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APPENDIX A
FAA Forecast Approval

U.S. Department
of Transportation
**Federal Aviation
Administration**

Southwest Region
Airports Division, Texas Airports Development Office

Fort Worth, Texas 76193-0650

August 7, 2019

Mr. Jeremy Valgardson
Airport Director
San Angelo Regional Airport
8618 Terminal Circle, Suite 101
San Angelo, Texas 76904

SUBJECT: San Angelo Regional Airport (SJT),
Master Plan Aviation Activity Forecast

Dear Mr. Valgardson:

Your submitted Master Plan Aviation Activity Forecast, dated May 24, 2019, is hereby approved.

Please do not hesitate to contact me if you have any questions.

Sincerely,

Marcelino Sanchez, P.E.
Program Manager
Texas Airports District Office

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SAN ANGELO REGIONAL AIRPORT

APPENDIX B
ACRP Report 79 Results

ATTACHMENT A

ACRP Report 79 Results

Annual Service Volume Estimation (ASV)

Use the capacities determined in the capacity model to estimate ASV

0.0	Calculated Cells
0.0	Input Cells
0.0	Linked Cells (within this worksheet)
150,000	Output Cells

ASV Calculations: (D * H * Cw = ASV)

D Factor	H Factor	Cw	ASV
276.9	6.7	76.2	141,300

D = Annual Demand/Avg. Peak Month Daily Demand
H = Avg. Peak Month Daily Demand/Avg. Peak Hour Demand

Fleet Mix Index: 21-50 - (C+3D)%
(C = Large Aircraft (i.e. Large-TP + Large-Jet + Large-757), D = Heavy Aircraft)

Weighted Average Capacity Calculations:

Runway use / weather	Hourly Capacity	% Occurrence	% Max Capacity	Weighting Factor	P*C*W	P*W
VMC (Optimal)	86.0	92.0%	100.0%	1	79.1	92.0%
IMC (Instrument)	62.0	8.0%	72.1%	8	39.7	64.0%
other 1			0.0%	16	0.0	0.0%
other 2			0.0%	0	0.0	0.0%
other 3			0.0%	0	0.0	0.0%
	(C)	(P)		(W)		
			Weighting Factors USED			
		100.00%			118.8	156.0%

Source: ACRP Report 79 - Airfield Capacity Estimation using Spreadsheet Models

Weighting Factors

	VMC Mix	IMC Mix Indexes		
% of Max Cap	0 - 180	0-20	21-50	51-180
91+	1	1	1	1
81 - 90	5	1	3	5
66 - 80	15	2	8	15
51 - 65	20	3	12	20
0 - 50	25	4	16	25

Above Table is from AC 150/5060-5, Airport Capacity and Delay Table 3-1

Cw = 76.2

APPENDIX C

Airport Real Estate Development Strategy

Airport Real Estate Development Strategy for San Angelo Regional Airport

Prepared by: C&S COMPANIES®

in partnership with centurion PLANNING AND DESIGN

August 2019

Project Context

The City of San Angelo has commissioned this land use and market assessment for a ±120 acre city-owned property along Knickerbocker Road at San Angelo Regional Airport (SJT) in order to identify potential development opportunities that benefit the airport and region. While land not needed for aeronautical facilities can be available for commercial and/or aviation-related development, it is subject to additional oversight and governance by the Federal Aviation Administration (FAA) given its on-airport location. As such, the purpose of this study is to help understand potential opportunities for this property within that regulatory context and to devise a guiding land use plan to provide direction and vision as the City looks to market this site and pursue future development.

City Goals for On-Airport Development

Augment non-aeronautical airport revenues as additional source of operational support

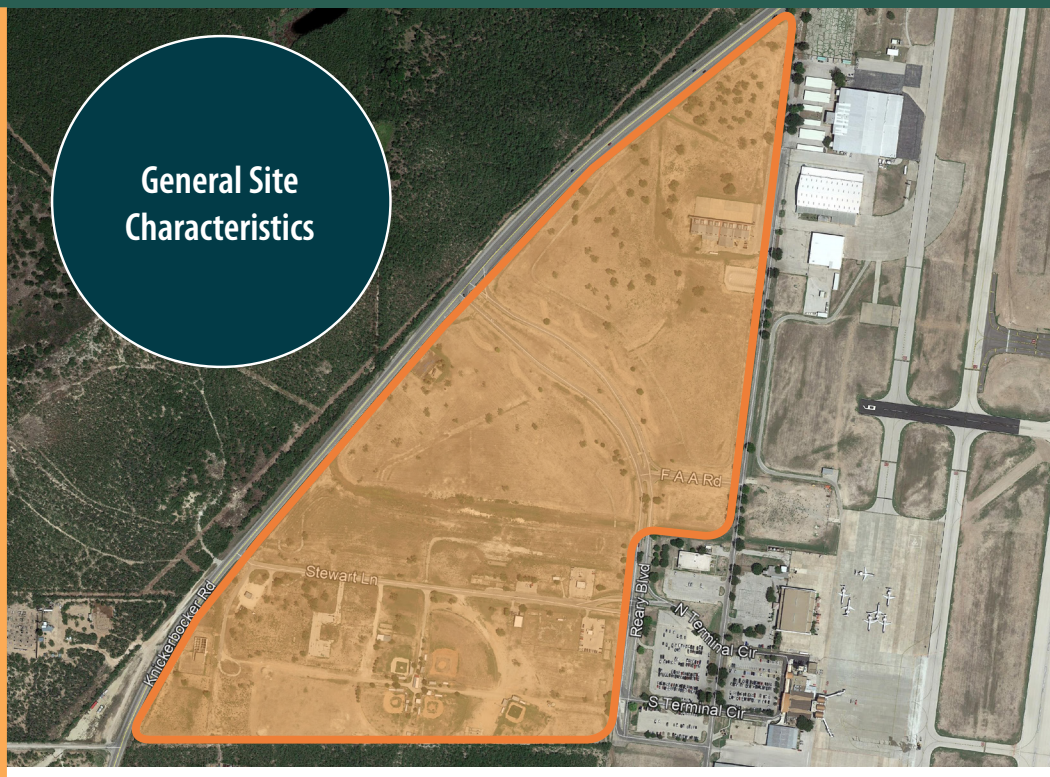
Leverage the airport to help realize unmet economic potential in the region

- Aviation-related industries
- Target industries and corporations
- High-value job creation

Support the region's key institutions (Goodfellow AFB, CBP drone operations, Angelo State & Howard College, among others)

Improve perceptions of airport as a community asset

General Site Characteristics



- ± 120 acres
- Airport-oriented Planned Development (PD) zoning
- Primary access via Knickerbocker Road with more than ¾ mile of frontage
- Secondary access via Reary Blvd. and Stewart Ln.
- Northern & central site areas mostly undeveloped
- Potential airfield access on site areas north & east of Reary Blvd.
- Ballfields & small-scale support development south of Stewart Ln.
- No known major environmental, wetland or habitat features on site
- Water, sewer and other infrastructure improvements needed to support current operators and allow for future development

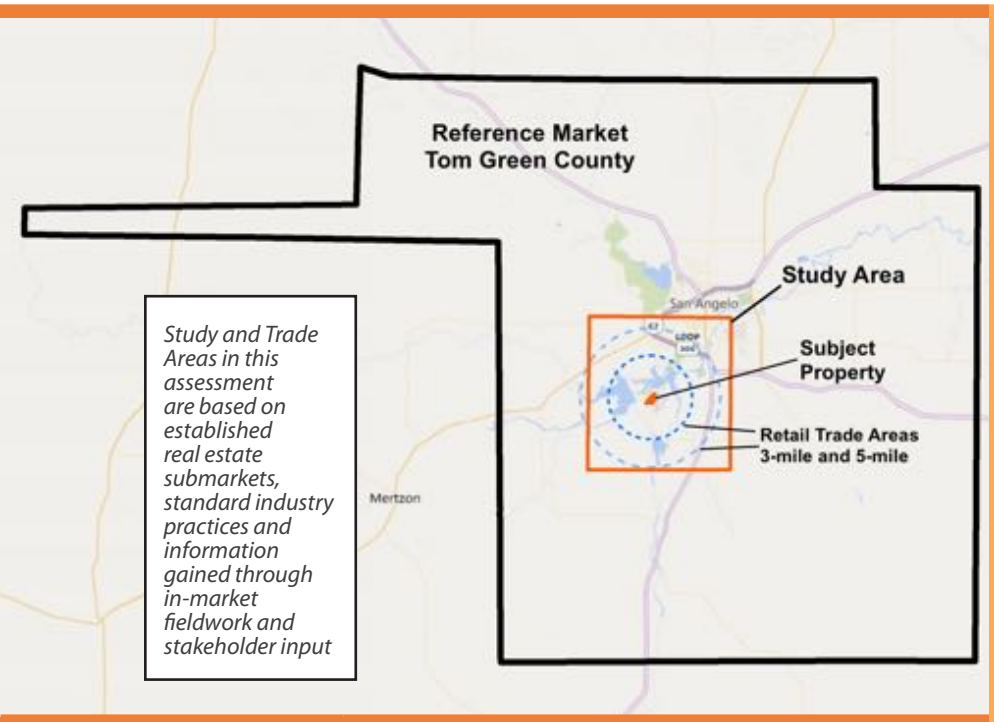
Approach & Context

- Coordination with Master Plan team
- Reviewed existing studies, plans, property holdings, economic and demographic conditions, etc.
- Stakeholder engagement
  - Focus groups, individual interviews
  - Key airport tenants
- In-market fieldwork and development patterns observation
- Location quotient analysis
- Market demand assessment
  - Office
  - Industrial & flex
  - Retail, restaurant, services
  - Hospitality
- Aerospace and aviation industry research and evaluation
- Competitive context and positioning
- Allocate potential demand to subject property
- Conceptual site layout
- Recommendations and next steps

Data Sources

- **San Angelo Regional Airport**
- **Master Plan Update team**
- **Various subscription-based third-party real estate, economic, and demographic data providers**
- **City of San Angelo staff**
- **Tom Green County Appraisal District**
- **Zoning, land use and previous studies from City of San Angelo and Tom Green County**
- **State of Texas**
  - **Comptroller's Office**
  - **Workforce Commission**
  - **Demographic Center**
  - **Department of Transportation**
- **Federal Sources:**
  - **US Census Bureau**
  - **Bureau of Labor Statistics**
  - **Quarterly Census of Employment & Wages**
  - **FAA**
  - **TRB**
- **Business journals, industry associations, commercial brokerage reports and interviews, other publications and agencies**

Market & Economic Overview

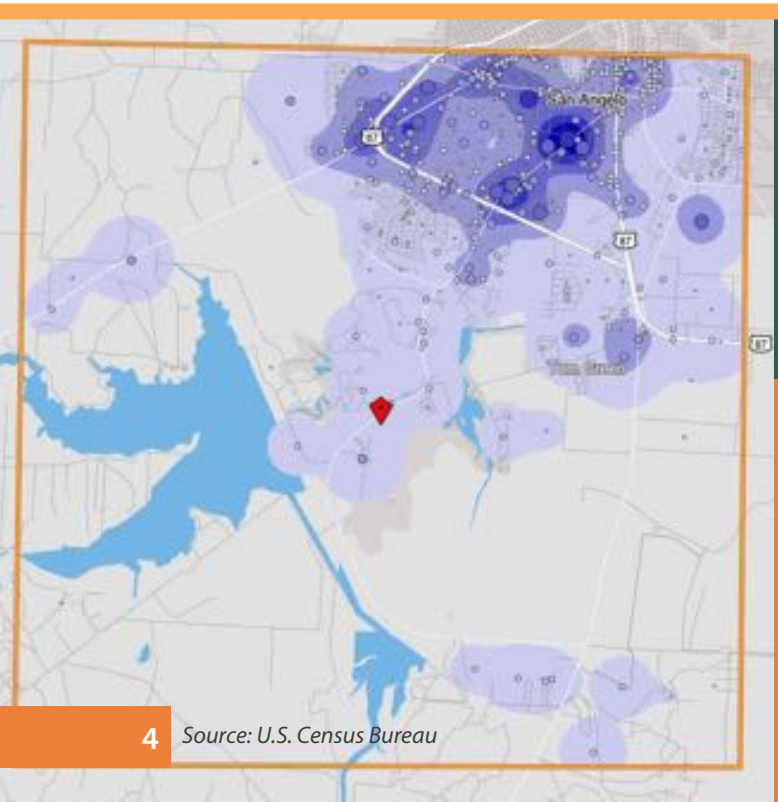


Study and Trade Areas in this assessment are based on established real estate submarkets, standard industry practices and information gained through in-market fieldwork and stakeholder input

Study Area Inventory as % of Reference Market

Asset Class	Inventory within Study Area, by SF
Industrial/Flex	40%
Retail	66%
Office	52%
Hotel	50%

Note: Reference Market includes Tom Green County; Study Area is 7% of Reference Market by area



1-5 Jobs/Square Mile
6-73 Jobs/Square Mile
74-366 Jobs/Square Mile
367-1,155 Jobs/Square Mile
1,156-2,819 Jobs/Square Mile

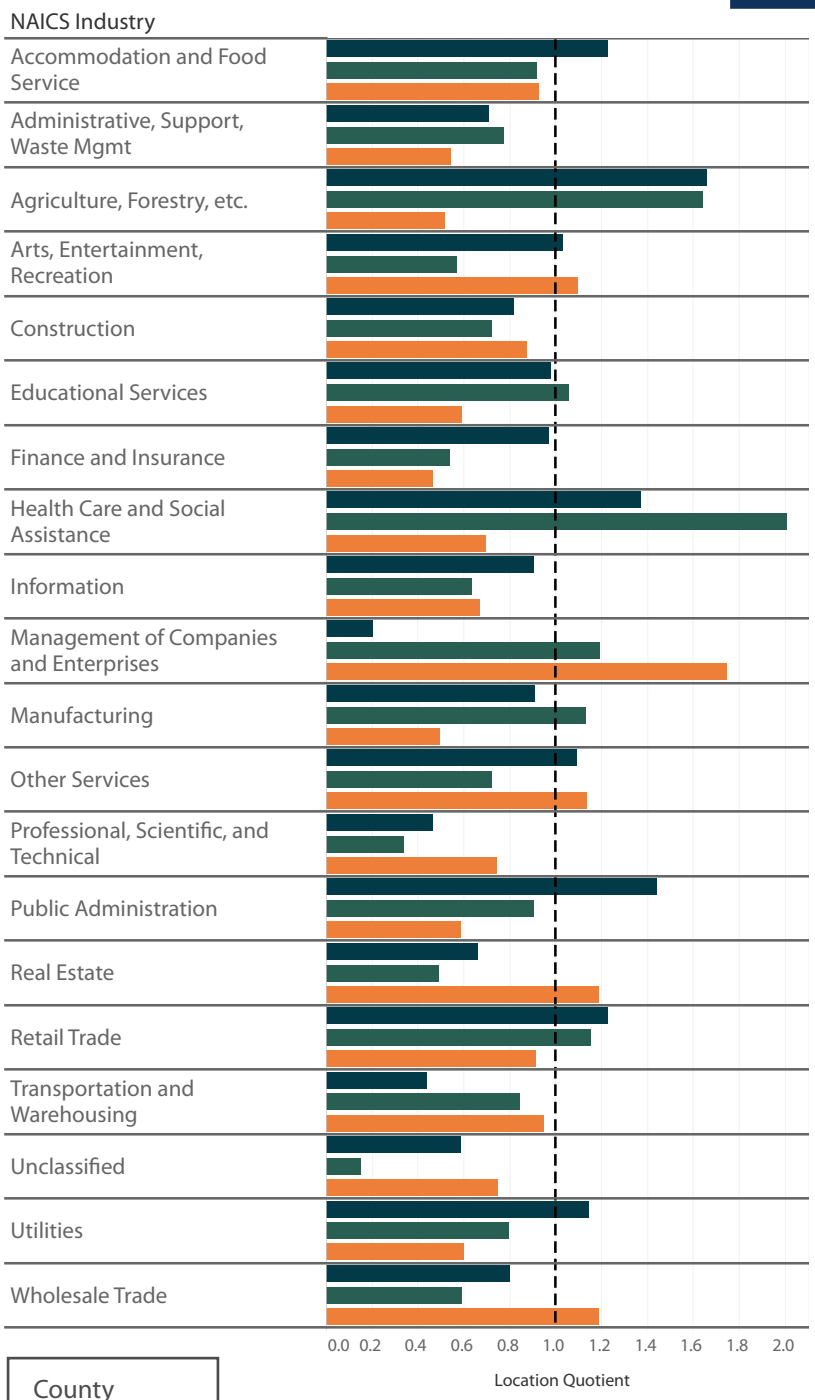
Source: U.S. Census Bureau

Notable Development & Economic Trends

- San Angelo industrial parks:
  - San Angelo Business & Industrial Park
    - Certified shovel-ready "Super Park" actively promoted as a city and regional economic development initiative
    - 746 total acres with available industrial/manufacturing or commercial sites ranging from small to very large
    - Planned rail-oriented industrial park
- The Study Area defined for this project encompasses 40% of the Tom Green County reference market's industrial inventory, and more than half of the office, retail, and hotel inventory
- Recent development (past 10 years) is generally concentrated around the Loop 306 area
- Employment and population density, as well as traffic counts, are low in the airport vicinity
- Tech-related employment has not kept pace with national level
  - Rate of population growth is slightly higher than the national average, but has slowed and is expected to level off
  - Recent job growth has been concentrated in support service industries

Location Quotient Economic Analysis

- To understand the strengths and weaknesses of the local economy based on levels of industry presence, location quotient analysis was conducted for Tom Green County (San Angelo). For benchmarking purposes, "peer regions" of Taylor (Abilene) and Midland Counties were also analyzed. Texas statewide employment data were used as the reference values.
- Values can be interpreted as follows:
  - LQ > 1 means an industry is relatively concentrated in the region, is self-sufficient or may export beyond the region
  - LQ < 1 means an industry may not be self-sufficient in the region, or may depend on other regions to provide services from the industry
  - Values of 1.25 or more may indicate the presence of an industry "cluster", while values of 0.75 or less suggest a limited industry presence



Takeaways

- Tom Green County presents a greater degree of balance and self-sufficiency across industries than its peers, which exhibit fewer strengths and more apparent industry gaps
- The LQ for Oil & Gas Extraction is extremely high in Midland County, highlighting its dominant role in driving the Midland economy; Tom Green County shows a strong presence of Oil & Gas industry, but at a more moderate concentration
- Support service industries (accommodation & food, health care, retail) are relatively concentrated in Tom Green County—likely reflecting the presence of Goodfellow AFB and educational institutions, and San Angelo's status as a regional center for these services
- Knowledge-based industries such as Management of Companies and Professional/Scientific/Technical are among Tom Green County's least concentrated industries

Mining, Oil, and Gas Extraction

1.16	Tom Green County
0.88	Taylor County
12.90	Midland County

Stakeholder Engagement

C&S staff held meetings with representatives from the following agencies, organizations, and companies to discuss their perspectives regarding future development of the Airport, its remaining property, and community context.

Organization	Representatives
City of San Angelo	Office of the Mayor City Council, District 1 Office of the Assistant City Manager Economic Development Department & Development Corporation San Angelo Regional Airport
San Angelo Chamber of Commerce	President/CEO Vice President of Economic Development San Angelo Regional Manufacturers Alliance
Angelo State University	Former President
Goodfellow Air Force Base	Community Partnership Specialist Retired Officers
State of Texas	Military Preparedness Commissioner
San Angelo Independent School District	Retired Superintendent
Airport Tenants	Vertex Aerospace Ranger Aviation Enterprises, Inc. Poor Boys Avionics

Overall theme: Desire to refocus attention on the airport and invest in its future for community and economic benefit

Strengths

- San Angelo Region
  - San Angelo provides a central location within both the state and country
  - Quality of life benefits include affordability and cultural, educational, recreational assets
  - Greater degree of economic stability with diverse set of local industries—relative to communities more reliant on oil & gas industries
  - Strong agricultural industry and expanding manufacturing base, particularly for support service and equipment for energy production industry given proximity to Permian Basin
  - Favorable climate and weather for agriculture and related manufacturing
- San Angelo Regional Airport
  - Central US location holds potential for connections and increased air traffic
  - Abundant airfield capacity and uncongested airspace
  - Climate and weather are conducive to air travel
  - Existing government UAV operations with authorized corridor and capacity to manage UAV activity alongside commercial traffic
  - Flightline operators offer a "Mini-MRO" through the services they provide, although some gaps were identified

Challenges

- San Angelo Region
  - Limited population and economic growth
  - Location is somewhat remote within the state
  - Lacks interstate highway connectivity currently; two future interstate systems are planned through or nearby San Angelo but timing is unknown
  - The region is relatively unknown outside of Texas
  - Very limited aviation and aerospace presence locally and no industry-specific educational or training programs are available
- San Angelo Regional Airport
  - Commercial air service is limited and can be expensive
  - Issues reported regarding water and sewer infrastructure capacity and quality
  - Improvements to utilities, hangars, and other airport facilities are needed
  - Located in less populated and developed area, which is an advantage for aircraft operations but a disadvantage for commercial development
  - Past inattention to airport as key community asset has resulted in need to "catch up" in terms of preparing for future
  - Limited labor pool: airport tenants generally must train own labor force on-the-job or must look outside the community for trained technicians

Key Influencing Factors

Goodfellow Air Force Base

- Long established, revered and highly supported community economic anchor
- Intelligence and cyber-oriented commands
- Contributes population and human capital to support industry and services in the community
- Potential need for space to house operations and technologies; off-base locations may be a possibility

Oil & gas industry

- Influential in San Angelo; not dominant but some expansion
- Economy not as vulnerable to industry-related "boom and bust" cycles as Midland/Odessa which are more reliant on oil & gas. Greater market stability seems to be prevailing due to change in US law allowing crude sales
- Desire for San Angelo to further expand roles in oil & gas related manufacturing, specialized "knowledge-based" services, housing, based corporate jets. Industry-related manufacturing also provides opportunity to sell products in global marketplace

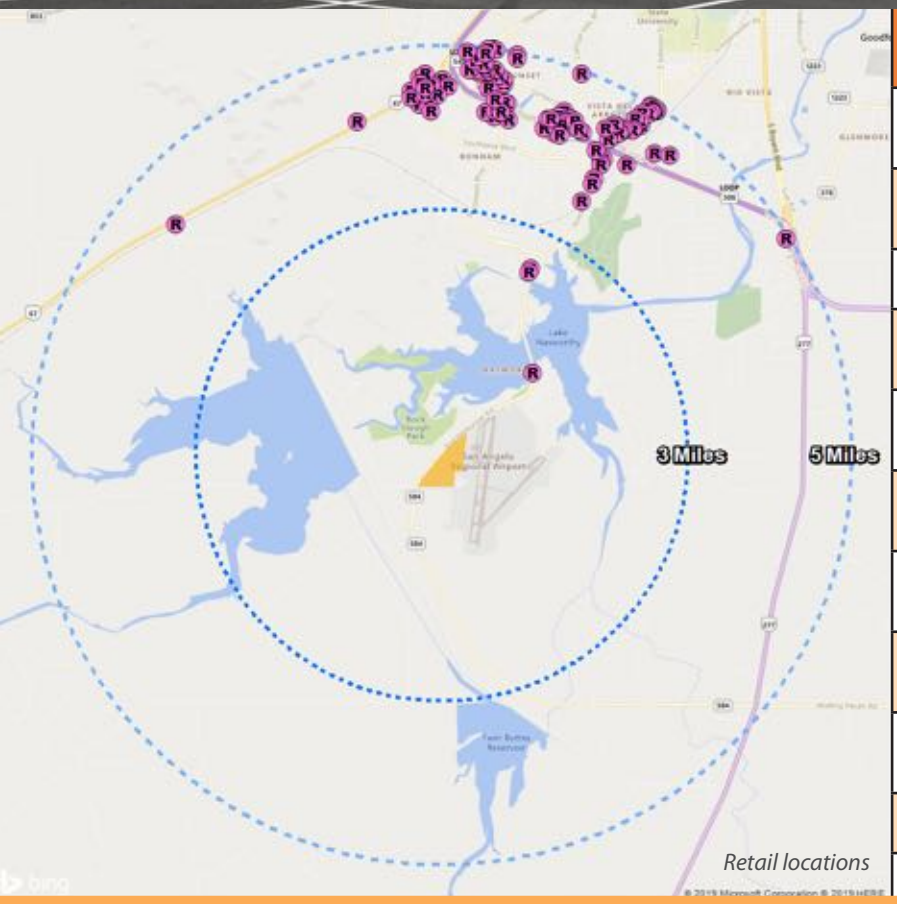
UAS operations at airport

- Existing flight corridor enables border-related government operations using fixed-wing surveillance UAS
- SJT contract tower has unique experience managing both UAS and commercial air traffic, which is a differentiator
- Perceived potential to expand UAS industry through government operations or private industry that continues to emerge and evolve

Key Themes and Takeaways

- Enhance the airport, including its appearance and functionality, in ways that establish it as an asset that promotes the community and region
- Strengthen relationships between the airport and key industries and corporations
- Support and expand government and military services at the airport, for example UAS operations
- Maintain focus of airport on service to the community
- Emerging tech including Smart City, 5G, 3D printing, and military-related spin-off (i.e. data interpretation) may create possibilities for greater San Angelo and are being further understood and pursued
- Awareness of gap in providing aviation-related educational and training programs locally
- Consensus that airport investment may contribute to opportunities and growth in the region by supporting key industries
- Goodfellow AFB, on-airport UAS operations, and other government services may present opportunities to expand private industry in related fields in the community and at the airport, however success in developing such spin-off opportunities has been limited so far
- Small market size and limited accessibility are key challenges

Retail Snapshot



Retail locations

DEMOGRAPHICS	3 Mile	5 Mile
Total Population (2018 / 2023)	3,270 / 3,500	27,900 / 29,800
% Annual Population Growth 2018-2023	1.37%	1.33%
Median Age, 2018	49.7	41.0
Total Households (2018 / 2023)	1,290/ 1,360	12,300 / 13,130
% Annual Household Growth (2018 / 2023)	1.09%	1.35%
Average Household Size, 2018	2.5	2.25
Median Household Income (2018 / 2023)	$86,900 / $96,700	$61,300 / $66,900
Average Household Income (2018 / 2023)	$130,320 / $148,000	$88,500 / $98,400
% Owner- / Renter-Occupied Housing, 2018	73% / 27%	53% / 47%
Daytime Employment	470	12,600

Source: ESRI, C&S Companies

Sources of Demand

- Steady but modest 0.9% annual population growth projected for metro area
- Limited population residing nearby and passerby traffic
- Airport passengers, employees, and other visitors associated with airport
- Nearby recreational use

KEY MARKET METRICS 5 MILE TRADE AREA	ALL RETAIL	RETAIL < 25,000 SF
Inventory % of Reference Market for same measure	36%	80%
Average building size	25,000 SF	7,000 SF
Average building size, past 10 years	49,000 SF	9,000 SF
Average age	33 years	34 years
Typical parcel size	1-10+ acres	1-3 acres
Prevailing scale of development	.15 - .23 FAR	.10 - .20 FAR
Prevailing market occupancy rates	Worsening ▼	Improving ▲
Prevailing market rental rates	Improving ▲	Improving ▲

Source: C&S Companies, based on third-party data

Market Considerations

- Analysis considers convenience-oriented retail product only—due to demographics, limited average annual daily traffic volume (AADT), subject site distance from higher-volume traffic corridors
  - Retail formats in this category are generally less than 25,000-square-feet including strip shopping centers; small neighborhood shopping centers; convenience store/gas, service-oriented and other standalone retail; restaurants
  - While a 1-mile radius is often treated as the trade area for convenience retail, we broadened our look first to a 3-mile and then a 5-mile radii to better understand and evaluate the market profile and demand potential for the subject airport site given the nature of the airport as a destination, the geographic features of the area, and customer willingness to drive further in this market
- Inventory values and associated calculations are sourced from third-party data providers and may be subject to limitations based on availability within the study area

Observations & Findings

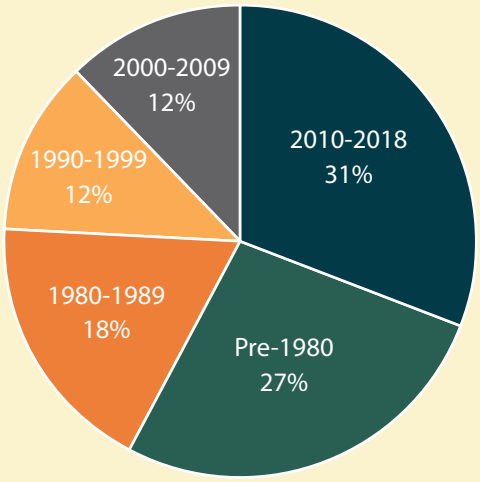
- Northern portion of 5-mile trade area includes high-traffic corridors and established competitive concentrations of retail inventory with greater surrounding population density to support
- Very limited population and daytime employment within 3-mile radius
- Retail space (all retail) in 5-mile trade area is approximately 36% of countywide total, but retail space within 3-mile trade area represents only 0.2% of countywide total
- Insufficient average annual daily traffic volume (AADT) on Knickerbocker Road proximate site to meet criteria for convenience-oriented retail site selection requirements—generally > 20,000 AADT to be considered viable
  - 6,300 AADT (TXDOT 2017) on north of the airport at S. Concho Rd
  - 1,750 AADT (TXDOT 2017) south of airport at Stewart Ln
- Nearby gas station/convenience store inventory includes four operators on Rickenbacker Rd. between Loop 306 and Airport, with better positioned locations and traffic volumes; closest location 1.5 miles north of airport entrance road
- Approximately one convenience-oriented retail property of average size is added to 3-mile trade area every 1-1.5 years
- Abundant supply of vacant, higher visibility, fee-simple land available closer to main corridors and demand centers

Result

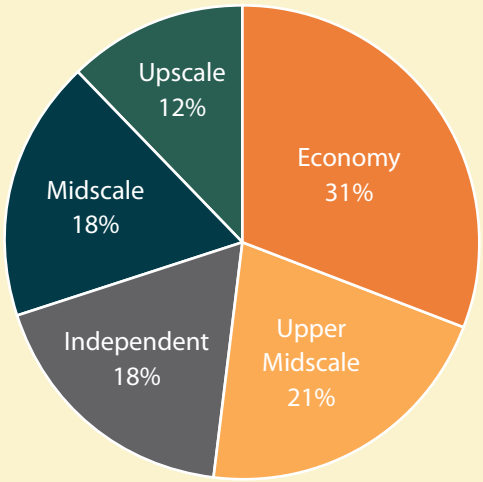
No market-based retail demand supported on site in the foreseeable future

Hotel Snapshot

Hotels by Year Built



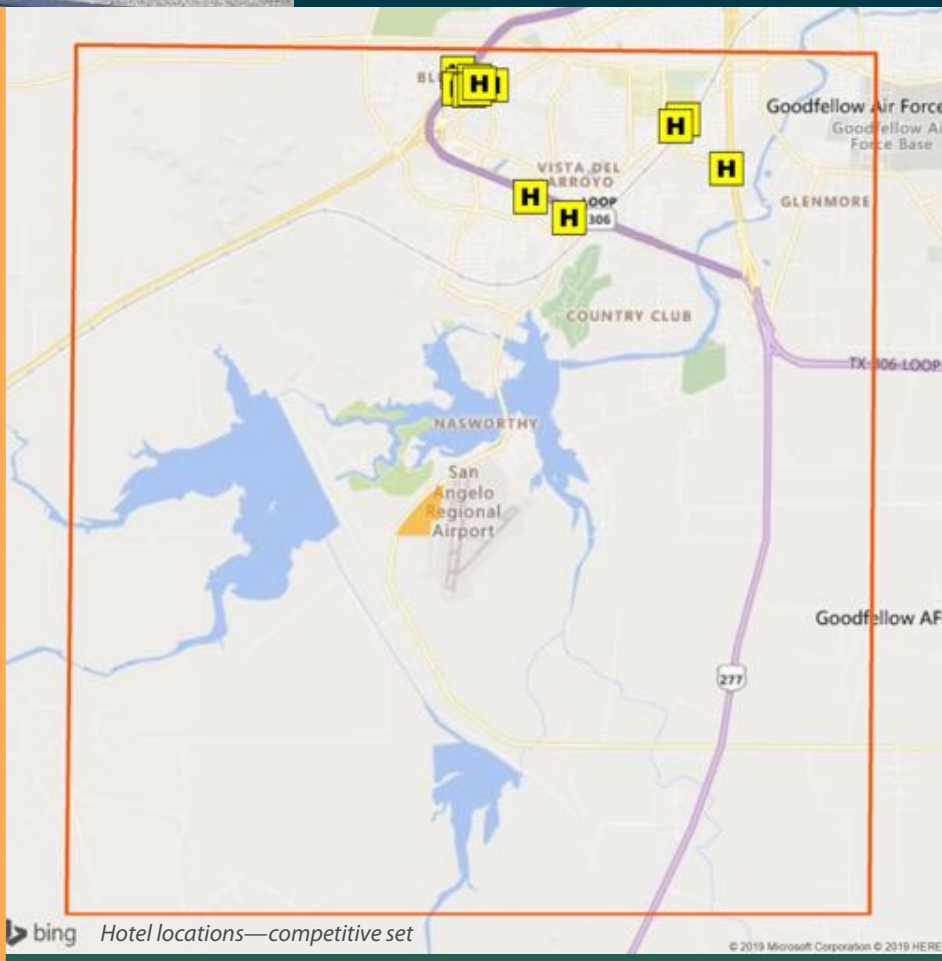
Hotels by Scale



Sources of Demand

Airport passengers, business travel and other activity associated with airport (limited)

Nearby recreational tourism



Hotel locations—competitive set

KEY MARKET METRICS STUDY AREA	HOTEL COMPETITIVE SET
Total inventory	1,132 rooms
Average building size	85 rooms
Average age	12 years
Typical parcel size	2 acres
Prevailing scale of development	40 rooms/acre
Annualized delivery	50 rooms (2000-present)

Source: C&S Companies

Market Considerations

- Competitive set of 13 hotels located in study area, which includes midscale class properties built since 2010 and all upper midscale and upscale class properties
- Geographic location and surrounding features of subject property and limited airport passenger volume

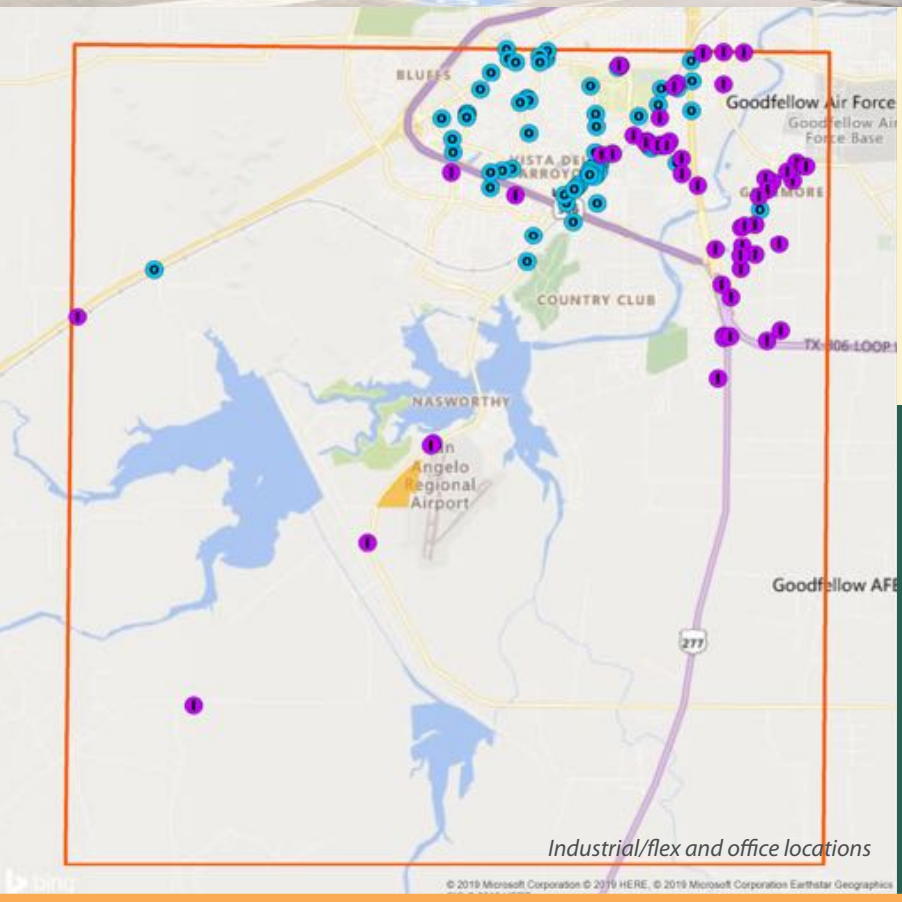
Observations & Findings

- Northern portion of study area includes high-traffic corridors and significant established competitive concentrations of hotel inventory with demand drivers to support it
- Fifty-four percent (54%) of competitive set built since 2010
- Approximately one hotel property of average size added to study area every 1.5 - 2 years for competitive set
- Major addition to hotel inventory with a combined 6 new properties in 2014 and 2016 temporarily lowered occupancy rates for two years, as expected, but upward trend in occupancy has resumed and currently in 70% range, historically a threshold for new entry decisions in this industry
- No known or announced plans for new hotel development in market
- Positive overall hotel market fundamentals in study area may indicate additional hotel development could occur in near-term assuming continuation of current economic conditions
- Abundant supply of vacant, higher visibility, fee-simple land available closer to highway corridors, demand centers, and amenity preferences
- Under current and assumed future conditions, subject site does not meet preferred site location criteria for hotel development given distance from higher-volume traffic corridors, demand centers and amenities concentrations, as well as low airport passenger volume

Result

No hotel demand supported on site in the foreseeable future

Industrial & Office Snapshot



Industrial/flex and office locations

Sources of Demand

Estimated non-farm employment growth for MSA of 1.1% annually, 2019-2029

Expansion of existing business and industries

Strategic relocations or new market entrants

Market Considerations

- **Flex buildings, also known as incubator, tech and showroom buildings, are versatile by design with at least 50% office use in combination with production, R&D, storage, lab, distribution, etc.**
- **Inventory values and associated calculations are sourced from third-party data providers and may be subject to limitations based on availability within the study area**

KEY MARKET METRICS STUDY AREA	INDUSTRIAL	FLEX	OFFICE
Inventory % of Reference Market	40%	57%	52%
Average building size	18,500 SF	9,800 SF	16,200
Average building size, past 10 years	12,000 SF	n/a	6,000 SF
Average age	40 years	35 years	38 years
Typical parcel size	1-5 acres	1-2 acres	1-3 acres
Prevailing scale of development	.15 - .2 FAR	.25 - .3 FAR	.2 - .25 FAR
Prevailing market occupancy rates	Improving ▲	Stabilized ◄►	Stabilized ◄►
Prevailing market rental rates	Improving ▲	Unreported	Stabilized ◄►

Source: C&S Companies, based on third party data

Observations & Findings

- Existing industrial and office concentrations located in the northern part of the study area:
  - Industrial clusters to the northeast toward Goodfellow AFB
  - Office spaces located more centrally north of Loop 306
  - Additional concentrations of both uses elsewhere in broader market
- Industry trends:
  - Nationwide, average industrial building size has increased substantially over the past decade largely due to proliferation of large-scale distribution warehouse. This trend was not observed in the study area
  - Industrial development favors locations offering close proximity and ease-of-access to significant transportation corridors
  - Commerce/industrial park settings are generally appealing because utilities and infrastructure readiness bolsters speed-to-market given ever-increasing pressure to accelerate development timeframes
  - Nationally, square feet of office space per employee has trended downward as collaborative workspaces, open office concepts and remote work have expanded. The study area has experienced a downward trend in new office building size
- Study area industrial and flex product is 41% of countywide total; office is 52%
- Flex buildings represent only 6% of industrial inventory and are less prevalent here than in many markets
- Study area industrial and office vacancy rates are low:
  - Strong industrial absorption in 2018 as vacancy rate declined from more than 10% to nearly 1% by year end
  - Office vacancy has stabilized below 5% in the last 3 years
- Based upon available development rates:
  - Approximately 1 industrial building of average size added to the study area every 3-5 years
  - Approximately 1 office building of average size added to the study area every 1-2 years
- Abundant supply of competitive fee-simple property available throughout the study area and in closer proximity to major transportation corridors and amenity preferences

Result

No market-based industrial/ flex and office demand supported on site under current conditions

Aviation & Aerospace Industry

Notable Industry Trends

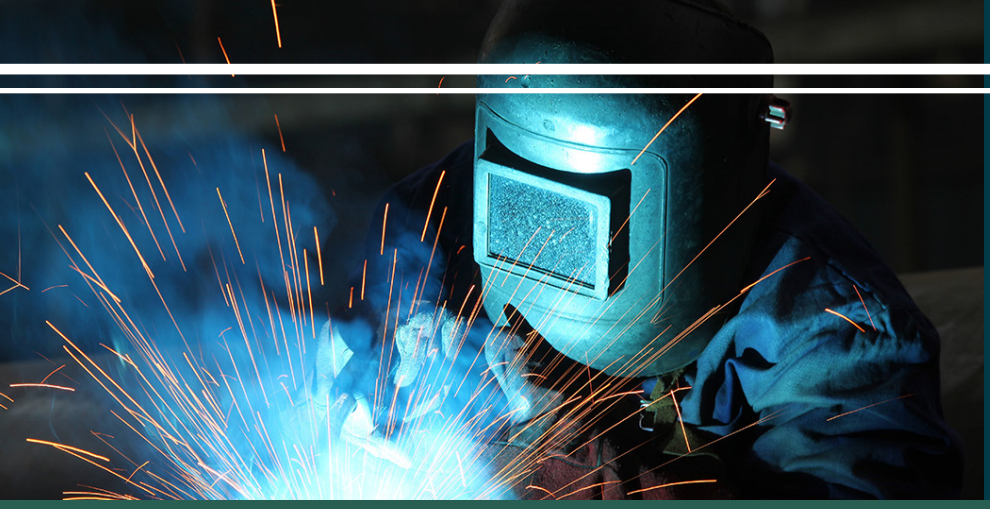
- Significant growth is projected for commercial and private aviation over the next 10-20 years
  - Demand for more aircraft, including "next generation" models
  - Increased aftermarket service needs, including aircraft updates and maintenance
  - Associated manufacturing and supply chain growth
- New technologies will become commonplace as A&A industries advance.
  - Examples include additive manufacturing (3D printing) and automation
  - Operators must invest and adapt
- A major workforce shortage exists throughout A&A industries—companies need more technicians and engineers
  - Specialized training and skills are increasingly important as technologies advance
  - Partnerships involving colleges or universities, private industry, and economic development organizations have been established in many communities to support and attract A&A industry
- Unmanned aerial vehicles (UAV) and other non-traditional aircraft will transform our transportation systems in the coming years
  - Government and military applications are established in designated locations including at SJT
  - Many advanced commercial UAV technologies have been developed but current regulations allow only limited applications in public airspace
  - Most commercial and all unauthorized UAV use is prohibited at and around airports
  - Timeframes for adoption depend on development of regulatory framework
- Consolidation is occurring within the aircraft manufacturing and aftermarket service industries
  - Major aircraft manufacturers (OEMs) including Boeing and Airbus have expanded into the MRO industry
  - Demand for increased output and modern production methods favors larger and flexible supply chain operators
  - Intensifying competition for small aftermarket/MRO and supply chain operators, and expanded market share for large established operators

Takeaways

- A&A industry growth is expected to continue, and a competitive environment exists as regions seek to attract industry operators
- Airport facilities and the available subject property acreage would limit possible manufacturing or MRO operations at SJT—if demand and interest were identified—to a regional/business aircraft scale
- Industry-specific educational and workforce development programming is a necessity in communities that support or wish to attract A&A industry
- Most A&A supply chain manufacturers favor off-airport industrial locations
- Expanded UAS operations or facility needs at SJT would likely be linked to government programming
- The airfield-adjacent portion of the subject property is best suited to accommodate various A&A operations

Typical Scale and Requirement by A&A Industry Sub-Sector

	Original Equipment Manufacturers (OEM)	Supply Chain Manufacturing	Maintenance, Repair and Overhaul (MRO)	Unmanned Aerial Vehicles (UAV)
Description	Primary manufacturers of aircraft and engines	Producers of aircraft components; classified by tier with Tier 1 directly supplying OEMs and lower tiers supplying more basic components	Provide "aftermarket" services to aircraft in operation including structural or mechanical repair, and upgrades to aircraft systems or components	UAV technologies and regulatory environment are advancing—commercial applications include R&D, training, surveillance, imaging, manufacturing, maintenance
Typical Scale	Commercial Aircraft 500,000-1 million+ SF 60-250 acres	Aircraft Components Manufacturing 40,000-200,000 SF 4-20 acres	Commercial Aircraft 250,000-1 million+ SF 25-90 acres	Limited information available
	Regional/Business Aircraft 200,000-500,000 SF 20-60 acres		Regional/Business Aircraft 75,000-400,000 SF 6-40 acres	
			Components or other 30,000-200,000 SF 2-20 acres	
Key Requirements	» Airfield access and capacity » Specialized, highly skilled workforce—engineers & technicians » Supply chain considerations—costs and accessibility » Airport or aero-industrial park setting and industrial infrastructure	» Generally do not require airfield access and/or airport location » Skilled manufacturing-oriented workforce » Supply chain considerations including input material costs and multi-modal (air, highway, other) access » Industrial setting and infrastructure	» Airfield access and capacity » Specialized, highly skilled workforce with emphasis on technicians » Supply chain considerations—costs and accessibility » Airport or aero-industrial park setting and industrial infrastructure	» Most UAV flight operations not compatible with airports—military as an exception » Major UAV test sites have FAA authorization, designated territory, R&D and testing infrastructure » R&D and training often affiliated with educational institutions » UAV supply chain and maintenance networks not well established » Industrial setting and infrastructure for most UAV related operators

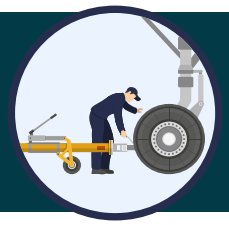


Training Facilities

A skilled workforce is almost universally considered the most important resource in attracting A&A industries, as well as other specialized manufacturing and tech-related jobs. Workforce training facilities and programs intended to develop industry-specific knowledge and skills have become an important means to educate employees in such industries.

A&A Industry Specific Training Facilities

- San Angelo region currently has no A&A degree or certification programs offered through local colleges
- Growing trend of formal partnerships and other close relationships among educational institutions, private industry, and economic development organizations—established to support or attract A&A industries
- Investment in A&A workforce training facilities has become a common practice
  - Programming often developed and offered by community colleges with funding, technical and other support provided by partners
  - Located at or near airports to allow hands-on training
  - A&A programs include Airframe and Powerplant (A&P) certification for aircraft maintenance technicians, airframe manufacturing, avionics, and pilot training
  - Private industry partners may offer job shadowing and mentoring opportunities, apprenticeships, guaranteed interview upon graduation
- Examples include:
  - Northeast State Community College, Blountville, TN—developing aviation programming and training facility as part of new aerospace park at Tri-Cities Airport (TRI)
  - Rock Valley College and AAR, Rockford, IL—formal partnership and workforce pathway program for aircraft technicians at Chicago-Rockford International Airport



A&A training facilities—typical scale

- **25,000 - 200,000 sf**
- **2 – 15 acres**

Regional Workforce Training Center

Some communities have invested in workforce training centers to help develop human capital and respond to evolving industry needs in an effort to attract and expand key industries.

- **Flexible facilities and space intended to serve a broad range of industries—in contrast to A&A or other industry-specific training centers**
- **Generally developed and operated by economic development organizations, in partnership with community-based educational institutions and private industry**
- **Flexible training space concept as a potential complement to A&A training facility, offering opportunities for short-term or evolving needs**

Western New York Workforce Training Center **Buffalo, NY**	» strong economic development/educational partnerships » focus training on skills relevant to emerging or prospective industries
Southwest Mississippi Regional Workforce Training Center **Summit, MS**	» develops curricula to meet needs identified by businesses in the community » located at SW Mississippi Community College

Private Industry Training Centers

Some companies develop their own customized training centers where employees, vendors, or other users can gather for hands-on, in-person instruction and training on their specific products and/or processes. Locations on or near airports or major transportation centers provide ease of access and efficiency for trainees.

Photo: BlastOne Training Center, Columbus, OH Company's national training center located in flex space on airport property (non-aviation company)

Takeaways

- Specialized, non-traditional workforce education/ training expected to gain traction as an alternative to university model
- A&A facilities offer hands-on training and must have airfield access—SJT provides opportunity for siting of such a facility
- Risk in developing educational programs—or building specialized (A&A) facilities without established industry presence in the community
- Possible multi-use opportunity for "flexible" training facility: A&A, military, general economic development purposes, private company. Opportunity for short-term or temporary use could be attractive.
- "Hybrid" facility with mix of educational program space and flexible training space could provide unique approach. Could include affiliated hangar space and access to airfield.

Concept Plan for Land Use & On-Airport Development

Because current demand and immediate opportunities appear to be limited for this site, SJT should focus near-term efforts on prudent land planning and preparation to support future on-airport development. That starts with developing a concept plan for land use and on-airport development that sets forth a vision for the future, defines optimal and agreed-upon zones for certain uses, and guides the actions and next steps needed to get there.

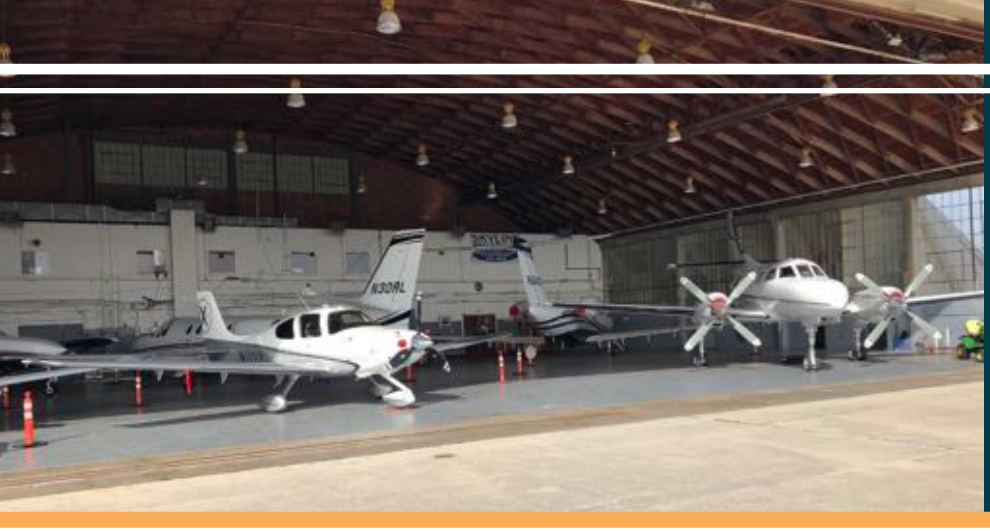
Concept Plan

Land use planning approach:

North of Reary Blvd (northern portion): While hurdles exist both locally and globally for attracting aviation-related enterprise, this northern portion of the property offers a unique and valuable asset—airfield access—and its future use should build upon that feature.

South of Reary Blvd to Stewart Lane (central portion): Market-based demand is not apparent, however this central portion of the site could offer a quality location for future office and flex development in a business park setting. This may appeal to some businesses for travel-related or other considerations that make an on-airport location advantageous.

South of Stewart Lane (southern portion): In the absence of market-driven demand, this southern portion of the site offers SJT the opportunity to build upon positive perceptions and relationships within the San Angelo community by preserving and enhancing active community use. Should market conditions change significantly in the future, and the central section of the site were to build out, this portion of the property could be utilized for business park expansion.



Summary of Findings

Absence of demand for market-driven (retail, office, industrial/flex, hotel) development on subject property

- Lack of surrounding population and development
- Low traffic counts along Knickerbocker Road
- "Path of growth" does not favor airport location
- Enplanements not high enough to attract service-oriented development as airport complement
- Abundant fee-simple, better-positioned land available in surrounding area, including City-supported industrial park

Investments in infrastructure and site readiness are necessary to support new development on subject property

Aviation & aerospace (A&A) industries continue to expand; SJT property offers airfield access as required by MRO, aircraft manufacturing, and some UAV operators, although challenges exist in attracting A&A industry

- Northern portion of subject property could accommodate operators at a regional/business aircraft scale
- Limited industry presence and workforce in the region
- No existing A&A industry-specific academic or workforce training programs
- Expanded UAV operations, if possible, would likely have to be associated with government programs
- Current industry trends favor larger—rather than smaller—operators

Challenges to non-aeronautical development on airport land:

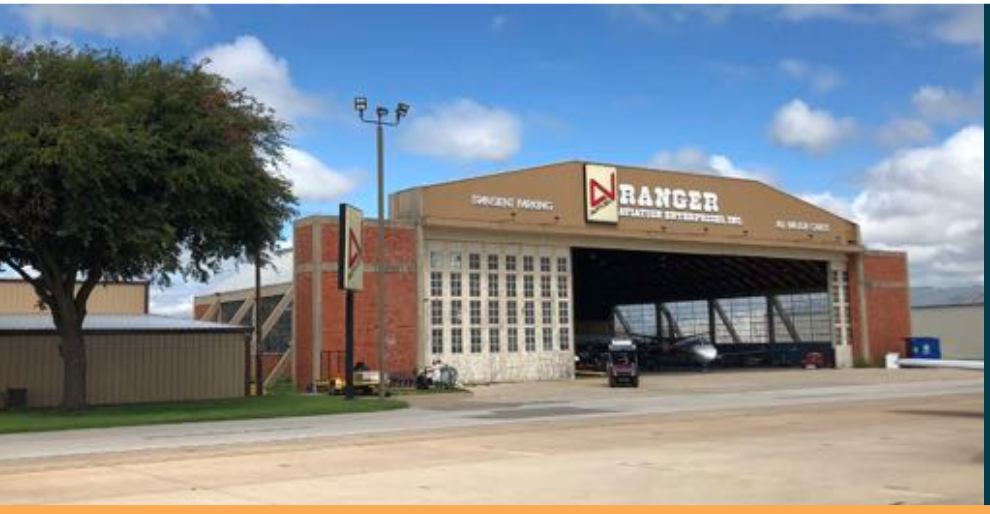
- FAA ground lease and fair market value mandates—developers often prefer to acquire property on a fee-simple basis
  - On the other hand, some may prefer a ground lease arrangement
- Required take-back clauses may complicate or preclude development financing
- Section 163 of the 2018 FAA Reauthorization has recently diminished a regulatory hurdle by limiting the FAA's role in approving non-aeronautical development moving forward
  - FAA review/approval was traditionally required for all non-aeronautical development
  - Per Section 163, FAA approval is no longer required for non-aeronautical development—provided that certain conditions are met, such as not impacting safe and efficient movement of aircraft and accurate land designations on the Airport Layout Plan (ALP)

Efforts to improve perceptions of the airport through strategic investments, programming, and marketing may enhance its position to attract development

Given the lack of apparent demand for the subject property, focus shifts to land planning—to ensure desired uses could be accommodated in the future, and to guide development in a strategic manner that aligns with best use of the land

Any development to occur on the subject property would likely do so because of advantages derived from the airport itself

- When it comes to attracting development, the airport is its own greatest asset
- For example:
  - Businesses working with the airport, or with staff that travel frequently
  - A&A industry operators that require airfield access



Next Steps

Where do we go from here?

Through prudent planning and thoughtful preparation, SJT has an opportunity to position its non-aeronautical property assets for the future. The site concept establishes a vision for future use of the subject site, and can be used to help guide decisions—so that when development opportunities arise, City and Airport leaders can take actions in the short term that promote, rather than preclude, the airport's long-term goals.

Moving forward, it will be important to maintain a strategic approach to the use and development of the subject property. The following set of "Next Steps" lays out a number of actions the airport may take in the near term to advance its goals.

Implement multi-channel marketing program—for the airport in general, as well as to promote development opportunities on airport land

- Create an airport brand, complete with logo and design package, and carry forward on physical features (signage, etc.) and digital presence
- Prepare print and digital marketing materials to promote awareness of development potential at SJT, and elevate understanding of the airport's roles as a community and economic asset
- Expand digital presence:
  - Establish dedicated, standalone airport website to distinguish SJT as a competitive and independent enterprise
  - Use website as a means to distribute customer and promotional information
  - Create and maintain active standalone airport social media accounts (Twitter, Instagram, Facebook, etc.)
  - Promote aviation-related and other development opportunities via real estate listings or registries, site selection services, etc.

Placemaking and Aesthetic Improvements

- Create airport gateway presence through enhancements
  - Prominent signage at airport entrance on Knickerbocker Road
  - Plantings and landscaping treatments as appropriate along Knickerbocker Road frontage and Reary Blvd. median
- As a City initiative, consider creating a broader branded community district in the airport vicinity
  - Highlight recreation opportunities with lake and ball fields, link to nearby natural features, frame airport as way to explore the world, etc.— "Exploration District" as an example of possible branding
- Consider establishing the area around existing ball fields as a "community destination" with possible expansion of recreation opportunities and airport-related branding
  - Non-airport funded enhancement of existing facilities
  - Potential relocation of War Memorial to this area

Preparing for Development

- Release airport land for non-aeronautical development and/or concurrent use and update ALP
- Identify and pursue infrastructure improvements as necessary to support existing and potential future development at airport:
  - Water and sewer upgrades to meet current tenant needs and prepare for future growth
  - Remove utility poles along Hangar Road and replace with underground lines to improve access between airfield and northern portion of subject property
  - Conduct infrastructure assessment to document conditions, capacities, and projected needs; prioritize investments accordingly
- Remain aware of changing FAA policy regarding approval of non-aeronautical development (FAA Section 163)
- Register available airport land with real estate data and site selection services
- Establish a local brokerage policy and/or enlist a local broker to assist with inquiries and promotion of sites

Further investigate the creation of an on-airport workforce training center focusing on skill development in aviation & aerospace (A&A) industries

- Engage higher education partners to develop an Airframe and Powerplant (A&P) certification program for aircraft maintenance technicians, and potentially other workforce programming with A&A applications
- Expand aviation-related curriculum and/or promote awareness of A&A career opportunities through initiatives like the existing 5th grade program sponsored by the Fine Art Museum and Goodfellow AFB
- Explore potential to engage A&A industry operators, economic development organizations, local government, or other parties in partnerships with educational institutions to develop workforce training programs—a model successfully applied in a number of communities
- Pursue creation of a "hybrid" on-airport workforce development center providing specialized facilities for hands-on A&A training, while also offering flexibility to support more generalized regional workforce training and economic development programs
  - A&A industry-specific components:
    - Aircraft maintenance hangar with airfield access, serving as center for hands-on A&A training
    - Training facility would typically provide space for multiple aircraft, modern aircraft maintenance tools & equipment, etc.
    - Classroom, lab, and ancillary space
  - Potential co-location opportunities for a "hybrid" workforce development center:
    - Space for academic programs affiliated with local institutions—classrooms, labs, etc.
    - Flexible integrated space for a variety of operators/industries to use for short-term training or special use purposes
    - Possible co-working or incubator elements, i.e. branded "Aero[Space]"

General Limiting Conditions

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This document is qualified in its entirety by, and should be considered in light of, these limitations, conditions and considerations.

Prepared by:

in partnership with

APPENDIX D
Airport Layout Plan Drawing Set

AIRPORT LAYOUT PLAN

DRAFT

SAN ANGELO REGIONAL AIRPORT/MATHIS FIELD (SJT)
SAN ANGELO, TEXAS
JULY 2020

PREPARED FOR:

SAN ANGELO REGIONAL AIRPORT

SAN ANGELO REGIONAL AIRPORT
8618 TERMINAL CIRCLE
SAN ANGELO, TX 76904
PHONE NO. (325) 659-6409

PREPARED BY:

centurion PLANNING AND DESIGN

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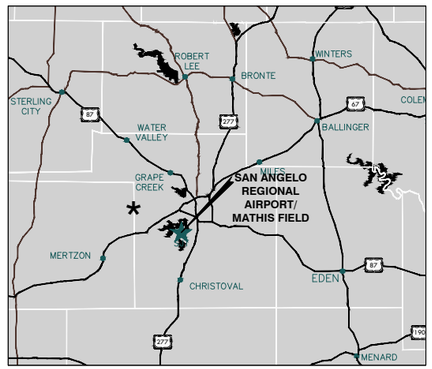
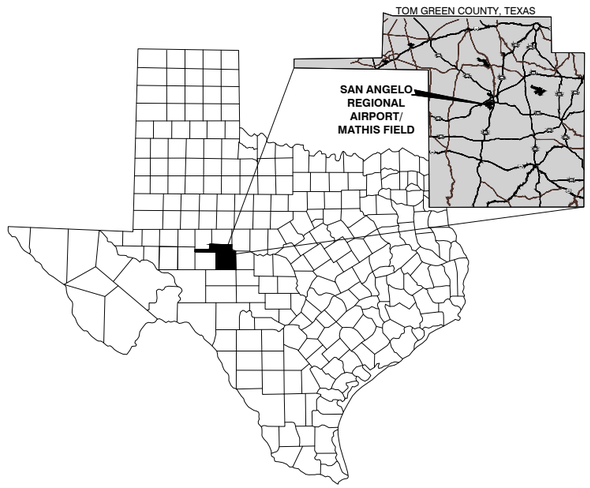


VICINITY MAP



LOCATION MAP

INDEX OF DRAWINGS		
SHEET NUMBER	SHEET TITLE	REVISION
1	COVER SHEET	
2	AIRPORT DATA SHEET (SHEET 1 OF 2)	
3	AIRPORT DATA SHEET (SHEET 2 OF 2)	
4	EXISTING AIRPORT LAYOUT PLAN	
5	ULTIMATE AIRPORT LAYOUT PLAN	
6	INNER PORTION OF THE APPROACH SURFACE DRAWING - RUNWAY 18	
7	INNER PORTION OF THE APPROACH SURFACE DRAWING - RUNWAY 36	
8	INNER PORTION OF THE APPROACH SURFACE DRAWING - RUNWAY 3 (ULTIMATE RUNWAY 4)	
9	INNER PORTION OF THE APPROACH SURFACE DRAWING - RUNWAY 21 (ULTIMATE RUNWAY 22)	
10	OBSTRUCTION DATA TABLES	
11	PART 77 AIRPORT AIRSPACE DRAWING	
12	PART 77 AIRPORT AIRSPACE DRAWING - RUNWAY 36 PRECISION APPROACH	
13	TERMINAL AREA DRAWING	
14	ULTIMATE LAND USE PLAN	
15	AIRPORT PROPERTY MAP	

AIRPORT APPROVAL

JEREMY VALGARDSON - AIRPORT DIRECTOR DATE

RUNWAY DATA TABLE

RUNWAY DATA	RUNWAY 18-36 EXISTING 18	RUNWAY 18-36 EXISTING 36	RUNWAY 18-36 ULTIMATE 18	RUNWAY 18-36 ULTIMATE 36	RUNWAY 3-21 (ULTIMATE RUNWAY 4-22) EXISTING 3	RUNWAY 3-21 (ULTIMATE RUNWAY 4-22) EXISTING 21	RUNWAY 3-21 (ULTIMATE RUNWAY 4-22) ULTIMATE 4	RUNWAY 3-21 (ULTIMATE RUNWAY 4-22) ULTIMATE 22	RUNWAY 9-27 EXISTING 9	RUNWAY 9-27 EXISTING 27	RUNWAY 9-27 ULTIMATE 9	RUNWAY 9-27 ULTIMATE 27
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	DECOMMISSIONED	DECOMMISSIONED

SOURCE: AIRPORT MASTER RECORDS AND REPORTS, AIRPORTIQ 5010, ACCESSED FEBRUARY 2020.
NOTES: 1/ THE RUNWAY 18 DISPLACED THRESHOLD AND DECLARED DISTANCES ARE IMPLEMENTED TO ALLOW FOR A FULL STANDARD RSA AND ROFA.
(S): SINGLE WHEEL
(D): DUAL WHEEL

AIRPORT FACILITIES (FAA OWNED)
NDB, ASR, VOR/DME, RTR, RVR,ASOS
ILS, GS, MALSR (RUNWAY 3)
ODALS, LOCALIZER ANTENNA (RUNWAY 21)
PAPI-4 (RUNWAY 18 & 36)
VASI-4 (RUNWAY 21)
REIL (RUNWAY 18)

MODIFICATION TO STANDARD			
STANDARD MODIFIED	DESCRIPTION	AIRSPACE CASE NUMBER	APPROVAL DATE

AIRPORT INSTRUMENT APPROACH PROCEDURES EXISTING CONDITIONS	
RUNWAY 18	RNAV (GPS)
RUNWAY 36	N/A
RUNWAY 3	ILS Y OR LOC Y, RNAV (GPS), HI-VOR/DME OR TACAN, VOR/DME OR TACAN, NBD
RUNWAY 21	RNAV (GPS), HI-VOR/DME OR TACAN, VOR/DME OR TACAN
RUNWAY 9	N/A
RUNWAY 27	N/A

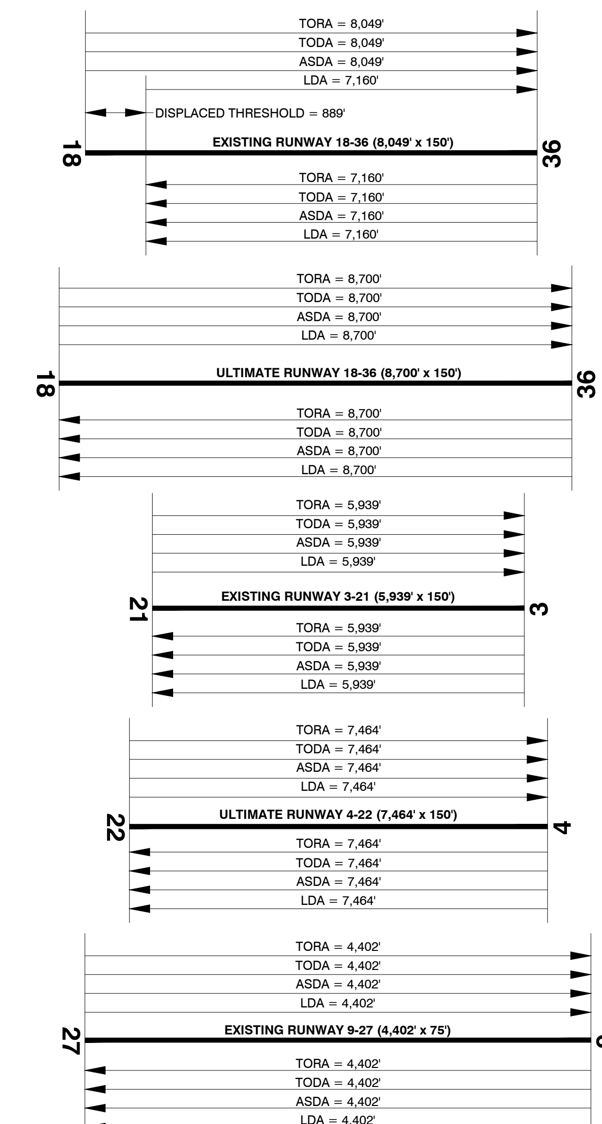
AIRPORT INSTRUMENT APPROACH PROCEDURES ULTIMATE CONDITIONS	
RUNWAY 18	RNAV (GPS)
RUNWAY 36	ILS Y OR LOC Y, RNAV (GPS), HI-VOR/DME OR TACAN, VOR/DME OR TACAN, NBD
RUNWAY 3	RNAV (GPS)
RUNWAY 21	RNAV (GPS), HI-VOR/DME OR TACAN, VOR/DME OR TACAN
RUNWAY 9	DECOMMISSIONED
RUNWAY 27	DECOMMISSIONED

AIRPORT DATA TABLE

DESCRIPTION	EXISTING	ULTIMATE
AIRPORT REFENCE CODE	C-II	C-III
ACREAGE	1,517	SAME
CRITICAL DESIGN AIRCRAFT	CRJ-700	CRJ-900
AIRPORT ELEVATION MSL (NAVD88)	1,918.6'	SAME
AIRPORT NAVAIDs	ROTATING BEACON, LIGHTED WIND CONE, SEGMENTED CIRCLE, MALSR, ODALS, VASI, PAPI, REIL	SAME
AIRPORT REFERENCE POINT (NAD83)		
LATITUDE	N31° 21' 27.90"	N31° 21' 11.19"
LONGITUDE	W100° 29' 46.70"	W100° 29' 51.72"
MISCELLANEOUS FACILITIES	ATCT, ASOS, LOC AND GS	SAME
AIRPORT MAGNETIC DECLINATION		
VARIATION	5° 7' E CHANGING BY 0° 7' W PER YEAR	5° 8' E CHANGING BY 0° 7' W PER YEAR
DATE	APRIL 2020	SAME
SOURCE	NGDC.NOAA.GOV	SAME
MEAN MAXIMUM TEMPERATURE OF HOTTEST MONTH	89.7° - AUGUST	SAME
NPIAS SERVICE LEVEL	COMMERCIAL SERVICE	SAME
STATE EQUIVALENT SERVICE ROLE	PRIMARY	SAME

DECLARED DISTANCES

RUNWAY 18-36	EXISTING	ULTIMATE
TAKEOFF RUN AVAILABLE (TORA)	8,049'/7,160'	8,700'/8,700'
TAKEOFF DISTANCE AVAILABLE (TODA)	8,049'/7,160'	8,700'/8,700'
ACCELERATE-STOP DISTANCE AVAILABLE (ASDA)	8,049'/7,160'	8,700'/8,700'
LANDING DISTANCE AVAILABLE (LDA)	7,160'/7,160'	8,700'/8,700'
RUNWAY 3-21 (ULTIMATE RUNWAY 4-22)		
TAKEOFF RUN AVAILABLE (TORA)	5,939'/5,939'	7,464'/7,464'
TAKEOFF DISTANCE AVAILABLE (TODA)	5,939'/5,939'	7,464'/7,464'
ACCELERATE-STOP DISTANCE AVAILABLE (ASDA)	5,939'/5,939'	7,464'/7,464'
LANDING DISTANCE AVAILABLE (LDA)	5,939'/5,939'	7,464'/7,464'
RUNWAY 9-27		
TAKEOFF RUN AVAILABLE (TORA)	4,402'/4,402'	DECOMMISSIONED
TAKEOFF DISTANCE AVAILABLE (TODA)	4,402'/4,402'	
ACCELERATE-STOP DISTANCE AVAILABLE (ASDA)	4,402'/4,402'	
LANDING DISTANCE AVAILABLE (LDA)	4,402'/4,402'	



NOTE:
ULTIMATE RUNWAY 9-27 WILL BE DECOMMISSIONED AND CONVERTED INTO A TAXIWAY.

SAN ANGELO REGIONAL AIRPORT
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FIRM NO. 19840

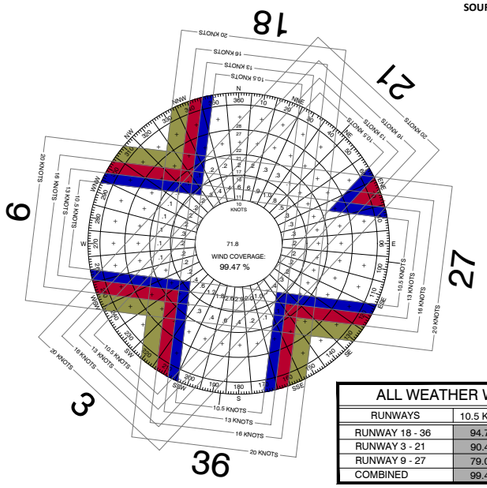
SAN ANGELO REGIONAL AIRPORT/ MATHIS FIELD (SJT) SAN ANGELO, TEXAS

MARK	REVISION	DATE
	DRAFT	

AIRPORT DATA SHEET (SHEET 1 OF 2)

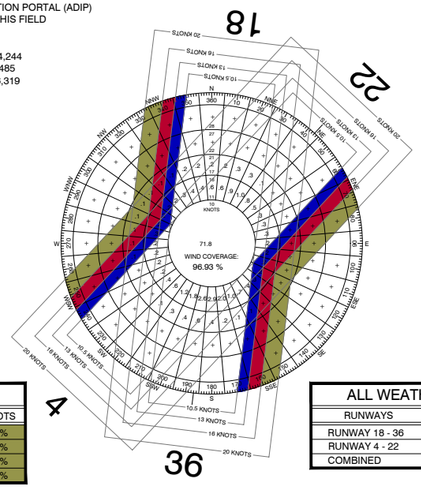
LATEST REVISION:	JULY 2020	SHEET NO.
DRAWN BY:	JA	2
REVIEWED BY:	DA	
JOB NO.	SJT1801P	

SOURCE: FAA: THE AIRPORT DATA AND INFORMATION PORTAL (ADIP)
SAN ANGELO REGIONAL AIRPORT - MATHIS FIELD
SAN ANGELO, TX
OBSERVATIONS:
ALL WEATHER OBSERVATIONS: 114,244
IFR WEATHER OBSERVATIONS: 8,485
VFR WEATHER OBSERVATIONS: 96,319
PERIOD: 2010-2019



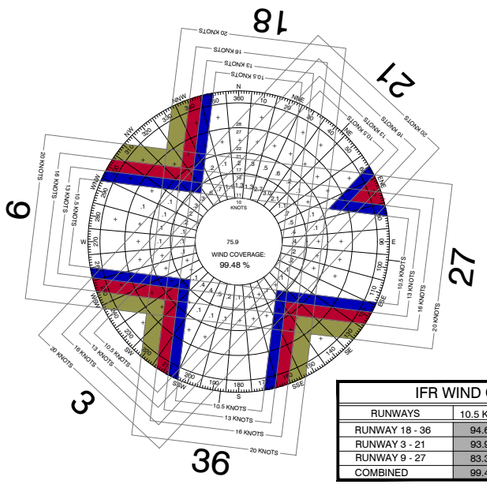
ALL WEATHER WIND COVERAGE - EXISTING

RUNWAYS	10.5 KNOTS	13 KNOTS	16 KNOTS	20 KNOTS
RUNWAY 18 - 36	94.72%	97.12%	98.90%	99.63%
RUNWAY 3 - 21	90.40%	95.43%	98.63%	99.68%
RUNWAY 9 - 27	79.08%	87.03%	95.83%	99.10%
COMBINED	99.47%	99.86%	99.96%	99.99%



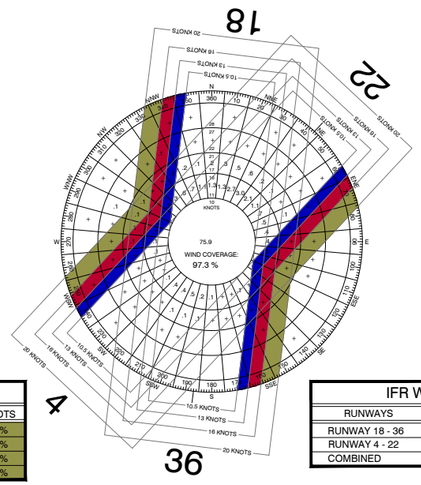
ALL WEATHER WIND COVERAGE - ULTIMATE

RUNWAYS	10.5 KNOTS	13 KNOTS	16 KNOTS	20 KNOTS
RUNWAY 18 - 36	94.72%	97.12%	98.90%	99.63%
RUNWAY 4 - 22	90.40%	95.43%	98.63%	99.68%
COMBINED	96.93%	98.55%	99.50%	99.88%



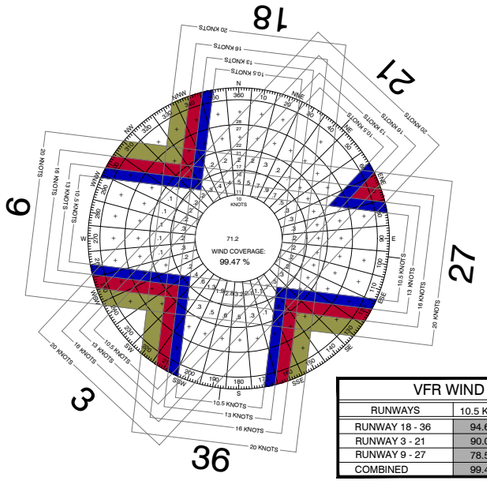
IFR WIND COVERAGE - EXISTING

RUNWAYS	10.5 KNOTS	13 KNOTS	16 KNOTS	20 KNOTS
RUNWAY 18 - 36	94.68%	97.06%	98.81%	99.52%
RUNWAY 3 - 21	93.96%	96.79%	98.77%	99.51%
RUNWAY 9 - 27	83.34%	90.25%	97.04%	99.34%
COMBINED	99.48%	99.77%	99.92%	99.98%



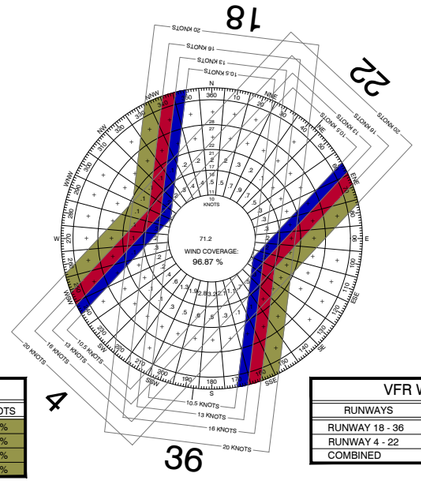
IFR WIND COVERAGE - ULTIMATE

RUNWAYS	10.5 KNOTS	13 KNOTS	16 KNOTS	20 KNOTS
RUNWAY 18 - 36	94.68%	97.06%	98.81%	99.52%
RUNWAY 4 - 22	93.96%	96.79%	98.77%	99.51%
COMBINED	97.30%	98.62%	99.41%	99.75%



VFR WIND COVERAGE - EXISTING

RUNWAYS	10.5 KNOTS	13 KNOTS	16 KNOTS	20 KNOTS
RUNWAY 18 - 36	94.68%	97.10%	98.89%	99.63%
RUNWAY 3 - 21	90.01%	95.26%	98.60%	99.69%
RUNWAY 9 - 27	78.52%	86.62%	95.68%	99.06%
COMBINED	99.47%	99.86%	99.97%	99.99%



VFR WIND COVERAGE - ULTIMATE

RUNWAYS	10.5 KNOTS	13 KNOTS	16 KNOTS	20 KNOTS
RUNWAY 18 - 36	94.68%	97.10%	98.89%	99.63%
RUNWAY 4 - 22	90.01%	95.26%	98.60%	99.69%
COMBINED	96.87%	98.52%	99.49%	99.88%

EXISTING TAXIWAY DATA TABLE

DESCRIPTION	WIDTH	TDG	TESM	TSA	TOFA	LIGHTING	OBJECTS INSIDE SAFETY AREA
TAXIWAY A	75'	TDG 5	15'	118'	186'	MITL	N/A
TAXIWAY B	75'	TDG 5	15'	118'	186'	MITL	N/A
TAXIWAY C	60'	TDG 3	10'	118'	186'	MITL	N/A
TAXIWAY D	50'	TDG 3	10'	118'	186'	MITL	N/A
TAXIWAY E	60'	TDG 3	10'	118'	186'	MITL	N/A
TAXIWAY F	75'	TDG 5	15'	118'	186'	MITL	N/A
TAXIWAY H	75'	TDG 5	15'	118'	186'	MITL	N/A

ULTIMATE TAXIWAY DATA TABLE

DESCRIPTION	WIDTH	TDG	TESM	TSA	TOFA	LIGHTING	OBJECTS INSIDE SAFETY AREA
TAXIWAY A (TWY B)	75'	TDG 5	15'	118'	186'	MITL	N/A
TAXIWAY A	50'	TDG 3	10'	118'	186'	MITL	N/A
TAXIWAY A1	75'	TDG 5	15'	118'	186'	MITL	N/A
TAXIWAY A2 (TWY D)	60'	TDG 3	10'	118'	186'	MITL	N/A
TAXIWAY A3 (TWY E)	50'	TDG 3	10'	118'	186'	MITL	N/A
TAXIWAY A4	50'	TDG 3	10'	118'	186'	MITL	N/A
TAXIWAY A5	50'	TDG 3	10'	118'	186'	MITL	N/A
TAXIWAY B (TWY H)	75'	TDG 5	15'	118'	186'	MITL	N/A
TAXIWAY B1 (TWY H)	75'	TDG 5	15'	118'	186'	MITL	N/A
TAXIWAY B2	50'	TDG 3	10'	118'	186'	MITL	N/A
TAXIWAY B3	50'	TDG 3	10'	118'	186'	MITL	N/A
TAXIWAY C (RW 9-27)	50'	TDG 3	10'	118'	186'	MITL	N/A
TAXIWAY D	50'	TDG 3	10'	118'	186'	MITL	N/A
TAXIWAY D1	50'	TDG 3	10'	118'	186'	MITL	N/A
TAXIWAY D2	50'	TDG 3	10'	118'	186'	MITL	N/A
TAXIWAY D3	50'	TDG 3	10'	118'	186'	MITL	N/A
TAXIWAY D4	50'	TDG 3	10'	118'	186'	MITL	N/A
TAXIWAY D5	50'	TDG 3	10'	118'	186'	MITL	N/A
TAXIWAY E (TWY A)	75'	TDG 5	15'	118'	186'	MITL	N/A
TAXIWAY E1	50'	TDG 3	10'	118'	186'	MITL	N/A

NOTE:
NAMES IN PARENTHESES REPRESENT EXISTING RUNWAY OR TAXIWAY IDENTIFIERS.

ABBREVIATIONS

AS	14 CFR PART 77 APPROACH SURFACE
ASDA	ACCELERATED STOP DISTANCE AVAILABLE
ASOS	AUTOMATED SURFACE OBSERVING SYSTEMS
ASR	AIRPORT SURFVEILLANCE RADAR
ATCT	AIR TRAFFIC CONTROL TOWER
BRL	BUILDING RESTRICTION LINE
D	DUAL WHEEL
DME	DISTANCE MEASURING EQUIPMENT
DS	TERPS DEPARTURE SURFACE
EB#99	ENGINEERING BRIEF #99
FAA	FEDERAL AVIATION ADMINISTRATION
GPS	GLOBAL POSITIONING SYSTEM
GS	GLIDE SLOPE
IFR	INSTRUMENT FLIGHT RULES
ILS	INSTRUMENT LANDING SYSTEM
LDA	LANDING DISTANCE AVAILABLE
LOC	LOCALIZER
MALSR	MEDIUM INTENSITY APPROACH LIGHTING SYSTEM WITH RUNWAY ALIGNMENT INDICATOR LIGHTS
MIRL	MEDIUM INTENSITY RUNWAY LIGHTS
NAD83	NORTH AMERICAN DATUM 1983
N/A	NOT APPLICABLE
NAVD88	NORTH AMERICAN VERTICAL DATUM 1988
NDB	NON-DIRECTIONAL BEACON
ODALS	OMNI-DIRECTIONAL APPROACH LIGHTS
OFZ	OBJECT FREE ZONE
PAPI	PRECISION APPROACH PATH INDICATORS
REIL	RUNWAY END IDENTIFIER LIGHTS
RNAV	AREA NAVIGATION
ROFA	RUNWAY OBJECT FREE AREA
RPZ	RUNWAY PROTECTION ZONE
RSA	RUNWAY SAFETY AREA
RTR	REMOTE TRANSMITTER/RECEIVER
RVR	RUNWAY VISUAL RANGE
RW	RUNWAY
S	SINGLE WHEEL
SJT	SAN ANGELO REGIONAL AIRPORT/MATHIS FIELD
TACAN	TACTICAL AIR NAVIGATION SYSTEM
TODA	TAKEOFF DISTANCE AVAILABLE
TORA	TAKEOFF RUN AVAILABLE
TSS	THRESHOLD SITING SURFACE
TWY	TAXIWAY
VASI	VISUAL APPROACH SLOPE INDICATORS
VFR	VISUAL FLIGHT RULES
VOR	VHF OMNIDIRECTIONAL RADIO RANGE
WC	WINDCONE

SAN ANGELO REGIONAL AIRPORT
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FIRM NO. 19840

SAN ANGELO REGIONAL AIRPORT/ MATHIS FIELD (SJT) SAN ANGELO, TEXAS

MARK	REVISION	DATE

DRAFT

AIRPORT DATA SHEET (SHEET 2 OF 2)

LATEST REVISION:	JULY 2020
DRAWN BY:	JA
REVIEWED BY:	DA
JOB NO.	SJT1801P

SHEET NO. 3

SURVEY CONTROL STATIONS

NGS PID & ELEVATION		DESIGNATION	LATITUDE	LONGITUDE
CB0761		EL. 1902.8	A 1446	31° 21' 30" N	100° 30' 14" W
AB6659	PACS	EL. 1900.8	ARP 2 SJT	31° 21' 39.59" N	100° 29' 40.57" W
CB0171		EL. 1898.54	BM	31° 21' 45" N	100° 30' 07" W
CB0170		EL. 1905.04	L 917	31° 21' 34" N	100° 30' 41" W
CB0172		EL. 1903.16	M 917	31° 21' 34" N	100° 30' 09" W
CB0173		EL. 1914.01	N 917	31° 21' 10" N	100° 30' 13" W
AC6542	SACS	EL. 1889.4	SJT AP STA B	31° 21' 40.79" N	100° 29' 11.42" W
AC6541	SACS	EL. 1914.3	SJT C	31° 20' 57.52" N	100° 29' 57.78" W

National Geodetic Survey Data Sheet, Retrieval Date: 7/18/12

LEGEND

DESCRIPTION	EXISTING
AIRPORT PROPERTY BOUNDARY	
AIRPORT SECURITY FENCE (AOA)	
AIRFIELD PAVEMENT	
BUILDINGS	
NAVIGATIONAL AIDS	
RUNWAY SAFETY AREA (RSA)	RSA
RUNWAY OBJECT FREE AREA (ROFA)	ROFA
OBSTACLE FREE ZONE (OFZ)	OFZ
PRECISION OBSTACLE FREE ZONE (POFZ)	
RUNWAY PROTECTION ZONE (RPZ) - APPROACH	RPZ
RUNWAY PROTECTION ZONE (RPZ) - DEPARTURE	RPZ
RUNWAY VISIBILITY ZONE (RVZ)	RVZ
BUILDING RESTRICTION LINE (BRL)	BRL
TERPS ILS APPROACH SURFACE (ILS)	ILS
GLIDE PATH QUALIFICATION SURFACE (GQS)	GQS
14 CFR PART 77 APPROACH SURFACE (AS)	AS
THRESHOLD SITING SURFACE (TSS) - EB #99	TSS
TERPS DEPARTURE SURFACE (DS)	DS

EXISTING BUILDING/FACILITIES	ELEVATION (FEET)
1. AIRPORT RESCUE FIREFIGHTING FACILITY	1928.7
2. AIRPORT STORAGE / SHOP	1915.1
3. U.S. CUSTOMS AND BORDER PROTECTION	1937.9
4. HANGAR	1937.4
5. U.S. BORDER PATROL	1920.9
6. RANGER AVIATION PAINT FACILITY	1936.8
7. AIRPORT LIGHTING VAULT	1915.7
8. FUEL FARM (TO BE RELOCATED)	1922.2
9. HANGAR (TO BE REMOVED)	1947.3
10. OFFICE (TO BE REMOVED)	1919.6
11. COSA EMERGENCY OPERATIONS CENTER	1938.1
12. HERTZ RENT-A-CAR	1916.4
13. AVIS RENT-A-CAR	1917.7
14. WATER TOWER	1920.8
15. TSA OFFICE	1914.7
16. SAN ANGELO AM RADIO CLUB	1916.7
17. WESTERN LITTLE LEAGUE	1919.2
18. CITY OF SAN ANGELO FUELING DEPOT	1920.9
19. WATER TREATMENT PLANT	1934.3
20. VIETNAM VETERANS MEMORIAL	-
21. MAINTENANCE / STORAGE	1925.1
22. AIR TRAFFIC CONTROL TOWER (1982.6) AIRPORT BEACON	1988.4
23. TERMINAL BUILDING	1940.8
24. RANGER AVIATION HANGAR	1932.7
25. WEST TEXAS WEATHER MODIFICATION ASSOCIATION	1927.3

EXISTING BUILDING/FACILITIES	ELEVATION (FEET)
26. FEDERAL EXPRESS (FEDEX)	1938.2
27. RANGER AVIATION	1938.2
28. POOR BOY AVIONICS	1926.1
29. FIRST FLIGHT	1917.2
30. RANGER AVIATION	1949.5
31. RANGER AVIATION	1970.9
32. T-HANGAR (TO BE REMOVED)	1924.5
33. T-HANGAR (TO BE REMOVED)	1925.0
34. T-HANGAR (TO BE REMOVED)	1925.4
35. T-HANGAR (TO REMOVED)	1925.5
36. SKYLINE AVIATION	1953.8
37. T-HANGAR	1929.3
38. L-3 VERTEX AEROSPACE	1936.7
39. RANGER AVIATION PAINT FACILITY (TO BE REMOVED)	1948.8
40. PRIVATE HANGAR	1933.2
41. FUEL FARM (TO BE REMOVED)	1923.7
42. PRECISION AIR CRAFT SERVICES	1935.8
43. T-HANGAR	1929.9
44. T-HANGAR	1926.2
45. REMOTE TRANSMITTER / RECEIVER (RTR-OL)	1940.8
46. AIRPORT STORAGE	1918.8
47. AIRPORT STORAGE	1928.2
48. AIRPORT STORAGE	1931.1
49. SEWER TREATMENT PLAN	1943.2
50. ASR-9 (OL) TOWER (ASR EQUIPMENT BUILDING 1933.1)	2008.2
51. NEXRAD RADAR TOWER	2009.3
52. NATIONAL WEATHER SERVICE BUILDING	1915.9
53. AUTOMATED SURFACE OBSERVING SYSTEM (ASOS)	1936.6
54. MAINTENANCE / STORAGE	1927.9
55. ANEOMETER (ANOM-OL)	1947.6
56. TRANSMISSOMETER (TMOM-OL)	1949.0
57. GLIDE SLOPE (OL)	1951.9
58. SEGMENTED CIRCLE / LIGHTED WINDCONE	1931.9
59. LOCALIZER ANTENNA (OL)	1884.5
60. LOC-DME (OL)	1902.0

GENERAL NOTES:

1. HORIZONTAL DATUM NAD 83, VERTICAL DATUM NAVD88.
2. DRAWING PREPARED IN TEXAS STATE PLANE COORDINATES, CENTRAL ZONE (4202), U.S. FOOT.
3. APPROACH SLOPES AND RUNWAY PROTECTION ZONES ARE ARE IN ACCORDANCE WITH FAA AIRPORT DESIGN STAMDARDS AND 14 CFR PART 77 CRITERIA.
4. DUE TO DRAWING SCALE TAXIWAY GUIDANCE SIGNS ARE NOT SHOWN.
5. ALL OBSTRUCTIONS MUST BE AT LEAST 15 FEET LOWER THAN THE HEIGHT OF THE ASOS SENSOR (30 FEET) WITHIN THE 500 FOOT RADIUS AND NO GREATER THAN 10 FEET ABOVE THE SENSOR FROM THE 500 TO 1,000 FOOT RADIUS. (SOURCE: FAA ORDER 6560.20C, DATED 09/06/17)
6. AIRPORT BASE FILE HAS BEEN DIGITIZED USING AERIAL PHOTOGRAPHY COLLECTED IN MONTH YEAR AS PART OF THE SJT MASTER PLAN.
7. REMOVAL OF THE RUNWAY HOLD POSITION MARKINGS WILL BE COMPLETED AS PART OF THE RUNWAY 9-27 CONVERSION TO A TAXIWAY.
8. BUILDING RESTRICTION LINE DEPICTED REPRESENTS 35 FOOT HEIGHT RESTRICTION.

SOURCE: PLANIMETRICS BASEMAP AND AERIAL PHOTOGRAPHY, MARTINEZ GEOSPATIAL, FEBRUARY 2019.

SAN ANGELO REGIONAL AIRPORT
8618 TERMINAL CIRCLE
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CENTURION PLANNING AND DESIGN
69 N. CHADBOURNE STREET
SUITE 210.7
SAN ANGELO, TX 76903
PHONE NO. (325) 812-8430
FIRM NO. 19840

5° 15.36' E TRUE

5° 7' E CHANGING BY 0° 7' W PER YEAR

0' 500' 1000'

GRAPHIC SCALE IN FEET

SAN ANGELO REGIONAL AIRPORT/ MATHIS FIELD (SJT) SAN ANGELO, TEXAS

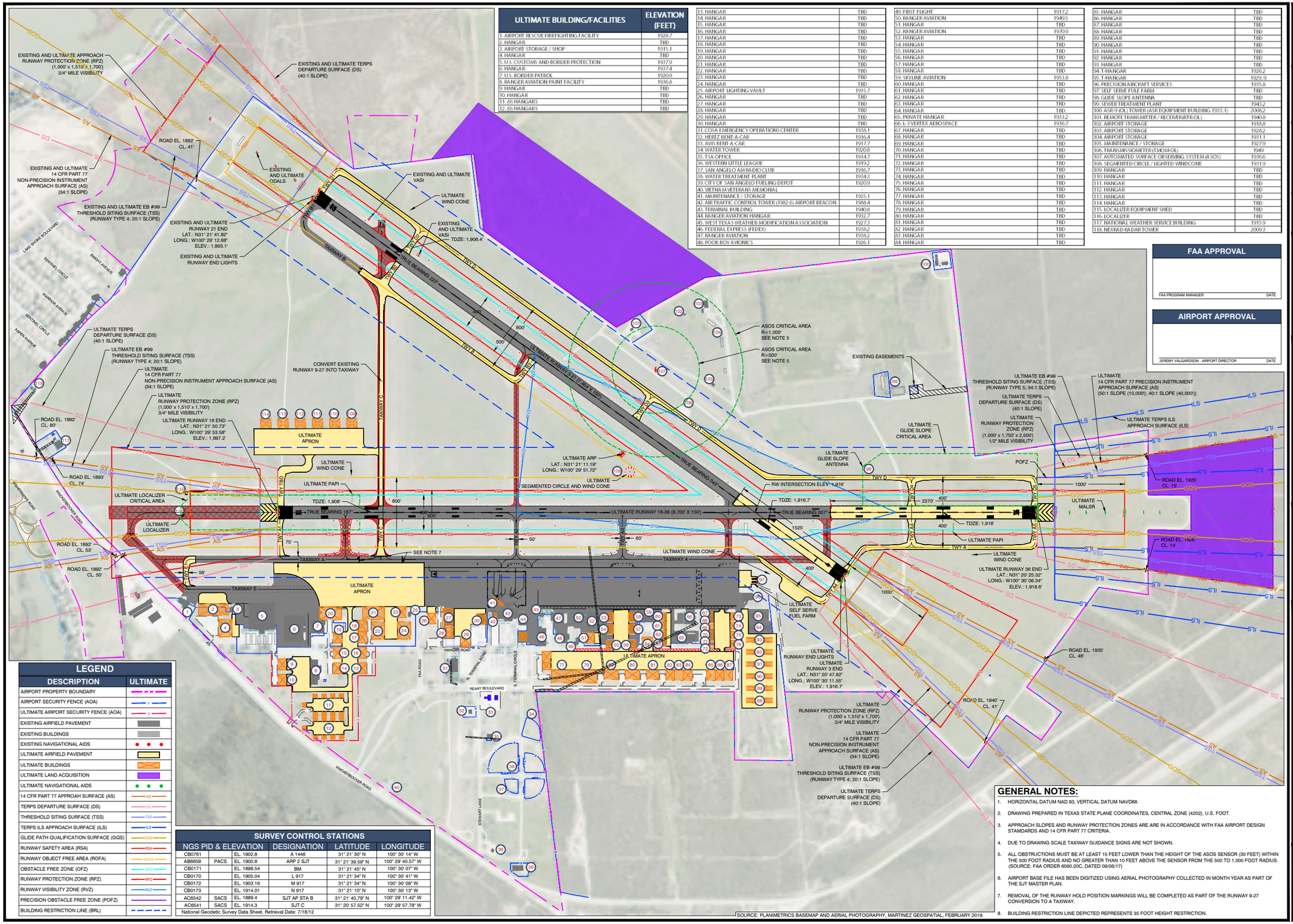
MARK	REVISION	DATE

DRAFT

EXISTING AIRPORT LAYOUT PLAN

LATEST REVISION:	JULY 2020
DRAWN BY:	JA
REVIEWED BY:	DA
JOB NO.	SJT1801P

SHEET NO. 4



ULTIMATE BUILDING/FACILITIES	ELEVATION (FEET)
1. AIRPORT RESCUE FIREFIGHTING FACILITY	1928.7
2. HANGAR	TBD
3. AIRPORT STORAGE / SHOP	1915.1
4. HANGAR	TBD
5. U.S. CUSTOMS AND BORDER PROTECTION	1937.9
6. HANGAR	1937.4
7. U.S. BORDER PATROL	1920.9
8. RANGER AVIATION PAINT FACILITY	1936.8
9. HANGAR	TBD
10. HANGAR	TBD
11. (7) HANGARS	TBD
12. (7) HANGARS	TBD

13. HANGAR	TBD	49. FIRST FLIGHT	1917.2	85. HANGAR	TBD
14. HANGAR	TBD	50. RANGER AVIATION	1949.5	86. HANGAR	TBD
15. HANGAR	TBD	51. HANGAR	TBD	87. HANGAR	TBD
16. HANGAR	TBD	52. RANGER AVIATION	1970.9	88. HANGAR	TBD
17. HANGAR	TBD	53. HANGAR	TBD	89. HANGAR	TBD
18. HANGAR	TBD	54. HANGAR	TBD	90. HANGAR	TBD
19. HANGAR	TBD	55. HANGAR	TBD	91. HANGAR	TBD
20. HANGAR	TBD	56. HANGAR	TBD	92. HANGAR	TBD
21. HANGAR	TBD	57. HANGAR	TBD	93. HANGAR	TBD
22. HANGAR	TBD	58. HANGAR	TBD	94. T-HANGAR	1926.2
23. HANGAR	TBD	59. SKYLINE AVIATION	1953.8	95. T-HANGAR	1929.9
24. HANGAR	TBD	60. HANGAR	TBD	96. PRECISION AIRCRAFT SERVICES	1935.8
25. AIRPORT LIGHTING VAULT	1915.7	61. HANGAR	TBD	97. SELF SERVE FUEL FARM	TBD
26. HANGAR	TBD	62. HANGAR	TBD	98. GLIDE SLOPE ANTENNA	TBD
27. HANGAR	TBD	63. HANGAR	TBD	99. SEWER TREATMENT PLANT	1943.2
28. HANGAR	TBD	64. HANGAR	TBD	100. ASR-9 (OL) TOWER (ASR EQUIPMENT BUILDING 1933.1)	2006.2
29. HANGAR	TBD	65. PRIVATE HANGAR	1933.2	101. REMOTE TRANSMITTER / RECEIVER(RTR-OL)	1940.8
30. HANGAR	TBD	66. L-3 VERTEX AEROSPACE	1936.7	102. AIRPORT STORAGE	1918.8
31. COSA EMERGENCY OPERATIONS CENTER	1938.1	67. HANGAR	TBD	103. AIRPORT STORAGE	1928.2
32. HERTZ RENT-A-CAR	1916.4	68. HANGAR	TBD	104. AIRPORT STORAGE	1931.1
33. AVIS RENT-A-CAR	1917.7	69. HANGAR	TBD	105. MAINTENANCE / STORAGE	1927.9
34. WATER TOWER	1920.8	70. HANGAR	TBD	106. TRANSMISSIOMETER (TMOM-OL)	1949
35. TSA OFFICE	1914.7	71. HANGAR	TBD	107. AUTOMATED SURFACE OBSERVING SYSTEM (ASOS)	1936.6
36. WESTERN LITTLE LEAGUE	1919.2	72. HANGAR	TBD	108. SEGMENTED CIRCLE / LIGHTED WINDCONE	1931.9
37. SAN ANGELO AM RADIO CLUB	1916.7	73. HANGAR	TBD	109. HANGAR	TBD
38. WATER TREATMENT PLANT	1934.3	74. HANGAR	TBD	110. HANGAR	TBD
39. CITY OF SAN ANGELO FUELING DEPOT	1920.9	75. HANGAR	TBD	111. HANGAR	TBD
40. VIETNAM VETERANS MEMORIAL	-	76. HANGAR	TBD	112. HANGAR	TBD
41. MAINTENANCE / STORAGE	1925.1	77. HANGAR	TBD	113. HANGAR	TBD
42. AIR TRAFFIC CONTROL TOWER (1982.6) AIRPORT BEACON	1985.4	78. HANGAR	TBD	114. HANGAR	TBD
43. TERMINAL BUILDING	1940.8	79. HANGAR	TBD	115. LOCALIZER EQUIPMENT SHED	TBD
44. RANGER AVIATION HANGAR	1932.7	80. HANGAR	TBD	116. LOCALIZER	TBD
45. WEST TEXAS WEATHER MODIFICATION ASSOCIATION	1927.3	81. HANGAR	TBD	117. NATIONAL WEATHER SERVICE BUILDING	1915.9
46. FEDERAL EXPRESS (FEDEX)	1938.2	82. HANGAR	TBD	118. NEXRAD RADAR TOWER	2009.3
47. RANGER AVIATION	1938.2	83. HANGAR	TBD		
48. POOR BOY AVIONICS	1926.1	84. HANGAR	TBD		

LEGEND

DESCRIPTION	ULTIMATE
AIRPORT PROPERTY BOUNDARY	
AIRPORT SECURITY FENCE (AOA)	
ULTIMATE AIRPORT SECURITY FENCE (AOA)	
EXISTING AIRFIELD PAVEMENT	
EXISTING BUILDINGS	
EXISTING NAVIGATIONAL AIDS	
ULTIMATE AIRFIELD PAVEMENT	
ULTIMATE BUILDINGS	
ULTIMATE LAND ACQUISITION	
ULTIMATE NAVIGATIONAL AIDS	
14 CFR PART 77 APPROAH SURFACE (AS)	
TERPS DEPARTURE SURFACE (DS)	
THRESHOLD SITING SURFACE (TSS)	
TERPS ILS APPROACH SURFACE (ILS)	
GLIDE PATH QUALIFICATION SURFACE (GQS)	
RUNWAY SAFETY AREA (RSA)	
RUNWAY OBJECT FREE AREA (ROFA)	
OBSTACLE FREE ZONE (OFZ)	
RUNWAY PROTECTION ZONE (RPZ)	
RUNWAY VISIBILITY ZONE (RVZ)	
PRECISION OBSTACLE FREE ZONE (POFZ)	
BUILDING RESTRICTION LINE (BRL)	

SURVEY CONTROL STATIONS

NGS PID & ELEVATION		DESIGNATION	LATITUDE	LONGITUDE
CB0761	EL. 1902.8	A 1446	31° 21' 30" N	100° 30' 14" W
AB6659	PACS EL. 1900.8	ARP 2 SJT	31° 21' 39.59" N	100° 29' 40.57" W
CB0171	EL. 1898.54	BM	31° 21' 45" N	100° 30' 07" W
CB0170	EL. 1905.04	L 917	31° 21' 34" N	100° 30' 41" W
CB0172	EL. 1903.16	M 917	31° 21' 34" N	100° 30' 09" W
CB0173	EL. 1914.01	N 917	31° 21' 10" N	100° 30' 13" W
AC6542	SACS EL. 1889.4	SJT AP STA B	31° 21' 40.79" N	100° 29' 11.42" W
AC6541	SACS EL. 1914.3	SJT C	31° 20' 57.52" N	100° 29' 57.78" W

National Geodetic Survey Data Sheet, Retrieval Date: 7/18/12

GENERAL NOTES:

1. HORIZONTAL DATUM NAD 83, VERTICAL DATUM NAVD88.
2. DRAWING PREPARED IN TEXAS STATE PLANE COORDINATES, CENTRAL ZONE (4202), U.S. FOOT.
3. APPROACH SLOPES AND RUNWAY PROTECTION ZONES ARE ARE IN ACCORDANCE WITH FAA AIRPORT DESIGN STAMDARDS AND 14 CFR PART 77 CRITERIA.
4. DUE TO DRAWING SCALE TAXIWAY GUIDANCE SIGNS ARE NOT SHOWN.
5. ALL OBSTRUCTIONS MUST BE AT LEAST 15 FEET LOWER THAN THE HEIGHT OF THE ASOS SENSOR (30 FEET) WITHIN THE 500 FOOT RADIUS AND NO GREATER THAN 10 FEET ABOVE THE SENSOR FROM THE 500 TO 1,000 FOOT RADIUS. (SOURCE: FAA ORDER 6560.20C, DATED 09/06/17)
6. AIRPORT BASE FILE HAS BEEN DIGITIZED USING AERIAL PHOTOGRAPHY COLLECTED IN MONTH YEAR AS PART OF THE SJT MASTER PLAN.
7. REMOVAL OF THE RUNWAY HOLD POSITION MARKINGS WILL BE COMPLETED AS PART OF THE RUNWAY 9-27 CONVERSION TO A TAXIWAY.
8. BUILDING RESTRICTION LINE DEPICTED REPRESENTS 35 FOOT HEIGHT RESTRICTION.

SOURCE: PLANIMETRICS BASEMAP AND AERIAL PHOTOGRAPHY, MARTINEZ GEOSPATIAL, FEBRUARY 2019.

FAA APPROVAL

FAA PROGRAM MANAGER — DATE

AIRPORT APPROVAL

JEREMY VALGARDSON - AIRPORT DIRECTOR — DATE

SAN ANGELO REGIONAL AIRPORT

SAN ANGELO REGIONAL AIRPORT
8618 TERMINAL CIRCLE
SAN ANGELO, TX 76904
PHONE NO. (325) 659-6409

centurion PLANNING AND DESIGN

CENTURION PLANNING AND DESIGN
69 N. CHADBOURNE STREET
SUITE 210.7
SAN ANGELO, TX 76903
PHONE NO. (325) 812-8430
FIRM NO. 19840

5° 15.36' E TRUE

5° 7' E CHANGING BY 0° 7' W PER YEAR

0' 500' 1000'

GRAPHIC SCALE IN FEET

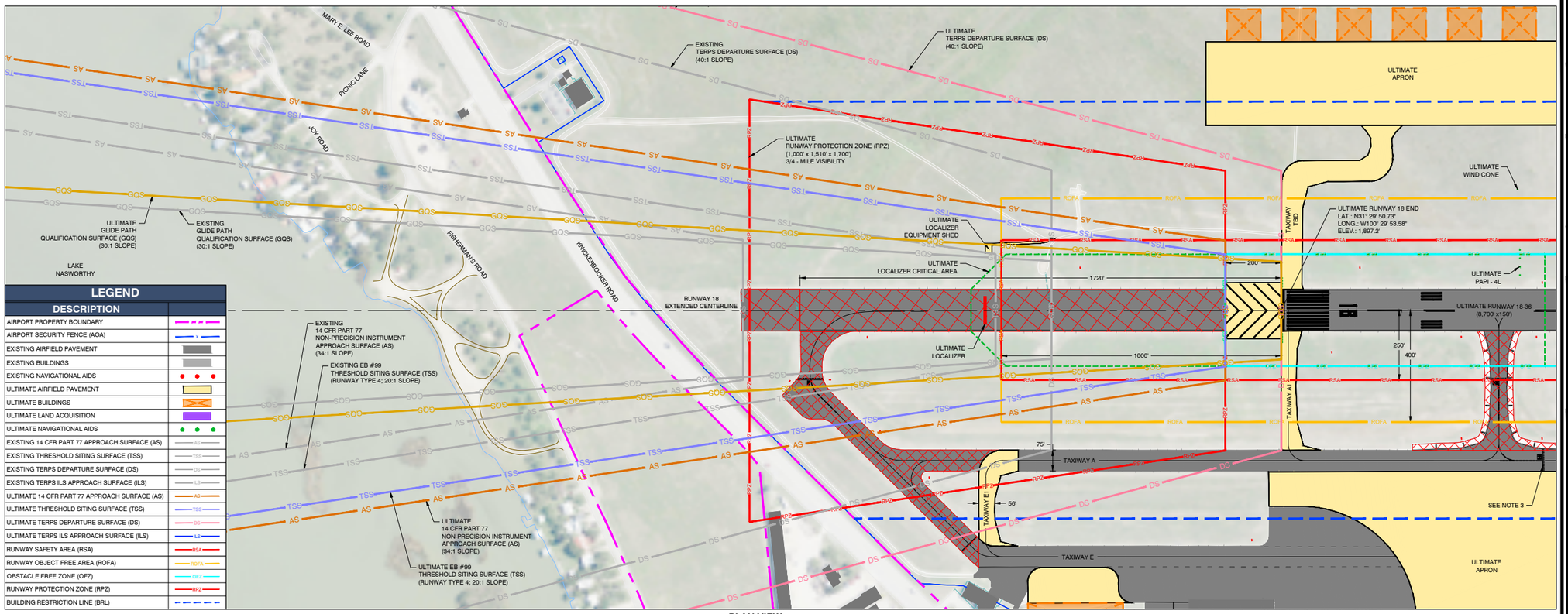
SAN ANGELO REGIONAL AIRPORT/ MATHIS FIELD (SJT) SAN ANGELO, TEXAS

MARK	REVISION	DATE

DRAFT

ULTIMATE AIRPORT LAYOUT PLAN

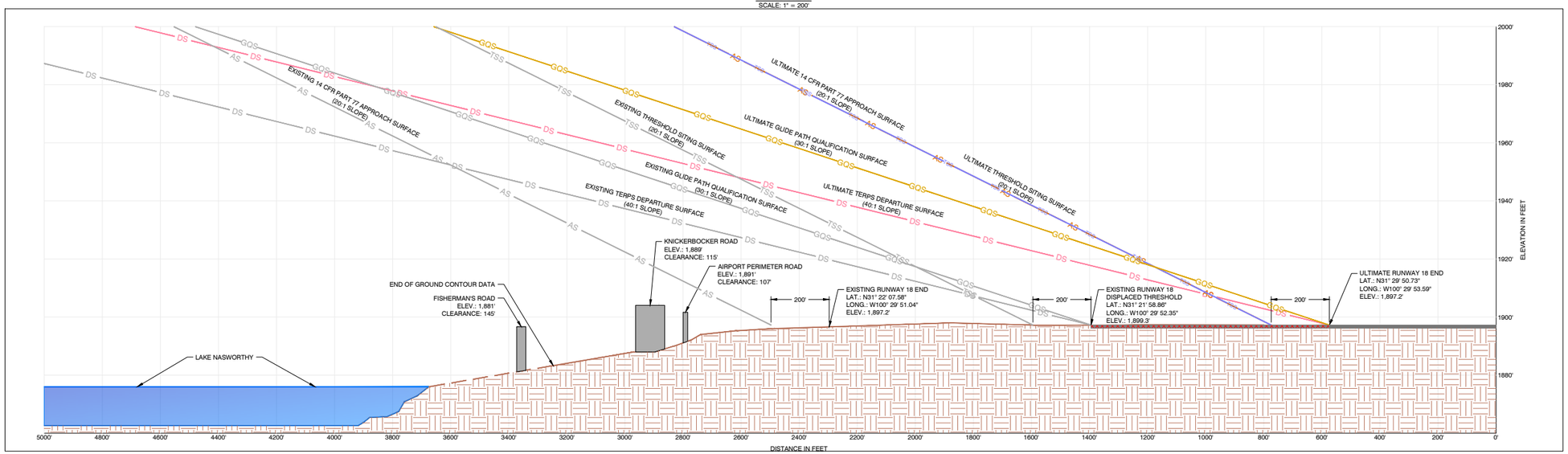
LATEST REVISION:	JULY 2020	SHEET NO. 5
DRAWN BY:	JA	
REVIEWED BY:	DA	
JOB NO.	SJT1801P	



LEGEND

DESCRIPTION	
AIRPORT PROPERTY BOUNDARY	
AIRPORT SECURITY FENCE (AOA)	X
EXISTING AIRFIELD PAVEMENT	
EXISTING BUILDINGS	
EXISTING NAVIGATIONAL AIDS	
ULTIMATE AIRFIELD PAVEMENT	
ULTIMATE BUILDINGS	
ULTIMATE LAND ACQUISITION	
ULTIMATE NAVIGATIONAL AIDS	
EXISTING 14 CFR PART 77 APPROACH SURFACE (AS)	AS
EXISTING THRESHOLD SITING SURFACE (TSS)	TSS
EXISTING TERPS DEPARTURE SURFACE (DS)	DS
EXISTING TERPS ILS APPROACH SURFACE (ILS)	ILS
ULTIMATE 14 CFR PART 77 APPROACH SURFACE (AS)	AS
ULTIMATE THRESHOLD SITING SURFACE (TSS)	TSS
ULTIMATE TERPS DEPARTURE SURFACE (DS)	DS
ULTIMATE TERPS ILS APPROACH SURFACE (ILS)	ILS
RUNWAY SAFETY AREA (RSA)	RSA
RUNWAY OBJECT FREE AREA (ROFA)	ROFA
OBSTACLE FREE ZONE (OFZ)	OFZ
RUNWAY PROTECTION ZONE (RPZ)	RPZ
BUILDING RESTRICTION LINE (BRL)	

PLAN VIEW
SCALE: 1" = 200'



PROFILE VIEW
SCALE: 1" = 200'

NOTES:

1. REFER TO SHEET 10 FOR FOR OBSTRUCTION DATA TABLE AND ADDITIONAL NOTES.
2. NAVD88 DATUM WAS USED FOR ALL VERTICAL ELEVATIONS AND NAD83 FOR ALL HORIZONTAL ELEVATIONS.
3. RUNWAY HOLD POSITION MARKINGS SHALL BE REMOVED DURING THE DECOMMISSION OF RUNWAY 9-27.
4. THRESHOLD SITING SURFACE DIMENSIONS PER LATEST FAA ENGINEERING BRIEF #99, DATED SEPTEMBER 20, 2018.

SAN ANGELO REGIONAL AIRPORT

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8618 TERMINAL CIRCLE
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69 N. CHADBOURNE STREET
SUITE 210.7
SAN ANGELO, TX 76903
PHONE NO. (325) 812-8430
FIRM NO. 19840

5° 7' E TRUE

5° 7' E CHANGING BY 0° 7' W PER YEAR

0' 500' 1000'

GRAPHIC SCALE IN FEET

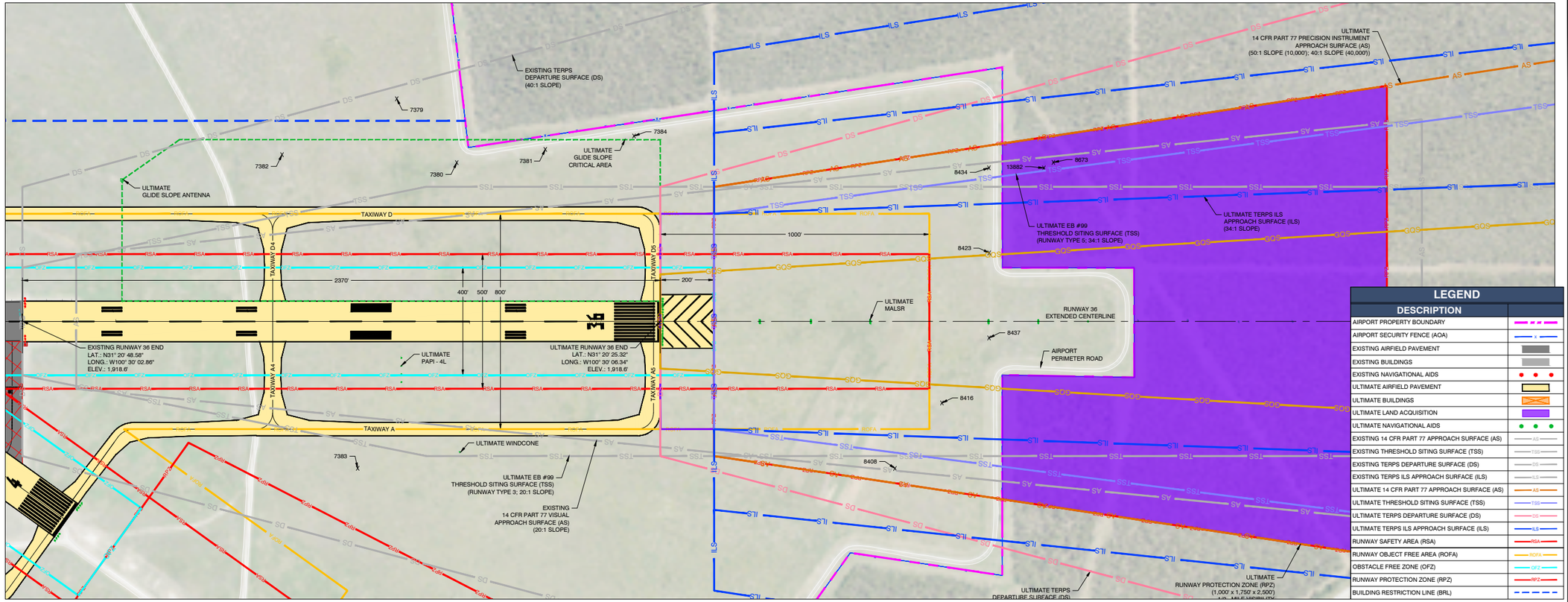
SAN ANGELO REGIONAL AIRPORT/ MATHIS FIELD (SJT) SAN ANGELO, TEXAS

MARK	REVISION	DATE

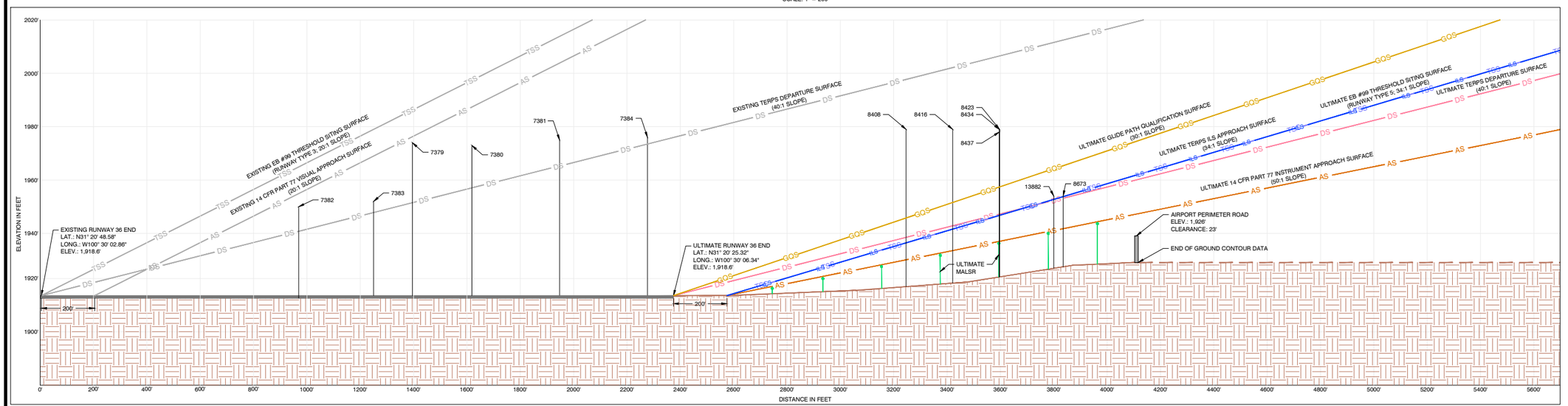
DRAFT

INNER PORTION OF THE APPROACH SURFACE DRAWING - RUNWAY 18

LATEST REVISION:	JULY 2020	SHEET NO.
DRAWN BY:	JA	6
REVIEWED BY:	DA	
JOB NO.	SJT1801P	



PLAN VIEW
SCALE: 1" = 200'



PROFILE VIEW
SCALE: 1" = 200'

NOTES:

1. REFER TO SHEET 10 FOR FOR OBSTRUCTION DATA TABLE AND ADDITIONAL NOTES.
2. NAVD88 DATUM WAS USED FOR ALL VERTICAL ELEVATIONS AND NAD83 FOR ALL HORIZONTAL ELEVATIONS.
3. THRESHOLD SITING SURFACE DIMENSIONS PER LATEST FAA ENGINEERING BRIEF #99, DATED SEPTEMBER 20, 2018.

LEGEND	
DESCRIPTION	
AIRPORT PROPERTY BOUNDARY	
AIRPORT SECURITY FENCE (AOA)	
EXISTING AIRFIELD PAVEMENT	
EXISTING BUILDINGS	
EXISTING NAVIGATIONAL AIDS	
ULTIMATE AIRFIELD PAVEMENT	
ULTIMATE BUILDINGS	
ULTIMATE LAND ACQUISITION	
ULTIMATE NAVIGATIONAL AIDS	
EXISTING 14 CFR PART 77 APPROACH SURFACE (AS)	AS
EXISTING THRESHOLD SITING SURFACE (TSS)	TSS
EXISTING TERPS DEPARTURE SURFACE (DS)	DS
EXISTING TERPS ILS APPROACH SURFACE (ILS)	ILS
ULTIMATE 14 CFR PART 77 APPROACH SURFACE (AS)	AS
ULTIMATE THRESHOLD SITING SURFACE (TSS)	TSS
ULTIMATE TERPS DEPARTURE SURFACE (DS)	DS
ULTIMATE TERPS ILS APPROACH SURFACE (ILS)	ILS
RUNWAY SAFETY AREA (RSA)	RSA
RUNWAY OBJECT FREE AREA (ROFA)	ROFA
OBSTACLE FREE ZONE (OFZ)	OFZ
RUNWAY PROTECTION ZONE (RPZ)	RPZ
BUILDING RESTRICTION LINE (BRL)	

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8618 TERMINAL CIRCLE
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SUITE 210.7
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PHONE NO. (325) 812-8430
FIRM NO. 19840

5° 15.36' E TRUE
5° 7' E CHANGING BY 0° 7' W PER YEAR
0' 500' 1000'
GRAPHIC SCALE IN FEET

SAN ANGELO REGIONAL AIRPORT/ MATHIS FIELD (SJT) SAN ANGELO, TEXAS

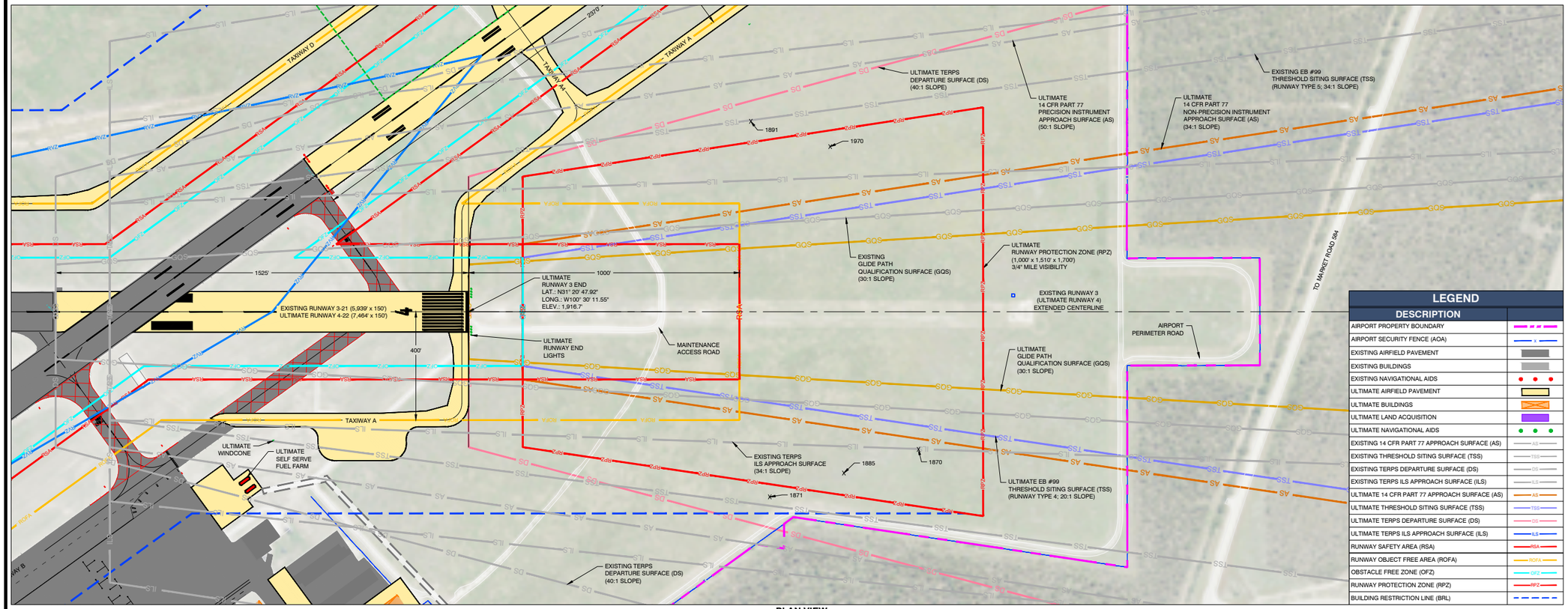
MARK	REVISION	DATE

DRAFT

INNER PORTION OF THE APPROACH SURFACE DRAWING - RUNWAY 36

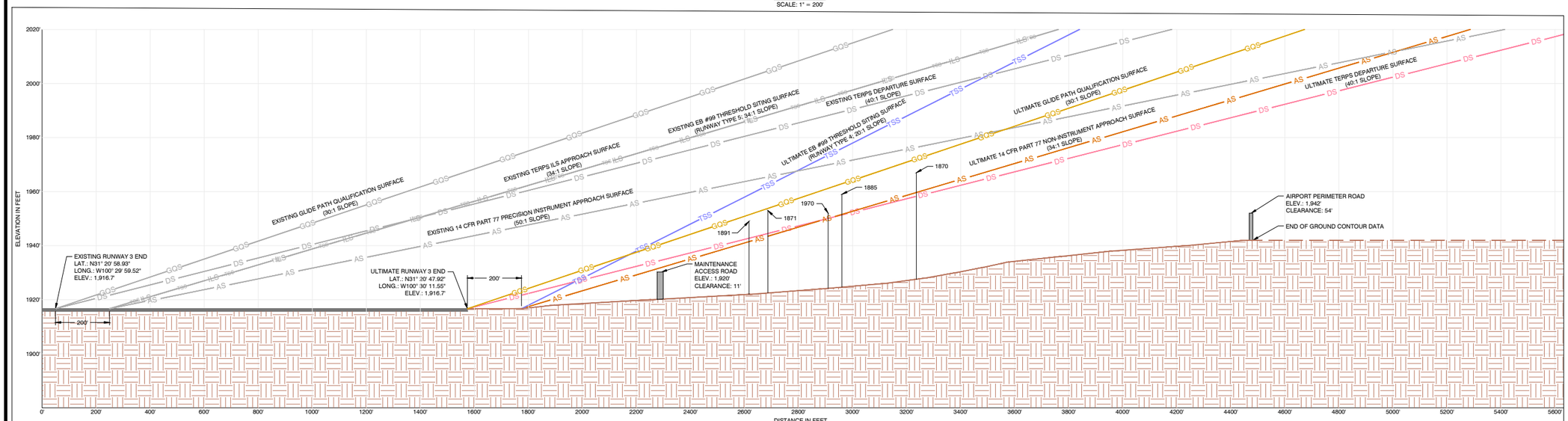
LATEST REVISION:	JULY 2020
DRAWN BY:	JA
REVIEWED BY:	DA
JOB NO.	SJT1801P

SHEET NO. 7



PLAN VIEW
SCALE: 1" = 200'

LEGEND	
DESCRIPTION	
AIRPORT PROPERTY BOUNDARY	
AIRPORT SECURITY FENCE (AOA)	
EXISTING AIRFIELD PAVEMENT	
EXISTING BUILDINGS	
EXISTING NAVIGATIONAL AIDS	
ULTIMATE AIRFIELD PAVEMENT	
ULTIMATE BUILDINGS	
ULTIMATE LAND ACQUISITION	
ULTIMATE NAVIGATIONAL AIDS	
EXISTING 14 CFR PART 77 APPROACH SURFACE (AS)	AS
EXISTING THRESHOLD SITING SURFACE (TSS)	TSS
EXISTING TERPS DEPARTURE SURFACE (DS)	DS
EXISTING TERPS ILS APPROACH SURFACE (ILS)	ILS
ULTIMATE 14 CFR PART 77 APPROACH SURFACE (AS)	AS
ULTIMATE THRESHOLD SITING SURFACE (TSS)	TSS
ULTIMATE TERPS DEPARTURE SURFACE (DS)	DS
ULTIMATE TERPS ILS APPROACH SURFACE (ILS)	ILS
RUNWAY SAFETY AREA (RSA)	RSA
RUNWAY OBJECT FREE AREA (ROFA)	ROFA
OBSTACLE FREE ZONE (OFZ)	OFZ
RUNWAY PROTECTION ZONE (RPZ)	RPZ
BUILDING RESTRICTION LINE (BRL)	



PROFILE VIEW
SCALE: 1" = 200'

NOTES:

1. REFER TO SHEET 10 FOR FOR OBSTRUCTION DATA TABLE AND ADDITIONAL NOTES.
2. MALSR, LOCALIZER, AND GLIDE SLOPE ANTENNA TO BE REMOVED AND RELOCATED TO ULTIMATE RUNWAY 36 END.
3. NAVD88 DATUM WAS USED FOR ALL VERTICAL ELEVATIONS AND NAD83 FOR ALL HORIZONTAL ELEVATIONS.
4. THRESHOLD SITING SURFACE DIMENSIONS PER LATEST FAA ENGINEERING BRIEF #99, DATED SEPTEMBER 20, 2018.

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5° 15.36' E
TRUE
5° 7' E CHANGING BY 0° 7' W PER YEAR
0' 500' 1000'
GRAPHIC SCALE IN FEET

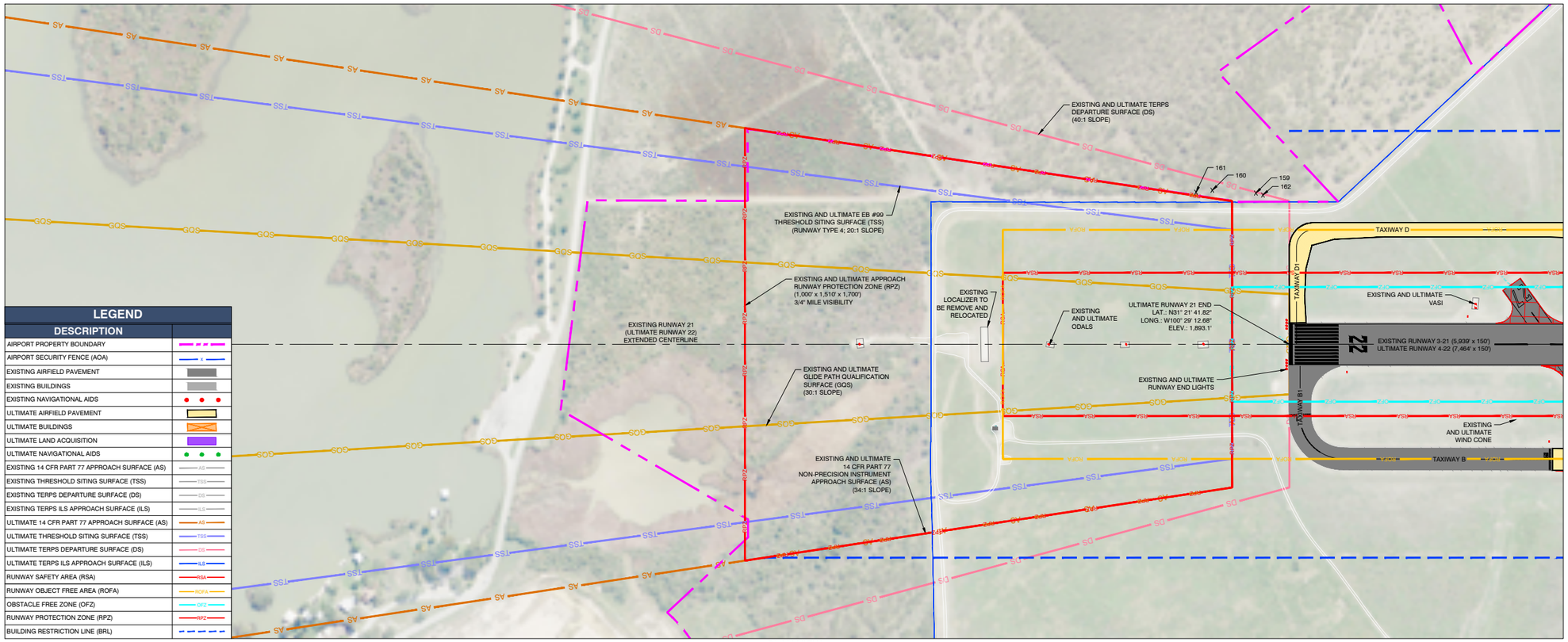
SAN ANGELO REGIONAL AIRPORT/ MATHIS FIELD (SJT) SAN ANGELO, TEXAS

MARK	REVISION	DATE

DRAFT

INNER PORTION OF THE APPROACH SURFACE DRAWING - RUNWAY 3

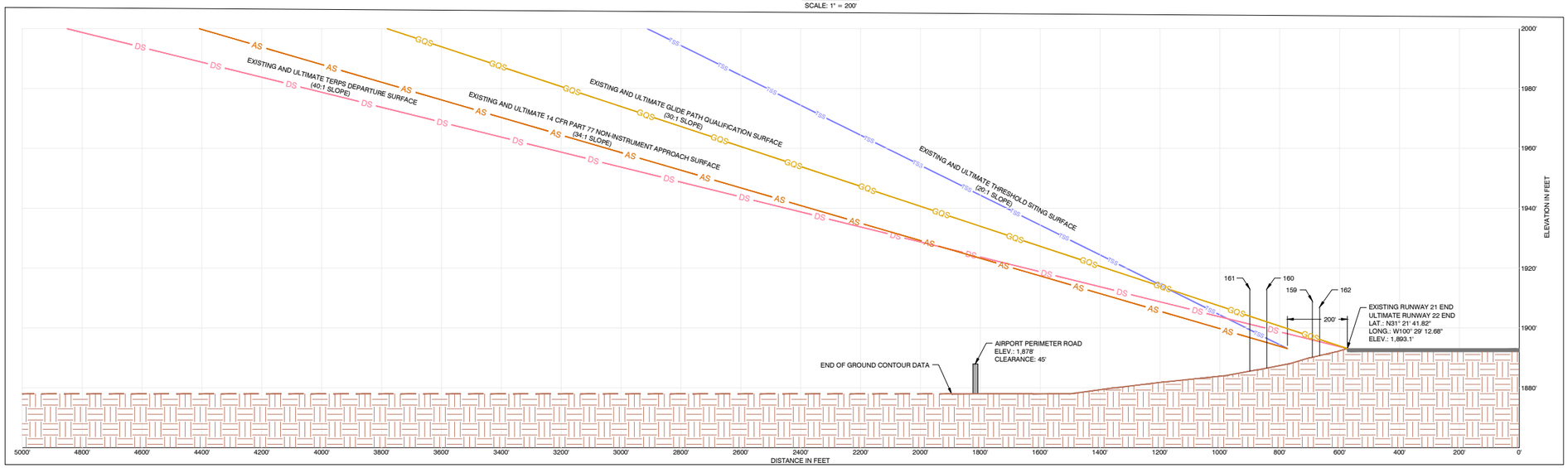
LATEST REVISION:	JULY 2020	SHEET NO.
DRAWN BY:	JA	8
REVIEWED BY:	DA	
JOB NO.	SJT1801P	



LEGEND

DESCRIPTION	
AIRPORT PROPERTY BOUNDARY	
AIRPORT SECURITY FENCE (AOA)	
EXISTING AIRFIELD PAVEMENT	
EXISTING BUILDINGS	
EXISTING NAVIGATIONAL AIDS	
ULTIMATE AIRFIELD PAVEMENT	
ULTIMATE BUILDINGS	
ULTIMATE LAND ACQUISITION	
ULTIMATE NAVIGATIONAL AIDS	
EXISTING 14 CFR PART 77 APPROACH SURFACE (AS)	AS
EXISTING THRESHOLD SITING SURFACE (TSS)	TSS
EXISTING TERPS DEPARTURE SURFACE (DS)	DS
EXISTING TERPS ILS APPROACH SURFACE (ILS)	ILS
ULTIMATE 14 CFR PART 77 APPROACH SURFACE (AS)	AS
ULTIMATE THRESHOLD SITING SURFACE (TSS)	TSS
ULTIMATE TERPS DEPARTURE SURFACE (DS)	DS
ULTIMATE TERPS ILS APPROACH SURFACE (ILS)	ILS
RUNWAY SAFETY AREA (RSA)	RSA
RUNWAY OBJECT FREE AREA (ROFA)	ROFA
OBSTACLE FREE ZONE (OFZ)	OFZ
RUNWAY PROTECTION ZONE (RPZ)	RPZ
BUILDING RESTRICTION LINE (BRL)	

PLAN VIEW
SCALE: 1" = 200'



PROFILE VIEW
SCALE: 1" = 200'

NOTES:

1. MALSR, LOCALIZER, AND GLIDE SLOPE ANTENNA TO BE REMOVED AND RELOCATED TO ULTIMATE RUNWAY 36 END.
2. REFER TO SHEET 10 FOR FOR OBSTRUCTION DATA TABLE AND ADDITIONAL NOTES.
3. NAVD88 DATUM WAS USED FOR ALL VERTICAL ELEVATIONS AND NAD83 FOR ALL HORIZONTAL ELEVATIONS.
4. THRESHOLD SITING SURFACE DIMENSIONS PER LATEST FAA ENGINEERING BRIEF #99, DATED SEPTEMBER 20, 2018.

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FIRM NO. 19840

5° 7' E TRUE

5° 7' E CHANGING BY 0° 7' W PER YEAR

0' 500' 1000'

GRAPHIC SCALE IN FEET

SAN ANGELO REGIONAL AIRPORT/ MATHIS FIELD (SJT) SAN ANGELO, TEXAS

MARK	REVISION	DATE

DRAFT

INNER PORTION OF THE APPROACH SURFACE DRAWING - RUNWAY 21 (ULTIMATE RUNWAY 22)

LATEST REVISION:	JULY 2020
DRAWN BY:	JA
REVIEWED BY:	DA
JOB NO.	SJT1801P

SHEET NO. 9

RUNWAY 3 (ULTIMATE RUNWAY 4) OBSTRUCTION DATA TABLE

OBSTRUCTION INFORMATION					34:1 TERPS ILS APPROACH SURFACE (FAA ORDER 8260.3C, CHAPTER 10)				14 CFR PART 77 APPROACH SURFACE				RUNWAY 21 TERPS 40:1 DEPARTURE SURFACE (RUNWAY 3 END)				THRESHOLD SITING SURFACE (FAA ENGINEERING BRIEF #99, TABLE 3-2)				RECOMMENDED ACTION
					EXISTING CONDITIONS		ULTIMATE CONDITIONS (REMOVED ILS APPROACH)		EXISTING CONDITIONS (50:1 PRECISION INSTRUMENT APPROACH)		ULTIMATE CONDITIONS (34:1 NON-PRECISION INSTRUMENT APPROACH)		EXISTING CONDITIONS		ULTIMATE CONDITIONS (ULTIMATE RUNWAY 4 END)		EXISTING CONDITIONS (34:1, RUNWAY TYPE 5)		ULTIMATE CONDITIONS (20:1, RUNWAY TYPE 4)		
POINT NO.	LATITUDE	LONGITUDE	ELEVATION (FEET)	DESCRIPTION	SURFACE ELEVATION (FEET)	SURFACE PENETRATION (FEET)	SURFACE ELEVATION (FEET)	SURFACE PENETRATION (FEET)	SURFACE ELEVATION (FEET)	SURFACE PENETRATION (FEET)	SURFACE ELEVATION (FEET)	SURFACE PENETRATION (FEET)	SURFACE ELEVATION (FEET)	SURFACE PENETRATION (FEET)	SURFACE ELEVATION (FEET)	SURFACE PENETRATION (FEET)	SURFACE ELEVATION (FEET)	SURFACE PENETRATION (FEET)	SURFACE ELEVATION (FEET)	SURFACE PENETRATION (FEET)	
1870	N31° 20' 39.56"	W 100° 30' 28.93"	1967	UTILITY POLE	-	-	-	-	N/A	N/A	N/A	N/A	N/A	N/A	1958	9	N/A	N/A	N/A	N/A	LIGHT OR MARK
1871	N31° 20' 44.52"	W 100° 30' 26.08"	1953	UTILITY POLE	-	-	-	-	N/A	N/A	N/A	N/A	N/A	N/A	1945	8	N/A	N/A	N/A	N/A	LIGHT OR MARK
1885	N31° 20' 41.94"	W 100° 30' 27.50"	1959	UTILITY POLE	-	-	-	-	N/A	N/A	N/A	N/A	N/A	N/A	1951	7	N/A	N/A	N/A	N/A	LIGHT OR MARK
1891	N31° 20' 35.63"	W 100° 30' 13.85"	1949	UTILITY POLE	-	-	-	-	N/A	N/A	N/A	N/A	N/A	N/A	1943	6	N/A	N/A	N/A	N/A	LIGHT OR MARK
1970	N31° 20' 34.15"	W 100° 30' 16.95"	1952	UTILITY POLE	-	-	-	-	N/A	N/A	N/A	N/A	N/A	N/A	1950	2	N/A	N/A	N/A	N/A	LIGHT OR MARK

RUNWAY 36 OBSTRUCTION DATA TABLE

OBSTRUCTION INFORMATION					34:1 TERPS ILS APPROACH SURFACE (FAA ORDER 8260.3C, CHAPTER 10)				14 CFR PART 77 APPROACH SURFACE				RUNWAY 18 TERPS 40:1 DEPARTURE SURFACE (RUNWAY 36 END)				THRESHOLD SITING SURFACE (FAA ENGINEERING BRIEF #99, TABLE 3-2)				RECOMMENDED ACTION
					EXISTING CONDITIONS (ILS APPROACH DID NOT APPLY)		ULTIMATE CONDITIONS		EXISTING CONDITIONS (20:1 VISUAL APPROACH)		ULTIMATE CONDITIONS (50:1 PRECISION INSTRUMENT APPROACH)		EXISTING CONDITIONS		ULTIMATE CONDITIONS		EXISTING CONDITIONS (20:1, RUNWAY TYPE 3)		ULTIMATE CONDITIONS (34:1, RUNWAY TYPE 5)		
POINT NO.	LATITUDE	LONGITUDE	ELEVATION (FEET)	DESCRIPTION	SURFACE ELEVATION (FEET)	SURFACE PENETRATION (FEET)	SURFACE ELEVATION (FEET)	SURFACE PENETRATION (FEET)	SURFACE ELEVATION (FEET)	SURFACE PENETRATION (FEET)	SURFACE ELEVATION (FEET)	SURFACE PENETRATION (FEET)	SURFACE ELEVATION (FEET)	SURFACE PENETRATION (FEET)	SURFACE ELEVATION (FEET)	SURFACE PENETRATION (FEET)	SURFACE ELEVATION (FEET)	SURFACE PENETRATION (FEET)	SURFACE ELEVATION (FEET)	SURFACE PENETRATION (FEET)	
7379	N31° 20' 33.83"	W 100° 29' 55.48"	1978	UTILITY POLE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1998	20	N/A	N/A	-	-	N/A	N/A	LIGHT OR MARK
7380	N31° 20' 31.69"	W 100° 29' 58.46"	1971	UTILITY POLE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1986	14	N/A	N/A	-	-	N/A	N/A	LIGHT OR MARK
7381	N31° 20' 28.72"	W 100° 29' 58.46"	1975	UTILITY POLE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1992	17	N/A	N/A	-	-	N/A	N/A	LIGHT OR MARK
7382	N31° 20' 30.61"	W 100° 29' 57.19"	1960	UTILITY POLE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1958	9	N/A	N/A	-	-	N/A	N/A	LIGHT OR MARK
7383	N31° 20' 27.04"	W 100° 30' 10.05"	1952	UTILITY POLE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1951	7	N/A	N/A	-	-	N/A	N/A	LIGHT OR MARK
7384	N31° 20' 25.41"	W 100° 29' 56.11"	1978	UTILITY POLE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1977	1	N/A	N/A	-	-	N/A	N/A	LIGHT OR MARK
8408	N31° 20' 17.44"	W 100° 30' 11.67"	1975	UTILITY POLE	N/A	N/A	-	-	N/A	N/A	N/A	N/A	1932	47	N/A	N/A	1940	35	-	-	N/A	N/A	LIGHT OR MARK
8436	N31° 20' 35.42"	W 100° 30' 11.34"	1979	UTILITY POLE	N/A	N/A	1948	31	N/A	N/A	1935	44	N/A	N/A	1940	39	-	-	1961	18	LIGHT OR MARK
8411	N31° 20' 33.04"	W 100° 30' 05.21"	1979	UTILITY POLE	N/A	N/A	1948	31	N/A	N/A	1939	40	N/A	N/A	1940	39	-	-	1979	0	LIGHT OR MARK
8434	N31° 20' 34.1"	W 100° 30' 21.67"	1975	UTILITY POLE	N/A	N/A	-	-	N/A	N/A	1935	44	N/A	N/A	1940	35	-	-	N/A	N/A	LIGHT OR MARK
8417	N31° 20' 33.62"	W 100° 30' 06.42"	1978	UTILITY POLE	N/A	N/A	1948	30	N/A	N/A	1938	41	N/A	N/A	1940	38	-	-	1978	0	LIGHT OR MARK
8573	N31° 20' 30.2"	W 100° 30' 01.77"	1994	TREE	N/A	N/A	-	-	N/A	N/A	1944	51	N/A	N/A	N/A	N/A	-	-	N/A	N/A	TRIM OR REMOVE
11942	N31° 20' 39.6"	W 100° 30' 19.82"	1994	TREE	N/A	N/A	-	-	N/A	N/A	1941	53	N/A	N/A	N/A	N/A	-	-	N/A	N/A	TRIM OR REMOVE

RUNWAY 21 (ULTIMATE RUNWAY 22) OBSTRUCTION DATA TABLE

OBSTRUCTION INFORMATION					EXISTING AND ULTIMATE 14 CFR PART 77 34:1 NON-PRECISION INSTRUMENT APPROACH SURFACE		EXISTING AND ULTIMATE RUNWAY 3 TERPS 40:1 DEPARTURE SURFACE (EXISTING RUNWAY 21 END) (ULTIMATE RUNWAY 22 END)		EXISTING AND ULTIMATE 20:1 THRESHOLD SITING SURFACE (FAA ENGINEERING BRIEF #99, TABLE 3-2, RUNWAY TYPE 4)		RECOMMENDED ACTION
POINT NO.	LATITUDE	LONGITUDE	ELEVATION (FEET)	DESCRIPTION	SURFACE ELEVATION (FEET)	SURFACE PENETRATION (FEET)	SURFACE ELEVATION (FEET)	SURFACE PENETRATION (FEET)	SURFACE ELEVATION (FEET)	SURFACE PENETRATION (FEET)	
159	N31° 21' 39.08"	W100° 29' 07.31"	1909	TREETOP	N/A	N/A	1922	13	N/A	N/A	TRIM OR REMOVE
160	N31° 21' 40.11"	W100° 29' 06.03"	1913	TREETOP	N/A	N/A	1926	13	N/A	N/A	TRIM OR REMOVE
161	N31° 21' 40.57"	W100° 29' 05.64"	1913	TREETOP	N/A	N/A	1925	12	N/A	N/A	TRIM OR REMOVE
162	N31° 21' 38.95"	W100° 29' 07.56"	1907	TREETOP	N/A	N/A	1919	12	N/A	N/A	TRIM OR REMOVE

NOTES:

1. REFER TO SHEETS 6 THROUGH 9 FOR OBJECT LOCATION.
2. A POSITIVE VALUE INDICATES THE AMOUNT OF PENETRATION ABOVE THE AIRSPACE SURFACE.
3. AS NOTED IN FAA ADVISORY CIRCULAR 150/5300-18C, *SURVEY AND DATA STANDARDS FOR SUBMISSION OF AERONAUTICAL DATA USING AIRPORTS GIS*, THE AIRPORT OPERATOR IS NOT REQUIRED TO PREVENT OR CLEAR PENETRATIONS TO THE PART 77, SUBPART C, IMAGINARY SURFACES WHEN THE FAA HAS DETERMINED THESE PENETRATIONS ARE NOT A HAZARD TO NAVIGATIONAL AIRSPACE.
4. AIRSPACE SURFACE AND OBSTRUCTION ELEVATIONS ARE SHOWN IN NAD83 AND NAVD88. ELEVATIONS ARE IN FEET ABOVE MEAN SEA LEVEL (MSL).
5. OBSTRUCTION DATA COORDINATES ARE BASED ON NAD83 TEXAS STATE PLANE, CENTRAL ZONE, US FOOT.

SAN ANGELO REGIONAL AIRPORT

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centurion PLANNING AND DESIGN

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FIRM NO. 19840

SAN ANGELO REGIONAL AIRPORT/ MATHIS FIELD (SJT) SAN ANGELO, TEXAS

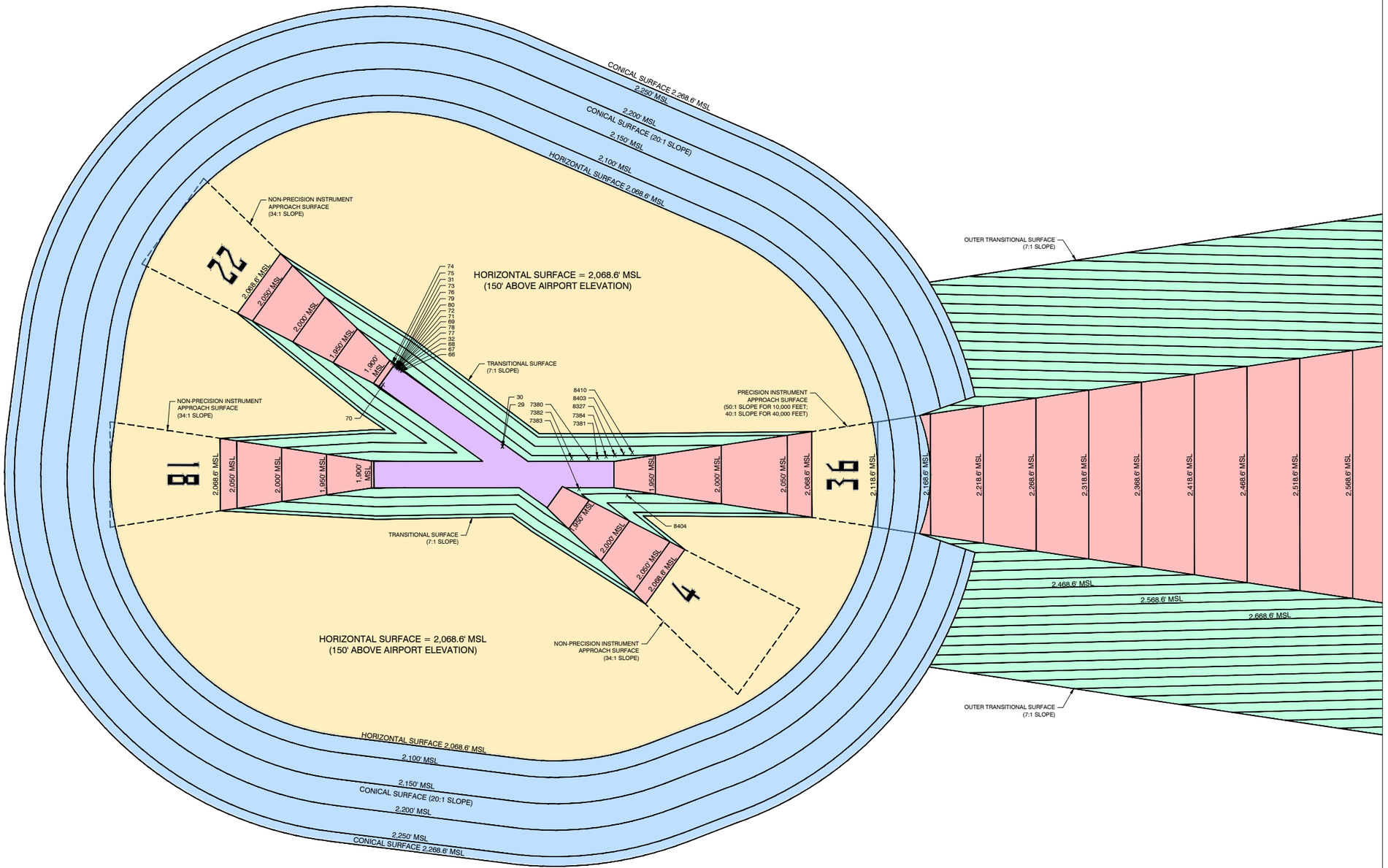
MARK	REVISION	DATE

DRAFT

OBSTRUCTION DATA TABLES

LATEST REVISION:	JULY 2020
DRAWN BY:	JA
REVIEWED BY:	DA
JOB NO.	SJT1801P

SHEET NO. 10



SOURCE: OBSTRUCTION ANALYSIS SURVEY, MARTINEZ GEOSPATIAL, APRIL 2019.

NOTES:

1. THIS SHEET ONLY IDENTIFIES OBSTRUCTIONS WITHIN THE 14 CFR PART 77 IMAGINARY SURFACES THAT PENETRATE 11 FEET OR GREATER, EXCEPT WHEN AN OBSTRUCTION IS WITHIN THE PRIMARY SURFACE.
2. THERE ARE NO OBSTRUCTION PENETRATIONS TO THE ULTIMATE HORIZONTAL AND CONICAL SURFACES.
3. REFER TO SHEET 12 FOR RUNWAY 36 PRECISION OUTER APPROACH SURFACE, OBSTRUCTION DATA TABLE, AND ADDITIONAL NOTES.
4. NAVD88 DATUM WAS USED FOR ALL VERTICAL ELEVATIONS AND NAD83 FOR ALL HORIZONTAL ELEVATIONS.
5. AIRPORT ZONING REGULATIONS - RUNWAY PROTECTION ZONES OUTSIDE OF PROPERTY BOUNDARIES IS PROTECTED BY SAN ANGELO-TOM GREEN COUNTY AIRPORT ZONING ORDINANCE: CHAPTER 12, *PLANNING AND DEVELOPMENT, EXHIBIT B - AIRPORT ZONING REGULATIONS.*

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5° 15.36' E
TRUE
5° 7' E CHANGING BY 0° 7' W PER YEAR
0' 2000' 4000'
GRAPHIC SCALE IN FEET

SAN ANGELO REGIONAL AIRPORT/ MATHIS FIELD (SJT) SAN ANGELO, TEXAS

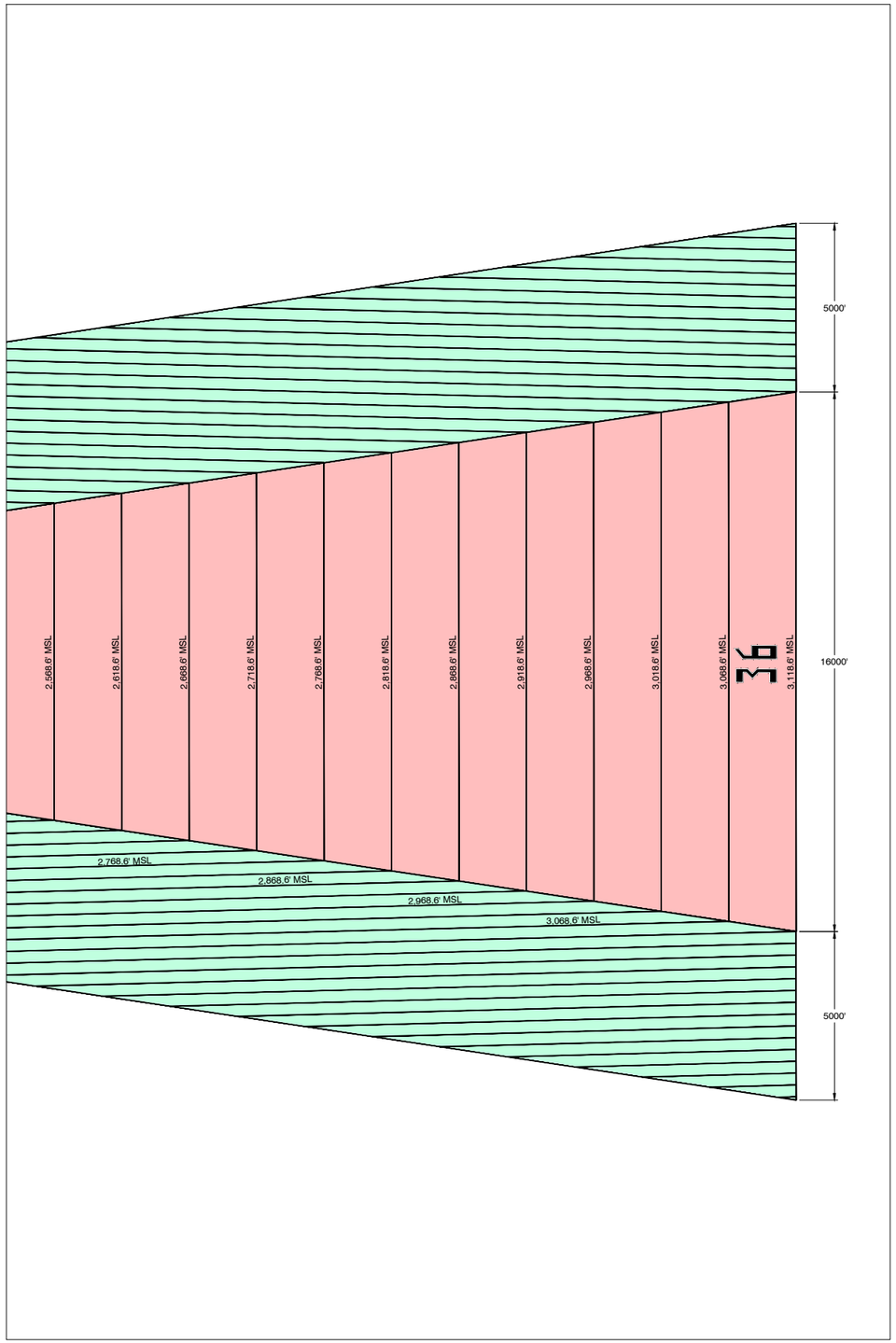
MARK	REVISION	DATE

DRAFT

PART 77 AIRPORT AIRSPACE DRAWING

LATEST REVISION:	JULY 2020
DRAWN BY:	JA
REVIEWED BY:	DA
JOB NO.	SJT1801P

SHEET NO. 11



14 CFR PART 77 OBSTRUCTION DATA TABLE

OBSTRUCTION INFORMATION					EXISTING CONDITIONS			ULTIMATE CONDITIONS			
POINT NO.	LATITUDE	LONGITUDE	ELEVATION (FEET)	DESCRIPTION	SURFACE ELEVATION (FEET)	SURFACE PENETRATION (FEET)	SURFACE PENETRATED	SURFACE ELEVATION (FEET)	SURFACE PENETRATION (FEET)	SURFACE PENETRATED	RECOMMENDED ACTION
29	N31° 21' 03.44"	W100° 29' 46.28"	1984	AIRFIELD EQUIPMENT	1915	29	PRIMARY	N/A	N/A	N/A	FIXED BY FUNCTION*
30	N31° 21' 03.36"	W100° 29' 48.13"	1924	BUILDING	1915	9	PRIMARY	N/A	N/A	N/A	FIXED BY FUNCTION*
31	N31° 21' 39.36"	W100° 29' 01.20"	1902	TREE	1893	9	PRIMARY	1893	9	PRIMARY	REMOVE
32	N31° 21' 38.03"	W100° 29' 08.91"	1902	TREE	1893	9	PRIMARY	1893	9	PRIMARY	REMOVE
66	N31° 21' 37.99"	W100° 29' 09.83"	1897	FENCE	1894	3	PRIMARY	1894	3	PRIMARY	REMOVE
67	N31° 21' 37.82"	W100° 29' 09.67"	1896	FENCE	1894	2	PRIMARY	1894	2	PRIMARY	REMOVE
68	N31° 21' 37.63"	W100° 29' 09.06"	1895	FENCE	1894	2	PRIMARY	1894	2	PRIMARY	REMOVE
69	N31° 21' 38.46"	W100° 29' 08.80"	1894	FENCE	1893	1	PRIMARY	1893	1	PRIMARY	REMOVE
70	N31° 21' 44.97"	W100° 29' 14.30"	1894	TREE	1893	1	PRIMARY	1893	1	PRIMARY	REMOVE
71	N31° 21' 39.06"	W100° 29' 08.26"	1894	FENCE	1893	1	PRIMARY	1893	1	PRIMARY	REMOVE
72	N31° 21' 38.82"	W100° 29' 08.09"	1894	FENCE	1893	1	PRIMARY	1893	1	PRIMARY	REMOVE
73	N31° 21' 39.20"	W100° 29' 07.66"	1893	FENCE	1893	0	PRIMARY	1893	0	PRIMARY	REMOVE
74	N31° 21' 40.53"	W100° 29' 01.64"	1913	TREE	1898	15	TRANSITIONAL	N/A	N/A	N/A	MONITOR GROWTH
75	N31° 21' 40.31"	W100° 29' 06.03"	1913	TREE	1899	14	TRANSITIONAL	N/A	N/A	N/A	MONITOR GROWTH
76	N31° 21' 39.08"	W100° 29' 01.31"	1909	TREE	1897	12	TRANSITIONAL	N/A	N/A	N/A	MONITOR GROWTH
77	N31° 21' 38.62"	W100° 29' 06.14"	1912	TREE	1900	12	TRANSITIONAL	N/A	N/A	N/A	MONITOR GROWTH
78	N31° 21' 38.20"	W100° 29' 06.04"	1910	TREE	1899	11	TRANSITIONAL	N/A	N/A	N/A	MONITOR GROWTH
79	N31° 21' 38.55"	W100° 29' 01.56"	1907	TREE	1896	11	TRANSITIONAL	N/A	N/A	N/A	MONITOR GROWTH
80	N31° 21' 38.04"	W100° 29' 01.57"	1910	TREE	1899	11	TRANSITIONAL	N/A	N/A	N/A	MONITOR GROWTH
7079	N31° 20' 33.89"	W100° 29' 53.64"	1974	UTILITY POLE	N/A	N/A	N/A	1963	9	TRANSITIONAL	LIGHT OR MARK
7080	N31° 20' 33.99"	W100° 29' 58.49"	1973	UTILITY POLE	N/A	N/A	N/A	1931	42	TRANSITIONAL	LIGHT OR MARK
7081	N31° 20' 35.71"	W100° 29' 58.46"	1975	UTILITY POLE	N/A	N/A	N/A	1938	37	TRANSITIONAL	LIGHT OR MARK
7082	N31° 20' 34.13"	W100° 29' 57.19"	1950	UTILITY POLE	N/A	N/A	N/A	1936	15	TRANSITIONAL	LIGHT OR MARK
7083	N31° 20' 37.04"	W100° 30' 00.37"	1932	UTILITY POLE	N/A	N/A	N/A	1925	27	TRANSITIONAL	LIGHT OR MARK
7084	N31° 20' 25.41"	W100° 29' 56.32"	1976	UTILITY POLE	N/A	N/A	N/A	1946	30	TRANSITIONAL	LIGHT OR MARK
8027	N31° 20' 22.51"	W100° 29' 58.24"	1977	UTILITY POLE	N/A	N/A	N/A	1952	24	TRANSITIONAL	LIGHT OR MARK
8802	N31° 20' 18.81"	W100° 29' 58.16"	1978	UTILITY POLE	N/A	N/A	N/A	1959	19	TRANSITIONAL	LIGHT OR MARK
8806	N31° 20' 19.47"	W100° 30' 16.38"	1980	UTILITY POLE	N/A	N/A	N/A	1959	21	TRANSITIONAL	LIGHT OR MARK
8830	N31° 20' 53.51"	W100° 29' 56.08"	1978	UTILITY POLE	N/A	N/A	N/A	1966	12	TRANSITIONAL	LIGHT OR MARK

NOTES:

1. THIS OBJECT IS LOCATED WITHIN THE EXISTING 14 CFR PART 77 PRIMARY SURFACE AND IS FIXED BY FUNCTION, HOWEVER WILL BE REMOVED AND RELOCATED DURING THE REMOVAL OF THE ILS APPROACH TO EXISTING RUNWAY 3.
2. TREE LOCATED WITHIN THE 14 CFR PART 77 TRANSITIONAL SURFACES ARE RECOMMENDED TO "MONITOR GROWTH" UNLESS THE FAA DETERMINES THE TREE TO BE A HAZARD TO NAVIGATIONAL AIRSPACE.
3. ANY UTILITY POLE THAT PENETRATES THE 14 CFR PART 77 TRANSITIONAL SURFACES SHALL BE EQUIPPED WITH AN OBSTRUCTION LIGHT IF SUCH LIGHT DOES NOT ALREADY EXIST.

SAN ANGELO REGIONAL AIRPORT

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CENTURION PLANNING AND DESIGN
69 N. CHADBOURNE STREET
SUITE 210.7
SAN ANGELO, TX 76903
PHONE NO. (325) 812-8430
FIRM NO. 19840

5° 15.36' E
TRUE
5° 7' E CHANGING BY 0° 7' W PER YEAR
0' 2000' 4000'
GRAPHIC SCALE IN FEET

SAN ANGELO REGIONAL AIRPORT/ MATHIS FIELD (SJT) SAN ANGELO, TEXAS

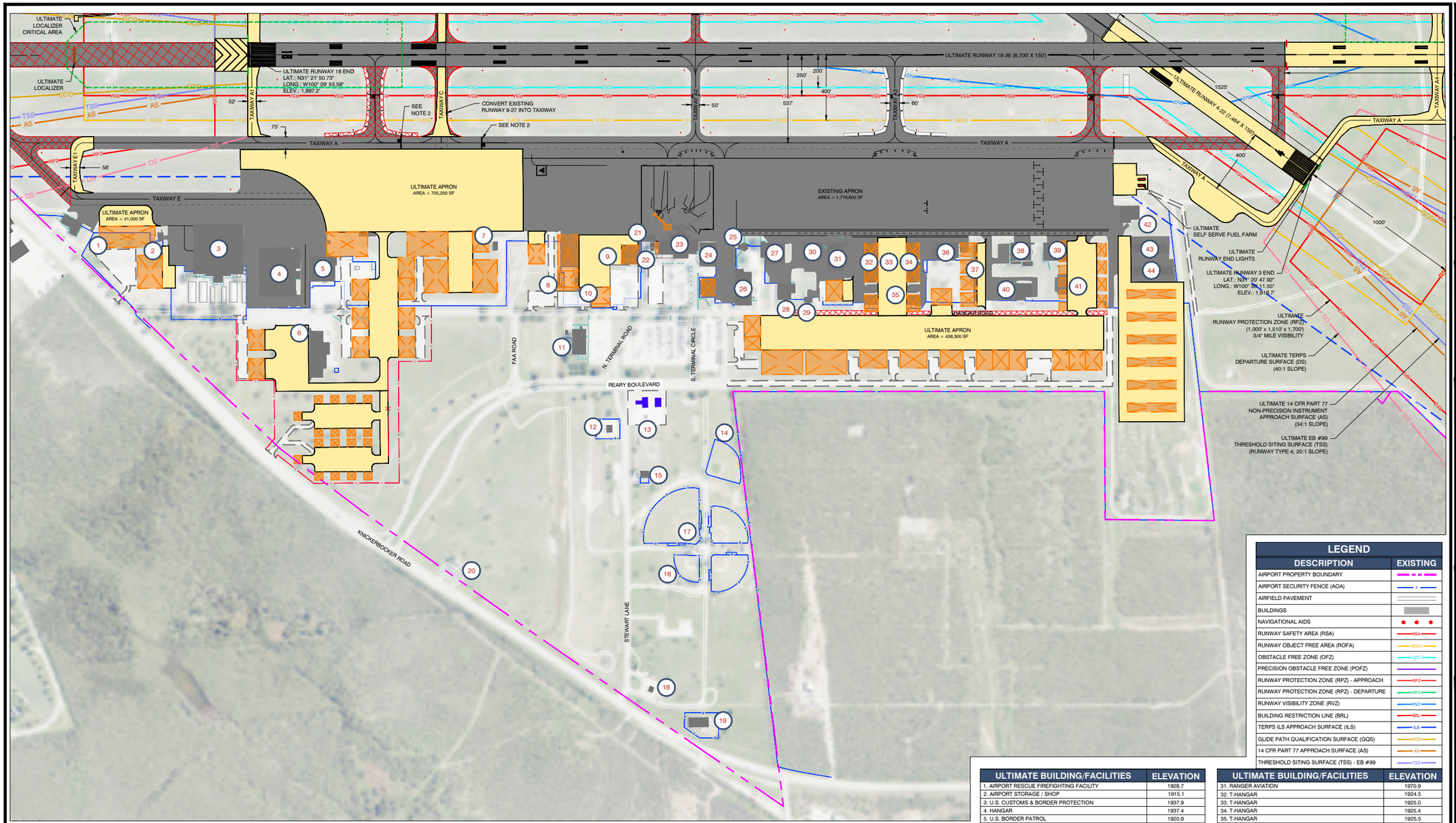
MARK	REVISION	DATE

DRAFT

PART 77 AIRPORT AIRSPACE DRAWING - RUNWAY 36 PRECISION APPROACH

LATEST REVISION:	JULY 2020
DRAWN BY:	JA
REVIEWED BY:	DA
JOB NO.	SJT1801P

SHEET NO. 12



LEGEND	
DESCRIPTION	EXISTING
AIRPORT PROPERTY BOUNDARY	
AIRPORT SECURITY FENCE (AOA)	
AIRFIELD PAVEMENT	
BUILDINGS	
NAVIGATIONAL AIDS	
RUNWAY SAFETY AREA (RSA)	
RUNWAY OBJECT FREE AREA (ROFA)	
OBSTACLE FREE ZONE (OFZ)	
PRECISION OBSTACLE FREE ZONE (POFZ)	
RUNWAY PROTECTION ZONE (RPZ) - APPROACH	
RUNWAY PROTECTION ZONE (RPZ) - DEPARTURE	
RUNWAY VISIBILITY ZONE (RVZ)	
BUILDING RESTRICTION LINE (BRL)	
TERPS ILS APPROACH SURFACE (ILS)	
GLIDE PATH QUALIFICATION SURFACE (GQS)	
14 CFR PART 77 APPROACH SURFACE (AS)	
THRESHOLD SITING SURFACE (TSS) - EB #99	

ULTIMATE BUILDING/FACILITIES	ELEVATION
1. AIRPORT RESCUE FIREFIGHTING FACILITY	1928.7
2. AIRPORT STORAGE / SHOP	1915.1
3. U.S. CUSTOMS & BORDER PROTECTION	1937.9
4. HANGAR	1937.4
5. U.S. BORDER PATROL	1920.9
6. RANGER AVIATION PAINT FACILITY	1936.8
7. AIRPORT LIGHTING VAULT	1915.7
8. FUEL FARM	1922.2
9. HANGAR	1947.3
10. OFFICE	1919.6
11. COSA EMERGENCY OPERATIONS CENTER	1938.1
12. HERTZ RENT-A-CAR	1916.4
13. AVIS RENT-A-CAR	1917.7
14. WATER TOWER	1920.8
15. TSA OFFICE	1914.7
16. SAN ANGELO AM RADIO CLUB	1916.7
17. WESTERN LITTLE LEAGUE	1919.2
18. CITY OF SAN ANGELO FUELING DEPOT	1920.9
19. WATER TREATMENT PLANT	1934.3
20. VIETNAM VETERANS MEMORIAL	-
21. MAINTENANCE / STORAGE	1925.1
22. AIR TRAFFIC CONTROL TOWER (1982.6) AIRPORT BEACON	1988.4
23. TERMINAL BUILDING	1940.8
24. RANGER AVIATION HANGAR	1932.7
25. WEST TEXAS WEATHER MODIFICATION ASSOCIATION	1927.3
26. FEDERAL EXPRESS (FEDEX)	1938.2
27. RANGER AVIATION	1938.2
28. POOR BOY AVIONICS	1926.1
29. FIRST FLIGHT	1917.2
30. RANGER AVIATION	1949.5

ULTIMATE BUILDING/FACILITIES	ELEVATION
31. RANGER AVIATION	1970.9
32. T-HANGAR	1924.5
33. T-HANGAR	1925.0
34. T-HANGAR	1925.4
35. T-HANGAR	1925.5
36. SKYLINE AVIATION	1953.8
37. T-HANGAR	1929.3
38. L-3 VERTEX AEROSPACE	1936.7
39. RANGER AVIATION PAINT FACILITY	1948.8
40. PRIVATE HANGAR	1933.2
41. FUEL FARM	1923.7
42. PRECISION AIRCRAFT SERVICES	1935.8
43. T-HANGAR	1929.9
44. T-HANGAR	1926.2
45. REMOTE TRANSMITTER / RECEIVER (RTR-OL)	1940.8
46. AIRPORT STORAGE	1918.8
47. AIRPORT STORAGE	1928.2
48. AIRPORT STORAGE	1931.1
49. SEWER TREATMENT PLANT	1943.2
50. ASR-9 (OL) TOWER (ASR EQUIPMENT BUILDING 1933.1)	2008.2
51. NEXRAD RADAR TOWER	2009.3
52. NATIONAL WEATHER SERVICE BUILDING	1915.9
53. AUTOMATED SURFACE OBSERVING SYSTEM (ASOS)	1936.6
54. MAINTENANCE / STORAGE	1927.9
55. ANEOMETER (AMOM-OL)	1947.6
56. TRANSMISSOMETER (TMOM-OL)	1949.0
57. GLIDE SLOPE (OL)	1951.9
58. SEGMENTED CIRCLE/LTD WINDCONE	1931.9
59. LOCALIZER ANTENNA (OL)	1884.5
60. LOC-DME (OL)	1902.0

NOTES:

1. REFER TO SHEETS 4 AND 5 FOR EXISTING AND ULTIMATE AIRPORT LAYOUT PLANS.
2. REMOVAL OF THE RUNWAY HOLD POSITION MARKINGS WILL BE COMPLETED AS PART OF THE RUNWAY 9-27 CONVERSION TO A TAXIWAY.

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PHONE NO. (325) 812-8430
FIRM NO. 19840

5° 15.36' E TRUE
5° 7' E CHANGING BY 0° 7' W PER YEAR
0' 300' 600'
GRAPHIC SCALE IN FEET

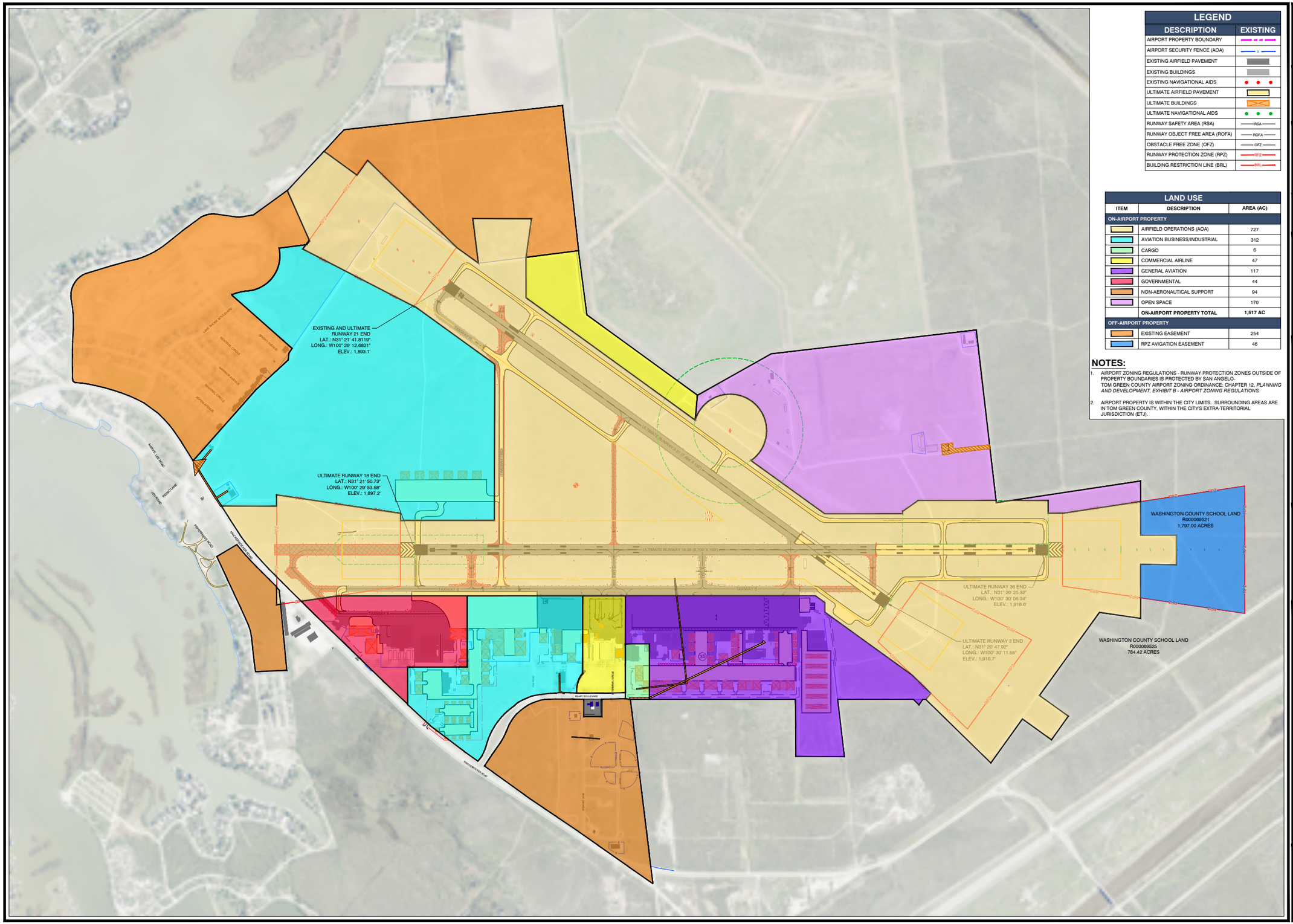
SAN ANGELO REGIONAL AIRPORT/ MATHIS FIELD (SJT) SAN ANGELO, TEXAS

MARK	REVISION	DATE
	DRAFT	

TERMINAL AREA DRAWING

LATEST REVISION:	JULY 2020
DRAWN BY:	JA
REVIEWED BY:	DA
JOB NO.	SJT1801P

SHEET NO. 13



LEGEND

DESCRIPTION	EXISTING
AIRPORT PROPERTY BOUNDARY	
AIRPORT SECURITY FENCE (AOA)	
EXISTING AIRFIELD PAVEMENT	
EXISTING BUILDINGS	
EXISTING NAVIGATIONAL AIDS	
ULTIMATE AIRFIELD PAVEMENT	
ULTIMATE BUILDINGS	
ULTIMATE NAVIGATIONAL AIDS	
RUNWAY SAFETY AREA (RSA)	RSA
RUNWAY OBJECT FREE AREA (ROFA)	ROFA
OBSTACLE FREE ZONE (OFZ)	OFZ
RUNWAY PROTECTION ZONE (RPZ)	RPZ
BUILDING RESTRICTION LINE (BRL)	BRL

LAND USE

ITEM	DESCRIPTION	AREA (AC)
ON-AIRPORT PROPERTY		
	AIRFIELD OPERATIONS (AOA)	727
	AVIATION BUSINESS/INDUSTRIAL	312
	CARGO	6
	COMMERCIAL AIRLINE	47
	GENERAL AVIATION	117
	GOVERNMENTAL	44
	NON-AERONAUTICAL SUPPORT	94
	OPEN SPACE	170
	ON-AIRPORT PROPERTY TOTAL	**1,517 AC**
OFF-AIRPORT PROPERTY		
	EXISTING EASEMENT	254
	RPZ AVIGATION EASEMENT	46

NOTES:

1. AIRPORT ZONING REGULATIONS - RUNWAY PROTECTION ZONES OUTSIDE OF PROPERTY BOUNDARIES IS PROTECTED BY SAN ANGELO-TOM GREEN COUNTY AIRPORT ZONING ORDINANCE: CHAPTER 12, *PLANNING AND DEVELOPMENT, EXHIBIT B - AIRPORT ZONING REGULATIONS.*
2. AIRPORT PROPERTY IS WITHIN THE CITY LIMITS. SURROUNDING AREAS ARE IN TOM GREEN COUNTY, WITHIN THE CITY'S EXTRA-TERRITORIAL JURISDICTION (ETJ).

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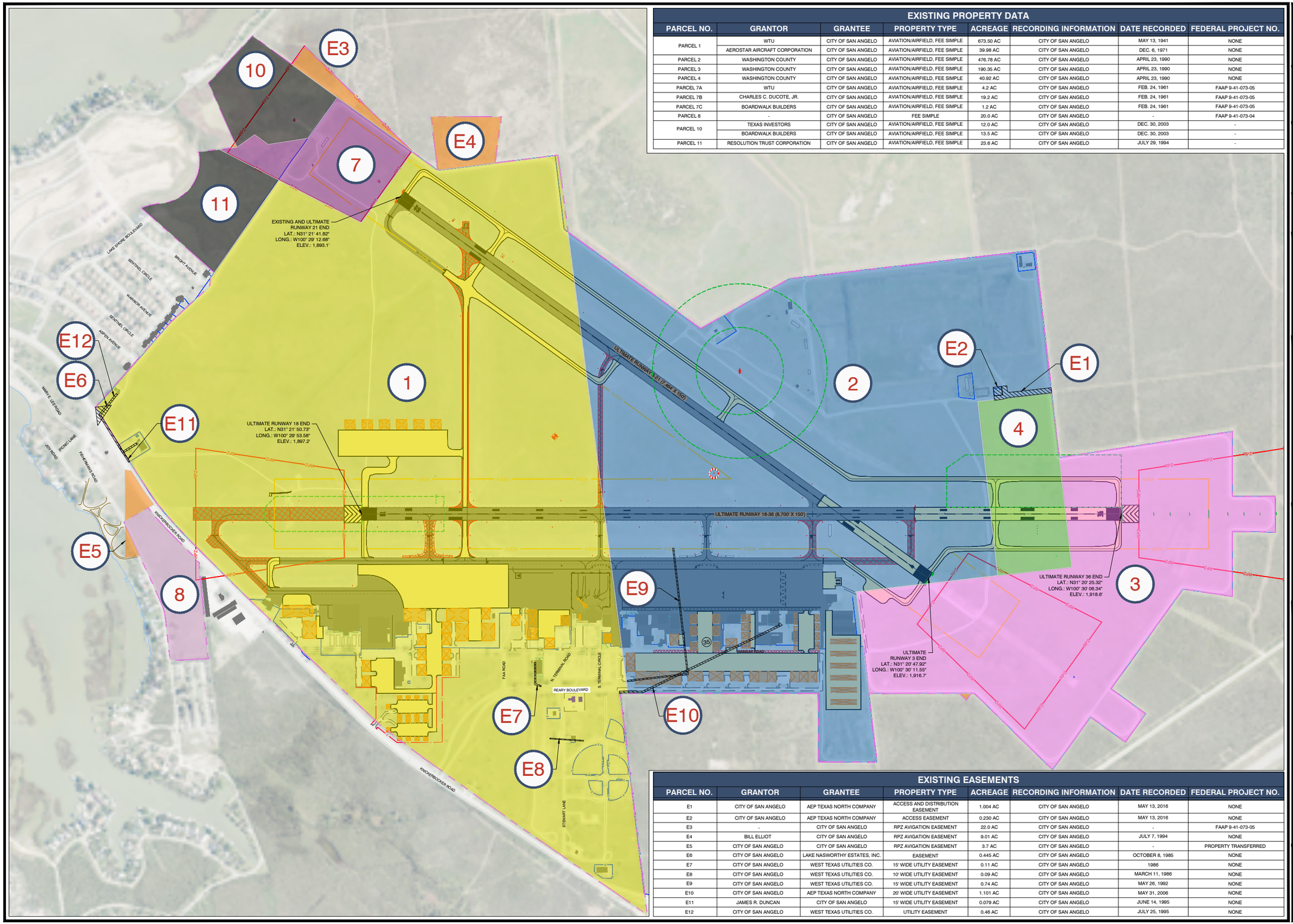
ULTIMATE LAND USE PLAN

LATEST REVISION:	JULY 2020
DRAWN BY:	JA
REVIEWED BY:	DA
JOB NO.	SJT1801P

SHEET NO. 14



EXISTING PROPERTY DATA

PARCEL NO.	GRANTOR	GRANTEE	PROPERTY TYPE	ACREAGE	RECORDING INFORMATION	DATE RECORDED	FEDERAL PROJECT NO.
PARCEL 1	WTU	CITY OF SAN ANGELO	AVIATION/AIRFIELD, FEE SIMPLE	673.50 AC	CITY OF SAN ANGELO	MAY 13, 1941	NONE
	AEROSTAR AIRCRAFT CORPORATION	CITY OF SAN ANGELO	AVIATION/AIRFIELD, FEE SIMPLE	39.98 AC	CITY OF SAN ANGELO	DEC. 6, 1971	NONE
PARCEL 2	WASHINGTON COUNTY	CITY OF SAN ANGELO	AVIATION/AIRFIELD, FEE SIMPLE	476.78 AC	CITY OF SAN ANGELO	APRIL 23, 1990	NONE
PARCEL 3	WASHINGTON COUNTY	CITY OF SAN ANGELO	AVIATION/AIRFIELD, FEE SIMPLE	190.35 AC	CITY OF SAN ANGELO	APRIL 23, 1990	NONE
PARCEL 4	WASHINGTON COUNTY	CITY OF SAN ANGELO	AVIATION/AIRFIELD, FEE SIMPLE	40.92 AC	CITY OF SAN ANGELO	APRIL 23, 1990	NONE
PARCEL 7A	WTU	CITY OF SAN ANGELO	AVIATION/AIRFIELD, FEE SIMPLE	4.2 AC	CITY OF SAN ANGELO	FEB. 24, 1961	FAAP 9-41-073-05
PARCEL 7B	CHARLES C. DUCOTE, JR.	CITY OF SAN ANGELO	AVIATION/AIRFIELD, FEE SIMPLE	19.2 AC	CITY OF SAN ANGELO	FEB. 24, 1961	FAAP 9-41-073-05
PARCEL 7C	BOARDWALK BUILDERS	CITY OF SAN ANGELO	AVIATION/AIRFIELD, FEE SIMPLE	1.2 AC	CITY OF SAN ANGELO	FEB. 24, 1961	FAAP 9-41-073-05
PARCEL 8	-	CITY OF SAN ANGELO	FEE SIMPLE	20.0 AC	CITY OF SAN ANGELO	-	FAAP 9-41-073-04
PARCEL 10	TEXAS INVESTORS	CITY OF SAN ANGELO	AVIATION/AIRFIELD, FEE SIMPLE	12.0 AC	CITY OF SAN ANGELO	DEC. 30, 2003	-
	BOARDWALK BUILDERS	CITY OF SAN ANGELO	AVIATION/AIRFIELD, FEE SIMPLE	13.5 AC	CITY OF SAN ANGELO	DEC. 30, 2003	-
PARCEL 11	RESOLUTION TRUST CORPORATION	CITY OF SAN ANGELO	AVIATION/AIRFIELD, FEE SIMPLE	23.6 AC	CITY OF SAN ANGELO	JULY 29, 1994	-

EXISTING EASEMENTS

PARCEL NO.	GRANTOR	GRANTEE	PROPERTY TYPE	ACREAGE	RECORDING INFORMATION	DATE RECORDED	FEDERAL PROJECT NO.
E1	CITY OF SAN ANGELO	AEP TEXAS NORTH COMPANY	ACCESS AND DISTRIBUTION EASEMENT	1.004 AC	CITY OF SAN ANGELO	MAY 13, 2016	NONE
E2	CITY OF SAN ANGELO	AEP TEXAS NORTH COMPANY	ACCESS EASEMENT	0.230 AC	CITY OF SAN ANGELO	MAY 13, 2016	NONE
E3	-	CITY OF SAN ANGELO	RPZ AVIGATION EASEMENT	22.0 AC	CITY OF SAN ANGELO	-	FAAP 9-41-073-05
E4	BILL ELLIOT	CITY OF SAN ANGELO	RPZ AVIGATION EASEMENT	9.01 AC	CITY OF SAN ANGELO	JULY 7, 1994	NONE
E5	CITY OF SAN ANGELO	CITY OF SAN ANGELO	RPZ AVIGATION EASEMENT	3.7 AC	CITY OF SAN ANGELO		PROPERTY TRANSFERRED
E6	CITY OF SAN ANGELO	LAKE NASWORTHY ESTATES, INC.	EASEMENT	0.445 AC	CITY OF SAN ANGELO	OCTOBER 8, 1985	NONE
E7	CITY OF SAN ANGELO	WEST TEXAS UTILITIES CO.	15' WIDE UTILITY EASEMENT	0.11 AC	CITY OF SAN ANGELO	1986	NONE
E8	CITY OF SAN ANGELO	WEST TEXAS UTILITIES CO.	10' WIDE UTILITY EASEMENT	0.09 AC	CITY OF SAN ANGELO	MARCH 11, 1986	NONE
E9	CITY OF SAN ANGELO	WEST TEXAS UTILITIES CO.	15' WIDE UTILITY EASEMENT	0.74 AC	CITY OF SAN ANGELO	MAY 26, 1992	NONE
E10	CITY OF SAN ANGELO	AEP TEXAS NORTH COMPANY	20' WIDE UTILITY EASEMENT	1.101 AC	CITY OF SAN ANGELO	MAY 31, 2006	NONE
E11	JAMES R. DUNCAN	CITY OF SAN ANGELO	15' WIDE UTILITY EASEMENT	0.079 AC	CITY OF SAN ANGELO	JUNE 14, 1995	NONE
E12	CITY OF SAN ANGELO	WEST TEXAS UTILITIES CO.	UTILITY EASEMENT	0.46 AC	CITY OF SAN ANGELO	JULY 25, 1995	NONE

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0' 500' 1000'

GRAPHIC SCALE IN FEET

SAN ANGELO REGIONAL AIRPORT/ MATHIS FIELD (SJT) SAN ANGELO, TEXAS

MARK	REVISION	DATE

DRAFT

AIRPORT PROPERTY MAP

LATEST REVISION:	JULY 2020
DRAWN BY:	JA
REVIEWED BY:	DA
JOB NO.	SJT1801P

SHEET NO. 15