PART IV – PROGRAM NARRATIVE

(Suggested Format)

PROJECT: AIP #3-46-0041-012-2020

AIRPORT: Sturgis Municipal Airport

1. Objective:

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) I 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.

2. Benefits Anticipated:

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.

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

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

4. Geographic Location:

Sturgis Municipal Airport, Sturgis, Meade County, South Dakota

5. If Applicable, Provide Additional Information:

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.

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

Dave Smith, Director of Planning & Permitting 605-347-4422
1040 Harley Davidson Way
Sturgis, SD 57785-1552

Description of Work

This project shall include construction of a new 6 unit T-Hangar, approach pavement, hangar taxilane, concrete radius pavements, reconstruction of existing hangar taxilanes, and paving the access road. This work includes the construction of a 6 unit T-Hangar, asphalt pavement removal, grading, geotextile separator fabric, subbase course, aggregate base course, asphalt pavement, concrete pavement, concrete valley gutters, pavement marking, topsoiling, seeding, and other items of related construction.

Base Bid

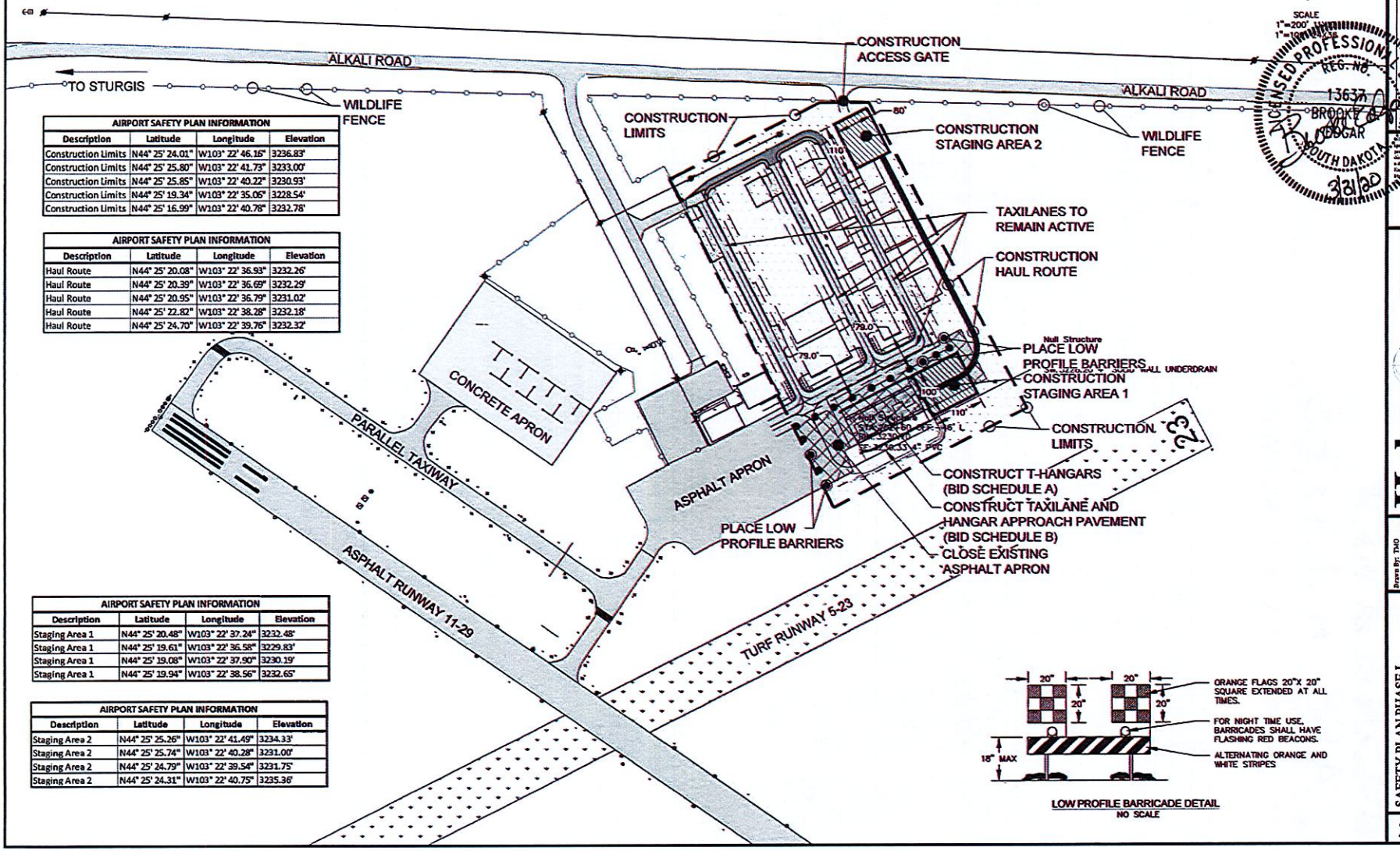
This project shall include construction of a new 6 unit T-Hangar. This project shall also include construction of a hangar taxilane and approach pavements for the T-Hangar. This work shall include pavement removal, grading, aggregate subbase, aggregate base course, HMA paving, PCC valley gutters, pavement markings, seeding and fertilizing, and other items of related construction.

Alternate Bid 1

This project shall include the reconstruction of the north hangar taxilane area, construction of hangar taxilane radii, and trenching/boring for the relocation of electrical transformers. This work shall include pavement removal, grading, aggregate subbase, aggregate base course, HMA paving, PCC valley gutters, pavement markings, seeding and fertilizing, and other items of related construction.

Alternate Bid 2

This project shall include paving the access road. This work shall include salvaging base course, grading, HMA paving, seeding and fertilizing, and other items of related construction.



AIRPORT SAFETY PLAN INFORMATION			
Description	Latitude	Longitude	Elevation
Construction Limits	N44° 25' 24.01"	W103° 22' 46.16"	3236.83'
Construction Limits	N44° 25' 25.80"	W103° 22' 41.73"	3233.00'
Construction Limits	N44° 25' 25.85"	W103° 22' 40.22"	3230.93'
Construction Limits	N44° 25' 19.34"	W103° 22' 35.06"	3228.54'
Construction Limits	N44° 25' 16.99"	W103° 22' 40.78"	3232.78'

AIRPORT SAFETY PLAN INFORMATION			
Description	Latitude	Longitude	Elevation
Haul Route	N44° 25' 20.08"	W103° 22' 36.93"	3232.26'
Haul Route	N44° 25' 20.39"	W103° 22' 36.69"	3232.29'
Haul Route	N44° 25' 20.95"	W103° 22' 36.79"	3231.02'
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' 20.48"	W103° 22' 37.24"	3232.48'
Staging Area 1	N44° 25' 19.61"	W103° 22' 36.58"	3229.83'
Staging Area 1	N44° 25' 19.08"	W103° 22' 37.90"	3230.19'
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AIRPORT SAFETY PLAN INFORMATION			
Description	Latitude	Longitude	Elevation
Staging Area 2	N44° 25' 25.26"	W103° 22' 41.49"	3234.33'
Staging Area 2	N44° 25' 25.74"	W103° 22' 40.28"	3231.00'
Staging Area 2	N44° 25' 24.79"	W103° 22' 39.54"	3231.75'
Staging Area 2	N44° 25' 24.31"	W103° 22' 40.75"	3235.36'

LOW PROFILE BARRICADE DETAIL
NO SCALE

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.

Helms & Associates
CIVIL ENGINEERS & LAND SURVEYORS
221 Brown County Highway 19
P.O. Box 111,
Aberdeen, S.D. 57401
Phone: 605.225.1115
Fax: 605.225.1118
Email: hela@helmsengineering.com

Drawn By: TMO
Chk'd By: BBE
Proj. No: A-7349
Dwg. No: 11-HGAR
Sheet No: 1-HGAR
Date: 3/31/20

SAFETY PLAN PHASE I

T-HANGAR CONSTRUCTION AND TAXILANE EXPANSION
STURGIS, SOUTH DAKOTA

Description of Work

This project shall include construction of a new 6 unit T-Hangar, approach pavement, hangar taxilane, concrete radius pavements, reconstruction of existing hangar taxilanes, and paving the access road. This work includes the construction of a 6 unit T-Hangar, asphalt pavement removal, grading, geotextile separator fabric, subbase course, aggregate base course, asphalt pavement, concrete pavement, concrete valley gutters, pavement marking, topsoiling, seeding, and other items of related construction.

Base Bid

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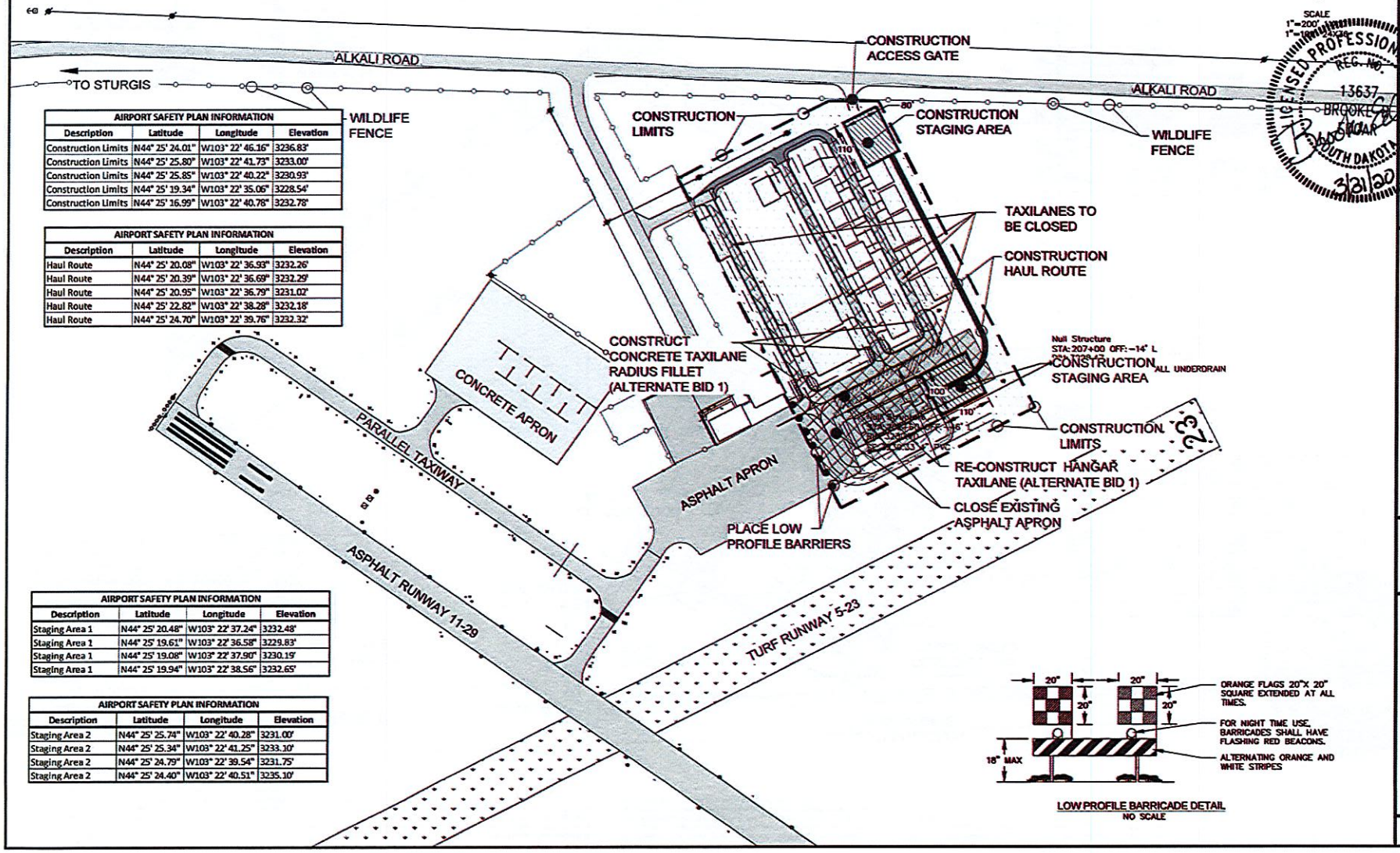

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LOW PROFILE BARRICADE DETAIL
NO SCALE

No.	Revisions	By	App.	Date

Helms & ASSOCIATES
CIVIL ENGINEERS & LAND SURVEYORS
231 Brown County Highway 19
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Phone: 605.225.1122
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Drawn By: TAO
Chk' By: BEE
Proj. No: A-7149
Dwg. No: 19A-SAFE
VP. No: 14-0525
Date: 3/31/20

SAFETY PLAN PHASE II

T-HANGAR CONSTRUCTION AND TAXILANE EXPANSION
STURGIS, SOUTH DAKOTA

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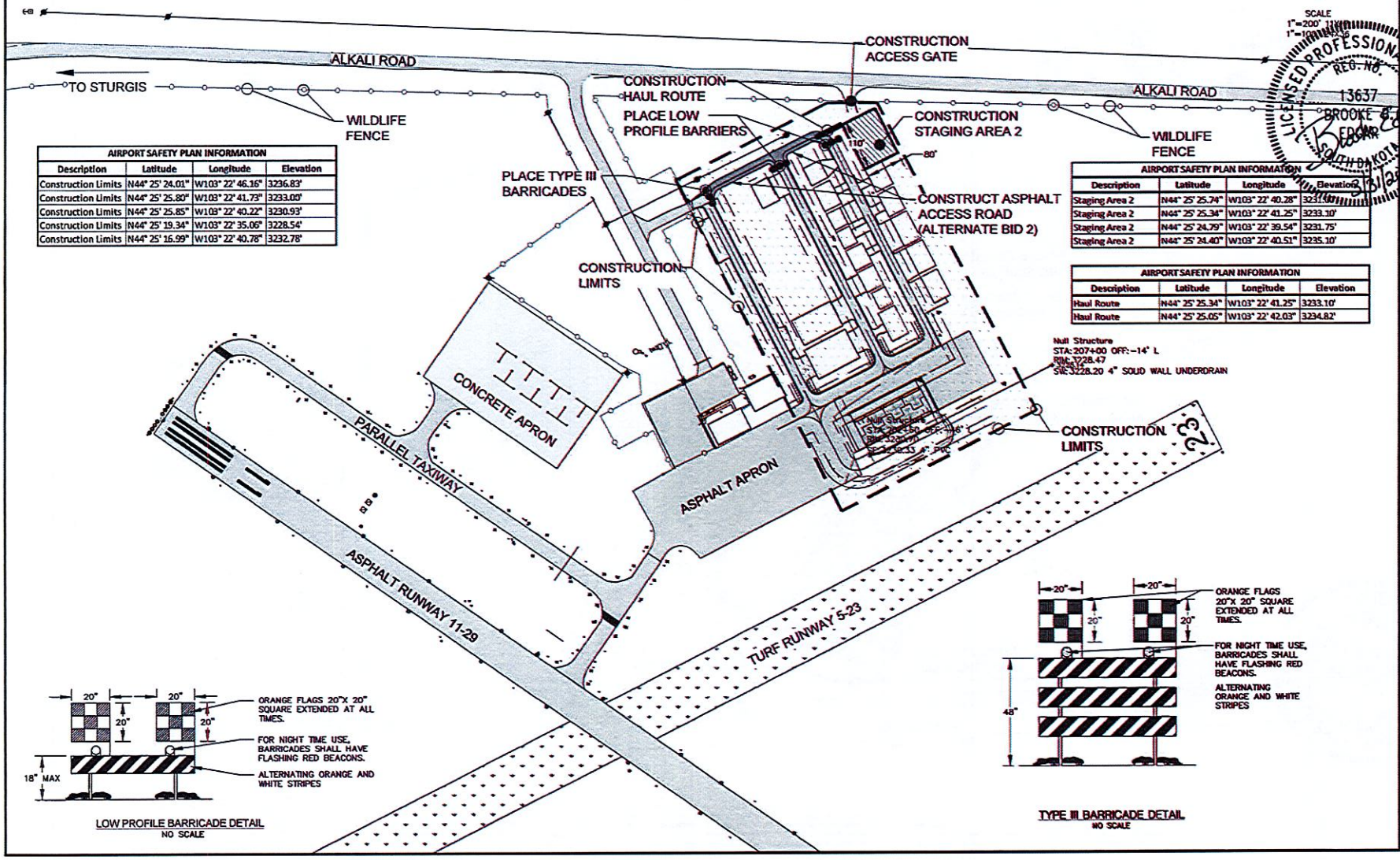

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LICENSED PROFESSIONAL ENGINEER
REG. NO. 13637
BROOKE E. EDGAR
SOUTH DAKOTA
3/31/23

No.	Revisions	By	App.	Date

Helms & Associates
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Drawn By: TMO
Chk'd By: BBE
Proj. No: A-7249
Dwg. No: 1HBA.DS
XR. No: 1HBA.DS
Date: 3/31/23

SAFETY PLAN PHASE III

T-HANGAR CONSTRUCTION AND TAXILANE EXPANSION
STURGIS, SOUTH DAKOTA