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Saint Paul, MN 55101
651.292.4400
tkda.com

September 24, 2021

Submitted via email: Jason.Anderson@ci.marshall.mn.us

Jason Anderson
City Engineer / Director of Public Works
City of Marshall
344 West Main Street
Marshall, MN 56258

Re: Proposal for Architectural and Engineering Predesign Study
Snow Removal Equipment (SRE) and Aircraft Rescue and Fire Fighting (ARFF) Facility
Southwest Minnesota Regional Airport - Marshall

Dear Mr. Anderson:

In response to your Request for Proposal, we are pleased to submit this Proposal to provide Architectural, Engineering and Planning Services in connection with the proposed SRE and ARFF Facility Project at the Southwest Minnesota Regional Airport in Marshall, MN, hereinafter called the Project. Our services will be provided in the manner described in this Proposal subject to the terms and conditions set forth in the Professional Services Agreement dated March 10, 2020.

I. PROJECT DESCRIPTION

OVERVIEW

TKDA met with Jason Anderson to discuss the Project. Description of the understood predesign scope is as follows:

The planned Snow Removal Equipment (SRE) and Aircraft Rescue Fire Fighting (ARFF) Facility at the Southwest Minnesota Regional Airport – Marshall is based on conceptual planning included in the Airport Master Plan, which was approved by the City in June 2020. The location of the planned facility is shown on the attached East Building Area Plan from the Airport Layout Plan. The 2020 Airport Master Plan, and corresponding Airport Layout Plan dated June 2020 have been accepted and approved by the FAA for establishing a guiding document for the 20-plus year development of the airport. The SRE/ARFF Facility is to be constructed in phases over the planning period, as the need for various uses develop. The first phase will be for construction of an SRE Storage and Maintenance Facility. The overall site shall be developed for future expansion to include an ARFF and Firefighting Facility that will jointly serve both airfield firefighting and rescue, and municipal firefighting capabilities.

The SRE Storage and Maintenance Facility will accommodate current airport snow removal equipment, mowing equipment, maintenance vehicles, and sand/salt storage. Also included will be airport maintenance staff offices, break room, and restrooms. The SRE Facility will be designed such that it can be expanded for the future firefighting facilities, and utilize common elements such as break rooms and restrooms. Future firefighting capabilities may include both airport rescue and firefighting, as well as city fire fighting capabilities. Desire for a City Fire Station to the west of the railroad tracks has been identified during previous planning studies as a city priority. Development of a joint ARFF/City Firefighting Facility would allow for shared resources, and utilization of existing city owned land on the airport.

Services to be provided by TKDA as part of this proposal include completing a Predesign Report for Capital projects, visual site survey, review of previous site preparation projects, budgetary construction cost estimate (of chosen alternative), funding plan, and NEPA Categorical Exclusion report. Additional design services for final construction documents and construction administration are not included in this Proposal.

DESIGN APPROACH

TKDA plans to utilize our full array of in-house design services and expertise to provide a comprehensive Pre-design Report and deliver the requested information for the City in a timely fashion. In addition to our services, we may utilize the services of outside construction companies to assist in cost estimating.

Design goals are focused on meeting the project budget while creating a highly functional and robust facility that will serve the City well into the future. We will work to develop a site plan that accommodates the near term development, as well as the ultimate build out, while minimizing future rework.

During the pre-design, our team will test and verify space configurations and work flows to maximize the planned facility layout for functionality and efficiency. Our focus will be to stretch the provided budget to gain as much of the desired facility as possible. We will work with city departments to verify programmatic elements and ensure requirements are met.

Architectural layouts and building systems (MEP) will be analyzed on a high level for cost, energy efficiency, life-cycle, and feasibility with site infrastructure. Pre-design documents will include plans, renderings, and studies in both 2D and 3D format to move the design decision process forward. Programming spreadsheets will be generated, capturing space requirements that include function, finishes, square footages, and spatial relationship requirements. These documents and studies will be followed up with a budgetary cost estimate exercise to test compliance with the total project budget of \$1,580,000 for the Site Preparation, and SRE Storage Facility, as included in the airports 2020 Capital Improvement Program (CIP). During the pre-design, the city will be asked to select a preferred design concept from the plan and study options generated prior to completing the pre-design report. Specific tasks and deliverables are outlined in part II of this proposal.

An analysis of the preferred SRE Storage Facility layout will be performed to determine the extent of which project elements are eligible for FAA Airport Improvement Program (AIP) funding, and State of Minnesota Department of Transportation (MnDOT) Airport Development funding sources. FAA eligibility will be determined utilizing current FAA Advisory Circulars (AC's), and the AIP Handbook. Total shares for Federal, State, and Local funding will be presented to the City for their consideration. Upon acceptance of overall funding levels, TKDA will assist the City in updating the airport Capital Improvement Program (CIP) to reflect the necessary funding.

Programming level estimates for the ultimate build out of the ARFF and Firefighting Facility will be developed for use by the City in seeking out alternative funding sources other than airport funding. The ARFF functions are not currently eligible for FAA funding as only airports with FAR Part 139 Certification, as required for commercial air service, qualify for federal assistance. At such time in the future that the airport receives a Part 139 Certificate, the ARFF Facility will become eligible for funding utilizing the airports AIP Entitlements. Funding for the municipal firefighting facility would not qualify for airport development funding. The study will seek to determine possible sources for future funding, other than local funding.

II. SERVICES AND DELIVERABLES TO BE PROVIDED BY TKDA

Based on TKDA's understanding of the Project, we propose to provide the following services:

A. PROJECT MANAGEMENT

- i. Track meeting notes for records
- ii. Execute TKDA's internal Quality Control/Quality Assurance protocol for reports and studies
- iii. Assemble pre-design submittal

B. MEETINGS (held via Microsoft Teams)

- i. Kick-Off Meeting
- ii. Design Review Meetings (2)
- iii. Programming Workshop (one, 2-hr session)
- iv. Agency Meeting w/FAA and MnDOT Representatives (one, 1-hr session)
- v. Visual site survey



C. PREDESIGN REPORT

- i. Drawings
 - 1) Site Plan Analysis (2 options)
 - 2) Facility Program Relationship Diagrams
 - 3) Facility Plan Analysis (3 options)
 - 4) Three dimension renderings (2 exterior)
- ii. Narrative
 - 1) Project statement and summary
 - 2) Building program summary and room data information
 - 3) Precedent study of similar facilities
 - 4) Technology and sustainability plan/features
 - 5) Summary of State and Federal requirements
 - 6) Project schedule for design and construction
- iii. Opinion of probable construction costs
- iv. Funding Plan
 - 1) Determine eligibility for FAA AIP funding and MnDOT Aeronautics Development Funding
 - 2) Explore non-aviation funding sources for ARFF/Firefighting Facility

D. NEPA Categorical Exclusion for site development and SRE/ARFF Facility

F. PROJECT ASSUMPTIONS AND EXCLUSIONS

- i. Upon completion of the Predesign, the City will seek FAA funding for design of the SRE Facility in 2022. The SRE Facility will be designed to be publicly bid for construction in 2023.
- ii. Expansion of the facility for ARFF and Firefighting will occur after 2023. No design efforts will be performed as part of the SRE Facility design in 2022, other than site preparation.
- iii. Any printing of materials outside of standard predesign documents requested by the City will be invoiced as a reimbursable expense.

III. ADDITIONAL SERVICES

If authorized in writing by the City, TKDA will furnish or obtain Additional Services of the types listed below which are not considered as basic services under this Proposal. Additional Services shall be billable on an Hourly Rate basis per our Master Contract, and such billings shall be over and above any maximum amounts set forth herein.

- A. Changes in scope or design deviations, phases of design beyond predesign
- B. Site visits above those listed in Section II.
- C. Meetings and/or review efforts outside of those listed in Section II.
- D. Site Topographic Survey
- E. Geotechnical Evaluations

IV. CLIENT RESPONSIBILITIES

These responsibilities shall be as set forth in Article 9 of the Professional Services Agreement and as further described or clarified below:

- A. Designate one individual to act as a representative with respect to the work to be performed; such person shall have complete authority to transmit instructions, receive information, interpret and define policies, and make decisions with respect to critical elements pertinent to the Project.



- B. Provide TKDA with access to the sites and appropriate photographs of existing conditions as required to perform services listed herein.
- C. Provide timely direction regarding any specific equipment and/or material requirements.
- D. Provide reviews of materials furnished by TKDA in a reasonable and prompt manner so the Project schedule can be maintained.

V. PERIOD OF SERVICE

We expect to start services promptly upon receipt of a written Notice to Proceed. TKDA will complete the services herein in approximately six weeks. Final schedule to be discussed and agreed upon during project kick-off meeting.

VI. COMPENSATION

Compensation to TKDA for services provided as in Section II shall be in a Lump Sum amount as listed below:

PREDESIGN STUDY	\$33,600
PROJECT SPECIFIC SERVICES	\$ 900
REIMBURSABLES:	\$ 500
TOTAL	\$35,000

The level of effort required to accomplish SECTION II services can be affected by factors beyond our control. Therefore, if it appears at any time charges for services rendered under SECTION II will exceed the above, TKDA agrees we will not perform services or incur costs resulting in billings in excess of such amount until we have been advised by you additional funds are available and our work can proceed.

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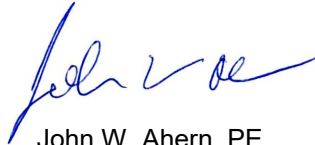
VII. CONTRACTUAL INTENT

We thank you for the opportunity to submit this Proposal. We agree that this letter and attachments constitute a contract between us upon its signature by an authorized official of the City of Marshall, and the return of a signed original to us. This Proposal will be open for acceptance for 90 days, unless the provisions herein are changed by us in writing prior to that time. Please contact John Peterson directly at 651.442-1898 or john.peterson@tkda.com if you should have any questions. We appreciate the opportunity to continue to serve you on this project.

Sincerely,



John N. Peterson, PE
Project Manager



John W. Ahern, PE
Vice President, Aviation

c: DJ Heinle – TKDA

ATTACHMENT: SOUTHWEST MINNESOTA REGIONAL AIRPORT EAST BUILDING AREA PLAN
ACCEPTED FOR CITY OF MARSHALL, MINNESOTA

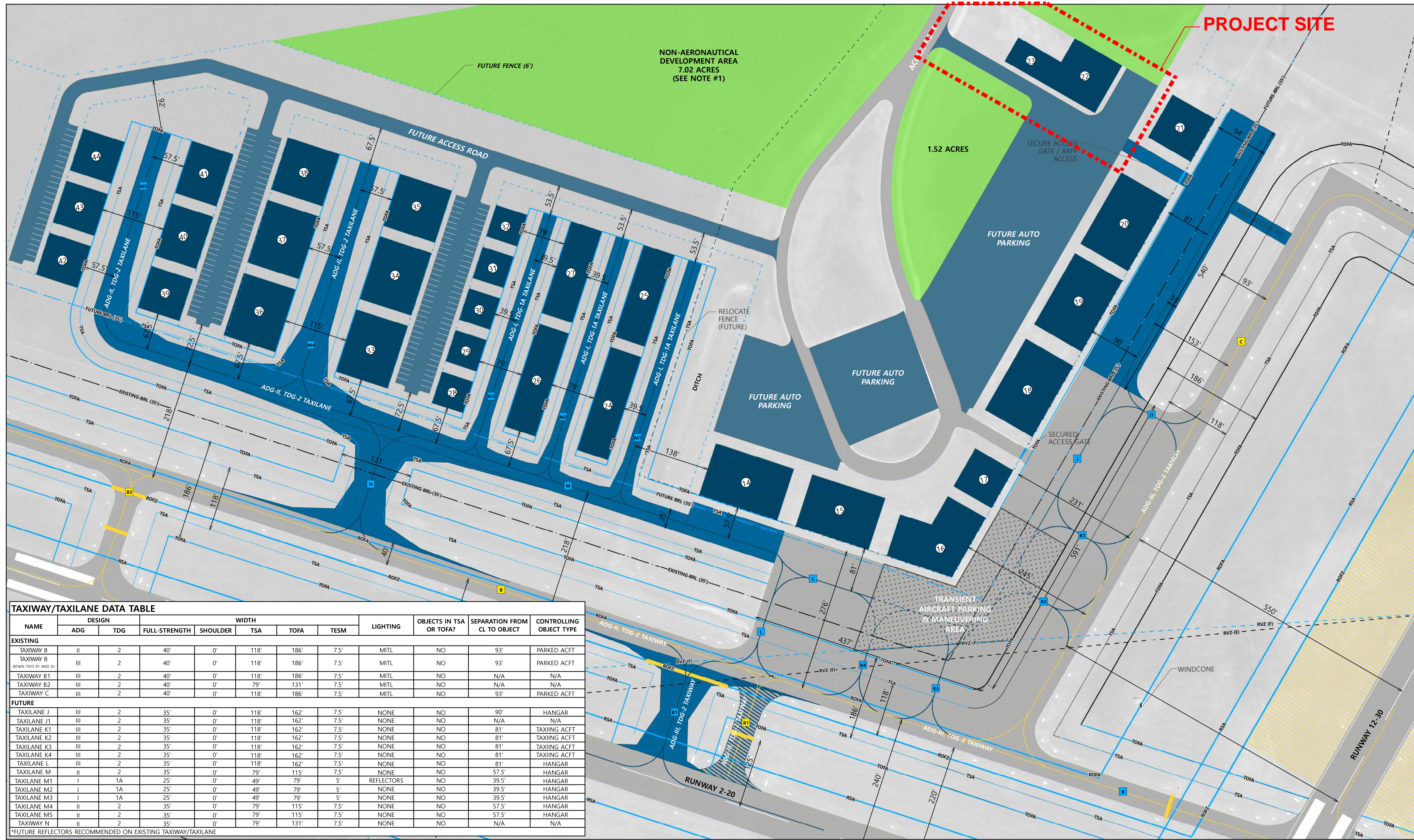
By:

(signature)	Printed Name/Title	Date
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CLIENT'S DESIGNATED REPRESENTATIVE:

Name/Title	Phone	Email
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DRAWING LEGEND

	EXISTING	FUTURE	ULTIMATE
AIRPORT PROPERTY LINE	---	---	---
AIRPORT SECURITY FENCE (6 FT)	---	---	N/A
AIRPORT BUILDINGS	█	█	█
AIRPORT PAVEMENT	█	█	█
PAVEMENT REMOVAL	█	█	█
AUTOMOBILE PARKING	█	█	█
BUILDING RESTRICTION LINE (BRL) - 35'	---	---	N/A
RUNWAY PROTECTION ZONE (RPZ)	█	█	N/A
MNDOT CLEAR ZONE	█	█	N/A
OBSTRUCTION SURFACES	█	█	N/A
RUNWAY SAFETY AREA (RSA)	█	█	N/A
RUNWAY VISIBILITY ZONE (RVZ)	█	█	N/A
RUNWAY OBJECT FREE AREA (ROFA)	█	█	N/A
RUNWAY OBSTACLE FREE ZONE (ROFZ)	█	█	N/A
PRECISION OBSTACLE FREE ZONE (POFZ)	█	█	N/A
TAXIWAY CENTERLINE	---	---	---
TAXIWAY SAFETY AREA (TSA)	---	---	---
TAXIWAY/TAXILANE OBJECT FREE AREA (TOFA)	---	---	---
NATURAL FEATURES	█	█	█
WATER BODIES	█	█	█
RIVERS, STREAMS, DITCHES	█	█	█
AIRPORT REFERENCE POINT	⊕	⊕	N/A
SURVEY MONUMENTS	⊕	⊕	N/A
APPROACH LIGHTING SYSTEM	⊕	⊕	N/A
LOCALIZER ANTENNA	⊕	⊕	N/A
SEQUENCED FLASHER	⊕	⊕	N/A
PRECISION APPROACH PATH INDICATOR (PAPI)	⊕	⊕	N/A
RUNWAY END IDENTIFIER LIGHTS (REIL)	⊕	⊕	N/A
AIRPORT ROTATING BEACON	⊕	⊕	N/A
GLIDE SLOPE	⊕	⊕	N/A
WIND CONE	⊕	⊕	N/A
AWOS	⊕	⊕	N/A
NAVAID CRITICAL AREA	█	█	N/A
NON-AERONAUTICAL DEVELOPMENT	█	█	█
AIRPORT DRAINAGE POND	█	█	█
EASEMENTS	---	---	---

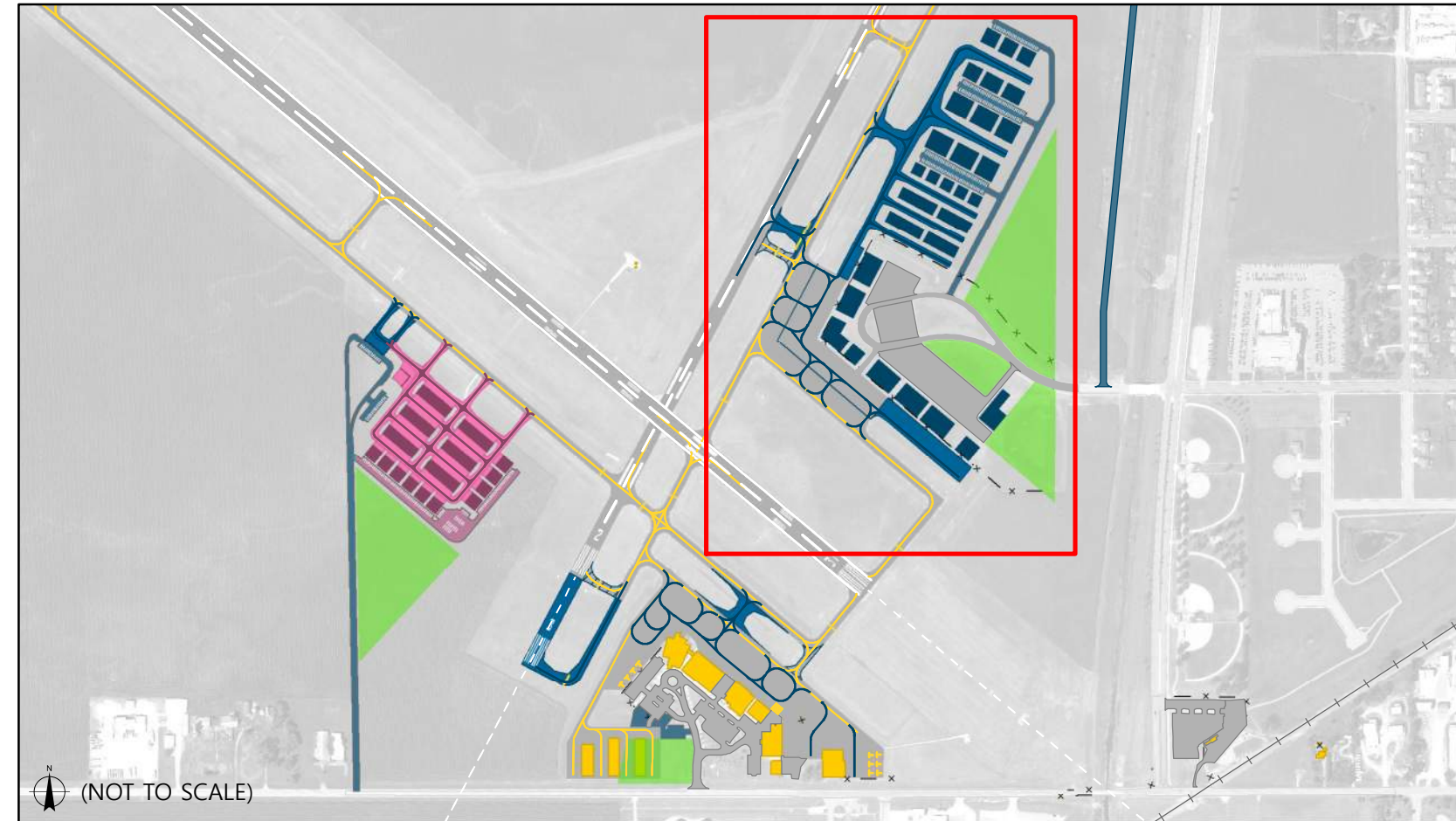
TAXIWAY/TAXILANE DATA TABLE

NAME	DESIGN	ADG	TDG	FULL-STRENGTH	SHOULDER	WIDTH			LIGHTING	OBJECTS IN TSA OR TOFA?	SEPARATION FROM CL TO OBJECT	CONTROLLING OBJECT TYPE
						TSA	TOFA	TESM				
EXISTING												
TAXIWAY B	II		2	40'	0'	118'	186'	7.5'	MITL	NO	93'	PARKED ACFT
TAXIWAY B (BTWN TDG B1 AND D)	III		2	40'	0'	118'	186'	7.5'	MITL	NO	93'	PARKED ACFT
TAXIWAY B1	III		2	40'	0'	118'	186'	7.5'	MITL	NO	N/A	N/A
TAXIWAY B2	III		2	40'	0'	79'	131'	7.5'	MITL	NO	N/A	N/A
TAXIWAY C	III		2	40'	0'	118'	186'	7.5'	MITL	NO	93'	PARKED ACFT
FUTURE												
TAXILANE J	III		2	35'	0'	118'	162'	7.5'	NONE	NO	90'	HANGAR
TAXILANE J1	III		2	35'	0'	118'	162'	7.5'	NONE	NO	N/A	N/A
TAXILANE K1	III		2	35'	0'	118'	162'	7.5'	NONE	NO	81'	TAXIING ACFT
TAXILANE K2	III		2	35'	0'	118'	162'	7.5'	NONE	NO	81'	TAXIING ACFT
TAXILANE K3	III		2	35'	0'	118'	162'	7.5'	NONE	NO	81'	TAXIING ACFT
TAXILANE K4	III		2	35'	0'	118'	162'	7.5'	NONE	NO	81'	TAXIING ACFT
TAXILANE L	III		2	35'	0'	118'	162'	7.5'	NONE	NO	81'	HANGAR
TAXILANE M	II		2	35'	0'	79'	115'	7.5'	NONE	NO	57.5'	HANGAR
TAXILANE M1	I	1A	25'	0'	49'	79'	5'	REFLECTORS	NO	39.5'	HANGAR	
TAXILANE M2	I	1A	25'	0'	49'	79'	5'	NONE	NO	39.5'	HANGAR	
TAXILANE M3	I	1A	25'	0'	49'	79'	5'	NONE	NO	39.5'	HANGAR	
TAXILANE M4	II		2	35'	0'	79'	115'	7.5'	NONE	NO	57.5'	HANGAR
TAXILANE M5	II		2	35'	0'	79'	115'	7.5'	NONE	NO	57.5'	HANGAR
TAXIWAY N	II		2	35'	0'	79'	131'	7.5'	NONE	NO	N/A	N/A

*FUTURE REFLECTORS RECOMMENDED ON EXISTING TAXIWAY/TAXILANE

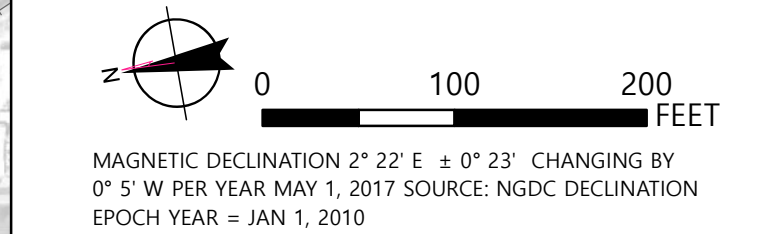
BUILDING DATA TABLE

ID	DESCRIPTION	PHASE	TOP ELEV. (MSL)	OBSTRUCTION?	LIGHTING OR MARKING	DISPOSITION	ID	DESCRIPTION	PHASE	TOP ELEV. (MSL)	OBSTRUCTION?	LIGHTING OR MARKING	DISPOSITION
14	140' X 100' CORPORATE / FBO HANGAR	FUTURE	1208.5	NO	NONE	TO BE CONSTRUCTED	30	60' X 60' BOX HANGAR	FUTURE	1197.6	NO	NONE	TO BE CONSTRUCTED
15	140' X 100' CORPORATE / FBO HANGAR	FUTURE	1209.8	NO	NONE	TO BE CONSTRUCTED	31	60' X 60' BOX HANGAR	FUTURE	1196.6	NO	NONE	TO BE CONSTRUCTED
16	TERMINAL BUILDING	FUTURE	1210.4	NO	NONE	TO BE CONSTRUCTED	32	60' X 60' BOX HANGAR	FUTURE	1195.0	NO	NONE	TO BE CONSTRUCTED
17	80' X 80' CORPORATE / FBO HANGAR	FUTURE	1206.0	NO	NONE	TO BE CONSTRUCTED	33	120' X 100' CORPORATE HANGAR	FUTURE	1211.5	NO	NONE	TO BE CONSTRUCTED
18	150' X 100' CORPORATE / FBO HANGAR	FUTURE	1209.1	NO	NONE	TO BE CONSTRUCTED	34	120' X 100' CORPORATE HANGAR	FUTURE	1212.6	NO	NONE	TO BE CONSTRUCTED
19	150' X 100' CORPORATE / FBO HANGAR	FUTURE	1209.0	NO	NONE	TO BE CONSTRUCTED	35	100' X 100' CORPORATE HANGAR	FUTURE	1205.7	NO	NONE	TO BE CONSTRUCTED
20	150' X 100' CORPORATE / FBO HANGAR	FUTURE	1210.2	NO	NONE	TO BE CONSTRUCTED	36	120' X 100' CORPORATE HANGAR	FUTURE	1203.2	NO	NONE	TO BE CONSTRUCTED
21	150' X 100' CORPORATE / FBO HANGAR	FUTURE	1211.0	NO	NONE	TO BE CONSTRUCTED	37	120' X 100' CORPORATE HANGAR	FUTURE	1203.2	NO	NONE	TO BE CONSTRUCTED
22	100' X 100' SNOW REMOVAL EQUIPMENT BLDG	FUTURE	1201.5	NO	NONE	TO BE CONSTRUCTED	38	100' X 100' CORPORATE HANGAR	FUTURE	1202.8	NO	NONE	TO BE CONSTRUCTED
23	JOINT CITY/ARFF FIRE STATION	FUTURE	1196.2	NO	NONE	TO BE CONSTRUCTED	39	80' X 80' BOX HANGAR	FUTURE	1199.9	NO	NONE	TO BE CONSTRUCTED
24	198' X 60' T-HANGAR	FUTURE	1189.8	NO	NONE	TO BE CONSTRUCTED	40	100' X 80' BOX HANGAR	FUTURE	1199.9	NO	NONE	TO BE CONSTRUCTED
25	176' X 60' T-HANGAR	FUTURE	1189.6	NO	NONE	TO BE CONSTRUCTED	41	100' X 80' BOX HANGAR	FUTURE	1201.9	NO	NONE	TO BE CONSTRUCTED
26	198' X 60' T-HANGAR	FUTURE	1193.8	NO	NONE	TO BE CONSTRUCTED	42	80' X 80' BOX HANGAR	FUTURE	1193.6	NO	NONE	TO BE CONSTRUCTED
27	176' X 60' T-HANGAR	FUTURE	1192.6	NO	NONE	TO BE CONSTRUCTED	43	80' X 80' BOX HANGAR	FUTURE	1194.4	NO	NONE	TO BE CONSTRUCTED
28	60' X 60' BOX HANGAR	FUTURE	1199.6	NO	NONE	TO BE CONSTRUCTED	44	80' X 80' BOX HANGAR	FUTURE	1195.1	NO	NONE	TO BE CONSTRUCTED
29	60' X 60' BOX HANGAR	FUTURE	1199.6	NO	NONE	TO BE CONSTRUCTED							



NOTES

1 FUTURE NON-AERONAUTICAL DEVELOPMENT AREA, FAA REVIEW AND/OR APPROVAL REQUIRED IN ADVANCE OF PROPOSED DEVELOPMENT. FAA REVIEW FACTORS INCLUDE NATURE OF PROPOSAL, LOCATION, AND FEDERAL PARTICIPATION.



REVISIONS

DATE	BY	CHANGE



SOUTHWEST MINNESOTA REGIONAL AIRPORT
RYAN FIELD
 Marshall, Minnesota
 PROJ. NO. 15857 DATE JUN. 18 2020

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 Architecture
 Planning
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 tkda.com



TERMINAL AREA
DRAWING - EAST
QUADRANT