Montana Army National Guard

Environmental Assessment of the Construction and Operation of a Permanent Limited Army Aviation Support Facility in Billings, Montana

DOA Architecture and Engineering # 2023-33-01

February 2024

Environmental Assessment Organization

This Environmental Assessment (EA) evaluates the potential physical, environmental, cultural, and socioeconomic impacts associated with the construction and operation of a permanent Limited Army Aviation Support Facility (LAASF) in Billings, Montana.

The potential effects of this Federal Proposed Action are analyzed as required by the National Environmental Policy Act of 1969 (NEPA; *42 United States Code [U.S.C.] 4321 et seq*.), the Council on Environmental Quality (CEQ) Regulations Implementing the Procedural Provisions of NEPA (*40 Code of Federal Regulations [CFR] Parts 1500-1508*), and *Environmental Analysis of Army Actions*, Final Rule (*32 CFR Part 651; 29 March 2002*). This EA will facilitate the decision-making process regarding the Proposed Action and its alternatives, and is organized as follows:

- **EXECUTIVE SUMMARY:** Describes the Proposed Action and its considered alternatives; summarizes the physical, environmental, cultural, and socioeconomic effects; and compares potential effects associated with the two alternatives, the Proposed Action Alternative (Option 1 and Option 2) and the No Action Alternative.
- **SECTION 1. PURPOSE, NEED, AND SCOPE:** Summarizes the purpose of and need for the Proposed Action, provides relevant background and scoping information, and describes the scope of the EA.
- **SECTION 2. DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES:** Describes the Proposed Action and alternatives considered.
- **SECTION 3. AFFECTED ENVIRONMENT:** Describes relevant components of the existing physical, environmental, cultural, and socioeconomic setting (within the Region of Influence) of the considered alternatives.
- **SECTION 4. ENVIRONMENTAL CONSEQUENCES:** Identifies potential direct, indirect, and cumulative physical, environmental, cultural, and socioeconomic effects of implementing the Proposed Action and alternatives, and identifies proposed mitigation and management measures, where appropriate.
- **SECTION 5. COMPARISON OF ALTERNATIVES AND CONCLUSIONS:** Compares the environmental effects of the considered alternatives and summarizes the significance of individual and expected cumulative effects of these alternatives.
- **SECTION 6. REFERENCES:** Provides bibliographical information for cited sources.
- **SECTION 7. LIST OF PREPARERS:** Identifies document preparers and their areas of expertise.
- **SECTION 8. AGENCIES AND INDIVIDUALS CONSULTED:** List agencies and individuals consulted during the preparation of the EA.

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Environmental Assessment Signature Page

LEAD AGENCY:	National Guard Bureau (NGB)
COOPERATING AGENCIES:	None
TITLE OF PROPOSED ACTION:	Construction and Operation of a Permanent Limited Army Aviation Support Facility in Billings, Montana
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ABSTRACT:
The Army National Guard prepares helicopter crews to effectively fight and serve on missions from security and combat to disaster relief and rescue operations. Currently, Company A of the 1-189th General Support Aviation Battalion operates from a hangar leased from Billings Flying Service adjacent to the Billings Logan International Airport. This Environmental Assessment addresses the Montana Army National Guard (MTARNG) proposal to construct a permanent facility out of which it would conduct operations in Eastern Montana. The permanent facilities are needed to provide larger, and better equipped training facilities, secure helicopter storage, and adequate security features and setbacks.

The Proposed Action is to construct a permanent Limited Army Aviation Support Facility (LAASF) training buildings, hangar, and apron adjacent to the Billings Logan International Airport in Billings, Montana. Up to six helicopters that are currently operating out of a leased hangar immediately to the east of the proposed location would be relocated to the new facilities. The No Action Alternative is to continue to serve Eastern Montana training and emergency response activities from the leased LAASF hangar.

Each alternative is assessed for its environmental effects on land use, air quality, noise, water resources, biological resources, socioeconomics, environmental justice, infrastructure, hazardous and toxic materials and wastes; geology, topography, and soils; prime and unique farmland; surface water, wetlands, and floodplains; and cultural resources.

Executive Summary

Introduction

In Montana and around the country, the Army National Guard (ARNG) prepares helicopter crews to effectively fly and serve on missions from security and combat to disaster relief and rescue operations. These flight operations are flown out of Army Aviation Support Facilities or AASFs. An AASF is a facility that provides maintenance, modification of ARNG equipment, operations, and logistical support for seven or more ARNG aircraft. There are approximately 100 ARNG AASFs situated around the country. Montana Army National Guard (MTARNG) operates an AASF at the Helena Regional Airport in Western Montana (Figure 1-1 in the EA). The Helena AASF is co-located with the Helena Aviation Readiness Center and a hangar for fixed-wing Beechcraft C-12 Huron transport aircraft. The 1-189th General Support Aviation Battalion is stationed at this location where MTARNG trains soldiers, maintains and repairs helicopters, and deploys personnel to address emergency or military situations when needed. Flights leave and return via the Helena Regional Airport runway.

As of January 2023, MTARNG expanded its aviation capabilities by operating a Limited AASF (LAASF) out of an existing 12,000-square-foot temporary hangar in Billings, Montana. An LAASF provides the same functions as an AASF but supports six or fewer aircraft. This action was evaluated in the *Development and Operation of a Limited Army Aviation Support Facility in Billings, Montana Environmental Assessment* (MTARNG 2023a) and the *Development and Operation of a Limited Army Aviation Support Facility in Billings, Montana Finding of No Significant Impact* (MTARNG 2023b).

The State of Montana was recently awarded American Rescue Plan Act (ARPA) funding for the construction of a permanent LAASF facility on the 40 acres west of the leased hangar. With the commencement of design and identification of funding for construction, this action is now considered "ripe" for review. This Environmental Assessment (EA) addresses environmental impacts associated with the siting and construction of the permanent facility, moving the operations from the leased hangar to the permanent facility, and anticipated changes in operations. If constructed, operations identified currently conducted at the leased hangar would be moved to and conducted from the permanent LAASF. The analyses of the operations in the aforementioned *Development and Operation of a Limited Army Aviation Support Facility in Billings, Montana Environmental Assessment* (MTARNG 2023a) have been incorporated into this EA by reference per the Council on Environmental Quality (CEQ) Regulations Implementing the Procedural Provisions of the National Environmental Policy Act (NEPA) (*40 Code of Federal Regulations [CFR] Part* § 1501.12, *Incorporation by Reference*).

The State of Montana and MTARNG has prepared this EA to analyze the potential environmental impacts of constructing and operating from a permanent LAASF. This EA has been prepared in accordance with the National Environmental Policy Act of 1969 (*42 United States Code [U.S.C.] 4321 et seq.*), the CEQ Regulations Implementing the Procedural Provisions of NEPA (*40 CFR Parts 1500-1508*), and *32 CFR Part 651* (*Environmental Analysis of Army Actions*, Final Rule).

Purpose and Need

The purpose of the Proposed Action is to provide a government-owned permanent facility that meets regulations and requirements and can accommodate MTARNG aviation training and maintenance needs in Eastern Montana and provide secure operations and storage for the long term. A permanent LAASF facility is needed to provide:

- Adequate long-term training and classroom facilities
- Secure storage and apron accommodating up to six helicopters
- Required minimum antiterrorism/force protection (AT/FP) measures

- Compliance with National Guard and Department of Defense (DoD) requirements to operate from a government-owned permanent facility

Alternatives Considered

During the initial alternatives development, two action alternatives the Proposed Action, stationing at the Billings Armed Forces Reserve Center (BAFRC) with helicopter operations remaining at the leased hangar, and the No Action alternative were considered.

The three alternatives were screened based on four screening criteria. These include:

1) Adequate long-term training and classroom/admin facility adjacency to an airport with related services
2) Secure storage of up to six helicopters and space to conduct all LAASF maintenance activities
3) Ability to provide security and minimum AT/FP requirements
4) Government-owned facilities, preferably on a military installation

The use of the BAFRC would be limited in availability based on other activities and units that currently use the BAFRC. There are no hangar facilities at the BAFRC, so the problems inherent with the long-term use of the leased hangar are also present in this alternative. For these reasons, this alternative was eliminated from further consideration in this EA.

Proposed Action

The Proposed Action is to construct a permanent LAASF in Billings, Montana approximately 620 feet west of the leased hangar. The proposed permanent facility would include approximately 66,000 square feet for the primary facility (plus parking and apron) compared to the 12,000 square foot leased hangar (plus parking and apron). While there would still be a small deficit in allocated square footage (54,163 square feet), this deficit would be substantially reduced. Another option would be to construct an AASF. An AASF is a minimum of 5,000 square feet larger, which allows for additional functionality, including flight instructor areas, learning and simulation areas, flight surgeon exam area, passenger waiting/briefing areas, aviation emergency operations center, fitness area, and certain maintenance shop areas. An LAASF is appropriate for this location based on one Company being stationed at this facility and the amount of equipment and aircraft associated with the Company.

Once the new LAASF is constructed, all operations at the neighboring leased facility would cease. In addition to the activities that were previously analyzed for operations from the leased hangar, operating from a larger, permanent MTARNG facility would accommodate the following additional activities that are allowed at an LAASF but not available at the leased hangar. These include:

- Aircraft wash
- Improved classroom and administrative capabilities
- Additional flight runups
- Avionics and engine maintenance
- Store petroleum, oil, and lubricants (POL)
- Store hazardous wastes on site

The leased hangar is authorized to store up to six helicopters, but there is only space to accommodate four. While this is not a change in what is allowable, it would be a change in the training being conducted. However, all impacts assessed in the EA for the leased hangar assumed the presence and use of six aircraft.

Two variations or Options of the Proposed Action are considered, with the difference between the two being the placement of the helipad and clear zones. Under the Proposed Action Option 1, the LAASF would be permanently located on a 40-acre parcel west of the Billings Logan International Airport on property owned by the State of Montana (refer to Figure 2-2 in EA). Under the Proposed Action Option

2, the LAASF would be permanently located on a 40-acre parcel west of the Billings Logan International Airport on property owned by the State of Montana, and the helicopter pad, clear zones and accident potential zone would be located on 2 acres of land owned by Billings/Airport (refer to Figure 2-3 in EA).

Under the Proposed Action (both Options), necessary infrastructure to provide a long-term LAASF facility in Billings would be constructed. The facilities would include the construction of a permanent hangar and classroom/administration building, apron, parking areas, utilities, stormwater management, access road, security fencing and AT/FP setbacks.

The property would be accessed from Highway 3 via AJ Way and approximately 1,000 feet of new access road. An aircraft maintenance hangar, classroom/administrative areas, apron, flammable storage, parking areas, fuel containment area, and helicopter wash area would be constructed, along with curbing, sidewalks, utilities, etc. The hangar would include the following integral features: backup/emergency generator, paved organizational vehicle parking, unheated aircraft storage hangar, and fire suppression for maintenance hangars and aircraft storage hangar. Construction would also include all utility services (includes connection to city water and sewer), information systems, fire detection and alarm systems, roads, sidewalks, curbs, gutters, stormwater drainage, personal vehicle parking areas, and site improvements.

No Action Alternative

Under the No Action Alternative, the operations as described in Section 2.2 would continue, operating from the leased hangar on Billings Flying Service (BFS) property. Classroom training would continue to take place in portable buildings that have been collocated on the leased hangar property. MTARNG would continue to use the shared apron and store up to four of the allotted six helicopters in the hangar. Some fencing has been constructed; however, AT/FP setback cannot be maintained due to the shared apron and proximity to adjacent BFS facilities. While MTARNG can operate on a temporary basis assuming the risk of associated non-compliant AT/FP, permanent waivers are not allowable. This alternative fails to meet the purpose and need of this action because it would not provide adequate hangar facilities for up to six helicopters, provide minimum AT/FP measures, or comply with NGB and DoD requirements to operate only temporarily from leased facilities and move to permanent facilities, preferably on government-owned property promptly (National Guard Regulation 405-80 *Real Estate, Army National Guard Program* and DoD Instruction 4165.70 *Real Property Management*). However, as required by NEPA, the No Action Alternative is evaluated in detail and provides a comparison by which the impacts of the Proposed Action Alternative and the two Options can be determined.

Public and Agency Involvement

Federal agencies, federally recognized Native American tribes, state agencies, and local agencies were all requested to contribute to this EA through the Interagency/Intergovernmental Coordination of Environmental Planning (IICEP) process, or scoping, which assisted the MTARNG in determining the appropriate scope for this EA. During scoping, letters are distributed soliciting concerns, issues, and information as it relates to the project. Consideration of the views and information from all interested persons promotes open communication and enables better decision making by the MTARNG and National Guard Bureau. All persons and organizations having potential interest in the Proposed Action, including minority, low income, and disadvantaged communities are urged to participate in the NEPA environmental analysis process. **Table ES-1** provides the responses received during the scoping period.

MTARNG contacted ten Tribes, and one responded during scoping. The Cheyenne Nation responded on 4 April 2023 and requested information regarding the current proposed action cultural resources management initiatives surrounding the project and whether there is an opportunity for tribal

participation during a pedestrian survey at the site. Finally, previous cultural surveys conducted within 0.25 mile of the project area were requested. Surveys were provided and several attempts to invite the Nation to walk along during cultural survey were extended. The Nation indicated they did not wish to visit the site. The State Historic Preservation Office (SHPO) was provided a scoping letter and responded on 12 April 2023 (Appendix A). No specific information was available, and the SHPO referred to the summary of identified cultural resources that they provided during consultation for leasing the hangar.

Table ES-1. Scoping Responses Received

Agency/Organization	Comment	Date Received
U.S. Fish and Wildlife Service	No comments or concerns were identified	03/09/2023
Yellowstone County Sheriff	Provided support for the project – no concerns identified	03/14/2023
State Historic Preservation Office	SHPO did not have additional cultural information to share. Information summarized on 13 April 2022 between MTARNG and SHPO is the most current information. Consultation dated 8 June 2021 summarized the resources on the parcels	03/21/2023
Billings Logan International Airport	Correct the map, MTARNG to respond to noise complaints, and the airport will work with MTARNG to site the stormwater easement	03/28/2023
Billings Planning Department	MTARNG to respond to noise comments, the property will be annexed into Billings and rezoned to an appropriate use (complete), and coordinate with the Billings Public Works regarding traffic impacts and Highway 3 ingress/egress	03/28/2023
Cheyenne Nation	Inquired about cultural resources management initiatives, opportunity to participate in pedestrian survey, and for previous surveys conducted within 0.25 mile. Information was provided, and after reviewing, the Nation indicated they did not wish to visit the site.	04/04/2023 05/10/2023

The opportunity for agency and public input on the EA and Draft Finding of No Significant Impact (FONSI) is provided during a 15-day public comment period. The document is available upon request and in the Billings Public Library. Persons interested in receiving the EA or the FONSI may contact Rebekah Myers at the Montana Department of Military Affairs Environmental Office. Notices of Availability announcing the availability of these documents was published in the *Billings Gazette*. The MTARNG will reply directly to comments received during the second public comment period.

Environmental Consequences

The Proposed Action was evaluated to determine its potential direct or indirect impact(s) on the physical, environmental, cultural, and socioeconomic aspects of the installation and surrounding area. Resource areas evaluated include:

- *Land Use*
- *Air Quality*
- *Noise*
- *Geology, Topography, and Soils*
- *Water Resources*
- *Biological Resources*
- *Cultural Resources*
- *Socioeconomics and Protection of Children*
- *Environmental Justice*
- *Infrastructure*
- *Hazardous and Toxic Materials and Wastes*

The Preferred Action Alternative would result in the impacts identified throughout **Section 4.0**. **Table ES-2, Summary of Impacts** includes a discussion of potential impacts associated with constructing an LAASF in Billings.

Table ES-2. Impact Comparison Matrix

Resource Area	No Action Alternative	Proposed Action Alternative – Option 1	Proposed Action Alternative – Option 2
Land Use	No impact would occur.	Drainage improvements would require an easement from Billings/Billings Logan International Airport. The Proposed Action would comply with City zoning and land use designations. ~~Landing and takeoff would be limited to the west to avoid land use conflicts.~~ The project would alter visual character but would be consistent with surrounding airport development. Other development is occurring in the area consistent with City and County plans. No cumulative impact is anticipated.	Same as Option 1 except drainage, helipad, and clear zone improvements would require an easement from Billings/Billings Logan International Airport~~, and there would be no landing/ takeoff land use conflict~~.
Air Quality	No changes in pollutant emissions including Greenhouse Gases (GHGs) would occur. Existing operations would continue from the leased hangar from the BFS property.	Emissions associated with operating from a permanent LAASF (including additional runups) would be small (less than 6.8 tons per year) and well below the General Conformity Thresholds. There would be an approximately 51 CO_2e increase in GHG emissions over existing because the larger LAASF area that would require heating and electricity to operate and additional flight activity. The emissions generated would continue to contribute to climate change. A Record of Non-Applicability was issued on 22 March 2022.	Same as Option 1.
Noise	Ongoing MTARNG activities at the leased hangar would not result in a change in noise.	While there would be an increase in noise levels under Option 1 of the Proposed Action, noise levels at all representative Points of Interest that were modeled would meet federal, state, and local noise regulations. The changes in noise would not result in any incompatible land use. Three percent of the flights would occur at night. Night flights would occur primarily in the fall/winter when it gets dark early, so nighttime noise is not anticipated to be elevated regularly. Noise abatement and fly-neighborly programs will be employed. Noise contours include the cumulative noise of the leased	Same as Option 1. The noise contours vary slightly but would not change impacts.

Resource Area	No Action Alternative	Proposed Action Alternative – Option 1	Proposed Action Alternative – Option 2
		hangar and LAASF facility. Cumulative impact would be less than significant.	
Geology, Topography, and Soils	No impact would occur.	No impact to overall topography, geologic landforms, or soil types in the project area. Soil would be disturbed during construction, which may impact soil quality and properties, increase potential for invasive weeds, and increase erosion. Option 1 would convert approximately 40 acres of farmland. Best management practices (e.g., silt fences, reseeding disturbed areas, etc.) would minimize the effects on soils. Other surrounding construction would similarly contribute to conversion of farmland and soil disturbance. Cumulative impacts would be minor.	Same as Option 1 with the conversion of approximately 42 acres. The additional 2 acres is not in farmland production.
Surface Water Resources	No impact would occur.	Minor increased water use during construction. Stormwater would be conveyed to a tributary to Alkali Creek. Stormwater would comply with Billings requirements and the Stormwater Pollution Prevention Plan. Minor surface water impacts. No anticipated cumulative impacts.	Same as Option 1 with slight increased runoff potential due to a greater amount (no more than 2 acres) of impervious surfaces.
Biological Resources	No impact would occur.	The Proposed Action would disturb approximately 40 acres of habitat (farm fields). No impacts to ESA-listed species. Potential negligible, adverse impacts to migratory birds. Wildlife inhabiting the project area likely have habituated to noise due to the presence of the existing airport. Other construction, new development, and flights would contribute to biological impacts but cumulatively the impacts would be minor.	Same as Option 1 but would disturb 2 additional acres.
Cultural Resources	No impact would occur.	No impact would occur.	Same as Option 1.
Socioeconomics Safety Environmental Justice	No change in demand on social or emergency services and no change in socioeconomics would occur. No Environmental Justice	Impacts would be the same as the No Action Alternative. Local emergency services would not be negatively affected and the likelihood of a crash over a populated area is negligible. There are no	Same as Option 1.

Resource Area	No Action Alternative	Proposed Action Alternative – Option 1	Proposed Action Alternative – Option 2
Protection of Children	populations present. Children would continue to be supervised if present at the leased hangar.	Environmental Justice populations near the site. Children would not be placed at an increased risk. No cumulative impacts anticipated.	
Infrastructure	There would be no change from current traffic or road conditions. No change in utilities or flight operations.	No permanent change to traffic or road infrastructure. Minor increase in traffic during construction. Utilities would be extended from AJ Way to service the LAASF. Proposed Action would not adversely affect airport operations. Utilities would not be overwhelmed by the additional demand. Cumulative impact would be negligible.	Same as Option 1.
Hazardous and Toxic Materials and Waste	Continued potential for accidental petroleum, oil, or lubricant spills during aircraft refueling, general maintenance, and parking personal vehicles at the leased hangar on the BFS property.	Potential for accidental petroleum, oil, or lubricant spills during aircraft refueling, general maintenance, and parking personal vehicles at the LAASF would be negligible due to the standard practices including secondary containment. No cumulative impacts anticipated.	Same as Option 1.

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LIST OF ACRONYMS

$\mu g/m^3$	microgram per cubic meter
AASF	Army Aviation Support Facility
AFCEC	Air Force Civil Engineer Center
ANSI	American National Standards Institute
APE	Area of Potential Effect
APU	Auxiliary Power Unit
APZ	accident potential zones
AR	Army Regulation
ARNG	Army National Guard
ARPA	American Rescue Plan Act
ASA	Acoustical Society of America
AT	Annual Training
AT/FP	Antiterrorism/Force Protection
BAFRC	Billings Armed Forces Reserve Center
BFS	Billings Flying Service
BG	Block Group
BMP	Best Management Practice
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CH-47	Chinook
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
CT	Census Tract
dB	decibels
dBA	A-weighted decibels
DMA	Department of Military Affairs
DNL	Day-Night Average Sound Level
DoD	Department of Defense
EA	Environmental Assessment
EIS	Environmental Impact Statement
ESA	Endangered Species Act
FEMA	Federal Emergency Management Act
FICON	Federal Interagency Committee on Noise
FICUN	Federal Interagency Committee on Urban Noise
FONSI	Finding of No Significant Impact
FY	Fiscal Year
GHG	greenhouse gas
g/m^2	grams per square meter
HEMTT	Heavy Expanded Mobility Tactical Truck
HMWMP	Hazardous Material and Waste Management Plan
Humvees	High Mobility Multipurpose Wheeled Vehicles
IICEP	Interagency/Intergovernmental Coordination of Environmental Planning

LIST OF ACRONYMS

IPaC	Information for Planning and Consultation
LAASF	Limited Army Aviation Support Facility
LFP	low flight pattern
LMTV	Light Military Tactical Vehicles
LTO	landing and take-off
MBMG	Montana Bureau of Mines and Geology
MTARNG	Montana Army National Guard
MTNHP	Montana Natural Heritage Program
NEPA	National Environmental Policy Act
NGB	National Guard Bureau
NHPA	National Historic Preservation Act of 1966
NOA	Notice of Availability
Nox	Nitrous oxides
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
$PM_{2.5}$	Particulate matter 2.5 microns or less in diameter
PM_{10}	Particulate matter 10 microns or less in diameter
PMCS	Preventative maintenance checks and services
POI	points of Interest
POL	petroleum, oil, and lubricants
ppb	parts per billion
ppm	parts per million
RCRA	Resource Conservation and Recovery Act
RPLANS	Real Property Planning and Analysis System
SHPO	State Historic Preservation Office
Sox	Sulfur oxides
SPCC	Spill Prevention, Control, and Countermeasure
SWPPP	Stormwater Pollution Prevention Plan
THPO	Tribal Historic Preservation Office
UFC	Unified Facilities Code
UH-60	Blackhawk
UH-72	Lakota
U.S.C.	United States Code
USEPA	U.S. Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
UST	underground storage tank
VOC	volatile organic compounds

SECTION 1.0 Purpose and Need for the Proposed Action

1.1 Introduction

In Montana and around the country, the Army National Guard (ARNG) prepares helicopter crews to effectively fly and serve on missions from security and combat to disaster relief and rescue operations. These flight operations are flown out of Army Aviation Support Facilities or AASFs. An AASF is a facility that provides maintenance, modification of ARNG equipment, operations, and logistical support for seven or more ARNG aircraft. There are approximately 100 ARNG AASFs situated around the country. Montana Army National Guard (MTARNG) operates an AASF at the Helena Regional Airport in Western Montana (Figure 1-1), which is co-located with the Helena Aviation Readiness Center. The 1-189th General Support Aviation Battalion is stationed at this location where MTARNG trains soldiers, maintains and repairs helicopters, and deploys personnel to address emergency or military situations when needed. As of January 2023, MTARNG expanded its aviation capabilities by having Company A of the 1-189th General Support Aviation Battalion operate a Limited AASF (LAASF) out of an existing 12,000-square-foot temporary hangar in Billings, Montana to better serve Eastern Montana. An LAASF provides many of the same functions as an AASF but supports six or fewer aircraft. This action was evaluated in the *Development and Operation of a Limited Army Aviation Support Facility in Billings, Montana Environmental Assessment* (MTARNG 2023a) and the *Development and Operation of a Limited Army Aviation Support Facility in Billings, Montana Finding of No Significant Impact* (MTARNG 2023b). Additional information regarding LAASF and AASFs is provided in Section 2.2.

The State of Montana was recently awarded American Rescue Plan Act (ARPA) funding for the construction of a permanent LAASF facility on the 40 acres west of the leased hangar. With the commencement of design and identification of funding for construction, this action is now considered "ripe" for review. This Environmental Assessment (EA) addresses environmental impacts associated with the siting and construction of the permanent facility, moving the operations from the leased hangar to the permanent facility, and anticipated changes in operations. If constructed, operations currently conducted at the leased hangar would be moved to and conducted from the permanent LAASF. The analyses of the operations is provided in the aforementioned *Development and Operation of a Limited Army Aviation Support Facility in Billings, Montana Environmental Assessment* (MTARNG 2023a) have been incorporated into this EA by reference per the Council on Environmental Quality (CEQ) Regulations Implementing the Procedural Provisions of NEPA (*40 Code of Federal Regulations [CFR] Part* § 1501.12, Incorporation by Reference and the EA is available online at www.mt.gov/dma/CFMO/index.

The State of Montana and MTARNG has prepared this EA to analyze the potential environmental impacts of constructing a permanent LAASF and minor changes in operations from those currently underway at the leased hangar. This EA has been prepared in accordance with the National Environmental Policy Act of 1969 (NEPA) (*42 United States Code [U.S.C.] 4321 et seq.*), the CEQ Regulations Implementing the Procedural Provisions of NEPA (*40 CFR Parts 1500-1508*), and *32 CFR Part 651* (*Environmental Analysis of Army Actions*, Final Rule).

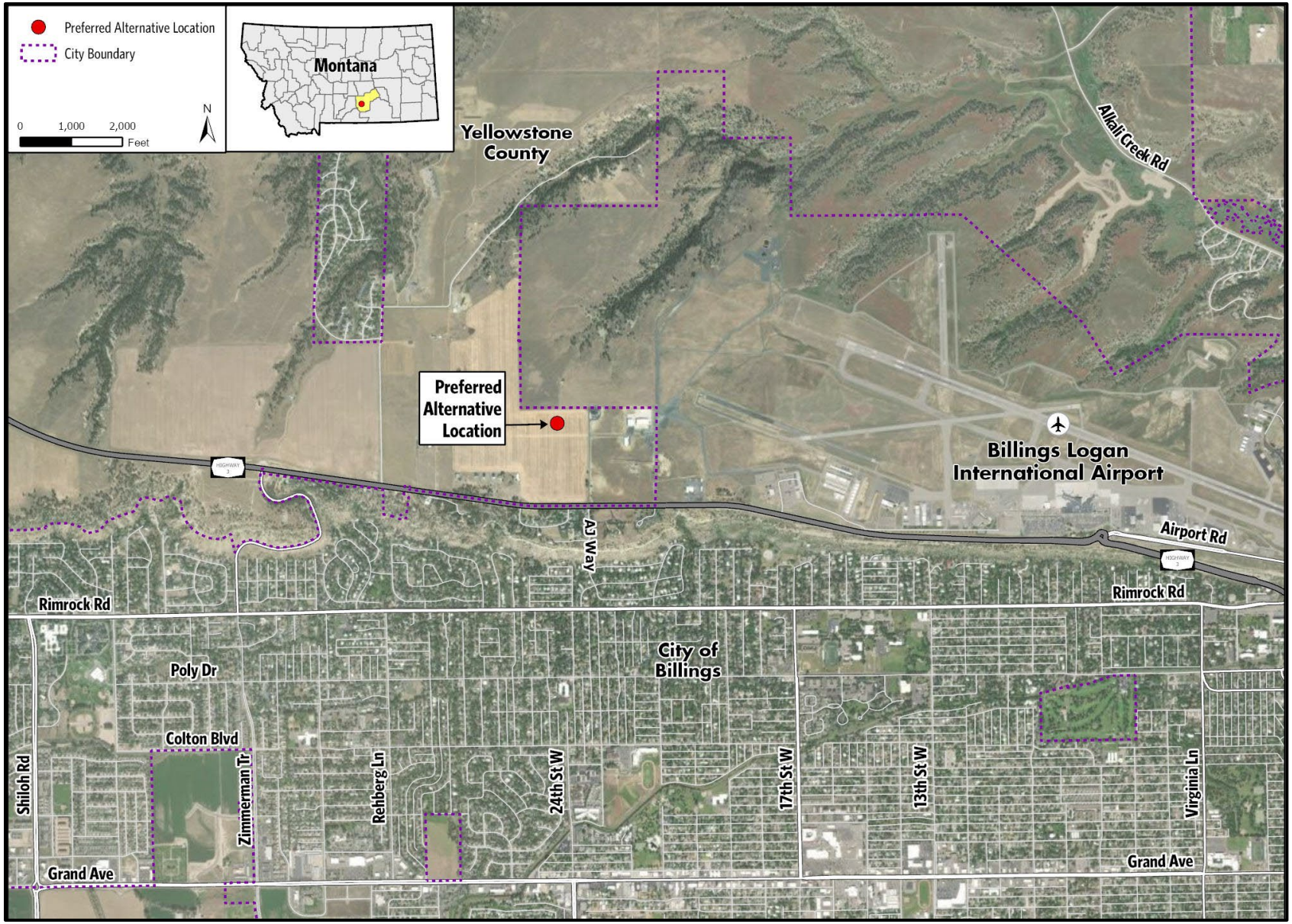

Figure 1-1. Project Location

1.2 Purpose and Need

The purpose and need define what the action seeks to accomplish and why MTARNG needs this action.

1.2.1 Purpose of the Project

The purpose of the Proposed Action is to provide a permanent facility that meets regulations and requirements and can accommodate MTARNG aviation training and maintenance needs in Eastern Montana and provide secure operations and storage for the long term.

1.2.2 Need for the Project

MTARNG needs a permanent LAASF facility to provide:

- Adequate long-term training and classroom facilities
- Secure storage and apron accommodating up to six helicopters
- Required minimum antiterrorism/force protection (AT/FP) measures
- Compliance with National Guard and DoD requirements to operate from a government-owned permanent facility

MTARNG has insufficient physical infrastructure to fully support statewide aviation operations. Real Property Planning and Analysis System (RPLANS) is a program managed by NGB that calculates facility authorizations to compare with recorded data in the Army National Guard Real Property Database of Record. This analysis results in the documentation of any shortage or excess of property. NGB and MTARNG are regularly reviewing and updating data in RPLANS to ensure that facility authorizations are current. Recent updates have included the changes to the category codes associated with Aviation Facilities resulting in revised authorizations for the MTARNG. The NGB and MTARNG completed this last update of RPLANS in December 2022. Based on *National Guard Pamphlet 415-12 Construction, Army National Guard Facilities Allowances* regarding facility allowances and RPLANS, MTARNG is allocated 200,618 square feet for Aviation Facilities statewide. The Helena AASF only provides 146,455 square feet, resulting in a 54,163 square foot statewide shortfall (MTARNG 2022).

ARNG building specifications for an LAASF basic allotment include 12,355 square feet (plus additional square footage per aircraft) which, per *National Guard Pamphlet 415-12* Table 4-2 and Table 4-3, includes:

- Hangar that supports drive train allied shops (repair/maintain engines, rotors, etc.)
  - Airframe and structural shops
  - Electronic and avionics allied shops
  - Technology supply
  - Contractor shop and storage
  - Bulk material storage
- Unheated storage
- Administrative and training areas
  - Operations
  - Aviation life support equipment shop
  - Maintenance administrative area
  - Information technology space
  - Locker rooms, break/assembly area, and toilet/shower area
  - Cisterns for firefighting water reserves

The leased hangar is a temporary solution that was used to commence operations in eastern Montana and allow the MTARNG to address the coverage deficiency until federal funds for construction could be identified.

Adequate Long-Term Training and Classroom Facilities

The leased hangar from which aviation operations are conducted includes 12,000 square feet of hangar space and 1,392 square feet of classroom and administration space. While it helps offset the 54,163 square foot statewide deficit of aviation support space, it is not adequately sized to meet the MTARNG needs. To operate at full efficiency, 2,100 square feet of administration, office, and break/facilities space is needed.

Secure Storage and Apron Accommodating up to Six Aircraft

The leased hangar can accommodate up to four aircraft. If six aircraft were to be stationed as allowed for an LAASF, two would have to be stored outside the hangar. This leaves the unsecured aircraft susceptible to weather or other damage. Further, the apron is shared, so BFS activities could also inadvertently risk damaging aircraft that are not secured in the hangar. While located on the BFS property, the leased hangar cannot be secured to DoD standards, meeting the necessary security setbacks and fencing requirements.

Required Minimum AT/FP Measures

The leased LAASF has limited security and does not meet the required AT/FP setbacks (Unified Facilities Code [UFC] 4-010-01, DoD Minimum Antiterrorism Standards for Buildings). The AT/FP standards are measures to reduce collateral damage and severity of mass casualties in the event of a terrorist attack. They are typically fulfilled by measures such as secure access points, fencing, berms, setback spacing, etc. Fencing, secure access/entry, and appropriate setbacks are not possible since the leased hangar is immediately adjacent to other BFS hangars and facilities, and the apron and parking are shared.

Compliance with NGB and DoD Requirements

Regulations within both the NGB and the DoD indicated that operating out of a leased facility should be a temporary solution. National Guard Regulation 405-80, *Real Estate*, Section 2-8b states that "leasing of improvements will be on a temporary basis only until replacement facilities can be constructed or acquired." Similarly, DoD Directive 4165.70, *Real Property*, Section 6.7.1 states "when possible, each DoD Component shall take prompt action to relocate activities accommodated in leased building space into Government-owned facilities, preferably located on a military installation, and to dispose of excess leaseholds." A permanent solution for the LAASF is needed to be compliant with these requirements.

1.3 Scope of the EA

This EA evaluates the construction and operation of a permanent LAASF on 40 acres adjacent to Billings Logan International Airport in Billings, Montana. There are two Options under consideration: Option 1 – helipad on the 40 acres, Option 2 – helipad on adjacent airport property to the north. The action would include the stationing of up to six helicopters (including various types, such as the CH-47 [Chinook], UH-60 [Blackhawk], and UH-72 [Lakota]), current staffing of to 14 full-time positions, conducting drill weekend activities, and performing light maintenance on the helicopters.

Chapter 3 provides a description of the existing environment as it pertains to the analysis. Resources that are not anticipated to be affected are briefly discussed at the beginning of Chapter 3, and those resources that are anticipated to be affected are described in more detail. Technical reports that provide additional detail for most resources analyzed are included in the appendices.

The anticipated impacts of the Proposed Action with differentiation of Option 1 and Option 2 as applicable and the No Action Alternatives are addressed in Chapter 4. This includes direct, indirect, and cumulative impacts. Both the Proposed Action and the No Action Alternative are evaluated in detail. The No Action Alternative provides a basis of comparison for the impacts identified for the Proposed Action. In addition, best management practices (BMPs) are identified that would help minimize the overall impact of the action, if implemented.

1.4 Decision-Making

Per 10 U.S.C. Sec. 10501, the NGB is a joint activity of the DoD. Pursuant to DoD Directive 5105.77, *National Guard Bureau*, dated 30 October 2015, the NGB serves as the principal advisor to U.S. Army on matters involving the ARNG, and is responsible for implementing DoD guidance on the structure and strength authorizations of the ARNG. The NGB is responsible for ensuring that ARNG activities are performed in accordance with applicable policies and regulations. As such, the NGB is the lead federal agency responsible for preparation of NEPA-compliant documentation on projects for which the MTARNG is the proponent. In that capacity, the NGB is ultimately responsible for environmental analyses and documentation; however, the local responsibility for NEPA document preparation falls upon the MTARNG.

This EA analyzes the potential for significant effects associated with the Proposed Action and the No Action Alternative. If the analyses presented in this EA indicate that the Proposed Action would not result in significant adverse environmental or socioeconomic effects, then a Finding of No Significant Impact (FONSI) would be prepared. A FONSI briefly presents the reasons why a Proposed Action would not have a significant adverse effect on the human environment and why an Environmental Impact Statement (EIS) would not be necessary. If the analyses presented in this EA indicate that significant adverse environmental effects would result from the Proposed Action that cannot be mitigated to insignificance, a Notice of Intent to prepare an EIS would be required, or no action would be taken.

1.5 Public and Agency Involvement

Federal agencies, federally recognized Native American tribes, state agencies, and local agencies were all requested to contribute to this EA through the Interagency/Intergovernmental Coordination of Environmental Planning (IICEP) process, or scoping, which assisted the MTARNG in determining the appropriate scope for this EA. During scoping, letters are distributed soliciting concerns, issues, and information as it relates to the project. Consideration of the views and information from all interested persons promotes open communication and enables better decision making by the MTARNG and National Guard Bureau. All persons and organizations having potential interest in the Proposed Action, including minority, low income, and disadvantaged communities are urged to participate in the NEPA environmental analysis process. The IICEP scoping process consisted of sending a scoping letter to 40 federal, state, and local agencies and federally recognized Native American Tribes on 3 March 2023 (see Section 8.0 and Appendix A). The letter requested that agencies provide information and identify issues or concerns associated with the Proposed Action. This information helps frame the scope of the EA. Response letters are summarized in Table 1-1 and included in Appendix A.

MTARNG contacted eight Tribes and the State Historic Preservation Office (SHPO) via e-mail on 7 March 2023, and one responded (Appendix A). The Cheyenne Nation responded to MTARNG on 4 April 2023, requesting more information on the proposed cultural resources investigations pertaining to project area. Initially the Cheyenne Nation expressed interest in participating in cultural surveys, but upon receiving information on cultural resource surveys within a 0.25-mile zone of

proposed project area, they determined there was no need for their participation in a communication dated 10 May 2023. SHPO responded to the scoping letter via e-mail on 21 March 2023, noting they had no specific information on cultural resources to share except to cite the cultural resources summary provided in a MTARNG Section 106 consultation letter for the operations of helicopters from the leased LAASF hangar.

National Historic Preservation Act of 1966 (NHPA) Section 106 continuing consultation was initiated on 6 October 2023 (see Appendix A). The site is part of a larger parcel that was surveyed and reported in 2021 as part of the land purchase. The original consultation addressed the adequacy of the intensive pedestrian survey report for the 138-acre land transfer to the State of Montana and the visual and auditory effects of helicopter overflight within an indirect area of potential effects (APE). A no adverse effect finding was determined for the survey and indirect effects.

The 6 October 2023 continuing consultation addressed the adequacy of the intensive pedestrian survey report of Additional APE that would potentially accommodate a helicopter pad and associated clear zone north of the MTARNG parcel and a drainage easement extending from the northeast corner of the MTARNG parcel to the north. Both areas are on Billing property. Based on the survey, a finding that the determination of no adverse effect is still applicable. Letters were sent via e-mail to the 10 Tribal Historic Preservation Offices. One response was received from the SHPO on 17 October 2023, indicating the report is adequate and concurring with the no adverse effect finding (Appendix A). One follow-up email was sent in on 28 November 2023. Fort Peck Assiniboine and Sioux Tribes responded on 5 January 2024 indicating that the project will not have an adverse effect on historic or cultural properties significant to them and if there are changes to the project, that on-site visit with the Tribal Historic Preservation Officer would be needed (Youpee, Fort Peck Assiniboine and Sioux Tribes to Myers, DMA 5 January 2024). No other Section 106 consultation response was received.

Table 1-1. Scoping Responses Received

Agency/Organization	Comment	Date Received
U.S. Fish and Wildlife Service	No comments or concerns were identified	03/09/2023
Yellowstone County Sheriff	Provided support for the project – no concerns identified	03/14/2023
State Historic Preservation Office	SHPO did not have any additional site-specific cultural information to share. Information summarized on 13 April 2022 between MTARNG and SHPO is the most current information. Consultation complete 8 June 2021 summarized the resources on the parcels	03/21/2023
Billings Logan International Airport	Correct the map, MTARNG to respond to noise complaints, and the airport will work with MTARNG to site the stormwater easement	03/28/2023
Billings Planning Department	MTARNG to respond to noise comments, the property will be annexed into Billings and rezoned to an appropriate use (complete), and coordinate with the Billings Public Works regarding traffic impacts and Highway 3 ingress/egress	03/28/2023
Cheyenne Nation	Inquired about cultural resources management initiatives, participating in pedestrian survey, and for previous surveys conducted within 0.25 mile. Information was provided. After reviewing, the Nation indicated they did not wish to visit the site.	04/04/2023 05/10/2023

Consideration of the views and information from all interested persons promotes open communication and enables the MTARNG and NGB to make better decisions. All persons, organizations having potential interest in the Proposed Action, including minority, low income, disadvantaged communities, are urged to participate in the NEPA environmental analysis process.

An opportunity for agency and public input on the EA and Draft FONSI is provided during the 15-day public comment period from 25 February 2024 to 11 March 2024. The document is available upon request and in the Billings Public Library located at 510 North Broadway, Billings, Montana, 59101. Persons interested in receiving the EA or the FONSI may contact Rebekah Myers at the Montana Department of Military Affairs (DMA) Environmental Office by emailing Rebekah.L.Myers2.nfg@army.mil. A Notice of Availability (NOA) announcing the EA and Draft FONSI availability was published in the *Billings Gazette* and via e-mail blast by the *Billings Gazette* on 25 February 2024 (see Appendix B). In addition, the EA is found on the landing page for the DMA website at www.mt.gov/dma/CFMO/index. The ARNG will reply directly to substantive comments received during the public comment period or address comment within the Final FONSI. The Final FONSI will be posted to the project website following approval and signature.

Comments may be sent via email to Rebekah.L.Myers2.nfg@army.mil or postal mail to:

Rebekah Myers, DMA Environmental Program Manager
JFHQ-MT
1956 Mt. Majo Street
Fort Harrison, MT 59636

1.6 Related NEPA, Environmental, and Other Documents and Processes

Planning and environmental documents relevant to the Proposed Action that were reviewed during preparation of this EA include, but are not limited to, the following:

- American National Standards Institute, Inc. (ANSI). 2003. *American National Standard Quantities and Procedures for Description and Measurement of Environmental Sound, Part 5: Sound Level Descriptors for Determination of Compatible Land Use, ANSI S12.9/Part 5-1998 (R 2003)*.
- Federal Interagency Committee on Noise (FICON). 1992. *Federal Agency Review of Selected Airport Noise Analysis Issues*. August.
- Federal Interagency Committee on Urban Noise (FICUN). 1980. *Guidelines for Considering Noise in Land-Use Planning and Control*. August.
- US Environmental Protection Agency (USEPA). 1982. *Guidelines for Noise Impact Analysis, Report 550/9-82-105 and #PB82-219205*. April.
- MTARNG. 2023a. *Development and Operation of a Limited Army Aviation Support Facility in Billings, Montana Environmental Assessment*. January.
- MTARNG. *2023b. Development and Operation of a Limited Army Aviation Support Facility in Billings, Montana Finding of No Significant Impact.* January.

1.7 Regulatory Framework

The Proposed Action and No Action Alternative are subject to the following federal environmental regulations:

- Aviation Flight Regulations (*Army Regulation [AR] 95-1, Supplement 1*)
- Bald and Golden Eagle Protection Act (*16 U.S.C. §668-668d*)

- CEQ Update to the Regulations Implementing the Procedural Provisions of the NEPA (*40 CFR 1500 – 1508, 1515-1518*)
- Clean Air Act, as amended (*42 U.S.C. §7401 et seq.*) Clean Air Act Amendments of 1990
- Environmental Analysis of Army Actions (*AR 200-1; 32 CFR 651*)
- Oil Pollution Prevention in the Clean Water Act (*40 CFR 112 §311*)
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 (*42 U.S.C. §9601 et seq.*)
- Endangered Species Act (ESA) of 1973 (*16 U.S.C. §1531 et seq.*)
- Real Property Master Planning for Army Installations (*AR 210-20*)
- *Executive Order 11988*, Floodplain Management
- *Executive Order 11990*, Protection of Wetlands
- *Executive Order 12898*, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations
- *Executive Order 13007*, Indian Sacred Sites
- *Executive Order 13045*, Protection of Children from Environmental Health Risks and Safety Risks
- *Executive Order 13175*, Consultation and Coordination with Indian Tribal Governments
- *Executive Order 14096,* Revitalizing Our Nation's Commitment to Environmental Justice for All
- Federal Facilities Compliance Act (*Public Law 102-386*) of 1992
- Force Development and Documentation Consolidated Procedures (*Department of the Army Pamphlet 71-32*)
- Migratory Bird Treaty Act, as amended (*16 U.S.C. §703-712)*
- National Historic Preservation Act, Section 106 (*36 CFR 800*)
- National Pollutant Discharge Elimination System (*40 CFR 122*)
- NEPA, as amended (*42 U.S.C. §4321-4347*)
- Noise Control Act, (*42 U.S.C. §4901 et seq.*)
- Resource Conservation and Recovery Act (RCRA) of 1976 (*42 U.S.C. §6901 et seq.*)
- Safe Drinking Water Act (*42 U.S.C. §300f et seq.*)
- Toxic Substances Control Act of 1976 (*15 U.S.C. §2601 et seq.*)
- U.S. Army Installation Policy to Address Threats Caused by Changing Climate and Extreme Weather (*Army Directive 2020-08*)
- Department of Defense Minimum Antiterrorism Standards for Buildings (UFC 4-010-01)

SECTION 2.0 Description of the Proposed Action and Alternatives

2.1 Introduction

This section describes the alternatives analysis process and the screening criteria MTARNG used to evaluate the alternatives.

2.2 Proposed Action

The Proposed Action is to construct a permanent LAASF in Billings, Montana approximately 620 feet west of the leased hangar. The proposed permanent facility would be including approximately 66,000 square feet for the primary facility (plus parking and apron) compared to the 12,000 square foot leased hangar (plus parking and apron). While there would still be a small deficit in allocated square footage (54,163 square feet), this deficit would be substantially reduced. Another option would be to construct an AASF. An AASF is a minimum of 5,000 square feet larger, which allows for additional functionality, including flight instructor areas, learning and simulation areas, flight surgeon exam area, passenger waiting/briefing areas, aviation emergency operations center, fitness area, and certain maintenance shop areas. The overall size of an AASF depends on the number of stationed aircraft. Table 2-1 provides a comparison between an AASF, the proposed permanent facility, and the leased hangar allocations. An LAASF is appropriate for this location based on one Company being stationed at this facility and the amount of equipment and aircraft associated with the Company.

Table 2-1. Comparison of Activities Performed at the Leased Hangar, Permanent LAASF, and Helena AASF

Activity	Leased Hangar	Permanent LAASF	Helena AASF
Washing helicopters	Prohibited at current location; helicopters are flown to Helena for washes/engine washes and inspection windows extended.	Washrack would be available and connected to oil/water separator, city sewer.	Washrack is available and connected to oil/water separator, city sewer.
Fueling	No permanent fuel farm available.	Permanent fuel farm (two 10,000-gallon USTs)[1].	Permanent fuel farm (two 25,000-gallon USTs).
Secondary containment	No permanent secondary containment.	Permanent secondary containment for HEMMT[2] stored on-site.	Permanent secondary containment for HEMMTs stored on-site.
Field level maintenance/ PMCS[3]	Able to complete all necessary field level maintenance/PMCS.	Able to complete all necessary field level maintenance/PMCS.	Able to complete all necessary field level maintenance/PMCS.
Specialty maintenance	No ability to complete specialty maintenance.	Limited specialty maintenance completed. No full back shop capability but would have avionics and as needed engine/sheet metal/rotor repair.	Specialty maintenance completed; included engine repair/replacement; in-depth scheduled maintenance; sheet metal repair; rotor repair; powertrain repair.
Number of aircraft	Limited to size of hangar (four helicopters inside).	Would be able to accommodate up to six (6) helicopters.	Able to accommodate number of helicopters assigned to the MTARNG.
Hazardous waste facility	No hazardous waste facility on site.	Hazardous waste facility on site.	Hazardous waste facility on site.
POL storage room	No POL storage room on site.	POL storage room on site.	POL storage room on site.

Activity	Leased Hangar	Permanent LAASF	Helena AASF
Administrative spaces	Limited Administrative spaces on site in rented trailers. Space must be shared by all working/training at hangar. Active Guard Reserve personnel have office space at BAFRC (off-site).	Administrative spaces authorized.	Administrative spaces authorized (flight instructor).
Safety office space	No safety office space. Shared administrative space for safety office.	Dedicated space for Safety Office.	Dedicated space for Safety Office.
Learning center	No learning center.	Dedicated space for learning center.	Dedicated space for learning center.
Operations space	Limited operations spaces on site in rented trailers. Space shared by flight ops, instructor and maintenance pilots, LAASF commander	Operations spaces authorized.	Additional operations spaces authorized (passenger waiting, flight surgeon).

1. UST- underground storage tank; 2. HEMMT- heavy expanded mobility tactical trucks; 3. PMCS- preventative maintenance checks and services

The proposed MTARNG-owned LAASF facility would accommodate a permanent hangar and would include backup/emergency generator, paved parking, unheated aircraft storage, and fire detection, alarm, and suppression equipment. It would meet Industry Standards and local, state, and federal building codes per 42 U.S.C. 4154 and National Guard Pamphlet 415-12. Other features include utility connections, information systems, roads, sidewalks, curbs, gutters, storm drainage, and site improvements. The facility would be designed in accordance with UFC 1-200-02 and include energy efficiencies, be of sustainable design, and would be accessible to individuals with disabilities. AT/FP measures would be included that meet UFC 4-010-01. This large, long-term permanent facility includes space for training rooms, office space, etc. and would accommodate the emerging growth needs and coverage requirements of the MTARNG aviation assets. The permanent facility would better accommodate on-the-ground drill and training activities.

The ongoing activities occurring at the 12,000 square-foot LAASF sited at a leased hangar would be relocated to the proposed location. As evaluated in the *Development and Operation of a Limited Army Aviation Support Facility in Billings, Montana Environmental Assessment*, the LAASF is staffed by up to 14 full-time personnel, including four mechanics, two flight operators, and one of each of the following, avionics, technical supply, production control officer, maintenance test pilot, quality assurance officer, Officer in Charge, instructor pilot, and maintenance supervisor (MTARNG 2023a). Personnel live in their personal residences in the surrounding area.

During the drill weekends, up to 90 personnel train out of the LAASF. These weekends commence on either Thursday or Friday and conclude on Sunday evenings. Typical start/end times are Thursdays, 10AM – 11PM; Fridays, 7AM – 11PM; Saturdays, 7AM – 11PM; and Sundays, 8AM – 330PM. Out of town personnel stay in local hotels during drill weekends. Daily lunch is catered by a contracted local business. All other meals are purchased at local restaurants, eaten at home, etc.

The proposed LAASF would support six helicopters of various types and sizes, including the Chinook, Blackhawk, and Lakota (Figure 2-1). The mix of the aircraft at the hangar at any given time is determined by need and fluctuates. Flights occur primarily during the day. On some drill weekends, at least one training flight occurs at night with the aircraft returning after dark, the timing of which varies with the season. Most night flights occur during the fall and winter when the sun sets earlier in the day. On weekdays, 2 to 3 helicopter training flights per day originate from LAASF for a total of 10 to 15 flights per work week. The LAASF supports 2 to 3 flights per day on drill weekends for a total of 14 to 21 flights during a drill week. While most flights are single-aircraft operations, some multi-ship operations occur. Multi-ship flights depart the airspace immediately and do not use the traffic pattern. The LAASF operates one additional Saturday per month that includes two to three flights. Flights follow flight paths that are approved by Air Traffic Control. Flight paths originate at the LAASF facility and travel over the airport property north of Highway 3. ~~Under Option 1, flights would all approach and leave to the west to avoid land use conflicts.~~ Under both Options 1 and 2, approximately 40 percent of the flights go to the east, 40 percent to the west, and 20 percent to the north. A map showing the flight paths is available in the noise analysis located in Appendix D of this document or online at www.mt.gov/dma/CFMO/index. The flight altitude of helicopters is maintained at 1,000 feet or more above ground level at the closest point to any community unless weather, air traffic control, or an emergency dictates otherwise.

Figure 2-1. Helicopters supported by the LAASF
Top - Chinook, Middle - Blackhawk, Bottom - Lakota

Maintenance activities include maintenance hover runs or flights for every 100 hours of flight time or after 14 days of storage. The hover runs or flights are typically 50 to 60 minutes or less per aircraft, when required, and are conducted at the airport. An estimated 150 maintenance runs occur per year. Typically, there are no more than two maintenance test flights per helicopter per week.

Aviation fuel would be stored in two, USEPA-approved 10,000-gallon underground storage tanks (UST), and refueling would be done on-site, using a 5,000-gallon over-the-road tanker truck. The DMA Environmental Office would develop a Spill Prevention, Control, and Countermeasure (SPCC) plan, and there would be permanent secondary containment for storing all fuel trucks. Other support vehicles that are used at the LAASF include light medium tactical vehicles, high mobility multipurpose wheeled vehicles, trailers, and a forklift.

Beginning in approximately 2026, annual training (AT) would occur at the LAASF about once every five years. Unlike other AT events where multiple units may train together, only the unit assigned to the LAASF would participate at these periodic events. Training activities (number of people, flights, etc.) would be the same as on a drill weekend but would extend over a 15-day period.

Stationing, in compliance with *AR 5-10, Management, Stationing* and as identified herein, was approved by NGB on 27 September 2022.

In addition to the activities that were previously analyzed for operations from the leased hangar, operating from a larger, permanent MTARNG facility would accommodate the following additional activities that are allowed at an LAASF but not available at the leased hangar. These include:

- Wash helicopters
- Improved classroom and administrative capabilities
- Avionics and engine maintenance
- Store petroleum, oil, and lubricants
- Store hazardous wastes on site

The leased hangar is authorized to store up to six helicopters, but there is only space to accommodate four. While this is not a change in what is allowable, it would be a change in the training being conducted. However, all impacts assessed in the EA for the leased hangar assumed the presence and use of six aircraft.

2.3 Alternatives Considered

Under NEPA and *32 CFR Part 651*, this EA is required to analyze the potential environmental impacts of the Proposed Action, No Action Alternative, and reasonable alternatives. Reasonable alternatives are those that meet the underlying purpose of and need for the Proposed Action; are feasible from a technical and economic standpoint; and meet all screening criteria that are suitable to a particular action. Screening criteria may include requirements or constraints associated with operational, technical, environmental, budgetary, and time factors. Alternatives that are determined to not be reasonable can be eliminated from detailed analysis in this EA.

Action alternatives considered included the Proposed Action, including two variations, Option 1, to construct the project within the 40-acre State of Montana-owned parcel, and Option 2, constructing the helipad and associated clear zones adjacent to the north of the State parcel on Billings property. The second action alternative would be to use the BAFRC while keeping the helicopter operations at the leased hangar. The No Action Alternative consists of continuing activities out of the hangar leased from BFS.

2.3.1 Alternatives Development (Screening Criteria)

Table 2-2 lists the primary criteria used to screen the alternatives considered for the operation of an LAASF. MTARNG evaluated each alternative to determine if it meets the purpose of and need for the Proposed Action, is feasible from a technical and economic standpoint, and if it meets the screening criteria identified in Table 2-2. The requirement for features and operations described in Section 2.2, Proposed Action would be the same for each of the alternatives. Table 2-3 provides the results of the alternatives screening and the rationale for the screening decision. The shading indicates whether each alternative fully meets each screening criterion (green), partially meets the criterion (yellow), or fails to meet the criterion (red).

Table 2-2. Alternatives Screening Criteria

Screening Criteria	Description
1 – Adequate long-term training and classroom/admin facility	A minimum of 2,100 square feet of administration, office, and break/facilities space is needed to operate at full efficiency.
2 – Secure storage of up to six helicopters and space to conduct all LAASF maintenance activities	Sufficient space for six aircraft to be stored within the hangar plus additional space to accommodate specialized workspace and storage.
3 – Air traffic control and land use compatibility	Have air traffic control to coordinate take offs and landings. To have LAASF activities be compatible with adjacent land use
4 – Security and Minimum AT/FP Requirements	Sufficient space is needed around the facility to allow for fencing, appropriate setbacks, and other security measures as identified in UFC 4-010-01.
5 – Government-owned facilities, preferably on a military installation	The long-term LAASF solution is to be government-owned and preferably located on a military installation or property.

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Table 2-3. Alternatives Screening Results

Screening Criteria	BAFRC	Proposed Action	No Action Alternative
1 – Adequate long-term training and classroom/admin facility	Limited availability of classroom space. Facility is already used by other units. Scheduling dependent on other activities taking place at the facility.	A minimum of 2,100 square feet of administration, office, break/facilities space is needed to operate at full efficiency.	Classroom/administrative area shortage would continue with training occurring in portable buildings.
2 – Secure storage of up to six helicopters and space to conduct all LAASF maintenance activities	No helicopter storage available and would require continued use of the leased hangar with storage of up to four aircraft.	New hangar would be constructed that could accommodated up to six helicopters and associated maintenance areas.	Leased hangar can accommodate up to four helicopters and has some facilities for maintenance.
3- Air Traffic Control and land use compatibility	Would require continued use of the leased hangar. Air traffic control is available, and use of the leased hangar is compatible with land use.	~~**Option 1**: All takeoff and landing would occur to the west to avoid land conflict~~ ~~**Option 2:** Takeoff and landing to east and west is available~~	Air traffic control is available, and use of the leased hangar is compatible with land use.
4 – Security and Minimum AT/FP Requirements	No AT/FP setback is available at the leased hangar since it is collocated on private property. Apron is shared with BFS. Some fencing has been installed but setbacks do not conform with AT/FP minimum requirements. The BAFRC building is secured.	AT/FP setbacks and security fencing and features meeting required standards would be included in the design of the facility.	No AT/FP setback is available at the leased hangar since it is collocated on private property. Apron is shared with BFS. Some fencing has been installed but setbacks do not conform with AT/FP minimum requirements.
5 – Government-owned facilities, preferably on a military installation.	Building is government owned. Hangar is on private property owned by others.	**Option 1:** Facility would be constructed on land owned by the State (DMA). **Option 2**: Facility would be constructed on land owned by the State (DMA) and Billings	Hangar and portable buildings are on private property owned by others.

Shading indicates whether each alternative fully meets each screening criterion (green), partially meets the criterion (yellow), or fails to meet the criterion (red).

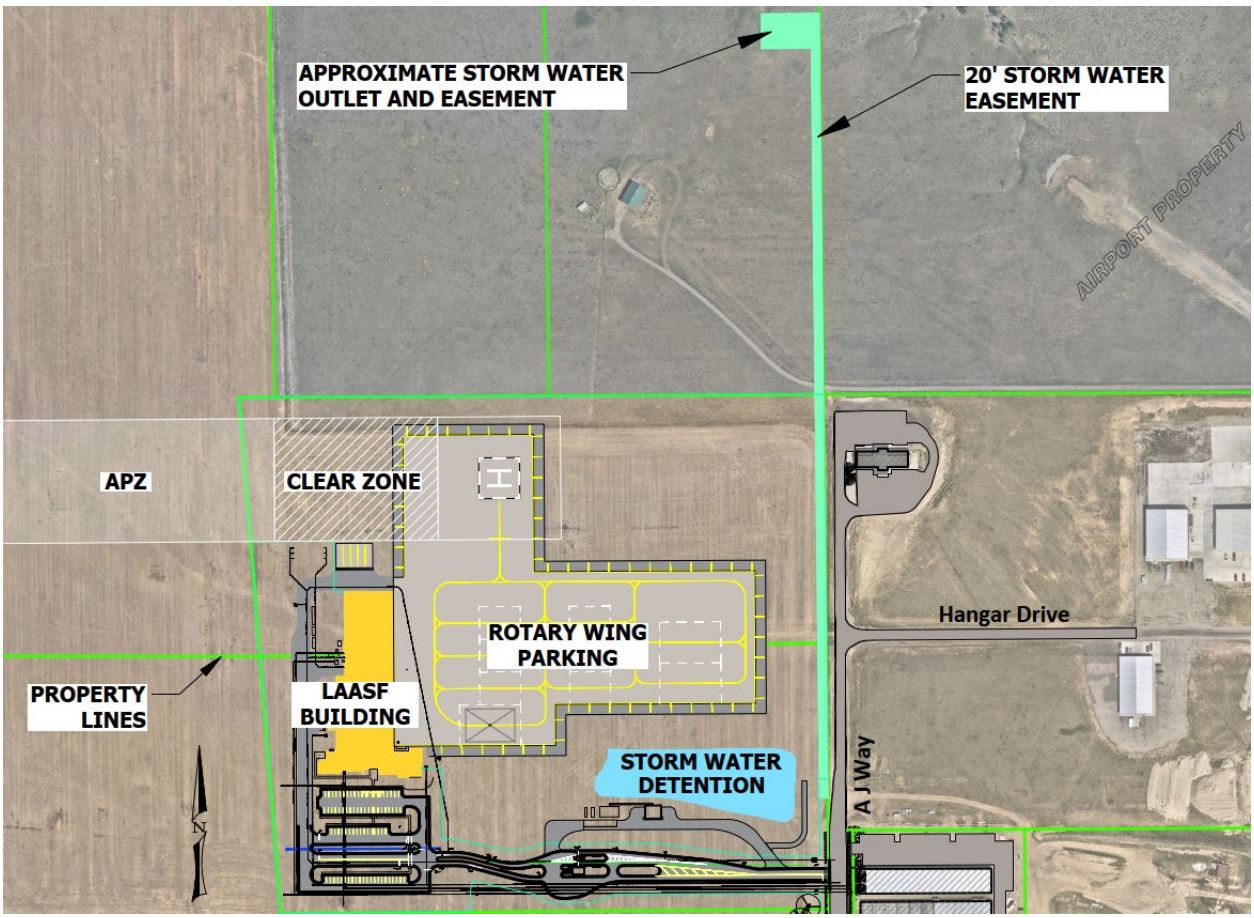
2.4 Alternatives Evaluation

Table 2-3 was reviewed to determine the effectiveness of each alternative at meeting the purpose and need of the project. Only the Proposed Action Alternative would effectively meet all the screening criteria. The No Action Alternative fails to meet the purpose and need (see Section 2.4.2) because it does not allow for adequate hangar space and AT/FP or comply with DoD and NGB requirements to only use leased facilities on a temporary basis. The BAFRC Alternative fails to meet three of the five criteria.

2.4.1 Proposed Action

Option 1:

Under the Proposed Action Option 1, the LAASF would be permanently located on a 40-acre parcel west of the Billings Logan International Airport on property owned by the State of Montana with a drainage easement extending onto City of Billings airport property (Figure 2-2). The adjacency to Billings Logan International Airport would allow for the continued coordination and activities at the airport and support including air traffic control tower, radar, and other features. The government ownership of the parcel on which the LAASF would be constructed simplifies the development of the land and facilitates securing the property to AT/FP requirements.



APZ- Accident Potential Zone

Figure 2-2. Proposed LAASF Facility West of the Leased Hangar, Option 1

Option 2: Under the Proposed Action Option 2, the LAASF would be permanently located on a 40-acre parcel west of the Billings Logan International Airport on property owned by the State of Montana with the helicopter pad, clear zones and APZ on 2 acres of land owned by Billings/Airport (Figure 2-3). The adjacency to Billings Logan International Airport would allow for continued coordination and support including air traffic control, radar, and other features. The government ownership of the parcel of land simplifies the development of the LAASF aprons and facilities. Locating the helipad and clear zones on the airport parcel to the north would allow for travel patterns to both the east and west without placing existing structures within the accident potential zone.

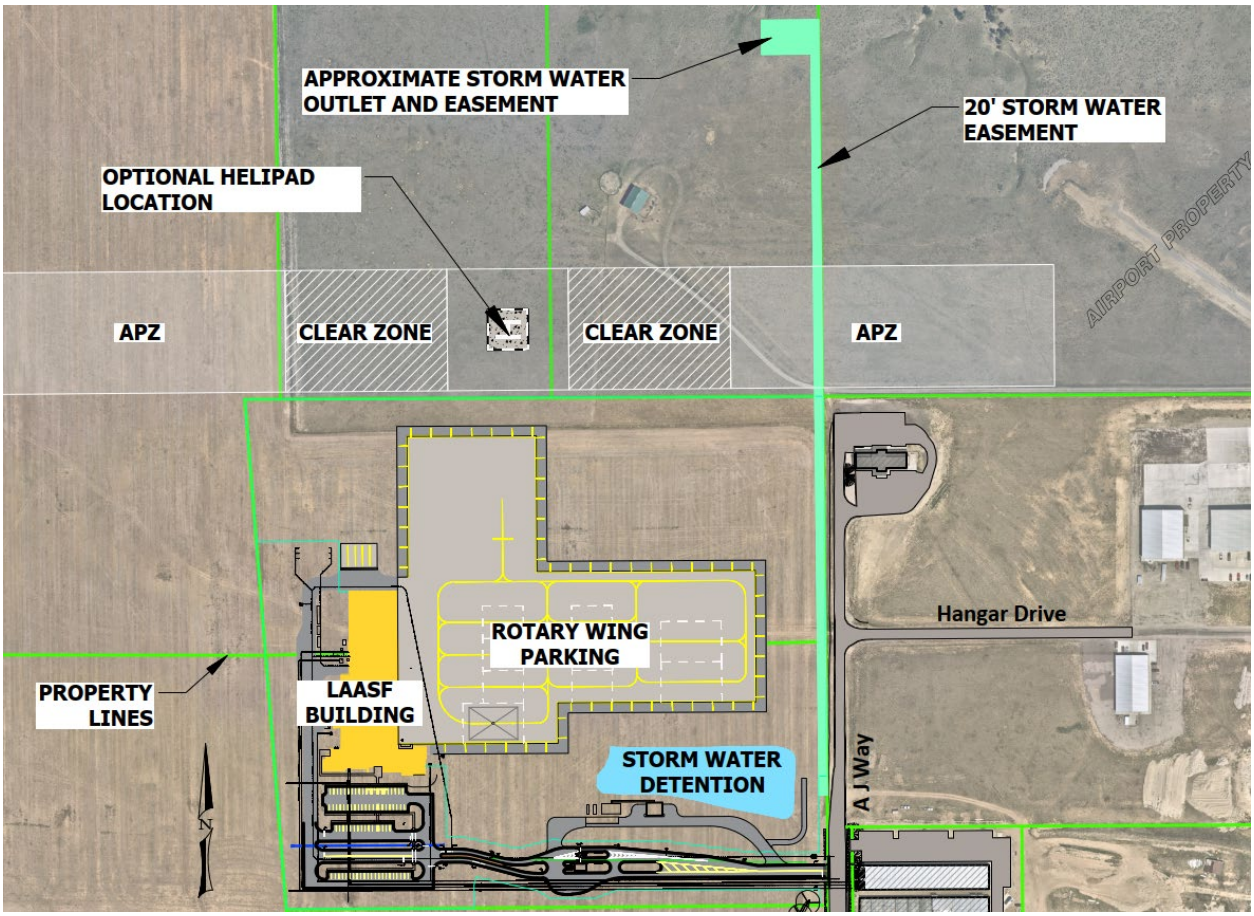


Figure 2-3. Proposed LAASF Facility West of the Leased Hangar, Option 2

Under the Proposed Action Option 1 and Option 2, necessary infrastructure to provide a long-term LAASF facility in Eastern Montana would be constructed. The facilities would include the construction of a permanent hangar and classroom/administration building, apron, parking areas, utilities, stormwater management, access road, security fencing and AT/FP setbacks.

The property would be accessed from Highway 3 via AJ Way and approximately 1,000 feet of new access road. An aircraft maintenance hangar, classroom/administrative areas, apron, flammable storage, parking areas, fuel containment area, and helicopter wash area would be constructed, along with curbing, sidewalks, utilities, etc. The hangar would include the following integral features: backup/emergency generator, paved organizational vehicle parking, unheated aircraft storage hangar, and fire suppression for maintenance hangars and aircraft storage hangar. Construction would also include all utility services (includes connection to city water and sewer), information systems, fire detection and alarm systems, roads, sidewalks, curbs, gutters, stormwater drainage, personal vehicle parking areas, and site improvements.

Operations are described in Section 2.2 Proposed Action and evaluated in detail in *Development and Operation of a Limited Army Aviation Support Facility in Billings, Montana Environmental Assessment* (MTARNG 2023a).

2.4.2 No Action Alternative

Under the No Action Alternative, the operations as described in Section 2.2 would continue, operating from the leased hangar on BFS property. Classroom training would continue to take place in portable buildings that have been collocated on the leased hangar property. MTARNG would continue to use the shared apron and store up to four of the allotted six helicopters in the hangar. Some fencing has been constructed; however, AT/FP setback cannot be maintained due to the shared apron and proximity to adjacent BFS facilities. While MTARNG can operate on a temporary basis assuming the risk of associated non-compliant AT/FP, permanent waivers are not allowable. This alternative fails to meet the purpose and need of this action because it would not provide adequate hangar facilities for up to six helicopters, provide minimum AT/FP measures, or comply with NGB and DoD requirements to operate only temporarily from leased facilities and move to permanent facilities, preferably on government-owned property promptly (National Guard Regulation 405-80 and DoD Directive 4165.70). However, as required by NEPA, the No Action Alternative is evaluated in detail and provides a comparison by which the impacts of the Preferred Alternative can be determined.

2.4.3 Alternatives Eliminated from Further Consideration

The use of the BAFRC would be limited in availability based on other activities and units that currently use the BAFRC. There are no hangar facilities at the BAFRC, so the problems inherent with the long-term use of the leased hangar are also present in this alternative. For these reasons, this alternative has been eliminated from further consideration in this EA.

2.4.4 Alternatives Impacts Comparison Matrix

Table 2-4 provides a summary and comparison of potential impacts associated with the Proposed Action Alternative Option 1 and Option 2, constructing and operating from a permanent LAASF in Billings, and the No Action Alternative.

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Table 2-4. Impact Comparison Matrix

Resource Area	No Action Alternative	Proposed Action Alternative – Option 1	Proposed Action Alternative – Option 2
Land Use	No impact would occur.	Drainage improvements would require an easement from Billings/Billings Logan International Airport. The Proposed Action would comply with City zoning and land use designations. ~~Landing and takeoff would be limited to the west to avoid land use conflicts.~~ The project would alter visual character but would be consistent with surrounding airport development. Other development is occurring in the area consistent with City and County plans. No cumulative impact is anticipated.	Same as Option 1 except drainage, helipad, and clear zone improvements would require an easement from Billings/Billings Logan International Airport~~, and there would be no landing/ takeoff land use conflict~~.
Air Quality	No changes in pollutant emissions including Greenhouse Gases (GHGs) would occur. Existing operations would continue from the leased hangar from the BFS property.	Emissions associated with operating from a permanent LAASF (including additional runups) would be small (less than 6.8 tons per year) and well below the General Conformity Thresholds. There would be an approximately 51 carbon dioxide equivalent increase in greenhouse gas emissions over existing because the larger LAASF area that would require heating and electricity to operate and additional flight activity. The emissions generated would continue to contribute to climate change. A Record of Non-Applicability was issued on 22 March 2022.	Same as Option 1.
Noise	Ongoing MTARNG activities at the leased hangar would not result in a change in noise.	While there would be an increase in noise levels under Option 1 of the Proposed Action, noise levels at all representative Points of Interest that were modeled would meet federal, state, and local noise regulations. The changes in noise would not result in any incompatible land use. Three percent of the flights would occur at night. Night flights would occur primarily in the fall/winter when it gets dark early, so nighttime noise is not anticipated to be elevated regularly. Noise abatement and fly-neighborly programs will be employed. Noise contours include the cumulative noise of the leased	Same as Option 1. The noise contours vary slightly but would not change impacts.

Resource Area	No Action Alternative	Proposed Action Alternative – Option 1	Proposed Action Alternative – Option 2
		hangar and LAASF facility. Cumulative impact would be less than significant.	
Geology, Topography, and Soils	No impact would occur.	No impact to overall topography, geologic landforms, or soil types in the project area. Soil would be disturbed during construction, which may impact soil quality and properties, increase potential for invasive weeds, and increase erosion. Option 1 would convert approximately 40 acres of farmland. Best management practices (e.g., silt fences, reseeding disturbed areas, etc.) would minimize the effects on soils. Other surrounding construction would similarly contribute to conversion of farmland and soil disturbance. Cumulative impacts would be minor.	Same as Option 1 with the conversion of approximately 42 acres. The additional 2 acres is not in farmland production.
Surface Water Resources	No impact would occur.	Minor increased water use during construction. Stormwater would be conveyed to a tributary to Alkali Creek. Stormwater would comply with Billings requirements and the Stormwater Pollution Prevention Plan. Minor surface water impacts. No anticipated cumulative impacts.	Same as Option 1 with slight increased runoff potential due to a greater amount (no more than 2 acres) of impervious surfaces.
Biological Resources	No impact would occur.	The Proposed Action would disturb approximately 40 acres of habitat. No impacts to ESA-listed species. Potential negligible, adverse impacts to migratory birds. Wildlife inhabiting the project area likely have habituated to noise due to the presence of the existing airport. Other construction, new development, and flights would contribute to biological impacts but cumulatively the impacts would be minor.	Same as Option 1 but would disturb 2 additional acres.
Cultural Resources	No impact would occur.	No impact would occur.	Same as Option 1.
Socioeconomics Safety Environmental Justice	No change in demand on social or emergency services and no change in socioeconomics would occur. No Environmental Justice	Impacts would be the same as the No Action Alternative. Local emergency services would not be negatively affected and the likelihood of a crash over a populated area is negligible. There are no	Same as Option 1.

Resource Area	No Action Alternative	Proposed Action Alternative – Option 1	Proposed Action Alternative – Option 2
Protection of Children	populations present. Children would continue to be supervised if present at the leased hangar.	Environmental Justice populations near the site. Children would not be placed at an increased risk. No cumulative impacts anticipated.	
Infrastructure	There would be no change from current traffic or road conditions. No change in utilities or flight operations.	No permanent change to traffic or road infrastructure. Minor increase in traffic during construction. Utilities would be extended from AJ Way to service the LAASF. Proposed Action would not adversely affect airport operations. Utilities would not be overwhelmed by the additional demand. Cumulative impact would be negligible.	Same as Option 1.
Hazardous and Toxic Materials and Waste	Continued potential for accidental petroleum, oil, or lubricant spills during aircraft refueling, general maintenance, and parking personal vehicles at the leased hangar on the BFS property.	Potential for accidental petroleum, oil, or lubricant spills during aircraft refueling, general maintenance, and parking personal vehicles at the LAASF would be negligible due to the standard practices including secondary containment. No cumulative impacts anticipated.	Same as Option 1.

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SECTION 3.0 Affected Environment

This section describes the baseline conditions in Billings at the Proposed Action's location (refer to Figure 2-2 and Figure 2-3). The physical, biological, social, and economic values and resources potentially affected by the Proposed Action were considered. Not all resources warrant detailed analysis. Resources are analyzed if:

- there is a relatively high potential level of impact and assessment is needed to determine the significance of the impact; or
- there is a disagreement about the best way to use a resource or resolve an unwanted resource condition due to the Proposed Action.

Based on best available information, known resource values, and current site-specific data collected during field investigations, the resources listed in Table 3-1 were identified as either not present or not warranting detailed investigations and the rationale for this determination.

Table 3-1. Resources Considered but Eliminated from Further Analysis

Resource Area	Not Present	Present/ Not Affected	Rationale
Wetland Resources, Water Quantity and Quality Impacts, or Floodplains		X	No wetlands (U.S. Fish and Wildlife Service [USFWS] 2023a), or floodplains (Federal Emergency Management Agency [FEMA] 2013) occur within the project area. All water and wastewater would be provided by municipal water and sewer services and would not require new wells or water sources. Potential to discharge petroleum products or other chemicals due to fueling, maintenance, and operation of helicopters is unlikely due to standard practices, such as secondary containment and compliance with SPCC and Hazardous Material and Waste Management Plan (HMWMP). Water quality, water quantity, and floodplains would not be affected by the LAASF.

The "project area" is the 40-acre parcel, approximately 0.9-acre drainage easement west of the Billings Logan International Airport and potential location of the helipad, clear zones, and APZs located north of the MTARNG parcel just west of the city limits of Billings, in Yellowstone County, Montana (refer Figure 1-1). Billings' elevation is 3,126 feet above sea level. The Billings Logan International Airport sits atop of the Rimrocks (Rims), sandstone cliffs approximately 500-feet high in this location and above most of Billings. MTARNG training activities currently occur at the leased hangar on BFS property.

3.1 Land Use

The project area is within Billings. It consists of undeveloped agricultural fields west of the Billings Logan International Airport and the existing leased BFS hangar. Additional agricultural fields are located to the west and undeveloped land owned by Billings is to the north. Suburban residential neighborhoods are located south and northwest of the project area. The land for the proposed LAASF has been acquired by DMA. The area to the north where the proposed drainage easement, potential helicopter pad, and clear areas would be located is on Billings property.

According to the City of Billings zoning map, the northern DMA parcel and the airport land to the north are both exempt. The southern DMA parcel is zoned as Vacant-Rural (Billings 2024). The

airport and adjacent land to the north are zoned for public institutional uses, and the land directly to the south of the property is zoned for heavy commercial use (Billings Zoning Information Website 2023). The parcels to the west of the project area are located within unincorporated Yellowstone County and are zoned for agriculture (Yellowstone County 2020). There is residential development south of Some parcels near the project area are currently planned for or undergoing development. Projects underway or recently developed include the Yellowstone Landing Commercial Park development located south of the proposed hangar, between Hangar Drive, Highway 3, Huey Way, and AJ Way. Future development is anticipated at the intersection of Rod and Gun Road and Highway 3 once the Northwest Billings Connector, also referred to as the Inner Belt Loop, is completed (personal communication Mattox, Billings to Shelton, Jacobs, 18 September 2023).

The current visual character of the project area is unirrigated agricultural fields with tall grasses. The visual character of the surrounding area includes existing airport infrastructure at the Billings Logan International Airport and BFS operations to the east. Unirrigated fields are present to the north, west, and south along with construction and new development to the south along AJ Way and Highway 3. The project area is not readily visible from major roads or subject to any agency's scenic standards or requirements. No visually sensitive areas have been identified.

3.2 Air Quality

This section provides baseline information regarding air quality standards, ambient air quality in Billings, and climate change.

3.2.1 Existing Air Quality

The USEPA determines if geographical areas meet federal national ambient air quality standards and state-specific air quality standards. If an area meets the standards, it is called an "attainment area." If an area does not meet a standard for a specific pollutant, it is referred to as a "nonattainment area." Once a state has taken measures to reduce emissions and the area has met the standards and additional re-designation requirements in the Clean Air Act, it can be re-designated as a "maintenance area." Table 3-2 provides the state and federal standards for each criteria pollutant that the USEPA monitors. Billings is a maintenance area for carbon monoxide and sulfur dioxide.

3.2.2 Greenhouse Gases/Climate Change

The Army issued a policy *Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in Army National Environmental Policy Act Reviews* (2021) providing guidance on the inclusion of GHG emissions and Climate Change, as part of the environmental baseline for NEPA analyses prepared in accordance with *32 CFR 651*, *Environmental Analysis of Army Actions*.

GHGs are compounds that may contribute to accelerated climate change by altering the thermodynamic properties of the earth's atmosphere. GHGs consist of carbon dioxide (CO_2), methane, nitrous oxide, and fluorinated gases (USEPA 2021a). Under the USEPA Mandatory Reporting Rule, facilities that emit 25,000 metric tons or more per year of carbon dioxide equivalent (CO2e) emissions must submit annual reports to the USEPA (USEPA 2013). This EA looks at GHG emissions as a category of air emissions. It also looks at issues of temperature and precipitation trends (climate change) (see Section 4.2.1).

Table 3-2. National Ambient Air Quality Standards

Air Pollutant	Average Time	Federal National Ambient Standards		Montana Ambient Air Quality Standards
		Primary	Secondary	All
Carbon monoxide	1-hour 8-hour	35 ppm(1) 9 ppm	-- --	23 ppm 9 ppm
Nitrogen dioxide	1-hour Annual	100 ppb(2) 53 ppb	-- 53 ppb	0.30 ppm 0.05 ppm
Ozone	8-hour 1-hour	0.07 ppm --	0.07 ppm --	-- 0.10 ppm
PM_{10}(3)	24-hour Annual	150 µg/m^3 (4) --	-- --	150 µg/m^3 50 µg/m^3
$PM_{2.5}$(5)	24-hour Annual	35 µg/m^3 12 µg/m^3	35 µg/m^3 15 µg/m^3	-- --
Settled Particulates	30-day average	--	--	10 g/m^2 (6)
Sulfur dioxide	1-hour 3-hour 24-hour Annual	75 ppb -- 0.14 ppm 0.03 ppm	-- 0.50 ppm -- --	0.50 ppm -- 0.10 ppm 0.02 ppm
Lead	90-day Calendar Quarter	 0.15 µg/m^3	 0.15 µg/m^3	 1.5 µg/m^3
Hydrogen sulfide	1-hour	--	--	0.05 ppm
Visibility	Annual	--	--	$3x10^{-5}$/m scattering coefficient

Source: USEPA 2021b and State of Montana 2023

(1) ppm = parts per million; (2) ppb = parts per billion; (3) PM_{10} = Particulate matter 10 microns or less in diameter; (4) µg/m^3 = microgram per cubic meter; (5) $PM_{2.5}$ = Particulate matter 2.5 microns or less in diameter; (6) g/m^2 = grams per square meter

Billings has a semi-arid climate with dry, hot summers and cold, dry winters. The climate in Montana is changing, and temperatures have increased by about 2 degrees Fahrenheit in the past century (USEPA 2016). Increasingly heat waves are occurring and the snowpack is melting earlier in spring. The persistent droughts are killing trees and other vegetation increasing the potential for and the intensity of forest fires. The continued changing climate is likely to decrease available water in the state and affect vegetation and agricultural yields and further increase the likelihood of wildfires (USEPA 2016).

Currently, aviation training and missions operate out of the leased hangar. Current emissions for six helicopters, tactical vehicles, and forklift are listed in Table 3-3. Since the current operations are using four helicopters, emissions in Table 3-3 are greater than actual emissions but consistent with approved activities. See Appendix E for additional information on how these emissions were calculated.

Table 3-3. Estimated Annual Emissions (tons)

Criteria Pollutant Emissions (tons) by Activity

Activity	Nox (ton)	Sox (ton)	CO (ton)	VOC (ton)	PM_{10} (ton)	$PM_{2.5}$ (ton)
CH-47	1.22	0.08	0.57	0.20	0.23	0.20
UH-72	0.09	0.02	1.27	0.08	0.09	0.09
UH-60	0.67	0.05	0.96	-	0.12	0.10
HEMMT	1.3E-03	3.2E-06	4.7E-04	1.3E-04	3.4E-05	3.1E-05
LMTV	2.0E-04	2.0E-06	4.6E-04	1.4E-04	4.0E-06	4.0E-06
HMMWV	1.6E-04	1.6E-06	1.8E-03	1.1E-04	3.2E-06	3.2E-06
Forklift	1.9E-02	1.6E-03	1.3E-02	3.6E-03	2.3E-03	2.2E-03
Total:	**2.00**	**0.15**	**2.82**	**0.28**	**0.44**	**0.39**

Nox-Nitrous oxides, Sox-sulfur oxides, CO-carbon monoxide, VOC-volatile organic compounds

3.3 Noise

Sound is created when an object vibrates and radiates part of its energy as acoustic pressure or waves through a medium, such as air, water, or a solid object. Sound levels are expressed in units called decibels (dB). Noise is generally defined as any loud or undesired sound. Noise levels are also expressed in dB. Since the human ear does not respond equally to all frequencies (or pitches), measured noise levels are often adjusted or weighted to correspond to the frequency of human hearing and the human perception of loudness. The weighted noise level is designated as the A-weighted noise level in decibels (otherwise known as dBA).

Around a military or civilian airfield, the noise environment is normally described in terms of the time-averaged sound level generated by aircraft operating at that facility. For this project, operations consist of the existing fixed-wing and rotary-wing flight activities conducted during an average annual day, including arrivals and departures at the airfield, flight patterns in the general vicinity of the airfield, and maintenance operations.

Day-Night Average Sound Level (DNL) represents the total accumulation of all sound energy, but it is spread out uniformly over a 24-hour period. While DNL provides a single measure of the overall noise impact, it does not provide specific information on the number of noise events or the individual sound levels that occur during the 24-hour period. For example, a daily average sound level of 65 dB could result from only a few loud events or many relatively quiet events.

Outdoor noise levels were computed for 34 Points of Interest (POI) (i.e., noise measurement points that provide a representative estimate for a general area) near the proposed LAASF. These POI included hospitals, parks, residential areas, schools, and places of worship. These POI are representative of noise in that area. POI are identified in Table 3-4 and depicted in Figure 3-1. Existing noise levels ranged from 4.43 dBA DNL at Orchard Elementary and Riverside Middle School to 66.5 dBA DNL at Swords Park. Primary noise sources include arrivals/departures and activities at the airport, helicopter operations at BFS and MTARNG, road traffic, and other sources typical of an urbanized area. For more information on the noise levels for each POI, refer to the Noise Study Report included in Appendix D which can be found on DMA's website at www.mt.gov/dma/CFMO/index.

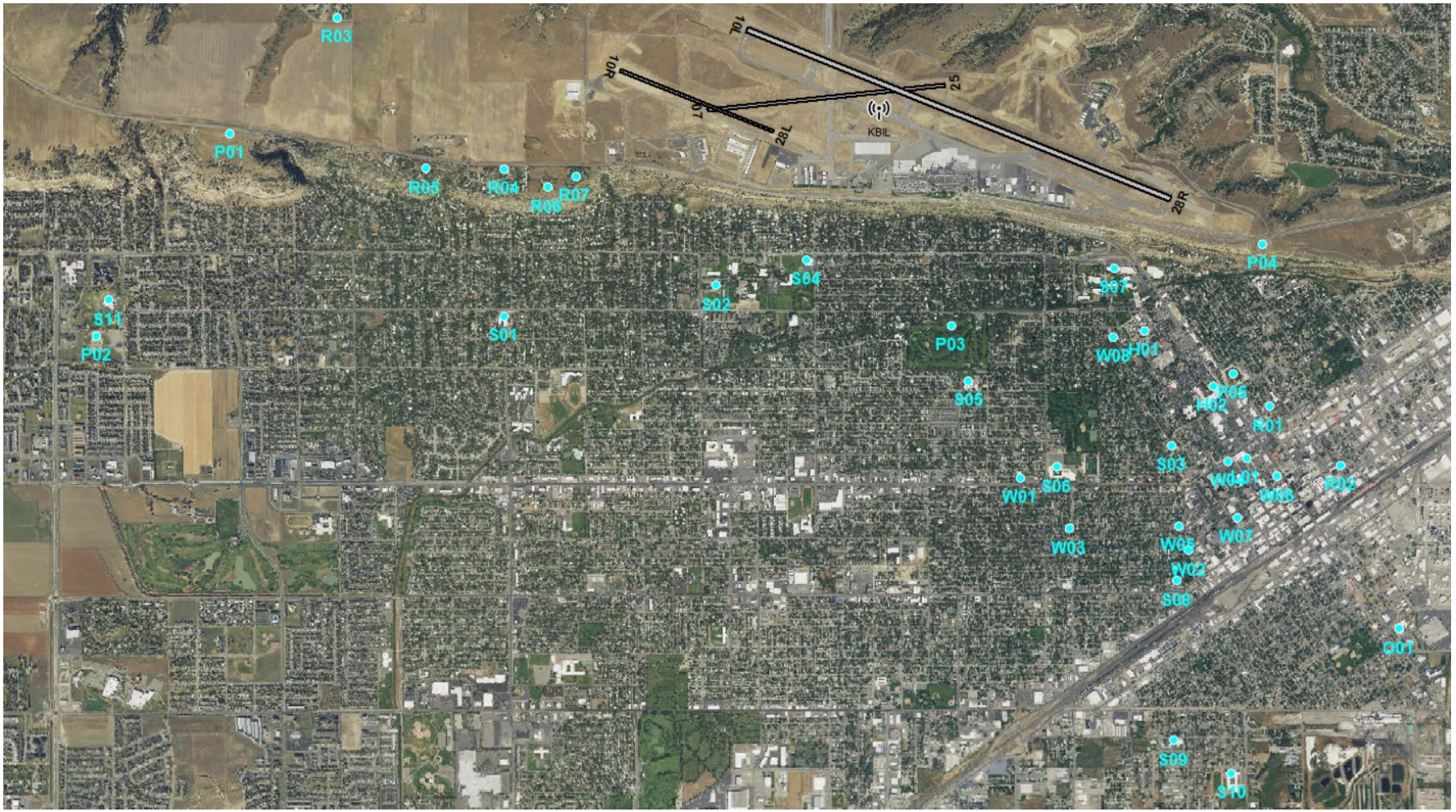

Figure 3-1. Points of Interest

Table 3-4. Existing Noise Levels for the Points of Interest

Type	ID	Description	DNL (dBA)	Type	ID	Description	DNL (dBA)
Hospital	H01	St. Vincent Healthcare	58.0	Schools	S03	McKinley Elementary School	52.6
	H02	Billings Clinic Hospital	56.1		S04	Rimrock Learning Center	50.8
Library	L01	Billings Public Library	52.7		S05	Highland Elementary School	51.7
Prison	O01	Montana Women's Prison	48.6		S06	Billings Senior High School	49.9
Parks	P01	Zimmerman Park	50.8		S07	Montana State University Billings	57.6
	P02	Poly Vista Park	48.1		S08	Billings Central Catholic High School	47.8
	P03	Hilands Golf Club	53.6		S09	Orchard Elementary School	43.4
	P04	Swords Park	66.5		S10	Riverside Middle School	43.4
	P05	Dehler Park	56.8		S11	Arrowhead Elementary School	48.3
Residential	R01	Prairie Tower Apartments	54.9	Places of Worship	W01	Trinity Lutheran Church	49.0
	R02	Sage Tower Retirement Apartments	52.1		W02	First Baptist Church	48.8
	R03	Rehberg Ranch Community	52.8		W03	St. Nicholas Orthodox Church	47.8
	R04	Masterson Circle Community	51.0		W04	First Christian Church	52.6
	R05	Wyatt Circle Community	49.1		W05	American Lutheran Church	49.5
	R06	Stoney Ridge Circle Community	51.8		W06	First Congregational United Church	52.2
	R07	Sky Ranch Community	52.3		W07	St. Patrick Co Cathedral	50.4
Schools	S01	Poly Drive Elementary School	44.3		W08	First English Lutheran Church	57.7
	S02	Rocky Mountain College	48.9				

3.4 Geology, Topography, and Soils

The geology within the project area consists of sedimentary rock, including sandstone and shale. The primary geologic bedrock unit within the project area is Eagle Sandstone from the Upper Cretaceous period (Montana Bureau of Mines and Geology [MBMG] 2000). The topography of Billings is generally characterized by a series of hills and ridges, including the Rimrocks, a series of

sandstone cliffs that rise 500 feet above the valley floor. The elevation within the project area ranges between approximately 3,680 feet to 3,730 feet above mean sea level. No active fault lines, earth fissures, landslides, or other known geologic hazards are within the project area (MBMG 2023). On occasion, boulders have fallen from the rims. According to a study conducted by Terracon (Rockfall Potential Evaluation Rimrocks to Valley Bike and Pedestrian Feasibility Study 2016), "Freeze/thaw periods, wetting and drying periods, and erosional effects are the main causes of rockfall along the rimrocks with toppling failure mechanisms as the primary way in which the rockfalls occur." The study goes on to note that "failures do not occur in a uniform manner that can be readily projected by monitoring" (Terracon 2016). It is unknown to what extent, if any, the vibrations associated with helicopters, airplanes, trucks, etc. near the rims affects the stability of the hillside. No mining claims or abandoned mines are present within the project area (MBMG 2023). DMA owns the mineral rights associated with their property.

Three soil types have been mapped within the project area by the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS). The defined soil types in the area are Wormser-Worland sandy loams, 4 to 7 percent slopes (52.6 percent); Worland fine sandy loam, 2 to 7 percent slopes (46.9 percent); and Wormser clay loam, 1 to 4 percent slopes (0.5 percent) (NRCS 2023).

The Farmland Protection Policy Act (7 U.S.C. § 4201) was enacted to minimize the unnecessary and irreversible conversion of prime and unique farmland and land of statewide or local importance to nonagricultural uses. Prime farmland has the best combination of physical and chemical characteristics for producing food, forage, fiber, feed, and oilseed crops. Farmland of unique importance is not prime farmland but is used to produce high-value fiber and food crops including citrus, fruits, vegetables, nuts, etc. There are approximately 192,000 acres of farmland of statewide importance in Yellowstone County (Torske and Barker 2021).

Two of the soil types within the project area (Wormser-Worland sandy loams, 4 to 7 percent slopes and Worland fine sandy loam, 2 to 7 percent slopes) are classified as farmland of statewide importance and encompasses 99.5 percent of the project area (NRCS 2023). The remaining 0.5 percent of the project area consists of Wormser clay loam, 1 to 4 percent slopes, which is classified as prime farmland if irrigated (NRCS 2023).

3.5 Water Resources

No washes, wetlands, springs, or floodplains occur within the project site (Montana Natural Heritage Program [MTNHP] 2021; USFWS 2023a; FEMA 2013). The site is located at the eastern end of the Upper Yellowstone-Lake groundwater basin within the non-glacial Central Groundwater region. Groundwater wells in the vicinity of the site are between 240 and 320 feet deep (MBMG 2021).

Water in the project vicinity generally flows to the northeast collecting in small washes and tributaries that ultimately discharge into Alkali Creek located approximately 2.5 miles west of the project area.

3.6 Biological Resources

The project area is in the Great Plains Physiographic Province characterized by a high plateau of semiarid grassland with low hills and incised stream valleys (Britannica 2023). The site is also located on the urbanized fringe of Billings and adjacent to the Billings Logan International Airport.

The LAASF would occur on agricultural fields, pastureland, and open space lands on MTARNG and airport property that are mowed and maintained. Species commonly found in the project area include western meadowlark, horned lark, vesper sparrow, common raven, eastern kingbird, red-breasted nuthatch, great-horned owl, bats, white-tailed deer, mule deer, coyote, Richardson's ground squirrel, plains garter snake, prairie rattlesnake, and common sagebrush lizard.

The USFWS Information for Planning and Consultation (IPaC) System was reviewed to determine if any federally listed species potentially occur in the vicinity of the proposed LAASF (USFWS 2023b). Monarch butterfly *(Danaus plexippusi)*, an Endangered Species Act candidate species, was the only federally listed special status species identified with the potential to occur within the project area. Suitable native habitat was identified in the project limits. No critical habitat is in the project area.

The MTNHP was reviewed to identify state listed species with the potential to occur within the project area. Ten Montana State Species of Concern were identified within the project vicinity, but only eight have the potential to occur onsite, including seven bird species protected under the Migratory Bird Treaty Act (golden eagle, burrowing owl, ferruginous hawk, chestnut-collared longspur, Baird's sparrow, bobolink, and long-billed curlew) and one bat species (little brown myotis) (MTNHP 2023). Additional information regarding the biological resources present within the project site may be found in the Biological Resources Technical Memorandum found in Appendix F.

3.7 Cultural Resources

The 40-acre parcel, drainage easement, helipad, and two clear zones comprise the APE for direct effects to cultural resources. A portion of the project limits were surveyed as part of a Class III cultural resources survey in 2021 with a finding of no historic resources. Background research and the field survey of the drainage easement, helipad, and clear zones identified one historic site (24YL2488). Site 24YL2488 is a trash deposit consisting of bottle and jar glass fragments, window glass, metal cans and can fragments, and asbestos tile fragments that likely occurred sometime in the late 1940s to 1960s. Site 24YL2488 is recommended as ineligible for inclusion in the National Register of Historic Places (NRHP). No historic properties, Traditional Cultural Places, or Sacred Sites are present within the APE. Refer to Section 1.5 for a summary of the Section 106 consultation process.

3.8 Socioeconomics and Protection of Children

According to 2022 Census data (the most current data), the population of Billings is estimated to be 119,960, growing by approximately 15 percent since 2010, which is slightly greater than the overall population growth across Montana statewide for the same period (U.S. Census Bureau 2022). Approximately 2.6 percent of the population in Billings is unemployed, which is the same level of unemployment statewide in Montana (U.S. Census Bureau 2022). The median household income in Billings is $63,608, slightly higher than the statewide median household income (U.S. Census Bureau 2022). According to 2022 Census data, approximately 93 percent of all housing units are occupied within Billings (U.S. Census Bureau 2022).

The Billings Public School community includes 22 elementary schools, 6 middle schools, and 3 high schools with approximately 16,120 students enrolled (Billings Public Schools 2023). As the largest city in Montana, Billings offers numerous stores, restaurants, hotels, and other businesses and services to residents and visitors. The Billings Department of Parks, Recreation, and Public Lands manages Billings' parks and recreation system, which offers approximately 2,580 acres of parkland including 171 park areas, 40 playgrounds, 30 miles of paved use trails, and a minor league baseball stadium (Billings Department of Parks, Recreation and Public Lands 2023).

The closest general hospital to the LAASF is the St. Vincent Healthcare facility that is open 24-hours a day and includes a Level II Trauma Center (SCL Health 2023). The Billings Fire Department provides fire suppression services, emergency medical care, and first response within Billings and within the Billings Urban Fire Service Area, which includes the existing and proposed LAASF locations (Billings Fire Department 2020).

Executive Order 13045, *Protection of Children from Environmental Health Risks and Safety Risks* (21 April 1997), identifies that studies are demonstrating that children may suffer disproportionately

from environmental health and safety risks because 1) children's' bodily systems are not fully developed, 2) they eat, drink, and breathe more in proportion to their body weight, 3) their size and weight may diminish protection from standard safety features, and 4) their behavior patterns may make them more susceptible to accidents. For these reasons, the President directed federal agencies to make it a high priority to identify and assess environmental health and safety risks that may disproportionately affect children. The President also directed each federal agency to ensure that its policies, programs, activities, and standards address disproportionate risks to children that result from environmental health or safety risks.

The LAASF would be used for helicopter activities and generally children would not be present. During times when children are present, precautions would be taken for their safety, including limiting access to areas that pose risks and through adult supervision.

3.9 Environmental Justice

Title VI of the Civil Rights Act of 1964 and related statutes ensure that individuals are not excluded from participation in, denied the benefit of, or subjected to discrimination under any program or activity receiving federal financial assistance because of race, color, national origin, age, sex, or disability. *Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, directs that programs, policies, and activities not have a disproportionately high and adverse human health and environmental effect on minority and low-income populations. In addition, *Executive Order 14008*, *Tackling the Climate Crisis at Home and Abroad* directs federal agencies to achieve environmental justice as part of their missions by developing programs, policies, and activities to address the disproportionately high and adverse impacts on human health, environmental, climate-related and other cumulative impacts on these communities as well as the accompanying economic challenges of such impacts. *Executive Order 14096, Revitalizing Our Nation's Commitment to Environmental Justice for All* reinforces previous executive orders by directing federal agencies to make achieving environmental justice part of their missions by identifying and addressing, as appropriate, disproportionate and adverse human health or environmental effects of its programs, policies, and activities on communities with environmental justice concerns and reinforces the importance of early and meaningful public involvement in the project review process.

Minority populations occur where either: 1) the minority population of the affected area exceeds 50 percent or 2) the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis, such as the county or state. A minority population also exists if there is more than one minority group present and the minority percentage, as calculated by aggregating all minority persons, meets one of the above-stated thresholds (CEQ 1997).

The U.S. Census Bureau defines low-income population areas as a "poverty area" where 20 percent or more of the residents have incomes below the poverty level, and an "extreme poverty area" has 40 percent or more residents that are below the poverty level. The criteria for determining poverty level are applied nationally, except for Alaska and Hawaii, without regard to the local cost of living.

The population in Billings is predominantly comprised of people who identify as white, with Hispanic or Latino being the second most common followed by those who identify as American Indian/Alaskan Native (Table 3-5). The distribution of races in the localized population, captured by block group information, indicates fewer people identify as a minority in the block group than compared to the state, county, and city counts. The population within the block group encompassing the project area is predominantly comprised of people who identify as white, with Hispanic or Latino being the second most common followed by those who identify as American Indian/Alaskan Native.

Poverty levels in Billings (11.1 percent) are comparable to and slightly lower than Yellowstone County (11.3 percent) and Montana (12.1 percent, Table 3-6). The distribution of poverty in the localized population, captured by block group information, indicates the number of people who live below the poverty level is lower in the project vicinity than compared to the state, county, and city counts. No low-income population was identified in the project area.

Table 3-5. Geographic Distribution of Minorities, Count/Percentage

Area	Total	White	African-American	American Indian/ Alaskan Native	Asian	Native Hawaiian/ Pacific Islander	Other Race	Hispanic or Latino*
Montana	1,122,867	995,983 88.7%	6,737 0.6%	72,986 6.5%	12,352 1.1%	1,123 0.1%	33,686 3.0%	50,529 4.5%
Yellowstone County	169,852	152,696 89.9%	1,190 0.7%	8,832 5.2%	1,529 0.9%	170 0.1%	5,435 3.2%	11,210 6.6%
Billings	119,960	104,245 86.9%	1,320 1.1%	5,638 4.7%	960 0.8%	0 0%	7,797 6.5%	8,277 6.9%
CT 14.02, BG3 Yellowstone County	1,039	940 90.5%	6 0.6%	10 1.0%	8 0.8%	4 0.4%	9 0.9%	45 4.3%

* Persons of Hispanic or Latino origin may be of any race; CT- Census Tract, BG – Block Group; Source: U.S. Census Bureau 2020 and 2022

Table 3-6. Geographic Distribution of Poverty, Count/Percentage

Area	Total	Total below poverty level, age 18-64	Total below poverty level, 65 and over	Combined Total below poverty level
Montana	1,122,867	74,635 6.65%	27,661 2.46%	102,296 9.11%
Yellowstone County	169,852	7,686 4.53%	3,392 2.00%	14,161 6.53%
Billings	119,960	5,766 4.81%	2,170 1.81%	7,936 6.62%
CT 14.02, BG3 Yellowstone County*	1,039	49 4.41%	10 0.90%	59 5.32%

Source: U.S. Census Bureau 2020* and 2022

In addition to the Census data, the USEPA EJScreen was used to compare environmental and demographic indicators for the project area (the project area and a 1-mile buffer) to the rest of the state and country to assess potential impacts to environmental justice populations (Table 3-7 and Appendix G). The USEPA EJScreen uses percentiles to compare whether the population within the project area has an equal or lower potential for exposure, risk, proximity to certain facilities, or minority/poverty level compared to the state, region, and/or U.S. The greater the percentile, the greater the potential for exposure or risk or the greater the minority/low-income population.

Table 3-7. EJScreen Reported Minority and Low-Income Averages and Percentiles

Socioeconomic Indicator	Project Area Value	State Average	Percentile in State	National Average	Percentile in the Nation
People of Color	10%	14%	52	40%	23
Low Income	13%	32%	12	30%	23
Limited English Speaking	0%	0%	0	5%	0

The results of the EJScreen for the project area indicated that 10 percent of the population in the study area is minority compared to the state's 14 percent and the nation's 40 percent. For income, 13 percent of people within the project area are classified as low income compared to the state's 32 percent and the nation's 30 percent. Based on these data, those within the project area and the one-mile buffer do not constitute an Environmental Justice community.

3.10 Infrastructure

This section describes transportation and utility infrastructure associated with the affected area.

3.10.1 Transportation Infrastructure

The project is accessible from Highway 3 using AJ Way. This portion of Highway 3 is a two-lane State-owned and maintained road with an average daily traffic in is between 11,120 at Zimmerman Road and 11,320 vehicles at the airport (Billings-Yellowstone County Metropolitan Planning Organization 2022). AJ Way is a privately-owned north-south, two-lane road that parallels eastern edge of the project area. Anticipated commercial development in the vicinity, including the Yellowstone Landing Commercial Park that is under construction, and residential growth within the region contribute to the average daily traffic on these roads. Traffic counts include the existing MTARNG traffic associated with LAASF operations that use Highway 3 and AJ Way to access the leased hangar.

The proposed Inner Belt Loop, which broke ground in March 2023, will create a new 5-mile-long arterial roadway that begins at the intersection of Highway 3 and Zimmerman Trail Road and connects with Alkali Creek Road. Construction is ongoing at Skyline Trail which connects the Airport to Zimmerman Trail and Highway 3 in this area. There are no other known projects planned for Highway 3 in the vicinity of AJ Way. Billings reviews proposed projects and depending on the situation, request that traffic studies be completed. Billings and Montana Department of Transportation are in the process of reviewing and updating the Highway 3 Corridor Study (personal communication Mattox, Billings to Shelton, Jacobs, 18 September 2023).

3.10.2 Airport Infrastructure and Aviation Operations

The Billings Logan International Airport is a city-owned and operated airport with three runways and associated taxiways. The airport serves seven passenger carrier airlines and two cargo/mail carrier airlines. According to the annual air traffic control tower operations based on Air Traffic Activity Reports, on average there are approximately 91,716 operations (landings or take offs – counted separately) broken out in 12,119 air carrier, 27,956 air taxi, 49,400 civil and general aviation, and 2,241 military operations between 2018 and 2022 (see Table 4-7 in the noise report included in Appendix D). Existing MTARNG flight operations include 1,041 annual operations, operating four of the approved six aircraft.

Airside facilities include land, runways, taxiways, aircraft parking ramps, aircraft storage hangars, Fixed Based Operators and other aircraft related businesses, airport operations, maintenance and fire-fighting facilities, fueling facilities, and navigational aids. Landside facilities include the

passenger terminal, a 120-foot air traffic control tower that was completed in 2005, car rental wash facility, and automobile parking (Billings Aviation & Transit Department 2009).

3.10.3 Utilities

No existing utilities are located on the undeveloped MTARNG, helipad, or drainage easement parcels. Utilities in the vicinity include Billings water and sewer, Northwestern Energy, and Montana-Dakota Utilities for gas. Existing gas and electricity service currently run to BFS. Water and force sewer main extend partway up AJ Way. Limited fiber is available in the area.

3.11 Hazardous and Toxic Materials/Wastes

The proposed LAASF site consists of undeveloped agricultural fields with no evidence of dumped hazardous or toxic materials/wastes. According to the USEPA EnviroMapper, no new or active incidents or conditions occur within one mile of the proposed LAASF (USEPA 2023). The operations at the leased hangar comply with the SPCC and HMWMP developed for the site.

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Section 4.0, Environmental Consequences, identifies potential direct and indirect effects of the identified project alternatives on each of the resource areas presented in this section. Impacts are the same for Option 1 (the development of the 40-acre parcel and drainage easement) and Option 2 (the helicopter pad, clear zones, and APZs located off the 40-acre parcel) unless specified otherwise.

Where impacts for Option 1 and Option 2 are the same, these impacts are discussed together. Differences between the two options are provided in separate paragraphs headed by either Option 1 or Option 2.

4.1 Land Use

Criteria used to identify impacts on land use include whether the changes would conflict with local land use plans and zoning ordinances; contribute to nuisance issues such as light, noise, or odors; or affect land uses by limiting current or future development capabilities. Land use impacts would be significant if the proposed LAASF would not comply with zoning ordinances, result in noise that violates acceptable standards (see Section 4.3), result in light that disrupts or vibration that damages the use of the land or the structures nearby, or inhibit development plans that have been approved by the local municipality or governing agency.

4.1.1 Effects of the Proposed Action

Option 1: The Proposed Action would be located entirely on DMA property except for the drainage easement. It would permanently convert undeveloped agricultural fields to the proposed LAASF. No business or residential displacements or relocations would occur. Construction and operation of the LAASF is consistent with the Billings zoning code and surrounding land uses. There are very limited proposed development plans in the immediate vicinity of the Proposed Action, and construction of an LAASF would not conflict with these plans that have been approved by Billings. Landing and takeoff functionality from the LAASF would be limited because the location of the helipad would result in structures on adjacent properties being within the APZ to the east. DMA would enter into an agreement with Billings for the use of the land immediately to the north of the DMA-owned parcels prior to construction in addition to the drainage easement.

The proposed project would alter the visual character of the project area by converting it from an undeveloped agricultural field to the LAASF and associated facilities introducing buildings and paved surfaces. Changes in visual character would be evident from nearby residential developments to the south. Residential development west of the Proposed Action would be somewhat to mostly shielded from view due to topography. The visual changes would be consistent with the adjacent development with the Billings Logan International Airport and BFS operations to the east. With the distance from viewpoints of Highway 3 or adjacent residential areas, the change in land use is not anticipated to result in additional lighting or disruption to background views. Refer to Section 4.3 for noise impact information.

Development occurring in the vicinity of the proposed LAASF complies with Billings or Yellowstone County zoning and permitting requirements. When this minor impact to land use combines with that of the Proposed Action, cumulative impacts would be minimal.

Option 2: The impacts due to Option 2 would be the same as Option 1 with one exception. Extending the project area to place the helicopter pad, clear zones, and APZs north of the DMA-owned property would eliminate the potential conflict with adjacent land uses in the MTARNG APZ and allow for easterly takeoff and landing functionality.

4.1.2 Effects of the No Action Alternative

Land use would continue to evolve and develop based on Billings, Yellowstone County, and Billings Logan International Airport plans. No land use impact would occur.

4.1.3 Best Management Practices and Mitigation

No BMPs or mitigation measures would be necessary because no significant adverse environmental impacts would occur.

4.2 Air Quality

Criteria used to identify the potential impacts on air quality include whether proposed activities would result in a decrease in ambient air quality. Significant impacts would occur if either alternative would 1) generate emissions greater than the General Conformity Rule *de minimis* thresholds (*40 CFR 93.153*); or 2) contribute to a violation of any federal, state, or local air regulations; or 3) result in a violation of an existing air permit.

4.2.1 Effects of the Proposed Action

Option 1: Under the Proposed Action, flight profiles would be adjusted from the leased hangar to the new location. Aircraft emissions for the LAASF leased hangar were estimated using the number of landings and take-offs (LTOs) and the number and duration of low flight patterns (LFPs) using the data shown in Table 4-1. Helicopter activity would vary under the Proposed Action compared to operating from the leased hangar because there would be additional ground run ups comprised of maintenance runs and engine washes shown in Table 4-1. LTOs counts were applied to engine setting profiles found in Table 2-4 of the Mobile Guide (AFCEC 2020) to determine total time in engine mode. Emission factors and fuel flow rates in Table 2-8 of the guidance were also used. Emission estimates for the CH-47 Chinook and the UH-72 Lakota were made using a surrogate aircraft--the CH-53 Sea Stallion. The MH-139 was used as a surrogate for the UH-72 Lakota. Surrogates were selected based on similar mission capabilities, engine type and size.

Auxiliary Power Units (APUs) were also included in the analysis of emissions for the UH-60 Black Hawk. An APU is a small engine that provides power to an aircraft before or after take-off while the aircraft engine is not operating. An APU typically operates for 1 hour per Black Hawk LTO.

Table 4-1. Aircraft Operations by Aircraft Type and Sortie

Aircraft	LTO Count	LFP Count	LFP Duration (min)	Ground Run Ups
CH-47 Chinook	122	1171	2.9	52
UH-60 Black Hawk	122	1171	2.9	52
UH-72 Lakota	122	659	2.9	52

Military tactical vehicle activity at the new permanent LAASF location would be similar to what was previously assessed for the leased LAASF hanger. Previous estimates were based on vehicle miles traveled. Up to four HEMMTs, eight High Mobility Multipurpose Wheeled Vehicles (Humvees), two Light Military Tactical Vehicles (LMTVs) and one forklift are anticipated to be used at the LAASF permanent facility. HEMMTs were modeled as Heavy-Duty Diesel Vehicles (HDDVs) and LMTVs and Humvees were modeled as Light Duty Diesel Vehicles. As with the previous analysis, emission factors from Table 5-21 of the AFCEC Mobile Guidance (AFCEC 2020) were applied to mileage estimates. Estimates are based on approximately 5 miles and 30 minutes of operation for each vehicle type. Forklift operation was estimated using emission factors from Table 3-6 of the AFCEC Mobile Guidance (AFCEC 2020). The forklift annual usage was estimated as 104 hours per year, with an engine size of 55 horsepower and a 30 percent load factor.

Option 1 would result in continued minimal emissions from aircraft, APUs, and vehicles, but with the emissions released in a different location. The increases within the Billings area airshed due to relocating aircraft operations and additional run up activity were found to be insignificant when compared to the General Conformity thresholds. Table 4-2 summarizes estimated emissions compared to the General Conformity *de minimis* thresholds. The Proposed Action would not cause an exceedance of any federal, state, or local regulation, including national ambient air quality standards listed in Table 3-2 and would not cause the Billings area to be in nonattainment. The relocation of existing activities and increased run ups would not require an air quality permit. A Record of Non-Applicability was issued on 22 March 2022. For additional information, refer to Appendix D.

Table 4-2. Estimated LAASF Annual Emissions and General Conformity *De Minimis* Thresholds (tons/year)

Pollutant	NO_x	SO_x	CO	VOC	PM_{10}	$PM_{2.5}$
Estimated Emissions[1]	2.4	0.17	3.0	0.32	0.46	0.41
General Conformity Threshold	100	100	100	100	100	100
Potentially Significant Impact	No	No	No	No	No	No

1. Includes ground run up emissions based on activity shown in Table 4-1.

Option 2: Option 2 for the helipad would modify the start and end location for each sortie but would not affect emissions estimates for the LTOs and the number and duration of LFPs. The impacts would be the same as for Option 1.

Greenhouse Gases/Climate Change

Option 1: The quantity of ongoing emissions from helicopter and equipment operations for training (approximately 1,053 metric tons carbon dioxide equivalents [CO_2e[1]]) at the leased LAASF hangar would continue to be released in the Billings area. Operating from the proposed LAASF, including additional ground run up activities, which are estimated to contribute approximately 51 CO_2e on an annual basis, would result in a minor increase in GHG emissions, and those emissions generated would continue to contribute to climate change.

The anticipated increases in temperature and drought in the West associated with climate change contribute to an increase in the intensity and frequency of wildfires and the potential for severe storms that may cause flooding. This potential increase in wildfires and floods would increase both air pollutants and the need for MTARNG to respond to emergencies. Other development, growth and use of fossil fuels would continue to increase and would contribute greenhouse gases to the atmosphere. MTARNG activities would contribute to these cumulative impacts.

Option 2: The impacts under Option 2 are the same as Option 1.

4.2.2 Effects of the No Action Alternative

Under the No Action Alternative, only the UH-60 helicopters would perform ground run ups, resulting in an insignificant change in air quality of less than 0.03 tons per year of any criteria pollutant

[1] CO_2e refers to the mass emitted of a given GHG and its specific global warming potential. Global warming potential indicates how much a given GHG could contribute to global warming relative to how much warming would be caused by the same mass of carbon dioxide.

annually. The number and type of activities would remain consistent with current levels and at the same location under the No Action Alternative.

Greenhouse Gases/Climate Change

There would be no change in MTARNG activities. No Action Alternative would result in an insignificant change in air quality of less than 8 tons CO_2e annually. MTARNG would continue its current use of fossil fuels for heating, electricity, helicopters, and equipment, resulting in minor but unchanged emissions of both criteria pollutants and GHGs.

4.2.3 Best Management Practices and Mitigation

Best management practices for the proposed action would include minimizing and combining vehicle trips, minimizing idling times, and maintaining well-tuned engines to help reduce pollutant emissions.

4.3 Noise

Impacts are assessed on whether they would result in a change in noise levels. Noise impacts would be determined significant if introduced noise (1) results in the violation of applicable federal, state, or local noise regulation; (2) creates appreciable areas of incompatible land use; or (3) causes the nighttime acceptable noise level to be consistently greater than existing levels. The FICUN *Guidelines for Considering Noise in Land-Use Planning and Control* (1980) characterizes aircraft noise exposure of 55 to 65 dBA in residential areas as “moderate,” between 65 and 76 dBA DNL in residential as “significant,” and over 75 dBA as “severe.” Federal Aviation Administration regulations (14 CFR 150) establishes 65 dBA DNL as the threshold of significant aircraft noise and incompatibility with residential land use (Tang 2021).

Flight paths that were used in the noise models are included in Appendix D, which can be viewed at www.mt.gov/dma/CFMO/index.

4.3.1 Effects of the Proposed Action

Option 1: During construction, there would be a short-term increase in noise associated with construction of the facilities. Given the relatively isolated location from noise-sensitive receivers, this temporary impact would be negligible.

The DNL contour levels of 55 through 80 dBA are displayed in Figure 4-1 and Figure 4-2. For Option 1, the MTARNG helipad is on the LAASF ramp, and the MTARNG flight tracks must depart and arrive to/from the north of the helipad to keep the APZ away from BFS. The DNL contour map shows that the Proposed Action Option 1 Helipad DNL contours fall very close to the baseline No Action DNL contours for most areas surrounding the airfield. However, directly surrounding the proposed LAASF Option 1 helipad, the Proposed Action 55 dBA DNL contour extends approximately 500 feet south of Highway 3 to the Rimrock boundary and approximately 1,000 feet west of Rod and Gun Club Road but does not extend into the Rehberg Ranch community. The Proposed Action 60 dBA DNL contours south of the proposed LAASF extend approximately 250 feet south of Highway 3, and the 65 dBA DNL contour does not extend beyond Highway 3.

POIs were established so that representative locations could be modeled to compare noise level changes for various areas in the study area. The noise analysis identified one location, Swords Park (P04) as having a DNL over 65 dBA (Table 4-3). However, the DNL noise level at this park currently exceeds 65 dBA, and the Proposed Action (both Options) increases the noise at this location by 0.2 dBA, which would not be perceptible. The largest impacts for the Proposed Action are directly south of the proposed LAASF. These include R04 – the Masterson Circle Community (increase of 8.6 dBA), R05 – Wyatt Circle Community (increase of 4.5 dBA), R06 – the Stoney Ridge Circle Community (increase of 3.3 dBA), R07 – the Sky Ranch Community (increase of 2.3 dBA), P01 – Zimmerman Park (increase 1.4 dBA for Option 1 and 1.3 dBA for Option 2), and R03 – Rehberg

Ranch Community (increase of 1.1 dBA for Option 1 and 0.9 dBA for Option 2). All other POIs had an increase of less than 1 dBA. It is important to note that the DNL at all these locations is less than 60 dBA for the Proposed Action.

While some noise levels would increase due to the Proposed Action, noise levels at all POIs would meet all federal, state, and local noise regulations. The changes in noise would not result in levels that are incompatible with current land use. Consistent with AR 951, aircrews would participate in noise abatement and fly-neighborly programs to minimize annoyance to persons on the ground when missions and safety are not adversely affected.

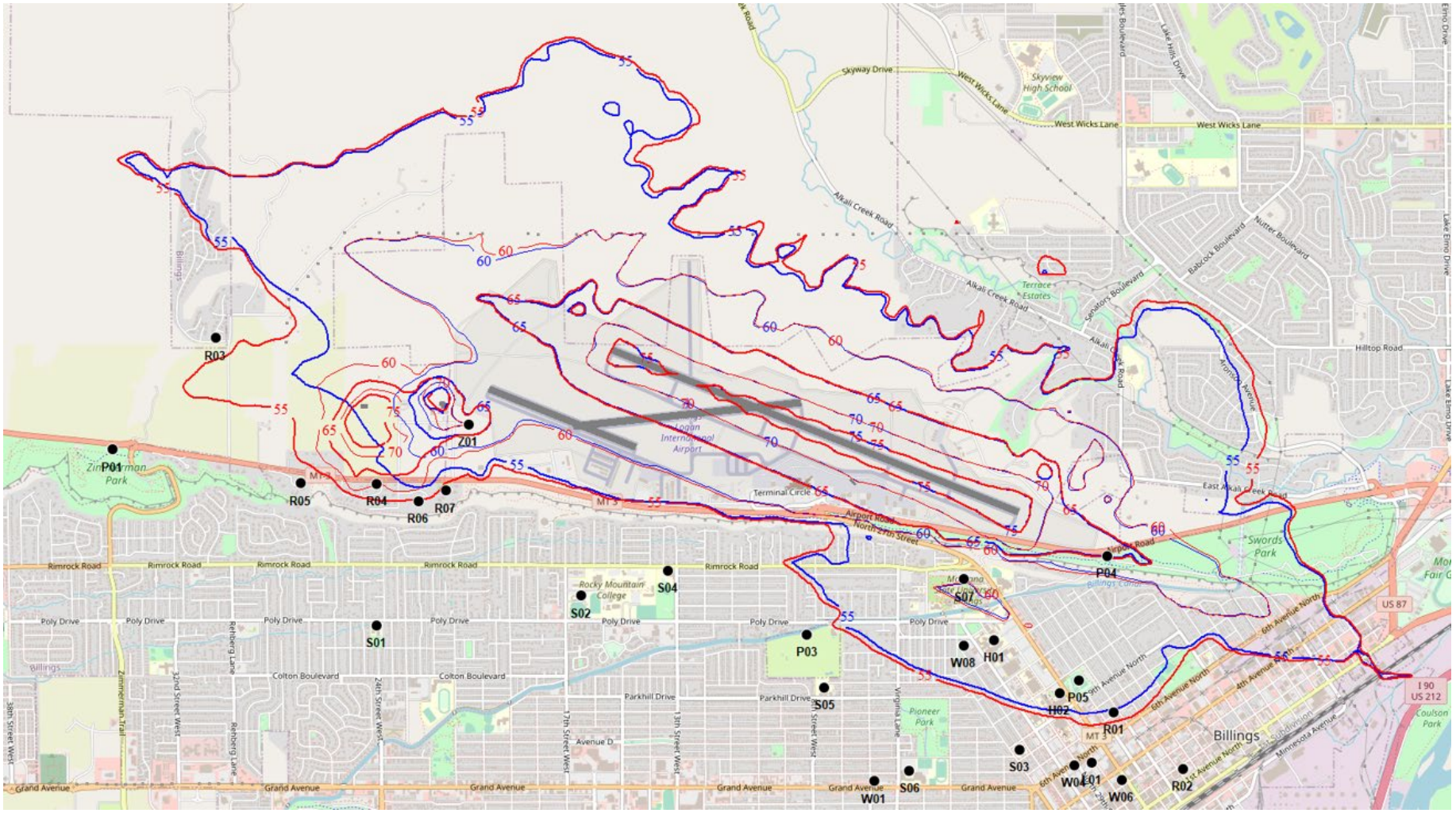
DoD guidelines recommend the use of the methodology and standards developed by ANSI and the Acoustical Society of America (ASA) for determining the probability of awakening adults associated with outdoor noise events heard in homes (DoD 2009, ANSI/ASA 2008). Approximately three percent of the MTARNG operations would occur at night. Nighttime disturbance was calculated based on the probability of awakening at the POIs. When comparing the Proposed Action to the No Action Alternative, there is an increase of less than one percent probability that someone with their windows open would be awoken at all the POIs except Swords Park. When windows are closed, this probability is lower. Nighttime noise increases would be negligible.

The use of the leased hangar resulted in initial noise increases for the POIs. This subsequent move of activities to the proposed LAASF and increase in flights and maintenance would result in additional increase for the adjacent areas. In addition, other development, increases in road and air traffic also contribute to the ambient noise. The noise contours take these changes into account (shown as the No Action Alternative). The two most affected POIs are Matterson Circle and Wyatt Circle communities which were projected to have a 3.7 dBA and 1.8 dBA increase with the introduction of the leased hangar and an additional 8.6 dBA and 4.5 dBA, respectively for cumulative increases of 9.2 dBA and 4.3 dBA (current actuals are less than was projected in the EA for the leased hangar). The combined increases in noise are still below the 65 dBA threshold for significance.

Option 2: The MTARNG helipad would be north of the LAASF on airport property, and helicopters would fly directly east and west from the helipad. The 55 dBA DNL contour for Option 2 extends approximately 500 feet south of Highway 3 to the Rimrock boundary and approximately 850 feet west of Rod and Gun Club Road but does not extend into the Rehberg Ranch community (Figure 4-2). The Proposed Action 60 dBA DNL contours south of the proposed LAASF extend approximately 250 feet south of Highway 3, and the 65 dBA DNL contour does not extend south of Highway 3. Refer to Figure 4-3 and Figure 4-4. A comparison of noise contours is provided in Figure 4-5. All noise impacts for POIs and nighttime disturbance are the same as describe for Option 1 and would meet all federal, state, and local noise regulations. The changes in noise would not result in levels that are incompatible with current land use. Consistent with AR 951, aircrews would participate in noise abatement and fly-neighborly programs to minimize annoyance to persons on the ground when missions and safety are not adversely affected.

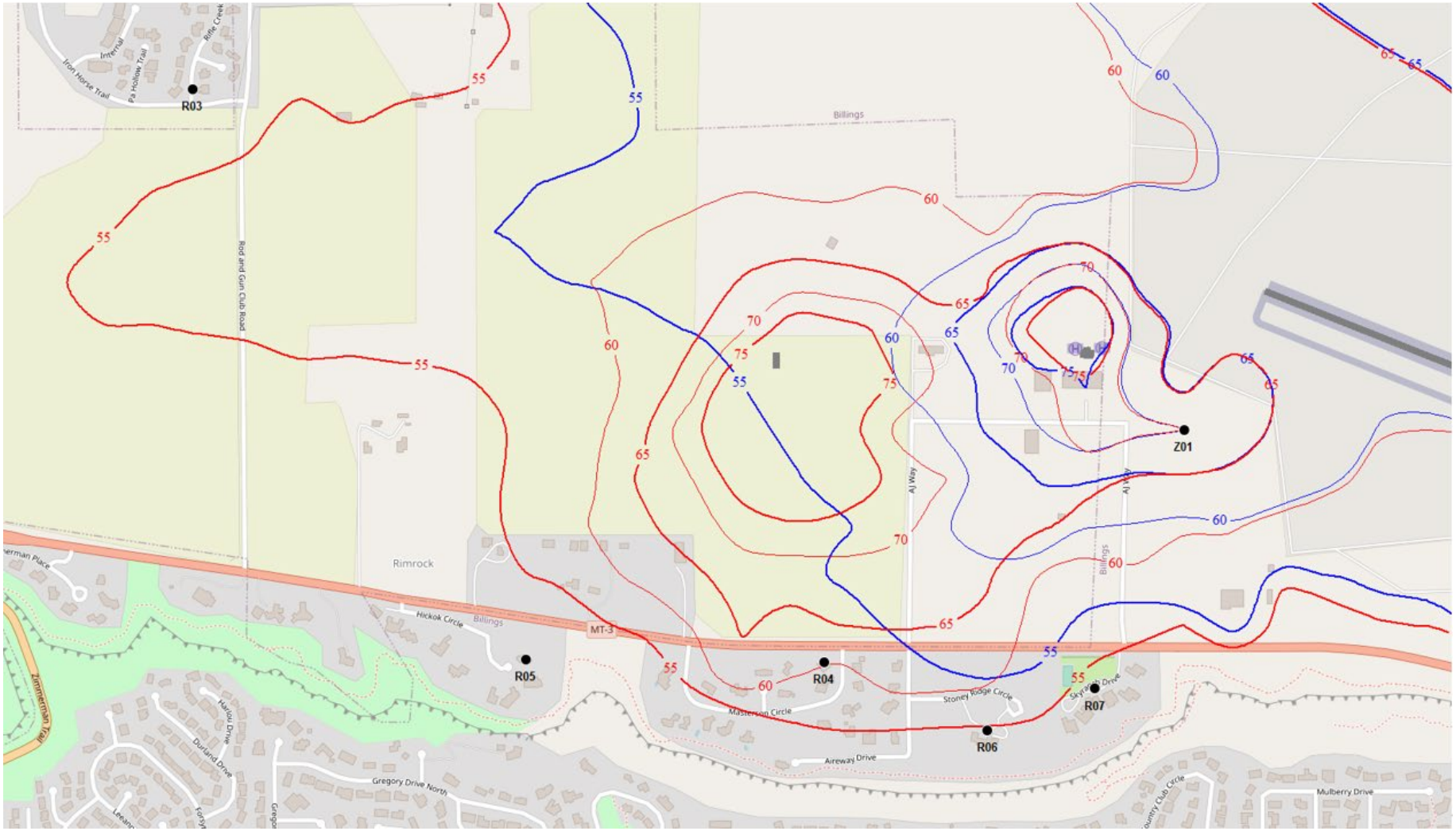
4.3.2 Effects of the No Action Alternative

MTARNG would continue its current activities from the leased hangar. Helicopter activities at the BFS hangar would change over time consistent with the business' plans. Further, additional Billings Logan International Airport flights, as well as other developments, traffic, and activities would contribute to the noise environment over time. Noise levels would change correspondingly. Over time, it is likely that noise levels would also increase. Given the relatively low projected noise levels,



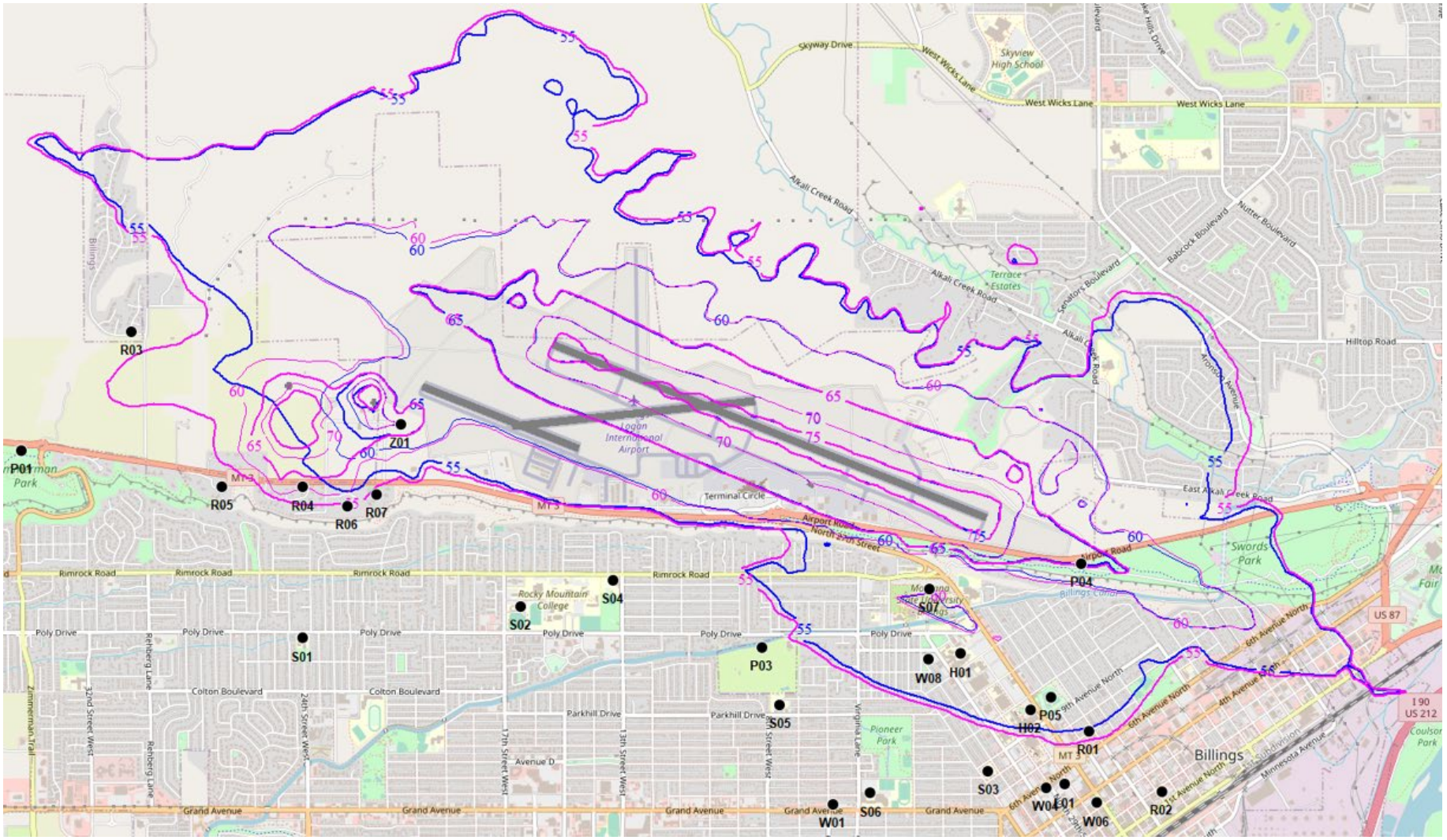
Legend: Red Contours – Proposed Action Option 1 dBA DNL; Blue Contours – No Action Alternative dBA DNL

Figure 4-1. Predicted Noise of the Proposed Action, Option 1 and No Action Alternative



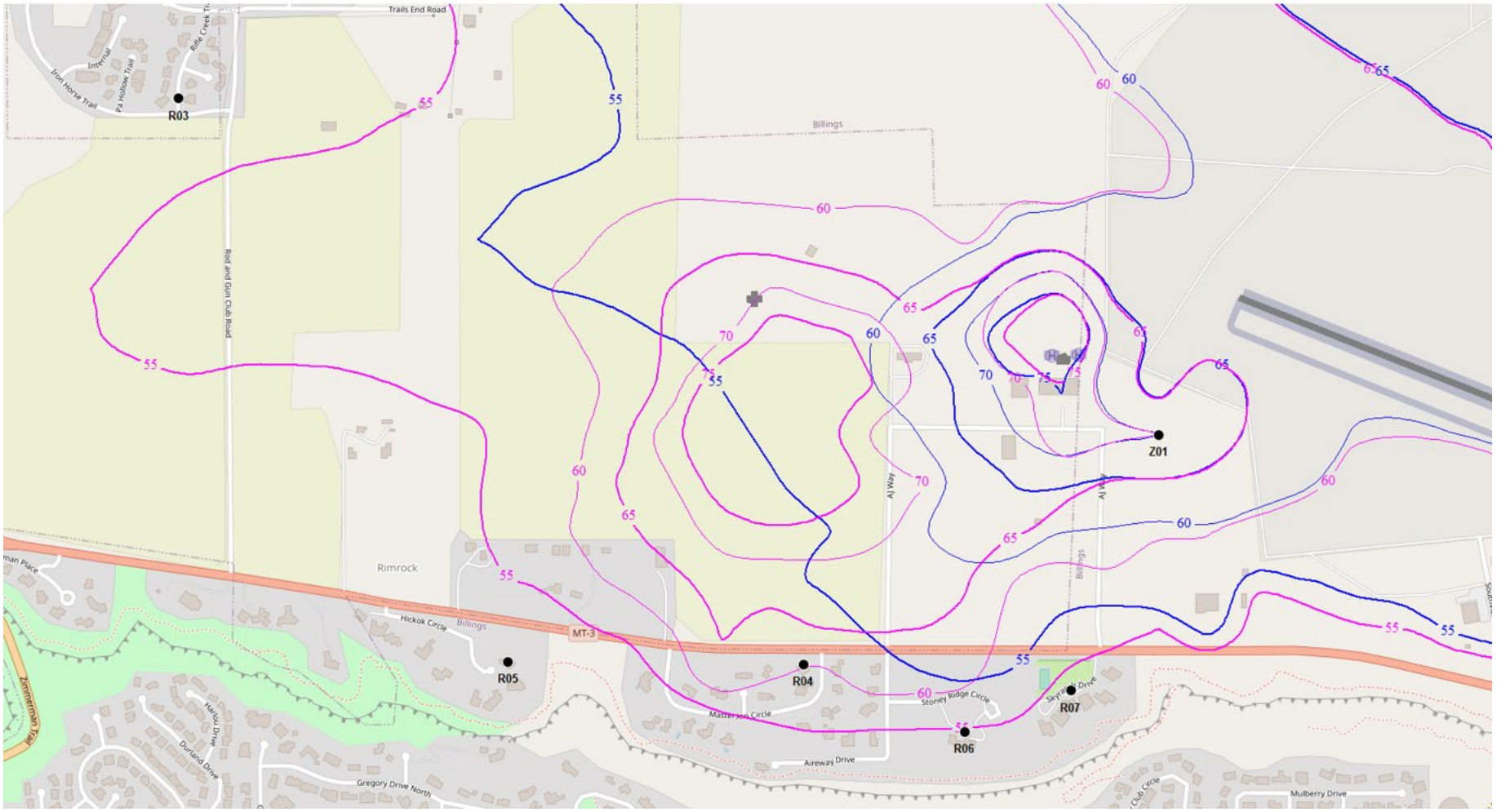
Legend: Red Contours – Proposed Action Option 1 dBA DNL; Blue Contours – No Action Alternative dBA DNL

Figure 4-2. Predicted Noise of the Proposed Action, Option 1 and No Action Alternative Expanded Around the LAASF Location



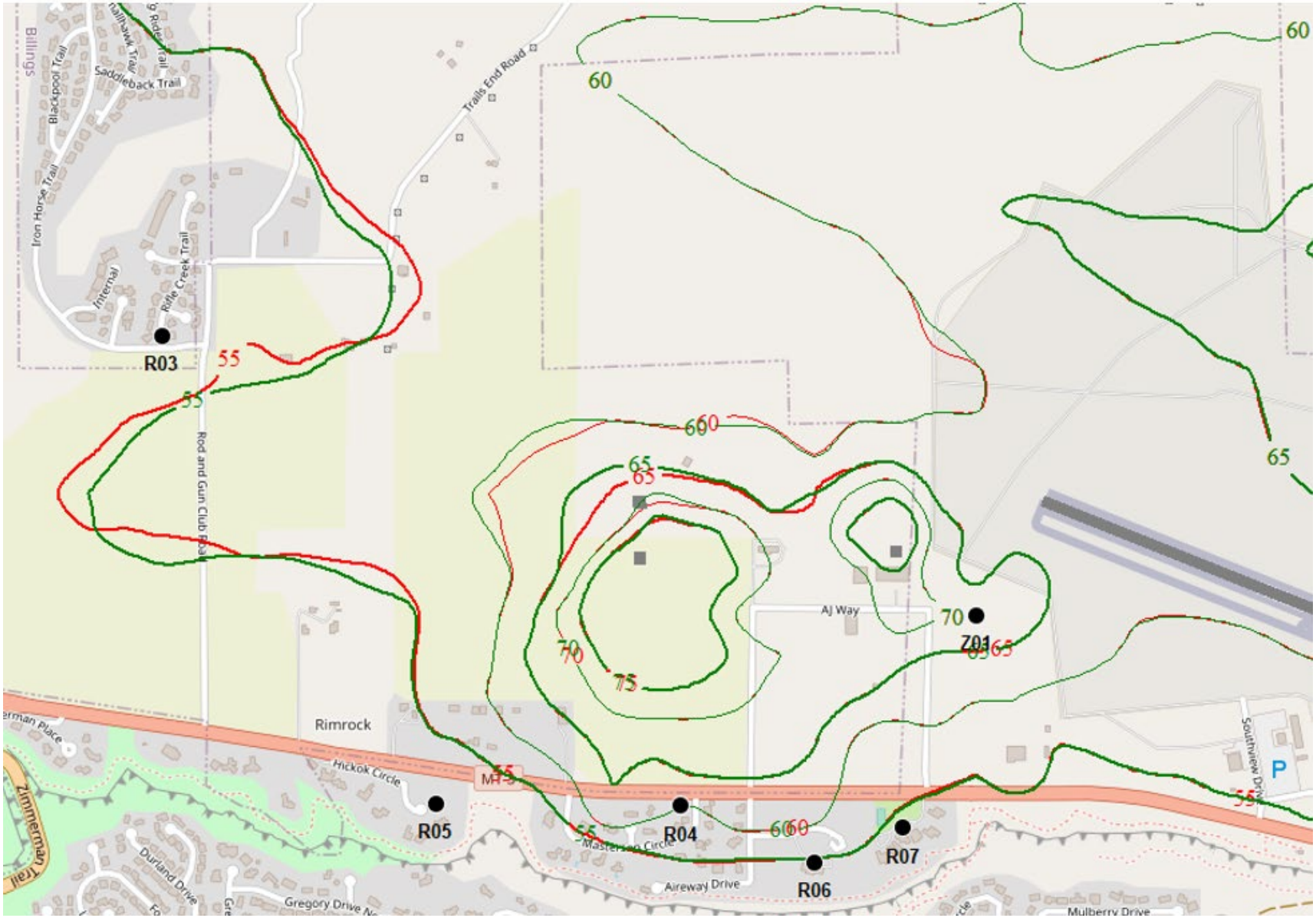
Legend: Pink Contours – Proposed Action Option 2 dBA DNL; Blue Contours – No Action Alternative dBA DNL

Figure 4-3. Predicted Noise of the Proposed Action, Option 2 and No Action Alternative



Legend: Pink Contours – Proposed Action Option 2 dBA DNL; Blue Contours – No Action Alternative dBA DNL; Numbered Points – Points of Interest

Figure 4-4. Predicted Noise of the Proposed Action, Option 1 and No Action Alternative Expanded Around the LAASF Location



Legend: Red Contours – Proposed Action Option 2 dBA DNL; Green Contours – No Action Alternative dBA DNL; Numbered Points – Points of Interest

Figure 4-5. Comparison of Proposed Action Option 1 and Option 2

Table 4-3. Noise at POIs for the No Action Compared to the Proposed Action Option 1 and Option 2 in dBA DNL

ID	Description	No Action	Proposed Action Option 1	Proposed Action Option 2	Change Opt 1/ Opt 2	ID	Description	No Action	Option 1	Option 2	Change Opt 1/ Opt 2
H01	St. Vincent Healthcare	58.0	58.2	58.2	0.2	S03	McKinley Elementary School	52.6	53.2	53.2	0.6
H02	Billings Clinic Hospital	56.1	56.4	56.4	0.3	S04	Rimrock Learning Center	50.8	51.3	51.3	0.5
L01	Billings Public Library	52.7	53.2	53.2	0.5	S05	Highland Elementary School	51.7	52.1	52.1	0.4
O01	Montana Women's Prison	48.6	48.7	48.7	0.1	S06	Billings Senior High School	49.9	50.2	50.2	0.3
P01	Zimmerman Park	50.8	52.2	52.1	1.4/ 1.3	S07	Montana State University Billings	57.6	58.0	58.0	0.4
P02	Poly Vista Park	48.1	48.5	48.5	0.4	S08	Billings Central Cath. High School	47.8	48.1	48.1	0.3
P03	Hilands Golf Club	53.6	53.9	53.9	0.3	S09	Orchard Elementary School	43.4	43.6	43.6	0.2
P04	Swords Park	66.5	66.7	66.7	0.2	S10	Riverside Middle School	43.4	43.5	43.5	0.1
P05	Dehler Park	56.8	57.1	57.1	0.3	S11	Arrowhead Elementary School	48.3	48.7	48.8	0.4/ 0.5
R01	Prairie Tower Apartments	54.9	55.4	55.4	0.5	W01	Trinity Lutheran Church	49.0	49.3	49.3	0.3
R02	Sage Tower Retirement. Apartments	52.1	52.4	52.4	0.3	W02	First Baptist Church	48.8	49.1	49.1	0.3
R03	Rehberg Ranch Comm.	52.8	53.9	53.7	1.1/ 0.9	W03	St. Nicholas Orthodox Church	47.8	48.1	48.1	0.3
R04	Masterson Circle Comm	51.0	59.6	59.6	8.6	W04	First Christian Church	52.6	53.2	53.2	0.6
R05	Wyatt Circle Community	49.1	53.6	53.6	4.5	W05	American Lutheran Church	49.5	49.9	49.9	0.4
R06	Stoney Ridge Circle Comm	51.8	55.1	55.1	3.3	W06	First Congregational United Church	52.2	52.6	52.6	0.4
R07	Sky Ranch Community	52.3	54.6	54.6	2.3	W07	St. Patrick Co Cathedral	50.4	50.8	50.8	0.4
S01	Poly Drive Elementary School	44.3	44.8	44.8	0.5	W08	First Congregational United Church	57.7	57.9	57.9	0.2
S02	Rocky Mountain College	48.9	49.5	49.5	0.6						

even when combined with other noise sources, resulting noise levels would likely remain below 65 dBA at noise-sensitive receivers, and additional noise would primarily be from sources other than MTARNG activities.

4.3.3 Best Management Practices and Mitigation

No mitigation measures would be necessary to reduce adverse noise impacts to below significant levels. Location-specific BMPs would be developed to minimize annoyance due to noise. These would include noise abatement and fly-neighborly programs identified in AR 95-1, Aviation Flight Regulations.

4.4 Geology, Topography, and Soils

Criteria used to assess impacts to geology, topography, and soils include changes to topography or geologic landforms, changes to soil types and characteristics, and the conversion of farmland.

4.4.1 Effects of the Proposed Action

Option 1: Construction of the Proposed Action would require the excavation and fill of material that would change the local topography slightly within the project area. However, the Proposed Action would not affect the overall topography, geologic landforms, or soil types in the greater vicinity. During construction, the Proposed Action would disturb approximately 130,000 -140,000 cubic yards of soil and potentially bedrock during excavation and placement of fill. The project design is anticipated to be balanced between cut and fill. Excavating and stockpiling soil can cause compaction, which may result in minor adverse impacts to soil quality and the physical, biological, and chemical properties of soil. Disturbed soil is also more susceptible to wind and water erosion. With the construction of the LAASF, mineral deposits under the facility would no longer be available for mining. There are no known mining claims in the area (MBMG 2023), and DMA owns the mineral rights for the land. No rare or valuable minerals are anticipated to be within the parcel. Use of the drainage easement would not preclude future mining activities. No adverse impact to mining or minerals is anticipated.

Of the 192,000 acres of farmland of statewide importance in Yellowstone County, the Proposed Action would directly convert approximately 40 acres of farmland of statewide importance and a small area of prime farmland if irrigated under Option 1. This would result in a negligible (0.02%) decrease in available farmland. The introduction of the LAASF would not affect the productivity of adjacent farmland or reduce demand for agricultural services in the area given the amount of other farmable land within the region. No indirect farmland impacts would occur. The NRCS was contacted regarding the completion of a farmland conversion rating form; no form was deemed necessary, and NRCS indicated no further coordination was needed (personal communication Oyler, U.S. Department of Agriculture – Farm Service Agency to McNeish, Jacobs, 7 August 2023).

Given the proximity to Billings, development of other areas adjacent to the project area, and general growth of communities throughout Montana, the conversion of additional farmland, including farmland of statewide importance, is anticipated to occur. The MTARNG LAASF project would contribute to the cumulative loss of farmland of statewide importance. NRCS monitors the conversion of farmland. No significant impact was identified.

Option 2: The area of soil disturbance under Option 2 would be approximately two acres greater than Option 1. Similarly, the two additional acres associated with Option 2 are not active farmland; however, based on soil type (Wormser-Worland sandy loam), this area is designated as farmland of statewide importance. Therefore, Option 2 would convert 42 acres of farmland resulting in a negligible (0.02%) decrease in available farmland. All other impacts would be the same as described for Option 1.

4.4.2 Effects of the No Action Alternative

No impacts to geology, topography, soils, or farmland would occur from construction or operation of the Proposed Action under the No Action Alternative. However, planned land use and development

would continue in accordance with Billings, Yellowstone County, and Billings Logan International Airport plans.

4.4.3 Best Management Practices and Mitigation Measures

BMPs such as slowing the rate of runoff through the placement of baffling, use of silt fences, reseeding disturbed areas following construction, etc. would be employed to minimize erosion. Activities would comply with the Stormwater Pollution Prevention Plan (SWPPP) requirements and terms, including testing of stormwater quality prior to its release. No mitigation measures would be necessary to reduce adverse environmental impacts to below significant levels.

4.5 Surface Water Resources

Water resources are evaluated based on whether the water quality or quantity would be affected. Impacts would be significant if the proposed activities result in a decline in water quantity or quality to a point that water used to support the needs of domestic use and habitat/species would be incapable of meeting the demand or of sustaining the populations living or depending on them.

4.5.1 Effects of the Proposed Action

Option 1: Option 1 would not affect wetlands, springs, or floodplains because none occur within the project area. Billings municipal water utility would provide potable water to the project area (see Section 4.10). An increased water demand would occur during construction due to dust suppression, construction needs, and initial filling of the cisterns. This would be temporary and cease following construction. The relocation of operations would not change water demand from currently approved activities. Operation water use is anticipated to be the same as current activities ongoing at the leased hangar. Temporary increases in construction water use would not result in a cumulative impact on water availability due to the limited volume of water and duration of use.

The LAASF would be developed in compliance with Billings Stormwater Management Manual (Billings Public Works Department 2018). Stormwater would be collected on site and conveyed to a detention pond and subsequently via a drainage easement to the north approximately 950 feet from the northeast corner of the project area before discharging into an unnamed tributary to Alkali Creek. Operations would be conducted in compliance with the SWPPP. The drainage discharge into the unnamed creek would be designed to minimize erosion and dissipate discharge energy at the drainage outfall, which would minimize sediment deposition into the creek. Option 1 would not result in a significant increase in discharge to the unnamed tributary or Alkali Creek or increase the potential for erosion or flooding downstream. Overall, stormwater impacts would be minor. Other development in the watershed would also result in increased impervious surfaces and additional runoff. The development code requires water be detained onsite for most developments and discharges be maintained at pre-construction levels. Compliance with Billings Stormwater Management Manual requirements would reduce the potential for cumulative demand on stormwater systems and drainages.

Option 2: Option 2 with the helipad on Billings land would include a greater impervious area than Option 1, which would result in slightly higher stormwater discharges. Option 2 would not result in a significant increase in discharge to the unnamed tributary or Alkali Creek or increase the potential for erosion or flooding downstream. Overall, stormwater impacts would be minor. All other impacts would be the same as Option 1.

4.5.2 Effects of the No Action Alternative

No changes in water use or discharge would occur. There would be no change in water impacts under the No Action Alternative. However, planned land use and development and associated water use and demands would continue in accordance with Billings, Yellowstone County, and Billings Logan International Airport plans and regulations.

4.5.3 Best Management Practices and Mitigation Measures

To manage the potential for adverse water resource impacts under the Proposed Action, the development of the LAASF would conform with Billings Stormwater Management requirements. MTARNG would develop and implement a SPCC Plan to prevent spills and minimize impacts of any spill and comply with the SWPPP including monitoring and testing of stormwater discharges. No mitigation measures would be necessary to reduce adverse environmental impacts to below significant levels.

4.6 Biological Resources

Impacts on biological resources are discussed in terms of impacts on vegetation, wildlife species and their habitat, and special status species of plants and animals. Significant impacts would occur if a species ceased to occur in the localized area due to proposed activities such as a loss of available habitat, and these impacts could not be mitigated. MTARNG sent USFWS a scoping letter requesting information related to potential environmental issues within the project's scope and location on March 3, 2023. USFWS responded to the scoping letter on March 9, 2023, indicating that they had no comments regarding federally listed, proposed threatened or endangered, or other trust species. The scoping letter sent to USFWS may be found in Appendix F.

4.6.1 Effects of the Proposed Action

Option 1: Option 1 would disturb soil and vegetation and result in approximately 40 acres of habitat loss or alteration. Although there would be no impacts on ESA-listed protected species, there are other protected resources within the action area, including migratory birds and native plants, that would be potentially impacted by implementation of the project. Ground disturbance due to construction would allow for easier infestation of invasive plant species. BMPs during construction such as washing equipment prior to accessing the site and removing any weeds, debris, or mud prior to leaving the site would minimize the introduction or spread of invasive species.

While no nests were observed during field investigations, potential nesting habitat for birds protected under the Migratory Bird Treaty Act and other special status avian species is present. If an occupied bird nest is identified during nesting season (1 April - 31 Aug) when ground disturbing activities would occur, construction would avoid the nest until coordination with the Natural Resources Department has been completed and a determination on how to proceed is made.

The main source of disturbance to wildlife from LAASF operations would occur from helicopter activities and noise (e.g., aircraft overflights). Ongoing aviation activities affect wildlife, and those effects would continue, although with a minor increase in quantity and change in location of origin if the project is authorized. No ESA-listed species or habitat for ESA-listed species would be affected. Additional helicopter sorties and maintenance runs would increase the noise levels in and adjacent to the project site (see Section 4.3). However, the project is located adjacent to an existing airport where aircraft noise already exists and will continue. Wildlife inhabiting the project vicinity likely have habituated to the continuous noise generated by aircraft using the airport and the presence of people. Vehicles, personnel, and other non-aviation activity that is occurring at the leased hangar would be relocated to the new LAASF. This would not be an increase in activity, rather a relocation of existing activity.

Direct impacts to wildlife, including disturbance occurring from human activities required for military training would be long term with the duration of military operations. Vehicle use for personnel accessing the training facility would continue to present the same potential for incidental injury as existing activities. There would be a small increase in the potential for bird strikes over existing conditions due to the minor increase in flights per week. Measures for reducing conflicts of aircraft with wildlife, in particular bird strikes, are a component of the federally mandated Wildlife Hazard Management Plan for the adjacent Billings Logan International Airport. With the proximity to the

airport, the proposed LAASF would also benefit from these existing measures. Existing fencing along the perimeter of the airport and proposed security fencing along the LAASF site would restrict wildlife movement in this area.

As other planned developments along Highway 3 and in residential areas are constructed, open areas available to wildlife would continue to slowly diminish, and mortality or incidental injury would increase due to the proposed flights from MTARNG aviation activity, BFS, and airport increase the potential for air strikes and noise disturbance. The LAASF contributes to these cumulative impacts to wildlife, but they are anticipated to be minor in intensity.

Option 2: Option 2 would disturb soil and vegetation and result in approximately 42 acres of habitat loss or alteration, which is 2 acres more than Option 1. All other impacts are the same as Option 1. BMPs during construction would be the same as described for Option 1.

4.6.2 Effects of the No Action Alternative

Noise from helicopter flights and vehicle use would continue at current rates at the leased hangar. Biological and natural resources would continue to be affected by ongoing military operations, including noise and disturbances associated with human activities and helicopter and vehicle use. There would be no contribution by MTARNG activities to the cumulative loss of habitat or impact to wildlife resulting from other development activities in the area.

4.6.3 Best Management Practices and Mitigation Measures

If an occupied bird nest is identified during nesting season (1 April - 31 Aug) when ground disturbing activities would occur, construction would avoid the nest until coordination with the Natural Resources Department has been completed and a determination on how to proceed is made.

4.7 Cultural Resources

Cultural resources are evaluated based on the potential to affect the context, location, or character of the resources due to the Proposed Action. Impacts to cultural resources would be considered significant if an alternative alters the character, setting, or feeling of a historic resource such that it is no longer eligible for listing in the NRHP or causes a disruption to unique archaeological resources in or eligible for listing in the NRHP.

4.7.1 Effects of the Proposed Action

Option 1: No NRHP-eligible or -listed historic sites are present within the APE; therefore, the Proposed Action would not directly affect any historic properties. An assessment of indirect impacts associated with visual resources and vibration determined that the LAASF and associated aviation activities would not adversely affect cultural resources in the APE or surrounding area. There are no known impacts to Native American Traditional Cultural Places or Sacred Sites. Section 106 consultation was undertaken (see Section 1.5), and the SHPO concurred on 17 October 2023 (Brown, SHPO to Myers, DMA 17 October 2023) that a no adverse effect finding is still appropriate. One e-mail follow-up email with return receipt requested was sent in on 28 November 2023. Fort Peck Assiniboine and Sioux Tribes responded on 5 January 2024 indicating that the project will not have an adverse effect on historic or cultural properties significant to them and if there are changes to the project, that on-site visit with the Tribal Historic Preservation Officer would be needed (Youpee, Fort Peck Assiniboine and Souix Tribes to Myers, DMA 5 January 2024). No other Section 106 consultation response was received. The *Updated Integrated Cultural Resources Management Plan (ICRMP) for the Installations of the Montana Army National Guard* (MTARNG 2020) provides procedures and management strategy for cultural resources. Standard Operating Procedures would be followed to maintain compliance with NHPA and Native American Graves Protection and Repatriation Act for any inadvertent discoveries of Cultural Resources. The Standard Operating

Procedures ensure work will stop until resources assessed following appropriate applicable regulatory processes.

Option 2: The impacts for Option 2 would be the same as described for Option 1, resulting in no adverse effect.

4.7.2 Effects of the No Action Alternative

Under the No Action Alternative, the existing use of the leased hangar would continue. No construction or impact on cultural resources would occur. There would be no impact on Native American sacred sites.

4.7.3 Best Management Practices and Mitigation

There would be no adverse impact. Therefore, no BMPs or mitigation are warranted for the Proposed Action. If previously unidentified cultural resources are identified during construction, all work in that area would cease and the DMA Environmental Office will be contacted. Standard Operating Procedures would be followed to maintain compliance with NHPA and Native American Graves Protection and Repatriation Act for any inadvertent discoveries of Cultural Resources. The Standard Operating Procedures ensure work will stop until resources assessed following appropriate applicable regulatory processes.

4.8 Socioeconomics and Protection of Children

In the evaluation of socioeconomic impacts, the following factors are considered: effect on population; changes in employment opportunities and associated effect on income in the region; effect on the housing market, community services, and recreation; and whether the actions will result in public health or safety concerns or affect emergency service response times. Significant impacts would occur if an alternative would alter the demographics of a local population or if it were to change the local population growth rate; housing market; housing vacancy rate; or availability of jobs, goods, and services.

4.8.1 Effects of the Proposed Action

Option 1: Ongoing operations at the leased hangar would relocate to the new facility. The Proposed Action would not result in a change in population, housing market or vacancy rate, demographics, schools, or opportunity for goods or services. During training weekends, hotel rooms and dining within Billings would continue to be in demand for visiting soldiers, but it would not result in any service being overwhelmed. The increase in jobs and demand for services would continue to result in a negligible benefit on the regional income. There would be a small increase in job opportunities during construction. These jobs would present a temporary beneficial impact associated with the project.

There would be no change in demands on emergency services. Emergency services would continue to operate acceptably without interruption and with acceptable response times. MTARNG contributions to responding to large-scale or technically challenging emergency situations would be improved, which would be a benefit to Eastern Montana.

Flight operations would follow approved flight paths and employ fly-neighborly principals to minimize noise impacts (see Section 4.3.1). The flight paths cross some developed areas, but the potential for an accident is low. The MTARNG Aviation Program operates and implements the "Army Aviation Accident Prevention Program" (DA PAM 385-90). Through the DA PAM 385-90, the MTARNG Aviation Program has created a "Pre-Accident Plan" or a Crash Alarm System that is standard practice in the event of an aviation emergency. The Proposed Action is not anticipated to result in adverse socioeconomic or health and safety impacts. With these measures along with direct adult supervision if children enter the facility, Option 1 would not the impact to the safety and welfare of children.

Option 2: Option 2 would have the same impact as described for Option 1.

4.8.2 Effects of the No Action Alternative

Under the No Action Alternative, training activities would continue to occur at the leased hangar. No change to population, income in the region, housing market or vacancy rate, demographics, schools, emergency services; the availability of jobs, services, or goods; or impacts on children would occur.

4.8.3 Best Management Practices and Mitigation Measures

No BMPs or mitigation are warranted for the Proposed Action.

4.9 Environmental Justice

In evaluating impacts on environmental justice, significant impacts would occur if either alternative were to cause disproportionate and adverse impacts to low-income or minority populations.

4.9.1 Effects of the Proposed Action

Option 1: There are no minority or low-income populations in the project vicinity. No disproportionate adverse impact would occur.

Option 2: There are no minority or low-income populations in the project vicinity. No disproportionate adverse impact would occur.

4.9.2 Effects of the No Action Alternative

Continuing training activities at the leased hangar would not result in any adverse impacts to the surrounding area, regardless of race, nationality, or economic status.

4.9.3 Best Management Practices and Mitigation

There are no Environmental Justice populations, and no changes to the socioeconomic conditions in the project area. No BMPs or mitigation measures are warranted for the Proposed Action.

4.10 Infrastructure

The impact evaluation of each alternative on infrastructure considered whether services would be interrupted; if demand for service would increase beyond the capacity of the providers; and if the existing infrastructure is compatible and/or can expand to accommodate new needs.

The evaluation of impacts on traffic and transportation considered if traffic generated by the action would result in increased congestion on the regional roadways; if roads would deteriorate due to the type or number of vehicles; if roads would be temporarily or permanently closed or access changed; and if railroads or airports/airfields in the region would experience a notable change in demand for service.

Significant impacts would occur if a strain on utilities, solid waste disposal, or roadways such that they are unable to keep up with the increased demands would occur. In addition, a significant impact would occur if the traffic volumes or vehicle mix were to degrade the quality of the road surfaces resulting in a failure of the facility or unmanageable maintenance costs.

4.10.1 Effects of the Proposed Action

Option 1: There would be no long-term change in the demand on the existing transportation network due to the Proposed Action. The LAASF would be staffed by the same number of employees as at the leased hangar under current operations, and the same anticipated number of soldiers would train on drill weekends at the LAASF as at the leased hangar. During construction, there would be a minor increase in vehicles on AJ Way and Highway 3 while construction workers commute to the site and when equipment is moved to/from the site. This temporary impact would cease at the end of

construction. The minor impact on existing roads is not anticipated to result in a deterioration in road pavement.

MTARNG LAASF air operations would continue to be conducted within designated air traffic patterns and as directed by the air traffic control tower at Billings Logan International Airport to align departure and arrival corridors to be best suited with the urban interface and noise compatibility. Under the Proposed Action (both options), all six helicopters allotted would be available for use, and there would be an increase in maintenance runs due to increased maintenance capabilities. An estimated 3,426 annual MTARNG operations are anticipated. This increased activity would be coordinated with the air traffic control tower and would not adversely affect airport operations.

During construction of the LAASF (both options), utilities would be extended to the new property. The LAASF would connect to city water and sewer, would bring in high speed fiber backbone, and would extend electricity and gas. There would be an increase in demand on the Billings water and sewer since MTARNG activities are not currently using city services for these utilities. Electrical and gas are currently available at the leased hangar. There may be a small increase in demand because of the greater square footage that would require heating, lighting, etc. The fiber network would be upgraded to accommodate MTARNG needs. None of the utilities would experience an increase in demand that would overwhelm or place undue demand on the utility. No adverse impact to utilities is anticipated.

Given the minimal impact on infrastructure, contribution towards a cumulative impact would be negligible.

Option 2: All infrastructure impacts would be the same as described for Options 1.

4.10.2 Effects of the No Action Alternative

With the No Action Alternative, MTARNG operations and training would continue at the leased hangar. Effects on the existing transportation, airfield and airspace, and utility infrastructure would be unchanged. Development in the vicinity and increases in Billings Logan International Airport would occur over time.

4.10.3 Best Management Practices and Mitigation

No BMPs or mitigation are warranted for the Proposed Action.

4.11 Hazardous and Toxic Materials/Wastes

This section addresses the potential impacts associated with existing contaminated sites and the potential for environmental impacts caused by hazardous materials/waste management practices resulting from inadvertent releases of petroleum, oils, or lubricants. Hazardous materials/wastes, asbestos, and lead-based paint are discussed in this section. Significant impacts would occur if proposed activities would result in the discharge or generation of hazardous materials to a level that would permanently adversely affect the health and safety of personnel at the proposed LAASF facilities or the neighboring communities.

4.11.1 Effects of the Proposed Action

Option 1: Under the Proposed Action, the hangar would house up to six helicopters and provide space for helicopter maintenance activities. Petroleum, oils, chemicals, and lubricants for the aircraft and support equipment, including some chemicals and lubricants that have not been used at the leased hangar, would be stored in approved storage containers in accordance with the MTARNG Hazardous Materials and Waste Management Plan. Operations would include refueling the aircraft on-site. Fuel would be purchased from local vendors or the airport fixed-base operator and transported to the LAASF using a 5,000-gallon over-the-road tanker. Fuel would be stored in an EPA-approved UST. Diesel would be stored in an above-ground storage tank. Fuel tankers and other

HEMTTs would be stored within permanent secondary containments. If fuel is spilled during operations, it would be addressed in accordance with the site's SPCC Plan.

The LAASF would be staffed by 14 full-time personnel who would park personal vehicles on the property; the existing parking facilities would also accommodate up to 90 soldiers participating in periodic weekend drills and other training. Light medium tactical vehicles, high mobility multipurpose wheeled vehicles, trailers, and a forklift would be used to support the LAASF. Vehicles parked on site potentially may leak petroleum, oil, or lubricants; however, such releases would be expected to be minor and infrequent and would be cleaned up in accordance with the SPCC Plan. Oil/water separators will be employed to remove oils from water prior to its disposal. Residues that may enter storm water would be detained on site. The new facility would not include painting or acid facilities. No cumulative impacts are anticipated.

The new LAASF location has no existing development or buildings. Therefore, the Proposed Action would not pose any public health threats related to exposure to lead-based paint or asbestos.

Option 2: Impacts would be the same as described for Option 1.

4.11.2 Effects of the No Action Alternative

No change in ongoing operations would occur under the No Action Alternative. The potential for accidental petroleum, oil, or lubricant spills at the leased hangar may occur with aircraft refueling, general maintenance, or from soldiers parking personal vehicles on site during drills and operations. Implementation of the SPCC Plan for the site and use of secondary containment features would continue. No potential exposure to lead-based paint or asbestos would occur under the No Action Alternative.

4.11.3 Best Management Practices and Mitigation

BMPs under the Proposed Action would include parking fuel trucks when not in use within permanent secondary containment. All activities would comply with the MTARNG HMWMP, site-specific SPCC Plan, and the SWPPP developed for the LAASF.

4.12 Summary of BMPs and Mitigation Measures

The following section summarizes the BMPs previously identified by resource area. No potentially significant adverse environmental impact was identified for any resources evaluated; therefore, no mitigation measures are necessary to reduce environmental impacts to less-than-significant levels.

4.12.1 Best Management Practices

BMPs are standard environmental protection measures that the MTARNG routinely implements as part of their "standard business practices" for new and existing activities, as applicable and appropriate. Standard operating procedures specific to the operation of the Billings LAASF would be developed and implemented. In addition, to maintain their stewardship posture, the MTARNG would implement the following BMPs, at a minimum and as appropriate, for this Proposed Action:

Air Quality

- Minimize and combine vehicle trips, minimize idling times, and maintain well-tuned engines to help reduce pollutant emissions.

Noise

- Location-specific BMPs would be developed to minimize annoyance due to noise, including noise abatement and fly-neighborly programs identified in AR 95-1.

Geology, Topography, and Soil Resources

- Practices to slow the rate of runoff may include the placement of baffling, use of silt fences, reseeding disturbed areas following construction, etc.
- Activities will comply with the SWPPP requirements and terms.

Surface Water Resources

- The development of the LAASF would conform with Billings Stormwater Management requirements.
- MTARNG would develop and implement a SPCC Plan to prevent spills and minimize impacts of any spill.
- MTARNG would comply with the SWPPP including monitoring and testing of stormwater discharges.

Biological Resources

- If an occupied bird nest is identified during nesting season (1 April - 31 Aug) when ground disturbing activities would occur, construction would avoid the nest until coordination with the Natural Resources Department has been completed and a determination on how to proceed is made.
- Measures to prevent the introduction of invasive species such as washing all equipment prior to entering and leaving the construction site would be used.

Cultural Resources

- If previously unidentified cultural resources are identified during construction, all work in that area would cease and the DMA Environmental Office will be contacted. The Standard Operating Practices identified in the ICRMP would be implemented.

Hazardous and Toxic Materials

- Store fuel trucks when not in use and conducting fueling activities within permanent secondary containment.
- All activities would comply with the MTARNG HMWMP, site-specific SPCC Plan, and the SWPPP developed for the LAASF.

4.12.2 Mitigation Measures

Mitigation measures are defined as project-specific requirements, not routinely implemented by the MTARNG, necessary to reduce identified potentially significant adverse environmental impacts to less-than-significant levels. No mitigation measures are required for the Proposed Action because no potentially significant impacts were identified.

SECTION 5.0 Comparison of Alternatives and Conclusions

5.1 Comparison of the Environmental Consequences

As summarized in Table 2-3 in Section 2.4.4, impacts due to the Proposed Action (both Option 1 and Option 2) would be minor in intensity and continue for the duration of operations of the LAASF. Option 1 of the Proposed Action would have slightly reduced impacts on geology, topography, and soils; surface water; and biological resources because the Option 2 is approximately 2 acres larger to accommodate the helipad and clear zones north of the DMA parcel. Option 2 provides more options in landing/takeoff because there is no land use conflict to the east. No significant direct, indirect, or cumulative impacts would occur. Temporary construction impacts on biological resources; noise; geology, topography, and soils; and air quality,

The No Action Alternative was not found to satisfy the purpose of and need for the project. This alternative would not provide adequate hangar facilities for up to six helicopters, provide minimum AT/FP measures, or comply with NGB and DoD requirements to operate only temporarily from leased facilities and move to permanent facilities, preferably on government-owned property.

No mitigation is required. BMPs would be implemented to minimize potential impacts.

5.2 Conclusions

Both Proposed Action options would provide the necessary infrastructure to provide a long-term LAASF in Eastern Montana. MTARNG needs a permanent LAASF facility to provide adequate long-term training and classroom facilities, provide secure storage and apron to accommodate up to six helicopters, and comply with AT/FP measures and DoD requirements to operate from a permanent facility on government-owned property.

The evaluation documented in this EA concludes there would be no significant adverse impact on the local environment or quality of life associated with the implementation of the Proposed Action Alternative. The analysis in this EA determines, therefore, that an EIS is unnecessary for approval of either Option of the Proposed Action Alternative, and a FONSI is appropriate. This EA recommends approval of Option 1 of the Proposed Action Alternative. Option 1 meets the purpose and need of an LAASF while remaining on State of Montana-owned property which allows for complete control of the helipad and comprehensive AT/FP security of the entire LAASF facility.

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SECTION 7.0 List of Preparers

7.1 National Guard Bureau and MTARNG Staff

The following National Guard Bureau and MTARNG staff were instrumental to the preparation and review of this EA.

Name	Title	Role, Responsibility	Degree	Years of Experience
COL Rob Oleson	Director Aviation and Safety	Aviation and safety programs manager	BS, Professional Aeronautics and Aviation Safety MS, Strategic Studies	35
Col Kelly Traynham	Construction Facilities Management Officer	Oversees facilities management, construction for MTARNG	BS, Animal Science MS, Strategic Studies	28
LTC John Gehring	Deputy Construction Facilities Management Officer	LAASF Development and Design	BA, Environmental Science	23
LTC Noah Genger	AASF Commander/ Battalion Commander	Plan development for 1-189th GSAB/AASF	BA, Economics MA, Military Operations	22
MAJ Dustin Horswill	LAASF Commander	Oversees daily operations of LAASF	BS, General Studies	22
Wref Balsam	Design and Project Manager	Oversees MTARNG construction activities	BS, Construction Engineering and Technology	30
Paul Blumenthal	Architect, DOA A&E	Design Manager	M Architecture	35
Jason Garber	NEPA and ECP Manager	Project Manager	BS, Anthropology MS, Natural Resources	28
Joel Miller	Plans & Programing Bureau Manager	Planning and development for MTARNG	BS, Crop and Soil Science MBA, Management	25
Rebekah Myers	Environmental Bureau Manager	Oversees implementation of NEPA	BS, Biology	22
Ricky French	NGB NEPA Reviewer	Environmental Review		
Edward Morrison	Associate General Counsel (Environmental and Real Property), NGB	Legal sufficiency review		

7.2 Jacobs/BRRC Staff

The following Jacobs and BRRC staff were instrumental to the preparation of this EA.

Name	Title	Role, Responsibility	Degree	Years of Experience
Zachary Allard	GIS Technician	GIS/Graphics	BS, Geography	3
Joe D'Onofrio	Sr. Environmental Planner	Air Quality/Noise QA/QC	MEP, Environmental Planning BS, Mechanical Engineering	33
Allison Hahn	Environmental Planner	EA Development, Administrative Record	BS, Environmental Resource Management	1
Jill Harris	Sr. Environmental Planner/Biologist	Biological Resources	MS, Environmental Planning BS, Wildlife and Fisheries Biology and Management	32
Glennda Luhnow	Principal Investigator	Technical oversight	MA, Anthropology	34
Ben Manning	Sr. Engineer/Noise Specialist	Noise	MS, Mechanical Engineering BS, Mechanical Engineering	20
Sabra McNeish	Environmental Planner	EA Development	JD BS, Environmental Science and Policy	5
Kristina Powell	Sr. Archaeologist	Permit coordinator	MA, Anthropology	29
Wally Punzmann	Sr. Archaeologist	Field Director, Report Author	MA, Anthropology	37
Pamela Rainey	Sr. Archaeologist	Permit coordinator	MA, Anthropology	20
Nancy Shelton	Sr. Environmental Planner	EA Project Manager and EA Author	MEP, Natural Resource Management BA, Political Science	23
Michelle York	Air Quality Engineer	Air Quality	BS, Chemical Engineering	23

SECTION 8.0 Agencies and Individuals Consulted

Scoping letters were sent to the parties identified in Table 8-1. This includes tribes and agency stakeholders. An example of the letters is included in Appendix E. Letters notifying the agencies, including SHPO, and the Tribes and Tribal Historic Preservation Offices have been sent.

Table 8-1. Tribes and Agencies Consulted during the Development of the EA

Title	Name	Organization	Address	City	State	Zip Code
	Joe Nye	Federal Aviation Administration, Helena FSDO	2725 Skyway Dr	Helena	MT	59602
		U.S. Army Corps of Engineers	P.O. Box 7032	Billings	MT	59103
	Montana Operations Region 8	U.S. Environmental Protection Agency	10 West 15th St, Suite 3200	Helena	MT	59626
Field Supervisor	Jodi Bush	U.S. Fish and Wildlife Service	585 Shepard Way, Suite 1	Helena	MT	59601
Chairman	Illiff Kipp Sr.	Blackfeet Nation Tribe	P.O. Box 850 All Chiefs Square	Browning	MT	59147
Chairman	Harlan Baker	Chippewa Cree Tribe	P.O. Box 544	Box Elder	MT	59521
Chairwoman	Shelly Fyant	Confederated Salish & Kootenai Tribes	P.O. Box 278 42487 Complex Blvd	Pablo	MT	59855
Chairman	Frank Whiteclay	Crow Tribe of Indians	P.O. Box 19 Bacheeitche Ave	Crow Agency	MT	59022
President	Jeffrey Stiffarm	Fort Belknap Indian Community	656 Agency Main St	Harlem	MT	59526
Chairman	Floyd Azure	Fort Peck Assiniboine & Sioux Tribes	P.O. Box 1027 501 Medicine Bear Road	Poplar	MT	59255
Chairman	Gerald Gray	Little Shell Chippewa Tribe	625 Central Ave West	Great Falls	MT	59401
President	Serena Wetherelt	Northern Cheyenne Tribe	P.O. Box 600 Cheyenne Ave	Lame Deer	MT	59043
Administrator	Tim Conway	Montana Aeronautics Division	P.O. Box 200507	Helena	MT	59620
Director	Chris Dorrington	Montana Department of Environmental Quality	1520 East Sixth Ave	Helena	MT	59620
Director	Henry Worsech	Montana Department of Fish, Wildlife and Parks	1420 East Sixth Ave	Helena	MT	59620

Title	Name	Organization	Address	City	State	Zip Code
Director	Amanda Kaster	Montana Department of Natural Resources and Conservation	1625 11th Ave	Helena	MT	59601
Director	Malcom Long	Montana Department of Transportation	P.O. Box 211001	Helena	MT	59620
State Historic Preservation Officer	Peter Brown	Montana State Historic Preservation Office	1301 East Lockey Ave	Helena	MT	59620
Sheriff	Lawrence C. Big Hair	Big Horn County Sheriff's Office	121 3rd St West	Hardin	MT	59034
Sheriff	Josh McQuillan	Carbon County Sheriff's Office	102 Broadway Ave North	Red Lodge	MT	59068
Sheriff	Robert Pallas	Golden Valley County Sheriff's Office	107 Kemp St	Ryegate	MT	59074
Sheriff	Shawn Lesnik	Musselshell County Sheriff's Office	820 Main St	Roundup	MT	59072
Sheriff	Charles Kem	Stillwater County Sheriff's Office	400 East 3rd Ave North	Columbus	MT	59109
Sheriff	Wayne Robinson	Treasure County Sheriff's Office	307 Rapelje Ave	Hysham	MT	59038
Commissioner	Donald Jones	Yellowstone County Commission	P.O. Box 35000	Billings	MT	59107
Commissioner	John Ostlund	Yellowstone County Commission	P.O. Box 35000	Billings	MT	59107
Commissioner	Denis Pitman	Yellowstone County Commission	P.O. Box 35000	Billings	MT	59107
Sheriff	Mike Linder	Yellowstone County Sheriff's Office	2323 2nd Ave North	Billings	MT	59101
Chief	Pepper Valdez	Billings Fire Department	210 North 27th St	Billings	MT	59101
	Airport Administration	Billings Logan International Airport	1901 Terminal Cir	Billings	MT	59105
Chief	Rich St. John	Billings Police Department	220 North 27th St	Billings	MT	59101
Mayor	Bill Cole	City of Billings	210 North 27th St	Billings	MT	59101
City Administrator	Chris Kukulski	City of Billings	210 North 27th St	Billings	MT	59101
	City Council	City of Billings	P.O. Box 1178	Billings	MT	59103
		Big Sky Search and Rescue	P.O. Box 160063	Big Sky	MT	59716
		Carbon County Search and Rescue	235 Upper Red Lodge Creek Rd	Red Lodge	MT	59068
Captain	Philip Schmidt	Civil Air Patrol	P.O. Box 1887	Great Falls	MT	59403
		Stillwater County Search and Rescue	P.O. Box 729	Columbus	MT	59019

Title	Name	Organization	Address	City	State	Zip Code

Table 8-2. Section 106 Consulting Parties

Title	Name	Organization	Address	City	State	Zip Code
State Historic Preservation Officer	Peter Brown	Montana State Historic Preservation Office	1301 East Lockey Ave	Helena	MT	59620
Tribal Historic Preservation Office (THPO)	Aaron Brien	The Crow Tribe of Indians	P.O. Box 19 Bacheeitche Avenue	Crow Agency	MT	59022
THPO	Jonathan Windy Boy	Chippewa Cree Tribe	P.O. Box 544	Box Elder	MT	59521
THPO	John Murray	Blackfeet Nation Tribe	P.O. Box 850 All Chiefs Square	Browning	MT	59417
THPO	Kathryn McDonald	Confederated Salish & Kootenai Tribes	P.O. Box 278 42487 Complex Blvd	Pablo	MT	59855
THPO	Teanna Limpy	Northern Cheyenne Tribe	P.O. Box 128 600 Cheyenne Ave	Lame Deer	MT	59043
Chairman	Gerald Gray	Montana Little Shell Tribe	625 Central Avenue West	Great Falls	MT	59401
THPO	Dyan Youpee	Fort Peck Assiniboine & Sioux Tribes	P.O. Box 1027 501 Medicine Bear Road	Poplar	MT	59255
THPO	Michael Blackwolf	Fort Belknap Indian Community	656 Agency Main Street	Harlem	MT	59526