

Department of Transportation
 Division of Secretariat
 Office of Air, Rail & Transit
 700 East Broadway Avenue
 Pierre, South Dakota 57501-2586
 OFFICE: 605/773-3574
 FAX: 605/773-2804

TO: South Dakota Aeronautics Commission
 FROM: Jack Dokken, Office of Aeronautics
 DATE: July 7, 2020
 SUBJECT: Financial Assistance Agreements

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

Britton 3-46-0004-014-2020

Acquire and install AWOS-III including site preparation.

Federal Share	\$378,000.00
State Share	\$
Local Share	\$
Total	\$378,000.00

Brookings 3-46-0005-032-2020

Design and construct hangar taxilane; reimburse access road reconstruction.

Federal Share	\$ 383,000.00
State Share	\$ 0
Local Share	\$ 0
Total	\$ 383,000.00

Canton 3-46-0007-009-2020

Construct hangar taxilane extension.

Federal Share	\$ 199,000.00
State Share	\$ 0
Local Share	\$ 0
Total	\$ 199,000.00

Chamberain 3-46-0071-010-2020

Environmental assessment for runway 17-35 extension.

Federal Share	\$ 225,000.00
State Share	\$
Local Share	\$
Total	\$ 225,000.00

Desmet 3-46-0063-014-2020

Construct runway turnarounds.

Federal Share	\$ 821,000.00
State Share	\$
Local Share	\$
Total	\$ 821,000.00

Eagle Butte 3-46-0068-011-2020

Design runway 13/31 reconstruction, environmental and geotechnical surveys.

Federal Share	\$ 240,000.00
State Share	\$
Local Share	\$
Total	\$ 240,000.00

Faith 3-46-0076-011-2020

Construct taxiway A1 and A3; relocate runway 31 threshold.

Federal Share	\$ 645,000.00
State Share	\$
Local Share	\$
Total	\$ 645,000.00

Flandreau 3-46-0077-011-2020

Miscellaneous planning study.

Federal Share	\$ 55,000.00
State Share	\$
Local Share	\$
Total	\$ 55,000.00

Gregory 3-46-0018-016-2020

Design runway 13/31 reconstruction and taxiway turnaround construction.

Federal Share	\$ 160,000.00
State Share	\$
Local Share	\$
Total	\$ 160,000.00

Madison 3-46-0029-018-2020

Design and bid for south GA apron expansion.

Federal Share	\$ 96,000.00
State Share	\$
Local Share	\$
Total	\$ 96,000.00

Martin 3-46-0030-014-2020

Acquisition of 18 acres for airport design standards.

Federal Share	\$ 196,887.00
State Share	\$
Local Share	\$
Total	\$ 196,887.00

McLaughlin 3-46-0031-010-2020

ALP update with narrative report, aeronautical obstruction and archaeological/TCS surveys.

Federal Share	\$ 220,000.00
State Share	\$
Local Share	\$
Total	\$ 220,000.00

Milbank 3-46-0034-016-2020

Land acquisition for runway 13/31 RPZ & departure surfaces.

Federal Share	\$ 285,000.00
State Share	\$
Local Share	\$
Total	\$ 285,000.00

Mitchell 3-46-0037-028-2020

Master Plan with ALP update, cultural survey and aeronautical obstruction survey.

Federal Share	\$ 430,000.00
State Share	\$
Local Share	\$
Total	\$ 430,000.00

Onida 3-46-0041-012-2020

Design runway 13/31 reconstruction and taxiway turnaround construction.

Federal Share	\$ 180,000.00
State Share	\$
Local Share	\$
Total	\$ 180,000.00

Parkston 3-46-0042-013-2020

Design and construction 4-unit revenue-generating hangar.

Federal Share	\$ 787,000.00
State Share	\$
Local Share	\$
Total	\$ 787,000.00

Platte 3-46-0066-011-2020

Construct GA terminal and revenue-producing hangar, site grading, fence/gate relocation.

Federal Share	\$ 680,000.00
State Share	\$
Local Share	\$
Total	\$ 680,000.00

Rapid City 3-46-0048-053-2020

SRE procurement; relocate 14-32 hold position markings; design terminal chiller replacement.

Federal Share	\$ 1,320,000.00
State Share	\$
Local Share	\$
Total	\$ 1,320,000.00

Rapid City 3-46-0048-055-2020

Passenger boarding bridges – design, construction, engineering.

Federal Share	\$ 2,155,000.00
State Share	\$
Local Share	\$ 239,444.44
Total	\$ 2,394,444.44

Redfield 3-46-0049-013-2020

Design and construct 10' wildlife fence, with gates and buried skirting.

Federal Share	\$ 585,000.00
State Share	\$
Local Share	\$
Total	\$ 585,000.00

Rosebud 3-46-0082-012-2020

Master plan and ALP update; aeronautical obstruction survey.

Federal Share	\$ 250,000.00
State Share	\$
Local Share	\$
Total	\$ 250,000.00

Sturgis 3-46-0054-016-2020

Construct 6-unit T hangar, approach pavement, taxilane, reconstruct existing taxilanes, pave access road.

Federal Share	\$ 1,344,000.00
State Share	\$
Local Share	\$
Total	\$ 1,344,000.00

Vermillion 3-46-0056-014-2020

Reconstruct 2,200' hangar taxilanes.

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

Watertown 3-46-0058-011-2020

Design new passenger terminal; purchase ARFF foam cart.

Federal Share	\$ 1,550,000.00
State Share	\$
Local Share	\$ 352,526.72
Total	\$ 1,902,526.72

Winner 3-46-0061-016-2020

Design and construct 100'x200' expansion on southeast side of GA apron; replacement of affected ramp lighting.

Federal Share	\$ 625,000.00
State Share	\$
Local Share	\$
Total	\$ 625,000.00

Yankton 3-46-0062-031-2020

Reconstruct runway 1-19, remark 1-19 to 2-20 and install new MIRL.

Federal Share	\$ 2,737,000.00
State Share	\$
Local Share	\$
Total	\$ 2,737,000.00

SDDOT 3-46-4600-026-2020

Pavement maintenance for airports at DeSmet, Eureka, Faulkton, Flandreau, Gettysburg, Huron, Mitchell, Murdo, Pine Ridge, Redfield, Sisseton, Spearfish and Wagner.

Federal Share	\$ 1,780,000.00
State Share	\$
Local Share	\$
Total	\$ 1,780,000.00

PART IV – PROGRAM NARRATIVE
(Suggested Format)**PROJECT:** AIP #3-46-0004-013-2020**AIRPORT:** Britton Municipal Airport**1. Objective:**

This project shall consist of the airport obtaining and installing an AWOS III-P. A land reimbursement request will also be part of this project for Lot 1 as shown in the attached project sketch.

2. Benefits Anticipated:

Britton Municipal Airport has an average of 53 operations/week at the airport according to the AIRNAV, updated May 2019. Users have expressed great interest in onsite weather reporting equipment. The closest AWOS III unit is 25 nautical miles north in Gwinner, North Dakota. Fixed wing air ambulances also desire the weather reporting equipment to monitor site conditions to make informed decisions when retrieving patients.

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

Complete Topographic Survey
Begin Design
Develop Preliminary Design Report
Develop Construction Safety Plan
Complete Design for FAA Review
Advertise the Project and Open Bids
Award the Construction Contract
Construct AWOS III or AWOS AV
Prepare As-Constructed Drawings
Assemble Closeout Documentation

4. Geographic Location:

Britton Municipal Airport, Britton, Marshall County, South Dakota

5. If Applicable, Provide Additional Information:

The negotiations are ongoing with the land owner that owns the property in the 13 End Approach Surface. There is an unoccupied residence within that area and it is in the City's best interest to control the use in this area.

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

Clyde Fredrickson, Mayor 605-448-5721
PO Box 126
Britton, SD 57430-0126

PART IV – PROGRAM NARRATIVE
(Suggested Format)**PROJECT:** AIP #3-46-0005-032-2020**AIRPORT:** Brookings Regional Airport**1. Objective:**

This project shall include the reconstruction of a Hangar Taxilane ($\pm 350' \times 35'$). This work includes Full Depth Reclamation, Grading, Subbase Course, Aggregate Base Course, Asphalt Paving, Underdrain Piping, Pavement Marking, Topsoiling, Seeding, and Erosion Control.

This project will also reimburse the City of Brookings for the Alternate Bid No. 1 Access Road Reconstruction from the 2019 Apron and Taxilane Improvements project.

2. Benefits Anticipated:

The new taxilane will replace the old taxilane with a PCI of 0.

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

Complete Geotechnical Subgrade Exploration
Complete Topographic Survey
Begin Design
Develop Preliminary Design Report
Develop Construction Safety Plan
Complete Design for FAA Review
Advertise the Project and Open Bids
Award the Construction Contract

4. Geographic Location:

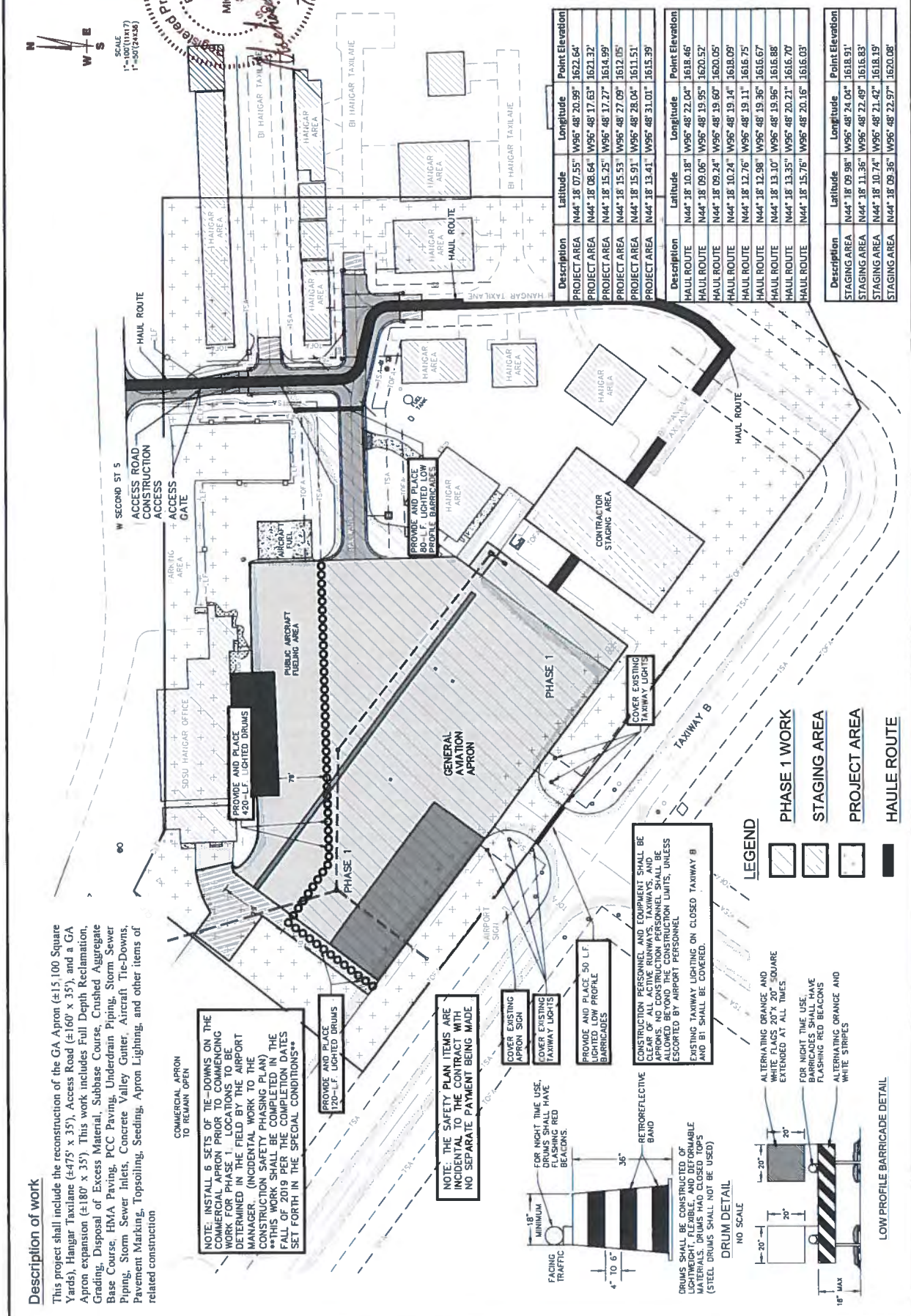
Brookings Regional Airport, Brookings, Brookings County, South Dakota

5. If Applicable, Provide Additional Information:**6. Sponsor's Representative:** (include address & telephone number)

Jackie Lanning, City Engineer 605-692-6629
PO Box 270
Brookings, SD 57006

Helms & Associates
 CIVIL ENGINEERS & LAND SURVEYORS
 221 Brown County Highway 19
 Hillsboro, IL 61748
 Phone: (815) 233-1212
 Fax: (815) 233-1219
 Email: service@helmsandassociates.com

CONSTRUCTION SAFETY PHASING PLAN LAYOUT-PHASE 1
 APRON AND TAXILANE IMPROVEMENTS
 BROOMING SOUTH DAKOTA
 BROOMING SOUTH DAKOTA
 11/16/18

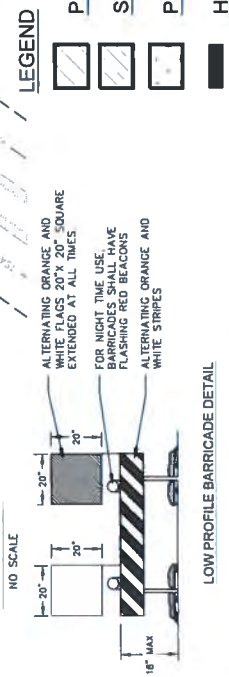
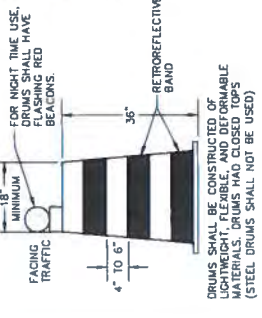


Description of work

This project shall include the reconstruction of the GA Apron (±15,100 Square Yards), Hangar Taxiway (±475' x 35'), Access Road (±160' x 35'), and a GA Apron expansion (±180' x 35'). This work includes Full Depth Reclamation, Grading, Disposal of Excess Material, Subbase Course, Crushed Aggregate Base Course, RMA Paving, PCC Paving, Underdrain Piping, Storm Sewer Piping, Storm Sewer Inlets, Concrete Valley Gutter, Aircraft Tie-Downs, Pavement Marking, Topsoiling, Seeding, Apron Lighting, and other items of related construction.

NOTE: INSTALL 6 SETS OF TIE-DOWNS ON THE COMMERCIAL APRON PRIOR TO COMMENCING WORK FOR PHASE 1. LOCATIONS TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR AND REPORT TO THE MANAGER OF THE PROJECT (INCIDENTAL PHASING PLAN). ALL WORK SHALL BE COMPLETED IN THE FALL OF 2019 PER THE COMPLETION DATES SET FORTH IN THE SPECIAL CONDITIONS**

NOTE: THE SAFETY PLAN ITEMS ARE INCIDENTAL TO THE CONTRACT WITH NO SEPARATE PAYMENT BEING MADE.



Description	Latitude	Longitude	Point Elevation
PROJECT AREA	N44° 18' 07.55"	W95° 48' 20.99"	1622.64'
PROJECT AREA	N44° 18' 08.64"	W95° 48' 37.63"	1621.32'
PROJECT AREA	N44° 18' 15.25"	W95° 48' 37.27"	1614.99'
PROJECT AREA	N44° 18' 15.91"	W95° 48' 28.04"	1611.51'
PROJECT AREA	N44° 18' 13.41"	W95° 48' 31.01"	1615.29'

Description	Latitude	Longitude	Point Elevation
HAUL ROUTE	N44° 18' 10.18"	W95° 48' 22.04"	1618.46'
HAUL ROUTE	N44° 18' 09.06"	W95° 48' 19.95"	1620.52'
HAUL ROUTE	N44° 18' 09.24"	W95° 48' 19.60"	1620.05'
HAUL ROUTE	N44° 18' 10.24"	W95° 48' 19.14"	1618.09'
HAUL ROUTE	N44° 18' 12.76"	W95° 48' 19.11"	1616.75'
HAUL ROUTE	N44° 18' 12.98"	W95° 48' 19.36"	1616.67'
HAUL ROUTE	N44° 18' 13.10"	W95° 48' 19.96"	1616.88'
HAUL ROUTE	N44° 18' 13.35"	W95° 48' 20.21"	1616.70'
HAUL ROUTE	N44° 18' 15.76"	W95° 48' 20.16"	1616.03'

Description	Latitude	Longitude	Point Elevation
STAGING AREA	N44° 18' 09.98"	W95° 48' 24.04"	1618.91'
STAGING AREA	N44° 18' 11.36"	W95° 48' 22.49"	1616.83'
STAGING AREA	N44° 18' 10.74"	W95° 48' 21.42"	1618.19'
STAGING AREA	N44° 18' 09.36"	W95° 48' 22.97"	1620.08'



CANTON MUNICIPAL AIRPORT
CITY OF CANTON
CANTON, SOUTH DAKOTA

PROJECT WORK DESCRIPTION
& BASIS OF ESTIMATE

DRAWN BY: JJB
REVIEWED BY: JJB
PROJECT NUMBER: 14517116
LAST REVISED DATE: 03/27/2020
SHEET: 1

PROJECT WORK DESCRIPTION

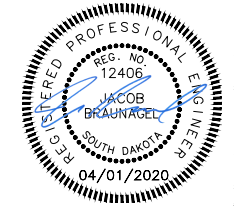
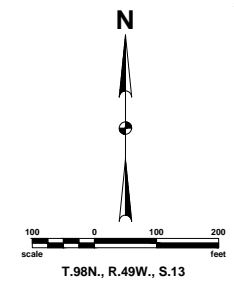
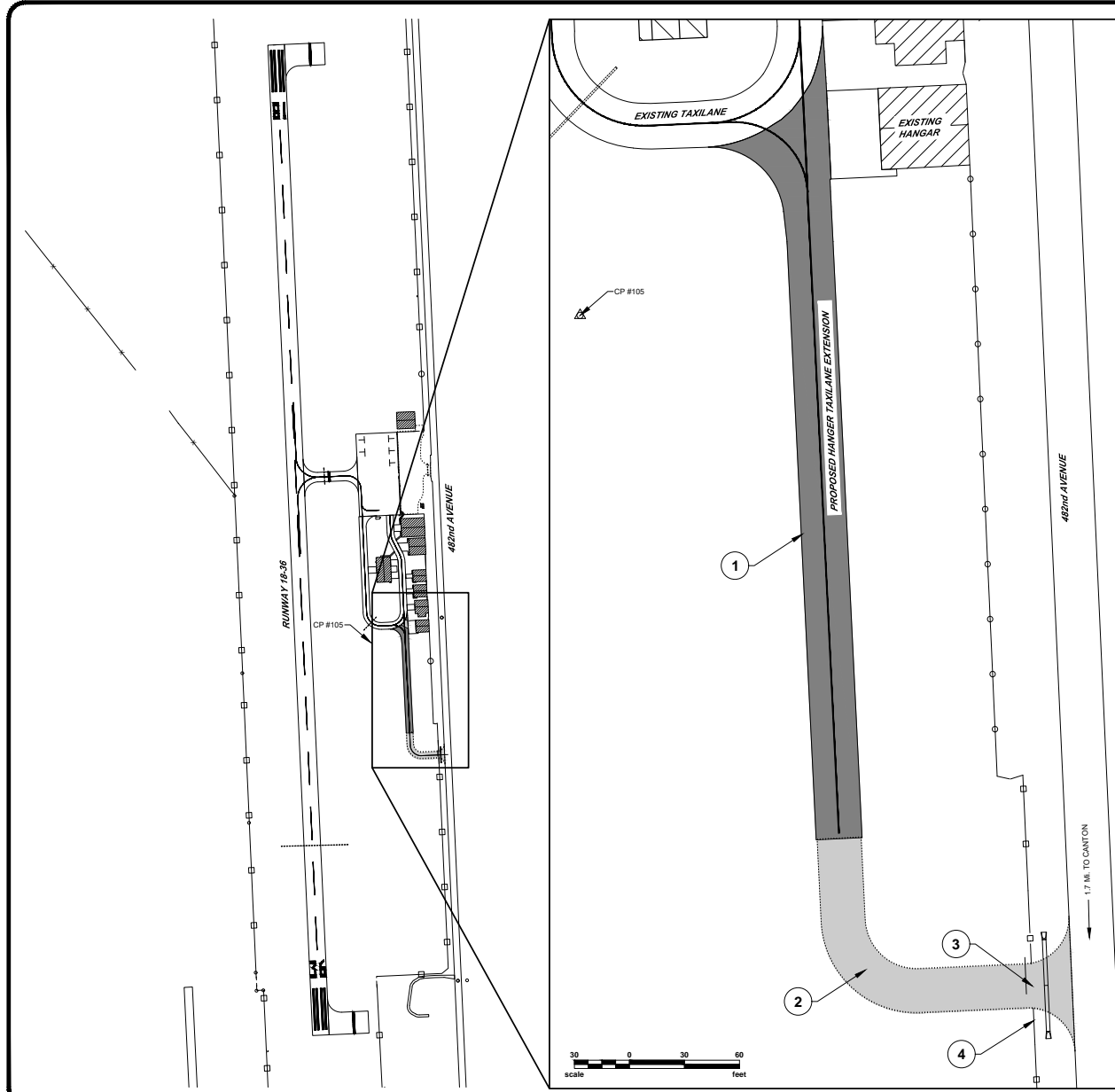
- 1 CONSTRUCT HANGAR TAXILANE EXTENSION (APPROX. 400' X 25')
- 2 CONSTRUCT GRAVEL ACCESS ROAD (APPROX. 195' X 25')
- 3 REMOVE EXISTING FENCE AND INSTALL 24' MANUAL SINGLE SLIDE GATE
- 4 REMOVE AND REINSTALL EXISTING FENCE (APPROX. 60 L.F.)

BASIS OF ESTIMATE

CONCRETE PAVEMENT REMOVAL - FULL DEPTH (P-101) -	AVERAGE DEPTH CONCRETE PAVEMENT: ±5"
TOPSOIL REMOVAL (P-152) -	STRIP 6" OVER ALL EXCAVATION OR EMBANKMENT AREAS. (INCLUDED IN UNCLASSIFIED EXCAVATION QUANTITY FOR PAYMENT)
EMBANKMENT (P-152) -	15% ADDITIONAL VOLUME HAS BEEN ADDED FOR SHRINKAGE
SEPARATION GEOTEXTILE (P-154) -	ACTUAL S.Y., NO OVERLAP INCLUDED
GEOGRID (P-154) -	ACTUAL S.Y., NO OVERLAP INCLUDED
SUBBASE COURSE (P-154) -	COMPACTED VOLUME IN PLACE
AGGREGATE BASE (SDDOT 260) -	COMPACTED VOLUME IN PLACE
HOT MIX ASPHALT PAVEMENT (SDDOT 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)

CONTROL POINT LIST			
NO.	DESCRIPTION	LOCATION	ELEVATION
105	7"X60" REBAR	N377,903.71 E2,969,733.96	1277.11'

NOTE: VERIFY ELEVATIONS IN FIELD PRIOR TO CONSTRUCTION.



Project Narrative (Justification)

2020 FAA Grant Application

Canton Municipal Airport

Project Item

Construct Hangar Taxilane Extension

What is the Project?

The project is for construction of a hangar taxilane extension at Canton Municipal Airport.

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 in the only remaining locations where existing taxilanes are located. The new taxilanes will provide access to new hangar development areas. The airport is maintaining a list of requests for hangar development space. The taxilanes would also provide access for a future T-hangar that is included in the Capital Improvement Plan (CIP). If the taxilanes project is delayed, there will be no available hangar development area remaining 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 project will ensure long-term economic sustainability of the airport by increasing revenues and based aircraft. With no available hangar development space, pilots are more often choosing another airport; this in turn will lead to a decreased outlook on fuel sales and land lease revenue. New taxilanes will increase based aircraft while also potentially attracting additional itinerant aircraft in the future when the T-Hangar is built.

The taxilanes project also addresses a goal identified in the South Dakota State Aviation System Plan (SDSASP). Canton is identified as a Small General Aviation Airport in the SDSASP. One goal for Small General Aviation Airports is to have hangar space available for 100% of based aircraft. The new taxilanes would allow for new hangar development spaces so that the airport can continue to provide hangar space for all based aircraft as user demand continues to increase at the airfield. This project helps to maintain and implement improvements to this goal.

Is the Project Phased?

Yes. This is the second phase of the project. The first phase of the project was the completion of the project plans and specifications.

Part IV - Program Narrative

(Suggested Format)

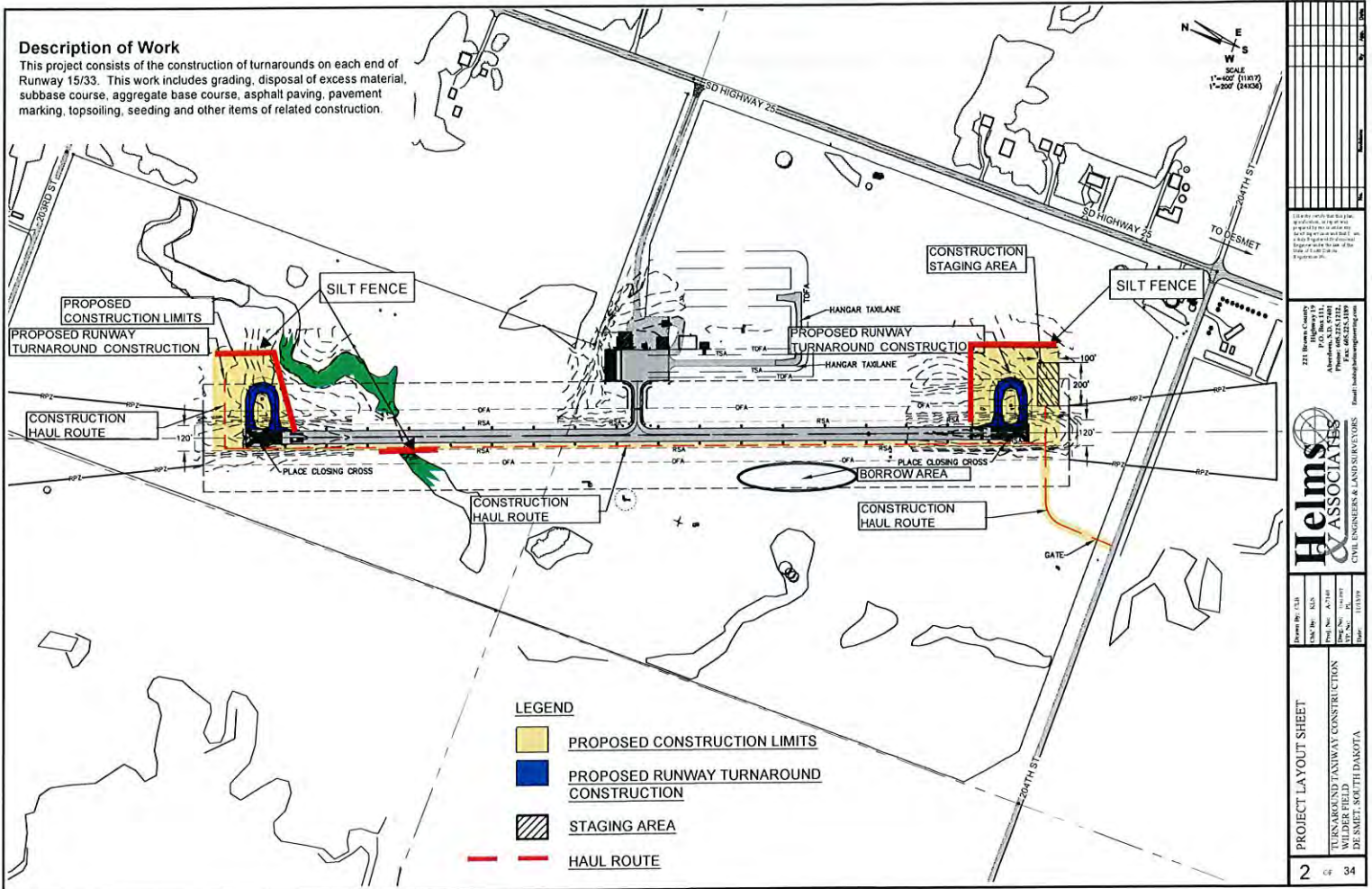
PROJECT:
AIRPORT:
1. Objective:
2. Benefits Anticipated:
3. Approach: <i>(See approved Scope of Work in Final Application)</i>
4. Geographic Location:
5. If Applicable, Provide Additional Information:
6. Sponsor's Representative: <i>(include address & telephone number)</i>

PART IV – PROGRAM NARRATIVE
(Suggested Format)

PROJECT: AIP #3-46-0063-014-2020
AIRPORT: Wilder Field
<p>1. Objective:</p> <p>This project shall include the construction of the turnarounds (±21,740 SqFt) on each end of Runway 15/33. This work shall include grading, disposal of excess material, subbase course, aggregate base course, asphalt paving, storm sewer piping, pavement marking, topsoiling, seeding, and other items of related construction.</p>
<p>2. Benefits Anticipated:</p> <p>Wilder Field does not possess runway turnarounds for aircraft to exit the runway for incoming traffic. All incoming traffic at Wilder Field must back taxi once landing on Runway 15/33. By constructing turnarounds at each end, aircraft would have the ability to exit the runway quickly. Aircraft taking off would also have the option to exit the runway prior to final takeoff to allow for emergency aircraft to land immediately and safely.</p>
<p>3. Approach: (See approved Scope of Work in Final Application)</p> <ul style="list-style-type: none"> Advertise the Project and Open Bids Award the Construction Contract Construct Taxiway Turnarounds Prepare As-Constructed Drawings Assemble Closeout Documentation
<p>4. Geographic Location:</p> <p>Wilder Field, De Smet, Kingsbury County, South Dakota</p>
<p>5. If Applicable, Provide Additional Information:</p>
<p>6. Sponsor's Representative: (include address & telephone number)</p> <p>Gary Wolkow 605-854-9074 PO Box 70 De Smet, SD 57231-0070</p>

Description of Work

This project consists of the construction of turnarounds on each end of Runway 15/33. This work includes grading, disposal of excess material, subbase course, aggregate base course, asphalt paving, pavement marking, topsoiling, seeding and other items of related construction.



LEGEND

- PROPOSED CONSTRUCTION LIMITS
- PROPOSED RUNWAY TURNAROUND CONSTRUCTION
- STAGING AREA
- HAUL ROUTE

<p>221 Brown County P.O. Highway 10 Aberdeen, S.D. 57401 Phone: 605.221.3100 Email: hals@helsandassociates.com</p> <p>Helms & Associates, Inc. CIVIL ENGINEER & LAND SURVEYOR</p>	<p>Drawn By: JLS Check By: RLS Plot No.: A-1148 Date: 11/19/19</p> <p>PROJECT LAYOUT SHEET TURNAROUND/TAXIWAY CONSTRUCTION WILDBEE FIELD DE SMET, SOUTH DAKOTA</p> <p>2 OF 34</p>
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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)

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)



FAITH MUNICIPAL AIRPORT
CITY OF FAITH
FAITH, SOUTH DAKOTA

PROJECT WORK DESCRIPTION

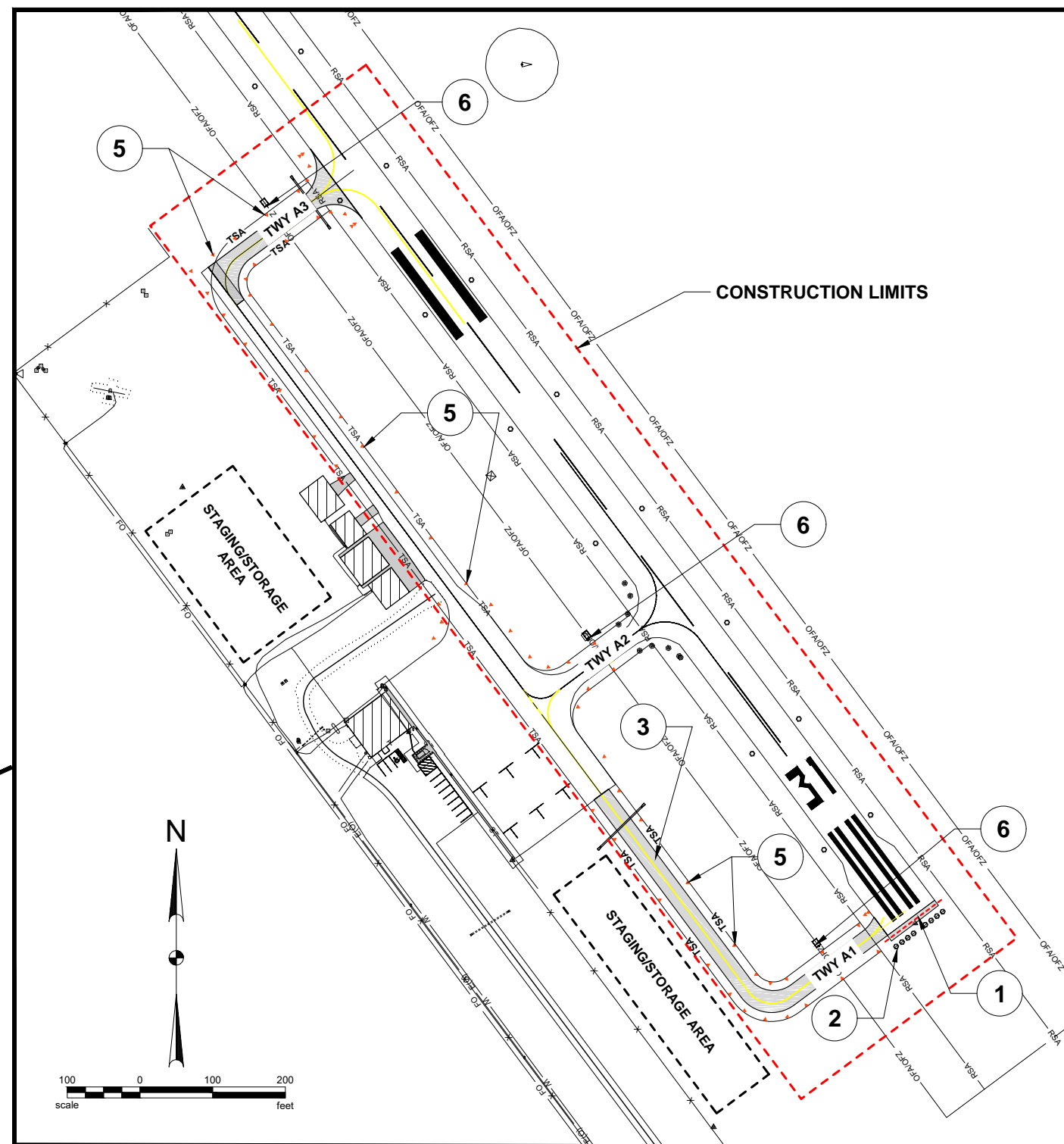
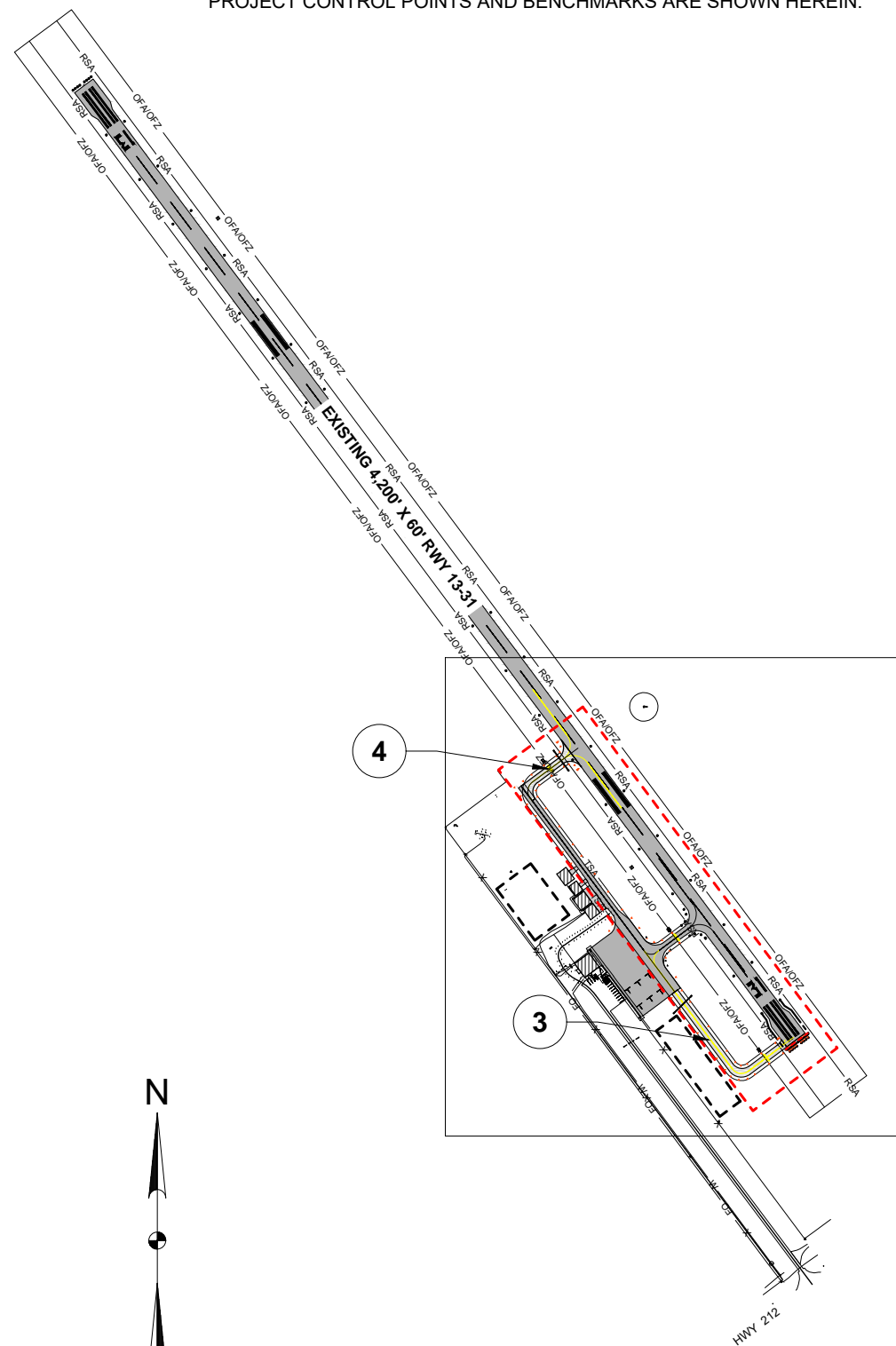
DRAFTED
MRM
REVIEWED
SLS
PROJECT NUMBER
2005-00779
LAST REVISED DATE
06/09/2020

SHEET

5

BASIS OF SURVEY

ALL COURSES, ELEVATIONS AND COORDINATES FOR THIS PROJECT ARE BASES ON SD STATE PLANE COORDINATES, SOUTH DAKOTA NORTH, ZONE, NAD 83/2011, U.S. SURVEY FEET. THE VERTICAL DATUM FOR THIS PROJECT IS NAVD 1988. GEOID 2012B, CONUS WAS USED TO COMPUTE THE ORTHOMETRIC HEIGHT (ELEVATION) AS NEEDED. THE PROJECT CONTROL POINTS AND BENCHMARKS ARE SHOWN HEREIN.



PROJECT WORK DESCRIPTION

- 1** REMOVE 10' OF PAVEMENT FROM 31 END TO CLEAR HWY 212 WITH PART 77 20:1 APPROACH.
- 2** RELOCATE RUNWAY 31 END THRESHOLD LIGHTS - (8 EACH)
- 3** CONSTRUCT TAXIWAY A1 - (560' x 25')
INCLUDES 18" CULVERT WITH END SECTIONS - (78')
- 4** CONSTRUCT TAXIWAY A3 - (200' x 25')
INCLUDES 18" CULVERT WITH END SECTIONS - (78')
- 5** INSTALL TAXIWAY EDGE RETROREFLECTIVE MARKERS - (67 EACH)
- 6** INSTALL RUNWAY HOLDING POSITION UNLIGHTED SIGNS - (3 EACH)

Part IV - Program Narrative

(Suggested Format)

PROJECT: AIP #3-46-0077-011-2020
AIRPORT: Flandreau Municipal Airport
1. Objective: This project shall consist of an update to the ALP and review of alternatives for the primary runway.
2. Benefits Anticipated: A review of alternatives meeting the FAA standards for RPZ and an update to the ALP are needed.
3. Approach: <i>(See approved Scope of Work in Final Application)</i> Complete Alternatives Analysis and Update ALP.
4. Geographic Location: Flandreau Municipal Airport, Moody County, South Dakota
5. If Applicable, Provide Additional Information:
6. Sponsor's Representative: <i>(include address & telephone number)</i> Mark Bonrud, Mayor 605-997-2492 1005 W. Elm Ave. Flandreau, SD 57028

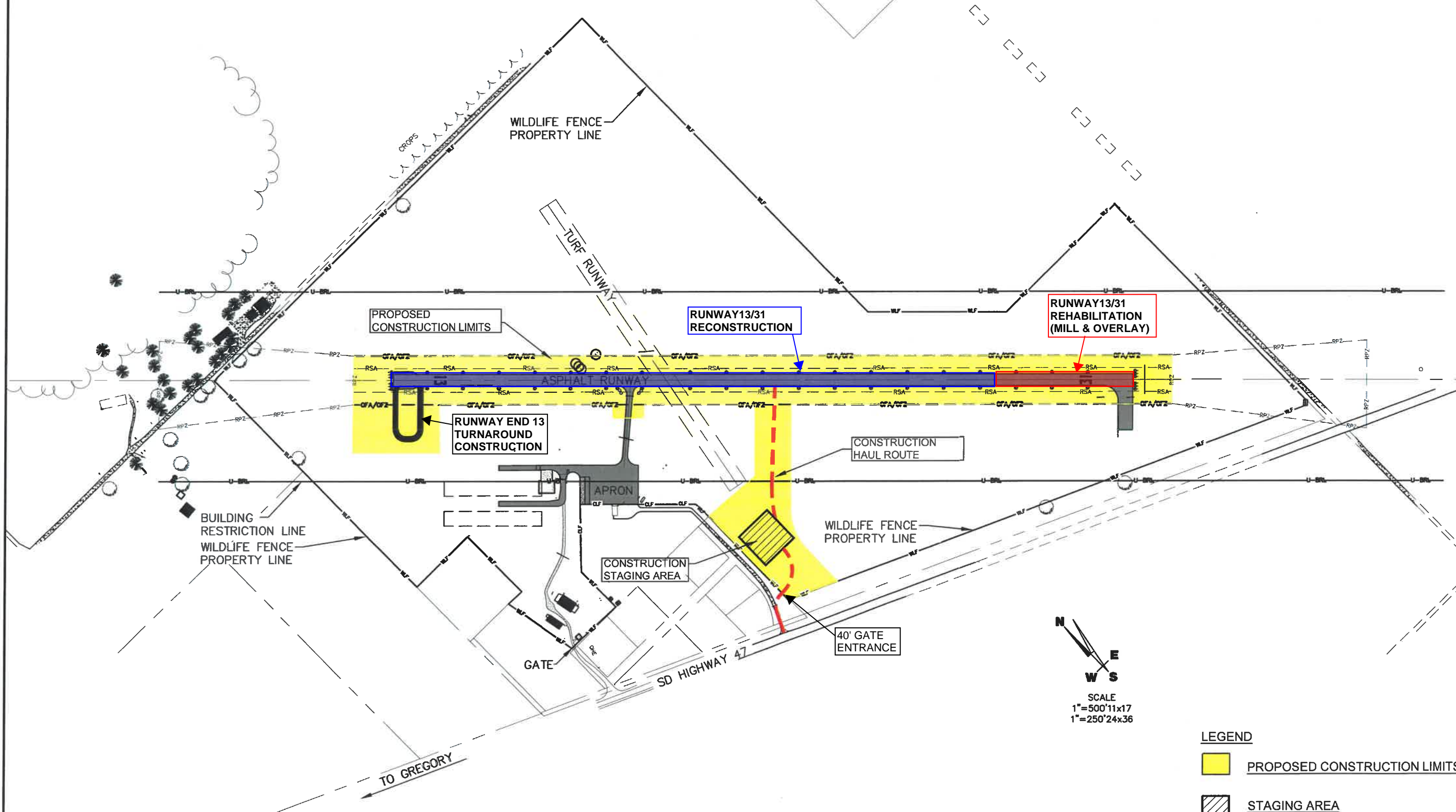
PART IV – PROGRAM NARRATIVE
(Suggested Format)

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)

DESCRIPTION OF WORK:

This project shall include the DESIGN ONLY of the Runway 13/31 Reconstruction/Rehabilitation with Turnaround Construction on the 13 end.

GREGORY MUNICIPAL AIRPORT



LEGEND

	PROPOSED CONSTRUCTION LIMITS
	STAGING AREA
	HAUL ROUTE

<p>221 Brown County Highway 19 Highway 111, P.O. Box 111, Aberdeen, S.D. 57401 Phone: 605.225.1212, Fax: 605.225.3189 Email: bob@helmsengineering.com</p> <p>Helms & Associates CIVIL ENGINEERS & LAND SURVEYORS</p>	<p>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. _____</p> <p>Drawn By: HELMS Chk' By: HELMS Proj. No: A-7337 Dwg. No: 757-LAYOUT VP. No: LAYOUT Date: 11-2019</p>
<p>PROJECT SKETCH/DESCRIPTION</p> <p>GREGORY MUNICIPAL AIRPORT HANGAR TAXILANE EXPANSION GREGORY, SOUTH DAKOTA</p>	
<p>1 OF 1</p>	

Madison Municipal Airport
Design Apron Expansion
AIP #3-46-0029-018-2020
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.

Part IV - Program Narrative

(Suggested Format)

PROJECT: AIP #3-46-0082-012-2020
AIRPORT: McLaughlin Municipal Airport
<p>1. Objective:</p> <p>This project shall consist of an ALP update with an accompanying narrative report. Included with the ALP update is an aeronautical obstruction survey and Archaeological/TCS survey.</p>
<p>2. Benefits Anticipated:</p> <p>The current ALP was completed as part of a grant in 2000. The ALP needs to be updated to show existing conditions and plan for the future. As part of the update, an approach survey will also be performed in order for the airport to obtain approaches on either end of the runway.</p>
<p>3. Approach: <i>(See approved Scope of Work in Final Application)</i></p> <p>Conduct meetings with the City and airport advisory board. Coordinate meetings with the City, SDDOT, and FAA. Topographical Survey Sub-consultant to Perform Aeronautical Obstruction Survey Sub-consultant to Perform Archaeological/TCS Survey Develop Airport Layout Plan Compose Airport Narrative Report Project Closeout Documents</p>
<p>4. Geographic Location:</p> <p>McLaughlin Municipal Airport, McLaughlin, Corson County, South Dakota</p>
<p>5. If Applicable, Provide Additional Information:</p>
<p>6. Sponsor's Representative: <i>(include address & telephone number)</i></p> <p>Arnold Schott, Mayor 605-823-4428 PO Box 169 McLaughlin, SD 57642-0169</p>

PART IV – PROGRAM NARRATIVE
(Suggested Format)**PROJECT:** AIP #3-46-0034-017-2020**AIRPORT:** Milbank Municipal Airport**1. Objective:**

The City of Milbank completed an EA for the purchase of property for the Runway 13/31 RPZ Departure Surfaces.

2. Benefits Anticipated:

The land appraisals and acquisition are necessary to ensure compatible land use by keeping incompatible land uses from being constructed there and to maintain clear approaches.

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

Appraisals were completed
Offers have been distributed
Negotiations with the land owners have occurred or are occurring
Finalizing purchase agreements

4. Geographic Location:

Milbank Municipal Airport
Milbank, Grant County, South Dakota

5. If Applicable, Provide Additional Information:**6. Sponsor's Representative: (include address & telephone number)**

John Foreman, City Administrator 605-432-9575
1001 E. 4th Ave. #301
Milbank, SD 57252

Part IV - Program Narrative

(Suggested Format)

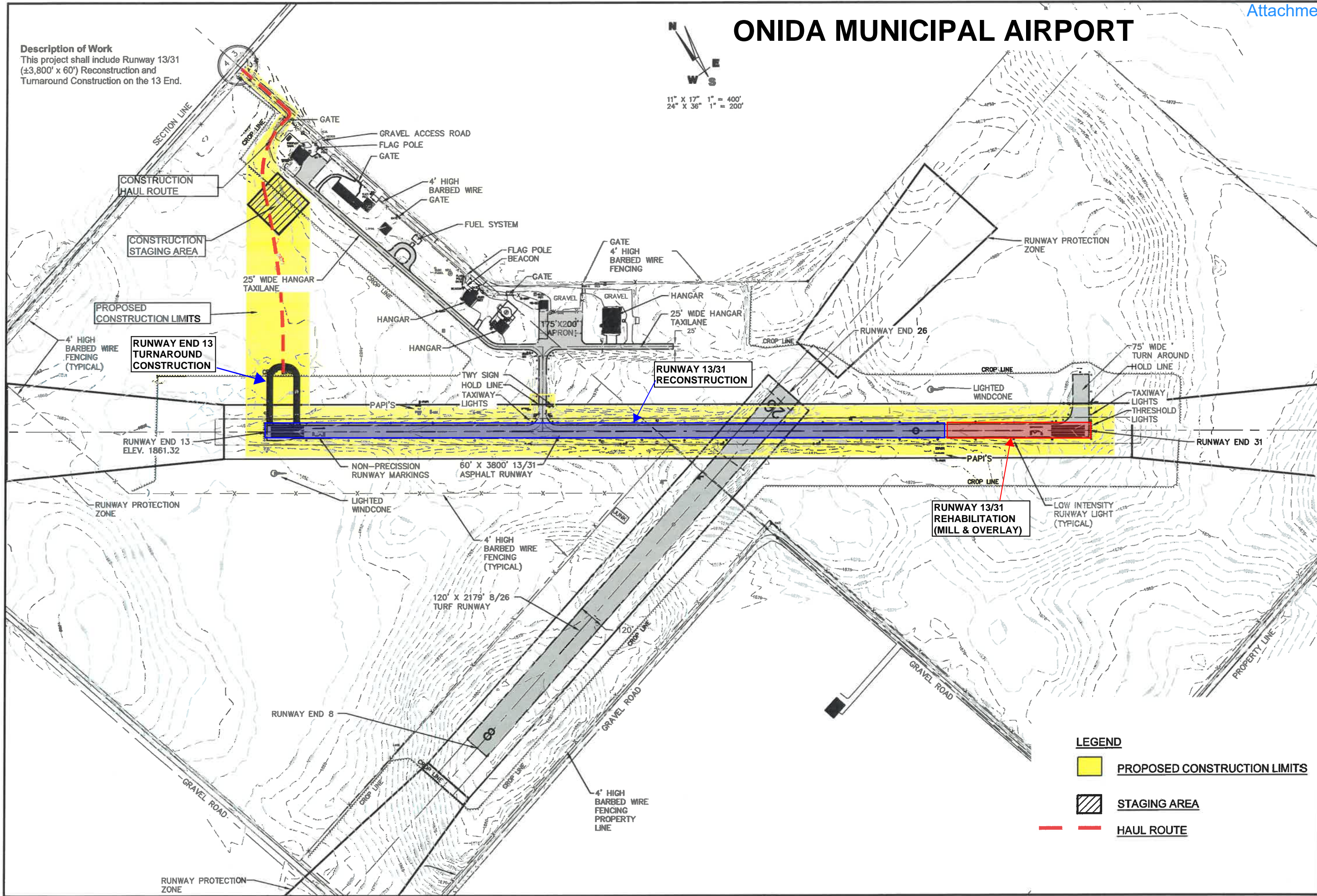
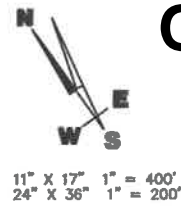
PROJECT:
AIRPORT:
1. Objective:
2. Benefits Anticipated:
3. Approach: <i>(See approved Scope of Work in Final Application)</i>
4. Geographic Location:
5. If Applicable, Provide Additional Information:
6. Sponsor's Representative: <i>(include address & telephone number)</i>

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)

ONIDA MUNICIPAL AIRPORT

Description of Work
 This project shall include Runway 13/31
 (±3,800' x 60') Reconstruction and
 Turnaround Construction on the 13 End.



- LEGEND**
- PROPOSED CONSTRUCTION LIMITS
 - STAGING AREA
 - HAUL ROUTE

<p>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. _____</p>	<p>221 Brown County Highway 19 P.O. Box 111, Aberdeen, S.D. 57401 Phone: 605.225.1212, Fax: 605.225.3189 Email: terry@helmsandassociates.com</p>
<p>Helms & Associates CIVIL ENGINEERS & LAND SURVEYORS</p>	
<p>Drawn By: HELMS Ck'd By: _____ Proj. No: A-7538 Dwg. No: AIRPORT LAYOUT VP. No: LAYOUT Date: 11-2019</p>	<p>66TH ST PROPERTY LINE</p>
<p>PROJECT SKETCH/DESCRIPTION AIRPORT LAYOUT PLAN ONIDA MUNICIPAL AIRPORT ONIDA, SOUTH DAKOTA</p>	
<p>1 OF 1</p>	

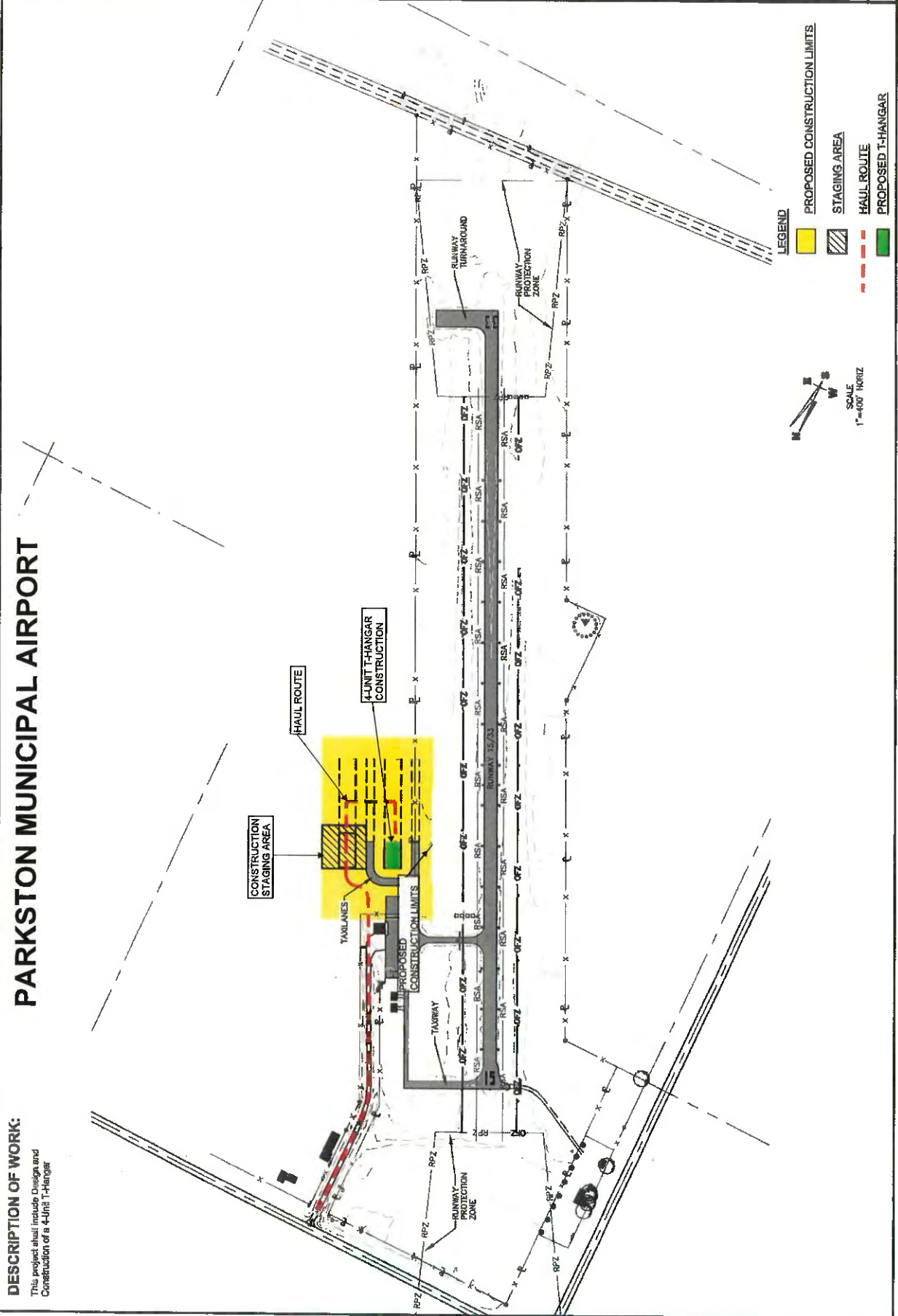
PART IV – PROGRAM NARRATIVE
(Suggested Format)

PROJECT: AIP #3-46-0042-013-2020
AIRPORT: Parkston Municipal Airport
<p>1. Objective:</p> <p>This project shall consist of the Design and Construction of a 4-Unit T-Hangar. The T-Hangar will be located between the new hangar taxilanes, southeast of the apron.</p>
<p>2. Benefits Anticipated:</p> <p>The Parkston Municipal Airport recently constructed a hangar taxilane expansion in 2016. The existing hangar on the airport is full of aircraft and there is a growing need for additional hangar storage space at the airport. The proposed T-Hangar will allow for existing and transient users to store their aircraft. The construction of a revenue producing hangar would prevent pilots from being wait listed for hangar space, allowing Parkston to be a more financially secure airport.</p>
<p>3. Approach: (See approved Scope of Work in Final Application)</p> <ul style="list-style-type: none"> Complete Geotechnical Exploration Complete Topographic Survey Begin Design Develop Preliminary Design Report Develop Construction Safety Plan Complete Design for FAA Review Advertise the Project and Open Bids Award the Construction Contract Construct 4-Unit T-Hangars Prepare As-Constructed Drawings Assemble Closeout Documentation
<p>4. Geographic Location:</p> <p>Parkston Municipal Airport, Parkston, Hutchinson County, South Dakota</p>
<p>5. If Applicable, Provide Additional Information:</p>
<p>6. Sponsor's Representative: (include address & telephone number)</p> <p>David Hoffman, Mayor 605-928-7968 PO Box 490 Parkston, SD 57366</p>

DESCRIPTION OF WORK:
 This project shall include Design and Construction of a 4-Unit T-Hangar

PARKSTON MUNICIPAL AIRPORT

PROJECT	1	OF	1
SKETCH/DESCRIPTION	PARKSTON MUNICIPAL AIRPORT		
Drawn By:	HELMES		
Checked By:	HELMES		
File No:	A-459		
Sheet No:	A-459/1		
Date:	11-2017		
HELMES & ASSOCIATES CIVIL ENGINEERS & LAND SURVEYORS 221 Brown County Madison, WI 53703 Phone: 608.233.1112 Fax: 608.233.1119 Email: herryh@hellesandassociates.com			
I hereby certify that the work shown on this drawing was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer in the State of Wisconsin.			



LEGEND

- PROPOSED CONSTRUCTION LIMITS (Yellow box)
- STAGING AREA (Hatched box)
- HAUL ROUTE (Red dashed line)
- PROPOSED T-HANGAR (Green box)

SCALE
 1"=400' HORIZ

PART IV – PROGRAM NARRATIVE
(Suggested Format)

PROJECT: AIP #3-46-0066-011-2020
AIRPORT: Platte Municipal Airport
1. Objective: Construction of a Revenue Producing Hangar/GA Terminal Building
2. Benefits Anticipated: There is no where for current users or transient users to get out of the weather when landing at the airport, a GA Terminal Building is needed. Also, a hangar will allow users to rent a space to store aircraft out of the weather.
3. Approach: (See approved Scope of Work in Final Application) Design and construct the GA Terminal/Hangar building
4. Geographic Location: Platte Municipal Airport Platte, Charles Mix County, South Dakota
5. If Applicable, Provide Additional Information:
6. Sponsor's Representative: (include address & telephone number) Steve Christensen, Mayor 605-337-3921 PO Box 236 Platte, SD 57369-0236

CONSTRUCTION SAFETY PHASING
 PLAN LAYOUT
 GATE TERMINAL REVENUE PRODUCING HANGAR
 PLATTE MUNICIPAL AIRPORT
 PLATTE SOUTH DAKOTA

Drawn By: K-AM
 Check By: JSM
 Date: 2/13/20

Helm
 ASSOCIATES
 CIVIL ENGINEERS & LAND SURVEYORS
 221 Brown County
 Highway 19
 P.O. Box 111
 Alameda, SD 57012
 Phone: 605.232.1312
 Email: hery@helsurveying.com

LATITUDE	LONGITUDE	ELEVATION	LOCATION
N43°24'13.9536"	W98°49'33.9394"	1618.5	STAGING AREA
N43°24'14.8247"	W98°49'32.2957"	1616.2	STAGING AREA
N43°24'14.1216"	W98°49'31.5948"	1617.9	STAGING AREA
N43°24'13.2512"	W98°49'33.2393"	1618.5	STAGING AREA
N43°24'13.3397"	W98°49'35.1057"	1618.5	BUILDING
N43°24'13.7071"	W98°49'34.3812"	1618.5	BUILDING
N43°24'13.0609"	W98°49'33.0511"	1616.2	BUILDING
N43°24'12.4429"	W98°49'34.2173"	1617.9	BUILDING
N43°24'13.2240"	W98°49'35.3253"	1620.7	WORK AREA
N43°24'13.3397"	W98°49'35.1057"	1620.0	WORK AREA
N43°24'11.7383"	W98°49'33.5192"	1621.0	WORK AREA
N43°24'11.6227"	W98°49'33.7388"	1620.6	WORK AREA

FOR HAZARDOUS OR CLOSED AREAS, BARRICADES AND DRUMS SHALL BE RESTRICTED FROM TAKING ANY CONSTRUCTION AREA.

DRUMS AND TUBULAR MARKERS SHALL BE CONSTRUCTED OF LIGHTWEIGHT METAL AND BE PROTECTED BY STEEL DRUMS (STEEL DRUMS SHALL NOT BE USED)

FOR NIGHT TIME USE, BARRICADES AND DRUMS SHALL HAVE FLASHING RED BEACONS.

RETROREFLECTIVE BAND

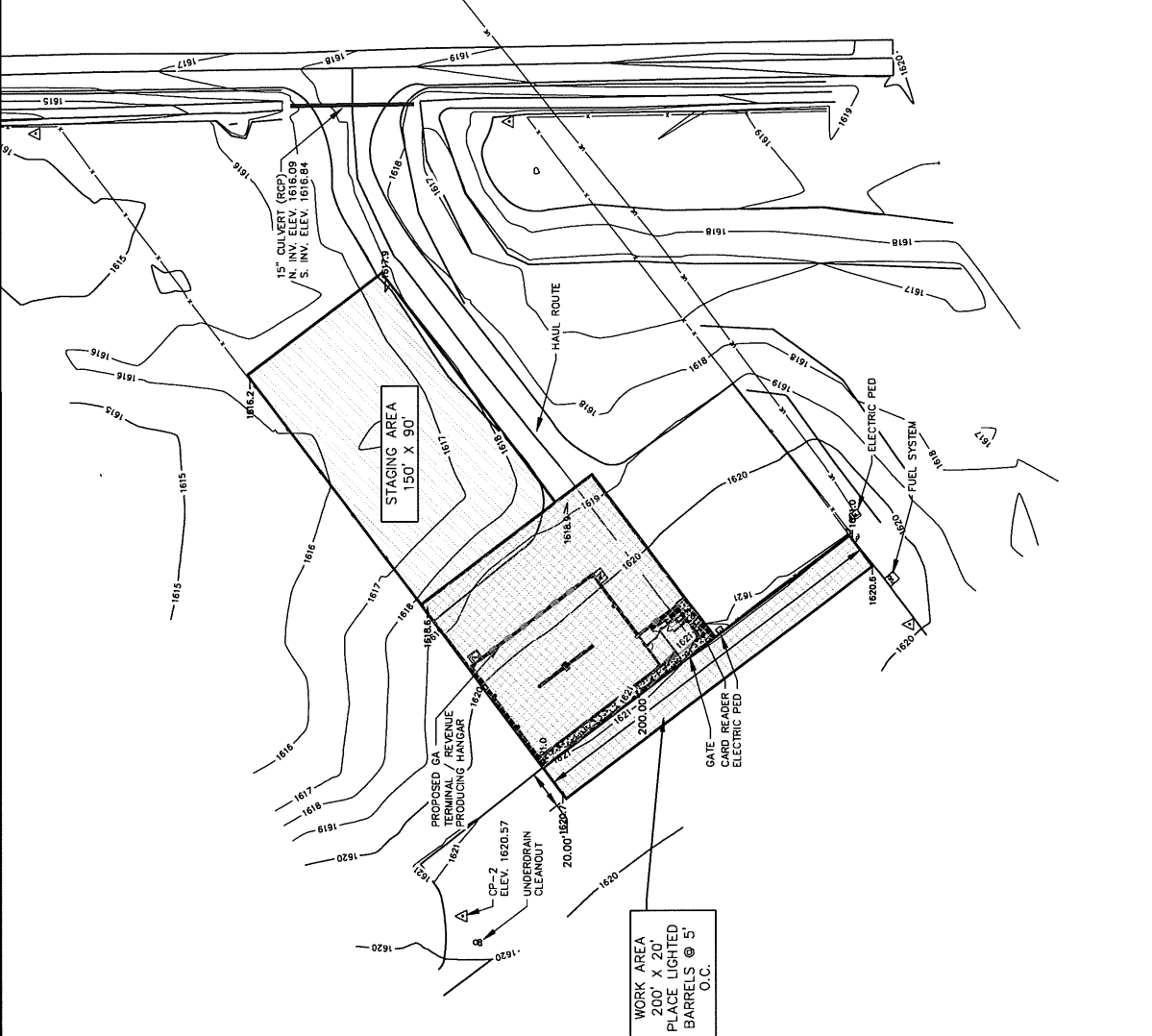
36"

1 1/2"

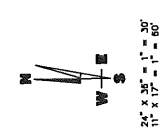
10"

DRUM DETAIL
 NO SCALE

REGISTERED PROFESSIONAL SURVEYOR
 REG. NO. 1152
 SAUCHE



- ELECTRIC POLE
- FUEL TANK
- CONTROL POINT
- ELECTRIC PEDESTAL
- ELECTRIC METER
- POST
- CARD READER
- SANITARY SEWER CLEANOUT
- UNDERGROUND ELECTRIC
- FENCE
- GRAVEL SURFACING
- ASPHALT SURFACING



PART IV – PROGRAM NARRATIVE
(Suggested Format)

PROJECT: Rehabilitate Taxiway - Relocation of Runway 14-32 Hold Lines and Signage to meet Setback Standards
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)



RUNWAY 14-32 HOLDING POSITIONS RELOCATION
 RAPID CITY REGIONAL AIRPORT
 RAPID CITY, SOUTH DAKOTA

PROJECT WORK DESCRIPTION



DRAFTED
 T.J.L.
 REVIEWED
 R.A.S.
 PROJECT NUMBER
 1905-01611
 LAST REVISED DATE
 03/27/2020

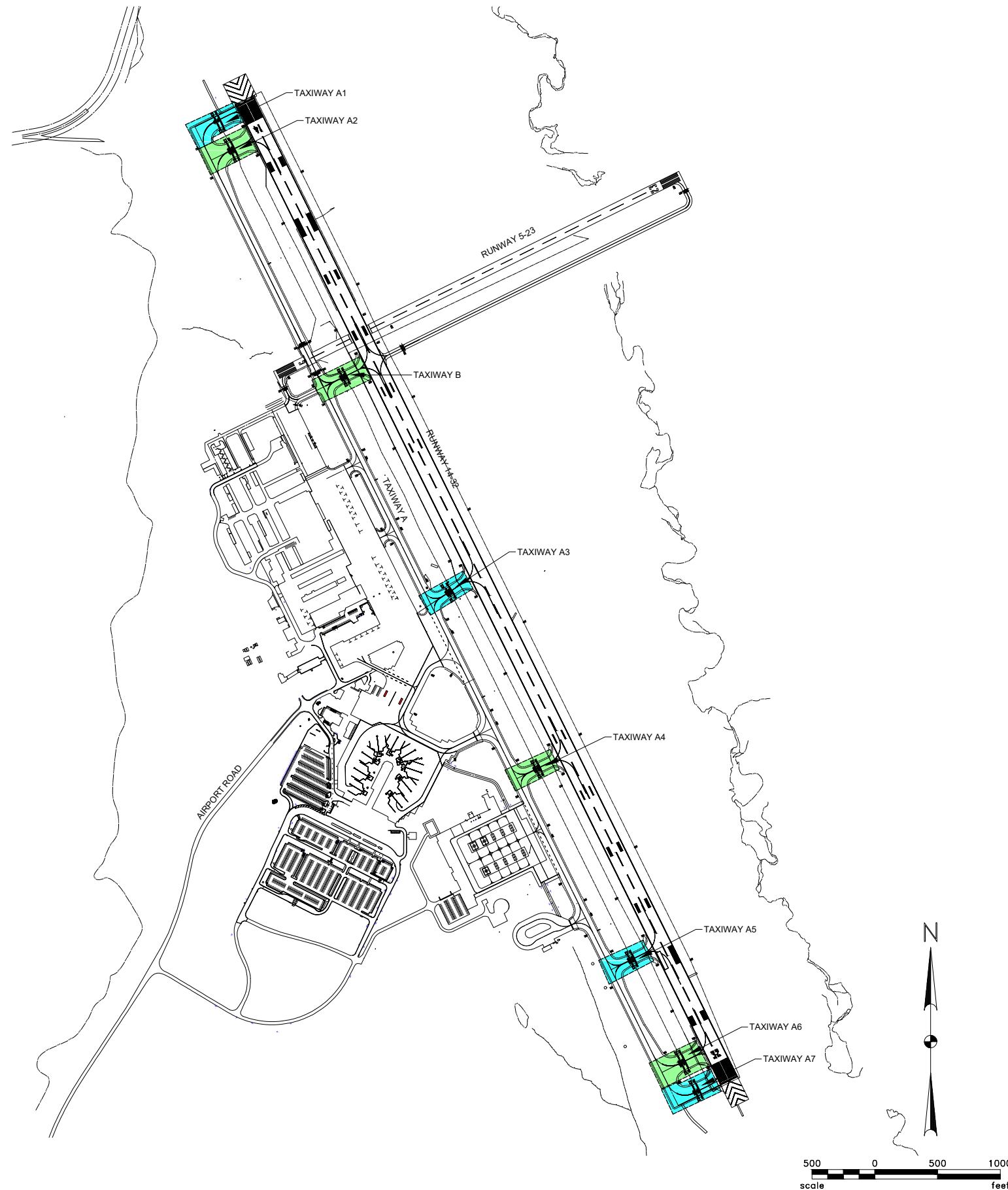
SHEET
1

PROJECT WORK DESCRIPTION

- 1 OBLITERATE EXISTING HOLDING POSITION MARKINGS AT TAXIWAYS A1, A2, B, A3, A4, A5, A6, AND A7.
- 2 INSTALL NEW HOLDING POSITION SURFACE MARKINGS AT 282 FEET FROM RUNWAY CENTERLINE AT TAXIWAYS A1, A2, B, A3, A4, A5, A6, AND A7.
- 3 REMOVE AND SALVAGE EXISTING TAXIWAY HOLDING POSITION SIGNS AT TAXIWAYS A1, A2, B, A3, A4, A5, A6, AND A7. DISPOSE OF SIGN FOUNDATIONS AND BASE CANS.
- 4 INSTALL SALVAGED SIGNS WITH NEW BASE CANS AND FOUNDATIONS AT NEW HOLD LINE POSITIONS.
- 5 REMOVE AND SALVAGE EXISTING RUNWAY GUARD LIGHTS AT TAXIWAYS A1, A2, B, A3, A4, A5, A6, AND A7 AND INSTALL NEW SOLID COVER OVER EXISTING BASE CANS.
- 6 INSTALL SALVAGED RUNWAY GUARD LIGHTS ON NEW BASE CANS AT NEW RUNWAY HOLDING POSITIONS (BID ALTERNATE REPLACE ALL EXISTING RUNWAY GUARD LIGHT FIXTURES WITH NEW FIXTURES).

LEGEND

-  PHASE 1 - RELOCATION OF HOLDING POSITIONS INCLUDING SIGNS, RUNWAY GUARD LIGHTS, AND SURFACE MARKINGS LOCATED AT TAXIWAYS A1, A3, A5, AND A7
-  PHASE 2 - RELOCATION OF HOLDING POSITIONS INCLUDING SIGNS, RUNWAY GUARD LIGHTS, AND SURFACE MARKINGS LOCATED AT TAXIWAYS A2, B, A4, AND A6





PASSENGER BOARDING BRIDGES
RAPID CITY REGIONAL AIRPORT BOARD
RAPID CITY, SOUTH DAKOTA

PROJECT WORK DESCRIPTION

DRAFTED
GCH
REVIEWED
RAS
PROJECT NUMBER
1905-02309
LAST REVISED DATE
03/27/2020

SHEET
2

PROJECT WORK DESCRIPTION

- 1 - REMOVE AND REPLACE PASSENGER BOARDING BRIDGE GATE #6
- 2 - REMOVE AND REPLACE PASSENGER BOARDING BRIDGE GATE #3
- 3 - REMOVE AND REPLACE PASSENGER BOARDING BRIDGE GATE #5 (ADD ALTERNATE 1)

NOTE:
BRIDGES TO BE INSTALLED ON EXISTING OR NEW FOUNDATIONS AND WILL INCLUDE ELECTRICAL POWER SUPPLY. UPGRADES EXISTING CIRCUITS AS NECESSARY.

LEGEND

- GATE 6 - CONSTRUCTION AREA
- GATE 3 - CONSTRUCTION AREA
- GATE 5 - CONSTRUCTION AREA (ADD ALTERNATE 1)



T.1N., R.9E., S.17



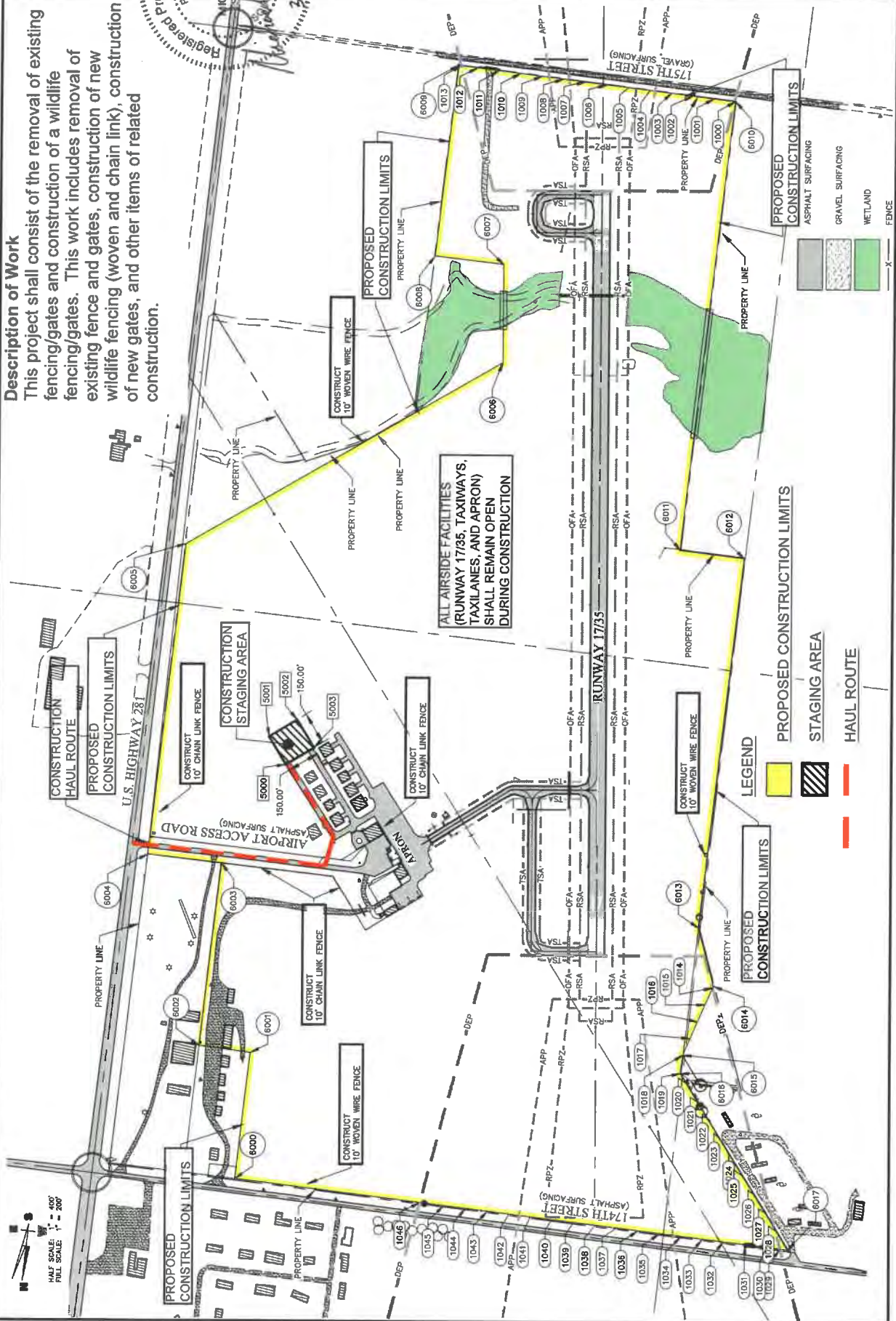
PART IV – PROGRAM NARRATIVE
(Suggested Format)

PROJECT: AIP #3-46-0049-013-2020
AIRPORT: Redfield Municipal Airport
1. Objective: <p>This project shall consist of a 10' high wildlife fence. Gates will be provided at applicable locations.</p>
2. Benefits Anticipated: <p>With the new Runway 17/35 construction, the existing barb wire fence does not encompass the existing airport property. The airport is less than one mile from Turtle Creek and has a large wetland on the southeast side of the airport. Both are large wildlife attractants of not only waterfowl but large and small mammals as well. By constructing a 10' high wildlife fence, access by large mammals will be reduced and security at the airport enhanced.</p>
3. Approach: (See approved Scope of Work in Final Application) <p>Advertise the Project and Open Bids Award the Construction Contract Construct Wildlife Fence Prepare As-Constructed Drawings Assemble Closeout Documentation</p>
4. Geographic Location: <p>Redfield Municipal Airport, Redfield, Spink County, South Dakota</p>
5. If Applicable, Provide Additional Information: <p>As part of the new runway construction, multiple wetlands were mitigated, a post construction site visit will aid in evaluation of how mitigated wetlands have been affecting wildlife in the area.</p>
6. Sponsor's Representative: (include address & telephone number) <p>Randy Maddox, Council President 605-472-4550 626 Main Street Redfield, SD 57469</p>

CONSTRUCTION SAFETY
PHASING PLAN
WILDLIFE FENCE IMPROVEMENTS
REDFIELD MUNICIPAL AIRPORT
REDFIELD, SOUTH DAKOTA

Drawn By: CLB
Check By: JAS
Proj. No: A-1745
Date: 11/14/17
Scale: AS SHOWN
Sheet: 3 of 17

Helm & Associates
CIVIL ENGINEERS & LAND SURVEYORS
221 Brown County
Highway 19
Redfield, S.D. 57468
Phone: 605.225.2121
Fax: 605.225.2119
Email: helm@helsandassociates.com



Description of Work
This project shall consist of the removal of existing fencing/gates and construction of a wildlife fencing/gates. This work includes removal of existing fence and gates, construction of new wildlife fencing (woven and chain link), construction of new gates, and other items of related construction.

ALL AIRSIDE FACILITIES
(RUNWAY 1735, TAXIWAYS,
TAXILANES, AND APRON)
SHALL REMAIN OPEN
DURING CONSTRUCTION

LEGEND

- PROPOSED CONSTRUCTION LIMITS
- STAGING AREA
- HAUL ROUTE

ASPHALT SURFACING
GRAVEL SURFACING
WETLAND
FENCE

North Arrow
HORIZ. SCALE: 1" = 400'
VERT. SCALE: 1" = 200'



Part IV - Program Narrative

(Suggested Format)

PROJECT: AIP #3-46-0082-012-2020**AIRPORT:** Rosebud Sioux Tribal Airport**1. Objective:**

This project shall consist of a Master Plan and ALP update. Included with the ALP update is an aeronautical obstruction survey.

2. Benefits Anticipated:

Rosebud Sioux Tribal Airport completed construction of its new facility in 2010. New buildings have been constructed and the airport has gained an approach since its original construction. The ALP needs to be updated to show existing conditions and make a plan for the future.

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

Conduct meetings with the City and airport advisory board.
 Coordinate meetings with the City, SDDOT, and FAA.
 Topographical Survey
 Sub-consultant to Perform Aeronautical Obstruction Survey
 Develop Airport Layout Plan
 Compose Airport Narrative Report
 Project Closeout Documents

4. Geographic Location:

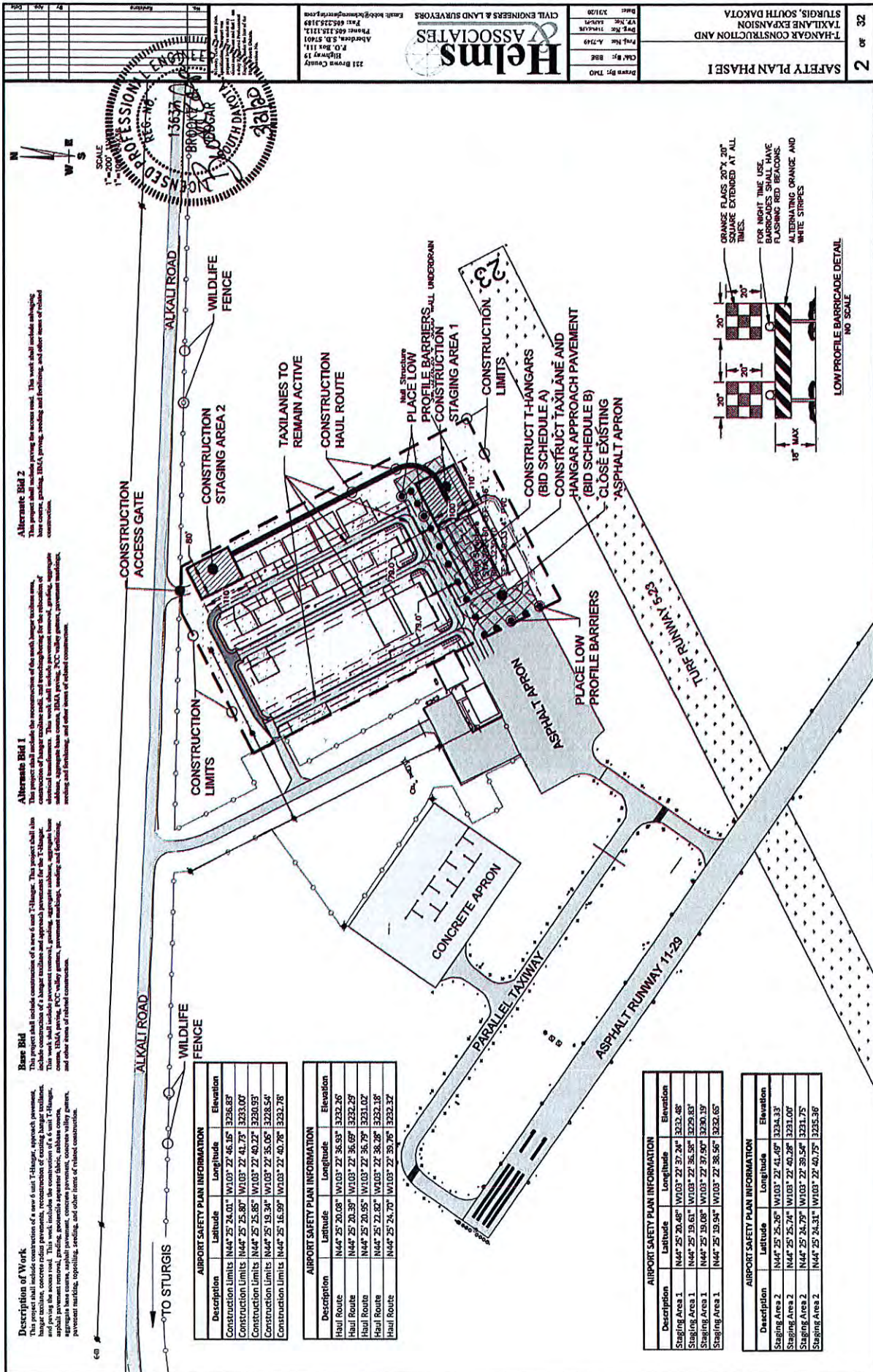
Rosebud Sioux Tribal Airport, Rosebud, Todd County, South Dakota

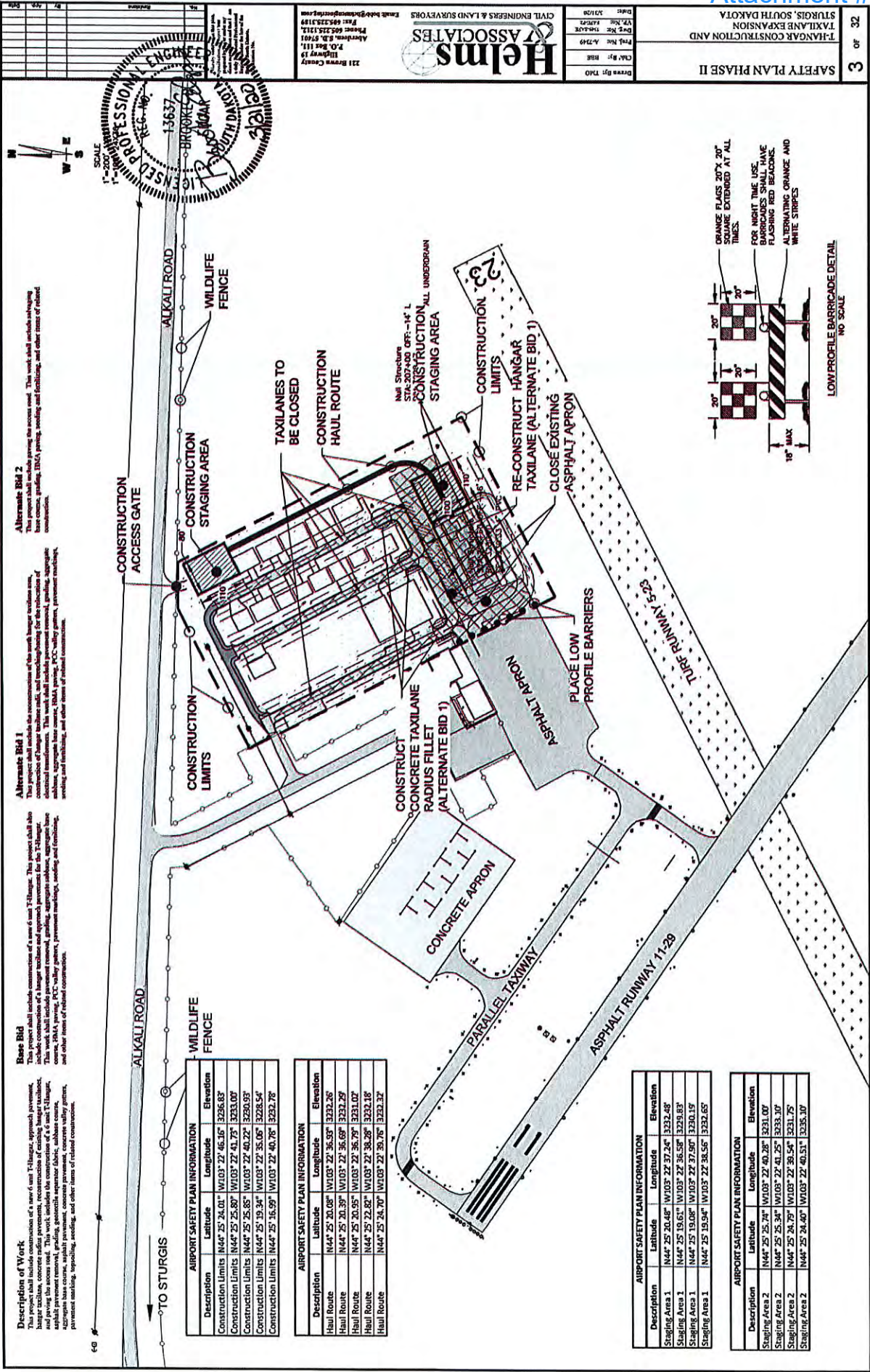
5. If Applicable, Provide Additional Information:**6. Sponsor's Representative:** *(include address & telephone number)*

Rodney Bordeaux, Tribal President 605-854-3731
 PO Box 430
 Rosebud, SD 57570

PART IV – PROGRAM NARRATIVE
(Suggested Format)

PROJECT: AIP #3-46-0041-012-2020
AIRPORT: Sturgis Municipal Airport
<p>1. Objective:</p> <p>The project will consist of the construction of a 6-Unit T-Hangar. As the T-Hangars require two hangar taxilanes, the north portion of the apron will remain and become the hangar taxilane for the three T-Hangars facing that direction. The taxilane will be approximately 25' x 200'. The existing hangar taxilanes do not have adequate radius fillets, and will be filled as part of this project. Currently, there are electrical transformers and a light pole in the Aircraft Design Group (ADG) Taxilane Object Free Area (TOFA). Based on the aircraft using the taxilanes, the obstructions will be relocated or Modification of Standard for a modified TOFA will be submitted for the appropriate taxilane to avert relocation costs, if possible. The project will also pave ±300' of the remaining portion of the access road.</p>
<p>2. Benefits Anticipated:</p> <p>There are 48 based aircraft at the Sturgis Municipal Airport, with only 19 hangars to house them. As an example, there are currently 9 aircraft stored in an 80' x 100' hangar. The aircraft must be maneuvered very precisely and there is hardly room to walk when all aircraft are stored. A hangar taxilane will need to be constructed on the south side of the three T-Hangars for aircraft access. The existing taxilane radii are under designed and aircraft tires track through the grass on many occasions. The radius fillets will be filled to prevent aircraft from leaving the taxilane.</p>
<p>3. Approach: (See approved Scope of Work in Final Application)</p> <ul style="list-style-type: none"> Advertise the Project and Open Bids Award the Construction Contract Construct 6-Unit T-Hangar Construct Hangar Taxilane Enlarge Existing Taxilane Radius Fillets Remove Objects from TOFA Pave Remaining Portion of Access Road Prepare As-Constructed Drawings Assemble Closeout Documentation
<p>4. Geographic Location:</p> <p>Sturgis Municipal Airport, Sturgis, Meade County, South Dakota</p>
<p>5. If Applicable, Provide Additional Information:</p> <p>The access road and parking areas are all paved with the exception of the northern access within the fence. The GA tenants use the first gate for access to their hangars. The access is gravel beyond the gate and FOD is tracked onto the airfield pavement on a regular basis. Paving this ±300' of access will significantly reduce the FOD on the airfield.</p>
<p>6. Sponsor's Representative: (include address & telephone number)</p> <p>Dave Smith, Director of Planning & Permitting 605-347-4422 1040 Harley Davidson Way Sturgis, SD 57785-1552</p>





Alternate Bid 2
 This project shall include the reconstruction of the north hangar sections one, two, and three. This work shall include pavement removal, grading, aggregate base, asphalt pavement, concrete pavement, concrete utility grates, pavement marking, lighting, and other items of related construction.

Alternate Bid 1
 This project shall include the reconstruction of the north hangar sections one, two, and three. This work shall include pavement removal, grading, aggregate base, asphalt pavement, concrete pavement, concrete utility grates, pavement marking, lighting, and other items of related construction.

Base Bid
 This project shall include construction of a new 6 x 117' hangar. This project shall also include the reconstruction of the north hangar sections one, two, and three. This work shall include pavement removal, grading, aggregate base, asphalt pavement, concrete pavement, concrete utility grates, pavement marking, lighting, and other items of related construction.

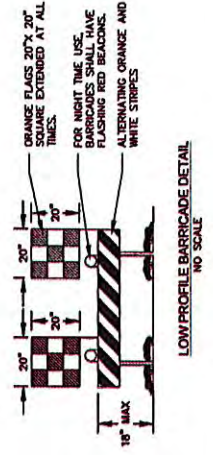
Description of Work
 This project shall include construction of a new 6 x 117' hangar, approach pavement, and parking area. This work shall include pavement removal, grading, aggregate base, asphalt pavement, concrete pavement, concrete utility grates, pavement marking, lighting, and other items of related construction.

AIRPORT SAFETY PLAN INFORMATION			
Description	Latitude	Longitude	Elevation
Construction Limits	N44° 25' 24.01"	W103° 22' 46.16"	3226.83'
Construction Limits	N44° 25' 25.89"	W103° 22' 41.72"	3233.00'
Construction Limits	N44° 25' 25.85"	W103° 22' 40.22"	3228.00'
Construction Limits	N44° 25' 29.34"	W103° 22' 35.06"	3228.54'
Construction Limits	N44° 25' 16.99"	W103° 22' 40.76"	3221.78'

AIRPORT SAFETY PLAN INFORMATION			
Description	Latitude	Longitude	Elevation
Haul Route	N44° 25' 20.08"	W103° 22' 36.53"	3232.28'
Haul Route	N44° 25' 20.39"	W103° 22' 36.69"	3231.29'
Haul Route	N44° 25' 20.95"	W103° 22' 36.79"	3231.07'
Haul Route	N44° 25' 22.82"	W103° 22' 38.28"	3232.18'
Haul Route	N44° 25' 24.70"	W103° 22' 39.76"	3232.32'

AIRPORT SAFETY PLAN INFORMATION			
Description	Latitude	Longitude	Elevation
Staging Area 1	N44° 25' 20.46"	W103° 22' 37.24"	3232.48'
Staging Area 1	N44° 25' 19.61"	W103° 22' 36.58"	3231.83'
Staging Area 1	N44° 25' 19.08"	W103° 22' 37.99"	3230.15'
Staging Area 1	N44° 25' 19.94"	W103° 22' 38.56"	3232.65'

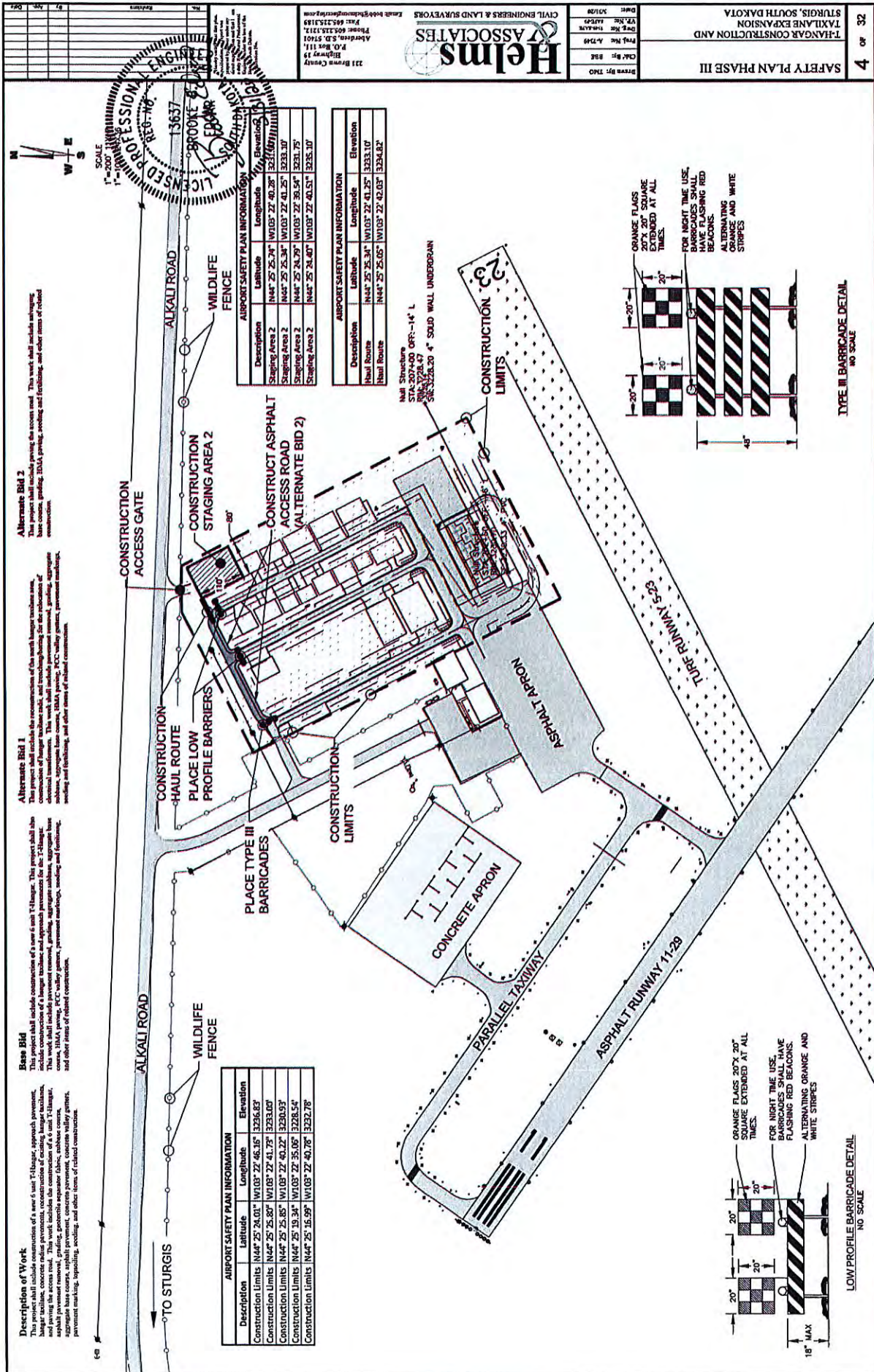
AIRPORT SAFETY PLAN INFORMATION			
Description	Latitude	Longitude	Elevation
Staging Area 2	N44° 25' 25.74"	W103° 22' 40.28"	3231.07'
Staging Area 2	N44° 25' 25.34"	W103° 22' 41.25"	3233.10'
Staging Area 2	N44° 25' 24.79"	W103° 22' 38.54"	3231.25'
Staging Area 2	N44° 25' 24.40"	W103° 22' 40.51"	3235.10'



Professional Engineer Seal
 State of South Dakota
 License No. 13637
 James R. Helms
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SAFETY PLAN PHASE II
 TAXI LANE EXPANSION AND
 HANGAR CONSTRUCTION AND
 STURGIS, SOUTH DAKOTA
 Drawn By: THD
 CMA: R. H. H.
 Proj. No: A-1749
 Date: 2/1/20

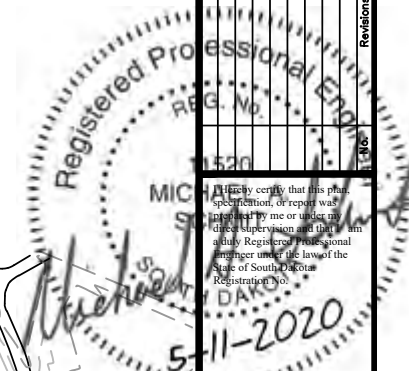
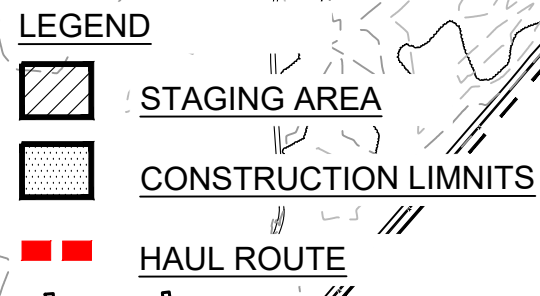
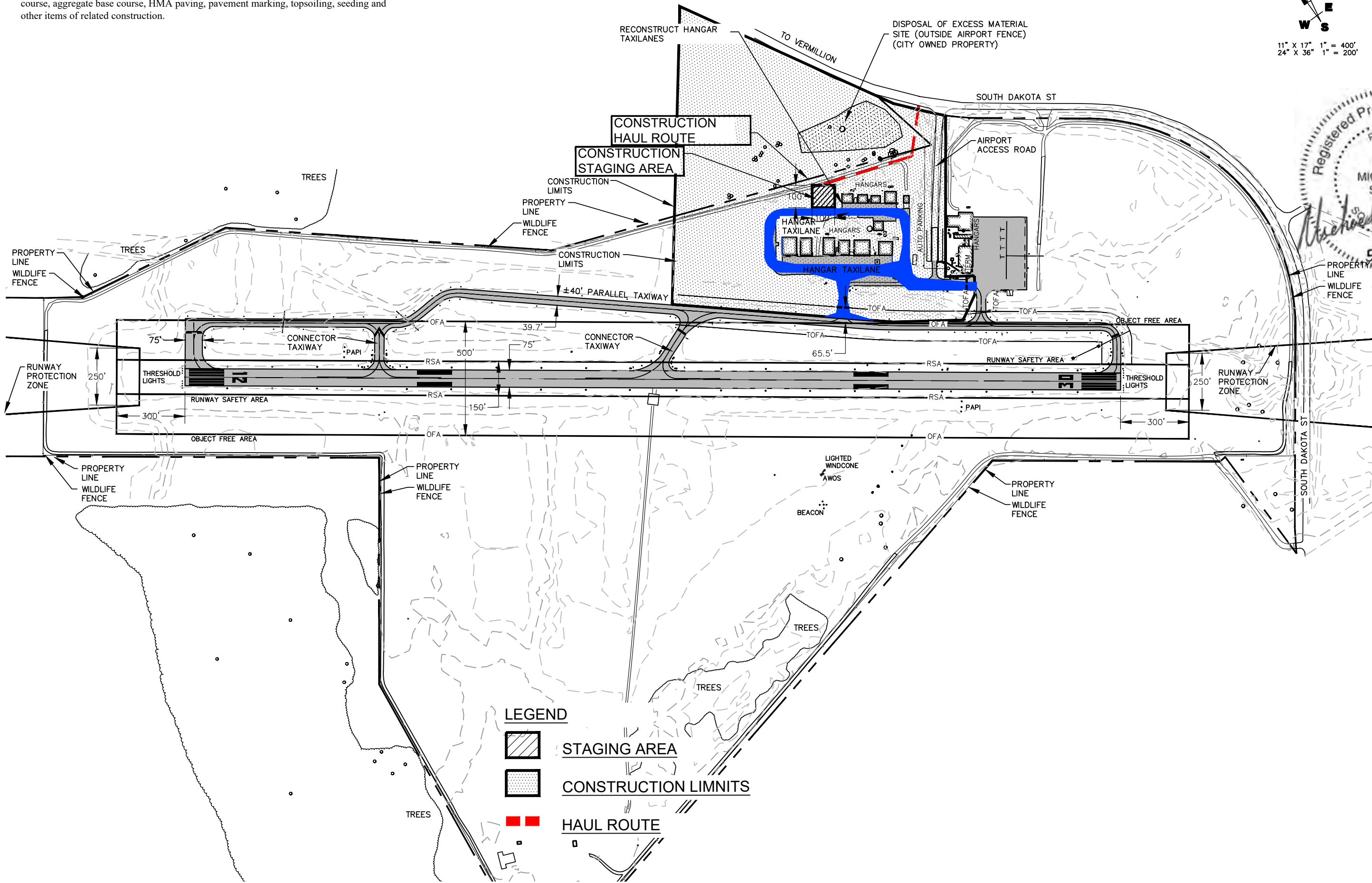
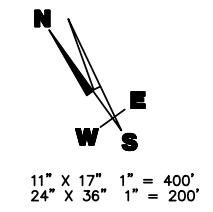


PART IV – PROGRAM NARRATIVE
(Suggested Format)

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)

Description of Work

This project shall include the reconstruction of approximately 2,200' of hangar taxilanes. This work includes full depth reclamation, grading, disposal of excess material, subbase course, aggregate base course, HMA paving, pavement marking, topsoiling, seeding and other items of related construction.



221 Brown County Highway 19
P.O. Box 111,
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CIVIL ENGINEERS & LAND SURVEYORS

Drawn By: WRD
Chk' By: MAS
Proj. No: A-7147
Dwg. No: 7147-SAFE
VP. No: SAFE
Date: 7/23/19

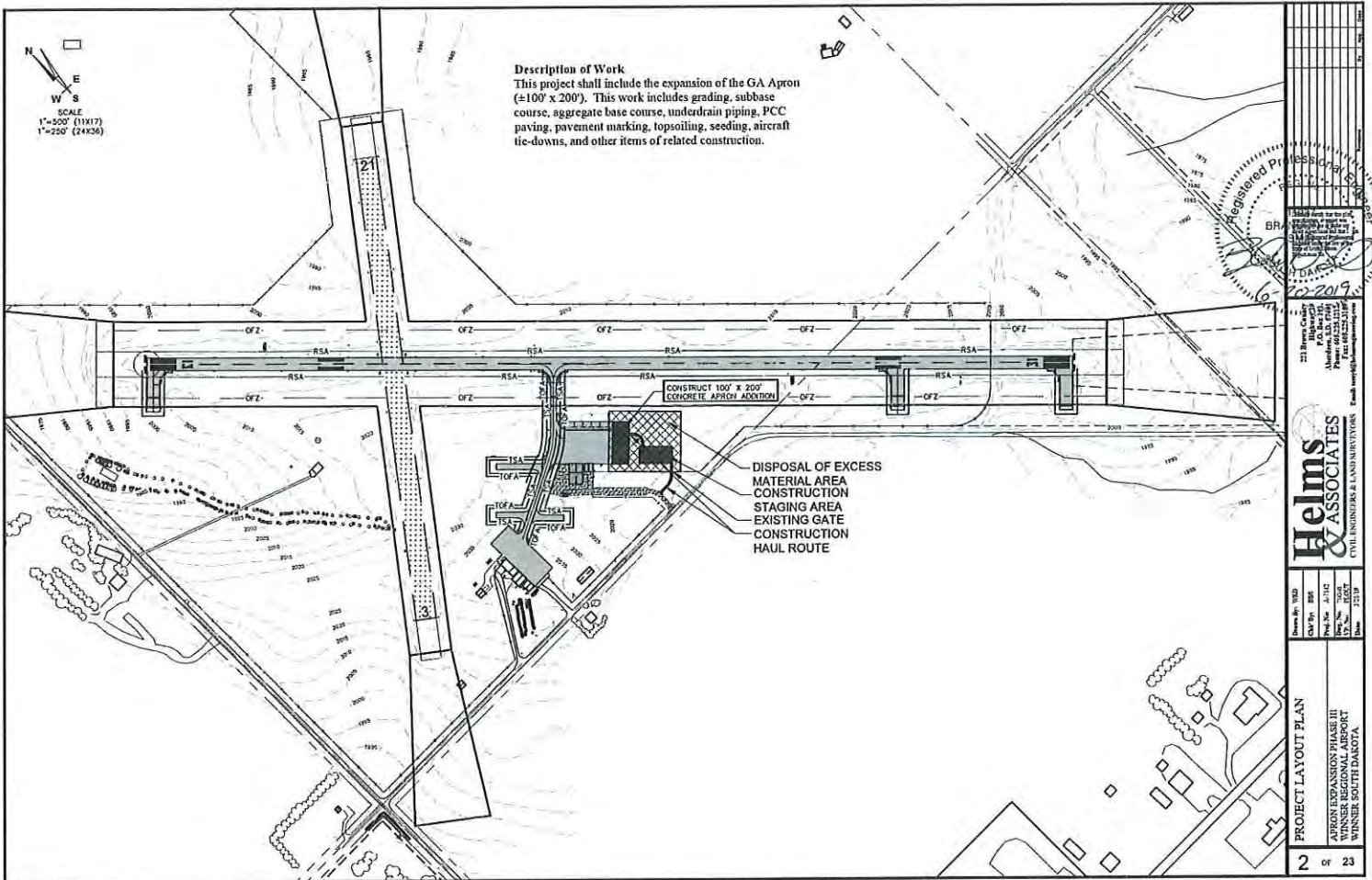
PROJECT LAYOUT PLAN
HANGAR TAXILANE IMPROVEMENTS
HAROLD DAVIDSON FIELD
VERMILLION, SOUTH DAKOTA

PART IV – PROGRAM NARRATIVE
(Suggested Format)

PROJECT: AIP #3-46-0058-035-2020
AIRPORT: Watertown Regional Airport
1. Objective: Purchase AFFF Cart Design Terminal Project
2. Benefits Anticipated: A new terminal building and associated civil site work shall be designed.
3. Approach: (See approved Scope of Work in Final Application) Complete Geotechnical Subgrade Exploration Complete Topographic Survey Begin Design Develop Preliminary Design Report Develop Construction Safety Plan Complete Design for FAA Review Advertise the Project and Open Bids Award the Construction Contract
4. Geographic Location: Watertown Regional Airport, Coddington County, South Dakota
5. If Applicable, Provide Additional Information:
6. Sponsor's Representative: (include address & telephone number) Sarah Caron, Mayor 605-882-6200 PO Box 910 Watertown, SD 57201-0910

PART IV – PROGRAM NARRATIVE
(Suggested Format)

PROJECT: AIP #3-46-0061-16-2020
AIRPORT: Winner Regional Airport
1. Objective: Design for Lower Apron Expansion - Phase II
2. Benefits Anticipated: Phase II of the apron expansion will allow for large aircraft to use the apron. Currently, there are many occasions in which an aircraft cannot enter the apron because of parked aircraft and aircraft at the fueling station, leaving inadequate room for the aircraft to enter.
3. Approach: (See approved Scope of Work in Final Application) Design an approximate 100' x 200' expansion on the southeast side of the lower apron. Advertise and Bid the project. Award the construction Contract.
4. Geographic Location: Winner Regional Airport Winner, Tripp County, South Dakota
5. If Applicable, Provide Additional Information: Geotechnical exploration of the site was completed with the Phase I Design of Lower Apron Expansion
6. Sponsor's Representative: (include address & telephone number) Jody Brozik, Mayor 605-842-2606 325 S Monroe Suite #118 Winner, SD 57580



Helms & Associates
 CIVIL ENGINEERS & LAND SURVEYORS

Drawn By: WSD
 Check By: BBE
 Date: 11/12
 Scale: 1"=500'
 Title: 2307

PROJECT LAYOUT PLAN
 APRON EXPANSION PHASE III
 WINSER AIRPORT
 WINSER SOUTH DAKOTA



CHAN GURNEY MUNICIPAL AIRPORT
CITY OF YANKTON
YANKTON, SOUTH DAKOTA

PROJECT WORK DESCRIPTION
AND BASIS OF ESTIMATE

DRAWN BY
A.J.M.
REVIEWED
J.J.B.
PROJECT NUMBER
1905-00652
LAST REVISED DATE
01/14/2020
SHEET
1

PROJECT WORK DESCRIPTION

- BASE BID - RECONSTRUCT RUNWAY 1-19**
- 1 RECONSTRUCT RUNWAY 1-19 NORTH OF RUNWAY 13-31 (1,150' X 60' APPROX.).
REDUCE RUNWAY WIDTH FROM 75' TO 60'
INSTALL NEW BITUMINOUS PAVEMENT
INSTALL NEW MEDIUM INTENSITY RUNWAY LIGHTING
RENUMBER RUNWAY 1-19 TO RUNWAY 2-20
 - 2 RECONSTRUCT RUNWAY 1-19 SOUTH OF TAXIWAY A (1,333' X 60' APPROX.).
REDUCE RUNWAY WIDTH FROM 75' TO 60'
INSTALL NEW BITUMINOUS PAVEMENT
INSTALL NEW MEDIUM INTENSITY RUNWAY LIGHTING
RENUMBER RUNWAY 1-19 TO RUNWAY 2-20
 - 3 RECONSTRUCT RUNWAY 1-19 AT TAXIWAY A (282' X 60-75' APPROX.).
INSTALL NEW CONCRETE PAVEMENT
INSTALL NEW MEDIUM INTENSITY RUNWAY LIGHTING
 - 4 REMOVE PAVEMENT ON RUNWAY 1-19 (425' X 7.5' APPROX. ON EACH SIDE).
REMOVE CONCRETE PAVEMENT TO 60" TOTAL RUNWAY WIDTH
 - 5 ~~CONSTRUCT RUNWAY 20 (1,150' X 60' APPROX.)~~
~~INSTALL NEW BITUMINOUS PAVEMENT~~
~~INSTALL NEW RETROREFLECTIVE MARKERS~~

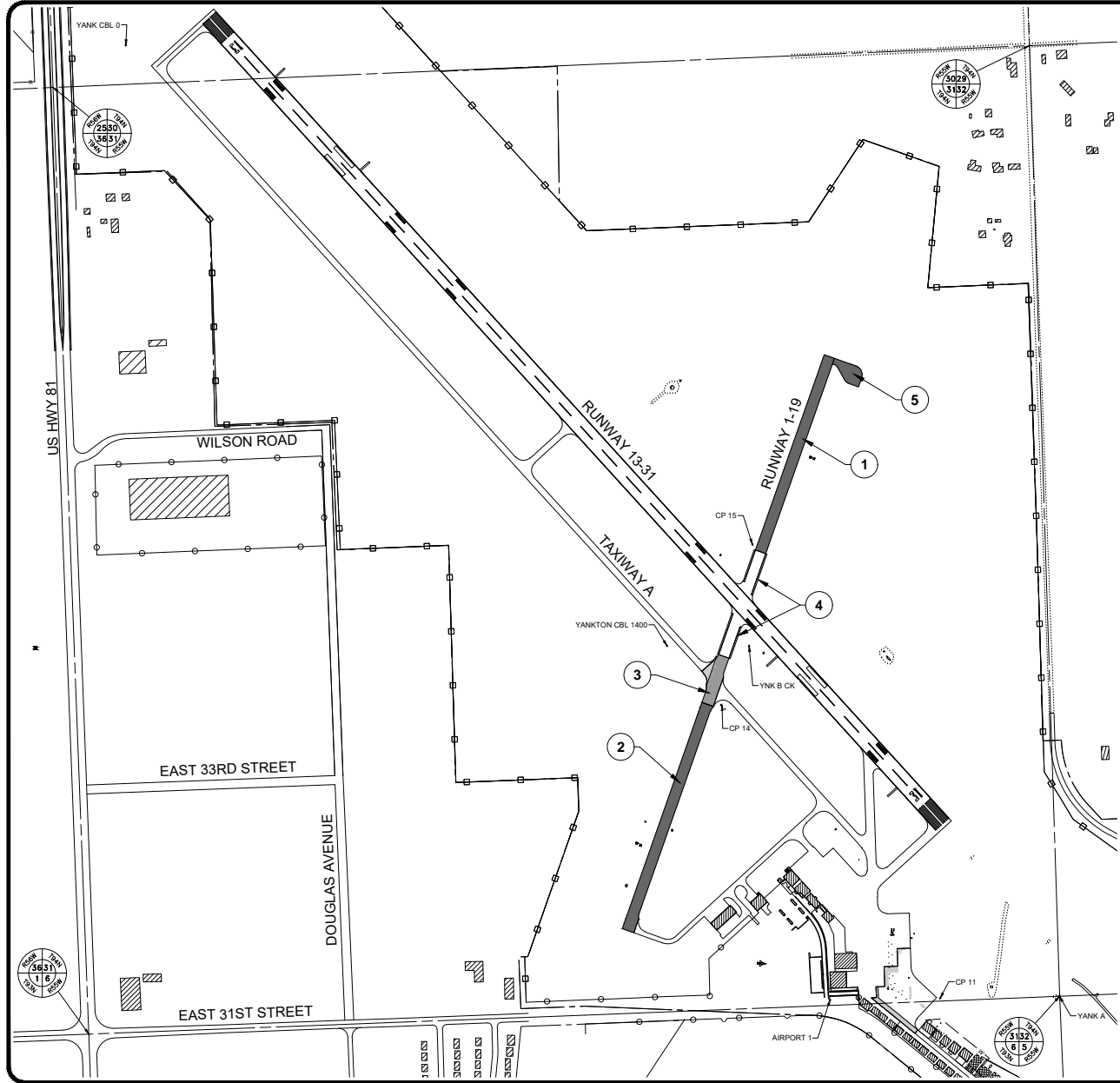


BENCH MARK LIST			
NO.	DESCRIPTION	LOCATION	ELEVATION
AIRPORT 1	USGS BRASS CAP	N231348.0 E2758397.0 STA 10+10.85 1105.41 RT. RUNWAY 01-19	1269.21'
	USGS PIN BELOW COVER	N231357.2 E2758255.0 STA 14+42.78 2387.18 RT. RUNWAY 01-19	1259.64'
YANKTON CBL 1400	USGS BRASS CAP	N226187.0 E2758384.0 STA 25+54.86 217.07 RT. RUNWAY 01-19	1277.13'
	USGS	N229151.3 E2758076.0 STA 07+42.91 4202.81 L. RUNWAY 01-19	1305.49'
CP 11	REBAR W/ GUARD HUBS	N231357.2 E2758303.0 STA 12+23.13 1765.41 RT. RUNWAY 01-19	1264.84'
	REBAR W/ GUARD HUBS	N226187.2 E2758341.0 STA 27+14.35 1153.01 RT. RUNWAY 01-19	1275.73'
CP 14	5/8" REBAR WITH CAP	N226187.2 E2758352.0 STA 23+03.16 75.79 RT. RUNWAY 01-19	1276.842'
CP 15	5/8" REBAR WITH CAP	N226187.0 E2758352.0 STA 23+03.16 56.79 RT. RUNWAY 01-19	1275.165'

BASIS OF ESTIMATE

- ASPHALT PAVEMENT REMOVAL - FULL DEPTH (P-101) - AVERAGE DEPTH BITUMINOUS PAVEMENT: 24-3" RUNWAY 1-19
- CONCRETE PAVEMENT REMOVAL - FULL DEPTH (P-101) - AVERAGE DEPTH OF CONCRETE PAVEMENT: 28" RUNWAY 1-19
- TOPSOIL REMOVAL (P-152) - STRIP 6" OVER ALL EXCAVATION OR EMBANKMENT AREAS (INCLUDED IN UNCLASSIFIED EXCAVATION QUANTITY FOR PAYMENT)
- EMBANKMENT (P-152) - 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 (P-208) - COMPACTED VOLUME IN PLACE
- HOT MIX ASPHALT PAVEMENT (SP-320) - 150 LBS/C.F.
- EMULSIFIED ASPHALT TACK COAT (P-603) - 0.10 GAL/S.Y.
- CONCRETE PAVEMENT (P-501) - S.Y. IN PLACE
- TOPSOIL REPLACEMENT (T-605) - MEASURED IN STOCKPILES BY AVERAGE END AREAS OR PRISMOIDAL METHOD (PAID FOR AS TOPSOILING)

This document was originally issued and sealed by Jacob Braunagel, Registration Number 12406 on January 14, 2020 and the original documents are stored at KLJ, Sioux Falls, SD. This media should not be considered a certified document.



PART IV – PROGRAM NARRATIVE
(Suggested Format)

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