



Canton Municipal Airport Canton, SD

Airport Master Plan Meeting – May 28, 2026

Agenda



- Introductions
- Progress to Date
- Aviation Activity / Critical Design Aircraft
- Inventory Findings
- Facility Requirements
- Open Discussion
- Next Steps

Project Participants



➤ Project Team

- Aviation Planner – Andrew Zielike
- Airport Engineer – Aaron Storm
- Aviation Planner – Kent Penney

➤ Canton Airport/ City of Canton

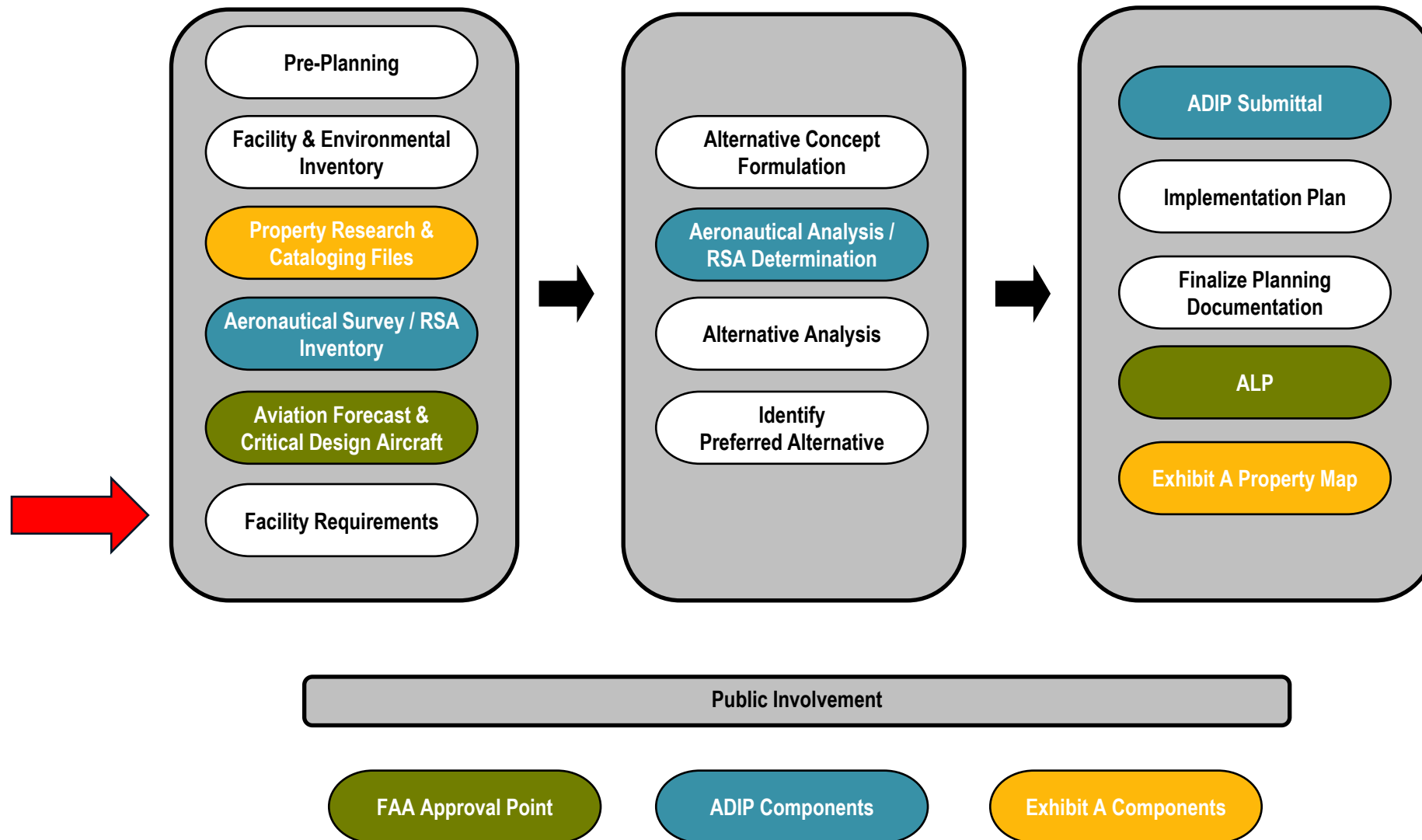
- City Commission
- Airport Board

➤ Agencies Involved

- FAA – Brian Schuck
- SD DOT Aeronautics – Jon Becker

➤ Planning Advisory Committee (PAC)

- Marshall Christensen – Airport Manager/Borders Aviation
- Jerry Choan – Airport Board/President
- Bruce Henke – Airport Board
- Ken Moulds – Omega Liner Company, Owner
- Paul Garbers – City Commissioner
- Dale Den Besten – Tri-State Aerial
- Joey Johnson – Dakota Aviation



Progress to Date



- Chapter 1 Submitted and Critical Design Aircraft Approved
- Existing obstacle data has been processed
- Exhibit A
 - Deeds and Easements Drafted
 - Encumbrances in process
- RSAD Submitted
- Existing ALP drafted



Annual Aircraft Operations



➤ 6,300 Estimated Annual Operations

➤ Flight Training

- Dakota Aviation (1,430)
- SDSU and Legacy Aviation (2,930)

➤ Aerial Applicator (500)

➤ Other

- TFMS (16)
- Based Aircraft (700)
- Transient (730)

Forecasted Annual Aircraft Operations

Category	2025	2030	2035	2040	2045	CAGR
Local	2,520	2,688	2,867	3,059	3,263	1.30%
Itinerant	3,780	4,032	4,301	4,588	4,894	1.30%
Total	6,300	6,720	7,169	7,647	8,157	1.30%



Based Aircraft Forecast



- 26 Validated Based Aircraft
- Canton has seen 14 additional based aircraft since 2015
- Growth from 2015-2025 was applied at linear rate through the end of the planning period
- Benchmark to preserve space for future hangar growth



Forecasted Based Aircraft

Aircraft Type	2025	2030	2035	2040	2045
Piston (Single)	22	27	32	38	45
Piston (Multi)	2	2	3	4	5
Turboprop	2	2	3	3	4
Jet	0	0	0	0	0
Helicopter	0	0	0	0	0
Other	0	0	0	0	0
TOTAL	26	31	37	45	54

Critical Design Aircraft



- Change from B-I (Small) to B-II is estimated to occur in 2035 or later
 - Combination of growth and/or fleet change
- No near-term impacts
 - Future development will plan to accommodate this change
- This change will impact zoning and future development on ALP



Source: airtractor.com

Future Critical Design Aircraft Characteristics

Aircraft Approach Category – B

- Represents speed that aircraft approaches runway
- Approach speed 91 knots or more but less than 121 knots

Airplane Design Group– II

- Represents wingspan and height of aircraft
- Wingspan: 20 ft to < 30 ft
- Tail height: 49 ft to < 79 ft

Taxiway Design Group– 1B

- Represents pavement width and turning clearance needed by aircraft (Main Gear Width and Cockpit to Main Gear distance)
- MGW: 0 to ≤ 15 ft
- CMG: > 20 ft to ≤ 40 ft

Weight Class- Large

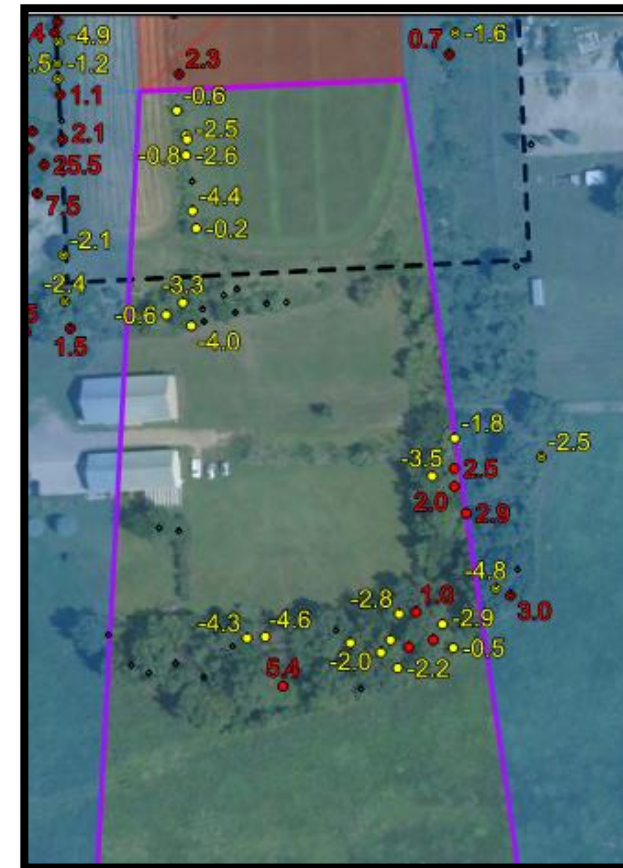
- Greater than 12,500 lbs

Future Critical Design Aircraft

Metric	2025	2030	2035	2040	2045
A/B-II, TDG-1B	400	427	569	607	647

➤ Part 77 Approach Obstructions

- Group of trees south of Runway 36



- [illegible]

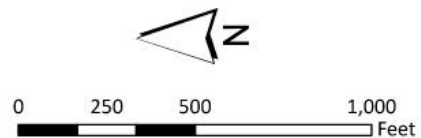
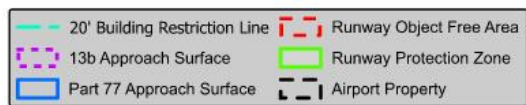
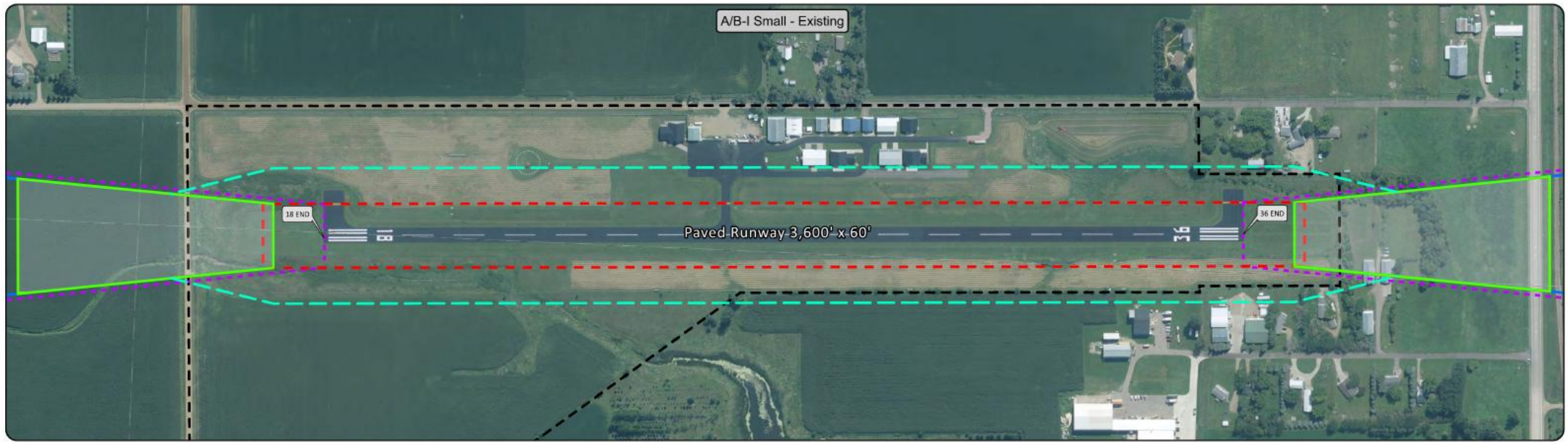
Runway Length and Width



- Existing Runway: 3,600' x 60'
 - Future A/B-II: 75' width
- FAA Runway Length guidance is changing to SARLAT
- Evaluated lengths needed for various aircraft
 - Air Tractor 802- 5,100' at MTOW but can operate at 74% load at 3,600'

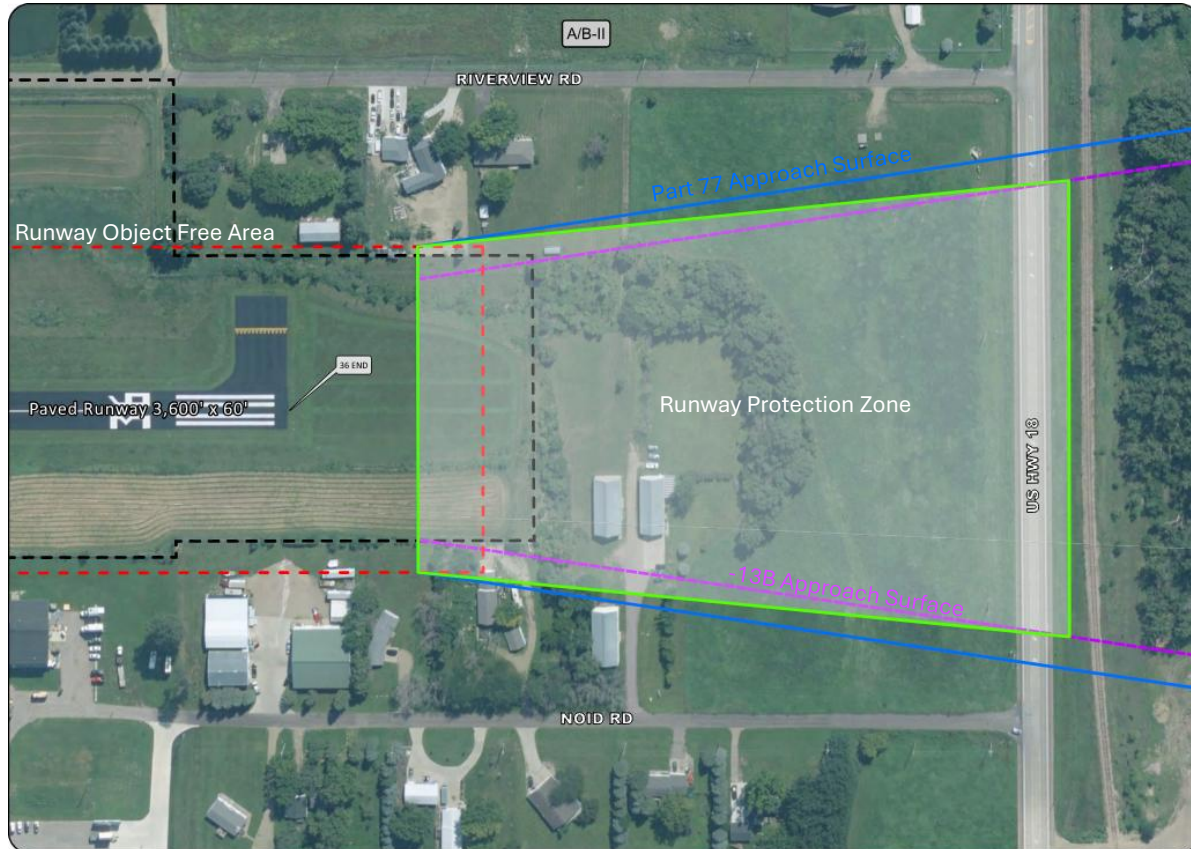
Aircraft ⁷	Recommended Runway Length (Paved)
Cessna 150	1,870 feet
Cessna 152	1,821 feet
Cessna 172 Skyhawk	1,929 feet
Cessna 182 Skylane	1,809 feet
Cessna 340	4,290 feet
Cessna 421 Golden Eagle	4,594 feet
Cessna T210 Turbo Centurion	2,887 feet
Cirrus SR 20	3,492 feet
Cirrus SR 22	2,585 feet
Cirrus SR 22 Turbo	2,764 feet
Diamond 40 Star	2,004 feet
Diamond 42 Star	2,107 feet
Mooney M20J	3,428 feet
Piper 24 Comanche	3,153 feet
Piper 28B Dakota	1,823 feet
Piper 30 Twin Comanche	3,707 feet
Vans RV 12	1,865 feet
Air Tractor 802	5,100 feet (MTOW) / 3,600 feet (74% load)

Source: Small Aircraft Runway Length Analysis Tool (SARLAT), Air Tractor 802 Flight Manual, KLJ Analysis



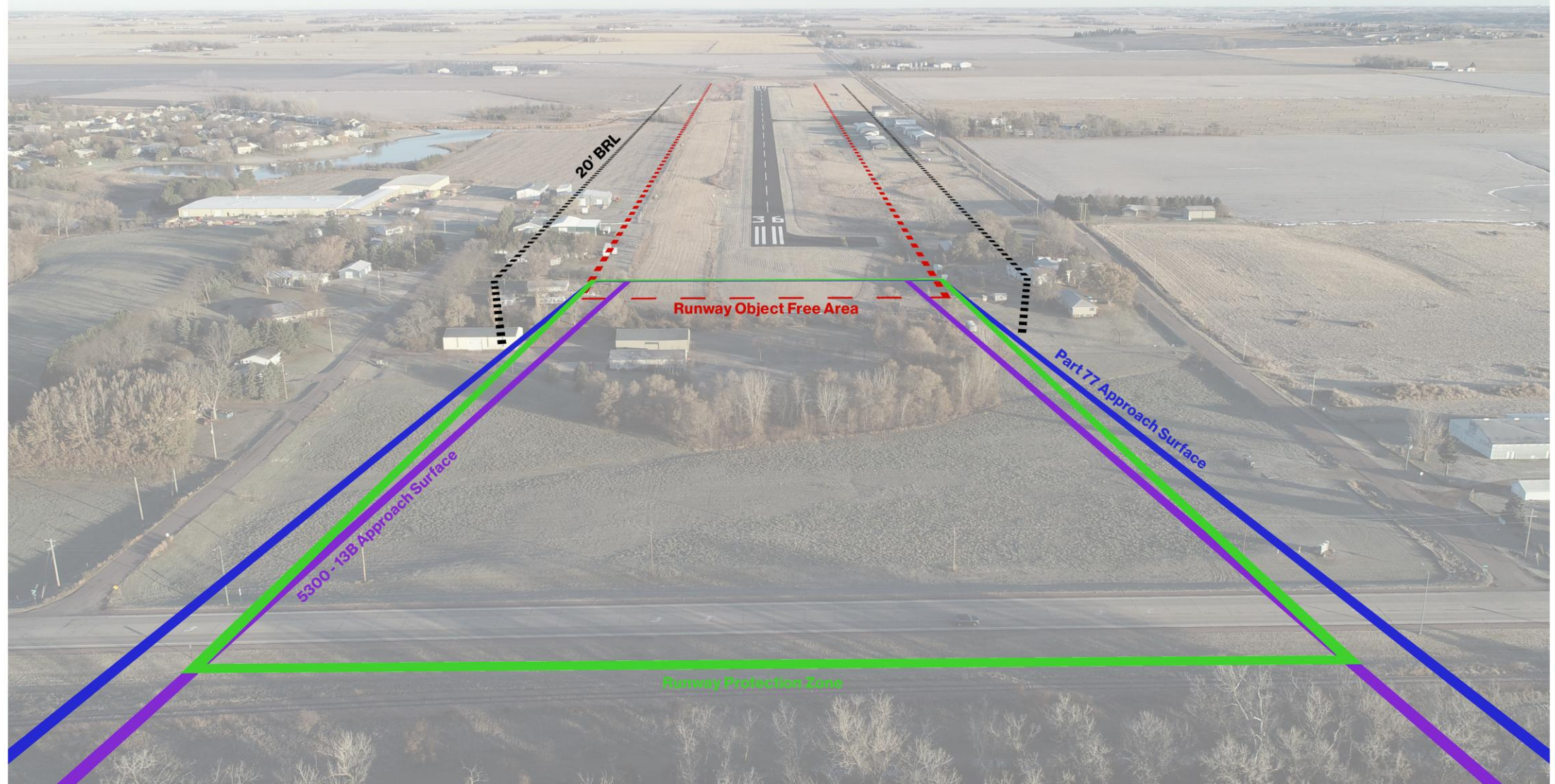
Canton Municipal Airport
Runway Map

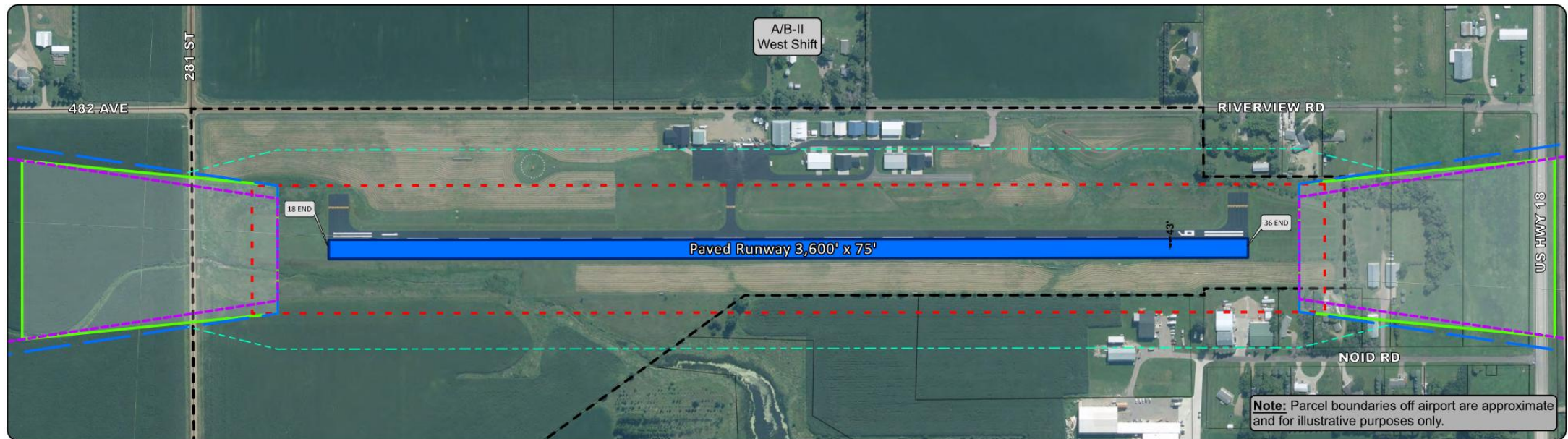
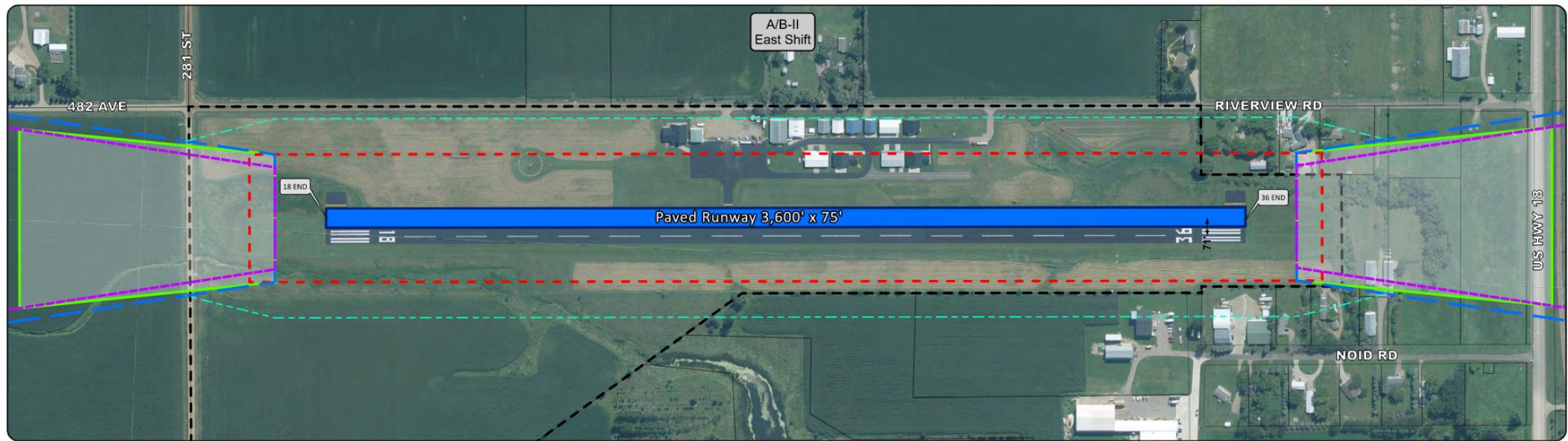
Future Protection Surfaces



Canton Municipal Airport

Protection Surfaces for Ultimate B-II Runway Design Code

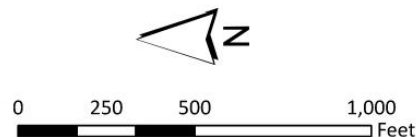




Note: Parcel boundaries off airport are approximate and for illustrative purposes only.



Airport Property	Runway Pavement
13b Approach Surface	PT 77 Approach
Runway Object Free Area	20' Building Restriction Line
Runway Protection Zone	Parcels



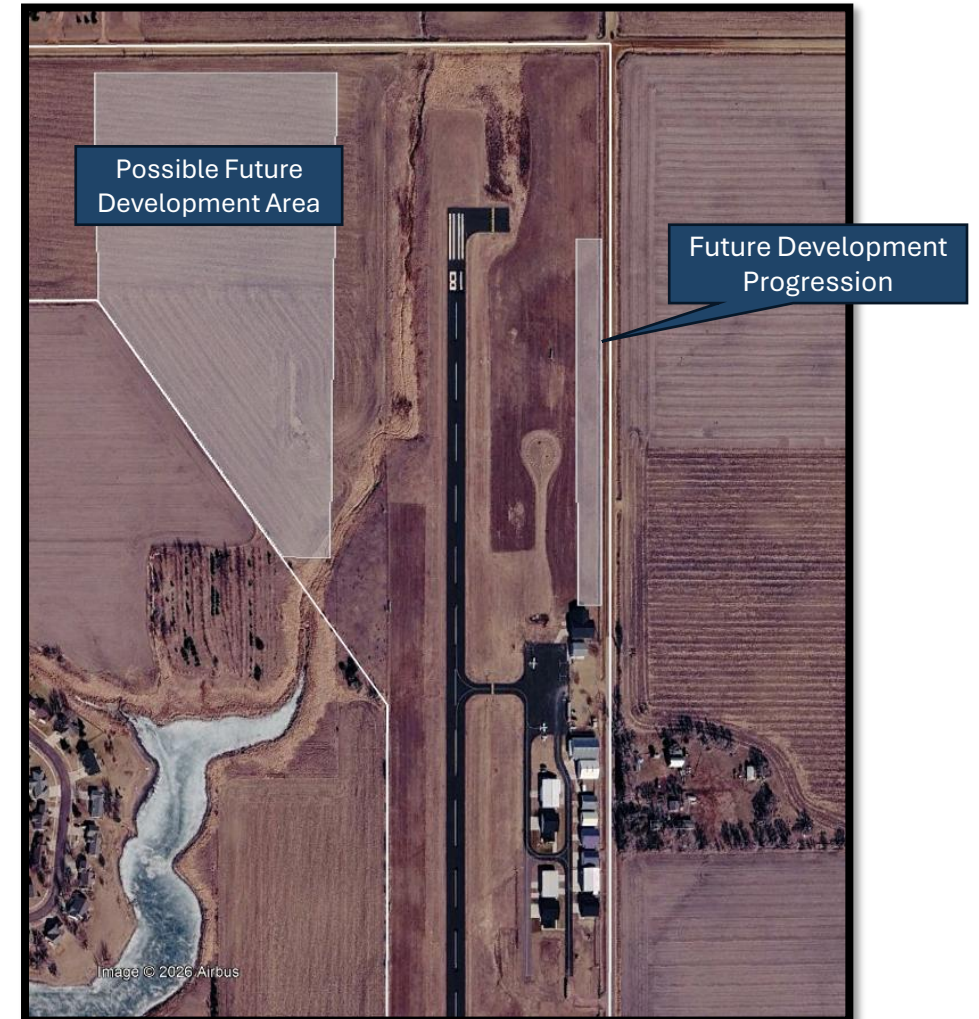
**Canton Municipal Airport
Shifted Runway
Options**

Future Terminal Development



- Drainage concerns south of existing terminal area
- Limited depth on east side
- Land preserved for previously proposed Crosswind Runway
 - Existing property allows for more development and depth

CONFIGURATION	ALL-WEATHER WIND COVERAGE			
	CROSSWIND COMPONENT			
	10.5 KNOTS	13 KNOTS	16 KNOTS	20 KNOTS
RUNWAY 18-36	90.79%	95.48%	-	-
RUNWAY 8-26	80.11%	88.99%	-	-
	-	-	-	-
COMBINED	97.21%	99.00%	-	-
SOURCE: KFSD ASOS (2015-2024, HOURLY) FROM NATIONAL CLIMATIC DATA CENTER				
87,570 TOTAL OBSERVATIONS				



Next Steps



- Refine Runway Alternatives
- Develop Terminal and Hangar Area Alternatives
- Submit updated Facility Requirements to FAA/State
- Next Meeting: Alternatives
- **Website:** <https://inputcentral.com/canton-airportplan>

Thank you for participating!

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