

Division of Finance & Management

Office of Air, Rail & Transit 700 East Broadway Avenue Pierre, SD 57501

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dot.sd.gov

TO: South Dakota Aeronautics Commission

FROM: Jack Dokken, Office of Aeronautics

DATE: August 9, 2022

SUBJECT: AIP Grant Applications

Airport sponsors are requesting funding from the State Aeronautics Fund for the following Airport Improvement Program (AIP) and/or Bi-partisan Infrastructure Law (BIL) projects:

Aberdeen 3-46-0001-047-2022

Construction of apron expansion (650' X 210') reconstruction phase 1B. (95% federal)

 Federal Share
 \$ 3,591,000.00

 State Share
 \$ 94,500.00

 Local Share
 \$ 94,500.00

 Total
 \$ 3,780,000.00

Eagle Butte 3-46-0068-015-2022

Reconstruct runways 13/31 including lighting, redesign 13 connector, construct 31 turnaround. (100% federal supplemental funds.)

Federal Share \$ 3,277,777.00

State Share \$ 0 Local Share \$ 0

Total \$ 3,277,777.00

Pierre 3-46-0044-047-2022

Acquisition of ARFF test cart. (95% federal)

 Federal Share
 \$ 33,250.00

 State Share
 \$ 875.00

 Local Share
 \$ 875.00

 Total
 \$ 35,000.00

Spearfish 3-46-0065-031-2022

AIP - Design and construct 35' x 900' taxilane north of east apron.

Federal Share	\$ 560,000.00
State Share	\$ 31,111.00
Local Share	\$ 31,111.00
Total	\$ 622,222.00

Spearfish 3-46-0065-032-2022

BIL - Design and construct 35' x 900' taxilane north of east apron.

Federal Share	\$ 1	15,000.00
State Share	\$	6,389.00
Local Share	\$	6,389.00
Total	\$ 1	.27,778.00

Wall 3-46-0069-013-2022

AIP – Reconstruct, widen and extend runway 14-32, including construction admin, observation and approach flight check.

Federal Share	\$ 5,384,000.00
State Share	\$ 299,111.11
Local Share	\$ 299,111.11
Total	\$ 5,982,222.22

Wall 3-46-0069-014-2022

BIL – cultural monitoring and archeological services for runway 14-32 reconstruct, extend and widen project.

Federal Share	\$ 70,000.00
State Share	\$ 3,888.89
Local Share	\$ 3,888.89
Total	\$ 77,777.78

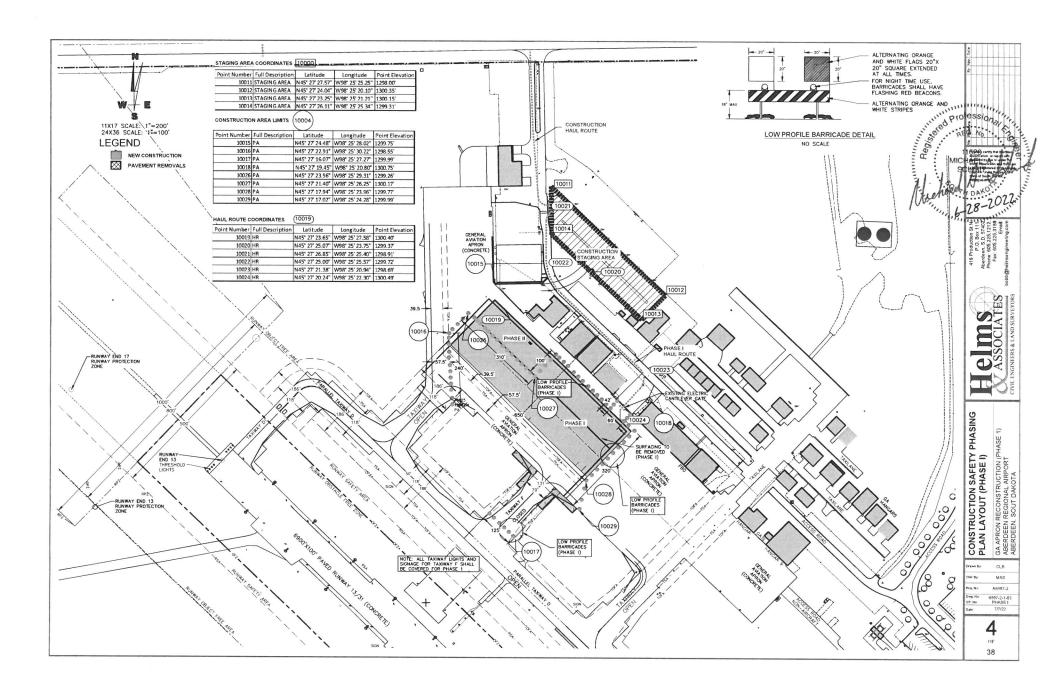
Project Narrative (Justification)

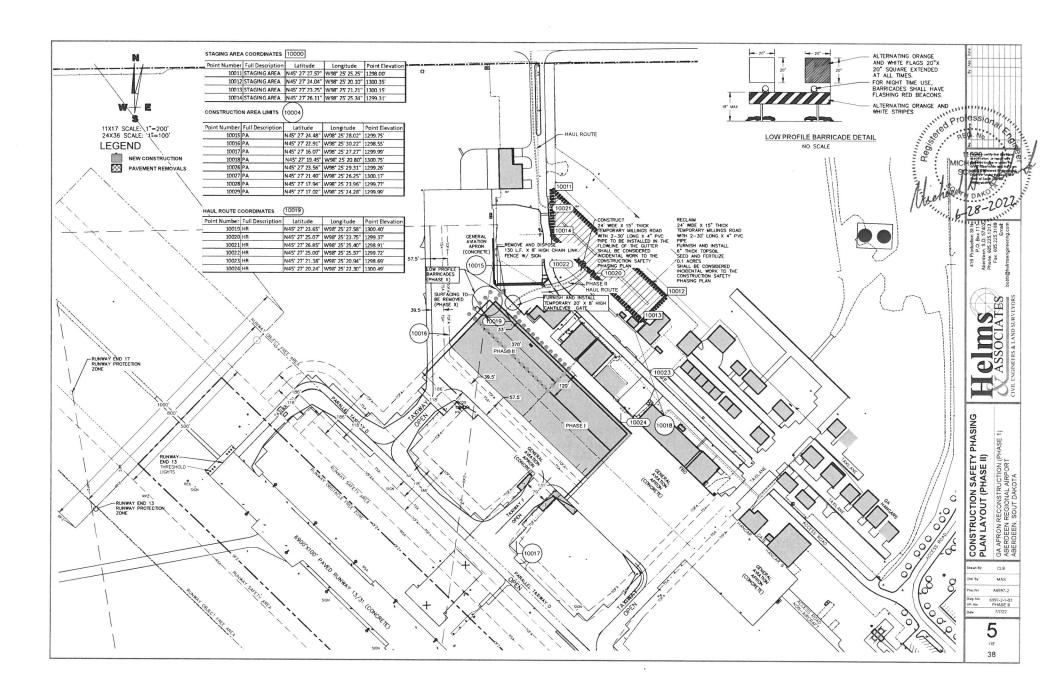
Construct GA Apron Reconstruction Phase IB (±650'x 210')

The GA apron pavement has exceeded the end of its useful life and is in need of reconstruction. The GA apron was reconstructed in 1986 and consists of approximately 6 and/or 12 inches of concrete and 8 inches of base course. The airport has performed a multitude of pavement maintenance projects on the GA apron to extend the life of the pavement. The latest results from the 2021 Pavement Condition Index (PCI) surveys indicated a 24 for the vast majority of the apron to be reconstructed and a 37 for the remaining pavement. The FAA minimum recommended PCI requirement for aprons is 45. The table below shows the gradual degradation of the runway since 2012.

	Pav	vement		2012 2015		2012 2015 2018		2018	2021	
Branch ID	Age	Material	PCI	Condition	PCI	Condition	PCI	Condition	PCI	Condition
GA Apron	1986	Concrete	80	Satisfactory	48	Poor	62	Fair	24	Serious
GA Apron	1986	Concrete	81	Satisfactory	59	Fair	68	Fair	37	Very Poor

This project proposes to reconstruct approximately $\pm 650' \times 210'$ of concrete apron. The project shall consist of unclassified excavation, concrete pavement removal, geotextile separator fabric, geogrid, recycled subbase course, furnished subbase course, crushed aggregate base course, 6 inch PCC pavement, 10 inch PCC pavement, marking, storm sewer piping, underdrain piping, aircraft tie downs, and erosion control measures.





OMB CONTROL NUMBER: 2120-0569 OMB EXPIRATION DATE: 6/30/2023

PART IV - PROGRAM NARRATIVE

(Suggested Format)

PROJECT: ARFF test cart acquisition
AIRPORT: Pierre Regional Airport
1. Objective: The airport does not have an ARFF test cart for testing the foam delivery in an environmentally friendly manner.
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2. Benefits Anticipated: Purchasing this ARFF Cart will allow for compliance with PGL 19-01
3. Approach: (See approved Scope of Work in Final Application) n/a
4. Geographic Location: Pierre Regional Airport - City of Pierre - County of Hughes - State of South Dakota
5. If Applicable, Provide Additional Information: N/A.
6. Sponsor's Representative: (include address & telephone number) Mr. Cameron Howard - Airport Manager - Pierre Regional Airport 3800 Airport Road, Suite #209 Pierre, SD 57501 Telephone (605) 773-7447



Federal Aviation Administration National Part 139 CertAlert

AdvisoryCautionary**Non-Directive**Advisory**Cautionary**Non-Directive**

Date: 6/1/2021 No. 21-01

To: All Certificated Part 139 Airports and Aircraft Rescue and Firefighting

(ARFF) Departments

Subject: Aqueous Film Forming Foam (AFFF) Testing at Certificated

Part 139 Airports

Point of Contact: Marc Tonnacliff, AAS-300, 202-267-8732

Email: marc.tonnacliff@faa.gov

1. **Purpose.** This CertAlert provides updated information and recommendations to airport operators about optional equipment for use in testing Aqueous Film Forming Foam (AFFF) systems on Aircraft Rescue and Firefighting vehicles. This guidance has been prepared in response to a directive in the FAA Reauthorization Act of 2018, described in further detail below, and it does not revise or replace any previously issued guidance other than that noted in the Cancellation paragraph below.

This guidance is not legally binding in its own right, and the Agency will not rely on it as a separate basis for affirmative enforcement action or other administrative penalty. Furthermore, conformity with the guidance document (as distinct from existing statutes and regulations) is voluntary only, and nonconformity will not affect rights and obligations under existing statutes and regulations.

- **2.** Cancellation. This CertAlert cancels CertAlert 19-02, *Aqueous Film Forming Foam (AFFF) Testing at Certificated Part 139 Airports*, dated October 29, 2019.
- 3. Background. Title 14 Code of Federal Regulation (CFR) Part 139 requires airport operators to maintain their ARFF vehicles and their fire suppression operating systems. To help ensure their operability, the FAA recommends vehicle system testing occurs within the 6-month period before the airport's periodic airport certification safety inspection. Airports must maintain proper successful documentation of the testing and have it available during the periodic inspection. If the airport operator does not conduct testing within this interval, the FAA will require the airport operator to test AFFF during the airport's periodic inspection with those vehicles identified to meet the ARFF Index. Testing during the inspection may also include an analysis by refractometer or conductivity meter (as referenced in the National Fire Protection Association Standard 412). This testing ensures the vehicle is proportioning the AFFF and water correctly and within tolerance and demonstrates that the operator is knowledgeable about the equipment.

Testing the system is an integral part of maintaining ARFF vehicles in optimal condition for an emergency response.

Currently, all certificated Part 139 airports must use foams that meet military specifications (MIL-PRF-24385), listed on the Navy's Quality Product Database (QPD) website:

https://qpldocs.dla.mil/search/parts.aspx?qpl=1910¶m=QPL-24385&type=256

There is growing concern over the use and discharge of AFFF at airports. The molecular composition of specification MIL-PRF-24385 contains a chemical compound that may potentially contaminate drinking water. This concern led to the inclusion of a mandate within the FAA Reauthorization Act of 2018 (enacted October 5, 2018) directing the FAA to stop requiring the use of fluorinated foam no later than 3 years from the date of enactment (or on October 4, 2021).

Previously, the FAA Technical Center initiated research on three different types of AFFF testing equipment that do not require dispensing of foam. A fourth system has subsequently gone through testing and has been approved. The FAA will accept use of these systems, shown in paragraph 4(a) below, as options to test the AFFF function on ARFF vehicles.

The Office of Airport Programming and Planning signed Policy Guidance Letter 19-01, *Aqueous Film Forming Foam (AFFF) Input-Based Testing Equipment,* in June 2019 to address the funding eligibility of equipment, including airport rescue and firefighting truck modifications, to install in-line proportioner testing systems for AFFF.

4. Recommendations. The FAA recommends the following to airport operators:

- a. Consider using one of the following AFFF testing systems, accepted by the FAA for immediate use, to satisfy the Part 139 testing requirement while minimizing any possible environmental impact:
 - a. Eco-Logic System from E-One
 - b. NoFoam System
 - c. Oshkosh Eco EFP (Electronic Foam Proportioning) System
 - d. Rosenbauer FIXMIX 2.0E Input-Based Proportioning Test System

Note: Input-based tests done by the FAA had a greater correlation to output-based tests at a 3-percent proportioning rate than at a 6-percent proportioning rate. Confirmation testing performed by the vendor at delivery/installation that compares input- and output-based tests may help offset this difference by establishing reference values representing the current state of the vehicle. Therefore, the FAA highly recommends airports using the 6-percent foam proportioning rate have the vendor perform this confirmation testing at the time of delivery.

b. Consider establishing local Standard Operating Guidelines/Standard Operating Procedures (in conjunction with your local or state environmental regulatory organizations) to identify a suitable location/storage container to discharge AFFF for training and/or testing to ensure the functionality of the foam proportioning system on each ARFF vehicle.

- c. Consider establishing safe and environmentally effective handling and disposal procedures during testing and re-servicing of each ARFF vehicle with AFFF.
- d. Periodically visit the FAA ARFF webpage for further guidance: https://www.faa.gov/airports/airport_safety/aircraft_rescue_fire_fighting/
- e. Read the FAA Technical Center Report on Input-Based Foam Proportioner Testing, released on July 2, 2019 (available on the FAA ARFF webpage referenced above).
- f. Consider contacting your ARFF vehicle manufacturer for information on next steps and vehicle modifications to begin using these optional testing systems.

Antly 7 AFED	6/1/2021
Anthony Butters, Deputy Manager	Date
Airport Safety and Operations Division, AAS-300	

OMB CONTROL NUMBER: 2120-0569 OMB EXPIRATION DATE: 6/30/2023

PART IV - PROGRAM NARRATIVE

(Suggested Format)

PROJECT: Construct Taxilane and Hangar Access Approach

AIRPORT: Black Hills Airport / Clyde Ice Field

1. Objective:

Black Hills Airport / Clyde Ice Field is home to many different hangars and based aircraft. The airport has been approached by several pilots requesting a location to construct large box hangars. The proposed project is for the construction of a hangar taxilane that is 35' by 900' in the location and configuration as shown on the ALP. This taxilane is shown to provide access for up to 7 box hangars to the airfield. At this time there are two different parties that have moved forward with hangar construction and that construction is anticipated to take place in the summer of 2022.

2. Benefits Anticipated:

Increased available area for box hangar development at the airport. There are no remaining areas on the ALP for box hangars to be constructed.

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

The project will be developed in a standard design, bid, and build method. Size and configuration of the taxilane is consistent with the approved ALP and will accommodate for construction to two large box hangars scheduled for the summer of 2022.

4. Geographic Location:

Black Hills Airport / Clyde Ice Field; City of Spearfish; County of Lawrence; State of South Dakota.

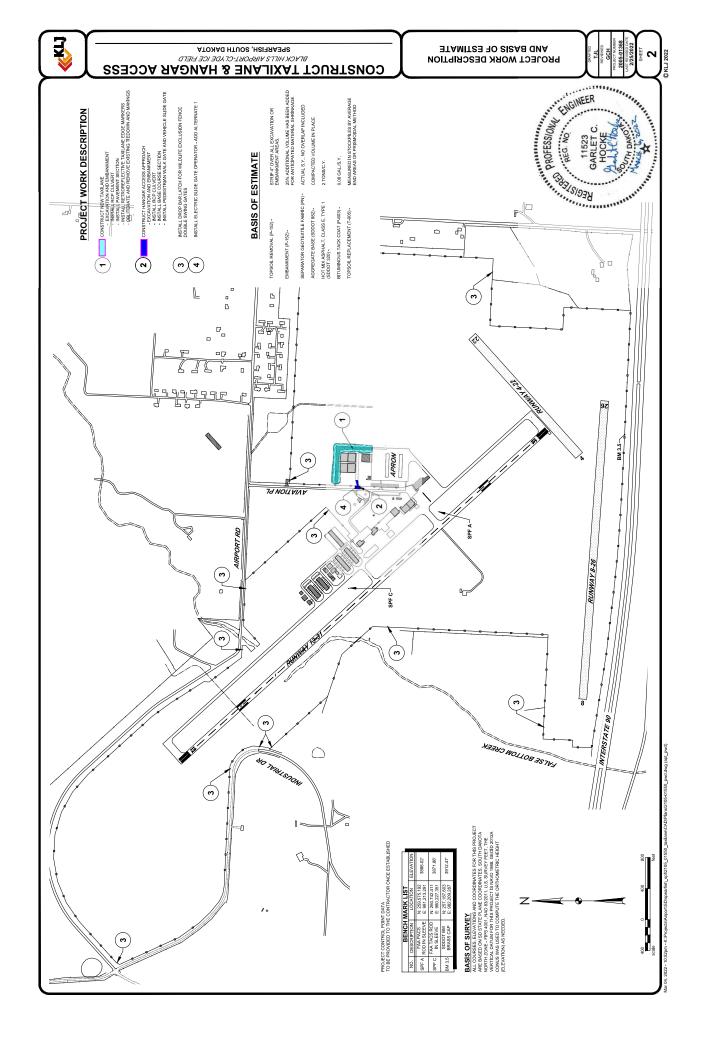
5. If Applicable, Provide Additional Information:

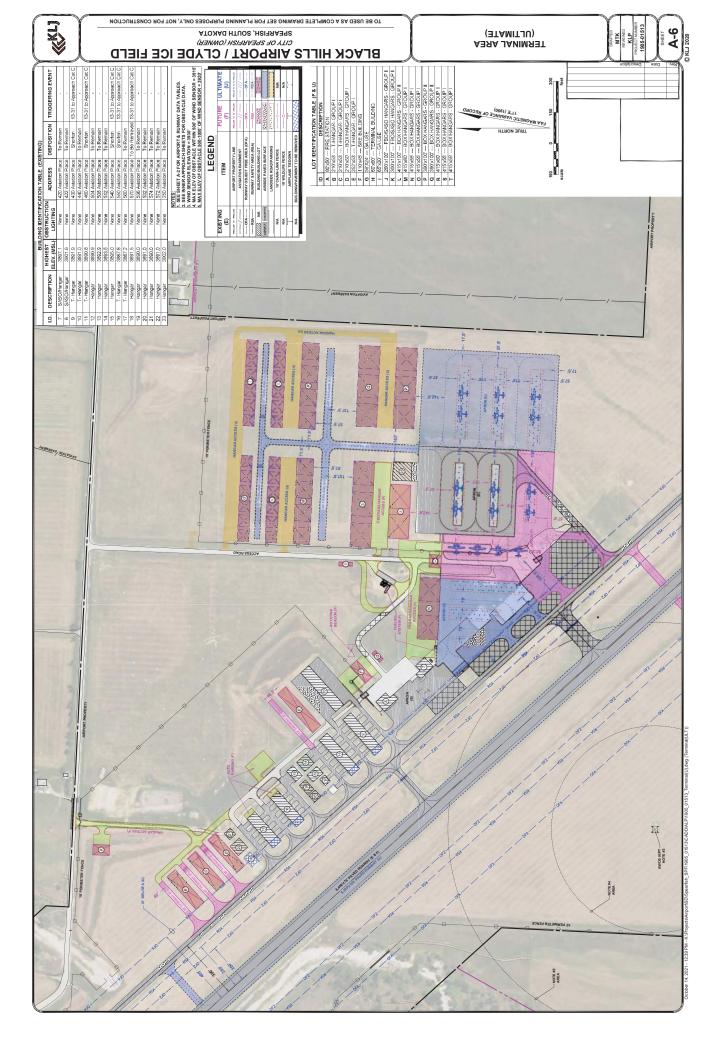
Not Applicable

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

Mr. Adam McMahon - Assistant Public Works Director - City of Spearfish 625 N. 5th Street

Spearfish, SD 57783 Ph. 605-717-1156 adam.mcmahon@cityofspearfish.com





OMB CONTROL NUMBER: 2120-0569 OMB EXPIRATION DATE: 6/30/2023

PART IV - PROGRAM NARRATIVE

(Suggested Format)

PROJECT: Runway 12-30 Reconstruct, Extend and Widen - Construction and Assoicated Services

AIRPORT: Wall Muncipal Airport

1. Objective:

The project is needed due 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 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 are complete and this grant will provide funding to reconstruct 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:

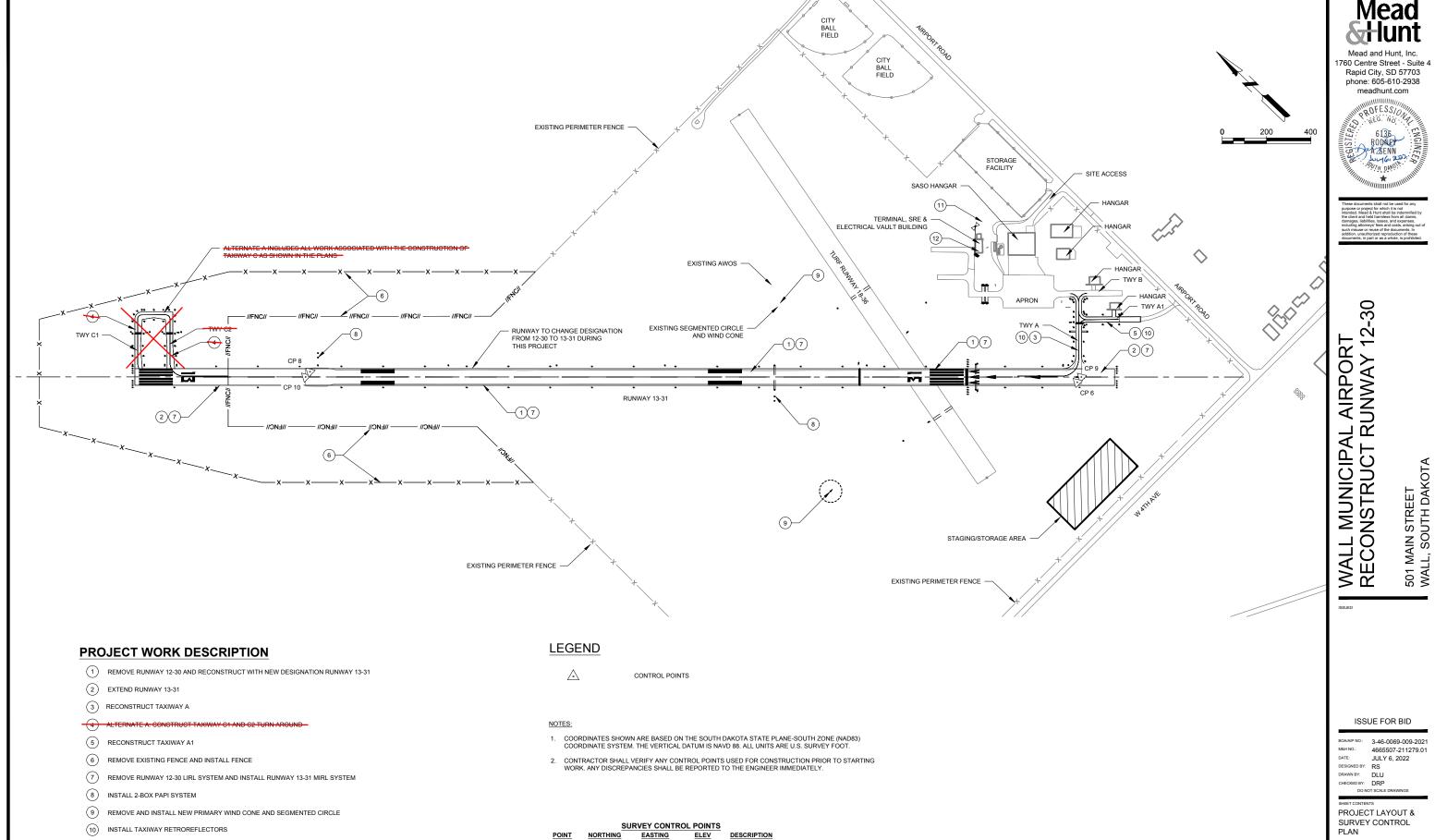
This is not a Letter of Intent project.

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



(11) REMOVE BEACON AND REPLACE WITH NEW BEACON AND TILT-DOWN POLE

12 ELECTRICAL VAULT MODIFICATIONS

	HOILIIII	LACTING		DECORUM HON
CP 6	611855.8544	1464181.8280	2812.18	GCP
CP 8	614394.7224	1461831.8180	2799.48	GCP
CP 9	611858.0633	1464211.9750	2812.26	FND MAG NAIL
CP 10	614393.1035	1461801.5220	2799.57	FND MAG NAIL

Mead Hunt

1760 Centre Street - Suite 4 Rapid City, SD 57703 phone: 605-610-2938 meadhunt.com



ISSUE FOR BID

BOA/AIP NO.: 3-46-0069-009-2021 4665507-211279.01 JULY 6, 2022

PROJECT LAYOUT &

G-021