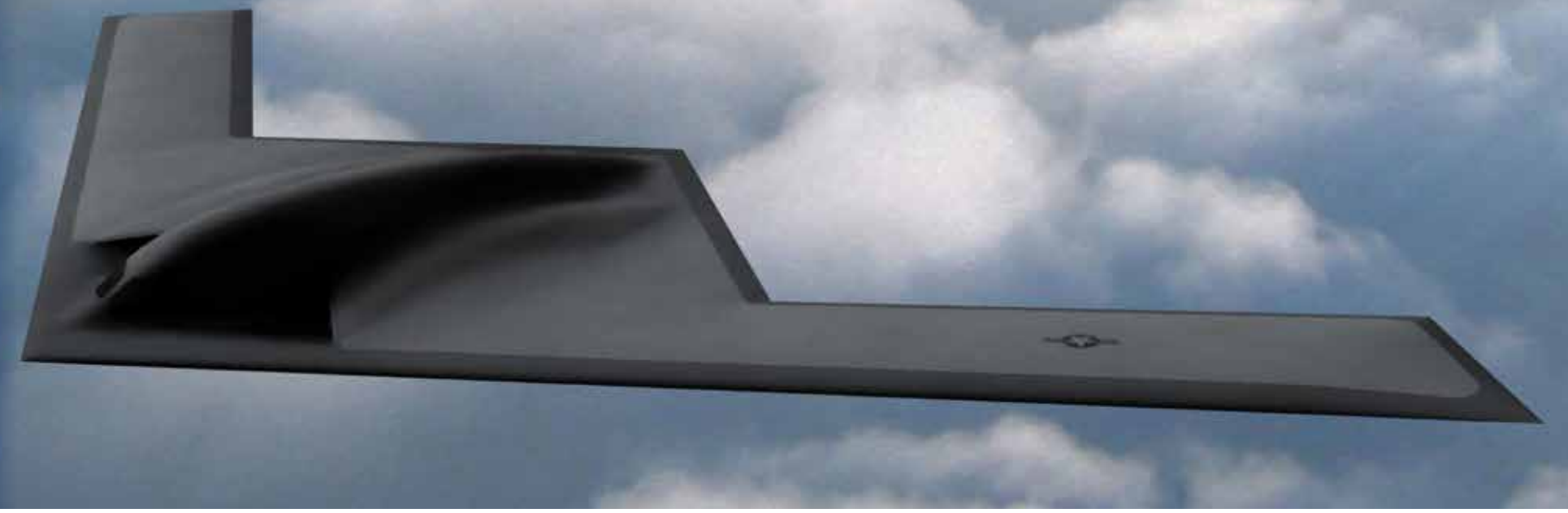


B-21 Main Operating Base 1 Beddown

at Dyess AFB, Texas, or Ellsworth AFB, South Dakota

ENVIRONMENTAL IMPACT STATEMENT



What is the National Environmental Policy Act?

The National Environmental Policy Act (NEPA) is our national charter for making informed decisions while considering environmental impacts. NEPA requires all federal agencies making a proposal that may significantly impact the environment to consider:

- ▶ A range of reasonable alternatives.
- ▶ Potential environmental or human health consequences.
- ▶ Public and government agency input.



NEPA Public Involvement

NEPA and Air Force regulations require tribal, government, agency, and public participation throughout the environmental impact analysis process.

Tribal, government, agency, and public participation is an integral part of the EIS process. The purpose of soliciting input is to identify interested parties and relevant issues so they can be considered in the EIS.

The first stage in the EIS process is public scoping. During scoping, the Air Force is actively seeking feedback from Federal, state and local agencies, federally recognized tribes, and the public in development of the EIS. The public scoping phase provides opportunities to learn about and comment on the project and provides the Air Force with the opportunity to identify issues of interest or concern to frame the environmental analysis and more effectively shape the range of alternatives to be considered.

B-21 Main Operating Base 1 Beddown

at Dyess AFB, Texas, or Ellsworth AFB, South Dakota



ENVIRONMENTAL IMPACT STATEMENT



What Environmental Resources will be Studied in the EIS?

Air Quality Analysis will focus on air emissions from the proposed action and alternatives and the potential impacts to local and regional air quality.

Airspace Use and Management Analysis will address current and proposed use of airspace and potential impacts to airspace use and aviation.

Biological Resources The Environmental Impact Statement (EIS) will address potential impacts to plant and animal species associated with the proposed action and alternatives.

Cultural Resources Analysis will focus on potential impacts to Native American, archaeological, and historic resources associated with the proposed action and alternatives.

Earth Resources The EIS will analyze impacts (such as erosion) to soils and geology associated with the proposed action and alternatives.

Hazardous Materials and Solid Wastes Analysis will focus on characterizing the types of hazardous and solid materials and wastes utilized and/or produced as a result of the proposed action and alternatives and the potential impacts to the environment.

Health and Safety The EIS will address potential impacts to the health and safety of military members and the public from the proposed action and alternatives.

Land Use Analysis will address potential impacts to current and planned future land uses associated with the proposed action and alternatives.

Noise The EIS will analyze the potential impacts to the public and biological resources from noise generating activities associated with the proposed action and alternatives.

Socioeconomics Analysis will focus on the economic impacts of the proposed action and alternatives, to include potential environmental justice impacts to low-income and minority groups.

Water Resources The EIS will identify potential impacts to surface and groundwater resources (such as streams, springs, wetlands, floodplains, and aquifers) associated with the proposed action and alternatives.



B-21 Main Operating Base 1 Beddown

at Dyess AFB, Texas, or Ellsworth AFB, South Dakota



ENVIRONMENTAL IMPACT STATEMENT



What is the Background of the Project?

On October 27, 2015, the U.S. Air Force (USAF) announced that Northrop Grumman Corporation was awarded the contract for Engineering and Manufacturing Development and early production for the Long Range Strike Bomber.

The Secretary of the Air Force announced that the new bomber would be called the B-21 “Raider,” in honor of the Doolittle Raiders of World War II.

The B-21 will operate under the direction of the USAF Global Strike Command. The B-21 will have both conventional and nuclear roles and will be capable of penetrating and surviving in advanced air defense environments.

The B-21 Raider will eventually replace existing B-1 and B-2 bomber aircraft. The beddown of the B-21 will take place through a series of three Main Operating Bases (MOB), referred to as MOB 1, MOB 2, and MOB 3. The Air Force proposes to beddown MOB 1, which includes B-21 Operational Squadrons, a B-21 Formal Training Unit, and a Weapons Generation Facility in this EIS. The additional two MOB locations (MOB 2 and MOB 3) would be evaluated in future NEPA analyses, after the location for MOB 1 is chosen.

The Environmental Impact Statement will consider two beddown locations for MOB 1, where B-21 Raider training and operational activities would take place: Dyess Air Force Base (AFB), Texas and Ellsworth AFB, South Dakota.

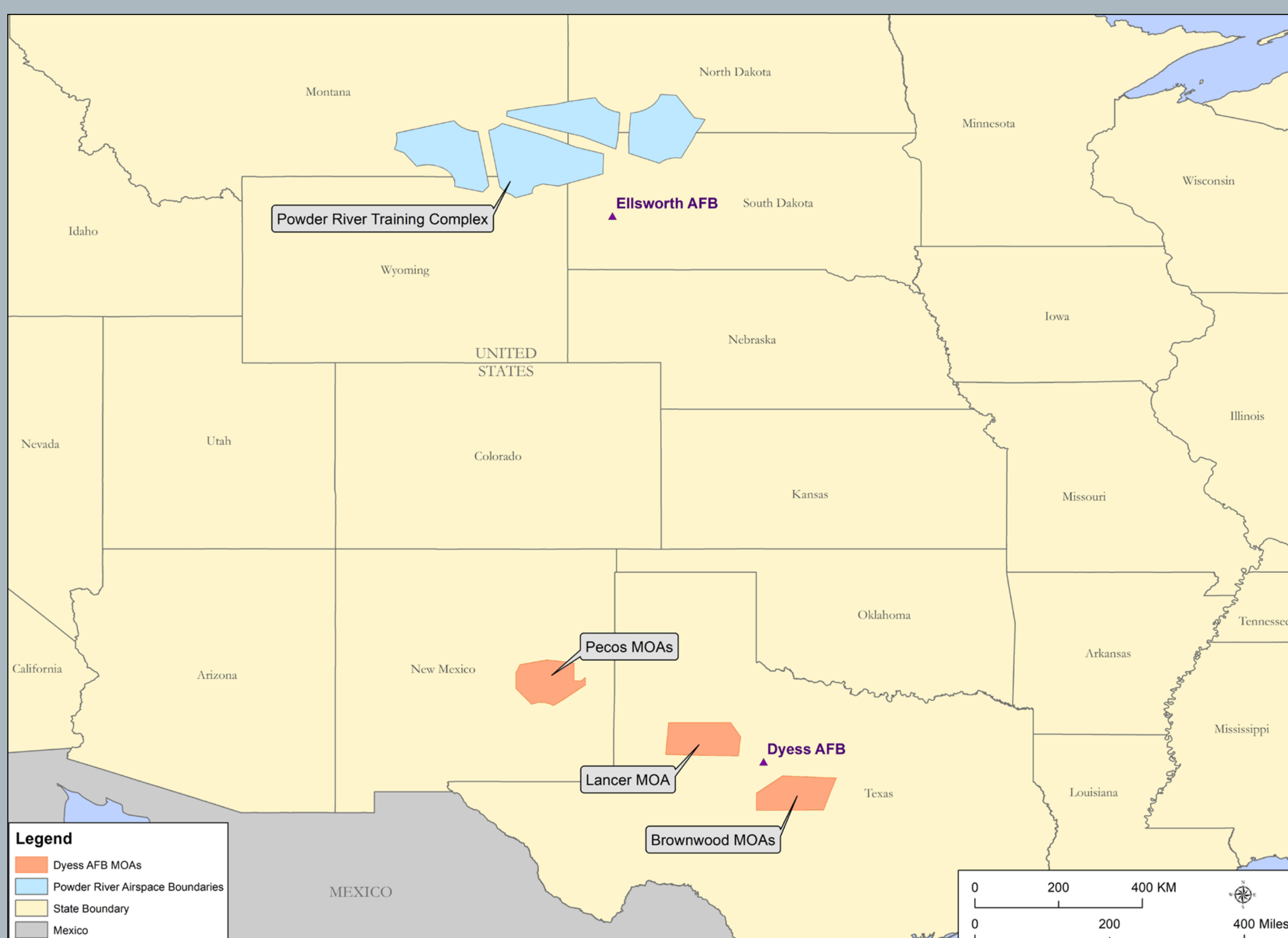
The map shows the airspace the USAF may utilize depending on the beddown location.

For Dyess AFB, the Following Airspace Might Be Utilized:

- ▶ Powder River Training Complex
- ▶ Brownwood Military Operating Area (MOA)
- ▶ Lancer MOA
- ▶ Pecos MOA

For Ellsworth AFB, the Following Airspace Might Be Utilized:

- ▶ Powder River Training Complex



This map shows the airspace the U.S. Air Force may utilize depending on the beddown location.

B-21 Main Operating Base 1 Beddown

at Dyess AFB, Texas, or Ellsworth AFB, South Dakota



ENVIRONMENTAL IMPACT STATEMENT



What are the Elements of the B-21 MOB 1 Beddown?

Personnel

- ▶ Personnel associated with the B-21 mission will include military personnel, contractors, and dependents at the chosen basing location.
- ▶ The B-21 mission would include initial training, transition/conversion training, refresher/qualification training, and instructor training.
- ▶ Students entering the B-21 program would be graduates of undergraduate aviator and maintainer training programs.
- ▶ Pilots and maintainers entering the program from another aircraft platform would go through a transitional training program, which would provide the requisite skills to meet the mission-qualified pilot or mission-qualified maintainer graduation criteria.
- ▶ MOB 1 Force Structure will consist of two Operational Squadrons and the B-21 Formal Training Unit.

Facilities and Infrastructure

- ▶ Existing facilities and infrastructure would be leveraged to maximize facility reuse and minimize cost.
- ▶ Requirements would differ depending on the basing location.
- ▶ Construction would allow both initial operational flying and flight training activities associated with both the Operations and Formal Training Unit squadrons.

Air Operations

- ▶ Both the Operations and Formal Training Unit squadrons would conduct air operations.
- ▶ Air operations would occur primarily during the day, with some operations at night.

Airspace and Range Utilization

- ▶ No changes to any existing airspace would occur.
- ▶ The Powder River Training Complex would be the primary training area for aircraft operations for either basing location.
- ▶ Dyess AFB would utilize additional airspace within the Brownwood Military Operating Area (MOA), Lancer MOA, and the Pecos MOA.
- ▶ The B-21 engine noise is expected to be quieter than the B-1B and about the same or quieter than the B-2.
- ▶ The B-21 is not expected to use low altitude training routes.

Weapons Generation Facility

- ▶ A facility that is unique to the B-21 mission, which would require new construction at the selected base.
- ▶ Provides safer and more secure location for the storage of Air Force nuclear munitions.
- ▶ Provides a consolidated facility with a single, controlled site that accommodates maintenance, storage, and support functions under one roof to provide enhanced operations and security measures for the entire mission.
- ▶ Munitions Storage Areas for each of the basing locations have adequate capacity for conventional Air Force assets.



B-21 Main Operating Base 1 Beddown

at Dyess AFB, Texas, or Ellsworth AFB, South Dakota



ENVIRONMENTAL IMPACT STATEMENT



What is the Purpose and Need for the Proposed Action?

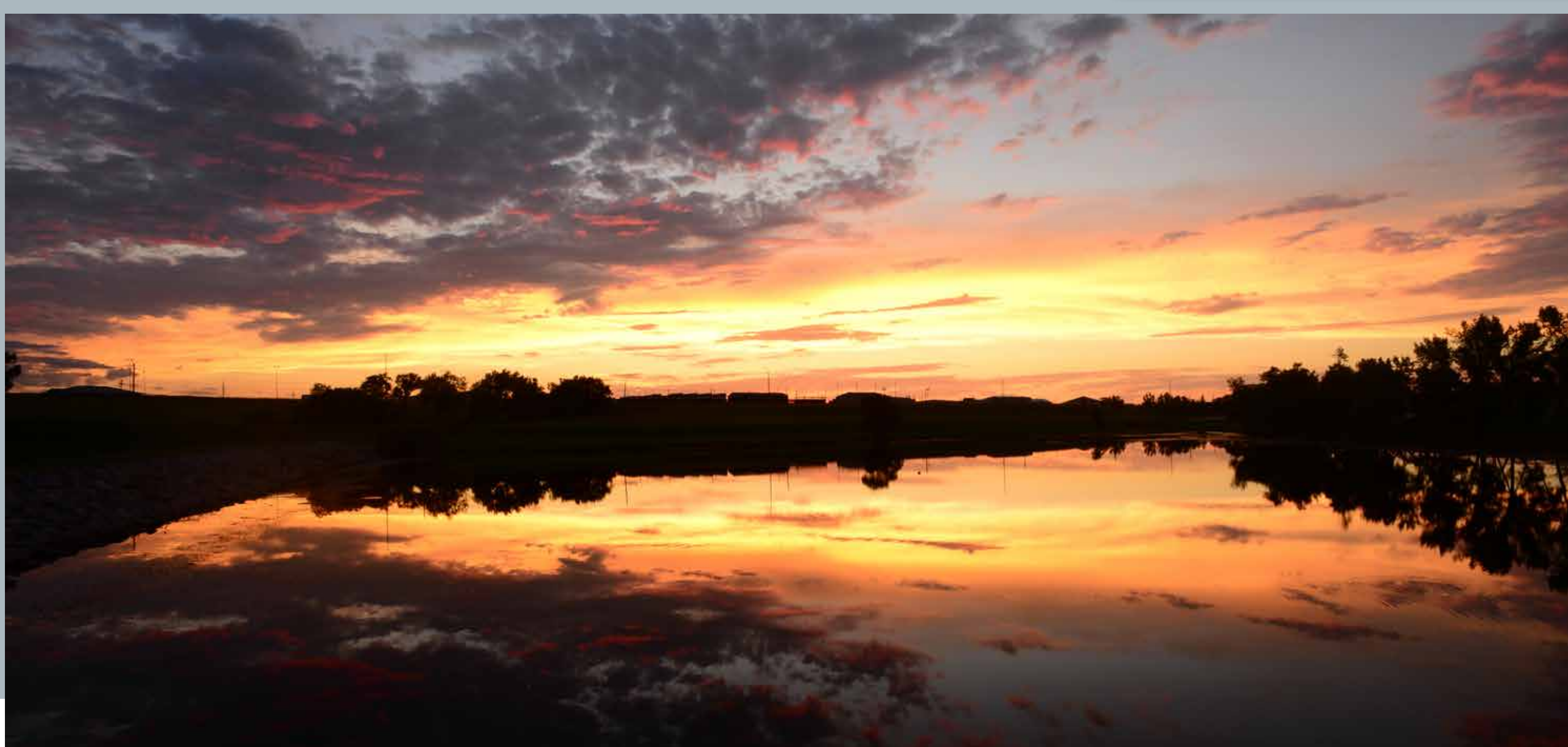
As stated in the 2018 National Defense Strategy, the global security environment is “characterized by overt challenges to the free and open international order and the re-emergence of long-term, strategic competition between nations”. The threats we face as a nation are increasingly transregional, multi-domain, and multi-functional. The U.S. Air Force’s existing bomber fleet lacks the technology required to ensure U.S. global security and long-range strike missions into the future. The U.S. Air Force must have advanced defense capabilities that discourage adversary nations from taking action and that can respond effectively to support national defense priorities. For deterrence to be successful, our adversaries must be aware that our weapons are reliable and will achieve the desired result regardless of enemy countermeasures.

The Air Force’s Need for the Proposed Action is to:

- ▶ Address the U.S. Air Force bomber fleet’s lacking technology by providing a new, more technologically capable system to support the nation’s defense and deterrence capabilities.
- ▶ Identify an installation that implements U.S. Air Force Global Strike Command’s B-21 MOB 1 mission objectives by providing an appropriate location that can:
 - Provide sufficient airfield, facilities, infrastructure, and airspace for B-21 training and operations.
 - Support personnel required for B-21 operation and maintenance.

The Air Force’s Purpose of the Proposed Action is to:

- ▶ Implement the goals of the National Defense Strategy by modernizing the U.S. bomber fleet capabilities.
- ▶ The B-21 Raider will:
 - Carry conventional payloads.
 - Support the nuclear triad by providing a visible and flexible nuclear deterrent capability.
 - Provide the only stealth bomber capability and capacity needed to deter and, if necessary, defeat our adversaries.
 - Assure allies and partners through the United States’ commitment to international treaties.



B-21 Main Operating Base 1 Beddown

at Dyess AFB, Texas, or Ellsworth AFB, South Dakota



ENVIRONMENTAL IMPACT STATEMENT



What Criteria was Used to Select Dyess AFB and Ellsworth AFB?

The U.S. Air Force used a three phased screening process to identify reasonable alternatives for MOB 1 locations.

- ▶ Phase 1 of the process consisted of developing and applying initial screening criteria for the new B-21 mission.
- ▶ Phase 2 involved reviewing the current Global Strike Command mission at each base.
- ▶ Phase 3 incorporated assessments of the missions that will be replaced by the B-21 mission, including an appropriate time phased reduction of B-1 and B-2 aircraft.

Phase 1: Initial Screening Criteria

During this phase, the U.S. Air Force looked at all U.S. bases and determined that only those with a current bombing mission could reasonably support the B-21 mission.

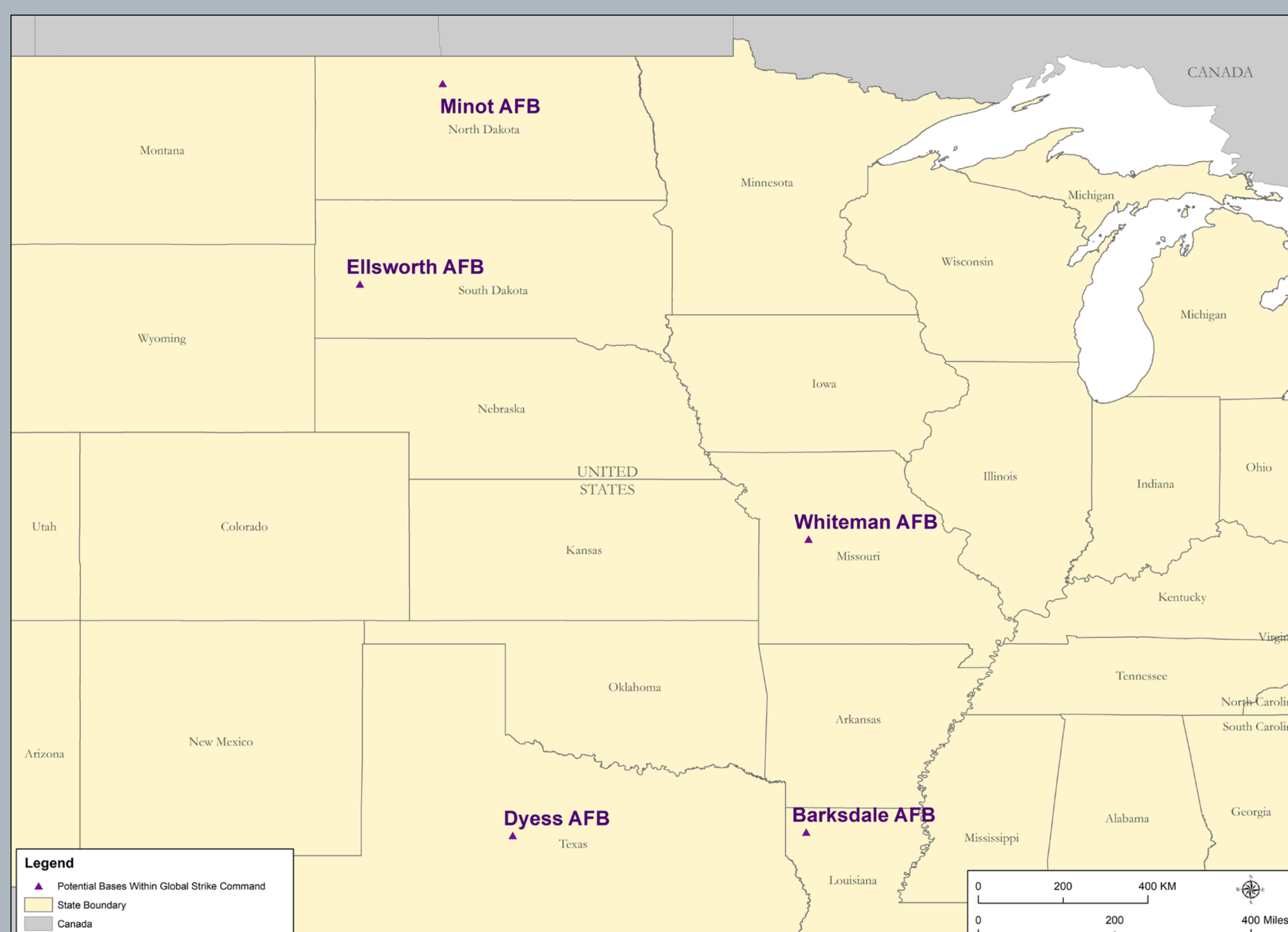
This process identified the following bomber bases as potential locations:

- ▶ Barksdale AFB, Louisiana
- ▶ Dyess AFB, Texas
- ▶ Ellsworth AFB, South Dakota
- ▶ Minot AFB, North Dakota
- ▶ Whiteman AFB, Missouri

Phase 2: Global Strike Command Screening Criteria

During this phase, the U.S. Air Force evaluated the ongoing Global Strike Command missions, and made the determination to eliminate Barksdale AFB, Louisiana and Minot AFB, North Dakota due to the continuation of the B-52 missions at these installations.

The map shows all of the locations within the Global Strike Command considered. Dyess AFB and Ellsworth AFB are the two alternatives being analyzed in this Environmental Impact Statement.



B-21 Main Operating Base 1 Beddown

at Dyess AFB, Texas, or Ellsworth AFB, South Dakota



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What Criteria was Used to Select Dyess AFB and Ellsworth AFB (continued)?

Phase 3: Time-Phased Aircraft Drawdown Screening Criteria

During this phase, the U.S. Air Force determined the timing involved in slowing down and ending other Global Strike Command missions that will be replaced by the B-21 mission. To ensure an uninterrupted deterrent related to the United States' nuclear capabilities, the U.S. Air Force determined that this transfer should occur after the initial beddown of Main Operating Base 1 (MOB 1) and that Whiteman AFB, Missouri will not be considered as a potential alternative for MOB 1 because the B-2 program will remain active at Whiteman AFB until an MOB 1 for the B-21 is established.

At the conclusion of all three phases, the two remaining locations for consideration for MOB 1 are:

- ▶ Dyess AFB, Texas
- ▶ Ellsworth AFB, South Dakota



B-21 Main Operating Base 1 Beddown

at Dyess AFB, Texas, or Ellsworth AFB, South Dakota



ENVIRONMENTAL IMPACT STATEMENT



What are the Commonalities Between the Dyess AFB Alternative and the Ellsworth AFB Alternative?

The Proposed Action includes common elements among both candidate bases, Dyess AFB, Texas and Ellsworth AFB, South Dakota. These commonalities are associated with personnel, aircraft operations, ordnance use, range utilization, and facilities.

Personnel Associated with the B-21 Mission:

- ▶ Includes military personnel, contractors, and dependents associated with two Operational Squadrons and one B-21 Formal Training Unit
- ▶ Approximately 3,900 military personnel
- ▶ Approximately 200 contractor personnel
- ▶ Approximately 2,300 spouses
- ▶ Approximately 6,700 children

Aircraft Operations Associated with the B-21 Mission:

- ▶ Approximately 9,100 total B-21 operations per year.
- ▶ Approximately 94.5 sorties per month, 40% of which would be conducted between the hours of 10 p.m. and 7 a.m.

Airspace and Range Utilization Mission:

- ▶ Powder River Training Complex would be the primary training area for B-21 aircraft operations for both installations.
- ▶ Dyess AFB would use additional airspace within the Brownwood Military Operating Area (MOA), Lancer MOA, Pecos MOA, and associated Air Traffic Control Assigned Airspaces (ATCAAs).
- ▶ The B-21 engine noise is expected to be quieter than the B-1 and about the same or quieter than the B-2.
- ▶ The B-21 is not expected to use low altitude training routes.

Weapons Generation Facilities (WGF) Associated with the B-21 Mission:

- ▶ The WGF is a facility that is unique to the B-21 mission and would be newly constructed at the selected base.
- ▶ Provides a safer and more secure location for storage, maintenance, and support functions of U.S. Air Force nuclear munitions within a consolidated facility.
- ▶ Requires an estimated construction footprint of 35 acres, which includes an approximate 52,000-square-foot building.
- ▶ Due to national security, details regarding the infrastructure associated with the WGF is not releasable.



B-21 Main Operating Base 1 Beddown

at Dyess AFB, Texas, or Ellsworth AFB, South Dakota



ENVIRONMENTAL IMPACT STATEMENT



What is the Dyess AFB Alternative?

Establish MOB 1 at Dyess AFB, Texas

The Dyess AFB Alternative would establish MOB 1 at Dyess AFB, Texas, which includes all common elements described on the commonalities board plus the construction of the facilities, infrastructure, and the Weapons Generation Facility (WGF), as seen in the figures below.

This figure shows the WGF location (in yellow) for Dyess AFB.



This figure shows the facilities and infrastructure planned areas of construction for Dyess AFB.

Due to operational security concerns, the specific locations of the facilities cannot be illustrated.

B-21 Main Operating Base 1 Beddown

at Dyess AFB, Texas, or Ellsworth AFB, South Dakota



ENVIRONMENTAL IMPACT STATEMENT

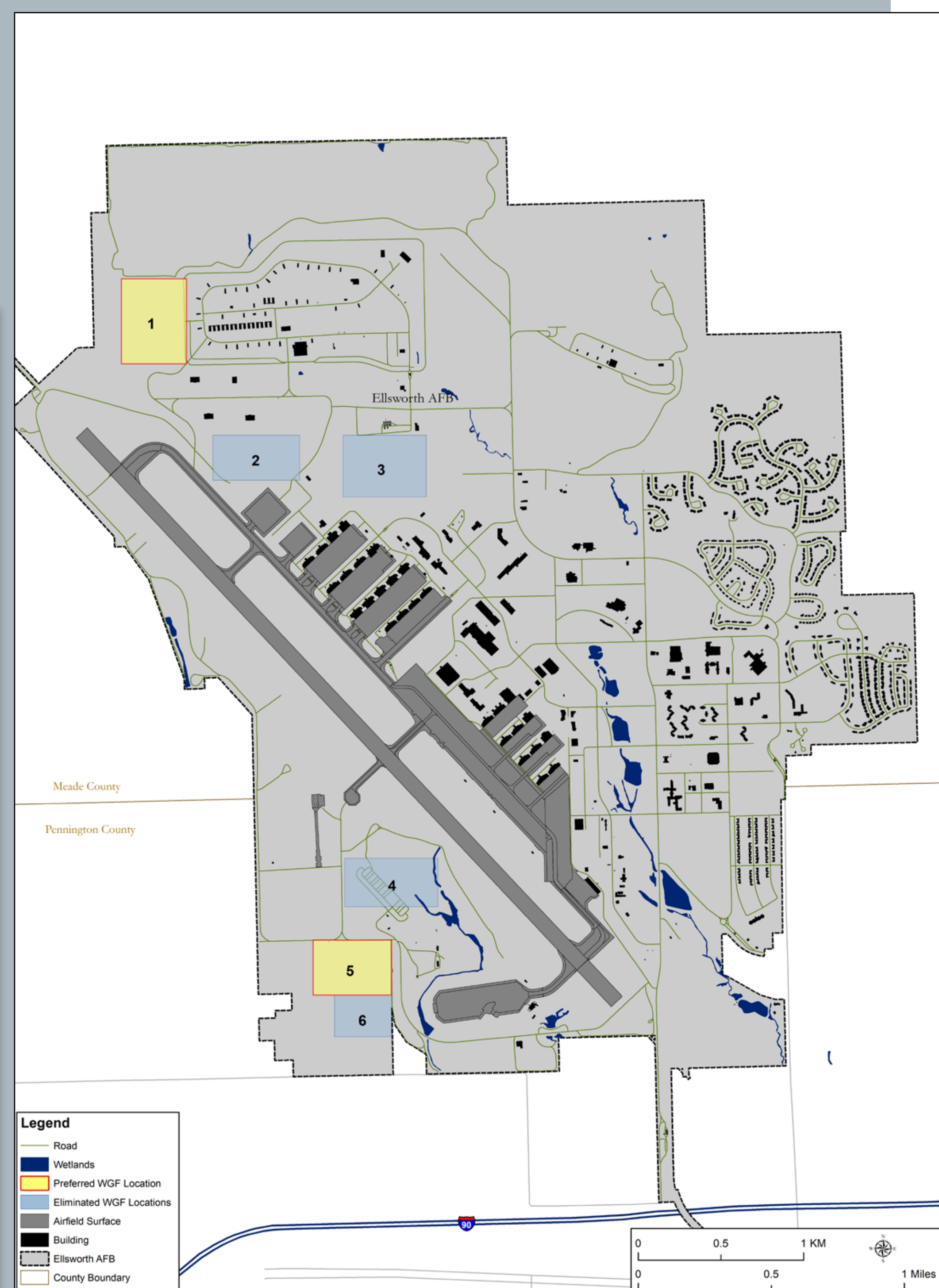
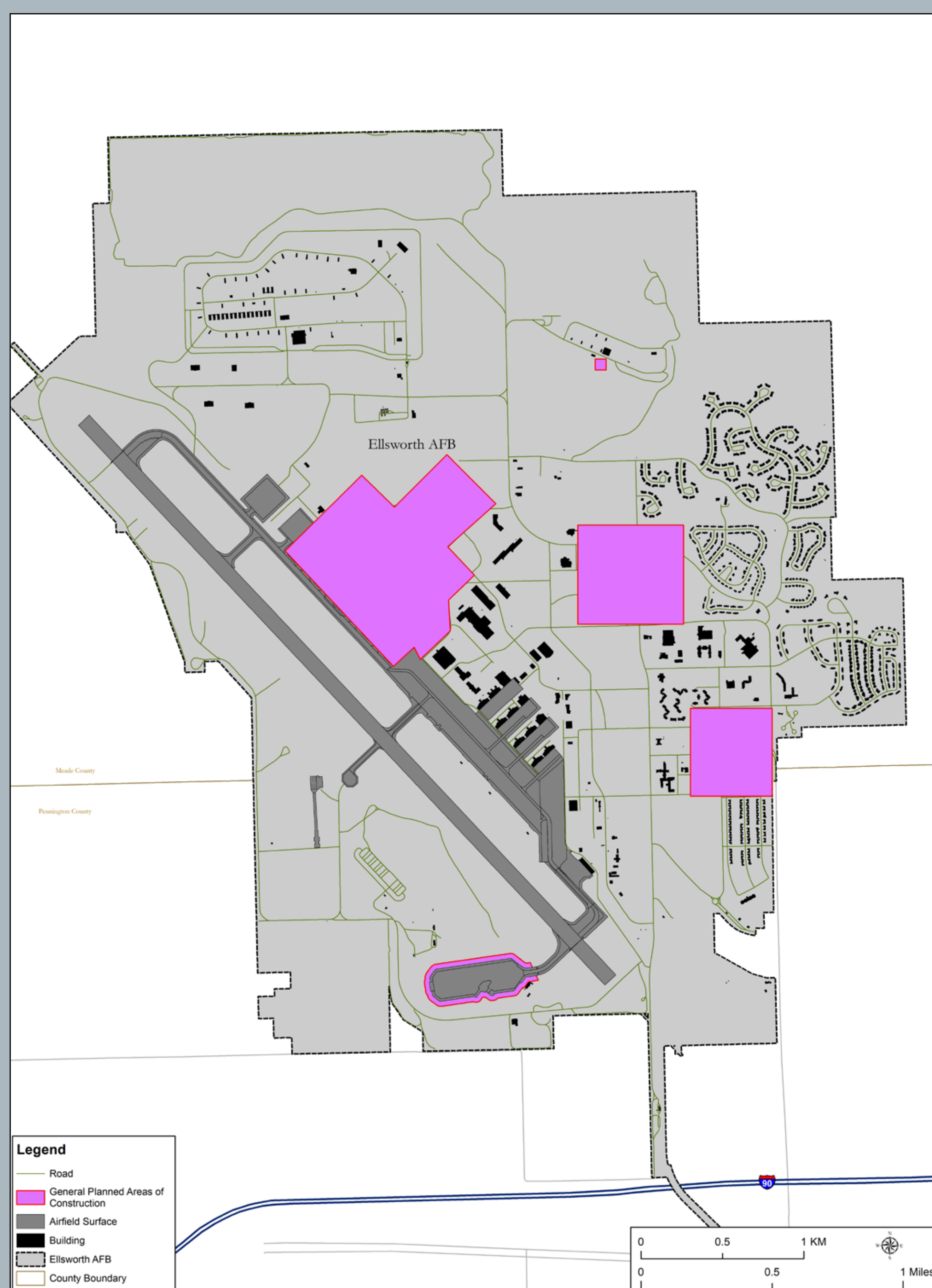


What is the Ellsworth AFB Alternative?

Establish MOB 1 at Ellsworth AFB, South Dakota

The Ellsworth AFB Alternative would establish MOB 1 at Ellsworth AFB, South Dakota, which includes all common elements described on the commonalities board plus the construction of the facilities, infrastructure, and the Weapons Generation Facility (WGF), as seen in the figures below. Alternative 2 has two sub-alternatives associated with the WGF as shown by the yellow boxes below.

This figure shows the WGF alternative locations (in yellow) for Ellsworth AFB.



This figure shows the facilities and infrastructure planned areas of construction for Ellsworth AFB.

Due to operational security concerns, the specific locations of the facilities cannot be illustrated.

B-21 Main Operating Base 1 Beddown

at Dyess AFB, Texas, or Ellsworth AFB, South Dakota



ENVIRONMENTAL IMPACT STATEMENT



What is the No Action Alternative?

The National Environmental Policy Act requires the alternatives analysis in an Environmental Impact Statement to include a No Action Alternative.

The No Action Alternative:

- ▶ Provides a baseline against which decision makers can compare the magnitude of potential environmental effects of the action alternatives. The baseline is typically considered the affected environment.
- ▶ The B-21 beddown would not occur at either Dyess AFB, Texas or Ellsworth AFB, South Dakota and each individual installation would continue their current missions at current levels.
- ▶ There would be no new construction associated with the No Action Alternative at both locations. However, there would be annually planned demolition, construction, and maintenance activities, which will be reflected in the cumulative impacts analysis in the EIS.

