



Division of Finance & Management
 Office of Air, Rail & Transit
 700 East Broadway Avenue
 Pierre, SD 57501
 O: 605.773-3574 | dot.sd.gov

TO: South Dakota Aeronautics Commission

FROM: Jack Dokken, Office of Aeronautics

DATE: May 15, 2025

SUBJECT: Airport Improvement Program (AIP) and Infrastructure Investment and Jobs Act (IIJA) Grant Applications

Airport sponsors are requesting funding from the State Aeronautics Fund for the following AIP/ IIJA projects below.

Bison 3-46-0003-017-2025

AIP: Design and bidding services for 6-unit revenue-producing hangar

Federal Share	\$ 235,600.00
State Share	\$ 0
Local Share	\$ 12,400.00
Total	\$ 248,000.00

Brookings 3-46-0005-040-2025

IIJA: Design and bid 140' x35' hangar taxilane extension

Federal Share	\$ 223,250.00
State Share	\$ 5,875.00
Local Share	\$ 5,875.00
Total	\$ 235,000.00

Eagle Butte 3-46-0068-018-2025

AIP: Construct AWOS III system

Federal Share	\$ 560,500.00
State Share	\$ 14,750.00
Local Share	\$ 14,750.00
Total	\$ 590,000.00

Flandreau 3-46-0077-016-2025**AIP:** Land acquisition for runway 10/28 shift

Federal Share	\$ 1,295,000.00
State Share	\$ 34,079.00
Local Share	\$ 34,079.00
Total	\$ 1,363,158.00

Flandreau 3-46-0077-017-2025**IIJA:** AGIS survey for runway 10/28 shift

Federal Share	\$ 57,000.00
State Share	\$ 1,500.00
Local Share	\$ 1,500.00
Total	\$ 60,000.00

Gettysburg 3-46-0017-017-2025**AIP:** Design revenue-producing hangar; aquatic and cultural resource survey

Federal Share	\$ 142,500.00
State Share	\$ 0.00
Local Share	\$ 7,500.00
Total	\$ 150,000.00

Gregory 3-46-0018-023-2025**IIJA:** Bid schedule A, 35% bid schedule B – revenue-producing T-hangar

Federal Share	\$ 444,000.00
State Share	\$ 0.00
Local Share	\$ 23,368.00
Total	\$ 467,368.00

Gregory 3-46-0018-022-2025**AIP:** 65% bid schedule B – revenue-producing hangar

Federal Share	\$ 532,000.00
State Share	\$ 0.00
Local Share	\$ 28,000.00
Total	\$ 560,000.00

Highmore 3-46-0019-014-2025**AIP:** Reconstruct apron (2700 SY); relocate taxiway connector(150'x35')

Federal Share	\$ 831,983.00
State Share	\$ 21,894.00
Local Share	\$ 21,894.00
Total	\$ 875,772.00

Hot Springs 3-46-0020-019-2025**AIP:** Construct AWOS III

Federal Share	\$ 508,250.00
State Share	\$ 13,375.00
Local Share	\$ 13,375.00
Total	\$ 535,000.00

Hoven 3-46-0021-018-2025**IJA:** Design revenue producing hangar; Geotech and environmental surveys

Federal Share	\$ 85,500.00
State Share	\$ 0.00
Local Share	\$ 4,500.00
Total	\$ 90,000.00

Lemmon 3-46-0027-020-2025**AIP:** Design and bid apron and taxilane reconstruction

Federal Share	\$ 204,250.00
State Share	\$ 5,375.00
Local Share	\$ 5,375.00
Total	\$ 215,000.00

Lincoln County 3-46-0078-024-2025**AIP:** Design reconstruction of taxilane

Federal Share	\$ 150,000.00
State Share	\$ 3,947.00
Local Share	\$ 3,947.00
Total	\$ 157,895.00

McLaughlin 3-46-0031-017-2025**IJA:** Reimburse 2024 revenue-producing hangar-fan coil heater

Federal Share	\$ 33,250.00
State Share	\$ 0.00
Local Share	\$ 1,750.00
Total	\$ 35,000.00

Miller 3-46-0035-016-2025**AIP:** Construction of taxiway and access road improvements

Federal Share	\$ 863,550.00
State Share	\$ 22,725.00
Local Share	\$ 22,725.00
Total	\$ 909,000.00

Miller 3-46-0035-017-2025**IIJA:** Design AWOS IIIP weather station

Federal Share	\$ 80,750.00
State Share	\$ 2,125.00
Local Share	\$ 2,125.00
Total	\$ 85,000.00

Murdo 3-46-0039-017-2025**IIJA:** Design reconstruction of runway, MIRL, PAPIs, Mill/overlay 14 turnaround, construct 32 turnaround, construct connector taxiway, crack/seal apron

Federal Share	\$ 370,500.00
State Share	\$ 9,750.00
Local Share	\$ 9,750.00
Total	\$ 390,000.00

Platte 3-46-0066-016-2025**AIP:** Construction of AWOS-IIIP

Federal Share	\$ 346,750.00
State Share	\$ 9,125.00
Local Share	\$ 9,125.00
Total	\$ 365,000.00

Sioux Falls 3-46-0050-065-2025**AIP:** Construct east cargo apron expansion

Federal Share	\$ 10,826,248.00
State Share	\$ 601,458.00
Local Share	\$ 601,458.00
Total	\$ 12,029,164.00

Spearfish 3-46-0065-038-2025**IIJA:** Design and construct terminal building

Federal Share	\$ 355,500.00
State Share	\$ SB 144
Local Share	\$ 39,500.00
Total	\$ 395,000.00

Springfield 3-46-0052-016-2025**AIP:** Reconstruct and rehab partial apron

Federal Share	\$ 212,882.00
State Share	\$ 5,603.00
Local Share	\$ 5,603.00
Total	\$ 224,088.00

Springfield 3-46-0052-015-2025**IIJA:** Reconstruct and rehab partial apron

Federal Share	\$ 108,000.00
State Share	\$ 2,843.00
Local Share	\$ 2,843.00
Total	\$ 213,686.00

PART IV – PROGRAM NARRATIVE
(Suggested Format)

PROJECT: Hangar Design

AIRPORT: Bison Municipal Airport

1. Objective:

The project is to provide design, bidding, and closeout services for a Hangar Building.

2. Benefits Anticipated:

Replace aging and deteriorating hangars on the airport.

3. Approach: (See approved Scope of Work in Final Application)

The hangar design, bidding, and closeout will be completed through a traditional engineering contract. KLJ of Bismarck, North Dakota will serve as the airport's consultant to lead the effort.

4. Geographic Location:

Town of Bison, Perkins County, State of South Dakota

5. If Applicable, Provide Additional Information:

6. Sponsor's Representative: (include address & telephone number)

Paula Kopren
PO Box 910, Bison, SD 57620
(605) 244-5677

Project Narrative (Justification)

AIG – Hangar Taxilane Extension (±140' x 35')

The Brookings Regional Airport (BKX) is located on the westside of Brookings, SD. The farthest southeast hangar taxilane currently has space available for the construction of new hangars. However, BKX has received a commitment from a private hangar owner to construct a large hangar at the airport. The airport's existing taxilane layout currently does not have adequate space available to accommodate the proposed hangar. The taxilane would be extended approximately 140' to provide the necessary hangar space. The taxilane extension would create an additional hangar area on the north side, where the City of Brookings may construct a city-owned hangar. Completing construction of these hangars will be very beneficial to the airport by providing an increase to both the number of based aircraft and operations at BKX. Additionally, the revenue generated from the hangar leases for the new building will provide additional revenue to the airport, allowing it to continue to operate and maintain its facilities at a high level.

The taxilane expansion will be located on the farthest south taxilane in the hangar area in the north eastern corner of the airport. The expansion will include approximately 140' of 35' wide asphalt pavement. The new taxilane will include a total paving section depth of 39" to help minimize the effects of frost related distresses on the pavement. The expansion project will also include relocating a portion of existing perimeter fencing and the removal of an existing gravel parking area to provide the space for additional hangars to be constructed in the future.

CHEYENNE – EAGLE BUTTE AIRPORT, EAGLE BUTTE, SOUTH DAKOTA

AWOS III – Design and Construct

Purpose

The purpose of this project is to provide certified weather reporting on the airfield. Currently, the only weather reporting on-site is a non-certified “SuperAWOS”. This system has had increased maintenance and down time. Pilots frequently call the Airport Manager to get a “visual” report of weather conditions at the airport. An AWOS III system would provide certified weather reporting to pilots and flight crews that is more accurate than a “visual” report. Current certified weather comes from Pierre Regional Airport (PIR) approximately 55 nautical miles away.

Scope

The scope of this project is the engineering design, bidding, and construction administration, as well as construction of an AWOS III system at Cheyenne – Eagle Butte Airport. The project will be bid to include an Add Alternate of Present Weather and Thunderstorm sensors. These will be awarded if the price comes in reasonably.

Safety – Airfield Operational Resiliency (AOR)

The airport is heavily used for air ambulance and medically necessary flights. Providing certified weather reporting will increase flight safety for these flights. The AWOS III system will increase airfield operational resiliency during inclement weather conditions by allowing flight crews to better evaluate current weather conditions when planning flights.

A goal of this project is that by providing current certified weather reporting that aircraft operations for medical flights can resume as quickly as possible during or after inclement weather conditions. This will keep the airport open to those aircraft operations for an increased period.

Location

This AWOS III system will replace the existing “SuperAWOS” that is currently in use at the airport. The “SuperAWOS” is not a certified weather reporting system and has had increased maintenance

PART IV – PROGRAM NARRATIVE
(Suggested Format)

PROJECT: AIP #3-46-0077-016-2025
AIRPORT: Flandreau Municipal Airport
1. Objective: Shift Runway 10/28 – Phase 2: Land Acquisition
2. Benefits Anticipated: The existing runway does not meet the current FAA standards. Therefore, by purchasing the necessary land and easements the sponsor will be able to realign/reconstruct the existing runway, thus bringing the airport into FAA compliance. Design is also included.
3. Approach: (See approved Scope of Work in Final Application) See approved Scope of Work
4. Geographic Location: Flandreau Municipal Airport Flandreau, Moody County, South Dakota
5. If Applicable, Provide Additional Information:
6. Sponsor's Representative: (include address & telephone number) Cohl Turnquist, City Administrator 605-997-2492 1005 W. Elm Ave Flandreau, SD 57028

PART IV – PROGRAM NARRATIVE
(Suggested Format)

PROJECT: AIP #3-46-0077-017-2025
AIRPORT: Flandreau Municipal Airport
1. Objective: Shift Runway 10/28 – Phase 3: AGIS Survey
2. Benefits Anticipated: The existing runway does not meet the current FAA standards. Therefore, by purchasing the necessary land and easements the sponsor will be able to realign/reconstruct the existing runway, thus bringing the airport into FAA compliance. This grant is for the AGIS survey to be completed as part of the Runway Reconstruction Project.
3. Approach: (See approved Scope of Work in Final Application) See approved Scope of Work
4. Geographic Location: Flandreau Municipal Airport Flandreau, Moody County, South Dakota
5. If Applicable, Provide Additional Information:
6. Sponsor's Representative: (include address & telephone number) Cohl Turnquist, City Administrator 605-997-2492 1005 W. Elm Ave Flandreau, SD 57028

Project Narrative (Justification)

AIP – Design Revenue Producing Hangar with Wetland Delineation and Cultural Survey

The Gettysburg Municipal Airport is in need of additional hangar space for the storing of aircraft. According to airport officials, there has been great interest from both local and transient users for additional storage space available for temporary and/or long-term situations. There are numerous private hangars on the airport, however these hangars are all filled. To help resolve this problem, the City of Gettysburg would like to utilize a portion of their Airport Improvement Program (AIP) entitlement funds to complete the design of a new, city owned, revenue producing T-Hangar building. The T-Hangar building would consist of a pre-fabricated steel structure, with 4 or 6 separate units. Each unit would provide storage for one aircraft and be completely separate from the other units. By constructing a new T-Hangar building, the airport will be able to provide users space to store their aircraft indoors and out of the elements. The airport would then rent out each unit to different users, allowing them have an additional revenue source for the airport.

The hangar design will also include completing two different environmental surveys. These surveys are required to be completed over the project area before any potential construction project can receive environmental approval from the FAA. The surveys will include a wetland delineation and Level III Cultural Resource Survey. The wetland delineation survey will be completed over the intended project area to determine if any wetlands or other “jurisdictional waters of the U.S.” exist. If the delineation survey finds evidence of these in the project area, proper mitigation measures will need to be followed. The cultural survey will be completed over the entire airport property. This survey will determine if any areas of cultural significance are present and if cultural monitoring will be required during earth disturbing activities. Both of these surveys can be completed concurrently and their finding will be incorporated into the environmental documentation for the proposed hangar project.

Project Narrative (Justification)

Gregory Municipal Airport

Gregory, SD

Revenue Producing T-Hangar

There has been great interest from local and transient users to have storage for temporary and/or long-term situations. The addition of a T-Hangar building will allow the airport to have more hangar space available for aircraft. The city-owned T-Hangars will be rented out to users allowing the city to collect revenue. Currently, there are two hangars at the airport, one of which is privately owned. During the fall the airport experiences higher traffic volumes due to hunters traveling to the area. With the shortage of hangar space available, pilots are forced to park their aircraft on the apron or utilize other airports. For example, 3 pilots live in Gregory and are forced to hangar their aircraft in Winner. Each of them have expressed the desire to be back at the Gregory airport and plan to rent a t-hangar if the project were to be constructed. By constructing the T-Hangars, the City of Gregory will have space available to accommodate those aircraft.

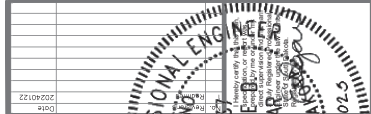
It is anticipated that the airport will utilize 4 grants for the completion of the project.

AIP 3-46-0018-021-2023 will be for the design of the project.

AIP 3-46-0018-023-2025 will be for the construction of the project.

AIG 3-46-0018-022-2025 will be for the construction of the project

AIG 3-46-0018-024-2026 will be for the reimbursement of engineering costs



PART IV – PROGRAM NARRATIVE
(Suggested Format)

PROJECT: Apron reconstruction and taxiway relocation

AIRPORT: Highmore Municipal

1. Objective:

The existing apron is in very poor condition, PCI of 24 during the 2024 PCI study. Additionally, the airport currently has direct access from the apron area to the runway, the project will reconstruct the apron and relocate the taxiway to eliminate the direct access.

2. Benefits Anticipated:

The reconstruction will enhance the usability of the airport while increasing safety by removing potential FOD and direct access.

3. Approach: (See approved Scope of Work in Final Application)

The apron will be closed during reconstruction, barricades will be placed to ensure aircraft to not enter the area. The parallel taxiway will be closed when any construction occurs within the Taxiway Object Free Area. The runway will remain open, taxiing operations will be routed away from the construction area. The project is scheduled to take 3 weeks for construction. Pavement markings will be completed 30 days after paving is complete.

4. Geographic Location:

Highmore, Hyde County, South Dakota. Approximately 1 mile north of the city center on SD 47.

5. If Applicable, Provide Additional Information:

6. Sponsor's Representative: (include address & telephone number)

Vikki Day, Mayor
125 2nd Ave SW, Highmore, SD 57345
605.852.2716

HOT SPRINGS MUNICIPAL AIRPORT, HOT SPRINGS, SOUTH DAKOTA

Construct Automated Weather Observation System (AWOS) III

Purpose

The purpose of this project is to provide certified weather reporting on the airfield. Currently, the only weather reporting on-site is a non-certified “SuperAWOS”. This system has had increased maintenance and down time. Pilots frequently call the Airport Manager to get a “visual” report of weather conditions at the airport. An AWOS III system would provide certified weather reporting to pilots and flight crews that is more accurate than a “visual” report. Current certified weather comes from Chadron Municipal Airport (CDR) approximately 35 nautical miles away or Rapid City Regional Airport (RAP) approximately 43 nautical miles away.

Hot Springs Municipal Airport is located along the southeastern edge of the Black Hills of South Dakota. Weather conditions vary significantly across the Black Hills region making weather reporting from other locations less accurate. Providing current certified weather reporting at the airport will increase safety and airport operations during inclement weather.

Scope

The scope of this project is the engineering design, bidding, and construction administration, as well as construction of an AWOS III system at Hot Springs Municipal Airport. The project will be bid to include an Add Alternate of Present Weather and Thunderstorm sensors. These will be awarded if the price comes in reasonably.

Safety – Airfield Operational Resiliency (AOR)

When a flight crew plans a flight to Hot Springs Municipal Airport, they assess the weather conditions to determine if weather reports meets their company's operational requirements to be used as a destination. The presence of certified weather reporting station facilitates compliance with these requirements. The AWOS III provides real-time data on temperature, wind speed and direction, visibility, precipitation, and other meteorological factors that directly impact the safe and legal ramifications of each flight operation. By having access to this information, pilots can make informed decisions that align with their company's operating specifications to ensure the safety of passengers and crew.

Most flight operations require strict adherence to their company's operations specifications, which outline the guidelines and procedures for conducting IFR operations. Weather-related parameters and limitations are included in these specifications. The AWOS III provides accurate weather data that enables pilots to assess whether the current weather conditions at the airport align with the limitations specified in the operations specifications. This ensures that flights are conducted within the prescribed parameters, mitigating risk, and maintaining compliance with regulatory standards.

The current weather reporting system at Hot Springs Municipal Airport is not certified as an approved weather reporting facility, therefore most commercial, corporate, and charter flight operations will file their IFR flight plan to destinations that have AWOS III or equivalent, in order to maintain compliance with their company's operation specifications.

AWOS III would be beneficial for the ballooning community in Hot Springs, primarily to help get better weather reports. Currently, they gather their weather information from several sources, one of which is the National Weather Service (NWS) in Rapid City. The NWS in Rapid City uses computer-generated models to predict weather in the Hot Springs area because there is no certified weather reporting system on the airport. There have been many occasions when computer-generated models have been incorrect and have affected balloon flight in the Hot Springs area.

Hot Springs Municipal Airport currently has a number of Life Flight operations that utilize multi-engine fixed wing aircraft. As discussed above, this is one of the IFR users that would benefit from AWOS III as it would make Hot Springs Municipal Airport accessible during more inclement weather conditions, and as such, enable more critical transport services to residents.

Location

This AWOS III system will replace the existing "SuperAWOS" that is currently in use at the airport. The "SuperAWOS" is not a certified weather reporting system and has had increased maintenance and down time. The new AWOS III will replace the "SuperAWOS". The location of the new AWOS-III has been coordinated with the FAA and is outside of the Runway Line of Sight to the north of the existing "SuperAWOS".

Financial Plan / Cost Estimate

Funding for this project was provided by a 90% grant from the FAA using the 2023 Supplemental NOFO program. There will be a 5% match from SDDOT and 5% local match. The non-AIP elements will be paid for with local funds.

Project Schedule

The schedule for this project is:

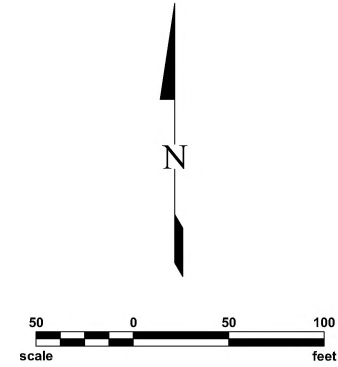
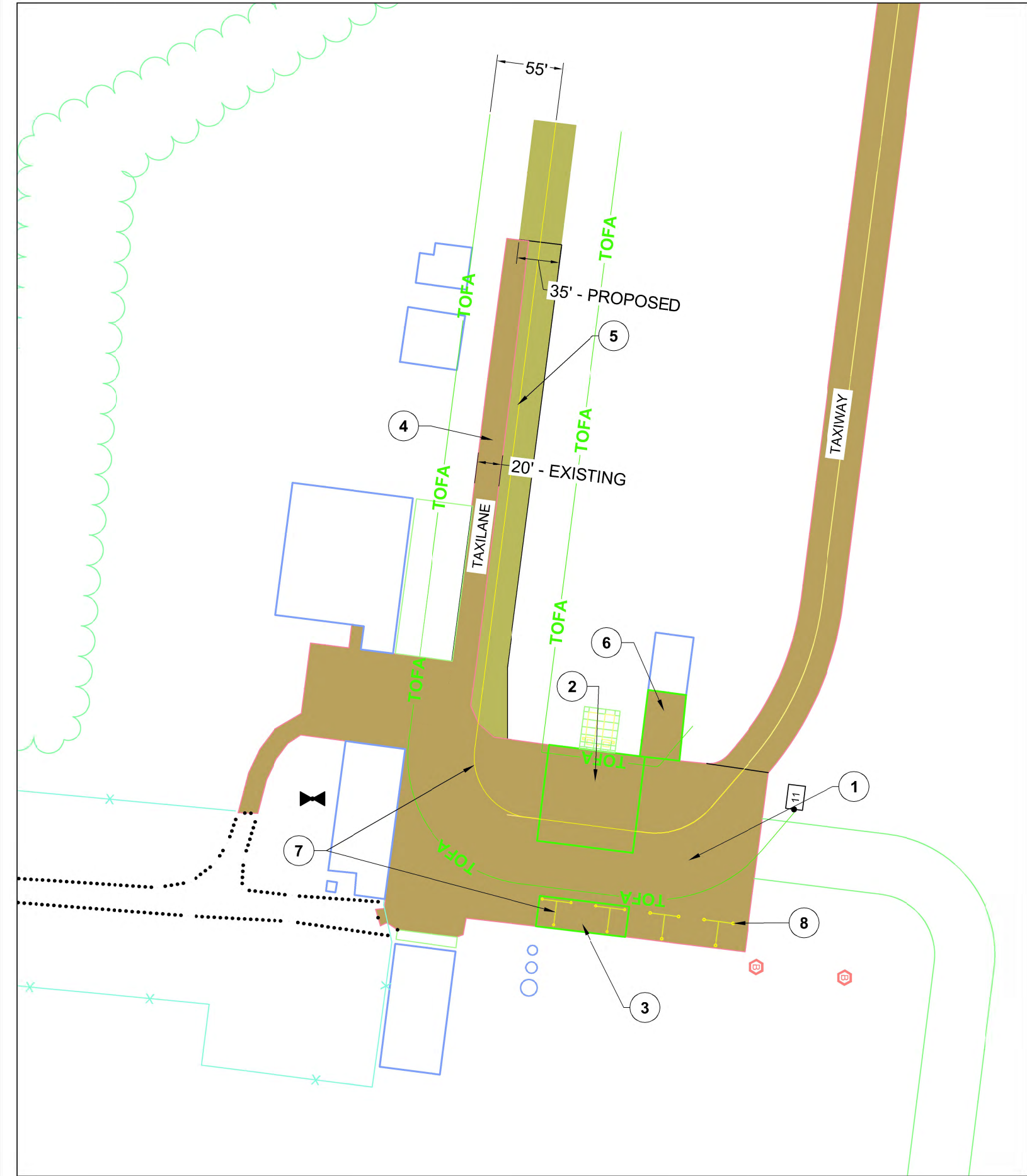
Task	Date
Begin Construction	August 2025
Complete Construction	June 2026
Submit Grant Closeout Report	January 2027

Project Narrative (Justification)

Phase 1 - Design a revenue producing hangar.

The Hoven Municipal Airport is in need of a new hangar to meet the current demands for additional aircraft storage. There are numerous existing hangars at the airport, but each of these hangars are full and there is no aircraft storage space available. The airport manager has stated that there is interest from multiple pilots on basing their aircraft at the airport. However, with the lack of storage space available, the prospective pilots have not made the move. The new hangar would be owned by the City of Hoven and would be rented out to pilots on a yearly or monthly basis. By constructing this new hangar, the airport would increase the available storage and entice more prospective pilots to storing their aircraft the airport. Collecting rent from the proposed hangar, would allow the city to be able to have another income source for the airport. In order for aircraft to use the proposed hangar, the project will also include approach pavement from the proposed hangar to the existing taxilanes and some minor site grading. The proposed hangar will be a pre-fabricated steel building with separate units or “areas” for pilots to store aircraft. Each of the units will be large enough to store a single plane and will be rented out to different users.

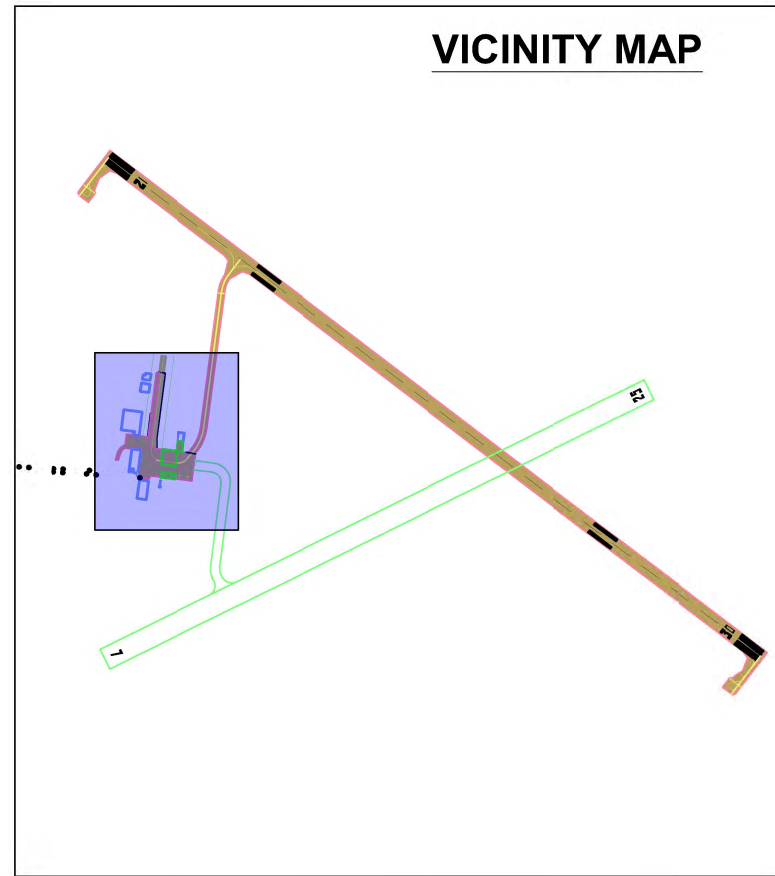
The 2025 grant includes only the design phase of the project. This will include a geotechnical exploration, environmental review, site layout and design, and the drafting of construction plans and specifications. The hangar will not be scheduled to be bid and constructed until 2026 at the earliest



NOTE: THIS SHEET IS TO BE PRINTED IN COLOR.

PROJECT WORK DESCRIPTION

- 1 RECONSTRUCT APRON APPROX. 4,238 SY)
- 2 CONSTRUCT CONCRETE FUELING APRON (APPROX. 712 SY)
- 3 CONSTRUCT CONCRETE HARD STAND (APPROX. 209 SY)
- 4 REMOVE EXISTING TAXILANE (20' X 410')
- 5 CONSTRUCT TAXILANE (65' X 510')
- 6 CONSTRUCT CONCRETE SRE BUILDING APRON (APPROX. 199 SY)
- 7 NEW PAVEMENT MARKINGS
- 8 REPLACE TIE-DOWNS





NO.	DATE	REVISION

DRAFTED
QED
REVIEWED
SLS
PROJECT NUMBER
2405-01059
ISSUE DATE
08/05/2024

APRON AND TAXILANE RECONSTRUCTION

CITY OF LEMMON (OWNER)
LEMMON, SOUTH DAKOTA

PROJECT WORK DESCRIPTION

SHEET
1

PART IV – PROGRAM NARRATIVE
(Suggested Format)

PROJECT: Apron and Hangar Taxilane Reconstruction (Design Only)

AIRPORT: Lemmon Municipal Airport

1. Objective:

The project is to provide design, bidding, and closeout services for an apron reconstruction and hangar taxilane reconstruction/extension.

2. Benefits Anticipated:

Replace aging and deteriorating pavements on the airfield.

3. Approach: (See approved Scope of Work in Final Application)

The apron and taxilane reconstruction design, bidding, and closeout will be completed through a traditional engineering contract. KLJ of Bismarck, North Dakota will serve as the airport's consultant to lead the effort.

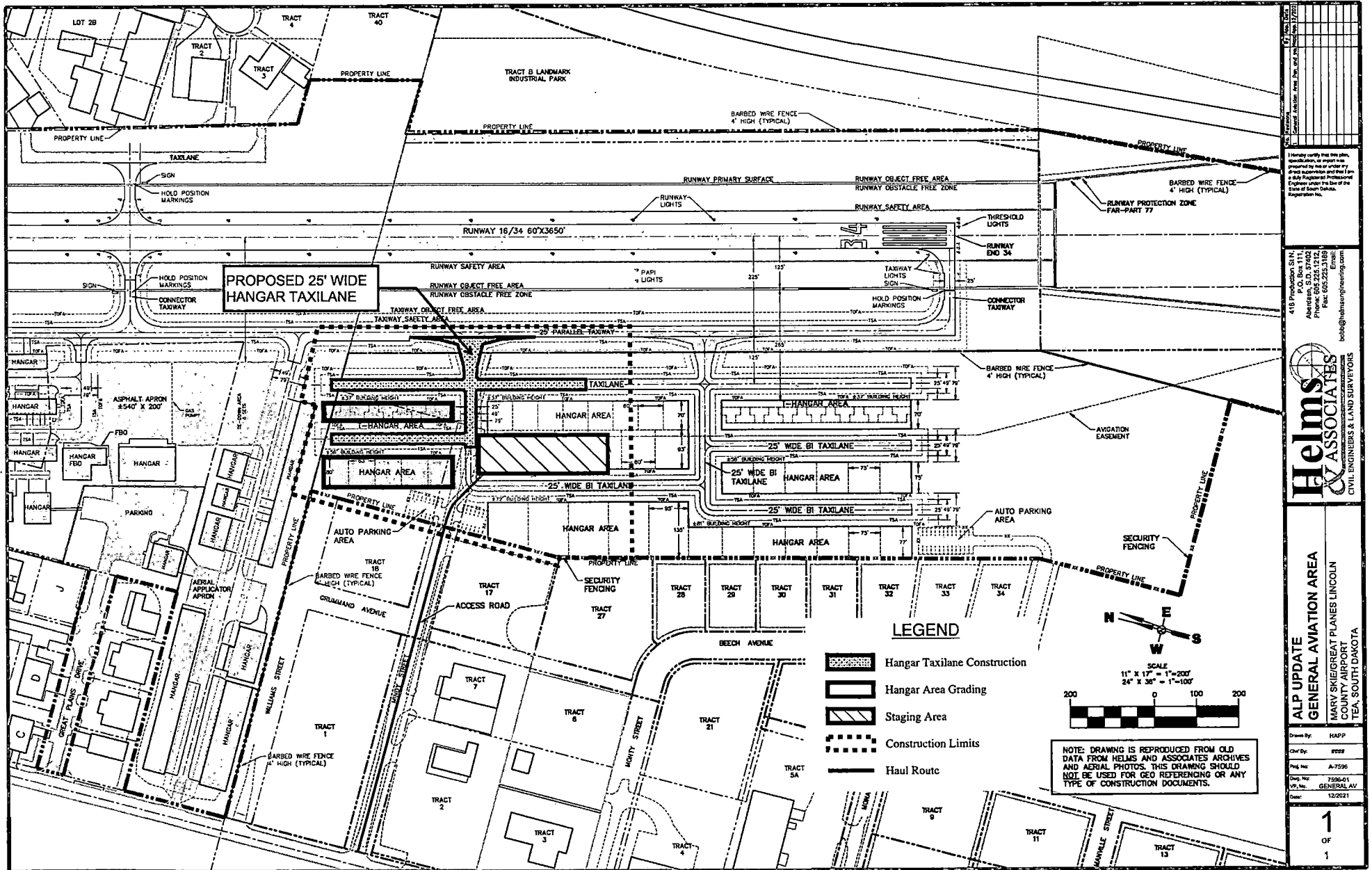
4. Geographic Location:

Lemmon, Perkins County, South Dakota

5. If Applicable, Provide Additional Information:

6. Sponsor's Representative: (include address & telephone number)

Mike Ginther
301 1st Ave W, Lemmon, SD 57638
(605) 374-5281



Helms & Associates
CIVIL ENGINEERS & LAND SURVEYORS

416 Production St. N.
P.O. Box 111
Aberdeen, SD 57202
Phone: 605.253.5122
Fax: 605.253.5189
Email: info@helmsandassociates.com

**ALP UPDATE
GENERAL AVIATION AREA**
MARY SNEG GREAT PLAINES LINCOLN
COUNTY AIRPORT
TEA, SOUTH DAKOTA

Drawn By: HAPP
Chk'd By: ewe
Proj. No: A-7596
V.P. No: GENERAL AV
Date: 12/2021

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OF
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Project Narrative (Justification)

Reconstruct Taxilane (420'x25'); Construct Taxilane (1,800'x25') – Phase 1: Design

The Marv Skie-Lincoln County Airport (Y14) has experienced substantial growth in recent years, and is now classified as a large GA airport in the state of South Dakota. The current FBO had acted as the FBO and airport manager for years. However, the Sponsor has moved forward with hiring an airport manager that is an employee of Lincoln County.

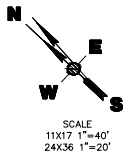
The airport and its users have identified a need for additional hangar space. The County understands the need and has established a priority list of projects to accommodate those needs. The new manager receives regular phone calls for locations to construct private hangars, as well as, rent t-hangar space. The proposed project will be the first phase of several phases for the development of the south hangar expansion area. Phase 1 shall include construction of ±1,800 linear feet of taxilane, and hangar area grading. The county plans on constructing new t-hangars on a portion of the constructed taxilanes. It is anticipated that there will be enough constructed taxilane and hangar area space to support nine additional private hangars. The airport manager believes that the users will occupy all of the constructed t-hangar space, and begin construction on all of the private hangar spaces available following completion of the project.

This Grant also includes Alternate Bid Schedule A from the Phase 2 General Aviation Apron Reconstruction project. Alternate Bid Schedule A included the reconstruction cost of 420 linear feet of hangar taxilane.

The airport has grown to approximately 70 based aircraft and approximately of 55 operations daily. Y14 is located near FSD and is a preferred relocation spot for General Aviation pilots as FSD has expanded. Y14 is a user-friendly GA airport with an excellent FBO that has a variety of offers, as well as, a mechanic on the field.

It is proposed that the taxilanes will be constructed to an adequate depth (up to 65% of frost depth) and include underdrain to reduce the susceptibility to frost heaves and extend the life of the pavement. An ALP update was submitted and approved for this area under 2022-AGL-6857- NRA. The County will eventually plan to continue the taxilane expansion in future phases. There will be additional taxilane provided for private hangar use, but also for the County to continue to construct T-Hangars.

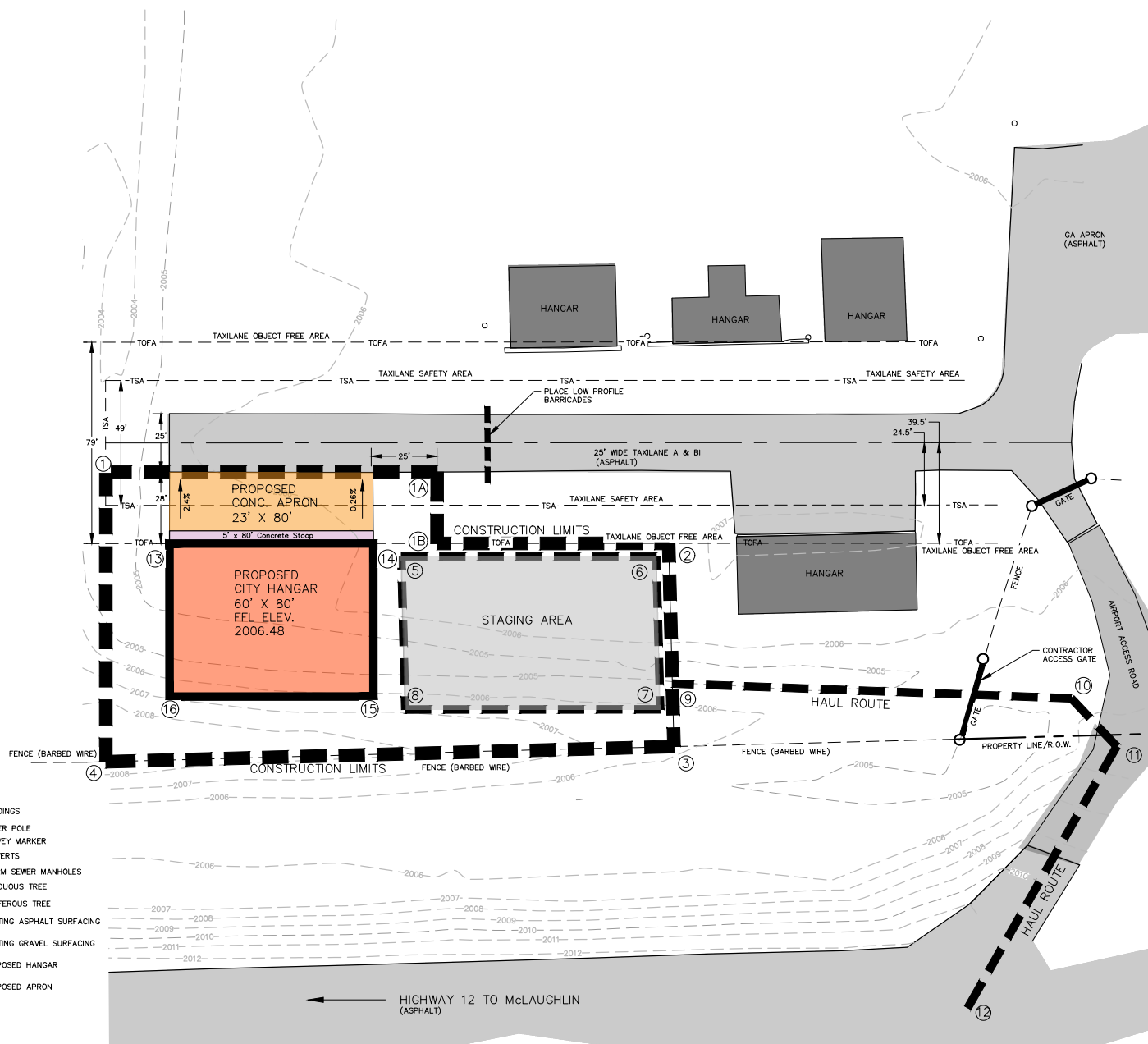
NOTE: CITY HANGAR MAX HEIGHT
● ROOF PEAK EL. 2034



PROJECT LEGEND

- RSA --- RUNWAY SAFETY AREA
- OFA/DFZ --- OBJECT FREE AREA/OBSTACLE FREE ZONE
- RPZ --- RUNWAY PROTECTION ZONE
- SECTION LINE
- QUARTER LINE
- X --- EXISTING FENCE
- OHE --- OVERHEAD ELECTRIC LINE
- PROPERTY CORNER
- RUNWAY THRESHOLD LIGHTS
- RUNWAY LIGHTS
- TAXIWAY LIGHTS
- RUNWAY MARKERS/CONES
- LIGHT POLE
- ▲ BEACON
- 1- TIE DOWNS

- BUILDINGS
- POWER POLE
- △ SURVEY MARKER
- CULVERTS
- STORM SEWER MANHOLES
- DECIDUOUS TREE
- CONIFEROUS TREE
- EXISTING ASPHALT SURFACING
- EXISTING GRAVEL SURFACING
- PROPOSED HANGAR
- PROPOSED APRON



← HIGHWAY 12 TO McLAUGHLIN
(ASPHALT)

No.	Revisions	By	Date

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the law of the State of South Dakota.
Registration No.

416 Production S.N.
Amendin, S.D. 57402
Phone: 605.225.1212
Fax: 605.225.3189
Email: bob@helmsandassociates.com
bob@helmsandassociates.com



Project Layout
Revenue Producing Hangar
McLaughlin Municipal Airport
McLaughlin, South Dakota

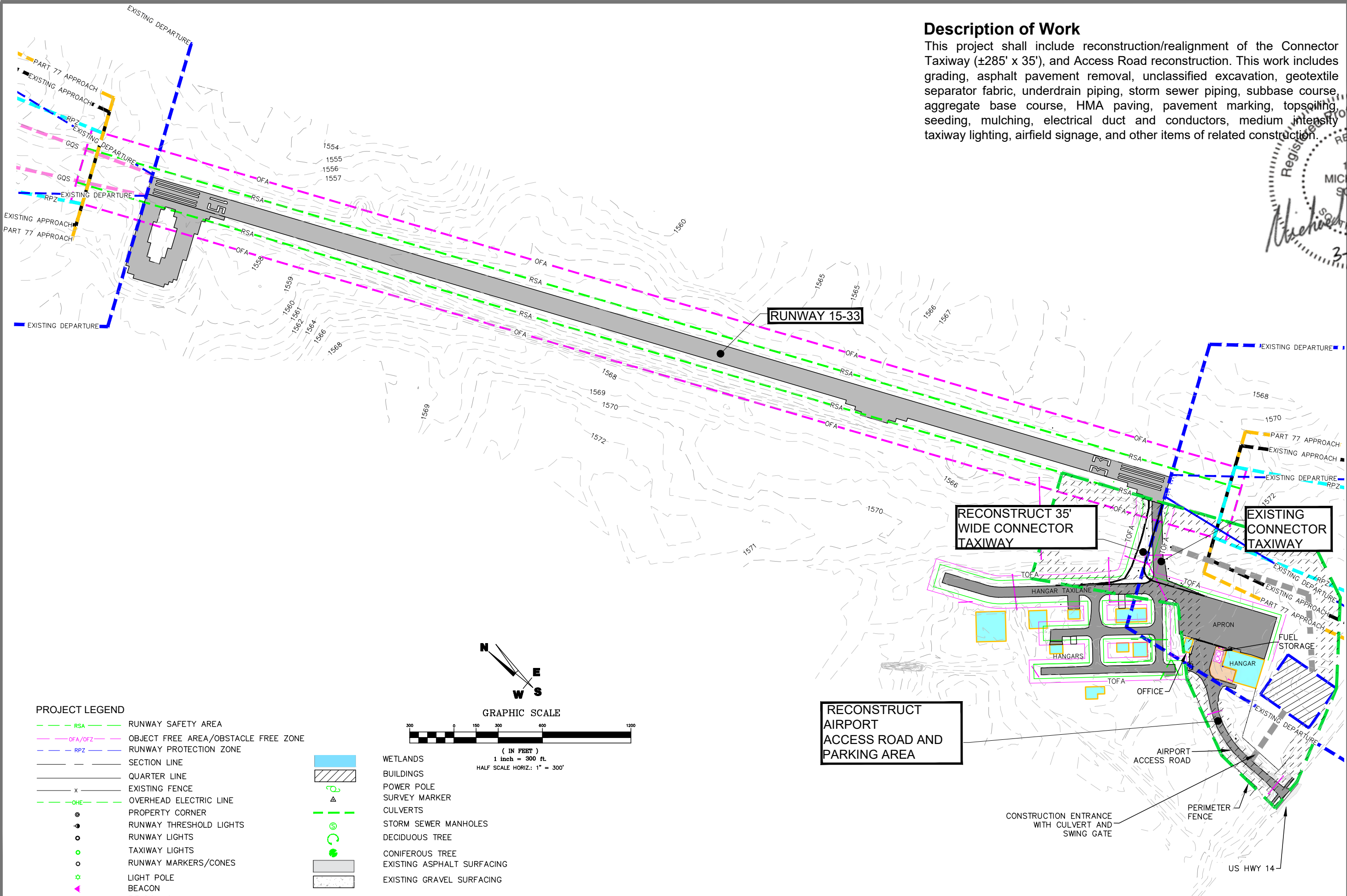
Drawn By: _____
CHK By: _____
Proj. No: _____
Dwg. No: _____
V.P. No: _____
Date: _____

Project Narrative (Justification)

BIL - Reimbursement for 2024 Revenue Producing Hangar Project (Alternate Bid 1 – Fan Coil Heater)

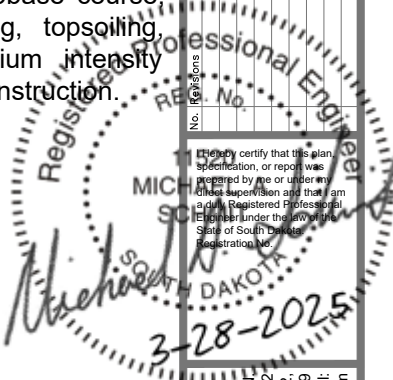
The McLaughlin Municipal Airport is currently in need of a new hangar to meet the current demands for aircraft storage and to increase airport revenue. Currently there are only 4 hangars at the airport, these hangars are in varying states of repair, and are all occupied by a tenant. There has been vested interest from 2 local pilots and several transient users for the airport to have the capability to provide additional storage for aircraft for both temporary and/or long-term circumstances. Constructing a new Hangar will allow users to rent the space for their aircraft. The hangar would be owned by the City of McLaughlin and would be rented out to pilots to allow them to store their aircraft inside while using the airport. By collecting rent from the proposed hangar, the city would be able to have another source of income from the airport. Having more space available for plans will also bring more traffic to the airport. In order for aircraft to use the proposed hangar, access to the existing hangar taxilanes will be constructed with the project. The included preliminary project sketch provides the location of the proposed hangar as well as a possible haul route and staging area for the project. The proposed hangar will be a pre-fabricated steel building with four separate units or “areas” for pilots to store aircraft. Each of the units will be large enough to store a single plain and will be rented out on a single basis.

The project was bid in the spring of 2024. However, construction of the new hangar is not anticipated to begin until the 2025 construction season due to delays in obtaining construction materials. The City will utilize both Airport Improvement Program (AIP) and Bipartisan Infrastructure Law (BIL) funding to fund the construction of the hangar. Grants for the airport’s 2025 fiscal year (FY) AIP and BIL entitlements will be obtained to help cover the funding shortfalls in the FY 2024 grants that are currently in place. The city should expect construction of the hangar to be complete by the fall of 2025 and begin to collect revenue from the hangar shortly thereafter.



Description of Work

This project shall include reconstruction/realignment of the Connector Taxiway (±285' x 35'), and Access Road reconstruction. This work includes grading, asphalt pavement removal, unclassified excavation, geotextile separator fabric, underdrain piping, storm sewer piping, subbase course, aggregate base course, HMA paving, pavement marking, topsoiling, seeding, mulching, electrical duct and conductors, medium intensity taxiway lighting, airfield signage, and other items of related construction.



416 Production St N
Aberdeen, S.D. 57402
Phone: 605.225.1212
Fax: 605.225.3189
Email: bobb@helmsengineering.com



PROJECT LAYOUT
TAXIWAY AND ACCESS ROAD IMPROVEMENTS
MILLER MUNICIPAL AIRPORT
MILLER, SOUTH DAKOTA

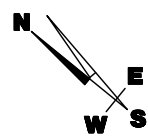
Drawn By: CLB
Chk' By: MAS
Proj. No: A-8967
Dwg. No: 8967-02
VP. No: LAY
Date: 4/8/25

PROJECT LEGEND

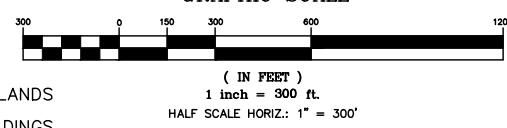
- RSA --- RUNWAY SAFETY AREA
- OFA/OFZ --- OBJECT FREE AREA/OBSTACLE FREE ZONE
- RPZ --- RUNWAY PROTECTION ZONE
- SECTION LINE ---
- QUARTER LINE ---
- x --- EXISTING FENCE
- OHE --- OVERHEAD ELECTRIC LINE
- PROPERTY CORNER
- RUNWAY THRESHOLD LIGHTS
- RUNWAY LIGHTS
- TAXIWAY LIGHTS
- RUNWAY MARKERS/CONES
- ☆ LIGHT POLE
- ▲ BEACON
- TIE DOWNS ---



- WETLANDS
- BUILDINGS
- POWER POLE
- SURVEY MARKER
- CULVERTS
- STORM SEWER MANHOLES
- DECIDUOUS TREE
- CONIFEROUS TREE
- EXISTING ASPHALT SURFACING
- EXISTING GRAVEL SURFACING



GRAPHIC SCALE



Project Narrative (Justification)

Construction of Taxiway and Access Road Improvements

The connector taxiway at the Miller Municipal Airport (MKA) has reached the end of its useful life and is in need of reconstruction. The connector taxiway was originally constructed in 1995 and consists of 2 inches of asphalt and 10 inches of base course. The taxiway received pavement maintenance in the form of crack repair and a coal tar rejuvenator in 2001. In recent years the condition of the taxiway has rapidly declined. The latest results from the 2024 Pavement Condition Index (PCI) surveys indicated a PCI value of 4 for the connector taxiway. According to FAA AC 150/5320-6G, pavement sections with PCI values less than 55 are candidates for reconstruction. As can be seen in the table below, the PCI values of the taxiway have been decreasing since 2015 to a point where the pavement section has been classified as “failed”. This taxiway is the only way for aircraft to access and exit the runway, making it some of the most heavily traffic pavement on the airport. Reconstructing the taxiway will help increase

Miller Municipal Airport (MKA)										
Branch ID	Pavement		2015		2018		2021		2024	
	Age	Material	PCI	Condition	PCI	Condition	PCI	Condition	PCI	Condition
Connector Taxiway	1995	Asphalt	52	Poor	22	Failed	24	Failed	4	Failed

The existing connector taxiway pavement section is approximately 12 inches deep, making the pavement highly susceptible to the effects of frost in the severe SD winters. It is proposed that the taxiway will be reconstructed to a depth of 39” (65% of frost depth) and include underdrain to reduce the susceptibility to frost heaves and extend the life of the pavement. The existing asphalt and base course will be recycled and reused as subbase material for the new concrete pavement section. The connector taxiway will also be realigned slightly to help meet the FAA’s direct access design standards.

The project also includes the paving of the airport’s access road. The access road’s existing asphalt surfacing has failed and begun to break apart. Traffic accessing the airport from the access road can drag pieces of the broken asphalt onto the apron and taxilanes which creates a Foreign Object Debris (FOD) problem. FOD can damage aircraft creating a safety hazard for users of the airport. The project proposes milling and reshaping of the access road, before paving 3” of new asphalt surfacing.

Project Narrative (Justification)

BIL – Design of Automated Weather Observing System (AWOS III-P)

The City of Miller would like to complete the construction of an Automated Weather Reporting System (AWOS III-P) at the Miller Municipal Airport. Installation of an AWOS III-P will provide pilots with detailed weather information needed to more effectively and more safely operate in and out of the airport. An AWOS III-P will provide pilots with the visibility, cloud ceiling, wind velocity and direction, as well as the type of precipitation if it is raining or snowing. The airport sees an average of 140 operations/week at the airport according to AIRNAV's August 2023 numbers. The airport is one of the busiest Ag spray bases in the state, with multiple spray planes operating from the airport at any given time. By constructing an onsite weather station, these ag spray pilots will have a better idea of the real time weather conditions at the airport, helping to increase the safety of their spraying operations.

This project proposes to design an AWOS III-P system to fulfill the need at this facility. The design will consist of grading and clearing, installing electrical equipment, fencing, localized drainage improvements, acquiring AWOS III-P equipment, installing a tower and foundations, computer equipment, software, and other appurtenances to complete the AWOS III-P system. An internet connection would also to be established in order for the National Weather Service (NWS) to connect with the National Airspace Data Interchange Network (NADIN) in order to relay weather information to pilots.



PROJECT WORK DESCRIPTION

- 1 RECONSTRUCT RUNWAY 14 - 32
 - SOUTH 3,400 FT X 60 FT - FULL RECONSTRUCTION
 - NORTH 600 FT X 60 FT - MILL & OVERLAY
 - INSTALL NEW MEDIUM INTENSITY RUNWAY LIGHTING SYSTEM (MIRL)
 - INSTALL NEW PRECISION APPROACH PATH INDICATORS (PAPI)
- 2 MILL & OVERLAY RUNWAY 14 TURNAROUND
- 3 CONSTRUCT RUNWAY 32 TURNAROUND
- 4 CONSTRUCT REALIGNED CONNECTING TAXIWAY
- 5 CRACK SEAL APRON PAVEMENTS
- 6 INSTALL PRECISION APPROACH PATH INDICATORS (PAPIS)
- 7 CONSTRUCT NEW AIRFIELD ELECTRICAL VAULT BUILDING



RUNWAY 14-32 RECONSTRUCTION
MURDO MUNICIPAL AIRPORT – CITY OF MURDO (OWNER)
MURDO, SOUTH DAKOTA

PROJECT WORK
DESCRIPTION

DRAFTED
ERF
REVIEWED
CJB
PROJECT NUMBER
2505-00235
LAST REVISED DATE
03/31/2025

SHEET

PRELIMINARY
NOT FOR
CONSTRUCTION

MURDO MUNICIPAL AIRPORT, MURDO, SOUTH DAKOTA

Project Narrative – Reconstruct Runway 14-32 (South 3,400 ft x 60 ft Full Reconstruction; North 600 ft x 60 ft Mill & Overlay; Install New MIRL System; Install New PAPIs), Mill & Overlay Runway 14 Turnaround, Construct Runway 32 Turnaround, Construct Re-Aligned Connecting Taxiway, and Crack Seal Apron Pavements – Design

IIJA 3-46-0039-017-2025

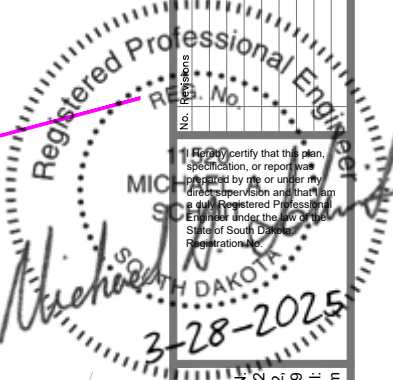
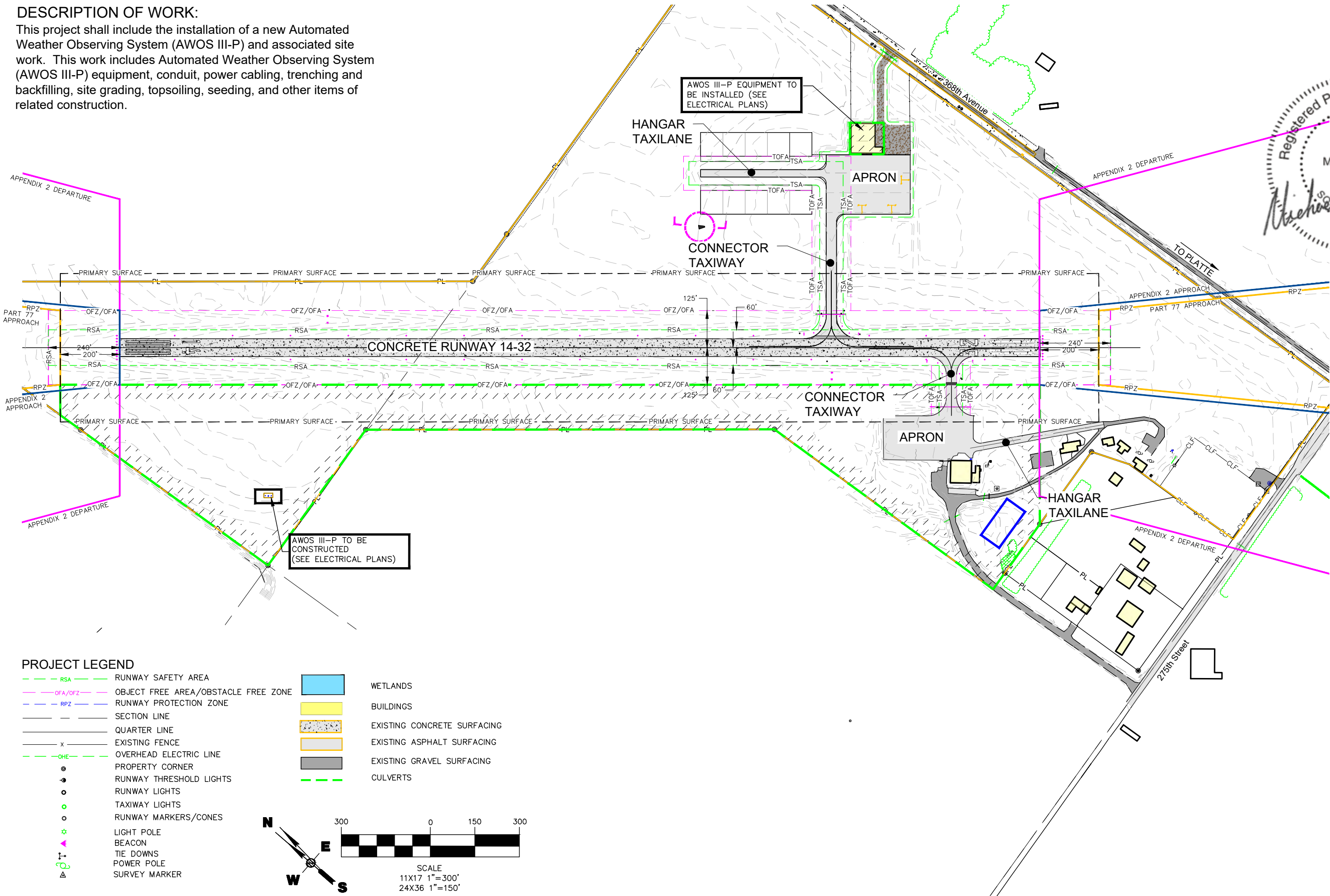
Pavement records indicate that Runway 14-32 was originally constructed in 1974. The runway was had some pavement rehabilitation in 1980, an asphalt overlay in 1992, and another asphalt overlay in 2008.

The airport pavements were inspected in 2021 and the Pavement Condition Index (PCI) rated the south portion of the runway as 69 (fair) and the north 600 feet as 76 (satisfactory). The PCI was updated in 2024 with the south portion of the runway at 63 (fair) and the north 600 feet remaining at 76 (satisfactory).

That pavement report forecast that the overall runway would be at a rating of 54 (poor) by 2027, the year that construction is anticipate taking place.

DESCRIPTION OF WORK:

This project shall include the installation of a new Automated Weather Observing System (AWOS III-P) and associated site work. This work includes Automated Weather Observing System (AWOS III-P) equipment, conduit, power cabling, trenching and backfilling, site grading, topsoiling, seeding, and other items of related construction.



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Email: bob@helmsengineering.com

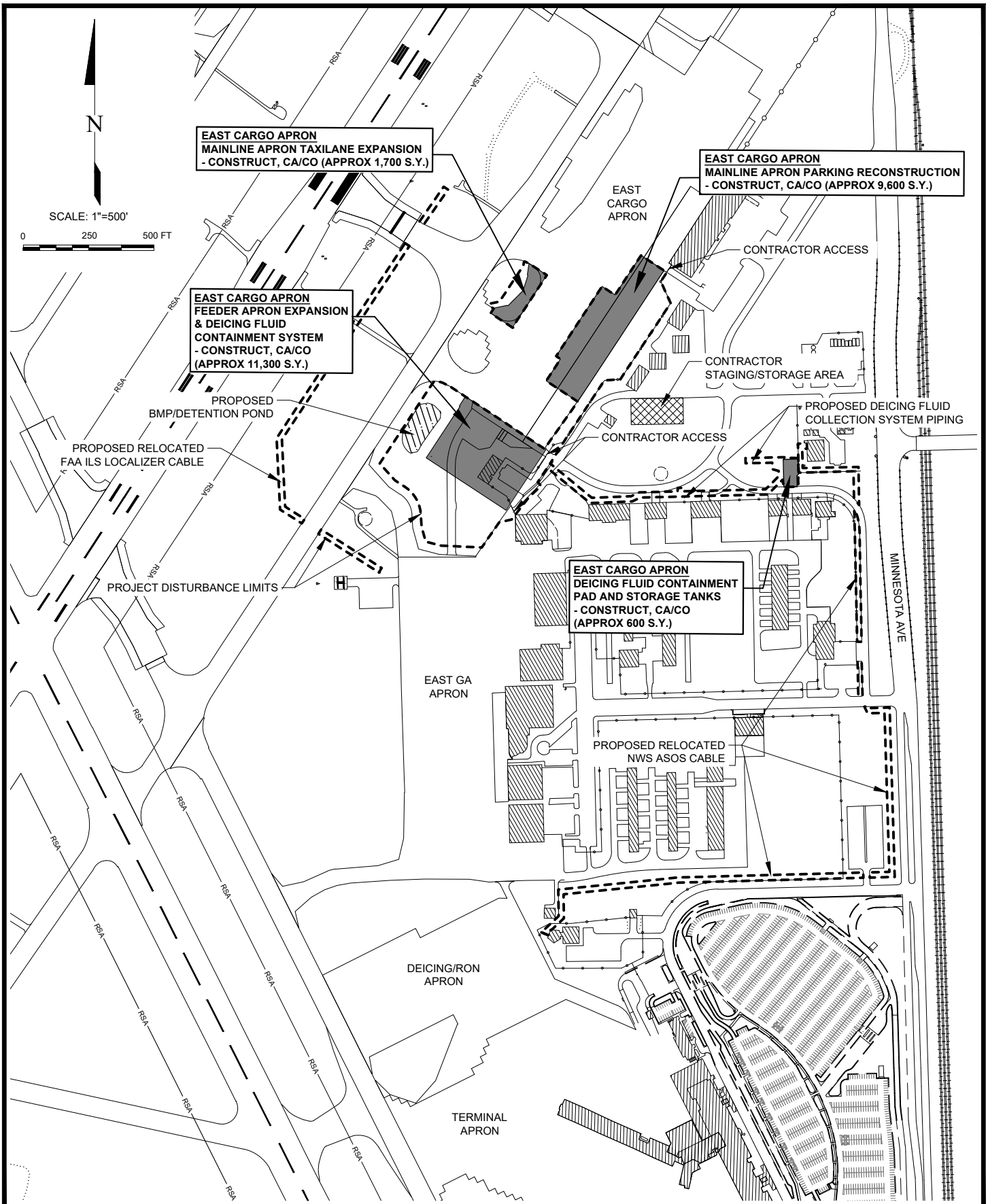


PROJECT LAYOUT
AUTOMATED WEATHER OBSERVING SYSTEM
PLATTE MUNICIPAL AIRPORT
PLATTE, SOUTH DAKOTA

Drawn By: NGP
Chk' By: MAS
Proj. No: A-8717
Dwg. No: 8717-PNT
VP. No: LAY
Date: 4/9/25

PART IV – PROGRAM NARRATIVE
(Suggested Format)

PROJECT:
AIRPORT:
1. Objective:
2. Benefits Anticipated:
3. Approach: (See approved Scope of Work in Final Application)
4. Geographic Location:
5. If Applicable, Provide Additional Information:
6. Sponsor's Representative: (include address & telephone number)



2025 GRANT APPLICATION EXHIBIT

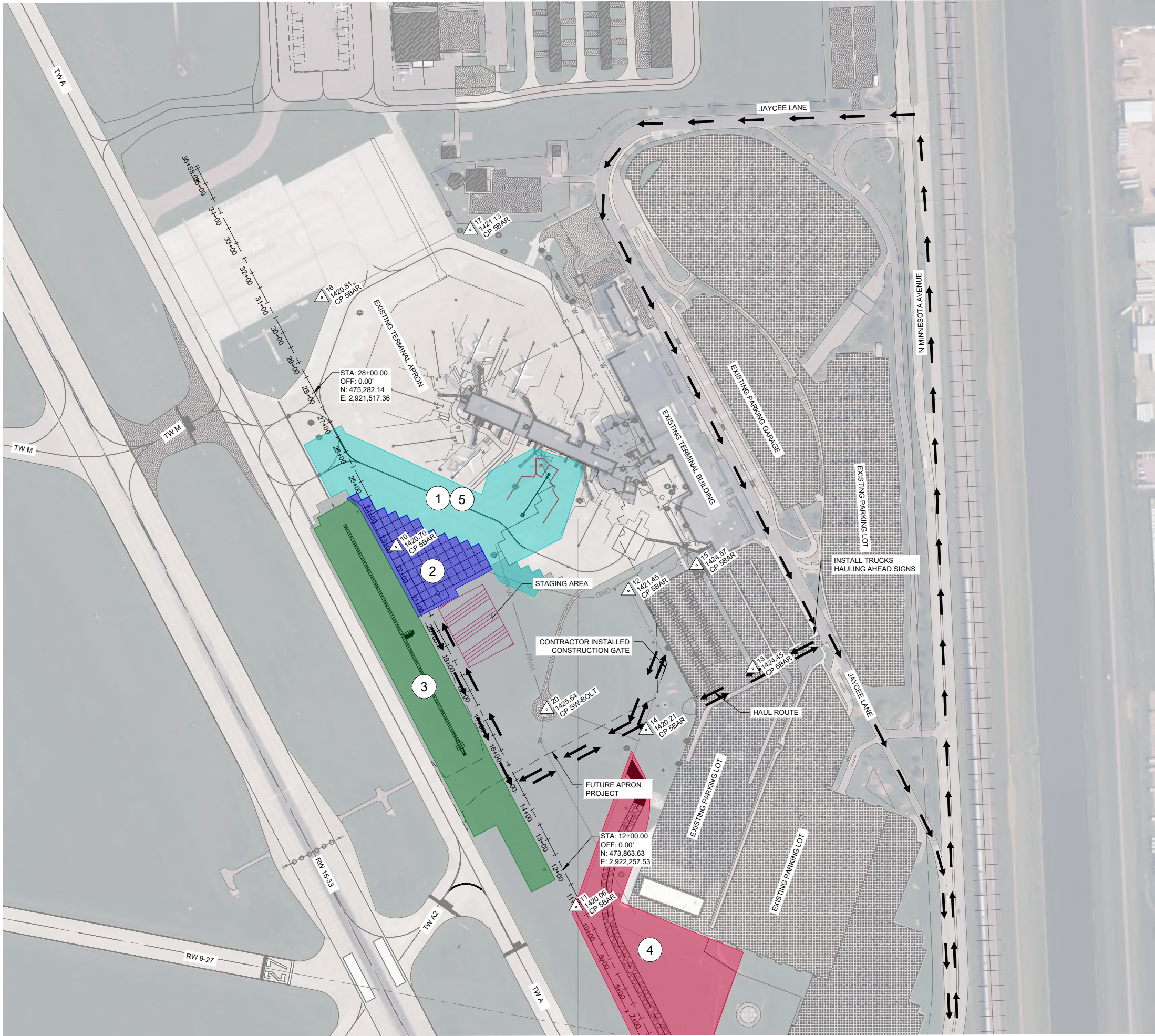
SIoux FALLS REGIONAL AIRPORT AUTHORITY
SIoux FALLS, SOUTH DAKOTA

CONSTRUCT EAST CARGO APRON EXPANSION

DRAFTED	BCB
REVIEWED	JJB
PROJECT NUMBER	SKETCH
ISSUE DATE	09/20/2024



X:\2890700\210946.04\TECH\CIVIL\INITIATING APRON\DRAWINGS\G-021 PROJECT LAYOUT PLAN.DWG
4/1/2025 12:12:22 PM



LEGEND:

- HAUL ROUTE
- FUTURE APRON PAVEMENT LIMITS (BY OTHERS)
- CONTRACTOR STAGING AREA
- APRON MARKINGS WORK AREA
- APRON EXPANSION (6,050 S.Y.)
- DETENTION POND CONSTRUCTION
- CONSTRUCT GRAVEL ROAD (32' BY 1331')

PROJECT WORK DESCRIPTION

- 1 REMOVE EXISTING APRON MARKINGS AND INSTALL TEMPORARY APRON MARKINGS
- 2 EARTHWORK, DRAINAGE IMPROVEMENTS, CONSTRUCT CONCRETE APRON (6,050 S.Y.), EDGE LIGHTING SYSTEM, AND OTHER MISCELLANEOUS WORK.
- 3 DETENTION POND CONSTRUCTION: EARTHWORK, DETENTION STRUCTURE, STORM DRAIN, MICRO POOL, AND OTHER MISCELLANEOUS WORK
- 4 CONSTRUCT GRAVEL ROAD (32' BY 1331')
- 5 REMOVE TEMPORARY APRON MARKINGS, INSTALL PERMANENT APRON MARKINGS, AND OTHER MISCELLANEOUS WORK. (NIGHT WORK)

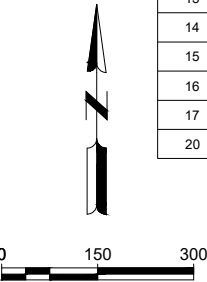
BASIS OF ESTIMATE

1. TOPSOIL REMOVAL (P-152) - STRIP 4" OVERALL EXCAVATION OR EMBANKMENT AREAS (INCLUDED IN UNCLASSIFIED EXCAVATION)
2. UNCLASSIFIED EXCAVATION - SUBCUT (P-152) - ACTUAL C.Y. MEASURED IN PLACE EXCAVATION BY DTM SURFACE COMPARISON
3. EMBANKMENT (P-152) - 10% ADDITIONAL VOLUME HAS BEEN ADDED FOR SHRINKAGE - NO DIRECT PAYMENT/MEASUREMENT
4. SUBBASE COURSE (P-154) - COMPACTED VOLUME IN PLACE
5. SEPARATION GEOTEXTILE (P-154) - ACTUAL S.Y., NO OVERLAP INCLUDED
6. CRUSHED AGGREGATE BASE COURSE (P-209) - COMPACTED VOLUME IN PLACE
7. SUBGRADE REPAIR AGGREGATE (PLAN NOTES) - COMPACTED VOLUME IN PLACE
8. CONCRETE PAVEMENT (P-501) - ACTUAL S.Y.
9. TOPSOIL REPLACEMENT (T-905) - MEASURED IN STOCKPILES BY DTM SURFACE

SURVEY NOTES

1. GROUND & CONTROL POINTS PROVIDED BY IDG, 2023.
2. THE CONTRACTOR SHALL VERIFY ALL CONTROL POINTS USED FOR CONSTRUCTION PRIOR TO STARTING WORK. ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.
3. COORDINATES SHOWN ARE BASED ON SOUTH DAKOTA STATE PLANE - SOUTH ZONE COORDINATE SYSTEM. THE PROJECT CONTROL POINTS AND BENCHMARKS AREA SHOWN HEREIN. ALL UNITS ARE IN U.S. SURVEY FEET.

CONTROL POINTS				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	474507.900	2920026.020	1426.28	CP ARP
2	479785.470	2921526.840	1428.21	CP AP STA
3	473022.110	2916673.950	1418.30	CP FSD E
10	474822.903	2921760.514	1420.70	CP 5BAR
11	473752.552	2922295.406	1420.06	CP 5BAR
12	474691.783	2922451.418	1421.45	CP 5BAR
13	474460.542	2922821.092	1424.45	CP 5BAR
14	474277.657	2922503.740	1420.21	CP 5BAR
15	474767.737	2922654.029	1424.57	CP 5BAR
16	475563.561	2921539.490	1420.81	CP 5BAR
17	475764.265	2921981.573	1421.13	CP 5BAR
20	474339.316	2922208.659	1425.64	CP SW-BOLT



Project Narrative (Justification)
2025 FAA Grant Application
AIP #3-46-0050-065-2025
Sioux Falls Regional Airport

Objective:

East Cargo Apron Expansion – Construct

Construct feeder apron expansion (approx. 11,300 S.Y.) on the south end of the existing East Cargo Apron, reconstruct mainline apron parking area (approx. 9,600 S.Y.) on the east side of the existing East Cargo Apron, and construct mainline apron taxilane expansion (approx. 1,700 S.Y.) on the west side of the existing East Cargo Apron.

Benefits Anticipated:

East Cargo Apron Expansion

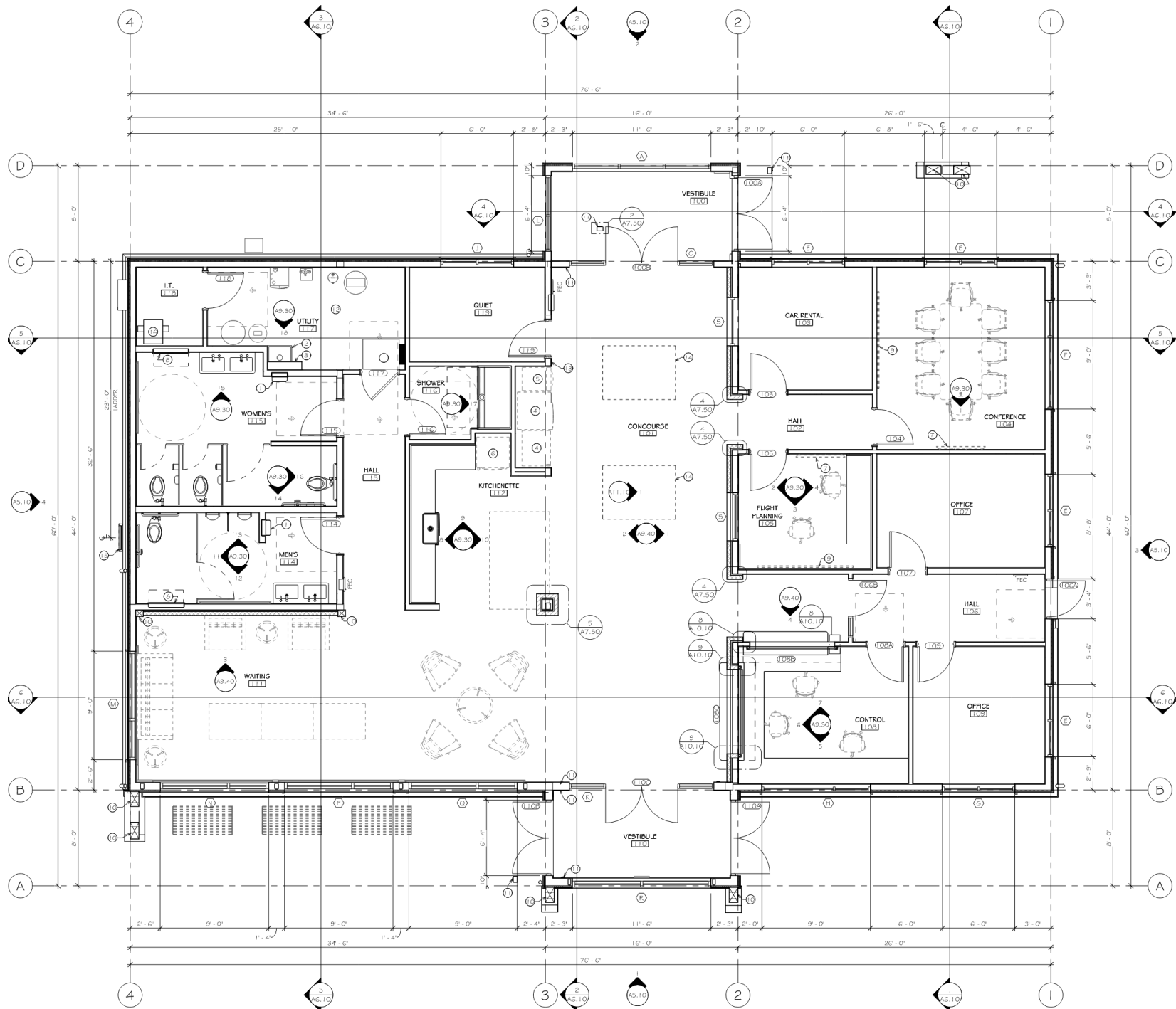
FSD is continuing to see cargo operations grow over time and has had space constraint issues on the East Cargo Apron for several years. Currently, UPS mainline aircraft park parallel to the taxilane centerline apron on the south side of the East Cargo Apron. When parked in this position, there is not proper Taxilane Object Free Area (TLOFA) clearances to allow for other aircraft to utilize the connector taxiways to access Taxiway B in this area. The area south of the existing East Cargo Apron is shown on the ALP as an expansion area. Expansion to the south is needed at this time to shift the feeder cargo operations to accommodate mainline parking that does not impede the flow of traffic on the East Cargo Apron as well as accommodate increased feeder parking. In conjunction with the expansion to the south, the project will also expand the apron to the west to allow for a taxilane shift and reconstruction/strengthening of pavements to the east to allow for mainline aircraft parking that doesn't impede the TLOFA of the East Cargo Apron taxilane. In addition to clearing TLOFAs on the apron, feeder aircraft parking capacity is a concern. Currently many feeder aircraft must park on the north side of the East General Aviation (GA) Apron due to limited capacity on the East Cargo Apron where they should be parking. This means ground vehicle operations must travel between the general aviation and East Cargo Apron, which leads to lost time and safety concerns within the air operations area. The East Cargo Apron expansion/reconfiguration is shown in the current 2024 Airport Layout Plan (ALP)/Master Plan (MP).

Various additional project items include a City of Sioux Falls required BMP/detention pond due to the increase in impervious area, realignment of cargo access road to accommodate apron expansion, removal of an existing building in the footprint of the apron expansion, a deicing fluid collection system, and the relocation of the Runway 3 Localizer & National Weather Service (NWS) ASOS cables.

Approach:

East Cargo Apron Expansion

The project was designed and advertised as a single bid package in summer 2024. Construction began in the fall of 2024 primarily with utility related work items. The bulk of construction will be completed in the spring, summer, and fall of 2025, with project completion at the end of October 2025. KLJ of Sioux Falls, SD will serve as the Sponsor's consultant to lead these efforts. Design is included in a previous grant and Construction will be included in this grant.

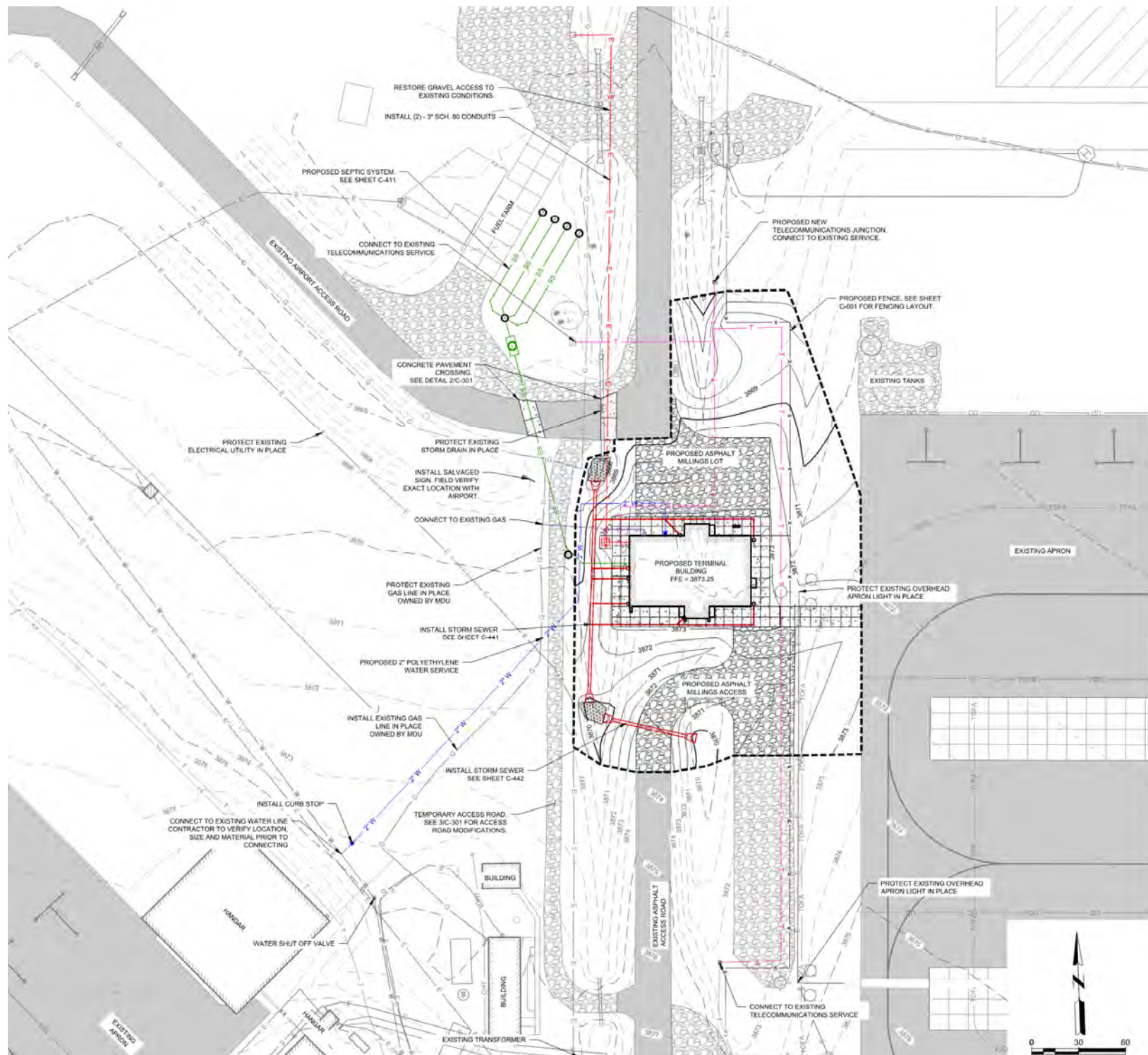


REFERENCE PLAN

1/4" = 1'-0"

GROSS SQ. FT. = 3,622 SF





PART IV – PROGRAM NARRATIVE
(Suggested Format)

PROJECT: Terminal Building Construction

AIRPORT: Black Hills Airport

1. Objective:

The existing terminal was constructed in 1970's as an administrative area connected to a hangar. The existing terminal has far exceeded its useful life with numerous ADA deficiencies, inefficient heating and cooling systems and in need of numerous repairs. The new terminal will be located closer to the airport's primary apron, meet ADA requirements, and provide energy efficient utilities.

2. Benefits Anticipated:

Replacement of aged and failed infrastructure and this project improves airfield safety in two ways. The first is by relocating the terminal further from the existing parallel taxiway allowing aircraft to effectively and efficiently park in a manner that does not encroach upon the Taxiway Object Free Area. The new terminal will allow public to access the terminal land side avoiding the current situation that requires the public to access the terminal via an active apron.

3. Approach: (See approved Scope of Work in Final Application)

The project is utilizing a standard form of project delivery to include a design - bid - build approach with a single phase of construction.

4. Geographic Location:

Black Hills Airport; City of Spearfish; County of Lawrence; and the State of South Dakota

5. If Applicable, Provide Additional Information:

This is not a Letter of Intent project.

6. Sponsor's Representative: (include address & telephone number)

Mr. Adam McMahon, PE	City of Spearfish Public Works Director
625 North 5th Street	
Spearfish, SD 57783-2311	Telephone: 605.642.1333 email: adam.mcmahon@cityofspearfish.com

Project Narrative

Reconstruct Runway 15/33, Runway 15 Turn Around, Taxiway A, and Partial Apron

Springfield Municipal Airport
Springfield, South Dakota

The condition of the existing runway, taxiways, taxilanes, and apron pavement is degrading yearly, causing constant attention, repairs, and maintenance. There are significant longitudinal and transverse cracks. The pavement is in significantly poor condition from all operational, maintenance, and safety standpoints.

The pavement will become unusable without reconstruction. The SDDOT Pavement Maintenance Report indicates the pavement has a PCI rating in the 20s, making it the worst pavement in South Dakota for many years. The pavement was originally constructed in the 1980s and it was rehabilitated in 2005. The State completed a runway crack repair project in 2019. The cracks were beyond joint sealant repair causing the contractor to run out of joint sealer material.

The repairs were expected to provide some extra life, hopefully a few years, but even that was optimistic. Some of the joints are collapsing already and the pavement is generally beyond additional crack repairs.

The proposed project will include a base bid consisting of reconstructing the existing runway, taxiways, taxilanes, and apron pavement. The project would meet the needs of the airport users and would bring the airport operations into alignment with current safety and compliance standards. Refer to the attached sketches.



0 50 100

BID SCHEDULE A
RECONSTRUCT RWY 15/33 (60'x3,500')
FAA AIP 013 (PREVIOUSLY EXECUTED)

BID SCHEDULE B1
REHAB PARTIAL APRON (726 SY)
FAA AIP 016-2025
(2026 APPLICATION REQUEST)

BID SCHEDULE B1
RECONSTRUCT PARTIAL APRON (840 SY)
FAA AIP 016-2025
(2025 APPLICATION REQUEST)

BID SCHEDULE B1
RECONSTRUCT PARTIAL APRON (840 SY)
FAA IJA 015-2025
(2025 APPLICATION REQUEST)

BID SCHEDULE B1
REHAB PARTIAL APRON (358 SY)
2025 HANGAR LEASEE
(FAA INELIGIBLE)

EXISTING
TERMINAL

EXISTING SRE
BUILDING

BID SCHEDULE B1
RECONSTRUCT PARTIAL APRON (2,930 SY)
FAA IJA 014 (PREVIOUSLY EXECUTED)

EXISTING
HANGAR

EXISTING
HANGAR

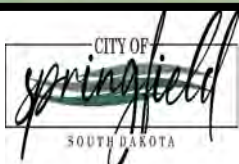
BID SCHEDULE B2
RECONSTRUCT TAXILANE
(NOT AWARDED)

EXISTING
HANGAR

BID SCHEDULE B1
RECONSTRUCT PARTIAL TXY A (35'x190')
FAA IJA 014 (PREVIOUSLY EXECUTED)

BID SCHEDULE A
RECONSTRUCT PARTIAL TXY A (35'x95')
FAA AIP 013 (PREVIOUSLY EXECUTED)

RWY 15/33 (3,500'x60')



SPRINGFIELD MUNICIPAL AIRPORT
REHABILITATE APRON - PROJECT SKETCH
FAA IJA 015 & AIP 016
GRANT APPLICATION REQUEST



DGR ENGINEERING
1300 S. HIGHLINE AVENUE
SIOUX FALLS, SD 57110
(605) 339-4157 office
(605) 339-4175 fax
dgr.com