipment in the construction area would generate additional noise and adversely impact persons living near the construction area. These noise impacts would

exist only during construction and would cease after completion. The increase in noise from construction activities would be negligible. Noise levels could be minimized by ensuring that construction equipment is equipped with a recommended muffler is good working order and by ensuring that construction activities are not conducted during early morning or late evening hours.

#### **4.3.2 Alternative 2**

Impacts would be similar to those generated under the proposed action.

#### **4.3.3 Alternative 3 (No Action)**

The no action alternative would not impact noise generation.

### **4.4 WASTES, HAZARDOUS MATERIALS, AND STORED FUELS**

#### **4.4.1 Alternative 1 (Proposed Action)**

The increase in hazardous and solid wastes from construction related activities would be minimal and temporary. Construction debris would be disposed of in approved location, such as the Grand Forks Municipal Landfill, which is located within 12 miles of the construction site. All solid waste materials would be managed and transported in accordance with the state's solid and hazardous waste rules. Appropriate efforts to reduce, reuse and/or recycle waste materials is encouraged by the State of North Dakota. Inert waste should be segregated from non-inert waste, where possible, to reduce the cost of waste management.

#### **4.4.2 Alternative 2**

Impacts would be similar to those generated under the proposed action.

#### **4.4.3 Alternative 3 (No Action)**

The no action alternative would not impact hazardous or solid waste generation.

### **4.5 WATER RESOURCES**

#### **4.5.1 Alternative 1 (Proposed Action)**

Ground Water: Provided BMPs are followed, there would be minimal impacts on ground water. The area is already considered developed as it used to be a housing area. Therefore, the minimal soil compaction that is likely to occur should not interfere with infiltration during storm events. A positive point for this area is the removal of existing streets and utilities would probably have a positive impact on groundwater, by allowing for more infiltration and local recharge. Provided a thorough design and operation, the proposed action should have minimal impact on ground water.

Surface Water: Surface water quality could be degraded, both in the short-term, during actual construction, and over the long-term due to reduced storm water quality caused by the increase of exposed soil. The short-term effects come from possible erosion contributing to turbidity of runoff and possible contamination from spills or leaks from construction equipment. The contractor must utilize effective methods to control surface water runoff and minimize erosion. Proper stabilization of the site immediately upon completion of the construction would provide beneficial vegetation, controlling erosion. Long-term surface water degradation could occur simply from the fact that additional area will remain without vegetation, increasing the amount of sediment that will be contained in the storm water runoff.

Water Quality: The proposed action would have minimal impact to water quality.

Waste Water: The proposed action would have no impact on wastewater.

Wetlands: On September 1999, the base identified a total of 49 wetlands comprising 23.7 acres. The wetlands included marshes, prairie potholes, and forested areas. Currently, there are no wetlands in the proposed site area, but a wetland delineation project is being conducted this summer. If wetlands are identified in the parking lot sited area, no construction activity should occur in any wetlands without a Clean Water Act Section 404 permit from the U.S. Army Corps of Engineers. No dumping, filling, dredging, or changing of the wetland hydrologic structure is permitted without a permit.

#### **4.5.2 Alternative 2**

Ground Water: Provided BMPs are followed, there would be minimal impacts on ground water. The area is already considered developed as it used to be a housing area. Therefore, the minimal soil compaction that is likely to occur should not interfere with infiltration during storm events. A positive point for this area is the removal of existing streets and utilities would probably have a positive impact on groundwater, by allowing for more infiltration and local recharge. Provided a thorough design and operation, the proposed action should have minimal impact on ground water.

Surface Water: Surface water quality could be degraded, both in the short-term, during actual construction, and over the long-term due to reduced storm water quality caused by the increase of exposed soil. The short-term effects come from possible erosion contributing to turbidity of runoff and possible contamination from spills or leaks from construction equipment. The contractor must utilize effective methods to control surface water runoff and minimize erosion. Proper stabilization of the site immediately upon completion of the construction would provide beneficial vegetation, controlling erosion. Long-term surface water degradation could occur simply from the fact that additional area will remain without vegetation, increasing the amount of sediment that will be contained in the storm water runoff.

Water Quality: The proposed action would have minimal impact to water quality.

Waste Water: The proposed action would have no impact on wastewater.

Wetlands: Impacts under this alternative would be similar to the impacts listed above.

Wetlands are specific to the sited area of a given construction activity. A new EA would have to be drafted to address any wetlands found on a new piece of land purchased for this activity. If wetlands are identified in this area, no construction activity should occur in any wetlands without a Clean Water Act section 404 permit from the Army Corps of Engineers. No dumping, filling, dredging, or changing of the wetland hydrologic structure is permitted without a permit.

#### **4.5.3 Alternative 3 (No Action)**

The no action alternative would have no impact on water resources.

### **4.6 BIOLOGICAL RESOURCES**

#### **4.6.1 Alternative 1 (Proposed Action)**

Vegetation: The proposed site is characterized as unimproved grasslands. This area was developed by residential housing, but the housing has been removed and it has been returned to grassland. Many trees are left, as well as the paved residential roads. Vegetation is dominated by non-native and native grasses, herbaceous plants, and invasive/noxious weeds. One hundred and forty two taxa, representing less than a third of the known Grand Forks County plant taxa, were identified in the ND Natural Heritage Inventory. No rare plant species are known to exist at Grand Forks AFB. Construction of a 5 acre gravel parking lot would remove all grassland vegetation in the area, and result in a permanent loss of vegetation. Under current plans, the parking lot would be constructed around existing trees. Any disturbed areas around the constructed parking lot should be seeded or revegetated to native species.

Noxious Weeds: Public law 93-629 mandates control of noxious weeds. Noxious weeds are known to be present in this area. Limit possible weed seed transport from infested areas to non-infested sites. Activities should be avoided in or adjacent to heavily infested areas or seed sources and propagules removed from the site prior to conducting activities, or limit operations to non-seed producing seasons. All vegetation and soil should be washed or otherwise removed from equipment before transporting to a new site. Following activities which expose the soil, mitigate by covering the area with weed seed free mulch and/or seed the area with native species. Covering the soil would reduce the germination of weed seeds, maintain soil moisture, and minimize erosion. Any fill material used for the parking lot must contain weed-free sources to minimize weed spread caused by moving infested gravel and fill material.

Soils: Zell-Gardena and Gardena silt loams with Yemassee fine sandy loams dominate this area. These soils are subject to soil blowing unless protected and covered with appropriate vegetation. Native vegetation stands of shrubs and trees are recommended as windbreaks to this parking lot area. The windbreak should be placed to the north and west of the parking lot. Construction of the parking lot should occur when ground conditions are such that unacceptable soil compaction and displacement is minimized. This would reduce the disturbance to soil microorganisms and

invertebrates. Soils would be contaminated from oil/gasoline spills of vehicles parking in the lot, and have potential to affect local wildlife, vegetative, air, and water resources.

Wildlife: The area is unimproved and not maintained by the grounds maintenance contractor, providing excellent habitat for many species of wildlife. These areas provide foraging habitat for many mammals such as mice, squirrels, rabbits, skunks, badgers, and deer. Many grassland birds use this area for breeding and nesting. The 2001 bird survey found several grassland birds using this area including the clay-colored sparrow, savannah sparrow, song sparrow, grasshopper sparrow, Nelson's sharp-tailed sparrow, and Swainson's hawk. The grasshopper sparrow, Nelson's sharp-tailed sparrow, and Swainson's hawk are state species of concern. Grassland bird populations are in decline in North America due to habitat loss. Construction of the parking lot would increase the amount of habitat loss for grassland birds. Residential land, proposed ATV track, a proposed paintball field, and farmland surrounds the proposed site, providing insufficient habitat for nesting grassland birds. Recommendations from the 2001 bird survey at Grand Forks AFB are to prevent further loss and fragmentation of grasslands and open areas. Housing was only removed from the area a couple years ago; therefore, the area has only been open for a couple years.

Threatened or Endangered Species: According to the 1994 ND Natural Heritage Inventory (1994), "There are no known federally threatened or endangered species populations on or adjacent to Grand Forks AFB." There have been bald eagle reports (November 2003) on the sewage lagoons to the east of the parking lot. However there is no appropriate habitat for the eagles at the proposed site, and there should be no adverse consequences to them.

#### **4.6.2 Alternative 2**

Vegetation: Permanent loss of 5 acres of vegetation would result. Procurement of new land would require a new EA, due to unknown site-characteristics of vegetation given the magnitude of construction planned. Planning of land purchase would need to be considered to avoid buying land that contains any critical vegetative habitat.

Noxious Weeds: Public Law 93-629 mandates control of noxious weeds. Limit possible weed seed transport from infested areas to non-infested sites. Activities in or adjacent to heavily infested areas should be avoided or seed sources and propagules removed from site prior to conducting activities, or operations limited to non-seed producing seasons. All vegetation and soil should be washed or otherwise removed from equipment before transporting to a new site. Following activities which expose the soil, mitigate by covering the area with weed seed free mulch and/or seed the area with native species. Covering the soil would reduce the germination of weed seeds, maintain soil moisture, and minimize erosion. Any fill material used for the parking lot must contain weed-free sources to minimize weed spread caused by moving infested gravel and fill material.

Soils: Soil characteristics are site specific. Procurement of new land would require a new EA, due to unknown site-characteristics of soils given the magnitude of construction planned.

Planning of land purchase would need to be considered to avoid buying land that contains unsuitable soil conditions.

Wildlife: Wildlife is site and regional specific. Procurement of new land would require a new EA, due to unknown site-characteristics of resident wildlife given the magnitude of construction planned. Planning of land purchase would need to be considered to avoid buying land that contains any critical wildlife habitat.

Threatened or Endangered Species: These species are site specific. Procurement of new land would require a new EA, due to unknown site-characteristics of vegetation given the magnitude of construction planned. Planning of land purchase would need to be considered to avoid buying land that contains any critical vegetative habitat.

#### **4.6.3 Alternative 3 (No Action)**

The no action alternative would not impact biological resources.

### **4.7 SOCIOECONOMIC RESOURCES**

#### **4.7.1 Alternative 1 (Proposed Action)**

This action would have a minor positive effect on the local economy. Secondary retail purchases would make an additional contribution to the local communities. The implementation of the proposed action, therefore, would provide a short-term, beneficial impact to local contractors and retailers during the construction phase of the project.

#### **4.7.2 Alternative 2**

Impacts would be similar to those generated under the proposed action.

#### **4.7.3 Alternative 3 (No Action)**

The no action alternative would not impact socioeconomics.

### **4.8 CULTURAL RESOURCES**

#### **4.8.1 Alternative 1 (Proposed Action)**

The proposed action has little potential to impact cultural resources. In the unlikely event any such artifacts were discovered during the construction activities, the contractor would be instructed to halt construction and immediately notify Grand Forks AFB civil engineers who would notify the State Historic Preservation Officer.

#### **4.8.2 Alternative 2**

Cultural resources are site specific. Procurement of new land would require a new EA, due to unknown cultural and archeological artifacts. Planning of land purchase would need to be considered to avoid buying land that has a high probability for these types of artifacts.

#### **4.8.3 Alternative 3 (No Action)**

The no action alternative would not impact cultural resources.

### **4.9 LAND USE**

#### **4.9.1 Alternative 1 (Proposed Action)**

Although the project area was previously sited for MFH, siting for the mass/mobility parking lot has been approved by Grand Forks AFB's Facility Board in December 2003. Therefore, the proposed action would not impact land use.

#### **4.9.2 Alternative 2**

Purchase of new land would require Facility Board approval and land designation for mass/mobility parking.

#### **4.9.3 Alternative 3 (No Action)**

The no action alternative would not impact land use.

### **4.10 TRANSPORTATION SYSTEMS**

#### **4.10.1 Alternative 1 (Proposed Action)**

The proposed action would have minimal adverse impact to transportation systems on base due to construction vehicles traveling to and from the site.

#### **4.10.2 Alternative 2**

Impacts would be similar to those generated under the proposed action.

#### **4.10.3 Alternative 3 (No Action)**

The action would not impact transportation.

## **4.11 AIRSPACE/AIRFIELD OPERATIONS**

### **4.11.1 Alternative 1 (Proposed Action)**

The proposed action would not impact aircraft safety or airspace compatibility.

### **4.11.2 Alternative 2**

The alternative action would not impact aircraft safety or airspace compatibility.

### **4.11.3 Alternative 3 (No Action)**

The no action alternative would not impact aircraft safety or airspace compatibility.

## **4.12 SAFETY AND OCCUPATIONAL HEALTH**

### **4.12.1 Alternative 1 (Proposed Action)**

The proposed action would not impact safety and occupational health.

### **4.12.2 Alternative 2**

The alternative action would not impact safety and occupational health.

### **4.12.3 Alternative 3 (No Action)**

The no action alternative would not impact safety and occupational health.

## **4.13 ENVIRONMENTAL MANAGEMENT**

### **4.13.1.1 Alternative 1 (Proposed Action)**

IRP: The proposed action would not impact IRP Sites.

Geology: Sediment located at the proposed construction site would be temporarily disturbed during construction. Underlying geology in some areas could be affected by construction activities. BMPs would be implemented to prevent erosion. The hazard of wind erosion is moderate and considerable erosion could occur on stockpiled soils. BMPs, such as daily watering and revegetating soils as soon as possible would reduce the impacts of erosion. At the conclusion of construction, the disturbed soils would be rolled and reseeded.

Pesticides: No pesticides would be used as part of this project.

#### **4.13.1.2 Alternative 2**

IRP Sites geological resources are site specific. Procurement of new land would require a new EA, due to unknown environmental contamination and geological resources. Planning of land purchase would need to be considered to avoid buying land that has a high probability for environmental contamination or geological resources. No pesticides would be used as part of this project.

#### **4.13.1.3 Alternative 3 (No Action)**

The no action alternative would not impact IRP Sites or geological resources. No pesticides would be used as part of this project.

### **4.14 ENVIRONMENTAL JUSTICE**

#### **4.14.1 Alternative 1 (Proposed Action)**

EO 12898 requires federal agencies to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations. There are no minority or low-income populations in the area of the proposed action, and, thus, there would be no disproportionately high or adverse impact on such populations.

#### **4.14.2 Alternative 2**

Procurement of new land would require a new EA, due to unknown minority or low-income populations. Planning of land purchase would need to be considered to avoid buying land that has a high probability for impacting minorities or low-income populations.

#### **4.14.3 Alternative 3 (No Action)**

The no action alternative would not impact environmental justice.

### **4.15 INDIRECT AND CUMULATIVE IMPACTS**

The short-term increases in air emissions and noise during construction and the impacts predicted for other resource areas, would not be significant when considered cumulatively with other ongoing and planned activities at Grand Forks AFB and nearby off-base areas. The cumulative impact of the Proposed Action or Alternative with other ongoing construction in the area would produce and increase in solid waste generation; however, the increase would be limited to the timeframe of each construction project. The area landfill used for construction and demolition debris does not have capacity concerns and could readily handle the solid waste generated by the various projects.

#### **4.16 UNAVIODABLE ADVERSE IMPACTS**

The use of construction-related vehicles and their short-term impacts on noise, air quality, and traffic is unavoidable.

#### **4.17 RELATIONSHIP BETWEEN SHORT-TERM USES AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY**

The proposed action and alternative would involve the use of previously developed areas. No croplands, pastureland, wooded areas, or wetlands would be modified or affected as a result of implementing the Proposed Action or Alternative and, consequently, productivity of the area would not be degraded.

#### **4.18 IRREVERSIVLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES**

Under the proposed action, fuels, manpower, economic resources, fill and other construction materials related to the construction of a mass/mobility parking lot would be irreversibly lost.

## 5.0 LIST OF PREPARERS

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Capt Brad Schulte  
Bioenvironmental Engineering Flight  
Commander  
319AMDS/SGPB  
1599 J St  
Grand Forks AFB ND 58205

**6.0 LIST OF AGENCIES AND PERSONS CONSULTED AND/OR PROVIDED COPIES**

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North Dakota Department of Health  
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Bismarck, ND 58505-0200

Mr. Merlen E. Paaverud  
State Historic Preservation Officer  
State Historical Society of North Dakota  
612 East Boulevard Avenue  
Bismarck ND 58505-0200

Mr. Dean Hildebrand  
Commissioner  
North Dakota Game and Fish  
100 North Bismarck Expressway  
Bismarck, ND 58501

## **7.0 REFERENCES**

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**APPENDIX A  
LOCATION MAP**

# Grand Forks AFB, ND

## Location Map

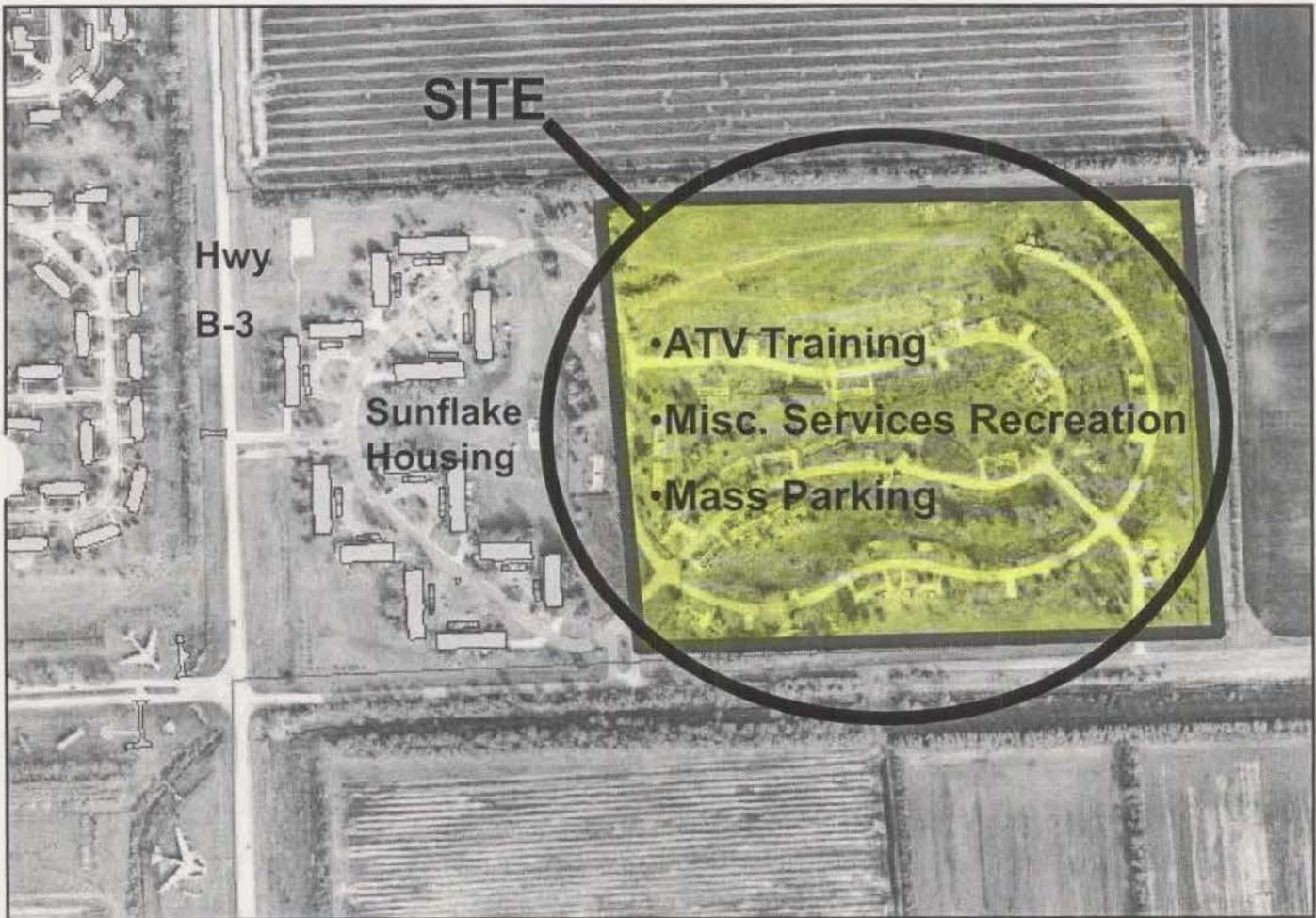


State Boundary

|                         |                                    |                     |
|-------------------------|------------------------------------|---------------------|
| 1 COMPONENT<br>AF (AMC) | FY 2004 MILITARY CONSTRUCTION DATA | 2 DATE<br>05 Nov 03 |
|-------------------------|------------------------------------|---------------------|

3 INSTALLATION AND LOCATION  
GRAND FORKS AFB, NORTH DAKOTA

|  |                        |
|--|------------------------|
| 4 PROJECT TITLE<br>ATV Training /Misc. Services Recreation/ Land Use Change/Mass Parking | 5 PROJECT NUMBER<br>NA |
|--|------------------------|



LOCATION PLAN

**APPENDIX B**  
**CULTURAL RESOURCE PROBABILITY MAP**

Figure 3.5  
Survey Areas and  
Probabilities

Grand Forks Air Force Base  
Cultural Resources Management Plan

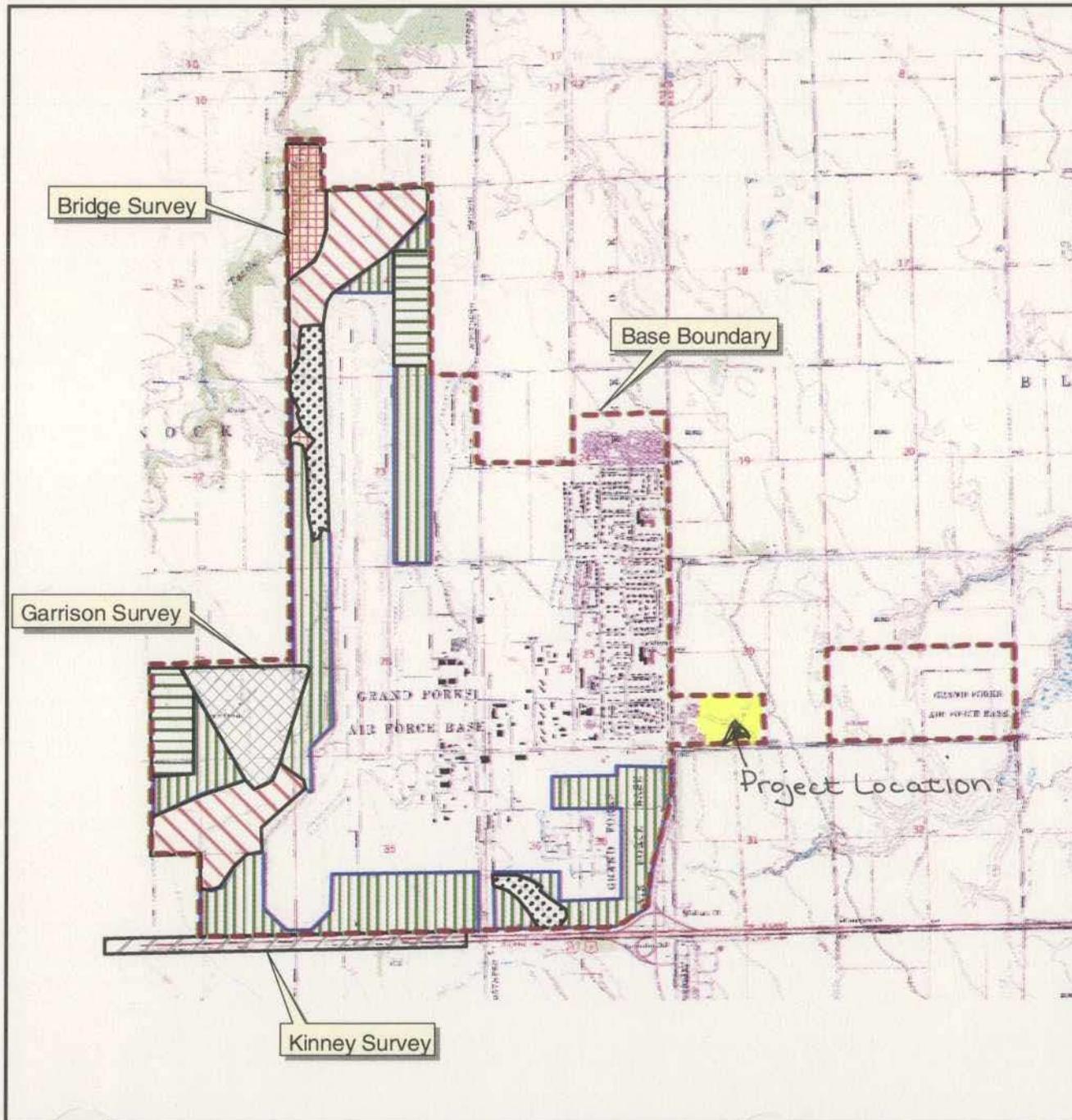
Legend

-  Historic Bridge Inventory Survey
-  Base Boundary
-  High Probability
-  Medium Probability (near water)
-  Kinney Survey
-  Medium Probability (beach ridge)
-  Peace Keeper Rail Garrison Survey
-  Low Probability (distance from water)
-  Low Probability (10% sample)
-  Previously Disturbed

2000 0 2000 4000 Feet



|                |  |
|----------------|--|
| Scale:         | 1:50000                                      |
| Created By:    | rp/bc  |
| File:          | y:\projects\federal\air force\grand forks... |
| Date:          | 5-16-02                                      |
| Figure Number: | 3.5  |
| Page Number:   | 3-18   |



**APPENDIX C**  
**ENVIRONMENTAL SITE MAP**



### Grand Forks AFB Environmental Sites (SE)

- Above Ground Storage Tanks (Fuel)
  - ▲ Abandoned Fuel Lines
  - ▲ Building 622 - Acid Dip Room
  - Helicopter Wash Area
  - ▲ Oil/Water Separator
  - ▲ Satellite Accumulation Areas (Haz Waste)
  - ▲ Scrap Storage Area
  - S.H.P.O. (Buildings under consideration)
  - ▲ Underground Waste Storage
  - Underground Storage Tanks (Fuel)
  - Ditches/Streams
  - ▨ IRP Sites
  - ▨ Landfill Caps
  - Trees
- Hydrography-flood zone area  
 floodplain zone centroid

**APPENDIX D**  
**AF FORM 813**

**REQUEST FOR ENVIRONMENTAL IMPACT ANALYSIS**

Report Control Symbol  
RCS: 2004-064

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**

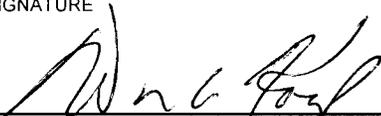
|  |   |                                   |
|--|---|-----------------------------------|
| 1. TO (Environmental Planning Function)<br>319 CES/CEVA  | 2. FROM (Proponent organization and functional address symbol)<br>319 SFS/SFOF<br>690 FIRST AVE     | 2a. TELEPHONE NO.<br>701-747-3597 |
| 3. TITLE OF PROPOSED ACTION<br>Construct a Mass/Mobility Parking Lot (JFSD 200402)   |   |                                   |
| 4. PURPOSE AND NEED FOR ACTION (Identify decision to be made and need date)<br>See Attached.   |   |                                   |
| 5. DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES (DOPAA) (Provide sufficient details for evaluation of the total action.)<br>See Attached. |   |                                   |
| 6. PROPONENT APPROVAL (Name and Grade)<br>ANTHONY D. MOSHER, SSGT  | 6a. SIGNATURE<br> | 6b. DATE                          |

| 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                        |
|--|--------------------------|-------------------------------------|-------------------------------------|--------------------------|
| 7. AIR INSTALLATION COMPATIBLE USE ZONE/LAND USE (Noise, accident potential, encroachment, etc.)   | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |
| 8. AIR QUALITY (Emissions, attainment status, state implementation plan, etc.)   | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 9. WATER RESOURCES (Quality, quantity, source, etc.)   | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 10. SAFETY AND OCCUPATIONAL HEALTH (Asbestos/radiation/chemical exposure, explosives safety quantity-distance, bird/wildlife aircraft hazard, etc.)  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |
| 11. HAZARDOUS MATERIALS/WASTE (Use/storage/generation, solid waste, etc.)  | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 12. BIOLOGICAL RESOURCES (Wetlands/floodplains, threatened or endangered species, etc.)  | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 13. CULTURAL RESOURCES (Native American burial sites, archaeological, historical, etc.)  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |
| 14. GEOLOGY AND SOILS (Topography, minerals, geothermal, Installation Restoration Program, seismicity, etc.)   | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> |
| 15. SOCIOECONOMIC (Employment/population projections, school and local fiscal impacts, etc.)   | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |
| 16. OTHER (Potential impacts not addressed above.)   | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |

**SECTION III - ENVIRONMENTAL ANALYSIS DETERMINATION**

17.  PROPOSED ACTION QUALIFIES FOR CATEGORICAL EXCLUSION (CATEX) # \_\_\_\_\_ ; OR  
 PROPOSED ACTION DOES NOT QUALIFY FOR A CATEX; FURTHER ENVIRONMENTAL ANALYSIS IS REQUIRED.

18. REMARKS  
 This action is not "regionally significant" and does not require a conformity determination in accordance with 40 CFR 93.153(1). The total emission of criteria pollutants from the proposed action are below the de minimus thresholds and less than 10 percent of the Air Quality Region's planning inventory.

|  |  |                        |
|--|--|------------------------|
| ENVIRONMENTAL PLANNING FUNCTION CERTIFICATION (Name and Grade)<br>WAYNE. A. KOOP, R.E.M., GM-13<br>Environmental Management Flight Chief | 19a. SIGNATURE<br> | 19b. DATE<br>13 Feb 04 |
|--|--|------------------------|

## 4.0 Purpose and Need for Action

4.1 Purpose: The purpose is to construct a mass/mobility parking lot outside Grand Forks AFB's perimeter fence.

4.2 Need: In accordance with the Installation Security Plan, Centralized Parking will be implemented in force protection condition (FPCON) CHARLIE or higher, or as directed by the commander of the 319th Air Refueling Wing Commander (319 ARW/CC) when there is a need to increase security around sensitive facilities or to restrict traffic flow on the installation. Base personnel will be instructed to park at designated parking areas, thus relieving about fifty percent of the workload during those periods. Parking lot could also be used as a Revoked/Barred from base parking lot also, thus clearing up parking spaces at the South Gate for contractors and vendors awaiting escort during higher FPCONs. Additionally, the limited amount of parking on base cannot accommodate all deploying military members' vehicles. A mass/mobility parking lot outside the base would prevent visitors from parking near key or critical facilities, enhancing base security.

## 5.0 Description of Proposed Action and Alternatives

5.1 Proposed Action: Under the proposed action, Grand Forks AFB would construct a new mass/mobility parking lot outside Grand Forks AFB's main perimeter fence in the old Dakota Military Family Housing (MFH) area. Personnel and visitors would be bused from this parking lot onto base proper. The proposed 500 parking spaces would cover an area of 212,890 square feet (5 acres). The parking lot would consist of built up gravel. The parking lot would be sloped to provide drainage. Lighting isn't part of this project but may be included in the future. The parking lot would be constructed around existing trees. Existing foundations and utilities would be removed as required.

5.2 Alternative Action 1: Grand Forks AFB would purchase land outside the base and construct and mass/mobility parking lot there. Size and specifications of the parking lot would remain the same as the proposed action.

5.3 No Action Alternative: Under the no action alternative, Grand Forks AFB would not construct a mass/mobility parking lot. During air shows, non-base personnel would potentially park and have access to critical and sensitive facilities. It would be easier for car bombs to be placed near critical facilities and damage the base's ability to operate. Under force protection standards, there must be a mass parking area for the base to meet Anti-Terrorism/Force Protection (AT/FP) requirements.

5.4 Decision: Grand Forks AFB must decide whether or not to construct a mass/mobility parking lot.

5.5 Permits: The proposed action would disturb more than one acre and the contractor would require a separate National Pollutant Discharge Elimination System (NPDES) construction permit from the North Dakota Department of Health (NDDH).

EIAP Checklist

Title Mass Pig Lot RCS# 04-0104

|              |                               |                    |
|--------------|-------------------------------|--------------------|
| Coordination | Email Sent: <u>12/3/03</u>    | Date Received      |
|              | ADS/SGGB (Bio)                | <u>No Response</u> |
|              | ARW/JA (Legal)                | <u>12/3/03</u>     |
|              | ARW/SE (Safety)               | <u>12/3/03</u>     |
|              | CES/CECP (Community Planner)  | <u>12/3/03</u>     |
|              | CES/CEV (Env)                 | <u>NA</u>          |
|              | CES/CEVA (Cultural)           | <u>12/3/03</u>     |
|              | CES/CEVC (Air/Natural Mgr)    | <u>12/15/03</u>    |
|              | CES/CEVC (Asbestos/LBP/tanks) | <u>12/3/03</u>     |
|              | CES/CEVC (Water Mgr)          | <u>12/11/03</u>    |
|              | CES/CEVP (Haz Mat/Waste)      | <u>12/3/03</u>     |
|              | CES/CEVR (IRP)                | <u>No Response</u> |
|              | OSS/OSA (Airfield Operations) | <u>12/3/03</u>     |

Public Notice Expiration: 1/18/03

Coordination w/Public Affairs 12/15 12/16/03

Base Leader 12/19/03  
 GF Herald 12/18/03

Route

|        |  |                  |
|--------|--|------------------|
| CEV    | <u>12/10</u> <sup>sent</sup> <u>12-11-04</u> | <u>13 Feb 04</u> |
| Legal  |  | <u>13 Feb 04</u> |
| ARW/CV |  | <u>2/2/04</u>    |
|        |  | <u>NA</u>        |

External 12/18/03

|                                |                 |
|--------------------------------|-----------------|
| ND Department of Health        | <u>1/2/04</u>   |
| ND Game and Fish               | <u>1/5/04</u>   |
| State Historical Society of ND | <u>12/29/03</u> |

12/09/03 email at heroon@813  
12/15/03 No project description in ACES

ROUTING AND TRANSMITTAL SLIP

Date  
11 Feb 04

|  |                    |      |
|--|--------------------|------|
| TO: (Name, office symbol, room number, building, Agency/ Post) | Initials           | Date |
| 1. CEU   | <i>[Signature]</i> | 13   |
| 2.   |                    |      |
| 3.   |                    |      |
| 4.   |                    |      |
| 5.   |                    |      |

| Action       | File                 | Note and Return  |
|--------------|----------------------|------------------|
| Approval     | For Clearance        | Per Conversation |
| As Requested | For Correction       | Prepare Reply    |
| Circulate    | For Your Information | See Me           |
| Comment      | Investigate          | Signature        |
| Coordination | Justify              |                  |

REMARKS

sign/Approve 813  
 sign/Approve FONSI  
 mass/mobility Parking Lot

DO NOT use this form as a RECORD of approvals, concurrences, disposals, clearances, and similar actions

|   |                  |
|---|------------------|
| FROM: (Name, org. symbol, Agency/ Post) | Room No. — Bldg. |
|   | Phone No.        |

*Kristen Rundquist*

NSN 7540-00-935-5862  
5041-103



OPTIONAL FORM 41 (Rev. 1-94)  
Prescribed by GSA  
UNICOR FPI - SST

**ROUTING AND TRANSMITTAL SLIP**

Date

20 Jan 04

| Name, office symbol, room number, Bldg, Agency/ Post | Initials    | Date   |
|--|-------------|--------|
| 1. 319 ARW/1A  | [Signature] | 2/1/04 |
| 2.   |             |        |
| 3.   |             |        |
| 4.   |             |        |
| 5.   |             |        |

| Action       | File                 | Note and Return  |
|--------------|----------------------|------------------|
| Approval     | For Clearance        | Per Conversation |
| As Requested | For Correction       | Prepare Reply    |
| Circulate    | For Your Information | See Me           |
| Comment      | Investigate          | Signature        |
| Coordination | Justify              |                  |

**REMARKS**

AF Form 813  
 Environmental Assessment  
 Mass / Mobility Parking  
 Lot  
 Public Notice  
 GF Herald 12/18/03 Leader 2/1/04

DO NOT use this form as a RECORD of approvals, concurrences, disposals, clearances, and similar actions

|   |                  |
|---|------------------|
| FROM: (Name, org. symbol, Agency/ Post) | Room No. — Bldg. |
| Heidi Durako                            |                  |
| 319 CES/CEVA                            | Phone No.        |
|   | 74774            |

NSN 7540-00-935-5862  
 5041-103



OPTIONAL FORM 41 (Rev. 1-94)  
 Prescribed by GSA  
 UNICOR FPI - SST

# DEPARTMENT OF THE AIR FORCE

HEADQUARTERS 319TH AIR REFUELING WING (AMC)  
GRAND FORKS AIR FORCE BASE, NORTH DAKOTA



27 January 2004

MEMORANDUM FOR 319 CES/CEVA

FROM: 319 ARW/JA

SUBJECT: Construct Mass/Mobility Parking Lot EA/FONSI

1. I reviewed the Environmental Assessment (EA) and Findings of No Significant Impact (FONSI) for the above-referenced project. The proposed EA and FONSI are both legally sufficient and comply with the requirements of 32 CFR Part 989. I recommend that Mr. Koop approve the FONSI.
2. The EA contains the need for the proposal, alternatives to the proposal, environmental impacts of the proposed action and alternatives, and a listing of agencies and persons consulted for EA preparation. The EA and FONSI were made available for public comment in the *Grand Forks Herald* (18 and 29 December 2003). No comments were received. From a legal perspective the projects ~~does~~ not have a significant environmental impact. Therefore, the EA is legally sufficient and a FONSI is appropriate.
3. If you have any questions about these comments, please contact me at 7-3606.

Handwritten signature of Mark W. Hanson in black ink.

MARK W. HANSON, GS-12, DAF  
Chief, General Law

I concur.

Handwritten signature of Barr D. Younker, Jr. in black ink.

BARR D. YOUNKER, JR., Lt Col, USAF  
Staff Judge Advocate



AFFIDAVIT OF PUBLICATION

STATE OF NORTH DAKOTA }  
COUNTY OF GRAND FORKS } SS.

[Signature] of said State and County being  
first duly sworn, on oath says:

That { she } is { a representative of the GRAND FORKS HERALD, INC.,  
he }

publisher of the Grand Forks Herald, Morning Edition, a daily newspaper of general circula-  
tion, printed and published in the City of Grand Forks, in said County and State, and has  
been during the time hereinafter mentioned, and that the advertisement of \_\_\_\_\_

Notice of parking lot const.  
a printed copy of which is hereto annexed, was printed and published in every copy of the  
following issues of said newspaper, for a period of 2 time (s) to wit:

12-18 Yr. 03 Yr. \_\_\_\_\_  
12-20 Yr. 03 Yr. \_\_\_\_\_  
Yr. \_\_\_\_\_ Yr. \_\_\_\_\_  
Yr. \_\_\_\_\_ Yr. \_\_\_\_\_

and that the full amount of the fee for the publication of the annexed notice inures solely to  
the benefit of the publishers of said newspaper; that no agreement or understanding for a  
division thereof has been made with any other person and that no part thereof has been  
agreed to be paid to any person whomsoever and the amount of said fee is \$ 15.18;

That said newspaper was, at the time of the aforesaid publication, the duly elected and  
qualified Official Newspaper within said County, and qualified in accordance with the law of  
the State of North Dakota to do legal printing in said County and State.

Subscribed and sworn to before me this 5 day of  
Jan A.D. 07

[Signature]  
Notary Public, Grand Forks, ND

Publication Fee \$ 15.18

**AIR FORCE BASE PUBLIC NOTIFICATION**  
Grand Forks Air Force Base has proposed  
the construction of a mass/mobility parking lot.  
An environmental assessment has been con-  
ducted and a finding of no significant impact  
has been determined for the action."  
Anyone who would like to view the support  
documents to this action should contact the  
319th Air Refueling Wing Public Affairs Office  
within the next 30 days at 747-5017.  
(December 18, 20, 2003)



**STATE  
HISTORICAL  
SOCIETY  
OF NORTH DAKOTA**

John Hoeven  
*Governor of North Dakota*

North Dakota  
State Historical Board

Diane K. Larson  
*Bismarck - President*

Marvin L. Kaiser  
*Williston - Vice President*

Albert I. Berger  
*Grand Forks - Secretary*

Chester E. Nelson, Jr.  
*Bismarck*

Gereld Gerntholz  
*Valley City*

A. Ruric Todd III  
*Jamestown*

Sara Otte Coleman  
*Director  
Tourism Division*

Kathi Gilmore  
*State Treasurer*

Alvin A. Jaeger  
*Secretary of State*

Douglass Prchal  
*Director  
Parks and Recreation  
Department*

David A. Sprynczynatyk  
*Director  
Department of Transportation*

John E. Von Rueden  
*Bismarck*

Merlan E. Paaverud, Jr.  
*Director*

*Accredited by the  
American Association  
of Museums*

December 29, 2003

Heidi Durako, 319 CES/CEVA  
525 Tuskegee Airmen Blvd  
Grand Forks AFB, ND 58205-6434

**ND SHPO Ref.: 97-0527**, Draft EA, Mass/Mobility Parking Lot, Grand Forks AFB, ND.

Dear Ms. Durako:

We have reviewed: *Environmental Assessment: Construct Mass/Mobility Parking Lot At Grand Forks AFB, North Dakota* (Draft Version, 15 Dec 03), and have the following comments:

Appendix A: A location map should have been provided in the draft.

Appendix B: A cultural resource probability map should have been provided in the draft.

Thank you for the opportunity to review this project. Please include the ND SHPO Reference number listed above in any further correspondence for this specific project. If you have any questions please contact Duane Klinner at (701) 328-3576.

Sincerely,

Merlan E. Paaverud, Jr.  
State Historic Preservation Officer  
(North Dakota)



DEPARTMENT OF THE AIR FORCE  
319TH CIVIL ENGINEER SQUADRON  
GRAND FORKS AIR FORCE BASE, NORTH DAKOTA

18 DEC 2007

Mr. Merlen E. Paaverud  
State Historic Preservation Officer  
State Historical Society of North Dakota  
612 East Boulevard Avenue  
Bismarck ND 58505-0200

RE: Environmental Assessment for Grand Forks Air Force Base, North Dakota.

Dear Mr. Paaverud:

The U.S. Air Force is preparing an environmental assessment (EA) on the construction of a mass/mobility parking lot. Attached is a copy of the EA. Please review the document and identify any additional resources within your agency's responsibility that may be impacted by the action. Comments should be sent within 15 days of receipt of this letter to:

Ms. Heidi Durako, 319 CES/CEVA  
525 Tuskegee Airmen Blvd.  
Grand Forks AFB, ND 58205-6434

Your assistance in providing information is greatly appreciated. If you have any questions, please call Ms. Durako at 701-747-4774.

Sincerely,

A handwritten signature in black ink, appearing to read "Wayne A. Koop".

WAYNE A. KOOP  
Environmental Management Flight Chief

Attachment:  
Environmental Assessment



DEPARTMENT OF THE AIR FORCE  
319TH CIVIL ENGINEER SQUADRON  
GRAND FORKS AIR FORCE BASE, NORTH DAKOTA

[18 DEC 2003]

Mr. Dean Hildebrand, Commissioner  
North Dakota Game and Fish  
100 North Bismarck Expressway  
Bismarck, ND 58501

RE: Environmental Assessment for Grand Forks Air Force Base, North Dakota.

Dear Mr. Hildebrand:

The U.S. Air Force is preparing an environmental assessment (EA) on the construction of a mass/mobility parking lot. Attached is a copy of the EA. Please review the document and identify any additional resources within your agency's responsibility that may be impacted by the action. Comments should be sent within 15 days of receipt of this letter to:

Ms. Heidi Durako, 319 CES/CEVA  
525 Tuskegee Airmen Blvd.  
Grand Forks AFB, ND 58205-6434

Your assistance in providing information is greatly appreciated. If you have any questions, please call Ms. Durako at 701-747-4774.

Sincerely,

WAYNE A. KOOP  
Environmental Management Flight Chief

Attachment:  
Environmental Assessment



North Dakota Game & Fish Dept.  
100 N. Bismarck Expressway  
Bismarck, ND 58501-5095

We have reviewed the project and foresee no identifiable conflict with wildlife or wildlife habitat based on the information provided.

(fot) Michael G. McKenna  
Chief, Conservation & Communication Division  
Date: 1/5/04



DEPARTMENT OF THE AIR FORCE  
319TH CIVIL ENGINEER SQUADRON  
GRAND FORKS AIR FORCE BASE, NORTH DAKOTA

123 27 117

Mr. Dean Hildebrand, Commissioner  
North Dakota Game and Fish  
100 North Bismarck Expressway  
Bismarck, ND 58501

RE: Environmental Assessment for Grand Forks Air Force Base, North Dakota.

Dear Mr. Hildebrand:

The U.S. Air Force is preparing an environmental assessment (EA) on the construction of a mass/mobility parking lot. Attached is a copy of the EA. Please review the document and identify any additional resources within your agency's responsibility that may be impacted by the action. Comments should be sent within 15 days of receipt of this letter to:

Ms. Heidi Durako, 319 CES/CEVA  
525 Tuskegee Airmen Blvd.  
Grand Forks AFB, ND 58205-6434

Your assistance in providing information is greatly appreciated. If you have any questions, please call Ms. Durako at 701-747-4774.

Sincerely,

A handwritten signature in black ink, appearing to read "Wayne A. Koop".

WAYNE A. KOOP  
Environmental Management Flight Chief

Attachment:  
Environmental Assessment



**NORTH DAKOTA DEPARTMENT OF HEALTH**  
**Environmental Health Section**

**Location:**  
1200 Missouri Avenue  
Bismarck, ND 58504-5264

**Fax #:**  
701-328-5200

**Mailing Address:**  
P.O. Box 5520  
Bismarck, ND 58506-5520

January 2, 2004

Ms. Heidi Durako  
319 CES/CEVA  
525 Tuskegee Airmen Blvd.  
Grand Forks AFB, ND 58205-6434

Re: Draft Environmental Assessment for Construction of a Mass/Mobility Parking Lot  
Grand Forks Air Force Base, Grand Forks County

Dear Ms. Durako:

This department has reviewed the information concerning the above-referenced project submitted under date of December 18, 2003, with respect to possible environmental impacts.

This department believes that environmental impacts from the proposed construction will be minor and can be controlled by proper construction methods. With respect to construction, we have the following comments:

1. All necessary measures must be taken to minimize fugitive dust emissions created during construction activities. Any complaints that may arise are to be dealt with in an efficient and effective manner.
2. Care is to be taken during construction activity near any water of the state to minimize adverse effects on a water body. This includes minimal disturbance of stream beds and banks to prevent excess siltation, and the replacement and revegetation of any disturbed area as soon as possible after work has been completed. Caution must also be taken to prevent spills of oil and grease that may reach the receiving water from equipment maintenance, and/or the handling of fuels on the site. Guidelines for minimizing degradation to waterways during construction are attached.
3. Projects disturbing one or more acres are required to have a permit to discharge storm water runoff until the site is stabilized by the reestablishment of vegetation or other permanent cover. Also, cities may impose additional requirements and/or specific best management practices for construction affecting their storm drainage system. Check with the local officials to be sure any local storm water management considerations are addressed.
4. Noise from construction activities may have adverse effects on persons who live near the construction area. Noise levels can be minimized by ensuring that construction equipment is equipped with a recommended muffler in good working order. Noise

---

Environmental Health  
Section Chief's Office  
701-328-5150

Air  
Quality  
701-328-5188

Municipal  
Facilities  
701-328-5211

Waste  
Management  
701-328-5166

Water  
Quality  
701-328-5210

effects can also be minimized by ensuring that construction activities are not conducted during early morning or late evening hours.

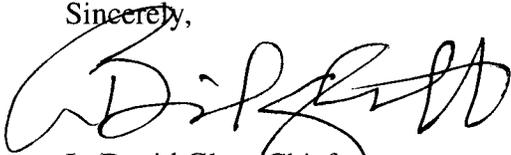
5. All solid waste materials must be managed and transported in accordance with the state's solid and hazardous waste rules. Appropriate efforts to reduce, reuse and/or recycle waste materials are strongly encouraged. As appropriate, segregation of inert waste from non-inert waste can generally reduce the cost of waste management. Further information on waste management and recycling is available from the Department's Division of Waste Management at (701) 328-5166.
6. We have noted a number of errors in the Air Quality Section of the Assessment. These include:
  - 1) The Prevention of Significant Deterioration (PSD) program establishes allowable incremental increases of SO<sub>2</sub>, PM<sub>10</sub> (not total suspended particulate) and nitrogen dioxide (NO<sub>2</sub>).
  - 2) Regarding the significant increase in emissions levels established in the PSD rules, there is also a 25 ton/yr level for total particulate.
  - 3) In the sentence "Ground disturbing activities create PM<sub>10</sub> and particulate matter 25 microns in diameter (PM<sub>2.5</sub>)," the 25 microns should be 2.5 microns.
  - 4) In the table 3.2-2, the NDAAQS for CO are 40,000 µg/m<sup>3</sup> (not 40) and 10,000 µg/m<sup>3</sup> (not 10).
  - 5) The NDAAQS for H<sub>2</sub>S also includes an instantaneous standard of 14,000 µg/m<sup>3</sup> (10 ppm).
  - 6) The State has not adopted the 8-hr ozone standard yet, "none" should be added to the NDAAQS column.

The department owns no land in or adjacent to the proposed improvements, nor does it have any projects scheduled in the area. In addition, we believe the proposed activities are consistent with the State Implementation Plan for the Control of Air Pollution for the State of North Dakota.

These comments are based on the information provided about the project in the above-referenced submittal. The U.S. Army Corps of Engineers may require a water quality certification from this department for the project if the project is subject to their Section 404 permitting process. Any additional information which may be required by the U.S. Army Corps of Engineers under the process will be considered by this department in our determination regarding the issuance of such a certification.

If you have any questions regarding our comments, please feel free to contact this office.

Sincerely,

A handwritten signature in black ink, appearing to read "L. David Glatt". The signature is fluid and cursive, with the first letter "L" being particularly large and stylized.

L. David Glatt, Chief  
Environmental Health Section

LDG:cc  
Attach.



**NORTH DAKOTA DEPARTMENT OF HEALTH**  
**Environmental Health Section**

**Location:**  
1200 Missouri Avenue  
Bismarck, ND 58504-5264

**Fax #:**  
701-328-5200

**Mailing Address:**  
P.O. Box 5520  
Bismarck, ND 58506-5520

December 2000

**Construction and Environmental Disturbance Requirements**

These represent the minimum requirements of the North Dakota Department of Health. They ensure that minimal environmental degradation occurs as a result of construction or related work which has the potential to affect the waters of the State of North Dakota. All projects will be designed and implemented to restrict the losses or disturbances of soil, vegetative cover, and pollutants (chemical or biological) from a site.

**Soils**

Prevent the erosion of exposed soil surfaces and trapping sediments being transported. Examples include, but are not restricted to, sediment dams or berms, diversion dikes, hay bales as erosion checks, riprap, mesh or burlap blankets to hold soil during construction, and immediately establishing vegetative cover on disturbed areas after construction is completed. Fragile and sensitive areas such as wetlands, riparian zones, delicate flora, or land resources will be protected against compaction, vegetation loss, and unnecessary damage.

**Surface Waters**

All construction which directly or indirectly impacts aquatic systems will be managed to minimize impacts. All attempts will be made to prevent the contamination of water at construction sites from fuel spillage, lubricants, and chemicals, by following safe storage and handling procedures. Stream bank and stream bed disturbances will be controlled to minimize and/or prevent silt movement, nutrient upsurges, plant dislocation, and any physical, chemical, or biological disruption. The use of pesticides or herbicides in or near these systems is forbidden without approval from this Department.

**Fill Material**

Any fill material placed below the high water mark must be free of top soils, decomposable materials, and persistent synthetic organic compounds (in toxic concentrations). This includes, but is not limited to, asphalt, tires, treated lumber, and construction debris. The Department may require testing of fill materials. All temporary fills must be removed. Debris and solid wastes will be removed from the site and the impacted areas restored as nearly as possible to the original condition.

Environmental Health  
Section Chief's Office  
701-328-5150

Air  
Quality  
701-328-5188

Municipal  
Facilities  
701-328-5211

Waste  
Management  
701-328-5166

Water  
Quality  
701-328-5210



DEPARTMENT OF THE AIR FORCE  
319TH CIVIL ENGINEER SQUADRON  
GRAND FORKS AIR FORCE BASE, NORTH DAKOTA

Mr. Terry Dwelle  
State Health Officer  
North Dakota Department of Health  
600 East Boulevard Avenue  
Bismarck, ND 58505-0200

RE: Environmental Assessment for Grand Forks Air Force Base, North Dakota.

Dear Mr. Dwelle:

The U.S. Air Force is preparing an environmental assessment (EA) on the construction of a mass/mobility parking lot. Attached is a copy of the EA. Please review the document and identify any additional resources within your agency's responsibility that may be impacted by the action. Comments should be sent within 15 days of receipt of this letter to:

Ms. Heidi Durako, 319 CES/CEVA  
525 Tuskegee Airmen Blvd.  
Grand Forks AFB, ND 58205-6434

Your assistance in providing information is greatly appreciated. If you have any questions, please call Ms. Durako at 701-747-4774.

Sincerely,

A handwritten signature in black ink, appearing to read "Wayne A. Koop".

WAYNE A. KOOP  
Environmental Management Flight Chief

Attachment:  
Environmental Assessment



DEPARTMENT OF THE AIR FORCE  
319TH CIVIL ENGINEER SQUADRON  
GRAND FORKS AIR FORCE BASE, NORTH DAKOTA

17 FEB 2004

MEMORANDUM FOR NORTH DAKOTA DIVISION OF COMMUNITY SERVICES  
ATTENTION: Jim Boyd  
14th Floor State Capitol Building  
600 East Blvd  
Bismarck ND 58502-0170

FROM: 319 CES/CEV  
525 Tuskegee Airmen Blvd  
Grand Forks AFB ND 58205-6434

SUBJECT: Finding of No Significant Impact (FONSI)

1. Attached for your information is the FONSI for the construction of a mass/mobility parking lot located to the east side of county road B3 at Grand Forks AFB.
2. The FONSI is being submitted to your office in accordance with Air Force Instruction 32-7061 which requires Grand Forks AFB to notify the OMB Circular Clearing House whenever a FONSI has been completed.
3. If you have any questions concerning this matter, please contact Ms. Kristen Rundquist, 319 CES/CEVC at (701) 747-4774.

A handwritten signature in black ink, appearing to read "Wayne A. Koop".

WAYNE A. KOOP, R.E.M., GM-13  
Environmental Management Flight Chief

Attachment:  
1. FONSI

copy

**BASE CIVIL ENGINEER WORK REQUEST**  
*(See Reverse for Instructions)*

Form Approved  
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average .3 hours 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 the Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project 0704-0188, Washington DC 20503. Please DO NOT RETURN your form to either of these addresses. Send your completed form to HQ AFESC/DEMG.

**SECTION I - TO BE COMPLETED BY REQUESTER**

|   |                          |                                |   |
|---|--------------------------|--------------------------------|---|
| 1. FROM (Organization)<br>319 CES                             | 2. OFFICE SYMBOL<br>CECP | 3. DATE OF REQUEST<br>20121103 | 4. WORK REQUEST NO. (For BCE Use)   |
| 5. NAME AND PHONE NO. OF REQUESTER<br>1Lt Venus Larson, x4712 |                          | 6. REQUIRED COMPLETION DATE    | 7. BUILDING, FACILITY OR STREET ADDRESS WHERE WORK IS TO BE ACCOMPLISHED<br>Old Dakota Housing Area |

8. DESCRIPTION OF WORK TO BE ACCOMPLISHED (Include Sketch or Plan, when appropriate)

Construct a Mass/Mobility Parking Lot

9. BRIEF JUSTIFICATION FOR WORK TO BE ACCOMPLISHED (Not required for maintenance and repair)

The limited amount of parking on base cannot accommodate all deploying military members' vehicles or visitors during major base events (wing changes of commands, wing holiday functions, airshows/open houses, etc.). A new parking lot is needed. Having a Mass/Mobility parking lot outside the base prevent visitors from parking near key or critical facilities, enhancing the base security.

10. DONATED RESOURCES

|  |       |                                 |   |      |
|--|-------|---------------------------------|---|------|
| FUNDS  | LABOR | MATERIAL                        | CONTRACT BY REQUESTER   | NONE |
| 11. NAME OF REQUESTER<br>Mr. Ken Johnson   |       | 12. GRADE OF REQUESTER<br>GM-13 | 13. SIGNATURE OF REQUESTER (See Reverse of Form)<br><i>as directed<br/>Ken Johnson<br/>10/19/03</i> |      |
| 14. COORDINATION<br><i>PDFC<br/>SEG 17 NOV 03<br/>17 NOV 03<br/>SAC 17 NOV 03<br/>LEFT</i> |       |                                 |   |      |

**SECTION II - FOR BASE CIVIL ENGINEER USE**

15. WORK ORDER (Place an "X" in the appropriate box.)

|            |           |          |       |
|------------|-----------|----------|-------|
| IN-SERVICE | SELF-HELP | CONTRACT | SABER |
|------------|-----------|----------|-------|

16. DIRECT SCHEDULED WORK (Place an "X" in the appropriate box.)

|           |        |         |           |     |
|-----------|--------|---------|-----------|-----|
| EMERGENCY | URGENT | ROUTINE | SELF-HELP | M/C |
|-----------|--------|---------|-----------|-----|

17. SELF-HELP (Place an "X" in the appropriate box.)

|                   |                       |                     |
|-------------------|-----------------------|---------------------|
| BRIEFING REQUIRED | ADEQUATE COORDINATION | INSPECTION REQUIRED |
|-------------------|-----------------------|---------------------|

**SECTION III - COMPLETE ONLY IF WORK IS TO BE ACCOMPLISHED BY WORK ORDER**

|   |              |  |                           |                          |
|---|--------------|--|---------------------------|--------------------------|
| 18. WORK CLASS  | 19. PRIORITY | 20. ESTIMATED HOURS                                  | 21. ESTIMATED FUNDED COST | 22. ESTIMATED TOTAL COST |
| 23. THERE IS NO NEED FOR AN ENVIRONMENTAL ASSESSMENT (AFR 19-2) |              | 24. A WRITTEN ASSESSMENT IS BEING/HAS BEEN PROCESSED | 25. APPROVED              | 26. DISAPPROVED          |

27. REMARKS  
*Ensure all paints are approved on base. CEFT - MAKE SURE ITS COMPLIANT WITH NFPA 5000  
Project requires submission of an AF Form 813 to 319 CES/CEVA.*

**SECTION IV - APPROVING AUTHORITY**

|   |               |          |
|---|---------------|----------|
| 28. NAME AND GRADE (Please Type or Print) | 29. SIGNATURE | 30. DATE |
|---|---------------|----------|

**Environmental Analysis is required prior to the start of work.**

copy 84-064

**BASE CIVIL ENGINEER WORK REQUEST**  
(See Reverse for Instructions)

Form Approved  
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average .3 hours 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 the Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office Management and Budget, Paperwork Reduction Project 0704-0188, Washington DC 20503. Please DO NOT RETURN your form to either of these addresses. Send your completed form to HQ AFESC/DEMG.

**SECTION I - TO BE COMPLETED BY REQUESTER**

|   |                          |                                |   |
|---|--------------------------|--------------------------------|---|
| 1. FROM (Organization)<br>319 CES                             | 2. OFFICE SYMBOL<br>CECP | 3. DATE OF REQUEST<br>20121103 | 4. WORK REQUEST NO. (For BCE Use)   |
| 5. NAME AND PHONE NO. OF REQUESTER<br>1Lt Venus Larson, x4712 |                          | 6. REQUIRED COMPLETION DATE    | 7. BUILDING, FACILITY OR STREET ADDRESS WHERE WORK IS TO BE ACCOMPLISHED<br>Old Dakota Housing Area |

8. DESCRIPTION OF WORK TO BE ACCOMPLISHED (Include Sketch or Plan, when appropriate)  
Construct a Mass/Mobility Parking Lot

9. BRIEF JUSTIFICATION FOR WORK TO BE ACCOMPLISHED (Not required for maintenance and repair)  
The limited amount of parking on base cannot accomadate all deploying military members' vehicles or visitors during major base events (wing changes of commands, wing holiday functions, airshows/open houses, etc.). A new parking lot is needed. Having a Mass/Mobility parking lot outside the base prevent visitors from parking near key or critical facilities, enhancing the base security.

10. DONATED RESOURCES

|       |       |          |                       |      |
|-------|-------|----------|-----------------------|------|
| FUNDS | LABOR | MATERIAL | CONTRACT BY REQUESTER | NONE |
|-------|-------|----------|-----------------------|------|

|  |                                 |  |
|--|---------------------------------|--|
| NAME OF REQUESTER<br>Mr. Ken Johnson                               | 12. GRADE OF REQUESTER<br>GM-13 | 13. SIGNATURE OF REQUESTER (See Reverse of Form)<br>as directed<br>Ken Johnson<br>JW<br>CEV 10/17/03 |
| 14. COORDINATION<br>PDIC<br>SEG 17 Nov 03<br>JAC 17 Nov 03<br>CEFT |                                 |  |

**SECTION II - FOR BASE CIVIL ENGINEER USE**

15. WORK ORDER (Place an "X" in the appropriate box.)

|            |           |          |       |
|------------|-----------|----------|-------|
| IN-SERVICE | SELF-HELP | CONTRACT | SABER |
|------------|-----------|----------|-------|

16. DIRECT SCHEDULED WORK (Place an "X" in the appropriate box.)

|           |        |         |           |     |
|-----------|--------|---------|-----------|-----|
| EMERGENCY | URGENT | ROUTINE | SELF-HELP | M/C |
|-----------|--------|---------|-----------|-----|

17. SELF-HELP (Place an "X" in the appropriate box.)

|                   |                       |                     |
|-------------------|-----------------------|---------------------|
| BRIEFING REQUIRED | ADEQUATE COORDINATION | INSPECTION REQUIRED |
|-------------------|-----------------------|---------------------|

**SECTION III - COMPLETE ONLY IF WORK IS TO BE ACCOMPLISHED BY WORK ORDER**

|   |  |                     |                           |                          |
|---|--|---------------------|---------------------------|--------------------------|
| 18. WORK CLASS  | 19. PRIORITY   | 20. ESTIMATED HOURS | 21. ESTIMATED FUNDED COST | 22. ESTIMATED TOTAL COST |
| 23. THERE IS NO NEED FOR AN ENVIRONMENTAL ASSESSMENT (AFR 19-2) | 24. A WRITTEN ASSESSMENT IS BEING/HAS BEEN PROCESSED | 25. APPROVED        | 26. DISAPPROVED           |                          |

27. REMARKS  
Ensure all paints are approved on base. CEFT - MAKE SURE ITS COMPLIANT WITH NFPA 5000  
Project requires submission of an AF Form 813 to 319 CES/CEVA.

**SECTION IV - APPROVING AUTHORITY**

|                                       |               |          |
|---------------------------------------|---------------|----------|
| NAME AND GRADE (Please Type or Print) | 29. SIGNATURE | 30. DATE |
|---------------------------------------|---------------|----------|

EC504-133

**BASE CIVIL ENGINEER WORK REQUEST**  
(See Reverse for Instructions)

Form Approved  
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average .3 hours 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 the Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project 0704-0188, Washington DC 20503. Please DO NOT RETURN your form to either of these addresses. Send your completed form to HQ AFESC/DEMG.

**SECTION I - TO BE COMPLETED BY REQUESTER**

|   |                              |   |   |
|---|------------------------------|---|---|
| 1. FROM (Organization)<br>319 SFS                                   | 2. OFFICE SYMBOL<br>319 SFOF | 3. DATE OF REQUEST<br>20040112          | 4. WORK REQUEST NO. (For BCE Use)   |
| 5. NAME AND PHONE NO. OF REQUESTER<br>ANTHONY D. MOSHER<br>747-3597 |                              | 6. REQUIRED COMPLETION DATE<br>20041231 | 7. BUILDING, FACILITY OR STREET ADDRESS WHERE WORK IS TO BE ACCOMPLISHED<br>SUNFLAKE HOUSING AREA |

8. DESCRIPTION OF WORK TO BE ACCOMPLISHED (Include Sketch or Plan, when appropriate)  
Add a parking lot in the Sunflake housing area to hold offbase residents and/or military members vehicles in the event Grand Forks AFB is directed to implement higher FPCONs (Charlie and Delta) and to supplement base central parking and curtailment plans IAW GFAFB Installation Security Plan 31-03. (See Attachment Map)

*SFS must submit AF Form 813 - Contact CES/CEVA Kristin Rudquist 7-6394*

9. BRIEF JUSTIFICATION FOR WORK TO BE ACCOMPLISHED (Not required for maintenance and repair)  
IAW Installation Security Plan, Centralized Parking will be implemented in FPCON CHARLIE or higher, or as directed by the 319 ARW/CC when there is a need to increase security around sensitive facilities or to assist traffic flow onto the installation. Base personnel will be instructed to park at designated parking areas, enter the installation via bus thus relieving traffic congestion during higher FPCONs. Parking lot could also be used as a Revoked/Barred from base parking lot, thus clearing up parking spaces at the South Gate for contractors and vendors awaiting escort during higher FPCONs.

10. DONATED RESOURCES

|   |       |                          |                               |                          |   |                          |                       |                          |      |
|---|-------|--------------------------|-------------------------------|--------------------------|---|--------------------------|-----------------------|--------------------------|------|
| <input type="checkbox"/>  | FUNDS | <input type="checkbox"/> | LABOR                         | <input type="checkbox"/> | MATERIAL  | <input type="checkbox"/> | CONTRACT BY REQUESTER | <input type="checkbox"/> | NONE |
| 11. NAME OF REQUESTER<br>MARK A. TSCHAMPL   |       |                          | 12. GRADE OF REQUESTER<br>O-3 |                          | 13. SIGNATURE OF REQUESTER (See Reverse of Form)<br><i>Mark A. Tschampl</i> |                          |                       |                          |      |
| 14. COORDINATION<br><i>CW</i><br>319 CES/CEF <i>20 JAN 04</i> 319 ARW/SE <i>20 Jan 04</i> 319 CES/CEV <i>VLS 20 JAN 04</i> 319 AMDS/SGPB <i>1/23/04</i> 319 CES/CEV <i>W King</i> |       |                          |                               |                          |   |                          |                       |                          |      |

**SECTION II - FOR BASE CIVIL ENGINEER USE**

15. WORK ORDER (Place an "X" in the appropriate box.)

|                          |            |                          |           |                          |          |                          |       |
|--------------------------|------------|--------------------------|-----------|--------------------------|----------|--------------------------|-------|
| <input type="checkbox"/> | IN-SERVICE | <input type="checkbox"/> | SELF-HELP | <input type="checkbox"/> | CONTRACT | <input type="checkbox"/> | SABER |
|--------------------------|------------|--------------------------|-----------|--------------------------|----------|--------------------------|-------|

16. DIRECT SCHEDULED WORK (Place an "X" in the appropriate box.)

|                          |           |                          |        |                          |         |                          |           |                          |     |
|--------------------------|-----------|--------------------------|--------|--------------------------|---------|--------------------------|-----------|--------------------------|-----|
| <input type="checkbox"/> | EMERGENCY | <input type="checkbox"/> | URGENT | <input type="checkbox"/> | ROUTINE | <input type="checkbox"/> | SELF-HELP | <input type="checkbox"/> | M/C |
|--------------------------|-----------|--------------------------|--------|--------------------------|---------|--------------------------|-----------|--------------------------|-----|

17. SELF-HELP (Place an "X" in the appropriate box.)

|                          |                   |                          |                       |                          |                     |
|--------------------------|-------------------|--------------------------|-----------------------|--------------------------|---------------------|
| <input type="checkbox"/> | BRIEFING REQUIRED | <input type="checkbox"/> | ADEQUATE COORDINATION | <input type="checkbox"/> | INSPECTION REQUIRED |
|--------------------------|-------------------|--------------------------|-----------------------|--------------------------|---------------------|

**SECTION III - COMPLETE ONLY IF WORK IS TO BE ACCOMPLISHED BY WORK ORDER**

|   |              |   |                           |                          |
|---|--------------|---|---------------------------|--------------------------|
| 18. WORK CLASS  | 19. PRIORITY | 20. ESTIMATED HOURS   | 21. ESTIMATED FUNDED COST | 22. ESTIMATED TOTAL COST |
| 23. THERE IS NO NEED FOR AN ENVIRONMENTAL ASSESSMENT (AFR 19-2) <input checked="" type="checkbox"/> |              | 24. A WRITTEN ASSESSMENT <i>AFESC</i> BEING PROCESSED <input checked="" type="checkbox"/> |                           | 25. APPROVED             |
| 26. DISAPPROVED   |              |   |                           |                          |

27. REMARKS  
**Project requires submission of an AF Form 813 to 319 CBS/CEVA. Environmental Analysis is required prior to the start of work.**  
*SFS must Submit.*

**SECTION IV - APPROVING AUTHORITY**

|   |               |          |
|---|---------------|----------|
| 28. NAME AND GRADE (Please Type or Print) | 29. SIGNATURE | 30. DATE |
|---|---------------|----------|

|                         |                                    |                     |
|-------------------------|------------------------------------|---------------------|
| 1 COMPONENT<br>AF (AMC) | FY 2004 MILITARY CONSTRUCTION DATA | 2 DATE<br>05 Nov 03 |
|-------------------------|------------------------------------|---------------------|

3 INSTALLATION AND LOCATION  
GRAND FORKS AFB, NORTH DAKOTA

|  |                        |
|--|------------------------|
| 4 PROJECT TITLE<br>ATV Training /Misc. Services Recreation/ Land Use Change/Mass Parking | 5 PROJECT NUMBER<br>NA |
|--|------------------------|



SITE PLAN

FACILITY BOARD APPROVAL \_\_\_\_\_

DATE \_\_\_\_\_

**REQUEST FOR ENVIRONMENTAL IMPACT ANALYSIS**

Report Control Symbol  
RCS:

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**

|   |   |                                   |
|---|---|-----------------------------------|
| 1. TO (Environmental Planning Function)<br>319 CES/CEVA   | 2. FROM (Proponent organization and functional address symbol)<br>319 CES/CECP                      | 2a. TELEPHONE NO.<br>701-747-4712 |
| 3. TITLE OF PROPOSED ACTION<br>Construct a Mass/Mobility Parking Lot  |   |                                   |
| 4. PURPOSE AND NEED FOR ACTION (Identify decision to be made and need date)<br>The limited amount of parking on base cannot accomadate all deploying military members' vehicles or visitors during major base events (wing changes of commands, wing holiday functions, airshows/open houses, etc.).  |   |                                   |
| 5. DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES (DOPAA) (Provide sufficient details for evaluation of the total action.)<br>A new parking lot is needed. Having a Mass/Mobility parking lot outside the base prevent visitors from parking near key or critical facilities, enhancing the base security. Previously used alternative was to park on base but heighten security eliminated that option. |   |                                   |
| 6. PROPONENT APPROVAL (Name and Grade)<br>Venus Larson, 1Lt   | 6a. SIGNATURE<br> | 6b. DATE<br>2003 11 26            |

**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                        |
|---|--------------------------|--------------------------|--------------------------|--------------------------|
| 7. AIR INSTALLATION COMPATIBLE USE ZONE/LAND USE (Noise, accident potential, encroachment, etc.)  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. AIR QUALITY (Emissions, attainment status, state implementation plan, etc.)  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. WATER RESOURCES (Quality, quantity, source, etc.)  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. SAFETY AND OCCUPATIONAL HEALTH (Asbestos/radiation/chemical exposure, explosives safety quantity-distance, bird/wildlife aircraft hazard, etc.) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 11. HAZARDOUS MATERIALS/WASTE(Use/storage/generation, solid waste, etc.)  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 12. BIOLOGICAL RESOURCES (Wetlands/floodplains, threatened or endangered species, etc.)   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 13. CULTURAL RESOURCES (Native American burial sites, archaeological, historical, etc.)   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 14. GEOLOGY AND SOILS (Topography, minerals, geothermal, Installation Restoration Program, seismicity, etc.)  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 15. SOCIOECONOMIC (Employment/population projections, school and local fiscal impacts, etc.)  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 16. OTHER (Potential impacts not addressed above.)  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

**SECTION III - ENVIRONMENTAL ANALYSIS DETERMINATION**

17.  PROPOSED ACTION QUALIFIES FOR CATEGORICAL EXCLUSION (CATEX) # \_\_\_\_\_ ; OR  
 PROPOSED ACTION DOES NOT QUALIFY FOR A CATEX; FURTHER ENVIRONMENTAL ANALYSIS IS REQUIRED.

18. REMARKS

|  |                |           |
|--|----------------|-----------|
| ENVIRONMENTAL PLANNING FUNCTION CERTIFICATION (Name and Grade) | 19a. SIGNATURE | 19b. DATE |
|--|----------------|-----------|

File 68B  
RES 3001-0001

Community Services

Economic

Development & Finance

Tourism

Workforce Development

February 19, 2004

Wayne A. Koop, R.E.M.  
Dept. of the Air Force  
319 CES/CEV  
525 Tuskegee Airmen Blvd.  
Grand Forks AFB, ND 58205-6434

"Letter of Clearance" In Conformance with the North Dakota Federal Program  
Review System - State Application Identifier No.: ND040219-0039

Dear Mr. Koop:

SUBJECT: FONSI - Construction of a Mass/Mobility Parking Lot

The above referenced FONSI has been reviewed through the North Dakota Federal  
Program Review Process. As a result of the review, clearance is given to the project  
only with respect to this consultation process.

If the proposed project changes in duration, scope, description, budget, location or  
area of impact, from the project description submitted for review, then it is necessary  
to submit a copy of the completed application to this office for further review.

We also request the opportunity for complete review of applications for renewal or  
continuation grants within one year after the date of this letter.

Please use the above SAI number for reference to the above project with this office.  
Your continued cooperation in the review process is much appreciated.

Sincerely,



James R. Boyd  
Manager of Governmental Services

sf



Center

1600 E. Century Ave

Suite 2

PO Box 2057

Bismarck, ND 58502-2057

Phone 701-328-5300

Fax 701-328-5320

www.ndcommerce.com



|   |  |   |
|---|--|---|
| 1. COMPONENT<br>AIR FORCE   | FY 2005 PROJECT DATA<br>(computer generated) | 2. DATE   |
| 3. INSTALLATION AND LOCATION<br>GRAND FORKS AIR FORCE BASE, NORTH DAKOTA  |  | 4. PROJECT TITLE<br>FP-CONS CENTRALIZED/CURTAILMENT MASS<br>PARKING LOT |
| 5. PROGRAM ELEMENT<br>28047   | 6. CATEGORY CODE<br>852-262                  | 7. PROJECT NUMBER<br>JFSD200402   |
| 8. PROJECT COST (\$000)<br>EEIC 529<br>362.7  |  |   |
| 9. COST ESTIMATES   |  |   |
| ITEM  | U/M  | QUANTITY  |
| UNIT  | COST   |   |
| PRIMARY FACILITIES  |  | 290.2   |
| DEMO EXISTING PAVEMENTS/EXCAVATION  | CM   | 6,117      8<br>( 51.6 )  |
| CONSTRUCT PARKING LOT   | CM   | 6,117      18<br>( 107.2 )  |
| STREET LIGHTS   | EA   | 22      3,429<br>( 75.4 )   |
| ELECTRICAL UNDERGROUND WIRING/CONDUIT   | LS   | ( 25.9 )  |
| DRAINAGE SYSTEM   | LS   | ( 30.0 )  |
| SUBTOTAL  |  | 290.2   |
| PROFIT AND OVERHEAD ( 25 % )  |  | 72.5  |
| TOTAL FUNDED COST   |  | 362.7   |
| UNFUNDED COST ( 0 % )   |  | 0.0   |
| TOTAL REQUEST   |  | 362.7   |
| 10. Description of Proposed Work: Construct a gravel parking lot with 500-spaces in previously designated Dakota Housing Area. Install lighting and provide drainage. Provide entry and exit driveways to the parking lot. Provide all necessary excavation, selective pavement demolition/disposal, fill, compaction, grading and electrical work as required. |  |   |
| 11. Requirement: As Required.   |  |   |
| <u>PROJECT:</u> FP-CONSTRUCT MASS PARKING LOT & LIGHTING  |  |   |
| <u>REQUIREMENT:</u> Per AT/FP standards and IAW Installation Security Plan, the base requires a centralized mass parking area during base Force Protection levels of CHARLIE or higher.   |  |   |
| <u>CURRENT SITUATION:</u> Centralized Parking needs to be implemented during FPCON CHARLIE or higher, or when directed by the 319 ARW/CC. No infrastructure exists to support this requirement.   |  |   |
| <u>IMPACT IF NOT PROVIDED:</u> Grand Forks AFB will not meet AT/FP standards and the security of the base will continue to be negatively impacted.  |  |   |
| <u>ADDITIONAL:</u>  |  |   |
| MARY C. GILTNER, GM-13, DAFC<br>Deputy Base Civil Engineer  |  |   |