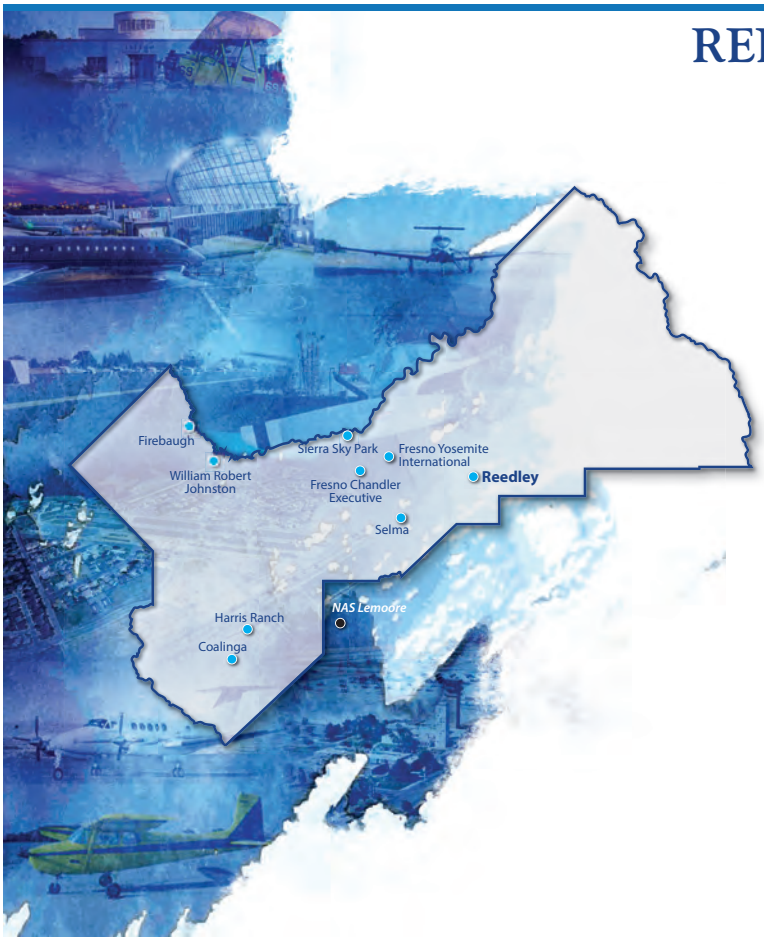
Fresno Council of Governments

Appendix F

REEDLEY MUNICIPAL AIRPORT



Appendix F: Reedley Municipal Airport

Appendix F provides an overview of Reedley Municipal Airport's (Airport) setting, airport influence area (AIA), safety zones, noise, and airspace and overflight areas. This Appendix will also discuss existing and planned land uses, as well as current and future Airport facilities.

Reedley Municipal Airport is located four miles north of the City of Reedley on approximately 143 acres of land with an access point for vehicles along South Frankwood Avenue. The Airport sits along the Kings River in the southeastern portion of Fresno County, approximately 25 miles southeast of Fresno. The Airport is a public use facility owned by the City of Reedley. The 2017 – 2021 *National Plan of Integrated Airport Systems* classifies Reedley Municipal Airport as a local general aviation facility, and the 2013 *California Aviation Systems Plan* considers the Airport a community facility.

SAFETY ZONES

EXISTING SAFETY ZONES

The Airport Influence Area (AIA) and Safety Zones for Reedley Municipal Airport are shown on **Exhibit F1**. Figure 3A of the California Airport Land Use Planning Handbook (Handbook) provides three example zones for general aviation airports, which are differentiated by runway length. The Handbook zone examples are provided as a starting point for developing safety zones specific to an airport. As discussed below, Reedley Municipal Airport has one runway, Runway 15-33, which is 3,300 feet long. The Federal Aviation Administration (FAA)-approved Airport Layout Plan (ALP) does not include any changes to the runway length. Therefore, the Safety Zones are based on the Short General Aviation Runway example. For this plan, the outermost zone in the Handbook examples was replaced by the 14 CFR Part 77 Conical

Surface, which also represents the airspace and overflight review area boundaries. Additional information regarding the safety compatibility zones can be found in **Appendix M**.

NOISE

Exhibit F2 depicts the long-range noise exposure contours from the 2007 *Reedley Municipal Airport Land Use Compatibility Plan.*

AIRSPACE AND OVERFLIGHT

Exhibit F3 depicts the Airspace Plan from the 2013 *Reedley Municipal Airport Layout Plan Update*. This exhibit includes the 14 CFR Part 77 Conical Surface which is also the Airport Influence Area (AIA) for Reedley Municipal Airport.

AIRPORT INFORMATION

AIRPORT FACILITIES

Airport facilities are detailed in **Table F1** and **Exhibit F4** shows the ALP (August 2013).

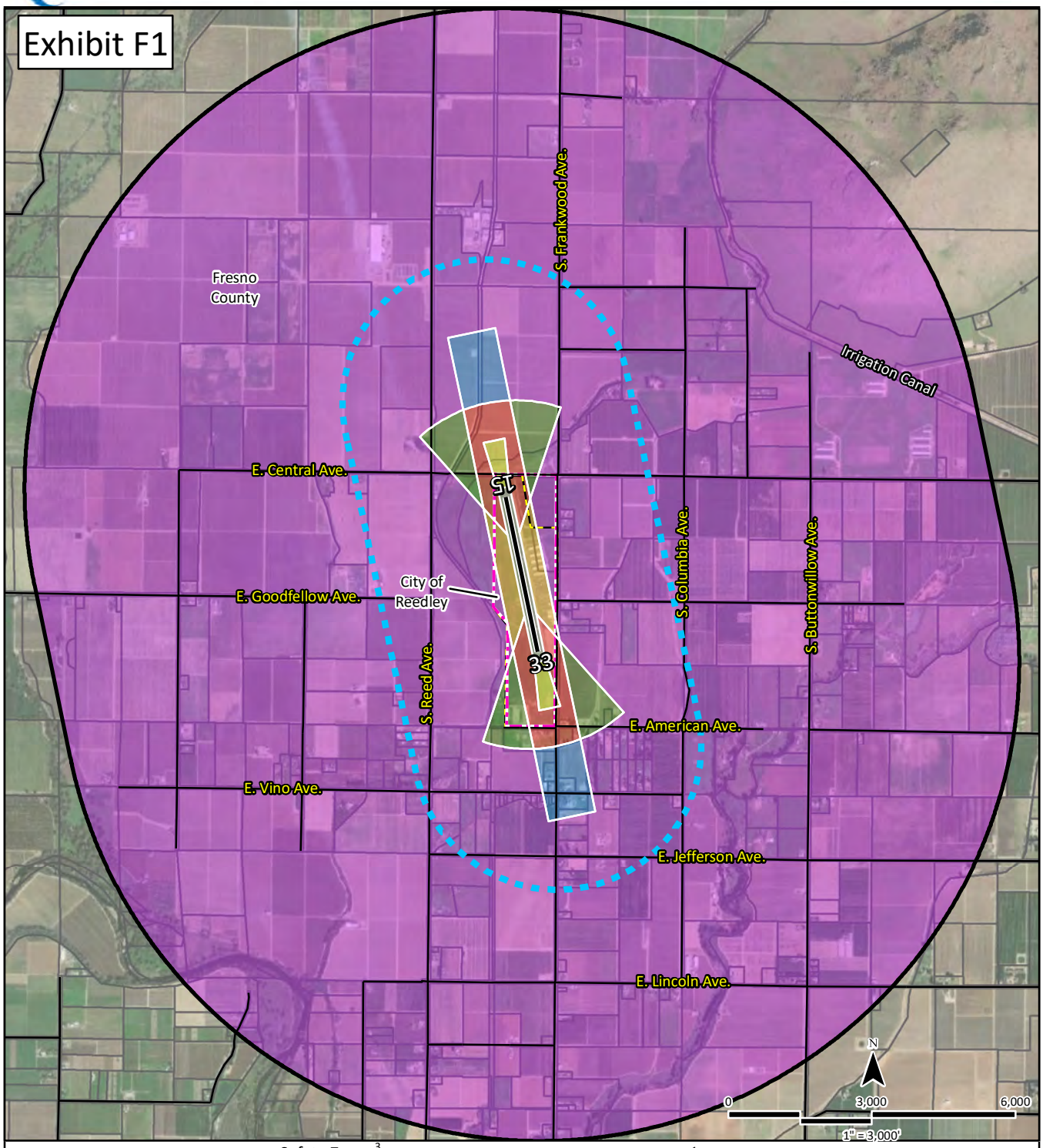
Reedley Municipal Airport has one runway, Runway 15-33, that is 3,300 feet long and 50 feet wide. The runway is constructed of asphalt and in good condition. Runway 15 has a standard, left-hand traffic pattern and Runway 33 has a right-hand traffic pattern to avoid the school that is one-half mile north of Runway 15 end. The runway can withstand up to 30,000 pounds. Runway pavement markings are basic and in good condition. Runway lighting consists of medium intensity runway lighting and runway end identifier lights. There is a touchdown point but it is unlighted. The runway has visual approach aids on both ends as there is a two-light precision approach path indicator (PAPI) on the left. The glide angle is three degrees on Runway 15 and four degrees on Runway 33. There are no instrument approach aids.

FUTURE AIRPORT PLANS

According to the *Airport Layout Plan Update* (August 2013), the City of Reedley and the FAA plan to concentrate on enhancing Airport drainage and rehabilitation of existing infrastructure. Additionally, short-term development projects include:

- Design and construction of the Runway Safety Area (RSA) and shoulder safety improvements.
- Design and construction of transient aircraft apron pavement, closure and rehabilitation of the remaining apron.
- Design of airfield lighting, runway and taxiway signage, pavement markings improvements, and airport electrical upgrades.

Exhibit F1



LEGEND

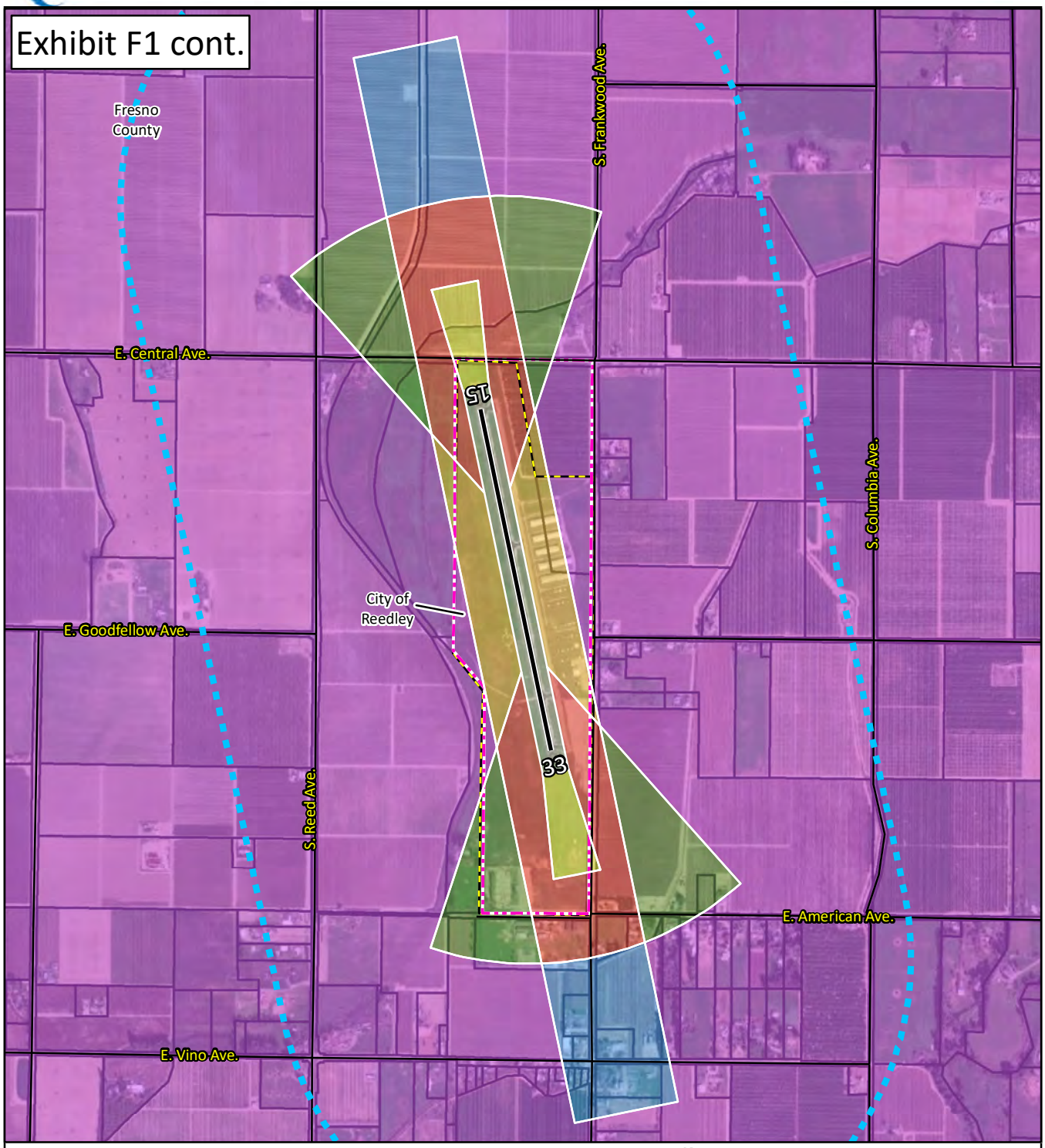
- Runway[1]
- Airport Property[1]
- Parcel Boundary
- Municipal Boundary
- Streets
- Airport Influence Area (AIA)[2]
- Review Area[4]

Safety Zones[3]

1. Runway Protection Zone
2. Inner Approach/Departure Zone
3. Inner Turning Zone
4. Outer Approach/Departure Zone
5. Sideline Zone
6. Traffic Pattern Zone

[1]Reedley Municipal Airport Layout Plan (2013).
[2]Part 77 Conical Surface. See 14 CFR, Subchapter E, Part 77, §77.25.
[3]Figure 3A, California Airport Land Use Planning Handbook (2011), and Coffman Associates Analysis. Sources: Fresno County Parcels, Fresno County Streets, ESRI Basemap Imagery (2020).
[4]Vulnerable Occupants Review Area (See Section 3.2.2 and Table 3A)

Exhibit F1 cont.



LEGEND

- Runway[1]
- Airport Property[1]
- Parcel Boundary
- Municipal Boundary
- Streets
- Review Area[3]

Safety Zones[2]

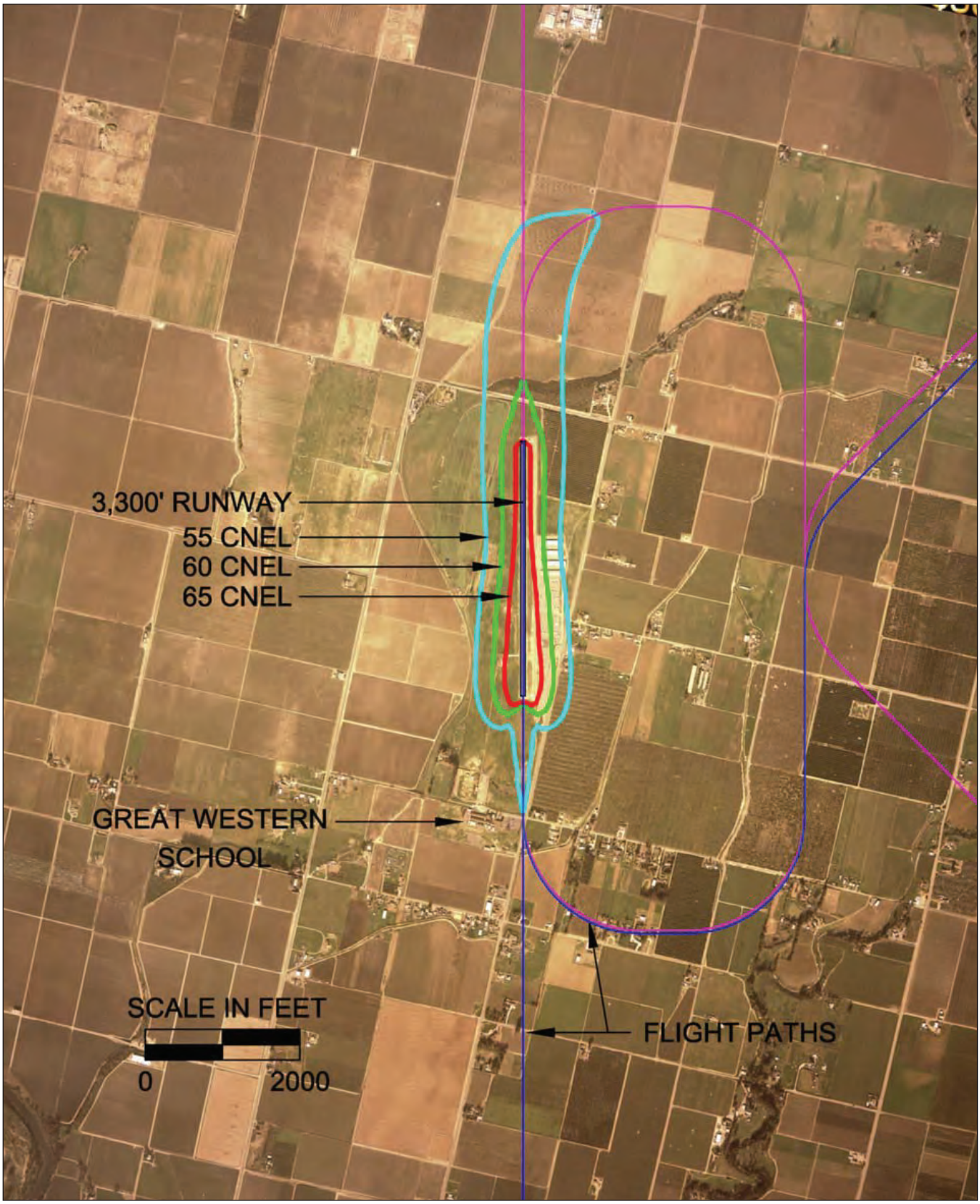
1. Runway Protection Zone
2. Inner Approach/Departure Zone
3. Inner Turning Zone
4. Outer Approach/Departure Zone
5. Sideline Zone
6. Traffic Pattern Zone

N

0 1,400 2,800

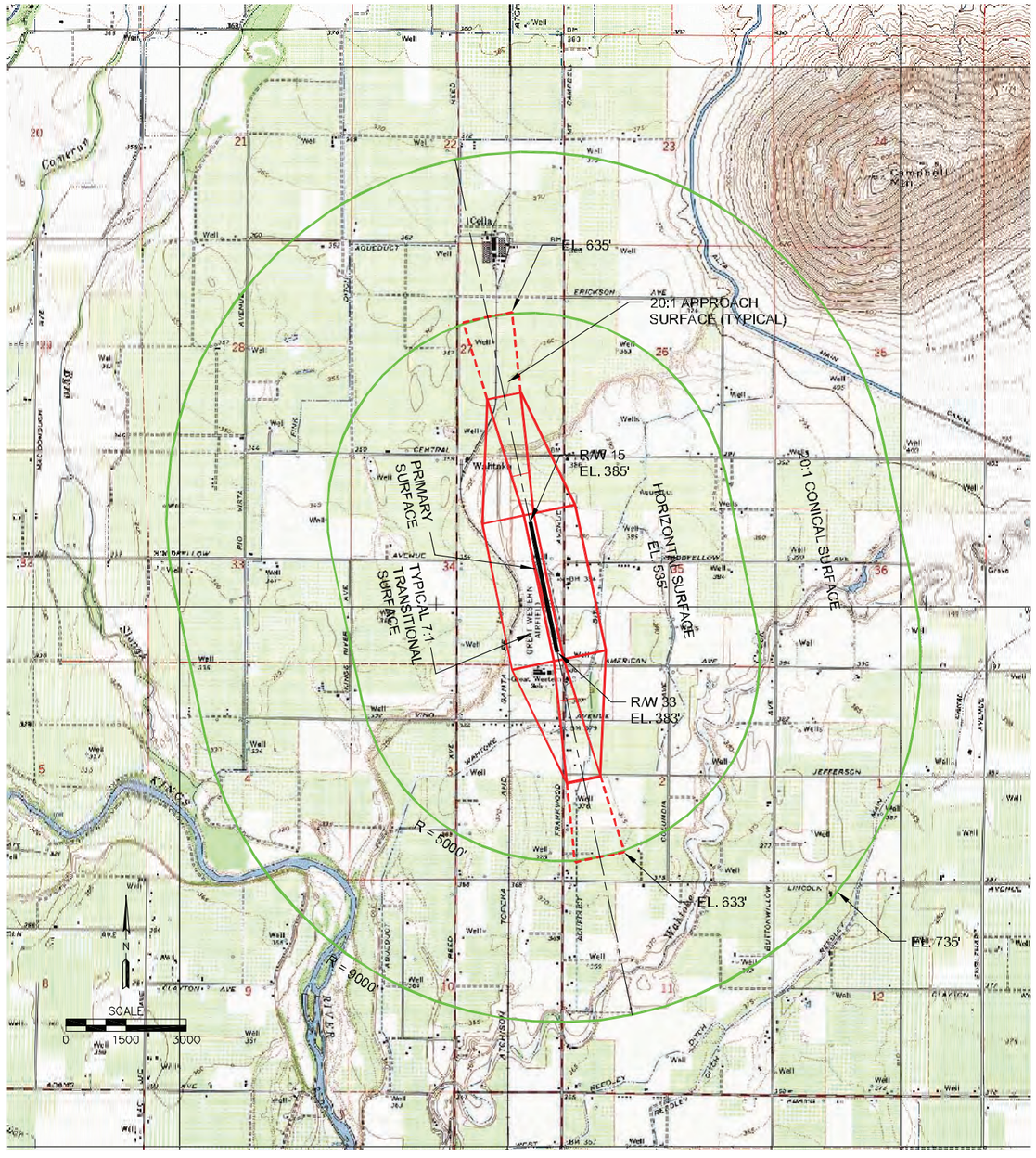
1" = 1,400'

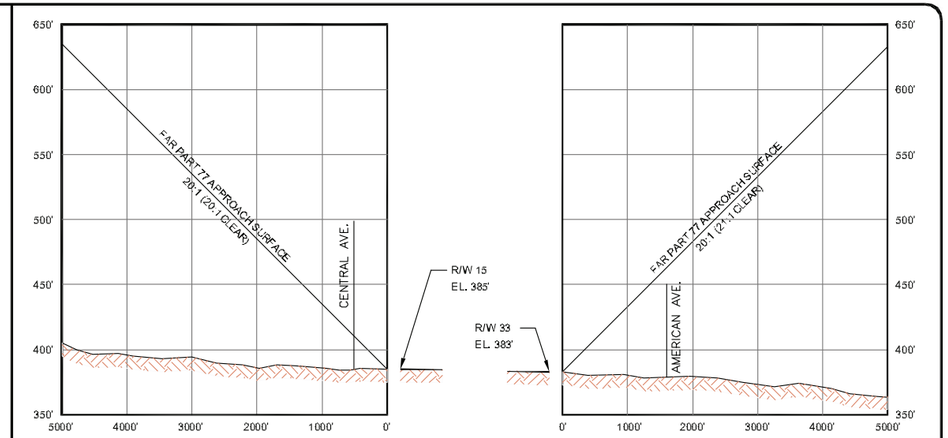
[1]Reedley Municipal Airport Layout Plan (2013).
[2]Figure 3A, California Airport Land Use Planning Handbook (2011), and Coffman Associates Analysis. Sources: Fresno County Parcels, Fresno County Streets, ESRI Basemap Imagery (2016).
[3]Vulnerable Occupants Review Area (See Section 3.2.2 and Table 3A)



Source: Wadell Engineering Corporation

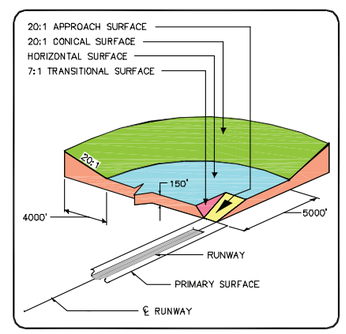
Exhibit F2
FUTURE NOISE EXPOSURE CONTOURS
REEDLEY MUNICIPAL AIRPORT





APPROACH PROFILES

ISOMETRIC VIEW



APPROACH DATA

RUNWAY NUMBER	15 / 33	
	EXISTING	FUTURE
LENGTH	3300'	SAME
APPROACH TYPE	VISUAL	NON-PRECISION
NAVAIDS	PAPI	SAME
APPROACH SURFACE		
LENGTH	5000'	SAME
SLOPE	20:1	SAME
INNER WIDTH	250'	SAME
OUTER WIDTH	1250'	SAME
RUNWAY PROTECTION ZONE		
INNER WIDTH	250'	SAME
OUTER WIDTH	450'	SAME
LENGTH	1000'	SAME

NOTES:

- THIS PLAN IS INTENDED TO PRESERVE AND PROTECT FOR AN EXISTING 3300' RUNWAY 15/33 WITH VISUAL APPROACHES ON BOTH ENDS AND SMALL AIRCRAFT ONLY.
- THERE ARE NO KNOWN PENETRATIONS OF THE HORIZONTAL, TRANSITIONAL OR CONICAL SURFACES.
- PROFILES REPRESENT A COMPOSITE OF THE HIGHEST TERRAIN IN THE APPROACH SURFACES.
- INFORMATION SOURCE: CURRENT U.S.G.S. MAPS.
- AIRPORT ELEVATION IS 385' MSL. AIRPORT REFERENCE POINT COORDINATES (NAD 83) ARE AS FOLLOWS:

	EXISTING	FUTURE
LATITUDE	N 36°-40'-15.60"	SAME
LONGITUDE	W 119°-27'-03.59"	SAME

NO.	DATE	BY	REVISIONS

REEDLEY MUNICIPAL AIRPORT
A CITY OF REEDLEY AVIATION FACILITY
REEDLEY CALIFORNIA

APPROACH AND RUNWAY PROTECTION ZONE DRAWING

DRAWING 2 OF 4

SCALE AS SHOWN

DRAWN DLH | CHECKED | DESIGNED RPW | JOB NUMBER 1314 | DRAWING NUMBER 1314-2RPZ | DATE MAR 2005

WADELL ENGINEERING CORPORATION AIRPORT PLANNING · ENGINEERING · MANAGEMENT san francisco bay area

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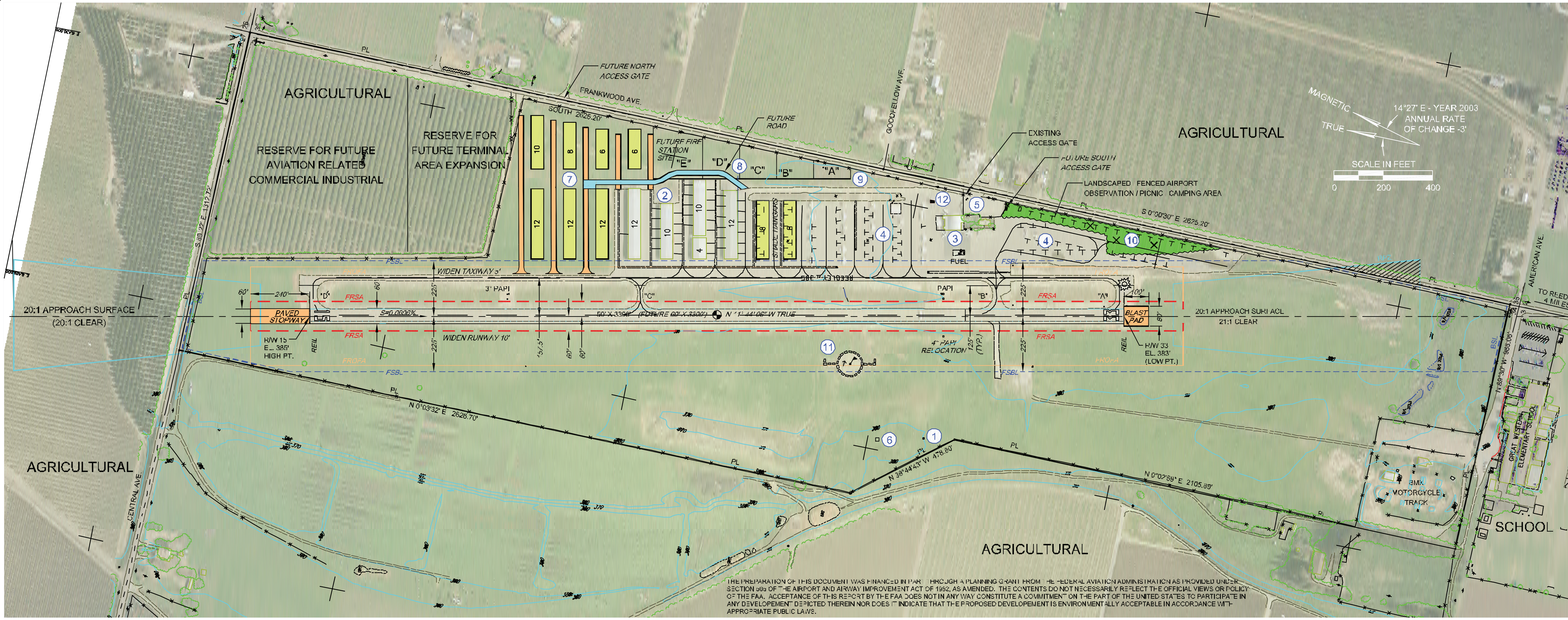
1314-2RPZ 12-16-03 1=1 REF: REEDLEYUSGS_0001 TO 0012
XREF: X-REEDLEY-MP-BRDR, USGS-COMBO-FULLSIZE



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1314-1ALP 03-04-05 1=1 XREF: X-REEDLEY-MP-BRDR, MASTER-NEW

LEGEND

	EXISTING	FUTURE
AIRPORT REFERENCE POINT		SAME
AIRPORT PROPERTY LINE	PL	FPL
AVIGATION EASEMENT		
BUILDING SETBACK LINE	BSL	FSBL
RUNWAY SAFETY AREA	RSA	FRSA
RUNWAY PROTECTION ZONES	RPZ	SAME
BUILDINGS		
DRAINAGE		
FACILITIES		
FACILITY TO BE REMOVED	N/A	X
FENCE		
LIGHTING		
WIND CONE		

AIRPORT DATA

		EXISTING	FUTURE
AIRPORT REFERENCE CODE CATEGORY		A - I	SAME
ELEVATION (MSL)		385'	SAME
TEMPERATURE (MEAN MAX. OF HOTTEST MONTH)		98.5° F	SAME
REFERENCE POINT COORDINATES (NAD 83)	LATITUDE	N 36°-40'-15.60"	N 36°-40'-15.59"
	LONGITUDE	W 119°-27'-03.59"	W 119°-27'-03.64"
NAVIGATIONAL AIDS		PAPI	REIL
ACREAGE	FEE TITLE	138	SAME
	AVIGATION EASEMENT	0.4	SAME
BASED AIRCRAFT PARKING DEMAND	TIEDOWNS	22	14
	HANGARS/SHELTERS	48	81
	TOTAL	70	95
TRANSIENT AIRCRAFT TIEDOWN DEMAND		4	7
AIRPORT RESCUE & FIRE FIGHTING INDEX (ARFF)		N/A	N/A

FACILITY DATA

1	AIRPORT BEACON
2	HANGARS
3	FBO
4	APRON
5	AUTO PARKING
6	FUTURE AUTOMATED WEATHER OBSERVATION SYS.
7	FUTURE HANGARS
8	FUTURE AVIATION SPECIALTY HANGARS
9	FUTURE AIRPORT / FIRE DISTRICT STATION
10	FUTURE PICNIC / CAMP / OBSERVATION AREA
11	WINDCONE / SEGMENTED CIRCLE
12	VAULT & FUTURE RELOCATED AIRPORT BEACON

TAXIWAY DATA

T/W	TYPE	PAVEMENT SURFACE	PAVEMENT WIDTH EXISTING	PAVEMENT WIDTH FUTURE	STRENGTH (1000#) SINGLE GEAR EXISTING	STRENGTH (1000#) SINGLE GEAR FUTURE	SIGNING/LIGHTING EXISTING	SIGNING/LIGHTING FUTURE
A	PARALLEL	ASPHALT	20'	25'	12.5	SAME	MITL	SAME
A	EXIT	ASPHALT	30'	35'	12.5	SAME	MITL	SAME
B	EXIT	ASPHALT	28'	35'	12.5	SAME	MITL	SAME
C	EXIT	ASPHALT	20'	35'	12.5	SAME	MITL	SAME
D	EXIT	ASPHALT	34'	35'	12.5	SAME	MITL	SAME

RUNWAY DATA

			RUNWAY 15-33 EXISTING	RUNWAY 15-33 FUTURE
RUNWAY CATEGORY			A - I	SAME
RUNWAY CLASSIFICATION			BASIC	SAME
PHYSICAL LENGTH, WIDTH, AND SURFACE			3300'x50' ASPHALT	3300'X60' ASPHALT
THRESHOLD DISPLACEMENT (D) OR RELOCATION (R)			NONE	SAME
EFFECTIVE GRADIENT (%)			0.06	SAME
PAVEMENT STRENGTH (1000#) SINGLE WHEEL GEAR			12.5	SAME
LIGHTING AND VISUAL AIDS			MIRL/PAPI	REIL
MARKING			BASIC	NON PRECISION
CRITICAL DESIGN AIRCRAFT	RUNWAY LENGTH		58TC	SAME
	PAVEMENT STRENGTH		AC690	SAME
	WINGSPAN		AC690	SAME
INSTRUMENT APPROACH TYPE/ RUNWAY FAR PART 77 CATEGORY	15		VISUAL	NON-PRECISION
	33		VISUAL	NON-PRECISION
APPROACH SLOPE; REQUIRED/CLEAR	15		20:1/20:1	SAME
	33		20:1/21:1	SAME
APPROACH & LANDING AIDS	15		NONE	GPS
	33		NONE	GPS
RUNWAY END COORDINATES (NAD 83)	15	LAT.	N 36°-40'-31.55"	N 36°-40'-31.54"
		LONG.	W 119°-27'-07.80"	W 119°-27'-07.85"
	33	LAT.	N 36°-39'-59.65"	N 36°-39'-59.64"
		LONG.	W 119°-26'-59.38"	W 119°-26'-59.43"
RUNWAY SAFETY AREA DIMENSIONS:	WIDTH		120'	SAME
	LENGTH (240' BEYOND END)		3780'	SAME
RUNWAY PROTECTION ZONE DIMENSIONS:	15		250/450/1000	SAME
(INNER/OUTER/LENGTH)	33		250/450/1000	SAME
RUNWAY OBSTACLE FREE ZONE AIRCRAFT			SMALL	SAME
WIND COVERAGE (%)	12 MPH ALL WEATHER		N/A	SAME
	15 MPH ALL WEATHER		N/A	SAME

FAA APPROVAL

CITY OF REEDLEY

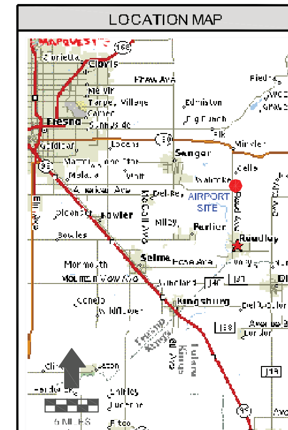
By: ______________ Date: ______________

Title: ______________

NOTES

1. ALL AIRFIELD PAVEMENTS ARE ASPHALTIC CONCRETE.
2. SITING OF NAVAIDS AND LIGHTING AIDS SUBJECT TO FAA REVIEW AND DESIGN.
3. TOPOGRAPHY SOURCE JANUARY 2003 PHOTOMAPPING.
4. THE AIRPORT IS NOT SUBJECT TO FLOODING.
5. AN AIRPORT HEIGHT ZONING ORDINANCE IS IN EFFECT.
6. CLEAR SLOPES ARE BASED ON ANALYSIS OF USGS TOPOGRAPHY.
7. SITE SPECIFIC WIND DATA IS NOT AVAILABLE.
8. COORDINATE BASIS: NAD 1983 HORIZONTAL AND NAVD 1988 VERTICAL.
9. NO OFZ OBJECT PENETRATIONS.

LOCATION MAP



REEDLEY MUNICIPAL AIRPORT A CITY OF REEDLEY AVIATION FACILITY REEDLEY CALIFORNIA	DRAWING 1 OF 4
AIRPORT LAYOUT PLAN	SCALE AS SHOWN
JOB NUMBER 1314 — DRAWING NUMBER 1314-1ALP	DATE MAR 2005

NO. | DATE | BY | REVISIONS

DRAWN DLH | CHECKED REV | DESIGNED RPW

WADELL ENGINEERING CORPORATION AIRPORT PLANNING · ENGINEERING · MANAGEMENT san francisco bay area

- Design and construction of 4,790 linear feet of perimeter fencing on the west side of Airport property, including upgrades to existing security gates and construction of an emergency vehicle access gate and staging pad.

TABLE F1
Airport Facilities
Reedley Municipal Airport

	Runway 15-33
RUNWAY	
Length (feet)	3,300
Width (feet)	50
Threshold Displacement (feet)	0
Runway Pavement Surface Material	Asphalt
Runway Pavement Surface Treatment	Not listed
Runway Pavement Condition	Good
Traffic Pattern	Left | Right
Runway Pavement Load Bearing Strength (lbs.)	
Single Wheel	30,000
Dual Wheel	N/A
Double Tandem	N/A
Double Dual Tandem	N/A
Runway Pavement Markings	
Type	Basic
Condition	Fair
Runway Lighting	
Runway Edge Lighting	MIRL
Approach Lighting System (ALS)	No
Touchdown Point	Yes (no lights)
Runway End Identifier Lights (REILs)	Yes
VISUAL APPROACH AIDS	
Type	2-Light PAPI on Left
Glide Path	3.00 degrees | 4.00 degrees
INSTRUMENT APPROACH AIDS	
Instrument Landing System (ILS)	No
Global Positioning System (GPS)	No
VOR/DME	No

N/A: Not Applicable
MIRL: Medium Intensity Runway Lights
PAPI: Precision Approach Path Indicator
VOR/DME: Very High Frequency Omnidirectional Range Distance Measuring Equipment
Source: AirNav (July 2017)

AIRPORT ENVIRONS

EXISTING LAND USES

Exhibit F5 shows existing land uses in the AIA.

The surrounding land uses are dominated by agricultural uses. There are two sections of Airport property that are being leased: an orchard on the north end of the Airport, east of Runway 15; and a BMX track in the southern corner of Airport property. Great Western Elementary School and some residential land uses are located less than a half mile south of Runway 33. There are also some residences along the eastern Airport property boundary on South Frankwood Avenue.

ZONING

Zoning in the AIA is shown on **Exhibit F6**.

Almost the entirety of the AIA is zoned for agriculture, except for an area zoned for open space in the southwest corner.

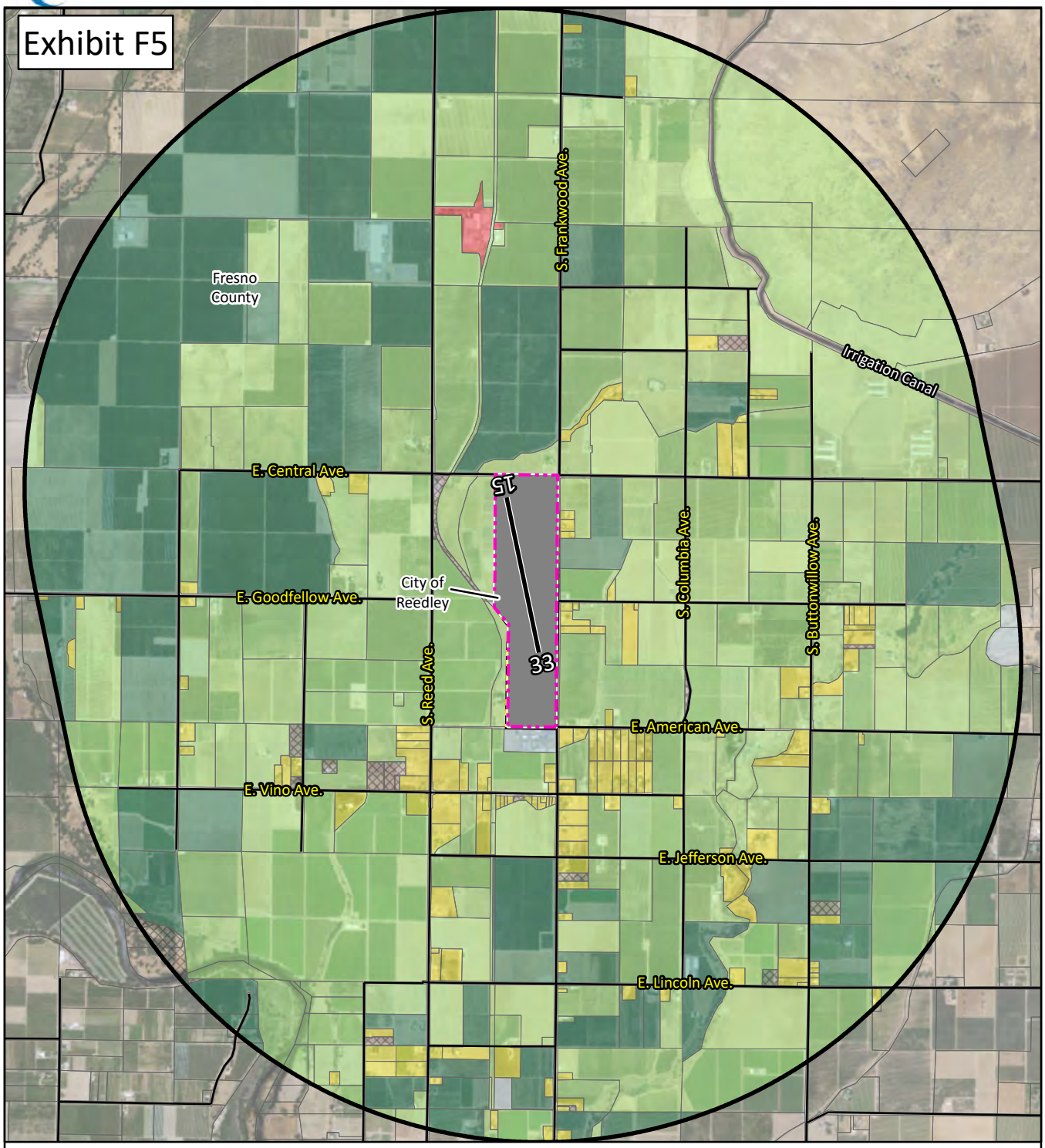
GENERAL PLAN

Exhibit F7 shows general plan land uses near the Airport.

Similar to zoning, the entirety of the AIA is planned for agricultural uses.

COMPATIBILITY FACTORS

Exhibit F8 is a compatibility factors map, which compiles National Transportation Safety Board flight accident data for all airports in the United States, noise exposure contours, and arrival and departure flight tracks from the noise exposure contours. The purpose of this exhibit is to illustrate the methodology behind the shape and size of the safety, noise, and airspace compatibility zones.



LEGEND

- Runway[1]
- Airport Property[1]
- Parcel Boundary
- Municipal Boundary
- Streets
- Airport Influence Area (AIA)[2]

Existing Land Use[3]

- Single Family Residential
- Commercial
- Public
- Open Space
- Agricultural
- Vacant

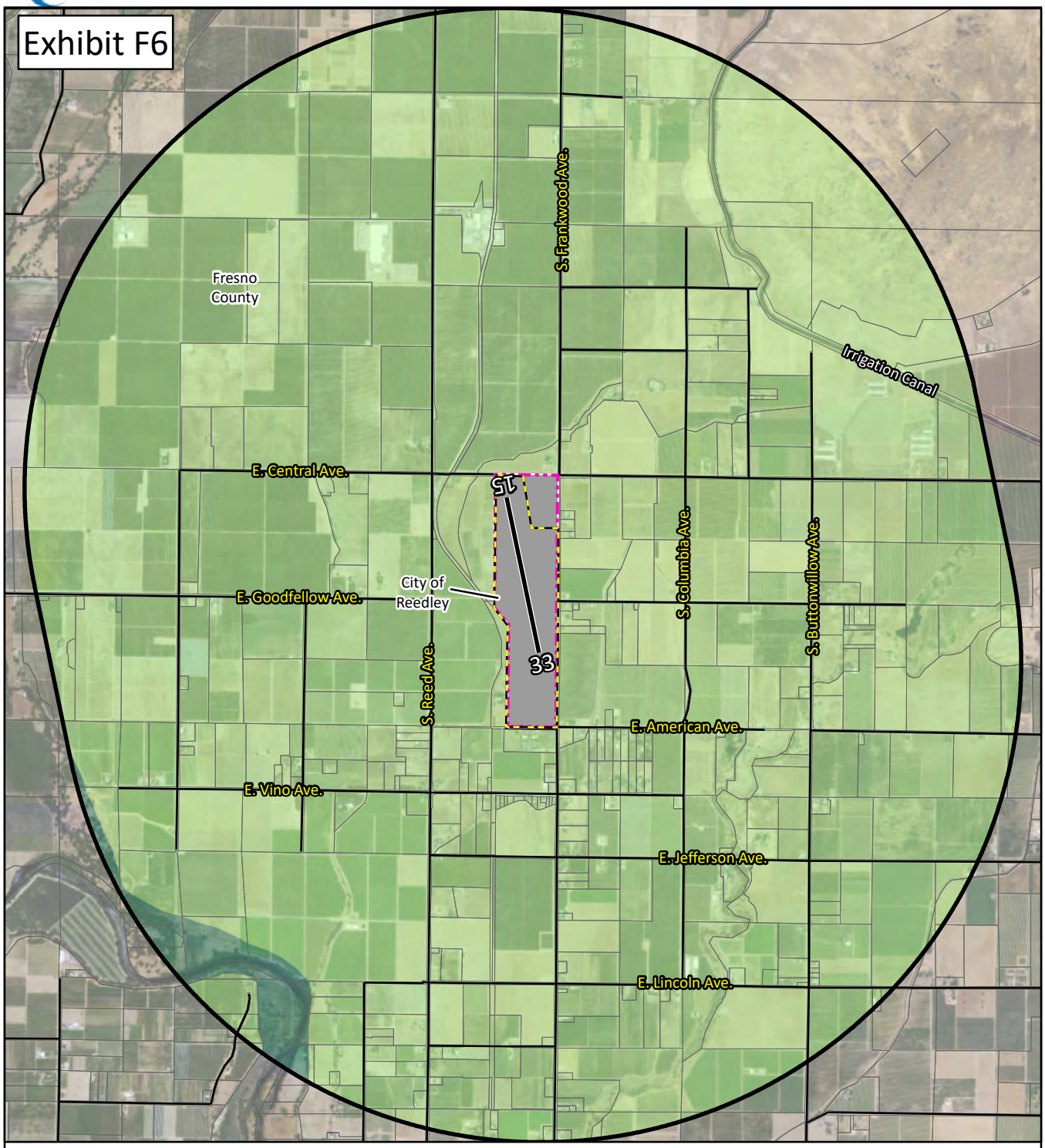
N

0 3,000 6,000

1" = 3,000'

[1]Reedley Municipal Airport Layout Plan (2013).
[2]Part 77 Conical Surface. See 14 CFR, Subchapter E, Part 77, §77.25.
[3]Fresno Council of Governments.
Sources: Fresno County Parcels, Fresno County Streets, ESRI Basemap Imagery (2016).

Exhibit F6



LEGEND

- Runway[1]
- Airport Property[1]
- Parcel Boundary
- Municipal Boundary
- Streets
- Airport Influence Area (AIA)[2]

Zoning[3]

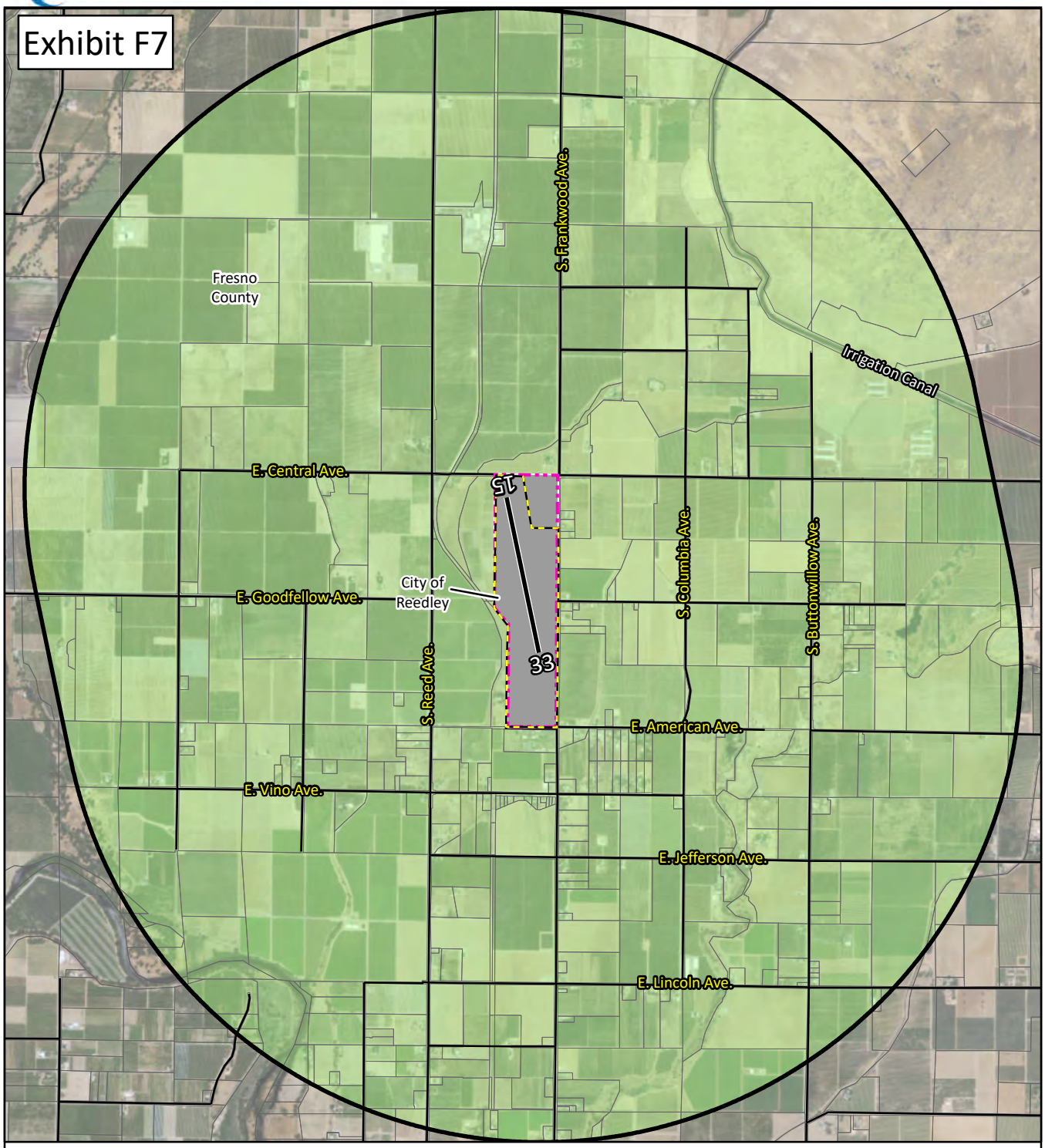
- Open Space
- Agriculture

N

0 3,000 6,000

1" = 3,000'

[1]Reedley Municipal Airport Layout Plan (2013).
[2]Part 77 Conical Surface. See 14 CFR, Subchapter E, Part 77, §77.25.
[3]Fresno County Zoning.
Sources: Fresno County Parcels, Fresno County Streets, ESRI Basemap Imagery (2016).



LEGEND

- Runway[1]
- Airport Property[1]
- Parcel Boundary
- Municipal Boundary
- Streets
- Airport Influence Area (AIA)[2]

General Plan[3]

- Agriculture

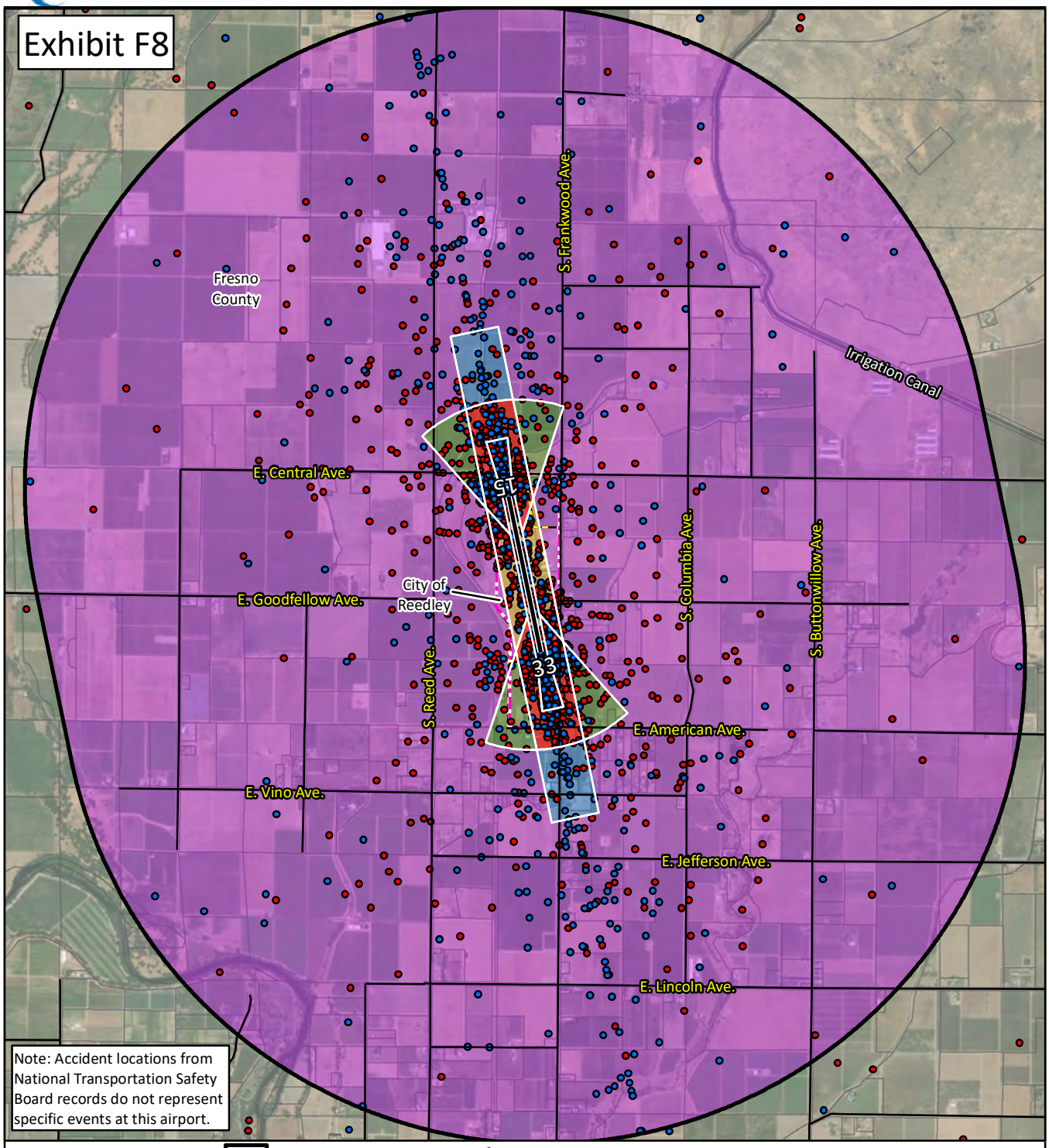
N

0 3,000 6,000

1" = 3,000'

[1]Reedley Municipal Airport Layout Plan (2013).
[2]Part 77 Conical Surface. See 14 CFR, Subchapter E, Part 77, §77.25.
[3]Fresno County General Plan.
Sources: Fresno County Parcels, Fresno County Streets, ESRI Basemap Imagery (2016).

Exhibit F8



Note: Accident locations from National Transportation Safety Board records do not represent specific events at this airport.

LEGEND

- Runway[1]
- Airport Property[1]
- Parcel Boundary
- Municipal Boundary
- Streets
- Arrival Accidents[2]
- Departure Accidents[2]
- Airport Influence Area (AIA)[3]

Safety Zones[4]

1. Runway Protection Zone
2. Inner Approach/Departure Zone
3. Inner Turning Zone
4. Outer Approach/Departure Zone
5. Sideline Zone
6. Traffic Pattern Zone

N

0 3,000 6,000

1" = 3,000'

[1]Reedley Municipal Airport Layout Plan (2013).
[2]California Airport Land Use Planning Handbook, 2011. Normalized from airports in United States.
[3]Part 77 Conical Surface. See 14 CFR, Subchapter E, Part 77, §77.25.
[4]Figure 3A, California Airport Land Use Planning Handbook (2011), and Coffman Associates Analysis.
Sources: Fresno County Parcels, Fresno County Streets, ESRI Basemap Imagery (2016).