



Division of Finance & Management  
Office of Air, Rail & Transit  
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Pierre, SD 57501  
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dot.sd.gov

**TO:** South Dakota Aeronautics Commission  
**FROM:** Jack Dokken, Office of Aeronautics  
**DATE:** June 17, 2021  
**SUBJECT:** Financial Assistance Agreements

**Bison 3-46-0003-012-2021**

Replace beacon and windcone.

Federal Share	\$60,000.00
State Share	\$
Local Share	\$
Total	\$60,000.00

**Canton 3-46-0007-011-2021**

Design snow removal equipment storage/general aviation terminal building.

Federal Share	\$ 86,000.00
State Share	\$ 0
Local Share	\$ 0
Total	\$ 86,000.00

**Hot Springs 3-46-0022-015-2021**

Construct multi-aircraft hangar & site grading.

Federal Share	\$ 783,000.00
State Share	\$ 0
Local Share	\$ 0
Total	\$ 783,000.00

**Hoven 3-46-0021-012-2021**

Construct runway 13/31; connector taxiway to runway OFA, partial parallel taxiway to ROFA of 13.

Federal Share	\$ 2,685,000.00
State Share	\$ 0
Local Share	\$ 0
Total	\$ 2,685,000.00

**Huron 3-46-0022-040-2021**

Design and construct lighting improvements including replacement of existing lighting fixtures on 12/30 and replacing PAPI units for both runways with LEDs.

Federal Share	\$ 345,000.00
State Share	\$
Local Share	\$
Total	\$ 345,000.00

**Lemmon 3-46-0027-016-2021**

Upgrade existing fuel system with additional tanks, new equipment and 24-hour card reader.

Federal Share	\$ 70,000.00
State Share	\$ 0
Local Share	\$ 0
Total	\$ 70,000.00

**Madison 3-46-0029-020-2021**

Construct south general aviation apron expansion.

Federal Share	\$ 1,121,000.00
State Share	\$
Local Share	\$
Total	\$ 1,121,000.00

**Martin 3-46-0030-016-2021**

Design and construct wildlife fence including cultural review.

Federal Share	\$ 60,000.00
State Share	\$ 0
Local Share	\$ 0
Total	\$ 60,000.00

**Milbank 3-46-0034-018-2021**

Design and construct AWOS-IIIP and acquire RPZ easement.

Federal Share	\$ 370,000.00
State Share	\$ 0
Local Share	\$ 0
Total	\$ 370,000.00

**Mobridge 3-46-0038-017-2021**

Construct apron rehab and hangar taxilane reconstruction.

Federal Share	\$ 858,368.00
State Share	\$
Local Share	\$
Total	\$ 858,368.00

**Murdo 3-46-0039-012-2021** Should be 14-2021

Construct multi-aircraft hangar.

Federal Share	\$ 868,000.00
State Share	\$
Local Share	\$
Total	\$ 868,000.00

**Wagner 3-46-0057-016-2021**

Design hangar taxilane expansion with geotechnical exploration and site surveys.

Federal Share	\$ 65,000.00
State Share	\$
Local Share	\$
Total	\$ 65,000.00

**Wall 3-46-0069-010-2021**

Design reconstruction and lengthening of runway 12-30, including connector taxiway and MIRL system.

Federal Share	\$ 243,000.00
State Share	\$
Local Share	\$27,000.00
Total	\$270,000.00

**Webster 3-46-0059-013-2021**

Construct revenue producing 4 unit T-hangar; easement acquisition.

Federal Share	\$ 955,000.00
State Share	\$
Local Share	\$
Total	\$ \$955,000.00

**Winner 3-46-0061-018-2021**

Design and construct runway 13/31 rehab and pavement maintenance.

Federal Share	\$ 320,000.00
State Share	\$
Local Share	\$
Total	\$ 320,000.00

**Yankton 3-46-0062-033-2021**

Environmental, design and bidding services for new hangar taxilanes and access road.

Federal Share	\$ 123,000.00
State Share	\$ 0
Local Share	\$ 0
Total	\$ 123,000.00



**BISON MUNICIPAL AIRPORT**  
TOWN OF BISON  
BISON, SOUTH DAKOTA

**PROJECT WORK DESCRIPTION**

DRAFTED  
KNV  
REVIEWED  
SLS  
PROJECT NUMBER  
2005-01596  
LAST REVISED DATE  
02/08/2021

SHEET  
1

**PROJECT WORK DESCRIPTION**

- 1 REPLACE BEACON
- 2 REPLACE WINDCONE AND SEGMENTED CIRCLE
- 3 INSTALL NEW WIRING AND CONDUIT

**CSP LEGEND**

- STORAGE/STAGING AREA
- LIMITS OF CONSTRUCTION AREA
- CONSTRUCTION EQUIPMENT TRAFFIC FLOW PATTERN

TOWN OF BISON

CONSTRUCTION ACCESS

STAGING/STORAGE AREA

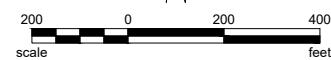
RUNWAY 11-29

CONSTRUCTION LIMITS

3 2

1

3



**PRELIMINARY**  
**NOT FOR**  
**CONSTRUCTION**





**CANTON MUNICIPAL AIRPORT**  
 CITY OF CANTON  
 CANTON, SOUTH DAKOTA

**APPLICATION SKETCH SNOW  
 REMOVAL EQUIPMENT AND GA  
 TERMINAL BUILDING**

DRAFTED	BCB
REVIEWED	JJB
PROJECT NUMBER	N/A
LAST REVISED DATE	04/29/2021

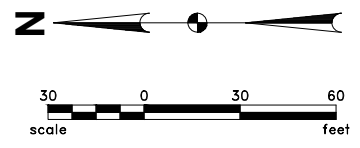
SHEET  
**1**



**PRELIMINARY**

**LEGEND**

AREA OF POTENTIAL DISTURBANCE



## **Project Narrative (Justification)**

### **2021 FAA Grant Application**

#### **Canton Municipal Airport**

##### **Project Item**

Snow Removal Equipment (SRE) Storage/General Aviation (GA) Terminal Building (Approximately 2,500 SF - final size to be determined during design).

##### **What is the Project?**

The project includes environmental, design and bidding services for a new SRE/GA Terminal Building. Also included is preliminary soils testing and FAA project closeout report services.

##### **Why is the Project Needed Now?**

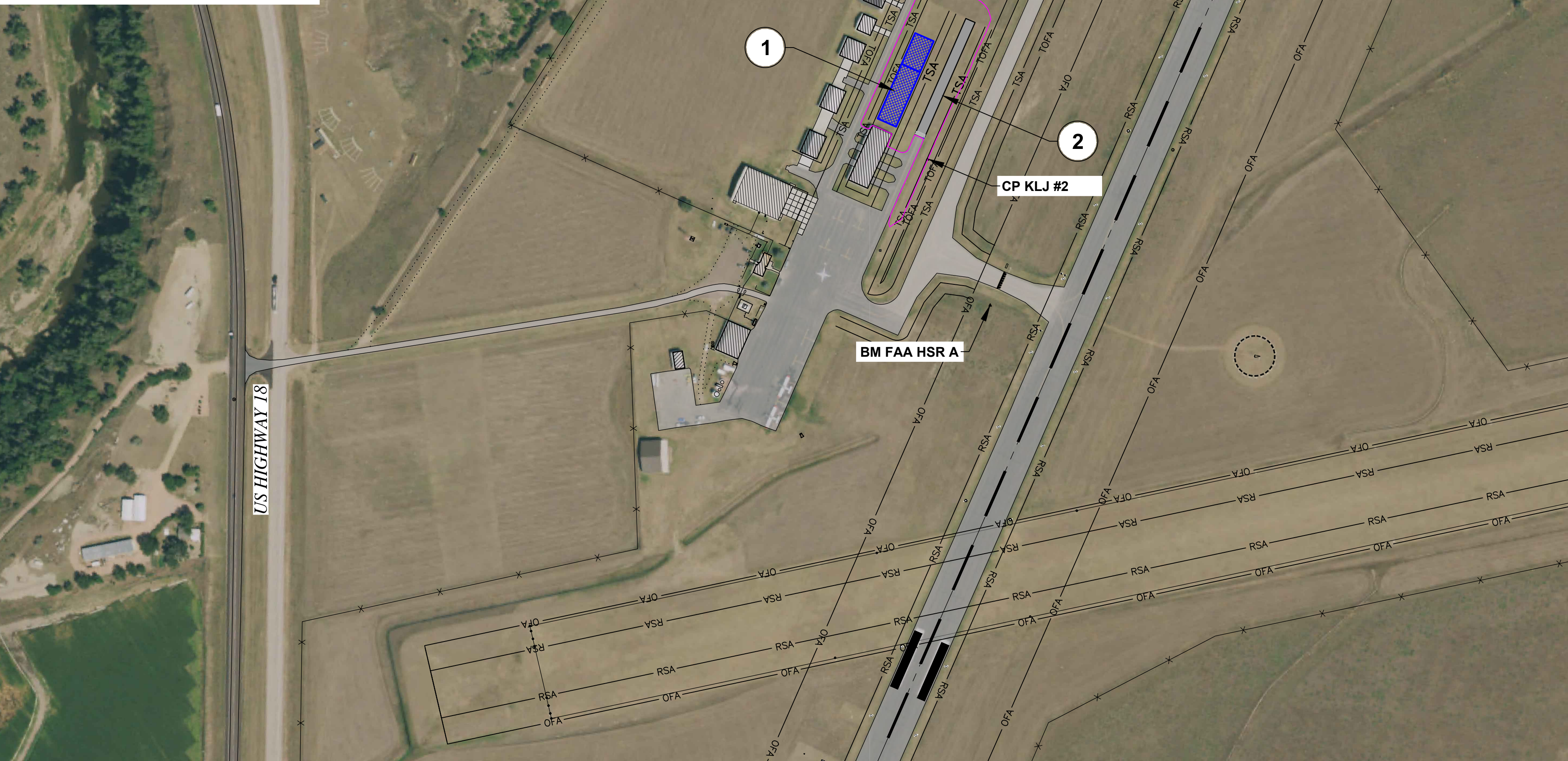
In the past, the City of Canton paid the Fixed Base Operator (FBO) to store their SRE and provide a GA Terminal on the airfield in addition to serving as the airport manager. The FBO has recently retired and intends to sell the hangar to a new Owner who is not interested in providing these FBO and airport management services. Therefore, the City of Canton will need to relocate their SRE and GA Terminal to a new location. The airport currently owns a loader, tractor, and various attachments that will be stored inside the new building. At this time, it is assumed the building will be approximately 2,500' SF, but the final size and location will be determined during the design phase according to FAA standards. This will be the sponsor's first SRE building constructed using federal funding.

##### **Is the Project Phased?**

Yes. This first phase of the project is to design and bid the SRE/GA Terminal Building. The second phase will be to complete the construction of the building.



AIRPORT LEGEND	
	SECTION LINE WITH RIGHT-OF-WAY
	AIRPORT PROPERTY LINE
	AIRPORT EASEMENT
	R.P.Z. EASEMENT
	RUNWAY PROTECTION ZONE (RPZ)
	BUILDING RESTRICTION LINE (BRL)
	RUNWAY OBJECT FREE AREA (OFA)
	RUNWAY SAFETY AREA (RSA)
	TAXIWAY OBJECT FREE AREA (TOFA)
	CLEAR ZONE
	BUILDING
	BITUMINOUS/CONCRETE SURFACE
	UNPAVED SURFACE (GRAVEL)
	AIRPORT REFERENCE POINT (ARP)
	AIRPORT BEACON
	WIND CONE & SEGMENTED CIRCLE
	INTERMEDIATE/INDEX CONTOUR LINE
	DECIDUOUS/EVERGREEN TREE
	TREE ROWS, BUSHES
	BARBED WIRE FENCE
	CHAIN-LINK FENCE
	WILDLIFE FENCE
	PRIVATE/HIGHWAY SIGN
	PRIVATE/FEDERAL MAILBOX
	POWER POLE/STREET LIGHT
	AIRPLANE TIEDOWN
	RUNWAY/THRESHOLD LIGHT
	TAXIWAY LIGHT/TAXIWAY REFLECTOR
	PAPI/VASI
	REIL/MALS
	TURF RUNWAY MARKER (CONE/PRISM)
	AIRPORT/DISTANCE TO GO SIGN
	CULVERT WITH END SECTION



**BASIS OF SURVEY**

ALL COURSES, ELEVATIONS AND COORDINATES FOR THIS PROJECT ARE BASED ON NAD 83 / 2011 (EPOCH 2010.00) SOUTH DAKOTA STATE PLANE COORDINATES, SOUTH ZONE, US SURVEY FEET. THE VERTICAL DATUM FOR THIS PROJECT IS NAVD 88. GEOID 18 WAS USED TO COMPUTE THE ORTHOMETRIC HEIGHT (ELEVATION) AS NEEDED. THE COMBINED SCALE FACTOR IS 1.000231473 (GRID TO GROUND)

**BENCH MARK LIST**

NO.	DESCRIPTION	LOCATION	ELEVATION
FAA HSR A	NGS SURVEY MONUMENT	N: 392,297.06 E: 1,155,842.79	3142.04'
KLJ CP #2	5/8 REBAR AND CAP	N: 392,658.41 E: 1,155,687.53	3142.96'

PROJECT CONTROL POINT DATA TO BE PROVIDED TO THE CONTRACTOR ONCE ESTABLISHED

**PROJECT WORK DESCRIPTION**

- 1 CONSTRUCT THE HANGAR BUILDING (BASE BID- 6 UNITS WITH ADD ALTERNATE 1- 4 ADDITIONAL UNITS)
  - EXCAVATION AND GRADING
  - BUILDING CONSTRUCTION
  - ELECTRICAL UTILITY
- 2 SITE DEVELOPMENT AND TURF TAXILANE (312' x 25' APPROX.)
  - REMOVE AND DISPOSE OF BITUMINOUS PAVEMENT
  - EXCAVATION AND GRADING
  - TOPSOIL REPLACEMENT
  - STABILIZED TURF TAXILANE CONSTRUCTION
  - SEEDING AND MULCHING

**BASIS OF ESTIMATE**

**CIVIL ITEMS**

REMOVE & DISPOSE OF BITUMINOUS PAVEMENT - FULL DEPTH (P-101) -	AVERAGE DEPTH BITUMINOUS PAVEMENT: ± 4" TAXILANE
TOPSOIL REMOVAL (P-152) -	STRIP 4" OVER ALL EXCAVATION OR EMBANKMENT AREAS. (INCLUDED IN UNCLASSIFIED EXCAVATION QUANTITY)
EMBANKMENT (P-152) -	25 % ADDITIONAL VOLUME HAS BEEN ADDED FOR ANTICIPATED SHRINKAGE OF EMBANKMENT
STABILIZER AGGREGATE (P-217) -	MEASURED BY THE TON OF AGGREGATE IN-PLACE 0.06 TONS PER SY
CONDITIONING OPERATION (P217) -	MEASURED BY THE SQUARE YARD OF AREA THAT IS STABILIZED WITH AGGREGATE.
TOPSOIL REPLACEMENT (T-905) -	MEASURED IN STOCKPILES BY AVERAGE END AREAS OR PRISMOIDAL METHOD

**HANGAR BUILDING**

THE HANGAR BUILDING FOUNDATION, FLOOR SLAB AND BUILDING CONSTRUCTION AND ALL ASSOCIATED ITEMS NOT SPECIFIED AND PAID FOR AS A SEPARATE BID ITEM WILL BE CONSIDERED INCIDENTAL TO THE HANGAR BUILDING.

THE BASE BID SIX-UNIT HANGAR BUILDING AND THE ALTERNATE 1 BID FOUR ADDITIONAL HANGAR UNITS WILL BE MEASURED AND PAID FOR PER LUMP SUM AND SHALL INCLUDE ALL MATERIALS, LABOR, EQUIPMENT AND ANY INCIDENTALS NECESSARY TO COMPLETE THE BUILDING AS A WHOLE IN ACCORDANCE WITH THE ARCHITECTURAL, STRUCTURAL, AND ELECTRICAL SPECIFICATIONS, PLANS, PLAN NOTES AND DETAILS.





**PART IV – PROGRAM NARRATIVE**  
(Suggested Format)

**PROJECT:** Multi Aircraft Hangar Building and Site Grading Construction

**AIRPORT:** Hot Springs Municipal Airport

**1. Objective:**

Hot Springs Municipal Airport is home to several hangars and a terminal / pilot lounge building. 2 structures are Airport owned with the most recent completed in 2012 which currently houses 8 aircraft. The others can house up to three aircraft depending on type. A private tee-hangar contains 6 units was constructed 10 years ago. Remaining buildings are private hangars housing 1 to 2 aircraft with one housing the glider club. All units have been at capacity for several years. The Airport currently has a list of 11 interested parties in a unit if available therefore, the Sponsor is requesting funding to construct a new multi aircraft hangar.

**2. Benefits Anticipated:**

Increased user safety and protection for the aviation community utilizing the Airport and a source of revenue for the Airport.

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

The project will be developed in a standard design, bid and build method. Size of the facility was based on the justification documents as approved by the FAA DAK-MIN ADO.

**4. Geographic Location:**

Hot Springs Municipal Airport; City of Hot Springs; County of Fall River and State of South Dakota.

**5. If Applicable, Provide Additional Information:**

N/A.

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

Mr. John Gregory - City Administrator - City of Hot Springs  
303 North River Street  
Hot Springs, SD 57747 Ph. 605-745-3135 hscityadministrator@hs-sd.org



**PART IV – PROGRAM NARRATIVE**  
(Suggested Format)

**PROJECT:** AIP #3-46-0021-012-2021

**AIRPORT:** Hoven Municipal Airport

**1. Objective:**

Design and Construction of Fuel System Upgrades for 100LL and Card Reader System

**2. Benefits Anticipated:**

The existing system has considerable wear and it is proposed that the lines from the existing tank be replaced and the location of the pump and card reader system be in a more accessible place. By updating their fuel system, the airport would be better able to provide fuel for both based aircraft and the itinerant users. The card reader would allow pilots to refuel without the City's assistance.

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

Helms & Associates of Aberdeen, SD will serve as the airport's consultant to design the Fuel System Upgrades and Card Reader System and assist the sponsor with a traditional construction contract. The Engineer shall coordinate a design meeting, develop the CSPP, submit the Engineer's Design Report, submit modifications to standards, develop plans and specifications for FAA approval. The project will be bid through a public process in May with construction to begin in July. Project completion is anticipated in early to mid-November 2021.

**4. Geographic Location:**

Hoven Municipal Airport  
Potter County  
South Dakota

**5. If Applicable, Provide Additional Information:**

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

Norman Stethem, Mayor  
PO Box 157  
Hoven, SD 57450-0157

## Project Narrative (Justification)

### Hoven Municipal Airport Hoven, SD

#### **Design and Construction of Fuel System Upgrades for 100LL and Card Reader System**

The existing system has considerable wear and it is proposed that the lines from the existing tank be replaced and the location of the pump and card reader system be in a more accessible place. By updating their fuel system, the airport would be better able to provide fuel for both based aircraft and the itinerant users. The card reader would allow pilots to refuel without the City's assistance. The photo below shows the existing card reader system off the edge of the apron. The existing fuel system was installed with City funds.





**PART IV – PROGRAM NARRATIVE**  
(Suggested Format)

**PROJECT:** AIP #3-46-0022-038-2021

**AIRPORT:** Huron Regional Airport

**1. Objective:**

Lighting Improvements to include removal of existing light fixtures on Runway 12/30 and replacing with LED fixtures and replacing fixtures within the PAPI units on both Runway 12/30 and 17/35 with LED fixtures

**2. Benefits Anticipated:**

The airport wishes to upgrade its current High Intensity Runway Lighting to LED fixtures of Runway 12/30 and all PAPI units to reduce energy consumption and maintenance costs of the lighting system. Installing LEDs will also increase longevity of the lighting system, which in turn reduces labor and equipment cost over the years.

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

Helms & Associates of Aberdeen, SD will serve as the airport's consultant and DGR Engineering will serve as Helms sub-consultant to design the lighting improvements and assist the sponsor with a traditional construction contract. The Engineer shall coordinate a design meeting, develop the CSPP, submit the Engineer's Design Report, submit modifications to standards, develop plans and specifications for FAA approval. The project will be bid through a public process in April with construction to begin in June. Project completion is anticipated in early to mid-September 2021.

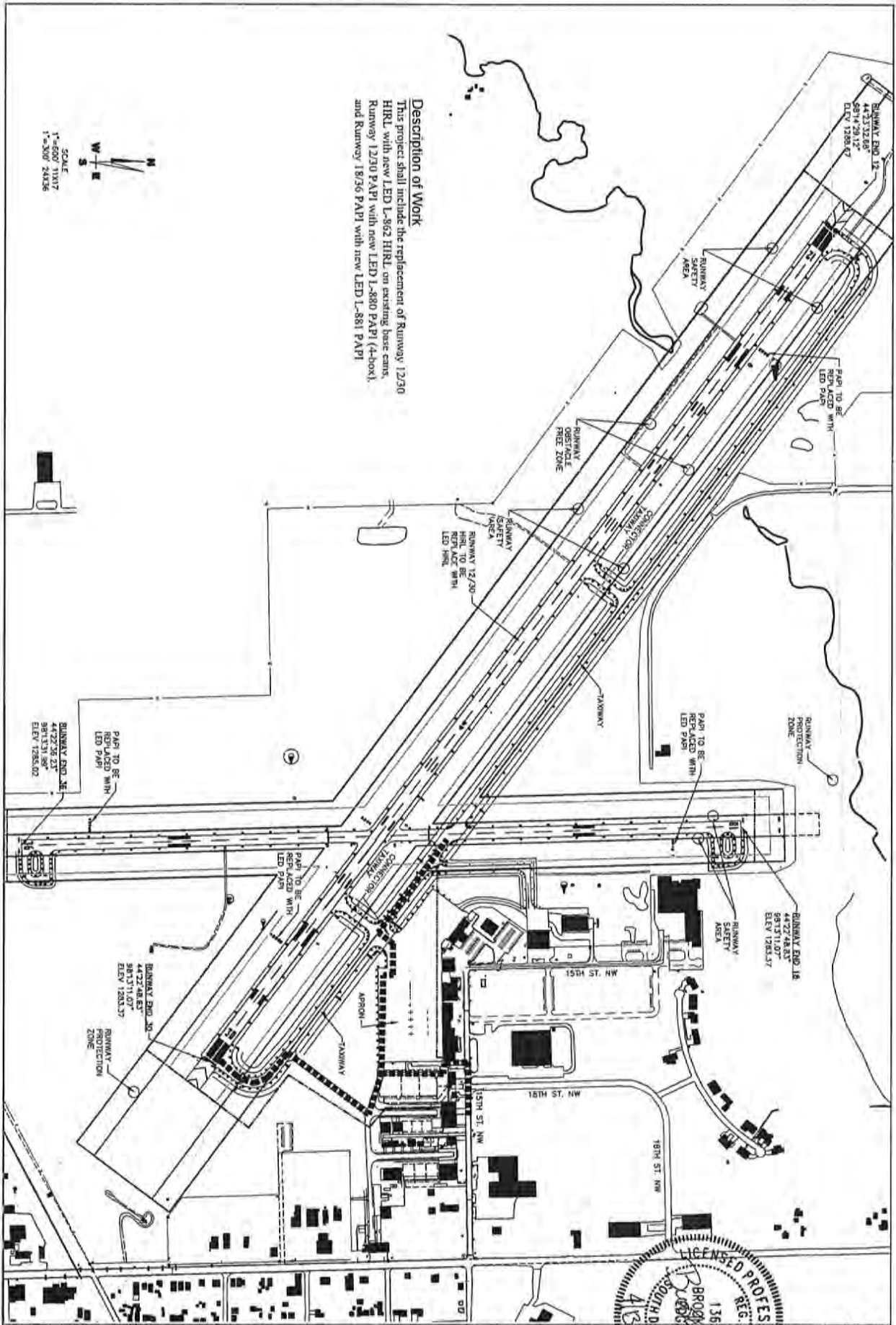
**4. Geographic Location:**

Huron Regional Airport  
Huron, Beadle County, South Dakota

**5. If Applicable, Provide Additional Information:**

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

Preston Steele, Airport Board Chairman                      605-353-8516  
426 15th St. NW  
Huron, SD 57350



**Description of Work**  
 This project shall include the replacement of Runway 12/30 HRL with new LED L-862 HRL, on existing base cans, Runway 12/30 PAPI with new LED L-880 PAPI (4-box), and Runway 18/36 PAPI with new LED L-881 PAPI



PROJECT LAYOUT	
RUNWAY LIGHTING IMPROVEMENTS HURON REGIONAL AIRPORT HURON, SOUTH DAKOTA	
DATE	2/2021
DESIGNED BY	AK/BS
CHECKED BY	AK/BS
SCALE	AS SHOWN
PROJECT NO.	20201
REV	2
9	

**Helms & Associates**  
 CIVIL ENGINEERS & LAND SURVEYORS  
 416 PROCD STREET  
 P.O. Box 517  
 Huron, S.D. 57350  
 Phone: 605.225.5174  
 Fax: 605.225.3165  
 Email: info@helmsandassociates.com

**LICENSED PROFESSIONAL ENGINEER**  
 136  
 BROOKINGS, SOUTH DAKOTA

NO.	DATE	DESCRIPTION



**PART IV – PROGRAM NARRATIVE**  
*(Suggested Format)*

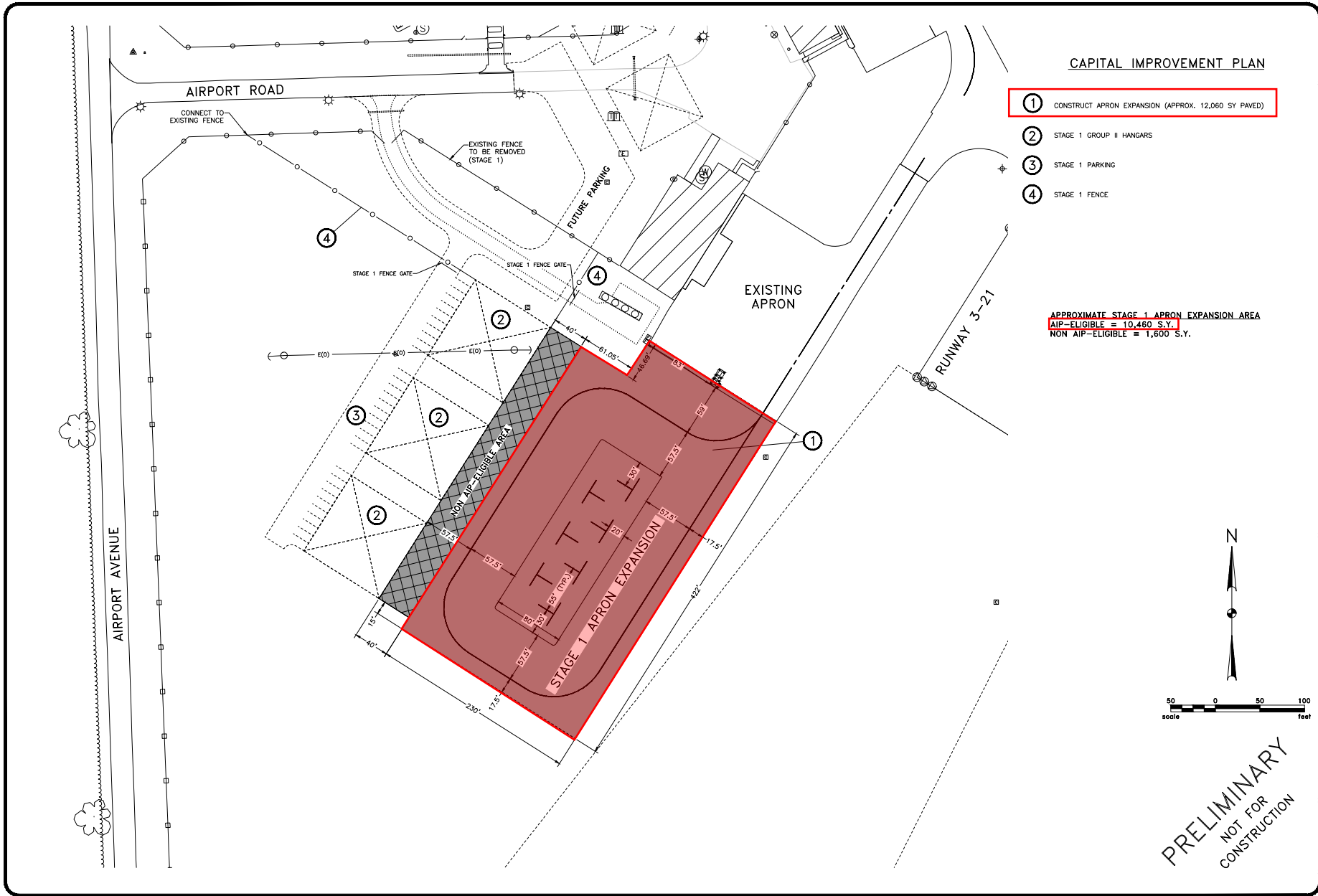
<b>PROJECT:</b>
<b>AIRPORT:</b>
<b>1. Objective:</b>
<b>2. Benefits Anticipated:</b>
<b>3. Approach:</b> (See approved Scope of Work in Final Application)
<b>4. Geographic Location:</b>
<b>5. If Applicable, Provide Additional Information:</b>
<b>6. Sponsor's Representative:</b> (include address & telephone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



CAPITAL IMPROVEMENT PLAN

- ① CONSTRUCT APRON EXPANSION (APPROX. 12,060 SY PAVED)
- ② STAGE 1 GROUP II HANGARS
- ③ STAGE 1 PARKING
- ④ STAGE 1 FENCE

APPROXIMATE STAGE 1 APRON EXPANSION AREA  
 AIP-ELIGIBLE = 10,450 S.Y.  
 NON AIP-ELIGIBLE = 1,600 S.Y.



MADISON MUNICIPAL AIRPORT  
 MADISON MUNICIPAL AIRPORT  
 MADISON, SD

APRON EXPANSION  
 EXHIBIT

PRELIMINARY  
 NOT FOR  
 CONSTRUCTION

DRAFTED  
 BJJ  
 REVIEWED

PROJECT NUMBER

LAST REVISED DATE  
 01/16/2019

SHEET

1








Madison Municipal Airport  
Construct South GA Apron Expansion  
AIP #3-46-0029-020-2021  
Apron Use Plan Narrative

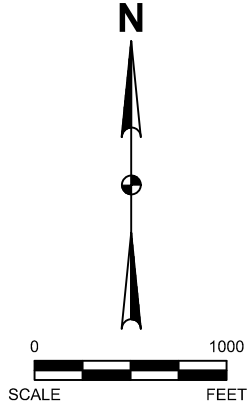
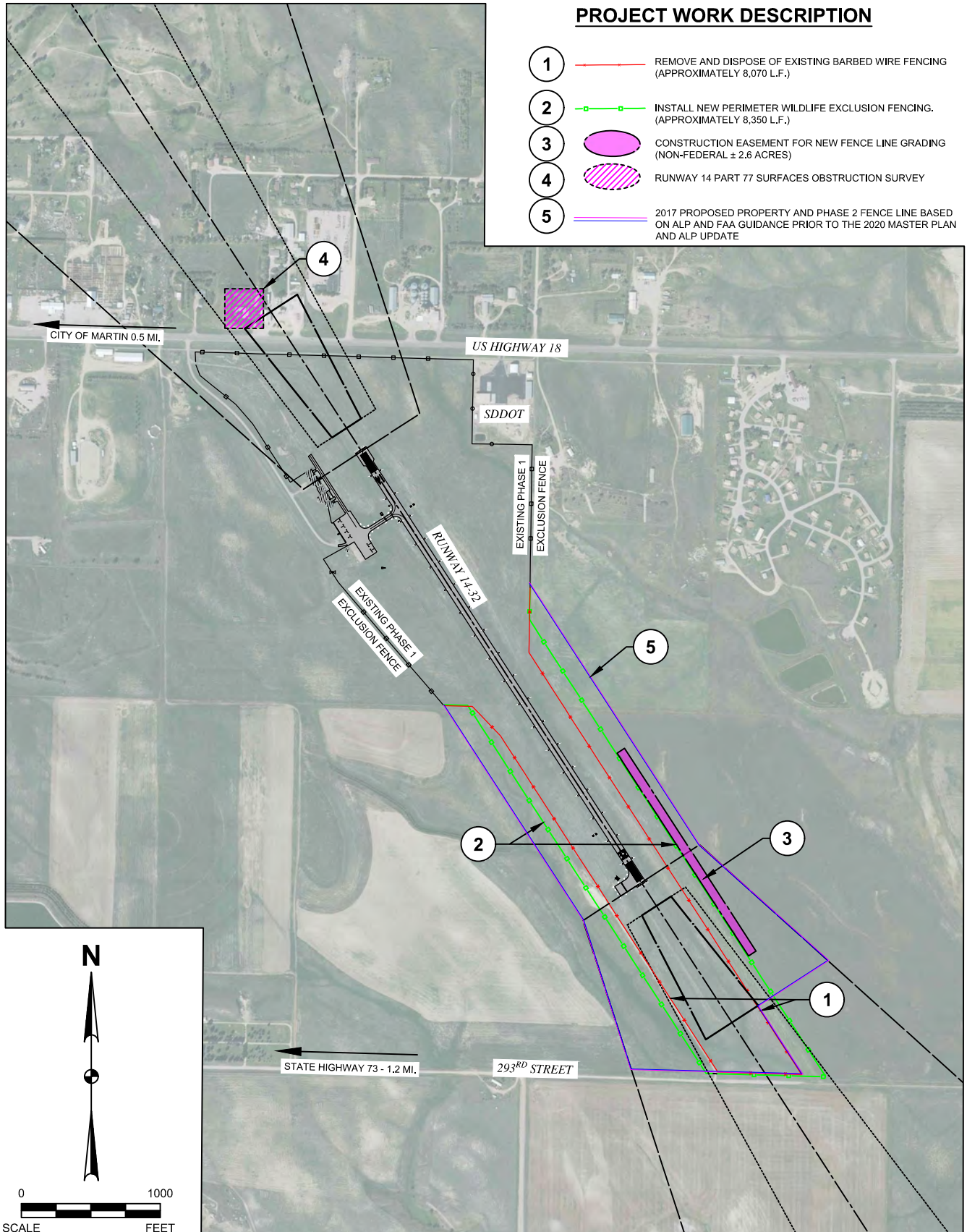
In the approved April 2008 Airport Layout Plan (ALP) the stage 1 apron expansion included six (6) tiedown locations with the ultimate apron expansion adding an additional ten (10) tiedown locations. Also, since the 2008 ALP was approved demand for aircraft tiedown locations has increased significantly as the operating FBO on the field is operating a large flight school attracting many pilots to the airfield. The ALP expansions were to occur to the east of the airport owned hangar on the east side of the hangar development area. These expansions would require relocation of the existing airport owned hangar as well as the displacement of a row of hangars. When KLJ began evaluating the feasibility of relocating the City owned hangar prior to scoping of the project, it was determined that it would be highly unlikely the hangar would be able to be relocated and salvaged due to its construction materials and design. At this time, it was also determined the Airport and City were against displacing the row of hangars.

In addition, per the approved April 2008 ALP a full-length parallel taxiway serving the primary runway was constructed in 2019. Construction of this parallel taxiway resulted in the removal of nine (9) turf tiedown locations and significantly reduced the size of the North GA Apron essentially restricting the ability to park any planes on this apron. Prior to the parallel taxiway project, the airport had insufficient on-pavement tiedown locations as compared to the demand. The existing aprons are frequently filled with aircraft from transient corporate aircraft to the local flight school aircraft. Currently the airport only has two (2) on-pavement tiedown locations on the South GA Apron. This is insufficient for the demand for on-pavement tiedown locations at the airport.

Considering the above information, KLJ began to develop alternatives for an apron expansion that could accommodate required apron expansion needs while limiting impacts to existing facilities. After several renditions were presented to the City and Airport a preferred alternative was developed. The preferred alternative was submitted to the FAA Dakota-Minnesota ADO and OE/AAA Portal for review and approval. The proposed apron expansion is the same as shown on this recently approved Terminal Area Plan Update of the ALP. The proposed apron expansion would include seven (7) new on-pavement aircraft tiedown locations and provide space for additional future hangar development as well. The seven (7) new on-pavement aircraft tiedown locations were chosen to maximize the recovery of the nine (9) removed turf tie downs from the parallel taxiway project. The Terminal Area Plan Update did not account for all nine (9) lost turf tie down locations in the design as it was laid out to accommodate future hangar development and taxilanes in the area as well per the original layout.

## PROJECT WORK DESCRIPTION

- ①  REMOVE AND DISPOSE OF EXISTING BARBED WIRE FENCING (APPROXIMATELY 8,070 L.F.)
- ②  INSTALL NEW PERIMETER WILDLIFE EXCLUSION FENCING. (APPROXIMATELY 8,350 L.F.)
- ③  CONSTRUCTION EASEMENT FOR NEW FENCE LINE GRADING (NON-FEDERAL ± 2.6 ACRES)
- ④  RUNWAY 14 PART 77 SURFACES OBSTRUCTION SURVEY
- ⑤  2017 PROPOSED PROPERTY AND PHASE 2 FENCE LINE BASED ON ALP AND FAA GUIDANCE PRIOR TO THE 2020 MASTER PLAN AND ALP UPDATE



DRAFTED BY: GCH  
 REVIEWED BY: CM  
 PROJECT NO: 2005-01708  
 REVISED DATE: 2/25/2021

## MARTIN MUNICIPAL AIRPORT PERIMETER WILDLIFE EXCLUSION FENCE PHASE 2





**PART IV – PROGRAM NARRATIVE**  
(Suggested Format)

**PROJECT:** Wildlife Fence Design - Phase 2

**AIRPORT:** Martin Municipal Airport

**1. Objective:**

Design and ultimately construct approximately 8,350 L.F. of airport wildlife fence.

**2. Benefits Anticipated:**

The completion will keep animals from entering the airport operations area and improve the safety for aircraft flying in and out of Martin.

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

The Wildlife fence is Phase 2, and the southern portion, of a two-phase project. The project was split into two phases to allow for an Airport Master Plan and land acquisition to meet the long-term needs of the airport before installation of this fence on the outer perimeter of the airport. The completion will keep animals from entering the airport operations area and improve the safety for aircraft flying in and out of Martin.

**4. Geographic Location:**

Martin Municipal Airport - City of Martin - County of Bennett - State of South Dakota - see attached project sketch

**5. If Applicable, Provide Additional Information:**

N/A.

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

Mrs. Jean Kirk - Finance Officer - City of Martin  
P.O. Box 687  
Martin, SD 57551 Telephone: (605)685-6525

**PROJECT WORK DESCRIPTION**

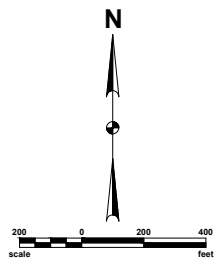
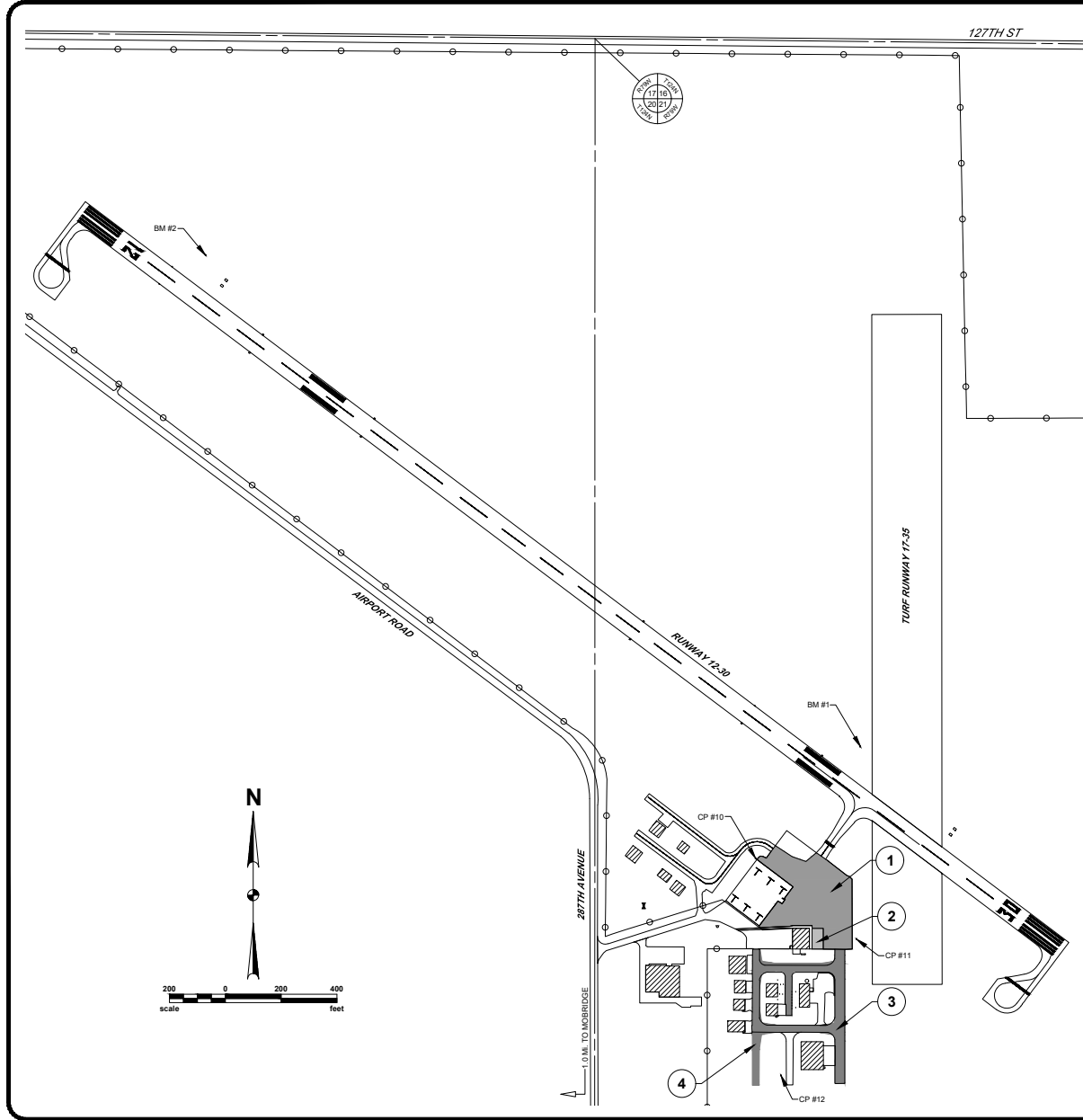
- 1 MILL & OVERLAY GA APRON - AIP ELIGIBLE (APPROX. 8,338 S.Y.)
- 2 MILL & OVERLAY GA APRON - AIP INELIGIBLE (APPROX. 331 S.Y.)
- 3 RECONSTRUCT SOUTH HANGAR TAXILANES (APPROX. 5,005 S.Y.)
- 4 CONSTRUCT TAXILANE D EXTENSION (APPROX. 583 S.Y.)

**BASIS OF ESTIMATE**

REMOVE & DISPOSE ASPHALT TAXILANE PAVEMENT - FULL DEPTH (P-101) -	AVERAGE DEPTH ASPHALT PAVEMENT: ± 2" - 3" AT TAXILANE
COLD MILL ASPHALT APRON PAVEMENT - 2" (P-101) -	± 4" - 5" AT APRON
TOPSOIL REMOVAL (P-152) -	STRIP 6" OVER ALL EXCAVATION OR EMBANKMENT AREAS. (INCLUDED IN UNCLASSIFIED EXCAVATION QUANTITY FOR PAYMENT)
EMBANKMENT (P-154) -	15% ADDITIONAL VOLUME HAS BEEN ADDED FOR SHRINKAGE
GEOGRID (P-154) -	ACTUAL S.Y., NO OVERLAP INCLUDED
SEPARATION GEOTEXTILE (P-154) -	ACTUAL S.Y., NO OVERLAP INCLUDED
SUBBASE COURSE (P-154) -	COMPACTED VOLUME IN PLACE
AGGREGATE BASE COURSE (DOT-260) -	COMPACTED VOLUME IN PLACE
HOT MIX ASPHALT PAVEMENT (DOT-320) -	150 LBS/C.F.
EMULSIFIED ASPHALT TACK COAT (P-603) -	0.10 GAL./S.Y.
TOPSOIL REPLACEMENT (T-905) -	MEASURED IN STOCKPILES BY AVERAGE END AREAS OR PRISMOIDAL METHOD (PAID FOR AS TOPSOILING)

BENCHMARK AND CONTROL POINT LIST			
NO.	DESCRIPTION	LOCATION	ELEVATION
BM1	METAL ROD IN SLEEVE "MIRB" X	N624.263.490 E1.865.024.850	1699.72'
BM2	METAL ROD IN SLEEVE "MIRB" E	N626.023.150 E1.862.680.230	1700.45'
CP10	CAPPED REBAR	N623.862.564 E1.864.650.597	1692.68'
CP11	CAPPED REBAR	N623.573.886 E1.865.012.002	1692.64'
CP12	CAPPED REBAR	N623.985.702 E1.864.744.212	1682.94'

NOTE: CONTRACTOR SHALL VERIFY CONTROL POINTS IN THE FIELD PRIOR TO CONSTRUCTION.



## **Project Narrative (Justification)**

### **2021 FAA Grant Application**

#### **Mobridge Municipal Airport**

##### **Project Item**

Apron Rehabilitation

##### **What is the Project?**

The project includes an Apron Rehabilitation. Also included is construction administration, observation & materials testing, and FAA project closeout services.

##### **Why is the Project Needed Now?**

The bituminous pavement section of the general aviation apron was constructed in 1999. The last PCI study (2018) indicated that the pavement had a PCI value of 51, which is considered poor. Major rehabilitation is recommended for PCI values in this range. It is currently recommended that the pavement be milled and overlaid with 2" of new bituminous pavement, though final rehabilitation method will need to be determined during the detailed design process once geotechnical investigations are completed. The bituminous pavement area of the apron is approximately 9,500 S.Y.

##### **Is the Project Phased?**

Yes. This second phase of the project is to complete the construction for the apron rehabilitation. The first phase was to design and bid the project which is currently in progress.

##### **Project Item**

Taxilane Reconstruction

##### **What is the Project?**

The project includes Hangar Taxilanes Reconstruction. Also included is construction administration, observation & materials testing, and FAA project closeout services.

##### **Why is the Project Needed Now?**

The last PCI study (2018) indicated that the hangar taxilanes were in "very poor" condition, with PCI values of 32 and 33. Major distresses are visually apparent and are causing foreign object debris (FOD) in many areas on the taxilanes. With PCI values this low and FOD safety concerns present, reconstruction is required. The bituminous pavement area of the taxilanes is approximately 5,600 S.Y.

##### **Is the Project Phased?**

Yes. This second phase of the project is to complete the construction for the hangar taxilanes reconstruction. The first phase was to design and bid the project which is currently in progress.

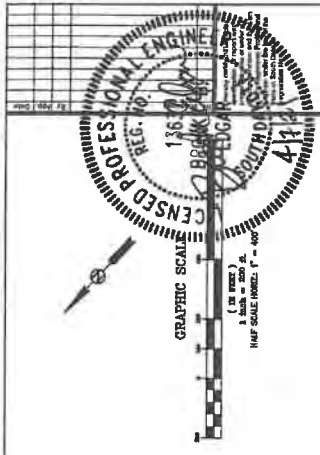


This project shall include the installation of a new Automated Weather Station (AWOS III-P) and construction of an access road with associated site work. This work includes Automated Weather Observing Station (AWOS III-P) equipment, conduit, power and data cabling, trenching and backfilling, directional boring, grading, geotextile separator fabric, gravel surfacing, topsoiling, seeding, and other items of related construction.

-  PROJECT AREA
-  HAUL ROUTE
-  STAGING AREA

PHASE I: AIRPORT SHALL BE CLOSED  
 PHASE II: CONTRACTOR SHALL REQUIRE AN EXCORT TO ENTER RUNWAY 13/31  
 OPA AND ALL MOVEMENT AREAS

AIRPORT CONSTRUCTION SAFETY PLAN INFORMATION			
DESCRIPTION	LATITUDE	LONGITUDE	ELEVATION
RUNWAY END 13	N45°13'09.76"	W86°33'42.80"	1113.78'
RUNWAY END 31	N45°13'40.75"	W86°33'44.86"	1114.84'
RUNWAY END 25	N45°13'49.48"	W86°33'38.01"	1113.30'
RUNWAY END 7	N45°13'38.06"	W86°33'38.35"	1114.84'
PHASE I			
1. WORK AREA CORNER	N45°13'45.74"	W86°33'50.79"	1107.00'
2. WORK AREA CORNER	N45°13'45.71"	W86°33'50.79"	1108.00'
3. WORK AREA CORNER	N45°13'45.71"	W86°33'46.75"	1118.00'
4. WORK AREA CORNER	N45°13'42.84"	W86°33'46.75"	1118.00'
PHASE II			
3. WORK AREA CORNER	N45°13'40.71"	W86°33'46.17"	1118.00'
4. WORK AREA CORNER	N45°13'42.84"	W86°33'48.75"	1118.00'
5. WORK AREA CORNER	N45°13'43.27"	W86°33'46.64"	1122.00'
6. WORK AREA CORNER	N45°13'40.71"	W86°33'43.42"	1115.00'
7. STAGING AREA CORNER	N45°13'41.08"	W86°33'52.71"	1108.00'
8. HAUL ROUTE	N45°13'40.73"	W86°33'28.38"	1108.00'
9. HAUL ROUTE	N45°13'43.44"	W86°33'50.57"	1109.00'
10. HAUL ROUTE	N45°13'40.69"	W86°33'53.15"	1113.00'
11. HAUL ROUTE	N45°13'44.31"	W86°33'58.85"	1111.00'

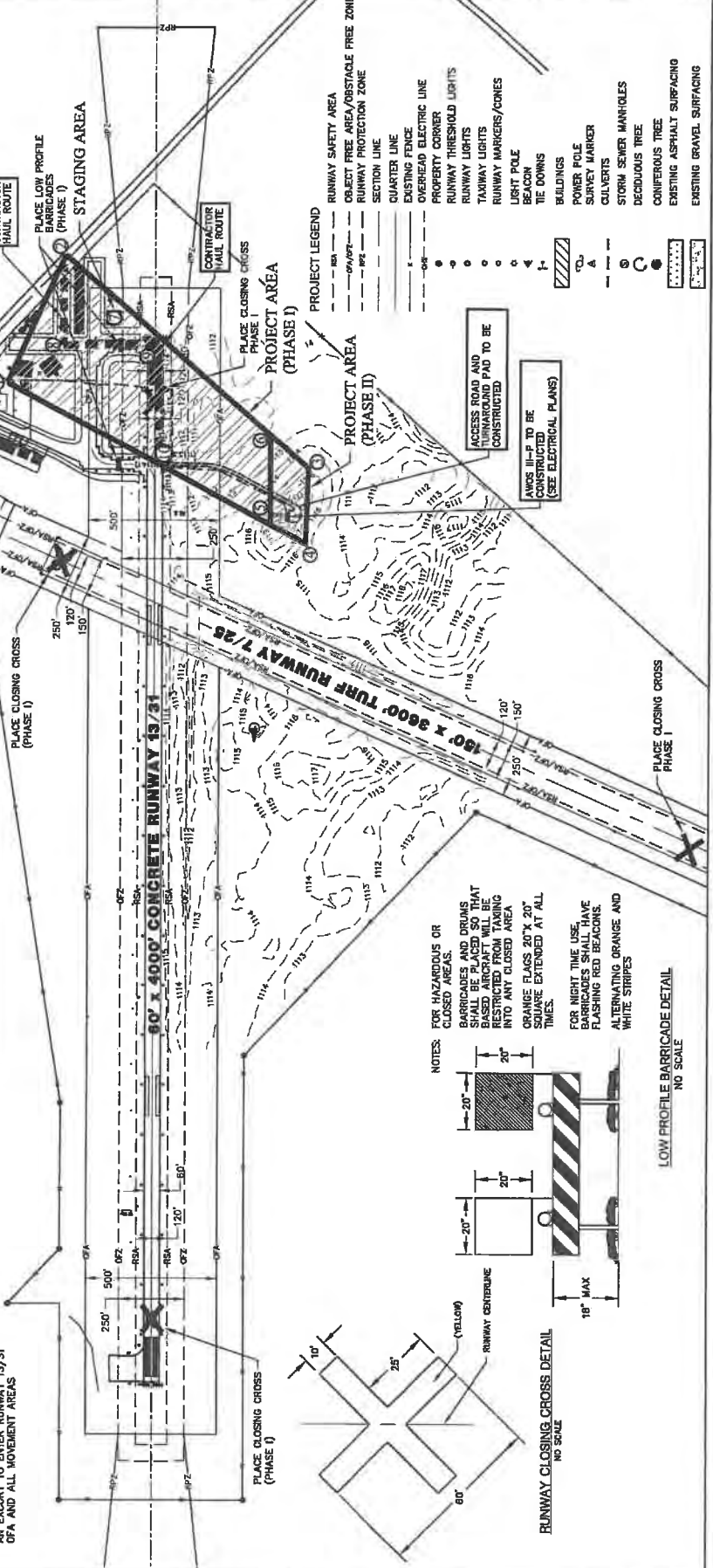


418 Production St. N  
 Aberdeen, SD 57402  
 Phone: 605.225.1212  
 Fax: 605.225.1199  
 info@helsmassociates.com



CONSTRUCTION SAFETY PHASING PLAN  
 AUTOMATED WEATHER OBSERVING SYSTEM  
 MILBANK MUNICIPAL AIRPORT  
 MILBANK, SOUTH DAKOTA

Scale: 1" = 200'  
 Date: 07/21/2011  
 Drawn: JRE  
 Checked: JRE  
 Project No: A-101  
 Client: MILBANK MUNICIPAL AIRPORT  
 Title: CONSTRUCTION SAFETY PHASING PLAN  
 Sheet: 3 of 14

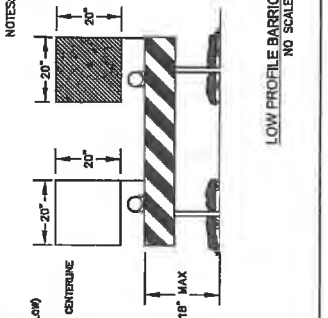


- PROJECT LEGEND**
- RSA RUNWAY SAFETY AREA
  - OFA/OAFZ OBJECT FREE AREA/OBSTACLE FREE ZONE
  - RPAZ RUNWAY PROTECTION ZONE
  - SL SECTION LINE
  - CL QUARTER LINE
  - EF EXISTING FENCE
  - OEL OVERHEAD ELECTRIC LINE
  - PC PROPERTY CORNER
  - RL RUNWAY LIGHTS
  - TL TOWER LIGHTS
  - TM TOWER MARKERS/CONES
  - LP LIGHT POLE
  - TD TIE DOWNS
  - B BUILDINGS
  - P POWER POLE
  - S SURVEY MARKER
  - C CULVERTS
  - SM STORM SEWER MANHOLES
  - DT DECIDUOUS TREE
  - CT CONIFEROUS TREE
  - EA EXISTING ASPHALT SURFACING
  - EG EXISTING GRAVEL SURFACING

ACCESS ROAD AND DRIVEWAY SHALL BE CONSTRUCTED AND PAID TO BE CONSTRUCTED (SEE ELECTRICAL PLANS)

LANES WILL BE CONSTRUCTED (SEE ELECTRICAL PLANS)

NOTES:  
 FOR HAZARDOUS OR CLOSED AREAS:  
 BARRICADES AND DRUMS SHALL BE PLACED SO THAT TRAFFIC WILL BE RESTRICTED FROM TAKING INTO ANY CLOSED AREA  
 ORANGE FLAGS 20" X 20" SQUARE EXTENDED AT ALL TIMES.  
 FOR NIGHT TIME USE, BARRICADES SHALL HAVE FLASHING RED BEACONS, ALTERNATING ORANGE AND WHITE STRIPES



LOW PROFILE BARRICADE DETAIL  
 NO SCALE

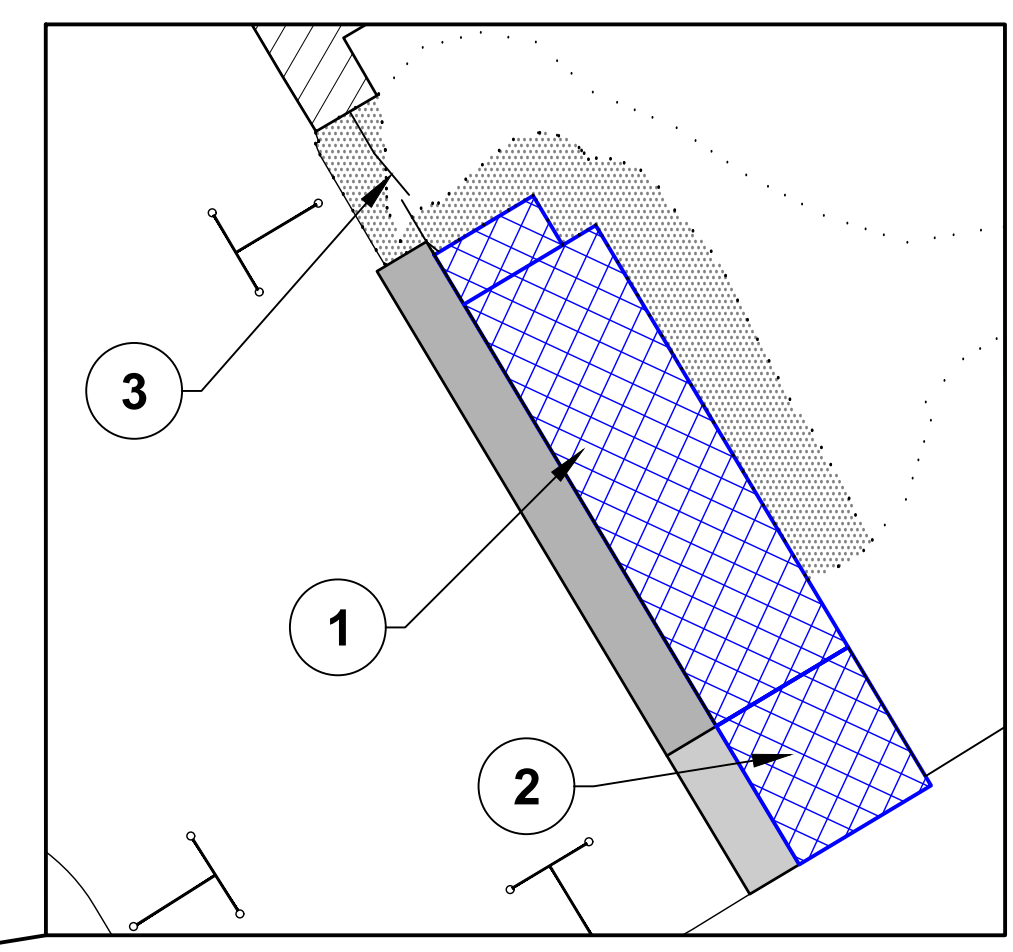
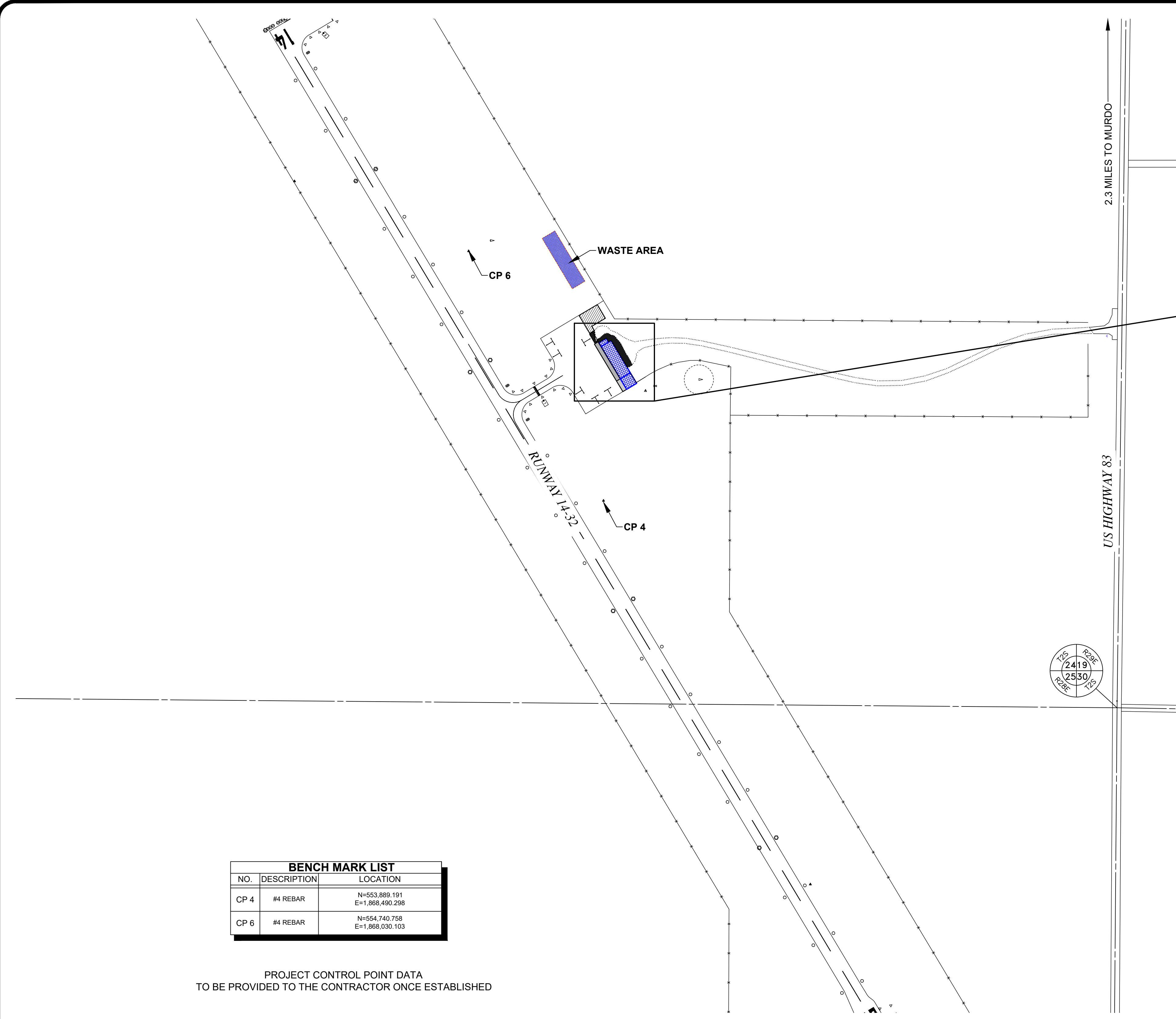
## **Project Narrative (Justification)**

### **Design and Construct AWOS III-P**

Milbank Municipal Airport has an average of 85 operations/week at the airport according to the AIRNAV, updated April 2020. Users have expressed great interest in onsite weather reporting equipment. The closest AWOS III unit is 7 nautical miles northeast in Ortonville, Minnesota. Fixed wing air ambulances also desire the weather reporting equipment to monitor site conditions to make informed decisions when retrieving patients.

### **Easement Acquisition**

The City of Milbank is pursuing the purchase of approximately 15 acres of land for the Runway 31 RPZ/Departure Surfaces. The purchase is necessary to ensure compatible land use by keeping incompatible land uses from being constructed there and to maintain clear approaches.



**PROJECT WORK DESCRIPTION**

- 1** CONSTRUCT MULTI- AIRCRAFT HANGAR BUILDING - BASE BID 3 UNIT
  - 2 - 43' x 40' EXTERIOR BAYS
  - 1 - 42' x 40' INTERIOR BAY
  - 1 - PILOT LOUNGE
  - CONCRETE APRON
- 2** CONSTRUCT ADDITIONAL HANGAR UNIT - ADD ALTERNATE
  - 1 - 42' x 40' INTERIOR BAY
  - CONCRETE APRON
- 3** NEW BARB WIRE FENCE AND 14 FOOT VEHICLE ACCESS GATE

NOTE: BASE BID AND ADD ALTERNATE WILL INCLUDE THE FOLLOWING CONSTRUCTION ITEMS

- REMOVE AND DISPOSE OF EXISTING PAVEMENT
- REMOVE AND SALVAGE EXISTING FENCE
- STRIP TOPSOIL AND EXCAVATION
- RELOCATE EXISTING HANGAR ELECTRICAL LINE
- EXCAVATION FOR HANGAR BUILDING
- HANGAR BUILDING FOUNDATION AND FLOOR SLAB
- HANGAR BUILDING CONSTRUCTION
- HANGAR BUILDING ELECTRICAL SERVICE
- HANGAR BUILDING WATER AND SANITARY SERVICE
- APRON BASE COURSE GRADING
- CONCRETE APRON PAVEMENT PLACEMENT
- SITE GRADING AND TOPSOIL REPLACEMENT
- FENCE INSTALLATION
- SEEDING AND MULCHING

THE HANGAR BUILDING FOUNDATION, FLOOR SLAB AND BUILDING CONSTRUCTION AND ALL ASSOCIATED ITEMS NOT SPECIFIED AND PAID FOR AS A SEPARATE BID ITEM SHALL BE COMPLETED FOLLOWING THE ARCHITECTURAL, STRUCTURAL, MECHANICAL, AND ELECTRICAL SPECIFICATIONS, PLANS, PLAN NOTES AND DETAILS.

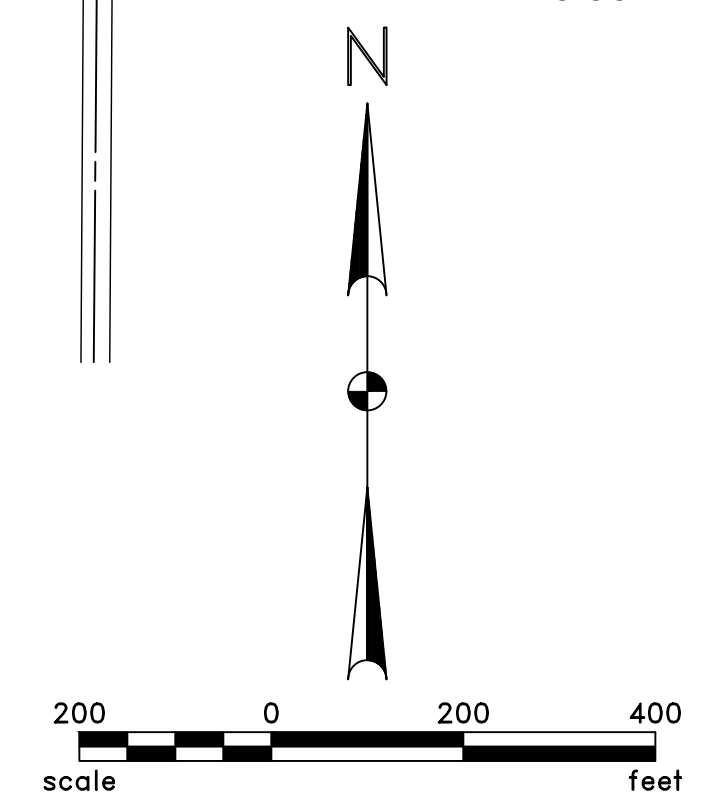
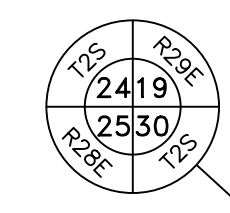
THE BASE BID THREE-UNIT HANGAR BUILDING AND THE ALTERNATE BID ADDITIONAL HANGAR UNIT WILL BE MEASURED AND PAID FOR PER LUMP SUM AND SHALL INCLUDE ALL MATERIALS, LABOR, EQUIPMENT AND ANY INCIDENTALS NECESSARY TO COMPLETE THE BUILDING AS A WHOLE.

BENCH MARK LIST		
NO.	DESCRIPTION	LOCATION
CP 4	#4 REBAR	N=553,889.191 E=1,868,490.298
CP 6	#4 REBAR	N=554,740.758 E=1,868,030.103

PROJECT CONTROL POINT DATA  
TO BE PROVIDED TO THE CONTRACTOR ONCE ESTABLISHED

**BASIS OF SURVEY**

THE BASIS OF BEARING AND COORDINATES FOR THIS SURVEY IS SOUTH DAKOTA STATE PLANE COORDINATES NORTH ZONE, NAD 83 IN US SURVEY FEET. COORDINATES AND DIMENSIONS SHOWN HEREIN ARE GRID BEARINGS AND GRID DISTANCES.  
VERTICAL DATUM IN NAVD-88.  
COMBINED SCALE FACTOR TO CONVERT FROM STATE PLANE DISTANCES (GRID) TO GROUND DISTANCES IS 1.000188





**PART IV – PROGRAM NARRATIVE**  
(Suggested Format)

**PROJECT:** Multi Aircraft Hangar Building Construction

**AIRPORT:** Murdo Municipal Airport

**1. Objective:**

Provide a facility for the housing of based and transient aircraft at the Airport. There is currently no available hangar space at the Airport to meet the needs of the local pilots and traveling public. The facility will also provide a revenue stream for the Airport to assist in operating and maintaining the airfield.

**2. Benefits Anticipated:**

Increased safety and protection for the aviation community utilizing the Airport and a source of revenue for the Airport.

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

The project was developed following the standard design, bid and build method. Size of the facility was based on the justification documents as approved by the FAA DAK-MIN ADO.

**4. Geographic Location:**

Murdo Municipal Airport - City of Murdo - County of Jones - State of South Dakota - see attached project sketch

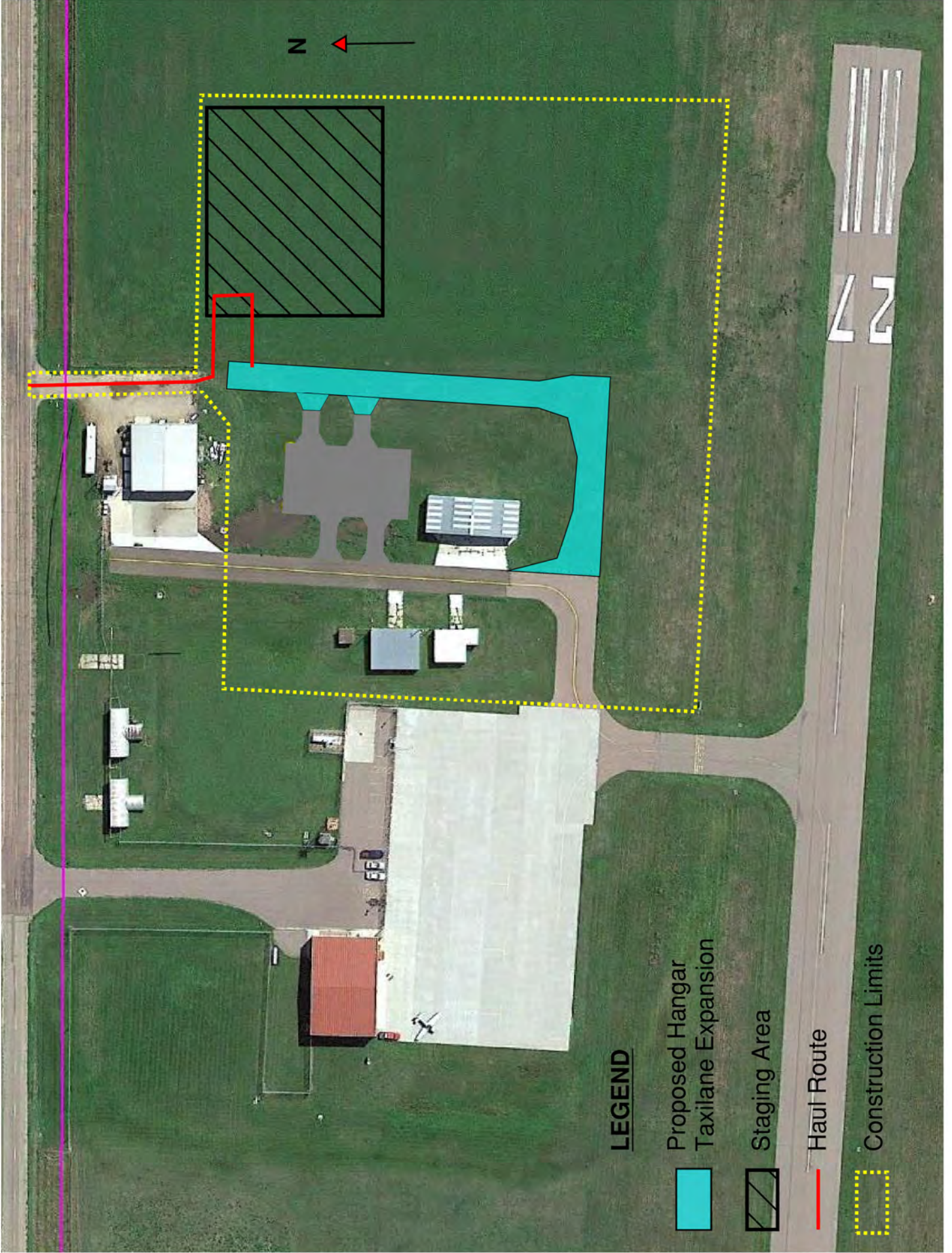
**5. If Applicable, Provide Additional Information:**

N/A.

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

Mrs. Krysti Barnes - Finance Officer - City of Murdo  
P.O. Box 432  
Murdo, SD 57559 Telephone: (605)669-2272

WAGNER MUNICIPAL AIRPORT 2021 PROJECT SKETCH



**LEGEND**

- Proposed Hangar
- Taxiway Expansion
- Staging Area
- Haul Route
- Construction Limits

## **Project Narrative (Justification)**

### Design Hangar Taxilane Expansion w/Geotechnical Exploration

#### **Hangar Taxilane Expansion**

A 4-unit T-Hangar was constructed in 2019/2020 adjacent to an existing hangar taxilane. In order to provide paved access to the hangar owners on the east side of the new T-Hangar, this taxilane should be constructed. Paved access to the hangar allows year round access of the airfield to the aircraft owner. With the 4-unit T-Hangar full, the hangar taxilane expansion provides space for future expansion to the east.

#### **Geotechnical Exploration**

A geotechnical exploration will be performed to identify materials beneath the proposed hangar taxilane to aid in design of the pavement section.



**PART IV – PROGRAM NARRATIVE**  
(Suggested Format)

**PROJECT:** Reconstruct and Lengthen Runway 12-30 - Design Engineering and Bidding Services

**AIRPORT:** Wall Municipal Airport

**1. Objective:**

The project is needed due to the existing airfield configuration limiting the operating capacity of the critical design aircraft (Air Tractor 802A) due to the length of the existing primary runway (3,499' x 60') and the Runway 30 Runway Protection Zone (RPS) has incompatible uses.

The objective of the project is to provide a runway (4,418' x 75') that can accommodate general aviation aircraft up to a Runway Design Code (RDC) B-II and to provide a Runway Protection Zone that meets the Federal Aviation Administration design and safety standards.

**2. Benefits Anticipated:**

The ultimate reconstruction, lengthening and widening of Runway 12-30 will allow the airport to come into compliance with the applicable FAA standards for the aircraft utilizing the airport and correct the RPZ issues which will greatly enhancing the safety of its users. Additionally, GPS guided approaches will be developed for Runway 12 and Runway 30

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

This will be a standard design - bid - build project. Design activities will be completed within this grant to facilitate a bid letting in the summer of 2022 and ultimate reconstruction of the runway in 2023.

**4. Geographic Location:**

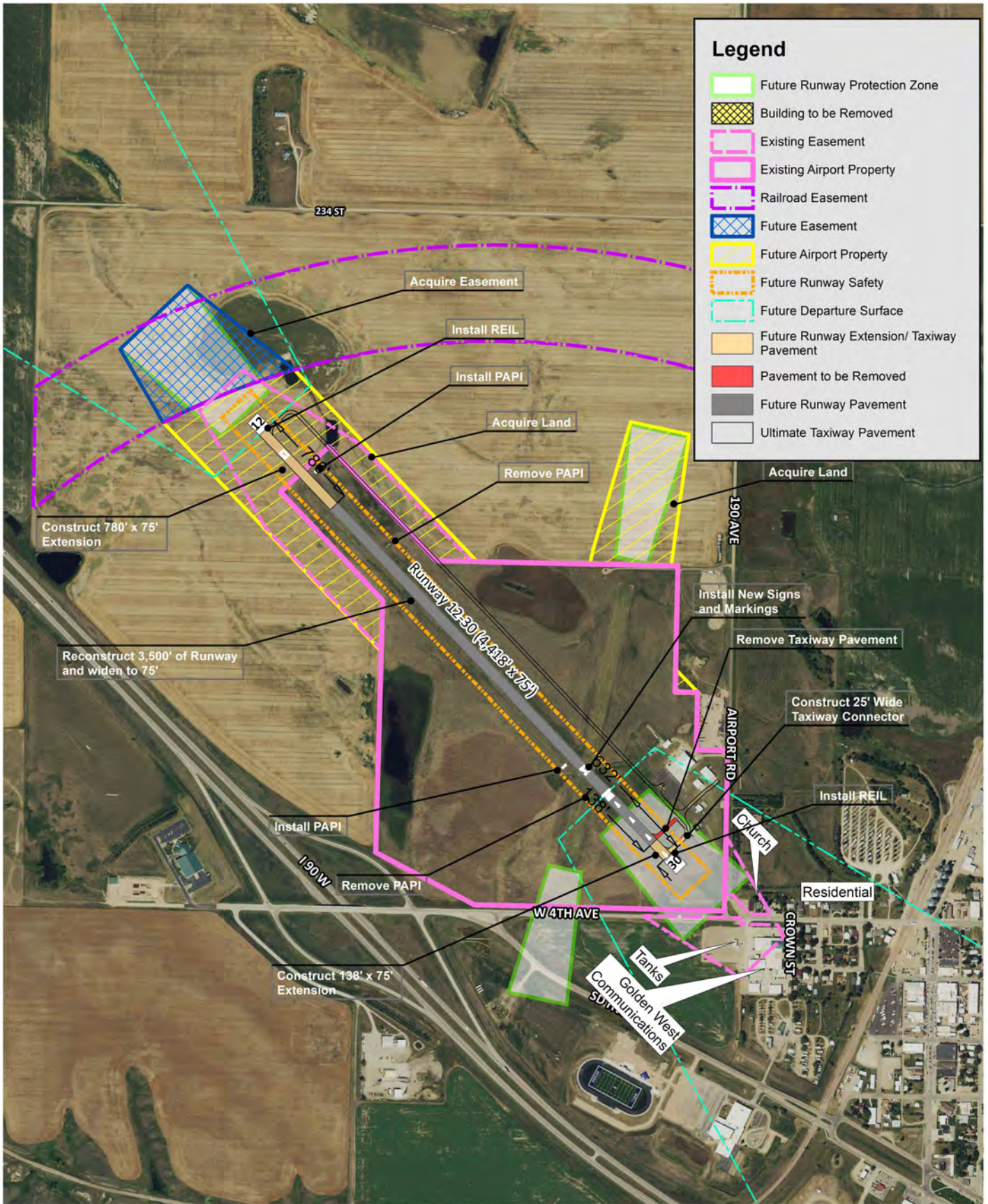
Wall Municipal Airport  
City of Wall  
County of Pennington  
State of South Dakota

**5. If Applicable, Provide Additional Information:**

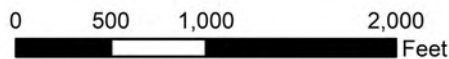
This is not a Letter of Intent project.

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

Ms. Carolynn Anderson - City of Wall Finance Officer  
501 Main Street - P.O. Box 314  
Wall, SD 57790 Telephone: 605.279.2663



\*Intended for Planning Purposes Only



**Wall Municipal Airport  
Wall, South Dakota  
Alternative C**

**PART IV – PROGRAM NARRATIVE**  
(Suggested Format)

<b>PROJECT:</b> AIP #3-46-0059-011-2021
<b>AIRPORT:</b> Sigurd Anderson Field
<b>1. Objective:</b> <p>This project shall consist of the construction of a 4-Unit T-Hangar with associated concrete approach pavement, storm sewer, topsoiling, and seeding and fertilizing. Each unit in the T-Hangar will be provided an insulated electrically operated bi-fold door, fully insulated walls, two circuits for LED light fixtures and electrical receptacle, individual electric meter, and propane hookup. The T-Hangar will also have exterior lighting above each door.</p> <p>An easement for 3.57 acres of land within the Runway 12 End is also requested with this project.</p>
<b>2. Benefits Anticipated:</b> <p>Sigurd Anderson Field does not have an existing revenue producing hangar at the airport. The four individual T-Hangars currently onsite are well beyond their useful life and at least one has settled allowing water to flow directly into the building. There has been great interest from local users and transient users to have storage for temporary and/or long term situations. Two local pilots store their aircraft at another local airport and plan to relocate once a new building is constructed.</p>
<b>3. Approach:</b> (See approved Scope of Work in Final Application) <p>Advertise the Project and Open Bids Award the Construction Contract Construct T-Hangar Prepare As-Constructed Drawings Assemble Closeout Documentation</p>
<b>4. Geographic Location:</b> <p>Sigurd Anderson Field, Webster, Day County, South Dakota</p>
<b>5. If Applicable, Provide Additional Information:</b> <p>Users have been instrumental in preliminary design of the T-Hangar and all spots have already been spoken for. The 3.57 acres of land within the RPZ was planned to be purchased; however, due to an unwilling seller, the City has chosen to obtain an easement. The intent of the easement is to protect Sigurd Anderson Field from incompatible land uses in the RPZ as described by AC 150/5300-13.</p>
<b>6. Sponsor's Representative:</b> (include address & telephone number) <p>Michael Grosek, Mayor            605-345-3241 PO Box 539 Webster, SD 57274</p>

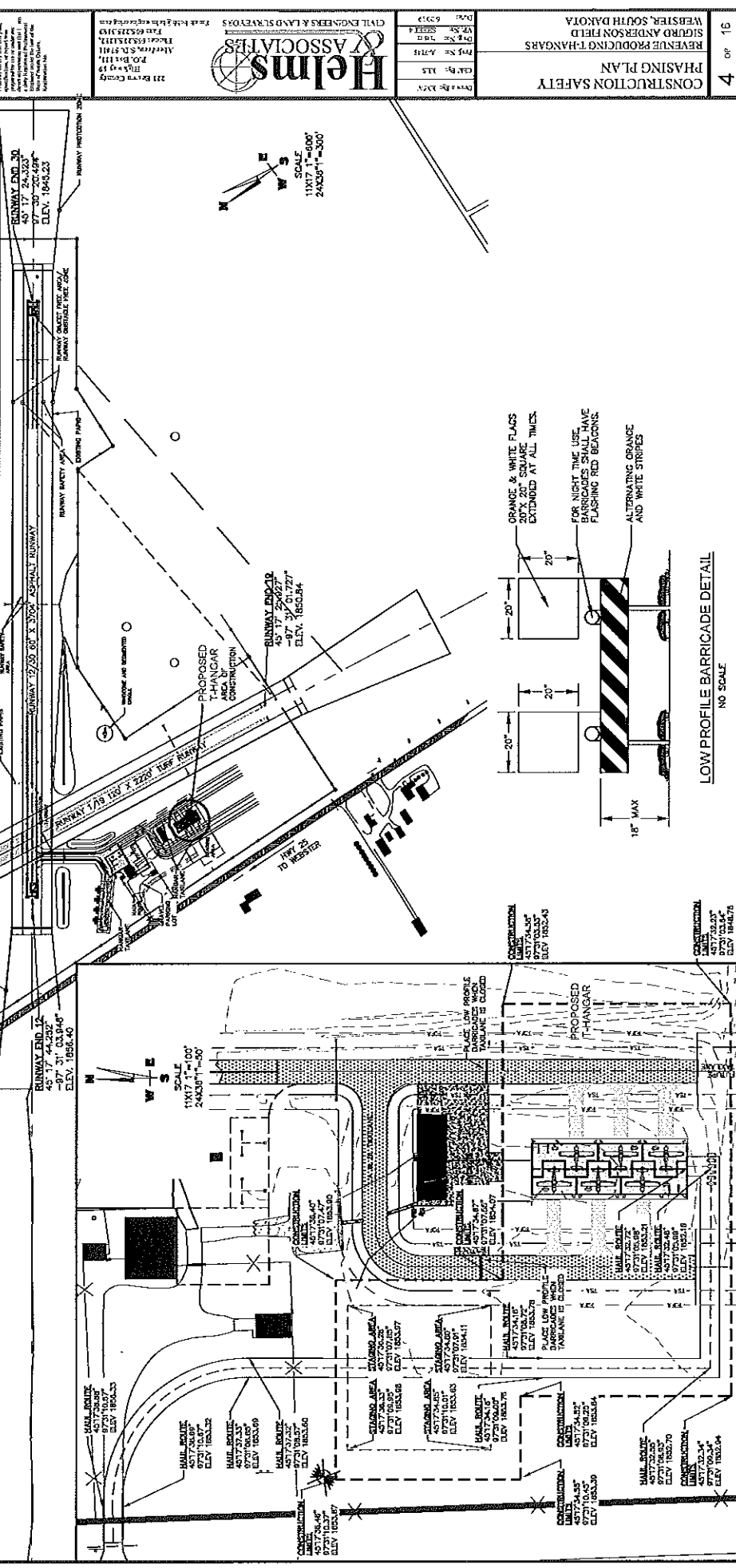


**Description of Work**  
 This project shall include the construction of a 6 Unit T-Hangar. This work includes construction of a T-Hangar, grading, aggregate base course, PCC pavement, topsoiling, seeding and other items of related construction.

Raw Description	Longitude	Latitude	Point Elevation
SW TAN. HAUL ROUTE	W87° 31' 10.67"	N45° 17' 32.66"	1856.32'
NW TAN. HAUL ROUTE	W87° 31' 10.67"	N45° 17' 38.88"	1856.33'
SW HAIL ROUTE	W87° 31' 09.00"	N45° 17' 34.18"	1853.78'
SW TAN. HAUL ROUTE	W87° 31' 08.85"	N45° 17' 37.33"	1853.69'
SE HAIL ROUTE	W87° 31' 08.72"	N45° 17' 34.18"	1853.76'
SE TAN. HAUL ROUTE	W87° 31' 08.57"	N45° 17' 37.32"	1853.60'
SE HAIL ROUTE CL	W87° 31' 05.99"	N45° 17' 32.48"	1852.16'
SW HAIL ROUTE CL	W87° 31' 06.98"	N45° 17' 32.55"	1852.70'
HAIL ROUTE CL	W87° 31' 05.98"	N45° 17' 32.72"	1853.21'

Raw Description	Longitude	Latitude	Point Elevation
NW STAGING	W87° 31' 09.95"	N45° 17' 36.33"	1853.98'
NE STAGING	W87° 31' 07.85"	N45° 17' 36.28"	1853.97'
SE STAGING	W87° 31' 07.91"	N45° 17' 34.80"	1854.11'
SW STAGING	W87° 31' 10.01"	N45° 17' 34.85"	1853.63'
NW CON LIM	W87° 31' 10.45"	N45° 17' 34.55"	1853.97'
NE CON LIM	W87° 31' 03.55"	N45° 17' 34.58"	1852.43'
SSE CON LIM	W87° 31' 03.64"	N45° 17' 32.25"	1848.75'
SW CON LIM	W87° 31' 09.34"	N45° 17' 32.34"	1852.94'
NNW CON LIM	W87° 31' 10.37"	N45° 17' 36.46"	1853.87'
NE CON LIM	W87° 31' 09.25"	N45° 17' 34.52"	1853.84'
SE CON LIM	W87° 31' 07.47"	N45° 17' 36.40"	1853.90'
SE CON LIM	W87° 31' 07.55"	N45° 17' 34.07"	1854.07'

Raw Description	Longitude	Latitude	Point Elevation
Runway End 1A	45° 17' 44.232"	1856.40	
Runway End 1B	45° 17' 44.232"	1856.40	
Runway End 1C	45° 17' 44.232"	1856.40	
Runway End 1D	45° 17' 44.232"	1856.40	
Runway End 1E	45° 17' 44.232"	1856.40	
Runway End 1F	45° 17' 44.232"	1856.40	
Runway End 1G	45° 17' 44.232"	1856.40	
Runway End 1H	45° 17' 44.232"	1856.40	
Runway End 1I	45° 17' 44.232"	1856.40	
Runway End 1J	45° 17' 44.232"	1856.40	
Runway End 1K	45° 17' 44.232"	1856.40	
Runway End 1L	45° 17' 44.232"	1856.40	
Runway End 1M	45° 17' 44.232"	1856.40	
Runway End 1N	45° 17' 44.232"	1856.40	
Runway End 1O	45° 17' 44.232"	1856.40	
Runway End 1P	45° 17' 44.232"	1856.40	
Runway End 1Q	45° 17' 44.232"	1856.40	
Runway End 1R	45° 17' 44.232"	1856.40	
Runway End 1S	45° 17' 44.232"	1856.40	
Runway End 1T	45° 17' 44.232"	1856.40	
Runway End 1U	45° 17' 44.232"	1856.40	
Runway End 1V	45° 17' 44.232"	1856.40	
Runway End 1W	45° 17' 44.232"	1856.40	
Runway End 1X	45° 17' 44.232"	1856.40	
Runway End 1Y	45° 17' 44.232"	1856.40	
Runway End 1Z	45° 17' 44.232"	1856.40	



Raw Description	Longitude	Latitude	Point Elevation
Runway End 20	45° 17' 24.262"	1856.40	
Runway End 21	45° 17' 24.262"	1856.40	
Runway End 22	45° 17' 24.262"	1856.40	
Runway End 23	45° 17' 24.262"	1856.40	
Runway End 24	45° 17' 24.262"	1856.40	
Runway End 25	45° 17' 24.262"	1856.40	
Runway End 26	45° 17' 24.262"	1856.40	
Runway End 27	45° 17' 24.262"	1856.40	
Runway End 28	45° 17' 24.262"	1856.40	
Runway End 29	45° 17' 24.262"	1856.40	
Runway End 30	45° 17' 24.262"	1856.40	
Runway End 31	45° 17' 24.262"	1856.40	
Runway End 32	45° 17' 24.262"	1856.40	
Runway End 33	45° 17' 24.262"	1856.40	
Runway End 34	45° 17' 24.262"	1856.40	
Runway End 35	45° 17' 24.262"	1856.40	
Runway End 36	45° 17' 24.262"	1856.40	
Runway End 37	45° 17' 24.262"	1856.40	
Runway End 38	45° 17' 24.262"	1856.40	
Runway End 39	45° 17' 24.262"	1856.40	
Runway End 40	45° 17' 24.262"	1856.40	
Runway End 41	45° 17' 24.262"	1856.40	
Runway End 42	45° 17' 24.262"	1856.40	
Runway End 43	45° 17' 24.262"	1856.40	
Runway End 44	45° 17' 24.262"	1856.40	
Runway End 45	45° 17' 24.262"	1856.40	
Runway End 46	45° 17' 24.262"	1856.40	
Runway End 47	45° 17' 24.262"	1856.40	
Runway End 48	45° 17' 24.262"	1856.40	
Runway End 49	45° 17' 24.262"	1856.40	
Runway End 50	45° 17' 24.262"	1856.40	

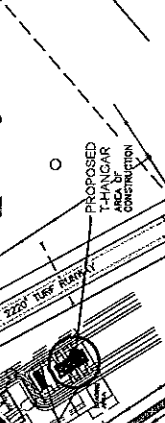
**Helms & Associates**  
 CIVIL ENGINEERS & LAND SURVEYORS  
 221 East Century  
 PO Box 111  
 Pierre, SD 57501  
 Phone: 605.224.1515  
 Fax: 605.224.1515

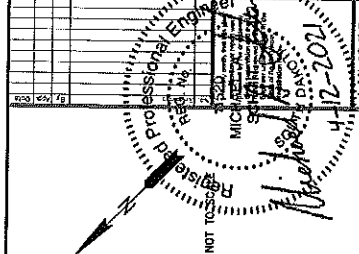
Drawn By: JLV  
 Checked By: JLV  
 Project No: A-715  
 Date: 10/11/11  
 Scale: 1"=40'

REVENUE PRODUCING HANGARS  
 SIGMUND ANDERSON FIELD  
 WESTER, SOUTH DAKOTA

CONSTRUCTION SAFETY  
 PHASING PLAN

4 of 16



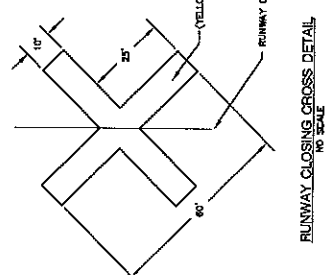
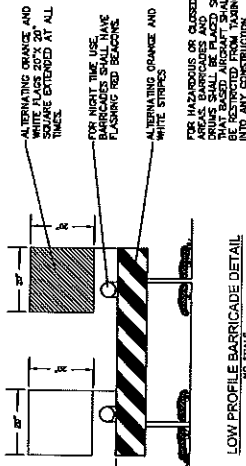
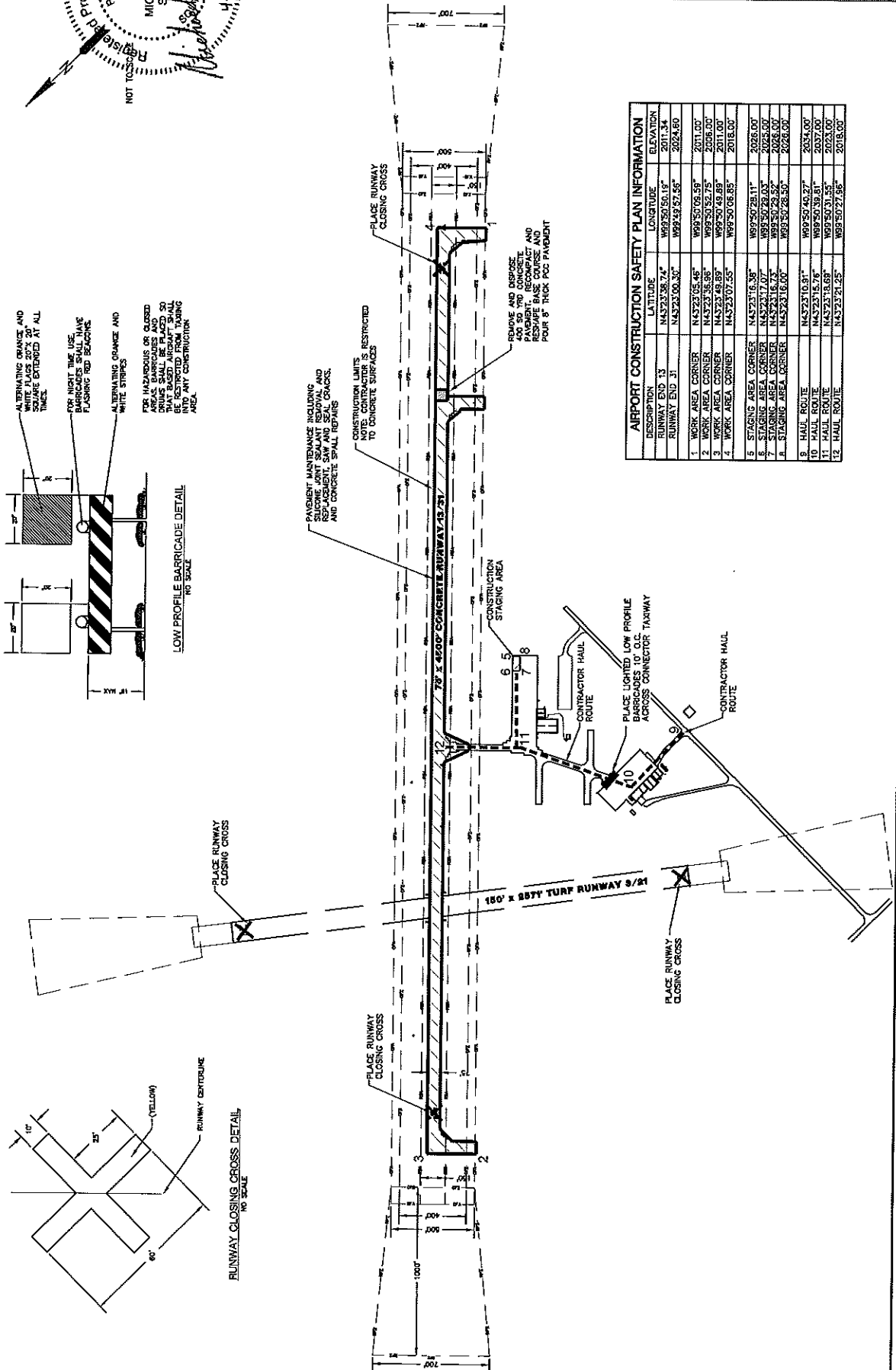


418 Production Blvd.  
 Aberdeen, S.D. 57402  
 Phone: 605.223.1212  
 Fax: 605.223.1195  
 Email: mhelms@helsmassociates.com

**Helms ASSOCIATES**  
 CIVIL ENGINEERS & LAND SURVEYORS

**CONSTRUCTION SAFETY PHASING PLAN LAYOUT**  
 RWYWAY 13/31 REPAIR/MAINTENANCE  
 WINNER REGIONAL AIRPORT  
 WINNER, SOUTH DAKOTA

Sheet No. 3 OF 11  
 Date: 4/10/21  
 Drawn By: A/008  
 Pkg. No.: 8066-01  
 V.A. No.: WINNER-SAFE  
 Date: 4/10/21



DESCRIPTION	LATITUDE	LONGITUDE	ELEVATION
RUNWAY END T3	N43°23'58.74"	W89°50'50.15"	2011.34
RUNWAY END J1	N43°23'00.30"	W89°49'57.85"	2024.60
1. WORK AREA CORNER	N43°23'05.46"	W89°50'09.59"	2011.07
2. WORK AREA CORNER	N43°23'36.89"	W89°50'52.75"	2006.00
3. WORK AREA CORNER	N43°23'49.89"	W89°50'49.89"	2011.00
4. WORK AREA CORNER	N43°22'07.25"	W89°50'08.65"	2018.00
5. STAGING AREA CORNER	N43°23'16.38"	W89°50'28.11"	2008.00
6. STAGING AREA CORNER	N43°23'17.07"	W89°50'29.03"	2008.00
7. STAGING AREA CORNER	N43°23'16.73"	W89°50'29.52"	2008.00
8. STAGING AREA CORNER	N43°23'16.00"	W89°50'28.50"	2028.00
9. HAUL ROUTE	N43°23'10.91"	W89°50'40.27"	2034.00
10. HAUL ROUTE	N43°23'15.76"	W89°50'36.81"	2037.00
11. HAUL ROUTE	N43°23'09.55"	W89°50'31.55"	2023.00
12. HAUL ROUTE	N43°22'51.25"	W89°50'27.95"	2018.00

**AIRPORT CONSTRUCTION SAFETY PLAN INFORMATION**

REMOVE AND REPLACE 100 SQ YRD CONCRETE PAVEMENT, RECOMPACT AND RESURFACE BASE COURSE AND POUR 8" THICK PCC PAVEMENT

PAVEMENT MAINTENANCE INCLUDING REPAIRS TO CRACKS AND CONCRETE SHALL REPAIRS

CONSTRUCTION LIMITS RESTRICTED TO CONCRETE SURFACES

CONSTRUCTION STAGING AREA

CONTRACTOR HAUL ROUTE

PLACE LIGHTED LOW PROFILE BARRICADES 10' O.C. ACROSS CONNECTOR TAXIWAY

CONTRACTOR HAUL ROUTE

PLACE RUNWAY CLOSING CROSS

PLACE RUNWAY CLOSING CROSS

PLACE RUNWAY CLOSING CROSS

PLACE RUNWAY CLOSING CROSS

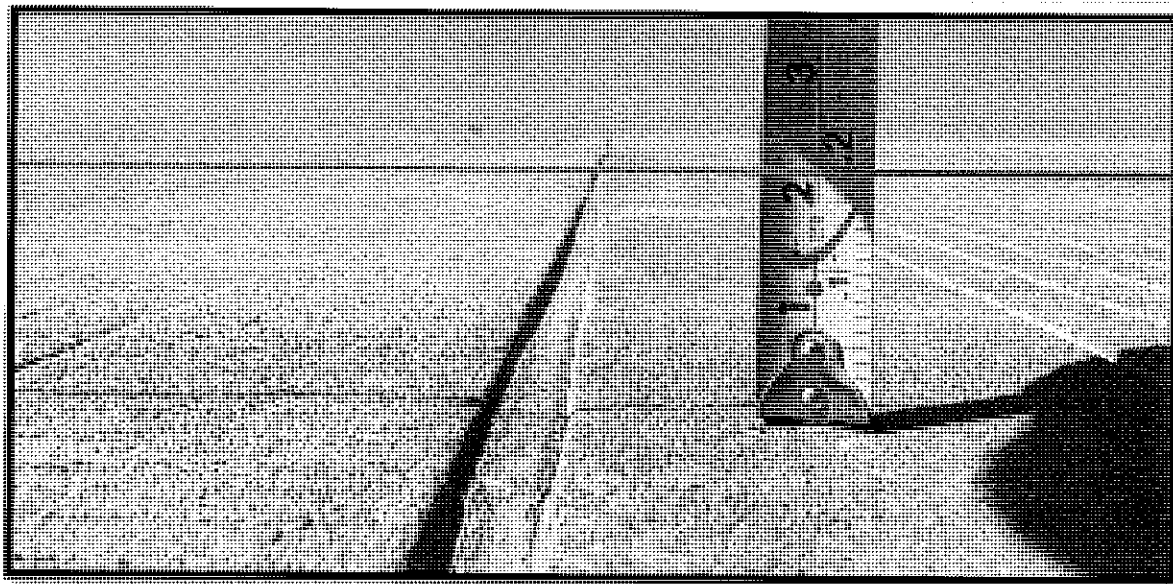
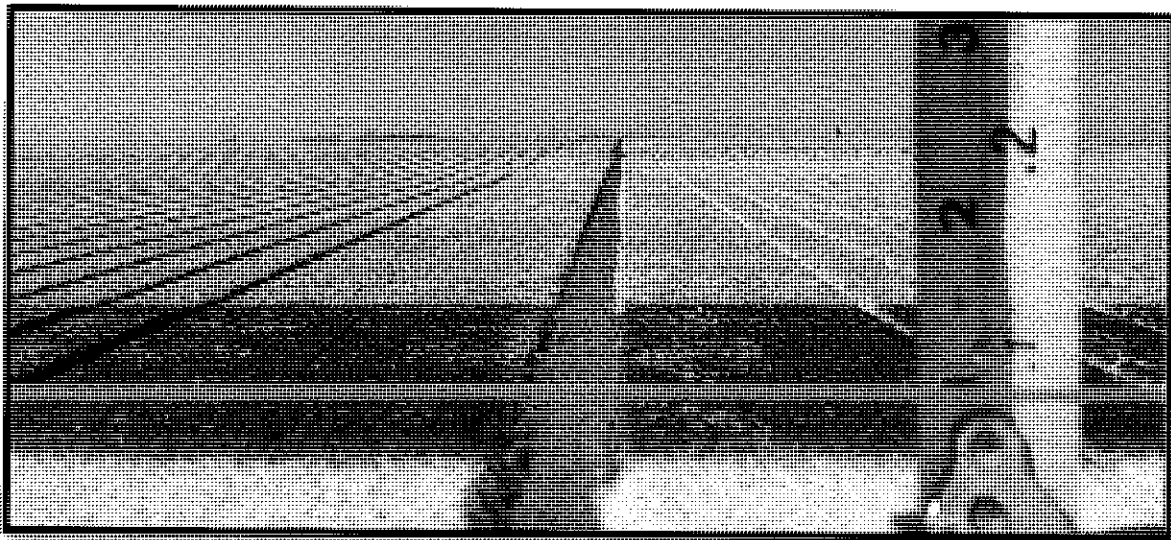
PLACE RUNWAY CLOSING CROSS

## Project Narrative (Justification)

### Winner Regional Airport Winner, SD

#### Design & Construct Runway Panel Replacement and Pavement Maintenance including Spall Repair and Joint Sealant

At present multiple panels within the aiming point zone of Runway 31 have settled substantially. Aircraft experience a noticeable dip when taking off from the 31 end. Through replacement of approximately 20 panels, the settled area can be addressed and the safety of pilots and their aircraft returned. The following photos depict the depth of the settling at its deepest points.





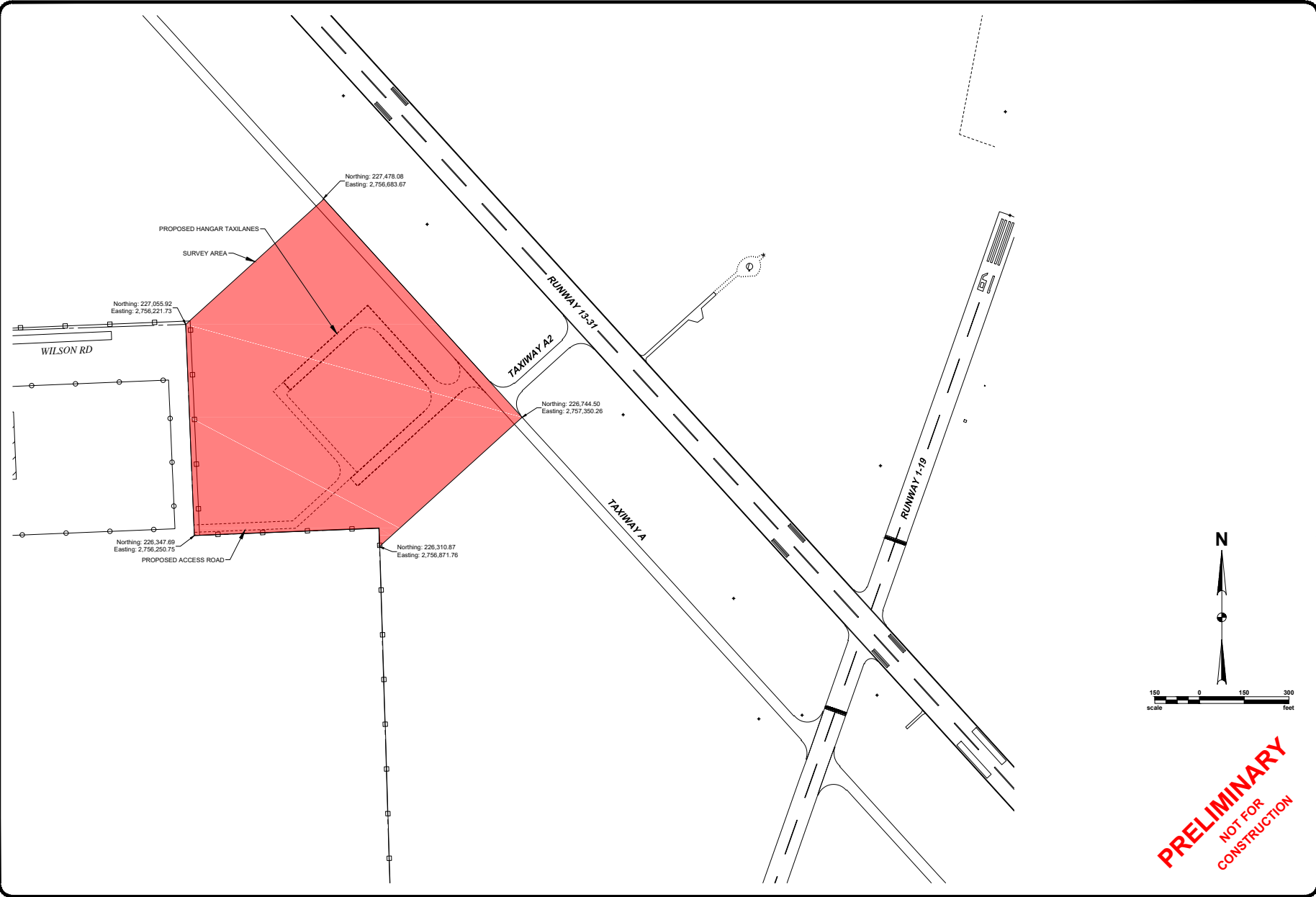


**CHAN GURNEY MUNICIPAL AIRPORT**  
CITY OF YANKTON  
YANKTON, SOUTH DAKOTA

**PROJECT WORK DESCRIPTION &  
BASIS OF ESTIMATE**

DRAWN BY  
**JAB**  
REVIEWED BY  
**JJB**  
PROJECT NUMBER  
**2005-01789**  
LAST PERIOD DATE  
**02/25/2021**

SHEET  
**1**



**PRELIMINARY**  
**NOT FOR**  
**CONSTRUCTION**

## **Project Narrative (Justification)**

### **2021 FAA Grant Application**

### **Chan Gurney Municipal Airport**

#### **Project Item**

Design Hangar Taxilane System and Access Road

#### **What is the Project?**

The project is for environmental, design and bidding services for a hangar taxilane system and access road at Chan Gurney Municipal Airport. Environmental services shall include a Cultural Resource Inventory, Traditional Cultural Property Survey and Report, Wetland Delineation and Report, and FAA CATEX Form ARP SOP No. 5.00.

#### **Why is the Project Needed Now?**

The project is needed now due to demand for hangar development at the airport. In recent years, three private hangars have been constructed on the existing hangar taxilane system. There is currently only one remaining location available on the existing hangar taxilane system. It is anticipated by the time funding becomes available for the construction of the new hangar taxilane development there will be no remaining spaces available on the existing hangar taxilane system. If the taxilanes project is delayed, there will likely be no available hangar development area remaining soon and thus will lead to lost revenue and airport growth. In addition, it is expected that the longer hangar development area is not available, more pilots will begin finding space at other airports in the region, hence reducing potential airport users in the future.

The proposed project will require an ALP sheet "pen and ink" update to address the proposed access road alignment which deviates from what is shown on the most current ALP due to current conditions. Additionally, depending on anticipated hangar configuration/type identified in the detailed design phase, the ALP sheet update may need to address the exact dimensioning and layout of the taxilanes. This was discussed with the local Airport District Office at the annual CIP meeting and was included in the detailed scope of work.

#### **Is the Project Phased?**

Yes. This first phase of the project is to complete the project plans and specifications. The second phase is to construct the project, currently scheduled for 2022 and 2023 dependent upon funding availability.

#### **Total AIP Funds Expended this Fiscal Year?**

\$123,000

#### **Additional AIP Funds Needed to Complete Project?**

\$1,100,000