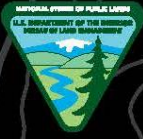


## Appendix A: Incorporated References and Public Involvement

## Contents

- 1 Bureau of Land Management – Decision Record
- 2 Bureau of Land Management – Environmental Assessment
- 3 Bureau of Land Management – Finding of No Significant Impact
- 4 Bureau of Land Management – Section 106 Consultation Letter
- 5 Department of Transportation – Section 4(f) Concurrence Letter
- 6 Wyoming State Historic Preservation Office – Concurrence Letter

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U.S. Department of the Interior  
Bureau of Land Management

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# **Federal Aviation Administration Building WYWY-106367389**

## **Decision Record (DR)**

**August 2024**

BLM Wyoming – Cody Field Office

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DOI-BLM-WY-R020-2024-0047-EA

Cody Field Office

1002 Blackburn Street

Cody, Wyoming 82414

307-578-5900

307-578-5939(FAX)

## **Decision Record**

Federal Aviation Administration Building WYWY-106367389

DOI-BLM-WY-R020-2024-0047-EA

### **INTRODUCTION:**

It is my decision to grant a right-of-way (ROW) authorization to the Federal Aviation Administration as described in the Proposed Action of the Environmental Analysis (EA) No. DOI-BLM-WY-R020-2024-0047-EA. The Proposed Action involves design and construction of a new garage/shop building on BLM-administered public lands. The garage building (60 feet by 60 feet) and surrounding fenced area would be 80 feet by 80 feet (6400 square feet). The garage would be a single-story, slab on-grade, metal-framed building utilizing shallow foundations. Construction would require fill depths of up to five (5) feet to balance the site and bring the building pad to design elevations. Surrounding the garage would be compacted gravel sloped away from the structure, disturbing approximately 900 square feet. A compact gravel access road would spur off the nearby existing road for access to the garage. Power would be provided from a nearby power line. The proposed buried power line length would be approximately 7200 square feet of disturbance. The total short term surface disturbance area during construction is estimated to be 0.5-1.0 acres. The total surface disturbance after construction and site reclamation would be 0.35 acres.

This action has been analyzed in an EA and found to have no significant impacts, thus an EIS is not required.

### **AUTHORITIES:**

The authorities for this decision are contained in the following:

National Environmental Policy Act of 1970, as amended (42 U.S.C. §§ 4321 – 4347)  
Title V of Federal Land Policy Management Act of 1976, as amended, Sec. 501 [43 U.S.C. 1761]  
Title VII of Federal Land Policy Management Act of 1976, as amended, Sec. 701  
43 CFR § 2800 – Land Resource Management Regulations  
Antiquities Act of 1906, as amended (54 U.S.C. 320301 et seq.)  
Archaeological Resources Protection Act of 1979 (16 U.S.C. 470)  
National Historic Preservation Act, Section 106; (54 U.S.C. 306108)  
Paleontological Resources Protection Act of 2009

### **COMPLIANCE AND MONITORING:**

To ensure compliance with the approved action, the ROW will be monitored during regularly scheduled field inspections.

### **TERMS / CONDITIONS / STIPULATIONS:**

The approval of the Federal Aviation Administration Building ROW is subject to the additional terms and conditions, stipulations, mitigation, and monitoring measures attached. Specific stipulations will be made part of the right-of-way grant authorization to protect any unknown resources that could be discovered during construction, and to mitigate for any resources that may be affected after construction takes place.

### **PLAN CONFORMANCE AND CONSISTENCY:**

The Proposed Action conforms to the Record of Decision (ROD) and Approved Resource Management Plan (ARMP) for the Cody Field Office (CYFO) dated September 21, 2015. The decisions in the CYFO ARMP provide general management direction and allocation of uses and resources on the public lands in the field office.

The Proposed Action has been reviewed to determine if it conforms to the land use plan as required by 43 CFR 1610.5. The RMP provides that the planning area is open to consideration for ROW

authorizations. The Proposed Action is specifically supported by Record 6001, which states that “consider land use authorization (permits, leases, etc.) on a case-by case basis consistent with other resource objectives”. It is also supported by the following Management Actions in the RMP:

Record	Management Action Text
1010	Allow surface-disturbing activities on fragile soils, biological crusts, soils with low reclamation potential, and soils with highly erosive characteristics on a case-by-case basis.
4036	Prohibit surface-disturbing activities within 500 feet of surface water and riparian/wetland areas (30,914 acres) except when such activities are necessary and when their impacts can be mitigated.
5037	Attach standard Paleontological Resources Protection Stipulations to authorizations for surface-disturbing activities in all areas, regardless of PFYC (i.e., 1 through 5).
6001	Consider all land use applications on a case-by-case basis consistent with other resource objectives.
8017	Provide warnings for geologic hazards. Identify geologic hazards case-by-case. Allow activities in mitigated (remediated) geologic hazard areas.

## ALTERNATIVES CONSIDERED:

### No Action

The request for an authorization to construct and maintain a garage/building on BLM-administered land would not be approved. The existing uses of the land would remain the same.

### Proposed Action

The FAA has requested authorization to construct a new prefabricated metal garage building on BLM administered public land in Lot 7 (SE¼SE¼) Section 25, T. 56 N., R. 93 W., 6th P.M., Big Horn County, WY (Maps 1 and 2, below). The building would house tools, a road grader, a snow cat and other FAA heavy equipment and vehicle support equipment. In winter months, the FAA maintains their ARSR site located on the BBNF. The ARSR site is critical not only for the FAA mission and aviation safety but is also used daily by the Department of Defense and the Department of Homeland Security to conduct their missions for defense of the United States of America.

This proposed action involves design and construction of a new storage garage building on BLM-administered public lands. The storage building (60 feet by 60 feet) and surrounding fenced area would be 80 feet by 80 feet (6400 square feet). The garage would be a single-story, slab on-grade, metal-framed building utilizing shallow foundations. Construction would require fill depths of up to five (5) feet to balance the site and bring the building pad to design elevations. Surrounding the garage would be compacted gravel sloped away from the structure, disturbing approximately 900 square feet. A compact gravel access road would spur off the nearby existing road for access to the garage door.

Power would be provided from a nearby power line. The proposed buried power line length would be approximately 7200 square feet of disturbance. No additional workspace would be needed. The total short term surface disturbance area during construction is estimated to be 0.5-1.0 acres, and the total long term surface disturbance area post construction would be 0.35 acres. Access to the ARSR site is by US Highway 14A and FS Road 651. US Highway 14A is closed during winter months so the FAA uses FS Road 651 to access their ARSR site using the snow cat. The snow cat is currently stored on the

BHNF, but winter conditions sometimes cause delays for access during inclement weather. The new garage building location would allow the FAA easier access to the snow cat to plow the road leading to FS Road 651 and travel the trail to their ARSR site during inclement weather.

Geotechnical testing was conducted on July 30, 2024, by a third party engineering consultant for the FAA. A corresponding Geotechnical Engineering Report was prepared and received by the BLM CYFO in August 2024. Geotechnical testing evaluated subsurface conditions at the proposed construction site according to accepted engineering practices. The report provides geotechnical opinions and recommendations to the FAA to support the planning, design, and construction of the project in the proposed location. This report, as well as the FAA's Statement of Work are both incorporated by reference into this DR.

#### **PUBLIC INVOLVEMENT:**

Internal scoping was initiated when the project was presented to the BLM Cody Field Office interdisciplinary team (IDT). External scoping was conducted by posting notification of this project on the ePlanning National Register website.

#### **RATIONALE FOR THE DECISION:**

My decision to select the Proposed Action conforms with NEPA in accordance with the Land Resource Management Regulations at 43 CFR § 2800; FLPMA, which requires that public lands are managed on the basis of multiple use, including issuance of rights-of-ways; and the CYFO ARMP which allows for authorizations of ROWs in the Cody Field Office.

This decision authorizes the Federal Aviation Administration's application for constructing a garage/building on BLM-managed public land in Lot 7, Section 25, T.56 N., R. 93 W., 6<sup>th</sup> P.M., Big Horn County, Wyoming as submitted and with all necessary terms and conditions/stipulations, mitigation and monitoring measures as determined during review and environmental analysis.

#### **PROTEST AND APPEAL OPPORTUNITIES:**

The decision of the Authorized Officer may be appealed to the Interior Board of Land Appeals, Office of the Secretary, in accordance with the regulations contained in 43 CFR Part 4 and Form 1842-1. If an appeal is taken, your notice of appeal must be filed in this office within 30 days from your receipt of this decision. The appellant has the burden of showing that the Decision appealed from is in error.

If you wish to file a petition for a stay of the effectiveness of this Decision during the time that your appeal is being reviewed by the Board, the petition for a stay must accompany your notice of appeal. A petition for a stay is required to show sufficient justification based on the standards listed below. A copy of the notice of appeal and petition for a stay must also be submitted to each party named in this decision and to the Interior Board of Land Appeals and to the appropriate Office of the Solicitor (see 43 CFR 4.413) at the same time the original documents are filed with this office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

#### Standards for Obtaining a Stay (43 CFR 4.21(b))

Except as otherwise provided by law or by other pertinent regulation:

- 1) A Petition for a Stay of a Decision pending appeal shall show sufficient justification based on the following standards:
  - i. The relative harm to the parties if the stay is granted or denied,
  - ii. The likelihood of the appellant's success on the merits,
  - iii. The likelihood of immediate and irreparable harm if the stay is not granted, and
  - iv. Whether the public interest favors granting the stay.

**SIGNATURE:**

\_\_\_\_\_  
/S/ Christopher Durham, Acting Field Manager, Cody

\_\_\_\_**8/30/2024**\_\_\_\_  
Date

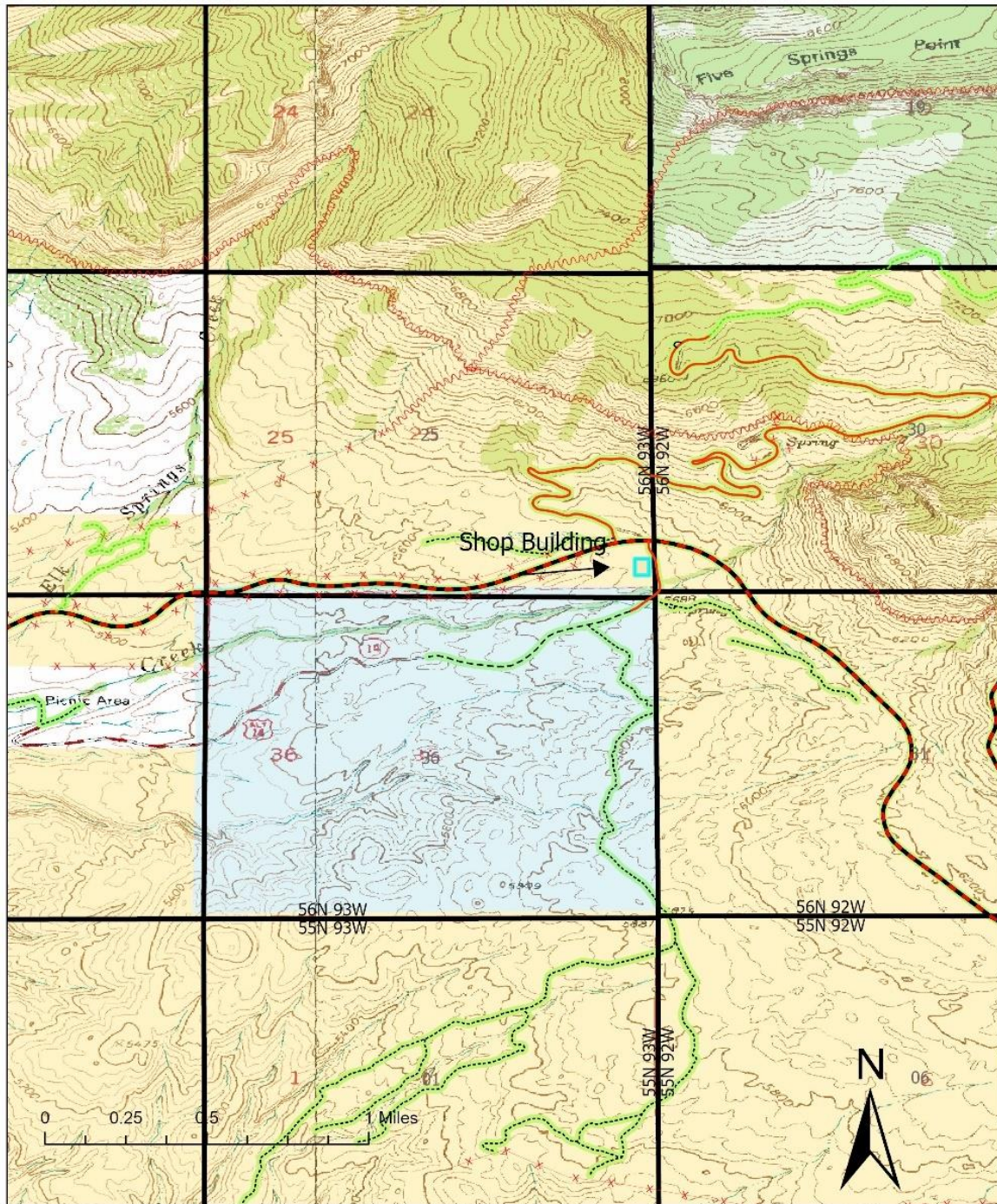
**Attachments:**

Maps

Operator Committed Measures, Additional Terms and Conditions, Mitigation Measures



FAA Shop  
WYWY106367389

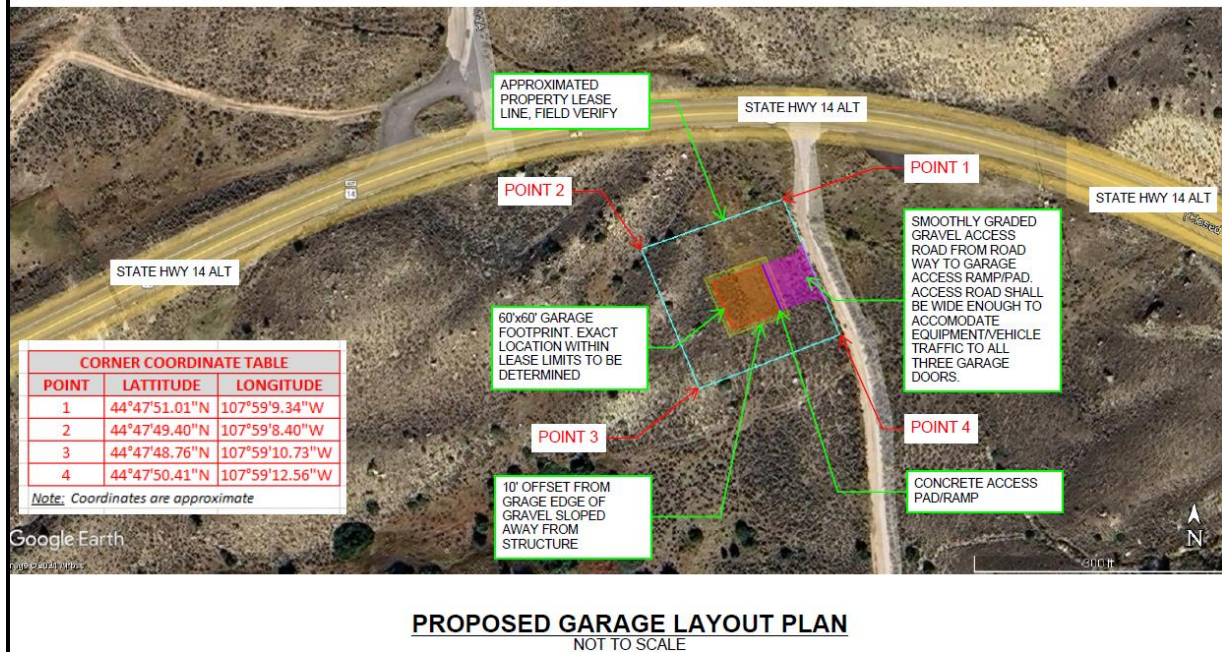


**Map 1. Location Map of the Proposed FAA Garage Site**  
Section 25 (Lot 7), T. 56 N., R. 93 W., 6th P.M., Big Horn County, WY



## Proposed Garage Layout Plan

QSI ARSR Garage Construction Project



### Map 2. Proposed FAA Garage Site Plan

Section 25 (Lot 7), T. 56 N., R. 93 W., 6<sup>th</sup> P.M., Big Horn County, WY

## OPERATOR COMMITTED MEASURES

The Geotechnical Engineering Report (JB Engineers, 2024) provides recommendations geared towards mitigating the effects of site soils, as well as geological and hydrological conditions on the Proposed Action. These recommendations cover earthwork categories of site grading, site preparation, site drainage, excavation/utility trench (power line) construction, and compaction requirements.

The recommendations in this report will be followed in their entirety in order to mitigate effects to the project due to the relatively complicated soils and hydrological profile present at the construction site. To protect the proposed garage building from flooding or other influences of water and soil moisture, multiple design parameters have been developed, both in the FAA's Statement of Work, and in the Geotechnical Engineering Report (JB Engineering, 2024) both of which are incorporated herein by reference. These design parameters/Operator Committed Measures are listed below:

### Site Grading

Rough elevations at the site vary up to 10 feet. Site grading requires fills of up to 6 feet to balance the site and bring the building pad to design grades. On-site soils or import soils can be used as fill to establish grades at the site. Import material shall consist of WYDOT grading "W" crushed base course. All site grading shall be constructed as specified in the Compaction Requirements section of the report. Some larger cobbles/boulders/rock out cropping should be anticipated near the surface and cannot be used as fill material.

### *Site Preparation*

Prepare the site by following the recommendations provided below:

- Strip and remove topsoil and sage brush and any deleterious material from structural areas or any area to receive cuts and/or fills. Topsoil depths are noted at 6 inches on the boring log. Contractors shall verify topsoil stripping depths when bidding on the project.
- Proof roll any areas to receive fill with a loaded dump truck (or engineer approved equivalent) to check for loose or soft areas prior to placing new fill or structures.
- All fill and backfill must be approved by the geotechnical engineer. On-site soils can be used as fill material. All material must be processed into pieces smaller than 3 inches prior to being used as fill. Some larger cobbles/boulders/rock out cropping should be anticipated near the surface and cannot be used as fill material.

### *Excavation/Trench Construction*

Excavations required for mass grading, foundations, and utility trenches will extend into the clayey sand with gravel and some large boulders/outcropping. Conventional heavy-duty earth moving equipment will be sufficient for the proposed excavations at the site. Gravel and surface boulders /bedrock outcrops were encountered at the site. Rock hammers or other means may be necessary to advance through bedrock and gravel lenses encountered at the site and shall be anticipated by contractors. While it is the responsibility of the contractor to provide safe working conditions and to comply with OSHA standards in connection with underground excavations, the following guidelines are provided for planning purposes. The subgrade soil and trench conditions must be evaluated during construction by the contractor's competent person.

Plan excavations with water collection points and utilize conventional sumps and pumps to remove nuisance water runoff or precipitation. If site soil excavations are not immediately backfilled, they may degrade when exposed to runoff and require over-excavation and replacement with structural fill. Construction activities and excavation backfilling will be performed as rapidly as possible following excavation to reduce the potential for subgrades to degrade under construction traffic.

### *Compaction Requirements*

Place fill in thin (8-inch maximum), uniform lifts and compacted to the following minimum percentages of the maximum dry unit weight as determined by ASTM D698 (Standard Proctor). Place all fill material within minus 2 percent to plus 2 percent of the optimum moisture as determined by ASTM D698. The following shall be implemented during construction:

- Open Hole Observation: An open hole will be observed by JB Engineers to document and ensure the soils encountered during construction are similar to those observed during the study.
- Foundation Backfill: One compaction test every 50 linear feet (lf) or two tests total, whichever results in greater number of tests, per each foot lift of backfill, is required.
- Structural Fill / Building Pad Preparation: One test every 2,500 square feet (sf) of each 12-inch lift of backfill is required.
- Utility Trench Backfill: One compaction test every 100 linear feet (lf) of trench per each 16-inch lift of backfill is required.

The contractor must understand and plan for the time required to process soil to meet the report requirements. Difficulty achieving required compaction may impact construction costs, schedules, and other project aspects. Allowing time and space (i.e., lay-down area) to process excavated site soil and facilitate proper moisture conditioning during dry weather is critical if the contractor plans to re-use the site soil as fill. Proper moisture conditioning or drying can help reduce compaction efforts and the need to import dry soil or aggregate.

### *Building Foundations*

Based on the results of field investigations the proposed site has been determined to be suitable for support of the building using spread footings. If rock outcropping is encountered in excavations, the area shall be overexcavated a minimum depth of 18 inches and fill be used to establish footing grades to provide a uniform bearing surface for the building.

Over-excavation (if required) shall be excavated laterally 2 feet on all sides. The overburden soils can be used to re-establish grades or WYDOT grading "W" aggregate base course and shall be moisture conditioned and compacted as specified in the Compaction Requirements section of the report.

The design and construction criteria presented below must be observed for the spread footing foundation system design and construction:

- The footing depth and bearing pressure for the design of footings was determined to provide against bearing failure and excessive settlement. Footings will be designed using a maximum allowable bearing pressure of 3,000 pounds per square foot (psf) bearing on native soils or structural fill. For footings designed using the supplied bearing pressure, an estimated total settlement for the footings will be 1 inch or less. An estimated total settlement will be less than half the total settlement.
- Friction acting along the base of the footings founded on recompacted native materials can be computed by using a coefficient of friction of 0.32 with the normal dead load.
- If loose or soft areas are encountered during footing excavations, the footings must extend to adequate bearing soil. As an alternative, the loose or soft areas can be over-excavated and replaced with on-site soils. Structural fill placed in over-excavations should be compacted to the specifications outlined above in the Compaction Requirements section of the report.

- Design exterior footings below unheated areas must be placed at least 48 inches below final exterior grade for frost protection.
- Design minimum footing widths of 16 inches for continuous footings and 22 inches for isolated pads.
- Reinforce continuous footings and foundation walls to span an unsupported length of 12 feet. This will allow the foundation to span any potential soft or loose areas that are not detected during excavation.
- Based on field exploration and general knowledge of the local geology, it is recommended that a Site Class D be utilized as a basis for structural seismic design.

### *Floor Slabs*

Slab on-grade floors can be utilized for the building flooring supported on native soils or WYDOT Grading "W" base course. The following recommendations must be followed:

- Separate all bearing walls from columns with expansion joints, which allow for unrestrained vertical movement and reduction in differential movement.
- Floor slab control joints must be used to reduce damage due to shrinkage cracking. Provide joints in accordance with appropriate ACI criteria.
- Use a modulus of subgrade reaction (K) of 125 pci for the prepared on-site soils.
- The requirements for slab reinforcement and thickness will be established by the designer based on experience and the intended use of the slab.
- Floor slabs will not be placed on frozen subgrades.

Exterior slabs are susceptible to frost action, which can generate substantial frost heave at certain times of the year. The potential for frost heave may not be acceptable at doorways or other critical areas adjacent to the building that will be exposed to weather.

One approach is to provide partial frost protection is to place and compact a minimum of 24 inches of aggregate base course beneath the slab. Alternatively, if partial frost protection is acceptable, over-excavation and aggregate base course replacement must be accomplished to the full frost depth of 36 inches.

To protect the proposed garage from flooding or other influences of water and soil moisture, multiple design parameters have been developed both in the FAA's Statement of Work, and in the Geotechnical Engineering Report (2024). These design parameters/Operator Committed Measures are listed below:

### *Site Drainage*

The following site drainage precautions must be observed during construction and maintained at all times after the building has been completed. Detrimental foundation movement may occur if site grading and surface drainage recommendations are not followed since the near-surface soils are active and prone to significant volume change with variations in moisture.

Landscaping completed after the building is completed must not alter positive drainage away from the building.

- The ground surface adjacent to exterior foundations will be sloped to drain away from the foundations in all directions. A minimum slope of 6 inches in the first 10 feet (5%) is recommended.
- Roof downspouts and drains will discharge well beyond the limits of the foundation wall backfill and will be well maintained over the life of the facility.

- Landscaping that requires irrigation will remain at least 8 feet from the structure.
- Cracks between buildings and exterior concrete flatwork and cracks that develop within exterior flatwork will be sealed and maintained to prevent surface water from infiltrating the subsurface soils.
- Backfill against footings, exterior walls, and in utility and sprinkler line trenches will be well compacted and free of all construction debris to reduce the possible of moisture infiltration.
- Landscape curbs, flatwork, or other landscaping that impairs drainage away from the structure will not be installed.

#### *Site Concrete/Corrosion*

The concentration of water-soluble sulfates measured in a sample of the on-site clayey sand soil obtained at a depth of one foot was 0.07%. This concentration of water-soluble sulfates represents a mild degree of attack on concrete exposed to these materials. This degree of attack is based on the scale presented in ACI Manual of Concrete Practice, Section 225R, Table 6.5 of mild, moderate, severe, and very severe. Type I or II cement will be used with a minimum compressive strength of 4,000 psi.

## **Additional Terms and Conditions**

WYWY-106367389

1. In case of a change of address, the holder shall immediately notify the Cody Field Manager, hereinafter referred to as the authorized officer.
2. The holder shall construct, operate, and maintain the facilities, improvements, and structures within this right-of-way in strict conformity with the plan of development which was approved and made part of the grant. Any relocation, additional construction, or use that is not in accord with the approved plan of development, shall not be initiated without the prior written approval of the authorized officer. A copy of the complete right-of-way grant, including all stipulations and approved plan of development, shall be made available of the right-of-way area during construction, operation, and termination to the authorized officer. Noncompliance with the above will be grounds for an immediate temporary suspension of activities if it constitutes a threat to public health and safety or the environment.
3. The holder shall contact the authorized officer at least 5 days prior to the anticipated start of construction and/or any surface disturbing activities. The authorized officer may require and schedule a preconstruction conference with the holder prior to the holder's commencing construction and/or surface disturbing activities on the right-of-way. The holder and/or his representative shall attend this conference. The holder's contractor, or agents involved with construction and/or any surface disturbing activities associated with the right-of-way, shall also attend this conference to review the stipulations of the grant including the plan of development.
4. The holder shall not initiate any construction or other surface disturbing activities on the right-of-way without the prior written authorization of the authorized officer. Such authorization shall be a written notice to proceed issued by the authorized officer. Any notice to proceed shall authorize construction or use only as therein expressly stated and only for the particular location or use therein described.
5. Use of pesticides shall comply with the applicable Federal and state laws. Pesticides shall be used only in accordance with their registered uses and within limitations imposed by the Secretary of the Interior. Prior to the use of pesticides, the holder shall obtain from the authorized officer written approval of a plan showing the type and quantity of material to be used, pest(s) to be controlled, method of application, location of storage and disposal of containers, and any other information deemed necessary by the authorized officer. Emergency use of pesticides shall be approved in writing by the authorized officer prior to such use.
6. The holder shall be responsible for prevention and control of noxious weeds and weeds of concern on all areas of surface disturbance associated with the project. Use of pesticides shall comply with the applicable Federal and State laws. Pesticides shall be used only in accordance with their registered uses and within limitations imposed by the Secretary of Interior. Prior to the use of pesticides on public land, the holder shall obtain from the BLM authorized officer written approval of a plan showing the type and quantity of material to be used, pest(s) to be controlled, method of application, location of storage and disposal of containers, and any other information deemed necessary by the authorized officer to such use.
7. Mobile equipment being transported from an offsite location to the Bureau of Land Management project area should be cleaned prior to arrival using water, steam, or air-pressurized cleaning methods to remove any invasive or noxious weed seed and plant parts or materials that could contain seeds or plant parts. When appropriate, identify sites generally off public lands where equipment can be cleaned. Seeds and plant parts need to be collected and disposed of appropriately.
8. All mulch, seed and other vegetative reclamation materials must be certified weed free. If available all sand, gravel, and fill materials shall be certified weed free.

9. The holder shall be responsible for weed control on disturbed areas within the limits of the right-of-way. The holder is responsible for consultation with the authorized officer and/or local authorities for acceptable weed control methods (within limits imposed in the grant stipulations).



10. The holder shall protect all survey monuments found within the right-of-way. Survey monuments include, but are not limited to, General Land Office and Bureau of Land Management Cadastral Survey Corners, reference corners, witness points, U.S. Coastal and Geodetic benchmarks and triangulation stations, military control monuments, and recognizable civil (both public and private) survey monuments. In the event of obliteration or disturbance of any of the above, the holder shall immediately report the incident, in writing, to the Authorized Officer and the respective installing authority if known. Where General Land Office or Bureau of Land Management right-of-way monuments or references are obliterated during operations, the holder shall secure the services of a registered land surveyor or a Bureau cadastral surveyor to restore the disturbed monuments and references using surveying procedures found in the Manual of Surveying Instructions for the Survey of the Public Lands in the United States, latest edition. The holder shall record such survey in the appropriate county and send a copy to the Authorized Officer. If the Bureau cadastral surveyors or other Federal surveyors are used to restore the disturbed survey monument, the holder shall be responsible for the survey cost.
11. The holder shall conduct all activities associated with the construction, operation, and termination of the right-of-way within the authorized limits of the right-of-way.
12. The holder will be responsible for taking such measures as may be necessary to protect other authorized facilities on public lands from damage due to construction or use of this ROW. The holder is responsible for contacting those other users and coordinating with them.
13. All design, material, and construction, operation, maintenance, and termination practices shall be in accordance with safe and proven engineering practices.
14. The holder shall be responsible for the prevention and suppression of fires on Federal lands caused by its employees, contractors, or subcontractors.
15. Holder shall save, hold harmless, defend, and indemnify the United States of America, its agents and employees for losses, damages, or judgments and expenses on account of bodily injury, death, or property damage, or claims for bodily injury, death, or property damage of any nature whatsoever, and by whomsoever made, arising out of the maintenance or use of the permitted land use by the holder, his employees, subcontractors, agents, social guests, licensees, permittees, or invitees.
16. Holder shall maintain the right-of-way in a safe, usable condition, as directed by the authorized officer.
17. The holder will inspect the construction area for the presence of Utility Facilities both surface and subsurface, and notify the Wyoming One Call System, 1-800-849-2476, before any construction activities begin. The holder will use extra safety precautions when working near or around pipelines, powerlines, power poles, underground cables, or other utility installations.
18. Ninety days prior to termination of the right-of-way, the holder shall contact the authorized officer to arrange a joint inspection of the right-of-way. This inspection will be held to agree to an acceptable termination (and rehabilitation) plan. This plan shall include, but is not limited to, removal of facilities, drainage structures, or surface material, re-contouring, topsoiling, or seeding. The authorized officer must approve the plan in writing prior to the holder's commencement of any termination activities.
19. All permanent above ground structures, not subject to safety requirements, shall be paid to blend with the natural color of the landscape. The color selected for this project shall match Carlsbad Canyon. Standard environmental color charts are available from the location BLM office.
20. Cultural Standard Stipulation:  
The holder is responsible for informing all persons associated with this project that they may be subject to prosecution for knowingly damaging, altering, excavating, or removing any archaeological, historical, or vertebrate fossil objects or site. If archaeological, historical, Native American, or vertebrate fossil materials are discovered, the holder is to suspend all operations that

further disturb such materials and immediately contact the authorized officer. Operations are not to resume until written authorization to proceed is issued by the authorized officer.

The authorized officer will evaluate, or will have evaluated, such discoveries not later than five working days after being notified and will determine what actions shall be taken with respect to such discoveries. The decision as to the appropriate measures to mitigate adverse effects to significant cultural or paleontological resources will be made by the authorized officer after consulting with the holder.

The holder is responsible for the cost of any investigations necessary for the evaluation and and mitigative measures required by the authorized officer. The authorized officer will provide technical and procedural guidelines for the conduct of evaluation and mitigation. Upon verification from the authorized officer that the required evaluation and/or mitigation have been completed, the holder will be allowed to resume operations.

#### Native American Graves Protection and Repatriation Act

If human remains are discovered or suspected, the holder shall suspend operations immediately, physically guard the area, and notify the Bureau of Land Management immediately.

#### Archaeological Resources Protection Act

No person may excavate, remove, damage, or otherwise alter or deface or attempt to excavate, remove, damage, or otherwise alter or deface any archaeological resource located on public lands or Indian lands unless such activity is pursuant to an issued permit.

### 21. Standard Paleontological Resource Protection Stipulations:

1. Collecting: The project proponent/Operator is responsible for informing all persons associated with this project including employees, contractors, and subcontractors under their direction that they shall be subject to prosecution for damaging, altering, excavating, or removing any vertebrate fossils or other scientifically significant paleontological resources from the project area. Collection of vertebrate fossils (bones, teeth, turtle shells) or other scientifically significant paleontological resources is prohibited without a permit. Unlawful removal, damage, or vandalism of paleontological resources will be prosecuted by federal law enforcement personnel.

2. Discovery: If vertebrate or other scientifically significant paleontological resources (fossils) are discovered on BLM-administered land during operations, the Operator shall suspend operations that could disturb the materials, stabilize, and protect the site, and immediately contact the BLM Cody Field Office Manager (Authorized Officer). The Authorized Officer would arrange for evaluation of the find within an agreed timeframe and determine the need for any mitigation actions that may be necessary. Any mitigation would be developed in consultation with the Operator, who may be responsible for the cost of site evaluation and mitigation of project effects to the site.

If the operator can avoid disturbing a discovered site, there is no need to suspend operations; however, the discovery shall be immediately brought to the attention of the Authorized Officer.

3. Avoidance: All vertebrate or scientifically significant paleontological resources found as a result of the project/action will be avoided during operations. Avoidance in this case means "No action or disturbance within a distance of at least 100 feet of the outer edge of the paleontological locality".

### 22. Wildlife Stipulation:

Surface disturbing activity is not authorized from April 10 through July 15, so as to not cause "take" of protected species under the Migratory Bird Treaty Act of 1918 during the nesting season,

unless an avian nesting survey by a wildlife biologist confirms an absence of nesting birds in the affected area. Contact the Cody Field Office wildlife biologist for further guidance on nesting survey protocol and coordination with the Cody Field Office will be required. The stipulation will protect nests, nestlings, and nesting habitat for migratory birds as to not cause “take” as defined by the MBTA.

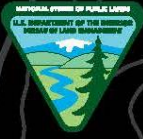
## **MITIGATION AND MONITORING MEASURES**

### **Mitigation:**

Topsoil and subsoil must not be removed from the public lands during or after construction.

Petroleum, fuels, and oils will be kept in the vehicles themselves rather than stored in barrels on site. Garage construction project Statement of Work, page 10 of 14, Section 1.4 item N covers how solid wastes, liquid wastes, hazardous materials, and hazardous wastes will be handled during site construction. A HAZCOM program will be in place during construction. A Safety Plan is detailed in Section 1.5 of the SOW.

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U.S. Department of the Interior  
Bureau of Land Management

# **Federal Aviation Administration Building Environmental Assessment**

**August 2024**

BLM Wyoming –Cody Field Office

DOI-BLM-WY-R020-2024-0047-EA

Cody Field Office

1002 Blackburn Street

Cody, Wyoming 82414

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## **Environmental Assessment**

### **Introduction**

#### **Identifying Information**

Project Name: Federal Aviation Administration Building

NEPA Number: DOI-BLM-WY-R020-2024-0047-EA

Type of Project: Right-of-Way

Location of Proposed Action: T. 56 N., R. 93 W., sec. 25, lot 7.

Name and Location of Preparing Office:

Cody Field Office

1002 Blackburn Street.

Cody, WY 82414

Lease/Serial/Case File Number: WYWY106367389

Applicant Name: Federal Aviation Administration

#### **Background**

The Federal Aviation Administration (FAA) has requested authorization to construct a new garage building on BLM-administered public lands to house tools, a road grader, snow cat, and other FAA heavy equipment and vehicle support equipment. The snow cat plows a road leading to the Air Route Surveillance Radar (ARSR) site located on the Big Horn National Forest (BHNF). The ARSR site is critical not only for the FAA mission and aviation safety but is also used daily by the Department of Defense (DOD) and the Department of Homeland Security (DHS) to conduct their missions for defense of the United States of America.

#### **Purpose and Need**

The purpose of the Proposed Action is to respond to the FAA's request for a Right-of-way (ROW) grant and to ensure the activity protects the natural resources of public lands. The need for the action is established by the BLM's responsibility to respond to a request for a right-of-way grant under Title V of the Federal Land Policy and Management Act of 1976, as amended (43 U.S.C. § 1761 et seq.). The application would be processed in accordance with 43 CFR § 2800.

#### **Decision to be Made**

The Authorized Officer (AO) must determine whether or not to approve the right-of-way grant and thus grant authorization of the building to be located on public lands. The AO could decide not to issue the grant if it would cause unnecessary or undue degradation to the public lands, or if it would threaten to violate another Federal law.

If it is decided to issue the ROW grant, the AO must decide what Terms and Conditions, would apply to the grant. Terms and Conditions could include specification of construction, design, reclamation activities and/or other mitigation measures for the proposed project area.

The AO must determine whether or not the Proposed Action could result in significant impact to the human environment. If not, this determination would be documented in a Finding of No Significant

Impact (FONSI). If the impacts could be significant, an environmental impact statement would be necessary.

### Conformance with BLM Land Use Plans

The Proposed Action conforms to the Record of Decision (ROD) and Approved Resource Management Plan (ARMP), as maintained, for the BLM Cody Field Office (CYFO), dated September 21, 2015. The decisions in the CYFO ARMP provide general management direction and allocation of uses and resources on the public lands in the area.

This plan has been reviewed to determine if the proposed action conforms to the land use plan as required by 43 CFR 1610.5-3. The RMP provides that the planning area is open to consideration for rights-of-way grants. The specific management records of the Cody ARMP that apply are described below:

Record	Management Action Text
1010	Allow surface-disturbing activities on fragile soils, biological crusts, soils with low reclamation potential, and soils with highly erosive characteristics on a case-by-case basis.
4036	Prohibit surface-disturbing activities within 500 feet of surface water and riparian/wetland areas (30,914 acres) except when such activities are necessary and when their impacts can be mitigated.
5037	Attach standard Paleontological Resources Protection Stipulations to authorizations for surface-disturbing activities in all areas, regardless of PFYC (i.e., 1 through 5).
6001	Consider all land use applications on a case-by-case basis.
8017	Provide warnings for geologic hazards. Identify geologic hazards case-by-case. Allow activities in mitigated (remediated) geologic hazard areas.

### Relationship to Statutes, Regulations, Plans, or Other Environmental Analysis

This Environmental Assessment (EA) was prepared in accordance with the National Environmental Policy Act (NEPA) and in compliance with all applicable laws and regulations passed subsequently, including the Council on Environmental Quality (CEQ) regulations 40 CFR, Parts 1500-1508; U.S. Department of the Interior (USDI) requirements put forth in the Department Manual 516, Environmental Quality; and guidelines listed in BLM's NEPA Handbook, H-1790-1 (BLM January 2008), as well as the following:.

- National Environmental Policy Act of 1970, as amended (42 U.S.C. §§ 4321 – 4347)
- Title V of Federal Land Policy Management Act of 1976, as amended, Sec. 501 [43 U.S.C. 1761]
- Title VII of Federal Land Policy Management Act of 1976, as amended, Sec. 701
- 43 CFR § 2800 – Land Resource Management Regulations for Rights-of-Way
- Antiquities Act of 1906, as amended (54 U.S.C. 320301 et seq.)
- Archaeological Resources Protection Act of 1979 (16 U.S.C. 470)
- National Historic Preservation Act, Section 106; (54 U.S.C. 306108)
- Paleontological Resources Protection Act of 2009



## **Identification of Issues and Scoping**

### **Public Involvement**

The public was notified of the NEPA process when the Environmental Assessment was listed on the BLMs ePlanning site. Based on the size and routine nature of the proposed project, it was determined that external scoping was not necessary.

### **Internal Scoping**

The Proposed Action was reviewed by an interdisciplinary team during preparation of this EA. Preliminary resource issues were considered in order to aid in the review and development of the Proposed Action and its design features. The ID team then determined which issues warranted further consideration. During internal review of the Proposed Action, geotechnical testing of the proposed construction site was determined to be necessary and was recommended by the BLM ID team to the FAA representative. A subsequent geotechnical investigation of the proposed garage building site was initiated, approved by BLM-CYFO, and conducted by a third party engineering consultant, JB Engineers of Casper, Wyoming, in July 2024 for the FAA. Results of that geotechnical testing were taken into account during analysis, and are incorporated into this EA.

### **Issues Identified for Detailed Analysis**

The following issues were identified by the ID team:

Geology: How would the proposed action affect geological and/or mineral resources, and how does area geology impact the potential building site?

Soils: How would the proposed action affect soil resources and how would area soils impact the potential building site?

Hydrology: How would the proposed action affect hydrological resources and how would area hydrological conditions impact the potential building site?

Visual Resource Management: Will the proposed site development of a 60x60 shop and associated fencing create visually contrasting impacts that alter the landscape character?

Will the proposed site developments meet the VRM objectives for that area?

## **Proposed Action and Alternatives**

### **No Action Alternative**

The request for an authorization to construct and maintain a building located on BLM-administered land would not be approved. The existing use of the land would remain the same. Maintenance of the ARSR site is critical to the FAA's mission and to aviation safety. The site is also used daily by the Department of Defense (DOD) and the Department of Homeland Security (DHS) to conduct their missions for defense of the United States of America. Therefore, if the No Action alternative was selected, the FAA would not be able to construct the garage building to assist in maintenance of the ARSR site, which could impact aviation safety and national defense.

### **Proposed Action Alternative**

The Proposed Action involves design and construction of a new garage building on BLM-administered public lands. The FAA has requested authorization to construct a new prefabricated metal garage building on BLM administered public land in Lot 7 (SE¼SE¼) Section 25, T. 56 N., R. 93 W., 6<sup>th</sup> P.M., Big Horn County, WY (Maps 1 and 2, below). The building would house tools, a road grader, a snow cat, and other FAA heavy equipment and vehicle support equipment. In winter months, the FAA maintains their ARSR site located on the BHNH. The ARSR site is critical not only for the FAA mission and aviation safety but is also used daily by the Department of Defense and the Department of Homeland Security to conduct their missions for defense of the United States of America.

The fenced area surrounding the garage building (60 feet by 60 feet) would be 80 feet by 80 feet (6400 square feet) in size. The garage building would be a single-story, slab on-grade, metal-framed building utilizing shallow foundations. Construction would require fill depths of up to five (5) feet to balance the site and bring the building pad to design elevations.

To access the garage, an area of compacted gravel, sloped away from the structure and disturbing approximately 900 square feet, would be constructed. A compact gravel access road would spur off the nearby existing road for access to the garage door. Power would be provided from a nearby power line. The proposed buried power line length would involve approximately 7200 square feet of disturbance. No additional workspace would be needed.

The total short term surface disturbance area during construction is estimated to be 0.5-1.0 acres, and the total long term surface disturbance area post construction would be 0.35 acres. Access to the ARSR site is via US Highway 14A, and Forest Service (FS) Road 651. US Highway 14A is closed during winter months, so the FAA uses FS Road 651 to access their ARSR site using the snow cat. The snow cat is currently stored on the BHNH, but winter conditions sometimes cause delays for access during inclement weather. The new garage building location would allow the FAA easier access to the snow cat to plow the road leading to FS Road 651 and travel the trail to their ARSR site during inclement weather.

Geotechnical testing was conducted on July 30, 2024, by a third-party engineering consultant for the FAA. A corresponding Geotechnical Engineering Report was prepared and received by the BLM CYFO in August 2024. This geotechnical testing evaluated subsurface conditions at the proposed construction site according to accepted engineering practices. The report provides geotechnical opinions and recommendations to the FAA to support the proposed planning, design, and construction of the project in the proposed location. This report, as well as the FAA's Statement of Work are both incorporated by reference into this EA.

### **Alternatives Considered and Eliminated from Further Analysis**

One other site was identified for construction of the building; however, it was not chosen since the parcel was farther away from the power source. This alternative would necessitate additional overhead power, which could introduce additive issues, particularly concerning resources like Visual Resource Management (VRM) and wildlife.

### **Affected Environment and Environmental Effects**

#### **General Setting and Geographic Scope of the Project Area**

The Proposed Action is situated along the western front of the northern Bighorn Mountains in Big Horn County, Wyoming. The location for the proposed garage building was selected due to its proximity to the Air Route Surveillance Radar (ARSR) site located to the east on the Big Horn National Forest (BHNH).

The general setting and geographic scope of the project area is discussed in more detail in the Geology and Mineral Resources section, below.

### **Resources Considered and Eliminated From Detailed Analysis**

Resources and features considered but not analyzed in detail are listed in Appendix A.

### **Resources Brought Forward for Detailed Analysis**

#### **Geology and Mineral Resources**

##### **Issue(s) Identified**

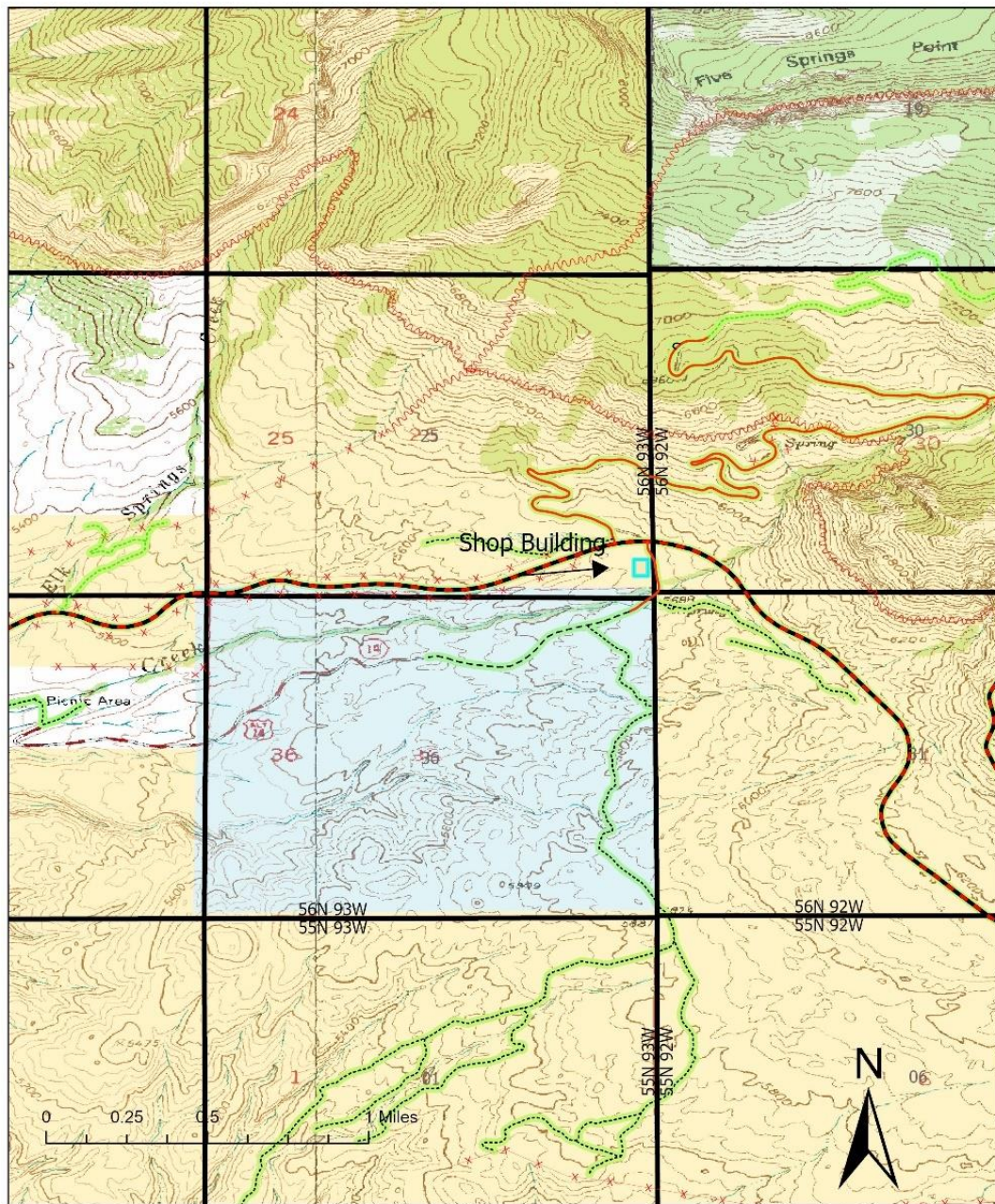
How would the proposed action affect geological and/or mineral resources, and how does area geology impact the potential building site?

##### **Affected Environment**

The Proposed Action is situated along the western flank of the northern Bighorn Mountains in northwestern Wyoming, along what has been termed the Five Springs Mountain Front (Wise and Obi, 1992). The Bighorn Mountains formed during the Laramide Orogeny, a period of regional uplift which took place from Late Cretaceous to Early Eocene time, approximately 40 to 80 million years ago (mya).

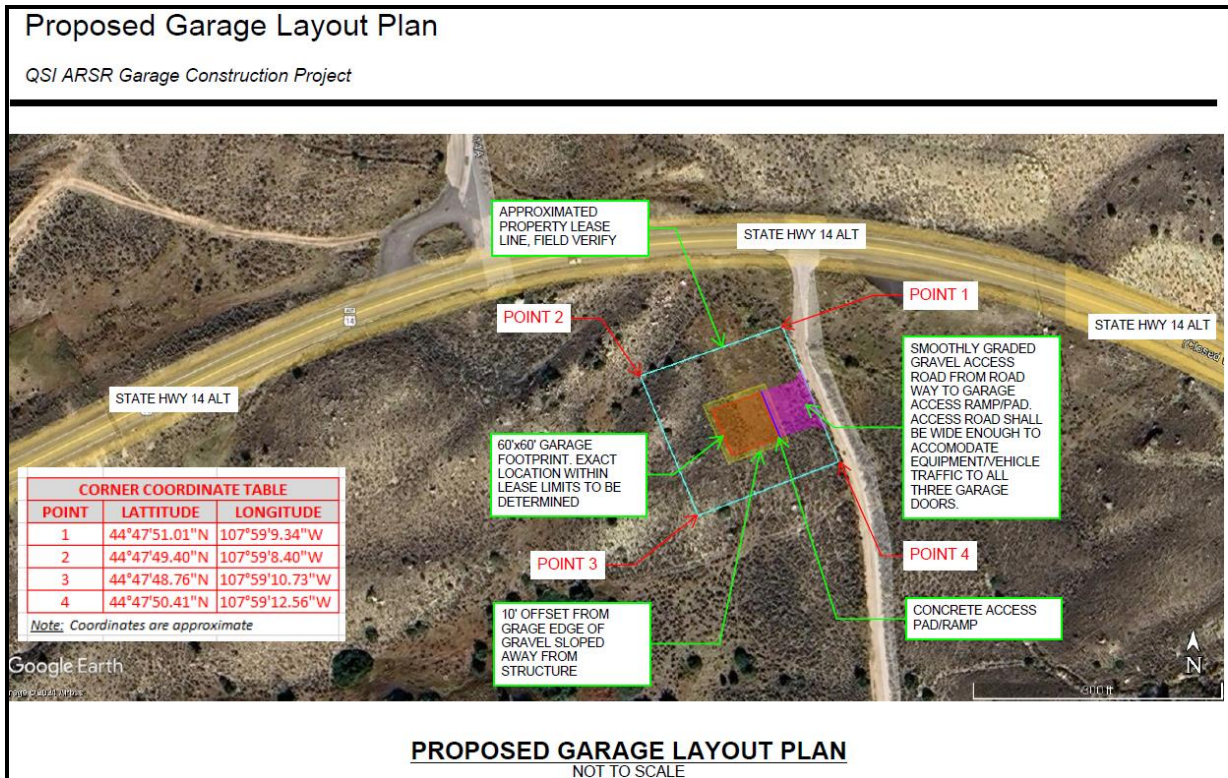
Just east of the proposed garage site, sedimentary strata along the western flank of the mountains dip steeply to the west at approximately 80 to over 90 degrees (overturned) and represent approximately 5,000 feet of structural relief. Ribs of vertical to overturned Paleozoic carbonate strata form the palisades seen along the mountain front.

FAA Shop  
WYWY106367389



**Map 1. Location Map of the Proposed FAA Garage Site**  
Section 25 (Lot 7), T. 56 N., R. 93 W., 6th P.M., Big Horn County, WY





### Map 2. Proposed FAA Garage Site Plan

Section 25 (Lot 7), T. 56 N., R. 93 W., 6<sup>th</sup> P.M., Big Horn County, WY

According to Wise and Obi (1992), exposures of folded and faulted strata illustrate the interplay of a changing paleostress environment over time, with rotation and reshaping of major fault blocks within the folded geologic structure. Steep slopes along the mountain front are covered in large areas by landslide deposits of Pleistocene or Holocene age. At the site of the proposed action, landslide deposits overlie more gently dipping beds of Cretaceous Thermopolis Shale, which slopes gently to the west, into the Bighorn Basin.

During geotechnical testing, one bore hole was advanced into the subsurface material to a total depth of 21.5 feet. It was determined that approximately 6-inches or more of topsoil cover the landslide deposits. From 6-inches to 14-feet, the bore hole encountered clayey gravel with sand, and from 14 feet to 21.5 feet, the bore hole encountered clayey sand, all of which are considered to be within the mapped landslide deposits covering the area. Groundwater was encountered at a depth of 19 feet. The bore hole did not reach the Thermopolis Shale. Several large boulders were noted near the proposed garage site.

### Effects

No Action

Under the No Action alternative, the construction of the proposed building would not be approved, and the issues identified above would not be of concern.

Proposed Action

The Proposed Action is located in an area that is stratigraphically and structurally complex due to its proximity to the Five Springs Mountain Front and associated steep slopes. These geological factors have resulted in numerous natural site conditions and limitations which have been taken into account as part of design and construction planning.

Under the Proposed Action alternative, the garage building would be constructed as recommended and described in the final Geotechnical Engineering Report prepared by JB Engineers of Casper, WY. No other design and construction alternatives were considered.

The engineering parameters of site excavation, material handling, compaction, concrete slab construction, building construction and site drainage are based on the results of geotechnical testing using one 21.5-foot deep borehole in the central part of the proposed slab location, and on the Statement of Work provided with the application. Samples of geologic materials obtained during geotechnical field work were tested in a laboratory to determine physical and engineering characteristics. The results of this testing were then analyzed to develop design opinions and recommendations regarding the proposed action.

Construction of the proposed garage would have no impacts on mineral resources, as no salable, locatable, or leasable solid minerals are present in the area. No fluid mineral resources including oil, gas or geothermal resources are known to be present in the area.

#### **Other Alternatives if Necessary**

No other alternatives were determined to be necessary.

#### **Mitigation**

The Geotechnical Engineering Report (JB Engineers, 2024) provides recommendations geared towards mitigating the effects of geological and hydrological conditions on the Proposed Action. These recommendations cover earthwork categories of site grading, site preparation, site preparation, site drainage, excavation/utility trench (power line) construction, and compaction requirements. The recommendations in this report would need to be followed in their entirety in order to mitigate effects to the project due to the relatively complicated geological and hydrological conditions on site. The mitigation measures listed below in the soils and hydrology sections include several measures that are also based on geological conditions in the area.

#### **Soils**

##### **Issue(s) Identified**

How would the proposed action affect soil resources and how would area soils impact the potential building site?

##### **Affected Environment**

Soils in the area of the Proposed Action are composed of soil type 526C: "Chilton very gravelly-Clapper extremely stoney complex" on 6 to 10 percent slopes (USDA-NRCS, 2024). These soils are associated with unconsolidated and poorly sorted landslide deposits which have moved downslope from the adjacent mountain front and are underlain by the fine-grained and poorly drained Thermopolis Shale.

The Geotechnical Engineering Report indicates that one bore hole was advanced to a total depth of 21.5 feet in the central location of the proposed concrete slab that would support the garage at the site. This bore hole indicated six or more inches of topsoil overlies 21 feet of unconsolidated landslide deposits composed of clayey gravel with sand, and clayey sand (JB Engineers, 2024). The bore hole did not

appear to reach the dark shales of the underlying Thermopolis Shale seen on aerial photos of the area. Groundwater was encountered at a depth of 19 feet in the borehole.

Samples of the subsurface soils were obtained using split barrel samplers. The testing was performed in accordance with ASTM D1586, Split Barrel Sampling. The samplers were driven into the various unconsolidated materials using a 140 pound hammer falling 30 inches. Penetration resistance values provide an indication of the relative density of granular soils or consistency of fine-grained soils.

The total number of blows required to advance the samplers each of three consecutive 6-inch increments was recorded and the sum of the second and third 6-inch increments was recorded as the penetration resistance value or SPT-N value.

Samples of soil obtained during the field exploration were observed and visually classified in accordance with ASTM D2487, which is based on the Unified Soil Classification System. Samples were selected for testing to determine the engineering and physical properties in general accordance with ASTM or other generally recognized procedures. The following parameters were analyzed during lab analyses: Natural Water Content (ASTM D2216), Particle Size Analysis (ASTM D1140), Atterberg Limits (ASTM D4318), and Water-Soluble Sulfate (ASTM D4318). Soils on site have a water content of 11.5%. Below the first one foot of soil, the material is composed of 15% gravel, 35.5% sand, and 49.6% silt and clay.

### **Effects**

#### **No Action**

Under the No Action alternative, the construction of the proposed garage building would not be approved, and the issues identified above would not be of concern.

#### **Proposed Action**

Under the Proposed Action alternative, both the short term and long term effects on the soil resource would be minimal. In the short term, during construction, the surface area to be effected is estimated to be between 0.5 and 1.0 acres, and 0.35 acres in the long term post-construction.

Soil conditions as determined by site inspection and geotechnical site investigation indicate several site-specific limitations which informed the detailed construction recommendations provided in the engineering report. The engineering parameters of site excavation, material handling, compaction, concrete slab construction, building construction and site drainage have been based on the results of geotechnical testing and on the Statement of Work provided with the application. Samples of soils and geologic materials obtained during geotechnical field work were tested in a laboratory to determine physical and engineering characteristics. The results of this testing were then analyzed to develop design opinions and recommendations regarding the proposed action.

### **Other Alternatives if Necessary**

No other alternatives were determined to be necessary.

### **Mitigation**

The Geotechnical Engineering Report (JB Engineers, 2024) provides recommendations geared towards mitigating the effects of site soils on the garage building, as well as geological and hydrological conditions on the Proposed Action. These recommendations cover earthwork categories of site grading, site preparation, site drainage, excavation/utility trench (power line) construction, and compaction

requirements. The recommendations in this report would need to be followed in their entirety in order to mitigate effects to the project due to the relatively complicated soil profile present at the site.

To protect the proposed garage from flooding or other influences of water and soil moisture, multiple design parameters have been developed both in the FAA's Statement of Work, and in the Geotechnical Engineering Report (2024). These design parameters/Operator Committed Measures are listed below:

#### *Site Grading*

Rough elevations at the site vary up to 10 feet. Site grading will require fills of up to 6 feet to balance the site and bring the building pad to design grades. On-site soils or import soils can be used as fill to establish grades at the site. Import material shall consist of WYDOT grading "W" crushed base course. All site grading shall be constructed as specified in the Compaction Requirements section of the report. Some larger cobbles/boulders/rock out cropping should be anticipated near the surface and cannot be used as fill material.

#### *Site Preparation*

Prepare the site by following the general recommendations provided below:

- Strip and remove topsoil and sage brush and any deleterious material from structural areas or any area to receive cuts and/or fills. Topsoil depths are noted at 6 inches on the boring log. Contractors shall verify topsoil stripping depths when bidding on the project.
- Proof roll any areas to receive fill with a loaded dump truck (or engineer approved equivalent) to check for loose or soft areas prior to placing new fill or structures.
- All fill and backfill must be approved by the geotechnical engineer. On-site soils can be used as fill material. All material must be processed into pieces smaller than 3 inches prior to being used as fill. Some larger cobbles/boulders/rock out cropping should be anticipated near the surface and cannot be used as fill material.

#### *Excavation/Trench Construction*

Excavations required for mass grading, foundations, and utility trenches will extend into the clayey sand with gravel and some large boulders/outcropping. Conventional heavy-duty earth moving equipment will be sufficient for the proposed excavations at the site. It should be noted that gravel and surface boulders /bedrock outcrops were encountered at the site. Rock hammers or other means may be necessary to advance through bedrock and gravel lenses encountered at the site and shall be anticipated by contractors. While it is the responsibility of the contractor to provide safe working conditions and to comply with OSHA standards in connection with underground excavations, the following guidelines are provided for planning purposes. The subgrade soil and trench conditions must be evaluated during construction by the contractor's competent person.

Plan excavations with water collection points and utilize conventional sumps and pumps to remove nuisance water runoff or precipitation. If site soil excavations are not immediately backfilled, they may degrade when exposed to runoff and require over-excavation and replacement with structural fill. We recommend construction activities and excavation backfilling be performed as rapidly as possible following excavation to reduce the potential for subgrades to degrade under construction traffic.

#### *Compaction Requirements*

Place fill in thin (8-inch maximum), uniform lifts and compacted to the following minimum percentages of the maximum dry unit weight as determined by ASTM D698 (Standard Proctor). Place all fill material



within minus 2 percent to plus 2 percent of the optimum moisture as determined by ASTM D698. The following shall be implemented during construction:

- Open Hole Observation: An open hole must be observed by JB Engineers to document and ensure the soils encountered during construction are similar to those observed during the study.
- Foundation Backfill: One compaction test every 50 linear feet (lf) or two tests total, whichever results in greater number of tests, per each foot lift of backfill.
- Structural Fill / Building Pad Preparation: One test every 2,500 square feet (sf) of each 12-inch lift of backfill.
- Utility Trench Backfill: One compaction test every 100 linear feet (lf) of trench per each 16-inch lift of backfill.

The contractor must understand and plan for the time required to process soil to meet the report requirements. Difficulty achieving required compaction may impact construction costs, schedules, and other project aspects. Allowing time and space (i.e., lay-down area) to process excavated site soil and facilitate proper moisture conditioning during dry weather is critical if the contractor plans to re-use the site soil as fill. Proper moisture conditioning or drying can help reduce compaction efforts and the need to import dry soil or aggregate.

#### *Building Foundations*

Based on the results of the geotechnical investigation, the proposed site has been determined to be suitable for support of the building using spread footings. If rock outcropping is encountered in excavations, the area shall be overexcavated a minimum depth of 18 inches and fill be used to establish footing grades to provide a uniform bearing surface for the building. Overexcavation (if required) shall be excavated laterally 2 feet on all sides. The overburden soils can be used to re-establish grades or WYDOT grading "W" aggregate base course and shall be moisture conditioned and compacted as specified in the Compaction Requirements section of the report.

The design and construction criteria presented below must be observed for the spread footing foundation system design and construction:

- The footing depth and bearing pressure for the design of footings was determined to provide against bearing failure and excessive settlement. Footings should be designed using a maximum allowable bearing pressure of 3,000 pounds per square foot (psf) bearing on native soils or structural fill. For footings designed using the supplied bearing pressure, an estimated total settlement for the footings will be 1 inch or less. An estimated total settlement will be less than half the total settlement.
- Friction acting along the base of the footings founded on recompacted native materials can be computed by using a coefficient of friction of 0.32 with the normal dead load.
- If loose or soft areas are encountered during footing excavations, the footings should extend to adequate bearing soil. As an alternative, the loose or soft areas can be over-excavated and replaced with on-site soils. Structural fill placed in over-excavations should be compacted to the specifications outlined above in the Compaction Requirements section of the report.
- Design exterior footings below unheated areas should be placed at least 48 inches below final exterior grade for frost protection.

- Design minimum footing widths of 16 inches for continuous footings and 22 inches for isolated pads.
- Reinforce continuous footings and foundation walls to span an unsupported length of 12 feet. This will allow the foundation to span any potential soft or loose areas that are not detected during excavation.
- Based on field exploration and general knowledge of the local geology, it is recommended that a Site Class D be utilized as a basis for structural seismic design.

### *Floor Slabs*

Slab on-grade floors can be utilized for the building flooring supported on native soils or WYDOT Grading "W" base course. The following recommendations must be followed:

- Separate all bearing walls from columns with expansion joints, which allow for unrestrained vertical movement and reduction in differential movement.
- Floor slab control joints should be used to reduce damage due to shrinkage cracking. Provide joints in accordance with appropriate ACI criteria.
- Use a modulus of subgrade reaction (K) of 125 pci for the prepared on-site soils.
- The requirements for slab reinforcement and thickness should be established by the designer based on experience and the intended use of the slab.
- Floor slabs should not be placed on frozen subgrades.

Exterior slabs are susceptible to frost action, which can generate substantial frost heave at certain times of the year. The potential for frost heave may not be acceptable at doorways or other critical areas adjacent to the building that will be exposed to weather. One approach is to provide partial frost protection would be to place and compact a minimum of 24 inches of aggregate base course beneath the slab. Alternatively, if partial frost protection is acceptable, over-excavation and aggregate base course replacement must be accomplished to the full frost depth of 36 inches.

Topsoil and subsoil must not be removed from the public lands during or after construction.

## **Hydrology and Water Resources**

### **Issue(s) Identified**

How would the Proposed Action affect hydrological resources and how would area hydrological conditions impact the potential building site?

### **Affected Environment**

The Proposed Action is situated in the perennial Five Springs Creek subwatershed (HUC\_12 code 100800100401), an area which encompasses a total of 14,510.5 acres. This creek flows from east to west from the Bighorn Mountains. It is supplied by multiple springs discharging groundwater from sedimentary strata along the western flank of the Bighorn Mountains, as well as from precipitation in the form of rainfall and snowmelt. Five Springs Creek generally reaches maximum discharge during the spring and early summer as a result of snowmelt runoff. Typical of the snowmelt are daily variations in streamflow, with successive discharges increasing as daylight hours and temperatures increase. This pattern, if uninterrupted by changing weather, will continue to the yearly peak flow and gradually subside as snowpacks diminish. A general rule for perennial streams originating in the high mountains

in Big Horn County is that the snowmelt season usually begins in late May, and peak flows often occur in mid-June (Plafcan et al., 1993).

The proposed garage location is situated just north of Five Springs Creek, and just west of a permitted reservoir supply ditch which diverts up to 0.056 cubic feet per second of water from the creek to supply an existing stock reservoir north of the US Highway 14A. The reservoir supply ditch, known as the N&S Supply Ditch, was constructed under Wyoming permit number 17795. It supplies water to the N&S Reservoir, located in the SE¼ Section 25, T. 56 N., R. 93 W., with a storage capacity of 42.4 acre-feet, and permitted under Wyoming permit number 4422R. In the past, this supply ditch has washed out and flooded the area where the garage building is proposed for construction. In addition, the garage building would be constructed just east of a mapped lentic riparian area (L0128X) approximately two acres in size. The project area is located in the 15-18-inch precipitation zone.

The bore hole constructed during geotechnical testing tagged alluvial/unconfined groundwater at a depth of 19-feet. This depth to alluvial groundwater indicates the depth to the top of the alluvial aquifer along the valley of Five Springs Creek. Moisture levels in the soils and vadose zone above the alluvial aquifer fluctuate up and down depending on precipitation levels, streamflow, snowmelt, as well as due to water infiltrating the subsurface from the N&S Supply Ditch located just east of the proposed garage location.

### **Effects**

#### **No Action**

Under the No Action alternative, the construction of the proposed building would not be approved, and the issues identified above would not be of concern.

#### **Proposed Action**

The Proposed Action is located in an area with relatively dynamic hydrological conditions. These conditions are a function of streamflow, the amount of precipitation that falls in and upgradient of the area throughout a given year, seasonal temperatures, evaporation rates, and the amount of water being diverted into the supply ditch, as well as the condition of the ditch itself.

Construction of the garage building would have minimal effects on area hydrology, however, local hydrological conditions, which can be dynamic depending on weather conditions throughout the year, may have important effects on the building, both during and after construction.

Based on the results of geotechnical testing, and the effects of water moving over the surface, and through the vadose zone and unconfined aquifer in the area, multiple design parameters were developed in order to facilitate construction and maintenance of the garage building over time. Design parameters in the Statement of Work submitted with the application, as well as engineering recommendations provided in JB Engineers (2024), would be deployed to mitigate the effects of local soils and hydrological conditions on the project.

### **Other Alternatives if Necessary**

No other alternatives were determined to be necessary.

### **Mitigation**

To protect the proposed garage from flooding or other influences of water and soil moisture, multiple design parameters have been developed both in the FAA's Statement of Work, and in the Geotechnical Engineering Report (2024). These design parameters/Operator Committed Measures are listed below:

Plan excavations with water collection points and utilize conventional sumps and pumps to remove nuisance water runoff or precipitation. If site soil excavations are not immediately backfilled, they may degrade when exposed to runoff and require over-excavation and replacement with structural fill.

Construction activities and excavation backfilling must be performed as rapidly as possible following excavation to reduce the potential for subgrades to degrade under construction traffic.

Groundwater was encountered at 19 feet during site reconnaissance. Dewatering prior to foundation excavation is not anticipated during construction. Dewatering may be required during utility excavations depending on final design depths. If encountered, dewatering must lower the groundwater level a minimum depth of 18 inches below excavation floors to reduce the potential of groundwater affecting the stability of the soils in the excavation bottoms.

#### *Site Drainage*

The following site drainage precautions must be observed during construction and maintained at all times after the building has been completed. Detrimental foundation movement may occur if site grading and surface drainage recommendations are not followed since the near-surface soils are active and prone to significant volume change with variations in moisture. Landscaping that may be completed after the building is completed must not alter positive drainage away from the building.

- The ground surface adjacent to exterior foundations should be sloped to drain away from the foundations in all directions. A minimum slope of 6 inches in the first 10 feet (5%) is recommended.
- Roof downspouts and drains should discharge well beyond the limits of the foundation wall backfill and should be well maintained over the life of the facility.
- Landscaping that requires irrigation should remain at least 8 feet from the structure.
- Cracks between buildings and exterior concrete flatwork and cracks that develop within exterior flatwork should be sealed and maintained to prevent surface water from infiltrating the subsurface soils.
- Backfill against footings, exterior walls, and in utility and sprinkler line trenches should be well compacted and free of all construction debris to reduce the possible of moisture infiltration.
- Do not install landscape curbs, flatwork, or other landscaping that impairs drainage away from the structure.

#### *Site Concrete/Corrosion*

The concentration of water-soluble sulfates measured in a sample of the on-site clayey sand soil obtained at a depth of one foot was 0.07%. This concentration of water-soluble sulfates represents a mild degree of attack on concrete exposed to these materials. This degree of attack is based on the scale presented in ACI Manual of Concrete Practice, Section 225R, Table 6.5 of mild, moderate, severe, and very severe. Type I or II cement should be used with a minimum compressive strength of 4,000 psi.

### **Visual Resource Management (VRM)**

#### **Issue(s) Identified**

Will the proposed site development of a 60x60 shop and associated fencing create visually contrasting impacts that alter the landscape character?

Will the proposed site developments meet the VRM objectives for that area?

## **Affected Environment**

### **Visual Resource Inventory**

The proposed project area is sited within the Little Mountain Scenic Quality Rating Unit (SQRU 001) which was inventoried as having a high A quality scenery (score of 19) This unit is a Special Recreation Management Area. It is a diverse landscape containing many notable features including Little Mountain, Devils Canyon, and Rainbow Canyon, as well as major cave resources. Land acquisitions added to the federal land ownership and significantly enhanced public access and public recreation opportunities. It is one of several areas in the Cody Field Office that were rated Class A. Little Mountain area is noted as an area of high interest. Public recreational use is notable, the amount of use is notable, public interest is high, and it is seen as a special area by Bighorn Basin residents and visitors alike. Accordingly, visual sensitivity is rated as High.

### *Characteristics Landscape*

The landform of the proposed project area is panoramic with steep sloping mountains to the west that gently roll out to the east with incised with washes and shallow drainages such as Five Springs Creek. Vegetation types include Sage Brush and Juniper with small, isolated patches of Aspen and Cottonwoods along Fives Springs Creek. The vegetation is mostly dark greenish gray and ranges from medium to coarse in texture. There are few built elements in this landscape the Highway 14A and small set of power lines. The road is the only of these that is prominent enough to draw attention.

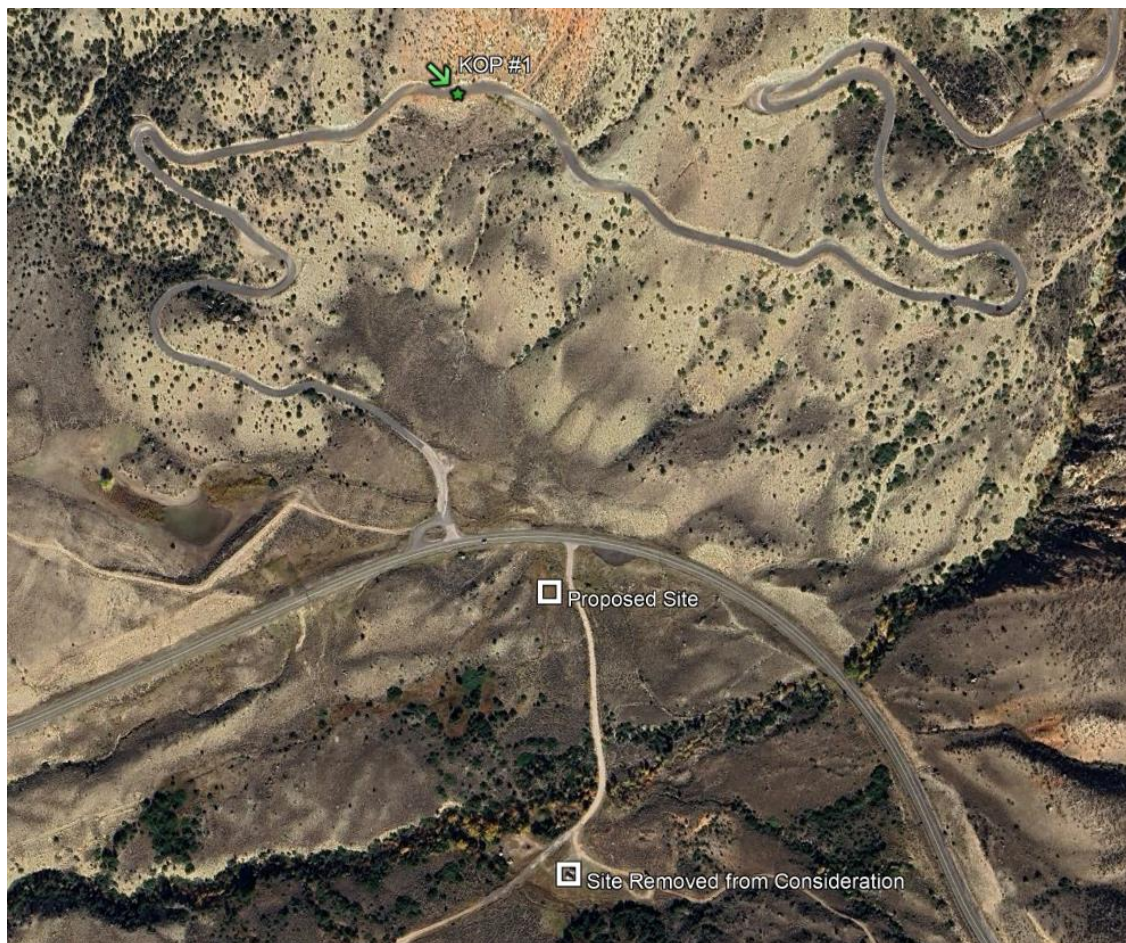
### *Visual Resource Management Classes and Objectives*

The proposed Federal Aviation Administration Building and its facilities is in Visual Resource Management (VRM) Class III. The objective to partially retain the existing character of the landscape. The level of change to the landscape can be moderate. Management activities may attract attention but should not dominate the view of the casual observer.

### *Environmental Consequences*

BLM's visual Resource Management program includes a standardized system to review lands actions from resource management plan conformance. Visual contrast rating worksheets are completed to determine if a project conforms to the resource management plan. In order to evaluate the environmental consequences of the alternatives for this proposed project. A key observation point (KOP) was established as part of completing the contrast rating analysis.

KOP #1 was along the Five Springs Falls Campground access road. Looking south towards the site.





Proposed Federal Aviation Administration Building



KOP #1-looking south toward highway 14A from Five Springs Falls Campground Access Road

The proposed project location is within proximity to US Highway 14A and Five Springs Campground Access Road, contributing to its visibility. Visitors travel in this area year-round though peak visitation is in the summer months of July and August. For those traveling both roads the length of time the site would be in view would be 5 to 10 minutes.

### **Effects**

#### **No Action**

Under the No Action alternative, the construction of the proposed building would not be approved, and the issues identified above would not be of concern.

#### **Proposed Action**

The cumulative impacts to visual resources from past, present, and reasonably foreseeable actions include establishment of a fenced area 80 feet by 80 feet (6400 square feet) in size surrounding the garage building (60 feet by 60 feet). During construction temporary impacts would result from the visibility of construction equipment and site work. Post construction, the contrast created by the site would be negligible in regard to the changes in vegetation. Weak landform contrast would be created in line and form by the delineation of the structures due to adding a blocky structure with vertical, horizontal, and diagonal lines into the landscape. The proposed action may contribute to measurable increase in impacts to visual resources. This development would be highly visible when accessing Five Springs Campground and traveling along US Highway 14A.

#### **Other Alternatives if Necessary**

Other alternatives were discussed during an onsite with FAA personal. One alternative was to move the proposed site further south to decrease the amount of visibility for those travelling along US Highway 14A. It was also mentioned at the onsite to change the building design to an arch type structure to repeat the natural line and form of the landscape. Both alternatives were declined by the FAA.

#### **Mitigation**

All structures shall be painted with the Standard Environmental Color Carlsbad Canyon. This color selection is used to minimize the visual contrast of the facility in the landscape.



## Consultation and Coordination

### List of Preparers

The following Cody Field Office personnel reviewed or have been contacted with regard to this EA.

Name	Title	Responsible for
Cara Blank	Realty Specialist	Lands and Access, Public Health and Safety, Environmental Justice, Flood Plains, Socioeconomics, Air Quality/Climate Change, Greenhouse Gas Emissions, Prime or Unique Farmland
Krystal Hazen-McCreary	Archaeologist – Fire and Fuels	Cultural Resources, Tribal Concerns
Gretchen Hurley	Geologist	Soils, Hydrology, Geology & Minerals, Paleontology, Hazardous Materials/Hazardous Wastes/Solid Wastes
Abel Guevara	Wildlife Biologist	Wild horses, T&E Sensitive Species (animals), T&E Sensitive Species (plants)
Alicia Hummel	Rangeland Management Specialist	Wetlands, Riparian
Rick Tryder	Recreation Planner	Recreation, VRM, Travel Transportation, WSA
Steve Clark	Fisheries Biologist	Fish
Tim Haas	Fuels Specialist	Fire and Fuels
Bryan McKenzie	Rangeland Management Specialist	Cave/Karst, Range, Vegetation
Brad Trauntvein	Natural Resource Specialist	Noxious Weeds
Jim Gates	Forester	Forestry
Laura Shipley	Natural Resource Specialist	Fluid Minerals (surface)
Allison Howard	Natural Resource Specialist	Energy Production (sub-surface)

## Appendix A - Resources Considered and Eliminated From Further Analysis

The following list of resource and features not present within the project area and not discussed in this EA:

- Environmental Justice,
- Prime or Unique Farmlands,
- Flood Plains,
- Class I visual management areas,
- Class I Airsheds,
- Wild and Scenic Rivers,
- Wilderness values or inventoried lands with wilderness characteristics
- Greater Sage Grouse Priority Habitat
- Wildlife (T&E Species)
- T&E Species (plants)
- Wild Horses and Burros
- Oil & Gas (surface, sub-surface)
- Fisheries
- Rangeland
- Vegetation
- Fire and Fuels
- Caves/Karst
- Forestry
- Recreation
- Travel Management
- WSA.

Resources and features present in the project area but not affected by the Proposed Action or alternatives include:

Resource/Feature Present	Rationale for Determination
<b>Invasive Species</b>	The project proponent is responsible for weed control within the project area. By treating invasive species, the potential for the spread or introduction of new species will be minimized.
<b>Cultural Resources</b>	One historic linear resource was identified within the area of potential effect for this project. The resource is Eligible for inclusion on the National Register of Historic Places, however, the segment which crosses through the project area is non-contributing to the site's overall eligibility. This project, if authorized, would result in a finding of No Adverse Effect; this resource was not carried forward for detailed analysis.
<b>Tribal Concerns</b>	No Traditional Cultural Properties are known to exist within the area of potential effect for this project. The proposed action would not prevent or limit access to ceremonial/religious sites or resources needed for sacred rites, interfere with the gathering of resources important for economic or traditional

	lifeways (e.g., teepee poles, firewood, aspen), or hinder the gathering of subsistence resources (e.g., plants, fish, game). No Tribal resources will be adversely affected, and this resource was not carried forward for detailed analysis.
<b>Wildlife and Big Game Winter Range</b>	No impact to wildlife, project is within Mule deer winter range and along the highway where mule deer would migrate through the area in search of more suitable habitat. Surface disturbing activity is not authorized from April 10 through July 15, so as to not cause “take” of protected species under the Migratory Bird Treaty Act of 1918 during the nesting season, unless an avian nesting survey by a wildlife biologist confirms an absence of nesting birds in the affected area. Contact the Cody Field Office wildlife biologist for further guidance on nesting survey protocol and coordination with the Cody Field Office will be required. The stipulation will protect nests, nestlings, and nesting habitat for migratory birds as to not cause “take” as defined by the MBTA.
<b>Paleontological Resources</b>	The proposed FAA garage site is proposed to be constructed on Quaternary landslide (Qls) deposits just west of the Bighorn Mountain front. Qls is PFYC=2 (low potential for vertebrate and/or scientifically significant paleontological resources). Qls deposits overlie strata of the Cretaceous Thermopolis Shale, PFYC=4, (high potential for vertebrate and/or scientifically significant paleontological resources). Based on the Geotechnical Engineering Report, excavations for the building will be restricted to soils, sands and gravels overlying the Thermopolis Shale. Therefore, no impacts to paleontological resources are anticipated as a result of the proposed action, however, the three standard paleontological resources protection stipulations must be applied to any approval of this project.

<p><b>Hazardous Materials, Hazardous Wastes, Solid Wastes, Petroleum Products</b></p>	<p>Petroleum, fuels, and oils associated with operating and maintaining vehicles to be stored in the proposed building/garage would be used and kept in the vehicles themselves rather than stored in barrels on site as per the Standard Form 299. The FAA has stated that none of these materials would be stored in the building proper, only within the associated vehicles that are to be stored within the building. No hazardous materials, hazardous wastes, or solid wastes would be stored within the building. The Statement of Work (SOW) submitted by FAA for this project is incorporated by reference into this EA. Garage construction project Statement of Work, page 10 of 14, Section 1.4, item N, covers how solid wastes, liquid wastes, hazardous materials, and hazardous wastes would be handled during site construction. A HAZCOM program would be in place during site construction. A Safety Plan is detailed in Section 1.5 of the SOW.</p>
<p><b>Recreation</b></p>	<p>The proposed action falls within the West Slope SRMA. The RMA is designated for motorized and nonmotorized recreationists to engage in hunting, hiking, horseback riding, wildlife viewing, sightseeing, fishing, and driving for pleasure so that they report realizing a “moderate” level of recreation experience and benefit outcomes in these Back, Middle, and Front Country settings. The naturalness of the area is considered middle to back country. Natural setting may have subtle to moderately dominant modifications that would be noticed but not draw the attention of the casual observer wandering through the area and primitive motorized routes and nonmotorized trails may exist. Facilities and structures in middle county are rare and often accessible via unimproved routes. The proposed action will not impact the BLM ability to manage for that objective and the associated RSCs. The proposed action also will not pose impacts to BLMs basic stewardship needs; visitor health and safety, use or user conflict and the proposed action should not influence how visitors impact natural resources in the project area.</p>
<p><b>Lands/Access</b></p>	<p>One power line right-of-way exists adjacent to the project area. An application is expected from the utility company to service the project building. Access to the project site is along an existing paved secondary road. Minimal disturbance is anticipated.</p>

<b>Livestock Grazing</b>	The proposed site is small acreage and would have no impacts to livestock grazing and vegetation in the area.
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## Appendix B – List of References & Authorities Cited

Federal Aviation Administration, 2024, Garage Construction Project, QSI-Garage-SOW, Lovell, WY, QSR-ARSR, prepared by the FAA NAS Defense Program, NDP Resources Services Team AJW-B710.

JB Engineers, 2024, Geotechnical Engineering Report – New Storage Garage near 5 Springs Campground, Big Horn County, Wyoming (01-24079); Prepared For: FAA/ NDP- WSA Liaison, Attn: Scott Babos, Des Moines, Washington; Casper, Wyoming.

Plafcan, M., Cassidy, E. W., and Smalley, M.L., 1993, Water Resources of Big Horn County, Wyoming; U.S. Geological Survey Water-Resources Investigations Report 93-4021.

USDA-NRCS, 2003, National Cooperative Soil Survey, [Official Series Description – CHILTON Series \(usda.gov\)](https://soilseries.sc.egov.usda.gov/OSD_Docs/C/CHILTON.html) Available online at: [https://soilseries.sc.egov.usda.gov/OSD\\_Docs/C/CHILTON.html](https://soilseries.sc.egov.usda.gov/OSD_Docs/C/CHILTON.html)

Wise, D. U., and Obi., C. M., 1992, Laramide Basement Deformation in an Evolving Stress Field, Bighorn Mountain Front, Five Springs Area, Wyoming, The American Association of Petroleum Geologists Bulletin, V. 76, No. 10 (October 1992), P. 1586-1600, 11 Figs.

## **Appendix C – Acronyms and Abbreviations**

ARSR - Air Route Surveillance Radar

BHNF - Big Horn National Forest

DHS – Department of Homeland Security

FAA – Federal Aviation Administration

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U.S. Department of the Interior  
Bureau of Land Management

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## **Federal Aviation Administration Building WYWY106367389**

### **Finding of No Significant Impact (FONSI)**

**August 2024**

BLM Wyoming –Cody Field Office

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DOI-BLM-WY-R020-2024-0047-EA

Cody Field Office

1002 Blackburn Street

Cody, Wyoming 82414

307-578-5900

307-578-5939(FAX)

## **FINDING OF NO SIGNIFICANT IMPACT**

DOI-BLM-WY-R020-2024-0047-EA

### **Introduction:**

The Bureau of Land Management (BLM) Cody Field Office has conducted an environmental analysis DOI-BLM-WY-R020-2024-0047-EA for a proposed action to grant a right-of-way (ROW) to the Federal Aviation Administration (FAA) for a new garage/shop building to be constructed near the Five Springs area in Big Horn County, Wyoming. The project area is located at T. 56 N., R. 93 W., sec. 25, Lot 7 (SE¼SE¼). The ROW for the building and parking area would involve approximately 0.35 acres of public land located along an existing gravel road. The fenced prefabricated building would be used to house various equipment including tools, a road grader, a snow cat and other FAA heavy equipment and vehicle support equipment needed to maintain a radar site on the Big Horn National Forest (BHNF).

The snow cat plows the highway leading to the Air Route Surveillance Radar (ARSR) site located on the BHNF. The ARSR site is critical not only for the FAA mission and aviation safety but is also used daily by the Department of Defense (DOD) and the Department of Homeland Security (DHS) to conduct their missions for defense of the United States of America. The environmental assessment (EA) is available at the BLM Cody Field Office and is incorporated by reference into this Finding of No Significant Impact (FONSI).

### **Finding of No Significant Impact:**

In considering whether the effects of the proposed action are significant, the BLM Cody Field Office analyzed the potentially affected environment and degree of the effects of the proposed action. Connected actions were considered, consistent with 40 CFR § 1501.9(e)(1).

### **Potentially Affected Area**

In considering the potentially affected environment, the BLM Cody Field Office considered, as appropriate to the specific action, the affected area (national, regional, or local) and its resources. The selected alternative would occur within the Cody Field Office boundaries and would have local impacts similar to and within the scope of those described and considered within the Cody Approved RMP. The project is a site-specific action directly involving up to 1.0 acres of BLM-administered land.

**Historic or Cultural Resources:** A Class III Cultural Resources inventory was conducted for the proposed project area and no cultural resources were identified. Cultural protections would be applied in order to mitigate potential affects to unknown historic or cultural resources and to inform the holder of their responsibilities under Archaeological Resources Protection Act and the State Protocol.

**Paleontological Resources:** Paleontological resources protection stipulations would be applied in order to mitigate potential affects to unknown paleontological resources.

**Geology and Minerals, Soils and Hydrology:** The geological setting, soils, and hydrological conditions on site were analyzed relative to their effect on the Proposed Action, as well as the effect of the Proposed Action on these resources. None of the impacts associated with these resources were considered to be significant.

**Visual Resource Management (VRM):** Visual sensitivity is rated as high. Post construction, the contrast created by the site would be negligible in regard to the changes in vegetation. All structures shall be painted with the Standard Environmental Color Carlsbad Canyon. This color selection is used to minimize the visual contrast of the facility in the landscape.

## **Degree of Effects**

In considering the degree of the effects, the following have been considered in evaluating effects appropriate to the specific action:

### **(i) Both short- and long-term effects.**

The BLM analyzed impacts to resources as described in the EA. The EA analyzed the short- and long-term effects of implementing either the No Action or Proposed Action alternatives. FAAs Operator-committed measures/design features for the garage building are based on a Statement of Work submitted by the FAA, on a geotechnical investigation of the site, and on a subsequent engineering report.

These efforts resulted in design features which would prevent significant impacts to natural resources such as soils, hydrology, recreation and VRM. None of the short or long-term environmental effects discussed in detail in the EA are considered significant.

### **(ii) Both beneficial and adverse effects.**

The Proposed Action would impact resources as described in the EA. Mitigation measures to reduce impacts to heritage resources through the application of cultural and paleontological resources protection stipulations have been incorporated into design of the Proposed Action. None of the environmental effects discussed in detail in the EA and associated appendices are considered significant.

### **(iii) Effects on public health and safety.**

It has been determined that no effects on public health and safety would result as a result of implementation of the Proposed Action. Maintenance of the ARSR site is critical not only for the FAA mission and aviation safety but is also used daily by the Department of Defense (DOD) and the Department of Homeland Security (DHS) to conduct their missions for defense of the United States of America.

### **(iv) Effects that would violate Federal, State, Tribal, or local law protecting the environment.**

The Proposed Action would not violate any applicable federal, state, local or tribal law or requirement imposed for the protection of the environment. In addition, the project is consistent with applicable land management plans, policies, and programs.

## **Stipulations, Mitigation and Monitoring**

There were no significant impacts identified in the environmental analysis; however, effects on unknown cultural and paleontological resources that may be discovered during construction or maintenance of the project would be mitigated through stipulations applied to the project as described in the EA and incorporated by reference into this FONSI. The FAAs Statement of Work (SOW, 2024) and the Geotechnical Engineering Report (JB Engineers, 2024) are incorporated by reference into this FONSI.

The authority for mitigation that the BLM has adopted is contained in:

- National Environmental Policy Act of 1970, as amended (42 U.S.C. §§ 4321 – 4347)
- Title V of Federal Land Policy Management Act of 1976, as amended, Sec. 501 [43 U.S.C. 1761]
- Title VII of Federal Land Policy Management Act of 1976, as amended, Sec. 701
- 43 CFR § 2800 – Land Resource Management Regulations for Rights-of-Way
- Antiquities Act of 1906, as amended (54 U.S.C. 320301 et seq.)
- Archaeological Resources Protection Act of 1979 (16 U.S.C. 470)

- National Historic Preservation Act, Section 106; (54 U.S.C. 306108)
- Paleontological Resources Protection Act of 2009

Applicable monitoring and enforcement provisions, consistent with the implementation of the adopted mitigation, would require the ROW to be monitored during regularly scheduled field inspections. These provisions are not required to mitigate or prevent any known significant impacts, but rather to avoid impacts to any possible, currently unknown paleontological or cultural resources.

**Signature:**

Based upon a review of the EA and the supporting documents, I have determined that the Proposed Action will not significantly affect the quality of the human environment, individually or with other actions in the general area. No environmental effects exceed those effects described in the Bighorn Basin RMP/FEIS. Therefore, an environmental impact statement is not needed.

---

/S/ Christopher Durham  
Acting Field Manager, Cody

8/30/2024  
Date

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STANDARD SIGNED NOTIFICATION DOCUMENTING NHPA COMPLIANCE PROJECT REVIEW  
UNDERSECTION 106

DB NUMBER: DBU\_WY\_2024\_676

UNDERTAKING NAME: Class III Cultural Resource Inventory of Federal Aviation Administration Building Near Five Springs Road

AGENCY UNDERTAKING NO: 020-2024-035

NUMBER OF UNDERTAKING ACTIONS: 1

INVESTIGATION DB NOs: DBI\_WY\_2024\_377

REQUIREMENTS:

FINDING OF EFFECT FOR PROJECT: No Adverse Effect

FINDING OF EFFECT NOTES:

Historic linear resource 48BH1390 (Kane to Dayton Road) is Eligible for inclusion on the National Register of Historic Places under Criterion A owing to its association with events that have made a significant contribution to the broad patterns of local history. A segment of site 48BH1390 crosses through the area of potential effect (APE) for this project (48BH1390\_12); this segment was evaluated by Terra Alta Archaeology and was found to be non-contributing to the site's overall eligibility. 48BH1390\_12 no longer retains integrity of setting or workmanship due to the present build environment in the surrounding area and due to deterioration of the resource from continued use and natural forces. The construction of the proposed FAA Storage Building would not adversely affect site 48BH1390 or any of its contributing aspects of integrity. The proposed action would not prevent or limit access to ceremonial/religious sites or resources needed for sacred rites, interfere with the gathering of resources important for economic or traditional lifeways (e.g., teepee poles, firewood, aspen), or hinder the gathering of subsistence resources (e.g., plants, fish, game). This project, if authorized, would result in a finding of No Adverse Effect and it is recommended that the Bureau of Land Management (BLM) permit this Undertaking in accordance with the stipulations listed below.

STIPULATIONS:

Cultural Resource Discovery and Protection

Pursuant to the State Protocol between the Wyoming State Historic Preservation Officer (SHPO) and the Bureau of Land Management (BLM) Wyoming State Director, if cultural resources are discovered within the areas of potential effect (APEs) for this action, operations shall be suspended until the BLM Authorized Officer (AO), in consultation with SHPO, can determine resource eligibility and effects.

The AO will issue a written notice to continue or suspend operations contingent upon resource eligibility and consultation. Pursuant to the Archaeological Resources Protection Act and it's implementing regulations at 43 C.F.R. § 7.4, all persons associated with this action are subject to prosecution for knowingly disturbing or collecting cultural resources (historic and prehistoric sites, features, or artifacts).

If human remains, funerary objects, sacred objects, or objects of cultural patrimony as defined by the Native American Graves Protection and Repatriation Act are encountered, all operations in the immediate area of discovery shall be halted and the BLM Authorized Officer and cultural resource specialist must be immediately notified.

Procedures set forth in 43 C.F.R. §10 will be followed. As applicable, the project would be redesigned to protect the cultural and tribal resource values present; mitigation procedures would be implemented based on recommendations from the project archaeologist with input from federally recognized tribes, approval from the Authorized Officer, and concurrence from the SHPO.

COMMENTS:

This project involves the construction of a 60' L X 60' W X 16' H storage building needed to store maintenance vehicles for the FAA. Building construction would involve the placement of an 80' L X 80' W gravel pad and a 60' L X 60' W concrete pad. A 50' L gravel access road will also be constructed to access the building. A two (2) acre block inventory was deemed an appropriate APE for this project.

REVIEW FRAMEWORK: State Protocol

REVIEW TIMEFRAME: 15 Day

LOCATIONS:

Meridian	Township/Range	Section
Sixth Principal Meridian	T56.00N R92.00W	30
Sixth Principal Meridian	T56.00N R93.00W	25

Reviewer:

JONATHAN DAVID

Digitally signed by JONATHAN  
DAVID  
Date: 2024.07.15 07:27:02 -06'00'

Certifying Official

KDAM (initials)

KRYSTAL HAZEN  
MCCREARY

Digitally signed by KRYSTAL  
HAZEN MCCREARY  
Date: 2024.07.14 17:24:44  
-06'00'

Date sent to SHPO

REPORT TITLE: Class III Cultural Resource Inventory of Federal Aviation Administration Building Near Five Springs Road

Site Summary Table

Smithsonian Number	Site Type	Time Period	Previous Eligibility	Contractor Eligibility	Agency Eligibility	SHPO Eligibility	Criteria	Effect	In APE	Collections	Agency Comments
BH 1390_12	District	Historic	Eligible	Eligible	Eligible	N/A	A	N/A	Yes		
BH 1390	District	Historic	Eligible	Eligible	Eligible	N/A	A	N/A	Yes	No	

Isolate Table

Isolate Number	Resource Type	Landowner	Collections
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**Federal Aviation  
Administration**

Engineering Services

777 South Aviation Boulevard  
El Segundo, California 90245

March 17, 2025

United States Bureau of Land Management  
Cody Field Office  
Attention: Mr. Jonathan David  
1002 Blackburn Street  
Cody, Wyoming 82414

Transmitted via electronic mail to: [jdavid@blm.gov](mailto:jdavid@blm.gov)

Re: Proposed FAA Field Maintenance Program Garage Construction Project  
Five Springs Area within Big Horn County, Wyoming  
Section 4(f)/303(c) Evaluation and Coordination

Dear Mr. David:

In accordance with National Environmental Policy Act (NEPA), the Federal Aviation Administration (FAA) is preparing an environmental impact review for the proposed garage construction project within Bureau of Land Management (BLM)-administered public lands, Big Horn County, Wyoming. The proposed project entails the construction of a garage building on BLM-administered public lands to house tools, a road grader, snow cat vehicles, and other FAA heavy equipment and support vehicle equipment. The site for the proposed garage would encompass an approximately one acre parcel of land that intersects the present United States Highway 14A (Medicine Wheel Passage) and a small access road. The parcel of land is currently undeveloped with its natural features such as native vegetation and naturally occurring rock fragments intact. The proposed garage would be 20 feet tall above ground level with a 3,600 square-foot building footprint and would be prefabricated on a concrete footing foundation. The proposed project would largely occur within the confines of the Five Springs area in Big Horn County, Wyoming.

The proposed project is needed to improve road access and conditions on U.S. Highway 14A during the winter months. Road closures hinder the FAA's ability to effectively access and manage other key FAA sites located within the Bighorn National Forest.

The proposed new garage facility would be funded by the United States Department of Defense, constructed by the FAA National Airspace System Defense Program Office, and transferred to FAA's Field Maintenance Program for ownership and maintenance upon completion. Construction staging would be located within the boundaries of the requested one acre parcel from the BLM.

Section 4(f) of the Department of Transportation Action of 1966 [recodified as Section 303(c) of 49 United State Code, Subtitle I] provides that the United States Secretary of Transportation shall not approve any program or project which requires the use of any publicly owned land from a public park, recreation area, or wildlife refuge, of national, state, or local significance or land of an historic site of national, state, or local significance, as determined by the officials having jurisdiction thereof, unless there is no feasible and prudent alternative to the use of such land and such program or project includes all possible planning to minimize harm resulting from the use. Such lands and sites are known as Section 4(f) resources.

The FAA is formally requesting environmental concurrence from the BLM. Specifically, the FAA is seeking to include in its NEPA environmental impact review a statement from the BLM pertaining to the significance of the impacts made by the proposed garage on the recreational use of the Five Springs area. The FAA had previously provided to the BLM survey data and preliminary site layout details for the proposed garage construction project. The BLM can use these data to determine the extent of potential environmental impact to the areas proposed for use by the garage construction project.

The FAA believes that impacts resulting from the construction and operation the proposed garage construction would be *de minimis* and would not adversely affect the activities, features, and attributes of the BLM administered public lands for the following reasons:

1. The FAA fully briefed the BLM, which has jurisdiction over the Five Springs area, on proposed plans for the proposed new garage facility in January 2024. In August 2024, the BLM published its finalized Finding of No Significant Impact (FONSI) and Decision Record (DR) documents which stipulated terms and conditions where the construction activities and garage presence would not adversely affect the activities, features, or attributes that make the Five Springs area eligible for Section 4(f) protection. The FAA would ensure that utmost care and Best Management Practices be employed during construction of the new garage in order to mitigate impacts to the surrounding areas. All FAA personnel and contractors will be trained prior to construction to identify and mitigate impacts to potential Federal and state-listed threatened and endangered species that may be present at the project areas.
2. In a correspondence letter dated July 22, 2024, the Wyoming State Historic Preservation Office determined that “no historic properties are present or affected by the project proposed” by the FAA within the requested BLM public land parcel.
3. The FAA provided an opportunity for public review and comment on the proposed project. Public notices were posted from January 8<sup>th</sup> to March 14<sup>th</sup>, 2025 on the BLM’s ePlanning website. Individuals were invited to contact the FAA for further information about the project and to provide comments. No public comments were received.

Therefore, the FAA requests BLM's concurrence with this determination. The FAA requests that a BLM representative sign below and, by signing, indicate concurrence that the FAA's proposed garage project would not substantially impair or diminish the potential activities, features, or attributes of the Five Springs area. In the event that the FAA does not receive correspondence from your office by close of business March 31<sup>st</sup>, 2025, it will be assumed that BLM concurs with this project.

If you would like additional information on this project, please contact Mr. Vincent Nguyen at (206) 304-2372 or send written comments to:

Mr. Vincent Nguyen, EIT  
Environmental Engineer  
Federal Aviation Administration  
777 South Aviation Boulevard  
El Segundo, California 90245  
[vincent.t.nguyen@faa.gov](mailto:vincent.t.nguyen@faa.gov)

Sincerely,

*Vincent T. Nguyen* Digitally signed by  
VINCENT T M NGUYEN  
Date: 2025.03.17 16:08:52  
-07'00'

Vincent Nguyen  
Environmental Engineer

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BLM Concurrence:

Signed: **RICHARD POWELL** Digitally signed by RICHARD POWELL  
Date: 2025.03.20 11:32:49 -06'00'

Date: 3/20/25

Printed Name: R. Cade Powell

Title: Field Manager

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July 22, 2024  
Krystal Hazen, Fire/Fuels Archaeologist  
BLM - Cody Field Office  
1002 Blackburn Street  
Cody, WY 82414

Re: DBI\_WY\_2024\_377 Class III Cultural Resource Inventory of Federal Aviation Administration Building  
Near Five Springs Road

Dear Krystal Hazen,

Thank you for consulting with the Wyoming State Historic Preservation Office (SHPO) regarding DBI\_WY\_2024\_377. We have reviewed the associated report and find the documentation meets the Secretary of the Interior's Standards for Archaeology and Historic Preservation (48 FR 44716-42).

We concur that site 48BH1390 is eligible for listing in the NRHP but will not be adversely affected by the undertaking as planned;

Smithsonian Number	Site Name	Current Eligibility	Effect
BH 1390	Kane to Dayton Road	Eligible	No Adverse Effect

We concur that segment 48BH1390\_12 is a non-contributing segment of an eligible for listing site and no further work or protective measures are necessary;

Smithsonian Number	Site Name	Current Eligibility	Effect
BH 1390_12	Kane to Dayton Road Segment	Not Contributing	No Effect

We recommend the BLM - Cody Field Office allow the undertaking to proceed in accordance with state and federal laws subject to the following stipulations: If any cultural materials are discovered during construction, work in the area shall halt immediately, the federal agency must be contacted, and the materials evaluated by an archaeologist or historian meeting the Secretary of the Interior's Professional Qualification Standards (48 FR 22716, Sept. 1983).

This letter should be retained in your files as documentation of a SHPO concurrence with your finding of no historic properties adversely affected. Please refer to SHPO project DBI\_WY\_2024\_377 on any future correspondence regarding this undertaking. If you have any questions, please contact me at 307-777-3424.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark Gordon".

Mark Gordon | Governor  
Dave Glenn | Director  
Sara Sheen | SHPO Officer



**ARTS. PARKS.  
HISTORY.**  
Wyoming State Parks & Cultural Resources



A handwritten signature in black ink, appearing to read 'Nathan May'.

Nathan May, Archaeologist

Mark Gordon | Governor  
Dave Glenn | Director  
Sara Sheen | SHPO Officer



**ARTS. PARKS.  
HISTORY.**  
Wyoming State Parks & Cultural Resources