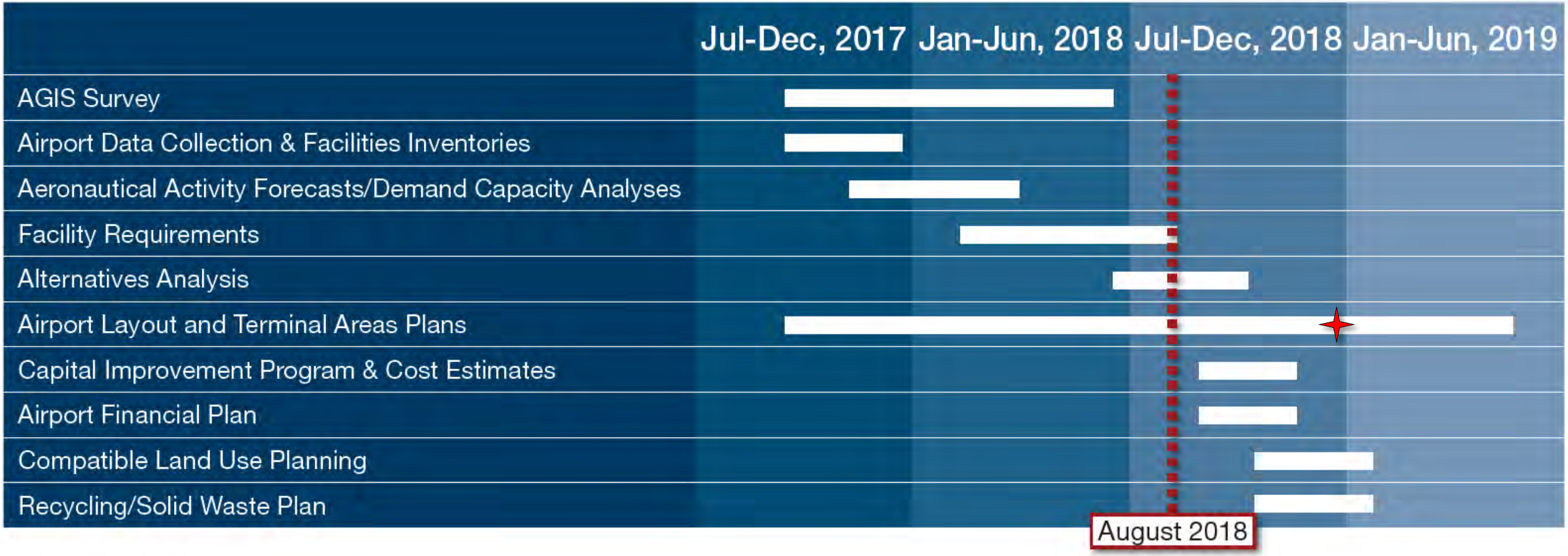
Ashland Airport Master Plan

Facility Requirements and
Preliminary Development Alternatives

INTRODUCTION

- Project Schedule
- Recap Aviation Activity Forecasts
- Demand Capacity Analysis
- Critical Aircraft and FAA Design Standards
- Airport Facilities Analysis
- Airside Requirements
- Landside Requirements
- Support Facility Requirements
- Preliminary Development Alternatives
- Next Steps

PROJECT SCHEDULE

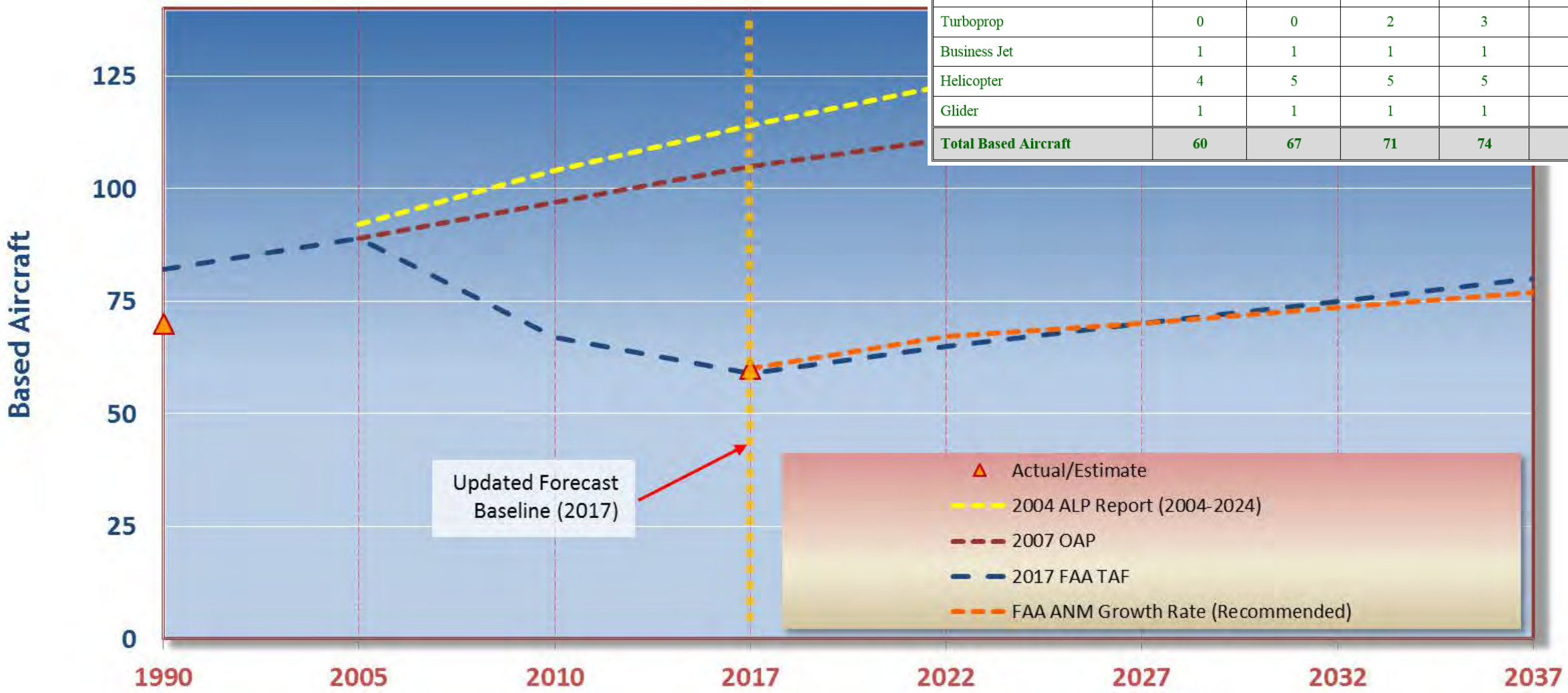


Next PAC Meeting Dec 2018

AVIATION ACTIVITY FORECASTS

TABLE 3-14: FORECAST BASED AIRCRAFT FLEET MIX

Aircraft Type	2017	2022	2027	2032	2037
Single Engine Piston	53	58	60	62	63
Multi-Engine Piston	1	2	2	2	2
Turboprop	0	0	2	3	3
Business Jet	1	1	1	1	2
Helicopter	4	5	5	5	6
Glider	1	1	1	1	1
Total Based Aircraft	**60**	**67**	**71**	**74**	**77**

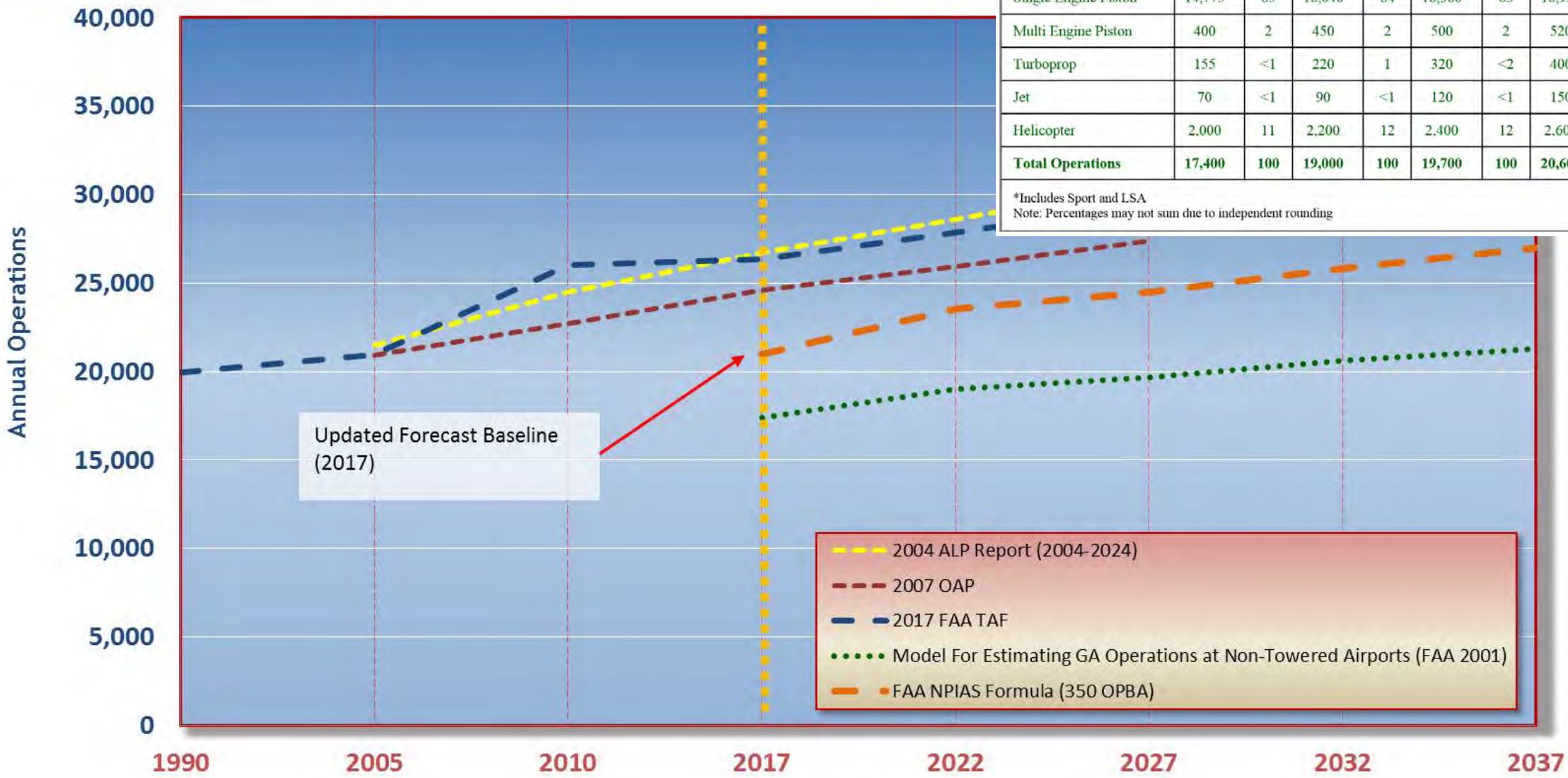


AVIATION ACTIVITY FORECASTS

TABLE 3-16: GA AIRCRAFT OPERATIONS FLEET MIX

Aircraft Type	2017	%	2022	%	2027	%	2032	%	2037	%
Single Engine Piston*	14,775	85	16,040	84	16,360	83	16,930	82	17,100	80
Multi Engine Piston	400	2	450	2	500	2	520	2	550	2
Turboprop	155	<1	220	1	320	<2	400	<2	460	2
Jet	70	<1	90	<1	120	<1	150	<1	190	<1
Helicopter	2,000	11	2,200	12	2,400	12	2,600	13	3,000	14
Total Operations	**17,400**	**100**	**19,000**	**100**	**19,700**	**100**	**20,600**	**100**	**21,300**	**100**

*Includes Sport and LSA
Note: Percentages may not sum due to independent rounding

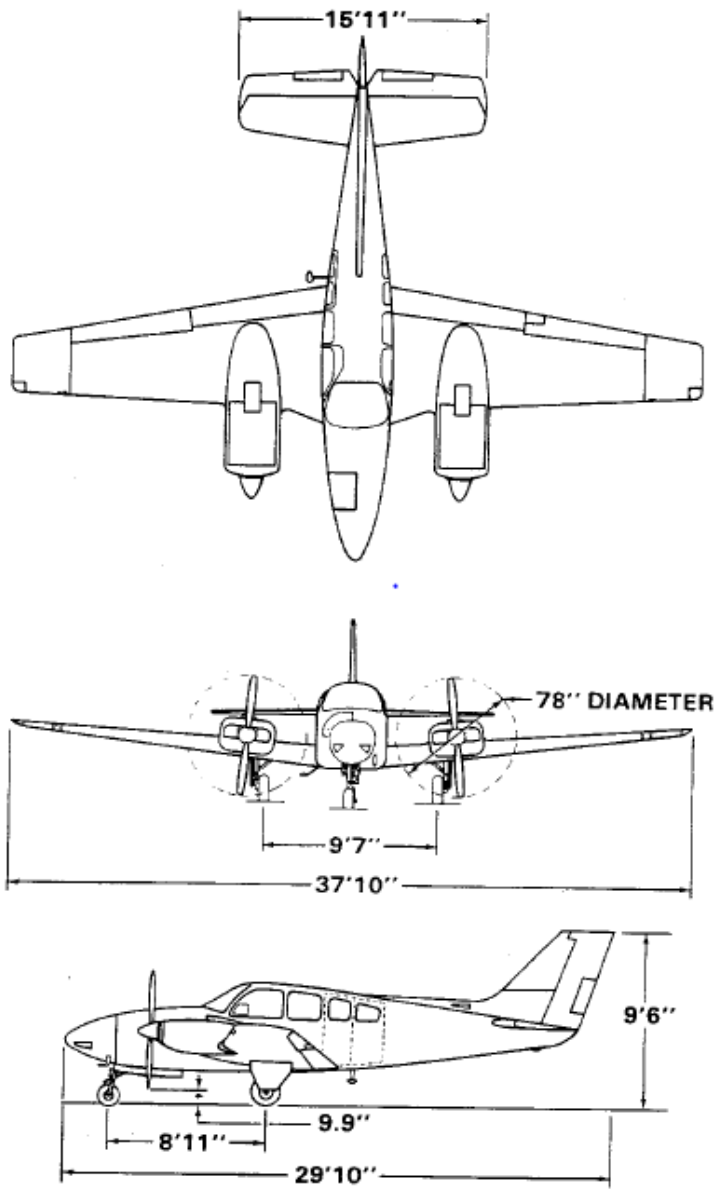


DEMAND/CAPACITY ANALYSIS

- Single runway with parallel taxiway configuration has an annual service volume (ASV) of 230,000 operations per year.
- Forecast operations for 2037 are well below 230,000 ASV.

For more information see: AC 150/5060-5. Airport Capacity and Delay

CRITICAL AIRCRAFT



Beechcraft Baron (Be-58)

POH recommended landing approach speed with 30 degrees of flaps = 96 kts

FAA DESIGN STANDARDS

FAA STANDARD	RUNWAY 12/30 EXISTING CONDITIONS	RUNWAY 12/30 ARC A/B-I (SMALL) NOT LOWER THAN 1-MILE OR VISUAL EXISTING/FUTURE STANDARD	RUNWAY 12/30 ARC A/B-I (SMALL) NOT LOWER THAN 3/4-MILE COMPARISON STANDARD[1]
Runway Length	3,603	See Runway Length Analysis Discussion (Page 15)	
Runway Width	75	60	60
Runway Shoulder Width[6]	10	10	10
Runway Safety Area • Width • Beyond RWY End • Prior to Landing Threshold	 120 240 240	 120 240 240	 120 240 240
Runway Obstacle Free Zone • Width • Beyond RWY End • Prior to Landing Threshold	 250 200 200	 250 200 200	 250 200 200
Object Free Area • Width • Beyond RWY End • Prior to Landing Threshold	 250 240 240	 250 240 240	 250 240 240
Runway Protection Zone Length	RWY 12: 1,000 RWY 30: 1,000	RWY 12: 1,000 RWY 30: 1,000	RWY 12: 1,700 RWY 30: 1,700
Runway Protection Zone Inner Width	RWY 12: 250 RWY 30: 250	RWY 12: 250 RWY 30: 250	RWY 12: 1000 RWY 30: 1000
Runway Protection Zone Outer Width	RWY 12: 450 RWY 30: 450	RWY 12: 450 RWY 30: 450	RWY 12: 1,500 RWY 30: 1,500
Runway Centerline to: Parallel Taxiway/Taxilane CL Aircraft Parking Area 32' Building Restriction Line (BRL)	 163/151[2] 200[3] 350[4]	 150 125 350	 150 125 474[5]

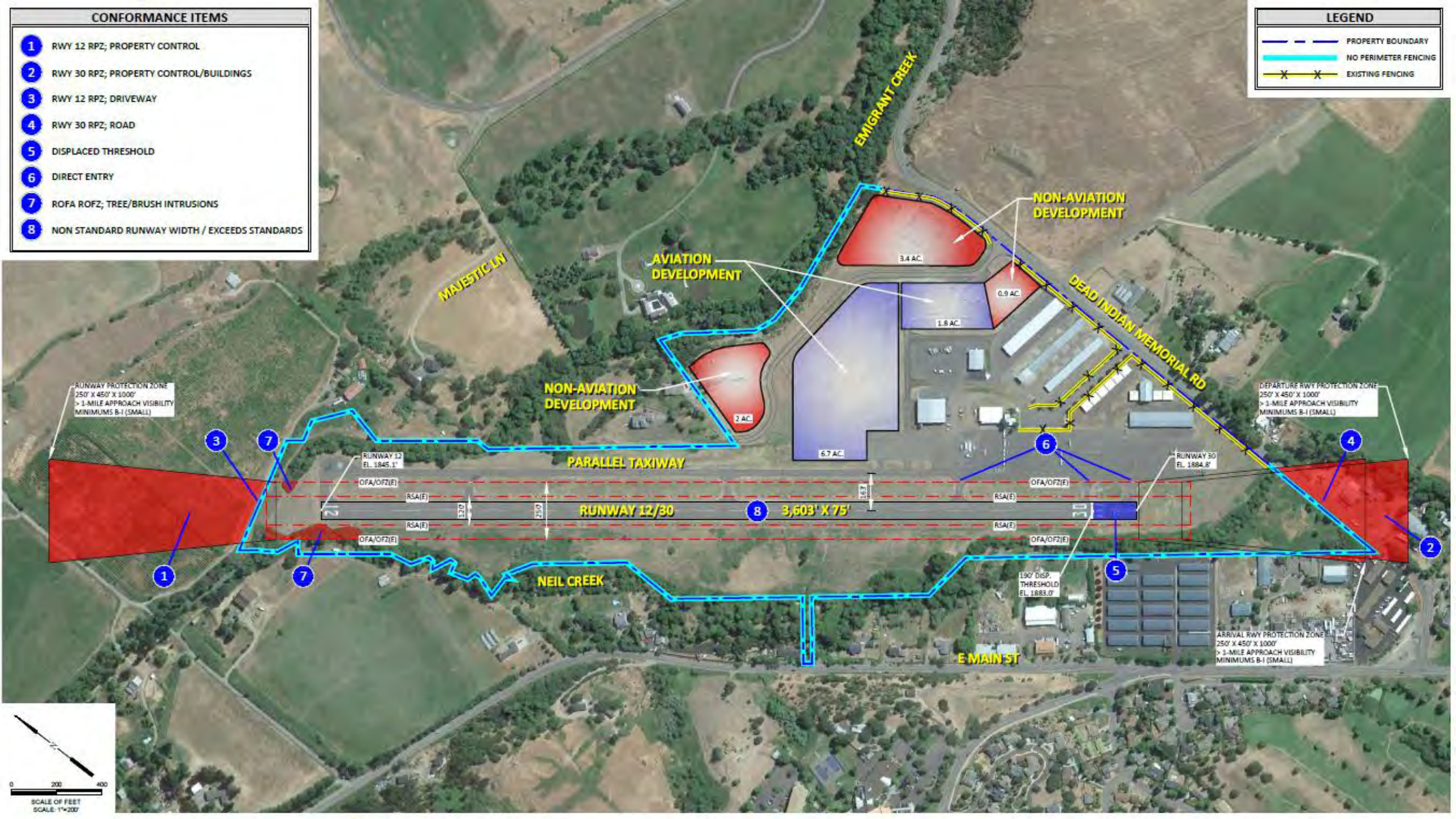
Notes:

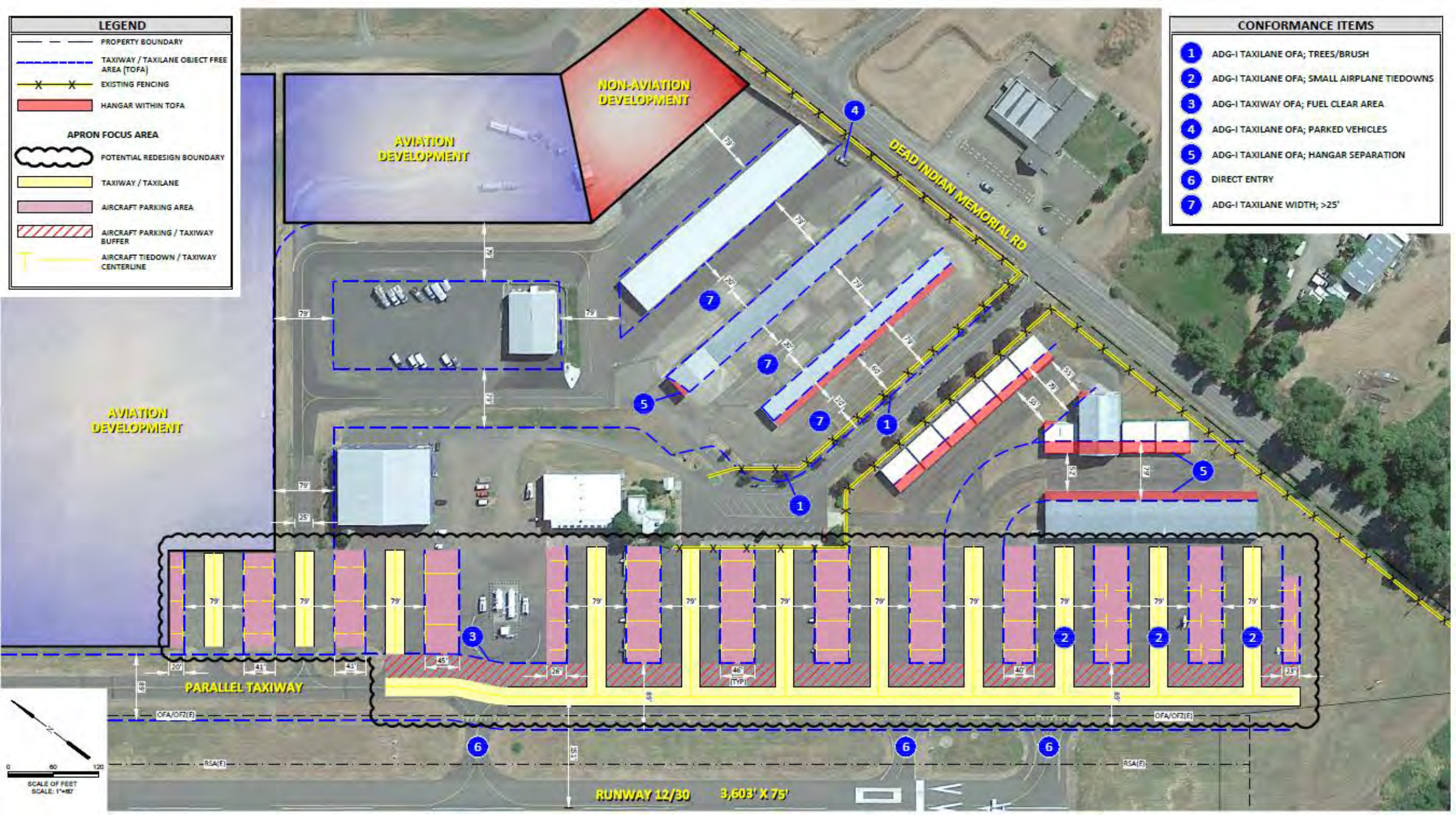
1. Not lower than ¾ mile B-I (small) standards depicted for the purpose of comparison.
2. Runway centerline to parallel Taxiway A centerline separation varies.
3. Distance between Runway 12/30 centerline and closest apron tiedowns.
4. A 350-foot BRL for 32-foot structures was depicted on the 2005 ALP.
5. A 474-foot BRL for 32-foot structures is required due to wider primary surface.
6. Turf, aggregate-turf, soil cement, lime or bituminous stabilized soil as measured outwards from the runway edge are recommended adjacent to ADG I runways.

- B-I (small)
- Visual/Not lower than 1 sm
- Not lower than ¾ sm

AIRPORT FACILITIES ANALYSIS

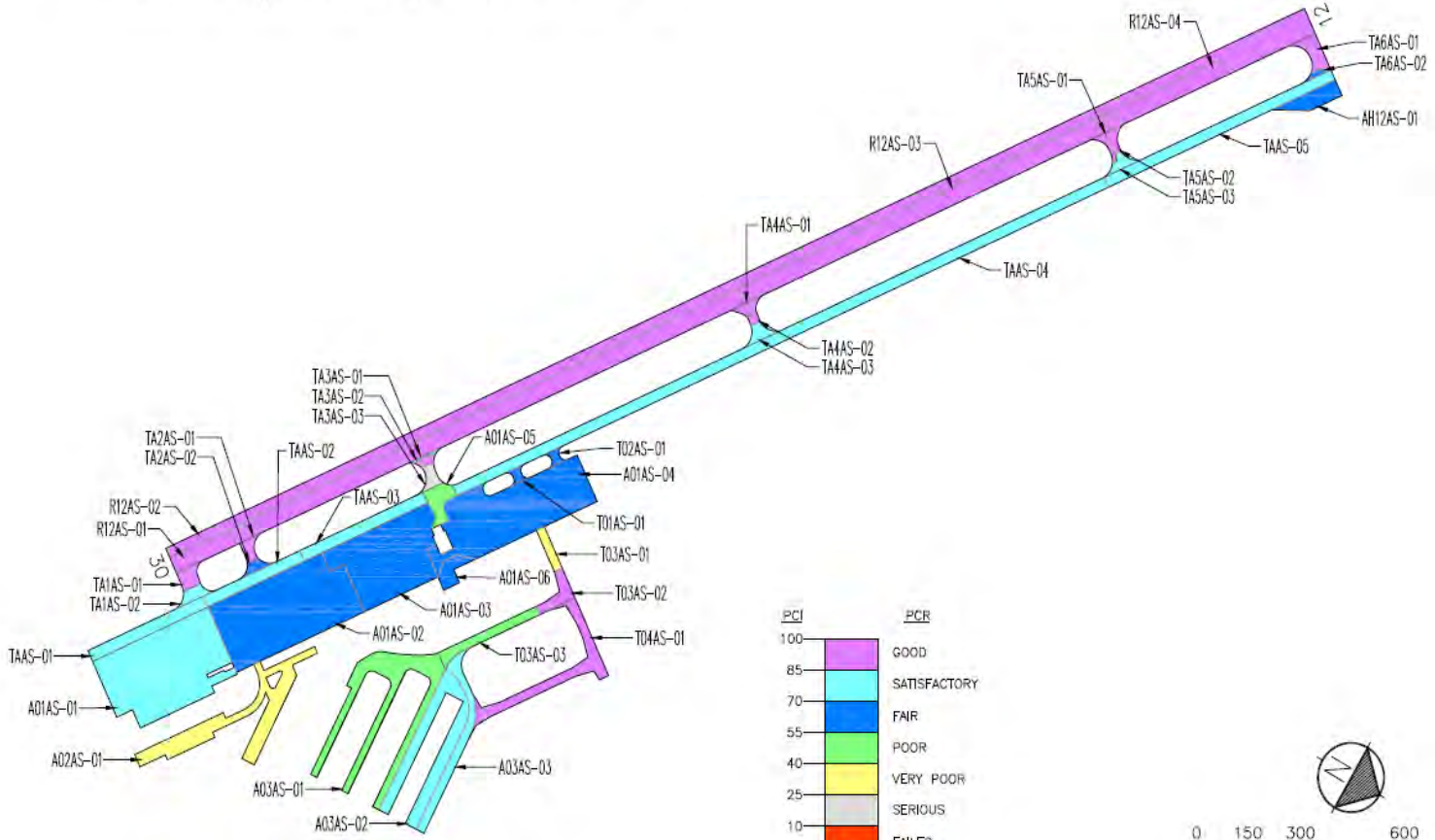
- Airspace/Obstructions/Off-Airport Land Use
- RPZ
- Runway Length
- Direct Entry and Displaced Threshold
- Runway Width
- Taxiways/Taxilanes
- Apron/Aircraft Parking
- Taxilanes/Hangars
- Airfield Signage/Lighting
- Hangars
- FBO/Corporate/Terminal Area
- Surface Access and Vehicle Parking
- On-Airport Land Use


CONFORMANCE ITEMS
1 RWY 12 RPZ; PROPERTY CONTROL
2 RWY 30 RPZ; PROPERTY CONTROL/BUILDINGS
3 RWY 12 RPZ; DRIVEWAY
4 RWY 30 RPZ; ROAD
5 DISPLACED THRESHOLD
6 DIRECT ENTRY
7 ROFA ROFZ; TREE/BRUSH INTRUSIONS
8 NON STANDARD RUNWAY WIDTH / EXCEEDS STANDARDS
LEGEND
PROPERTY BOUNDARY
NO PERIMETER FENCING
EXISTING FENCING
EMIGRANT CREEK
MAJESTIC LN
AVIATION DEVELOPMENT
NON-AVIATION DEVELOPMENT
NON-AVIATION DEVELOPMENT
3.4 AC.
0.9 AC.
1.8 AC.
2 AC.
6.7 AC.
DEAD INDIAN MEMORIAL RD
RUNWAY PROTECTION ZONE
250' X 450' X 1000'
> 1-MILE APPROACH VISIBILITY
MINIMUMS B-I (SMALL)
DEPARTURE RWY PROTECTION ZONE
250' X 450' X 1000'
> 1-MILE APPROACH VISIBILITY
MINIMUMS B-I (SMALL)
PARALLEL TAXIWAY
RUNWAY 12
EL. 1845.1'
RUNWAY 30
EL. 1884.8'
OFA/OFZ(E)
RSA(E)
RUNWAY 12/30
3,603' X 75'
NEIL CREEK
190' DISP. THRESHOLD
EL. 1883.0'
E MAIN ST
ARRIVAL RWY PROTECTION ZONE
250' X 450' X 1000'
> 1-MILE APPROACH VISIBILITY
MINIMUMS B-I (SMALL)
0
200
400
SCALE OF FEET
SCALE: 1"=200'


LEGEND
PROPERTY BOUNDARY
TAXIWAY / TAXILANE OBJECT FREE AREA (TOFA)
EXISTING FENCING
HANGAR WITHIN TOFA
APRON FOCUS AREA
POTENTIAL REDESIGN BOUNDARY
TAXIWAY / TAXILANE
AIRCRAFT PARKING AREA
AIRCRAFT PARKING / TAXIWAY BUFFER
AIRCRAFT TIEDOWN / TAXIWAY CENTERLINE
CONFORMANCE ITEMS
1 ADG-I TAXILANE OFA; TREES/BRUSH
2 ADG-I TAXILANE OFA; SMALL AIRPLANE TIEDOWNS
3 ADG-I TAXIWAY OFA; FUEL CLEAR AREA
4 ADG-I TAXILANE OFA; PARKED VEHICLES
5 ADG-I TAXILANE OFA; HANGAR SEPARATION
6 DIRECT ENTRY
7 ADG-I TAXILANE WIDTH; >25'
NON-AVIATION DEVELOPMENT
AVIATION DEVELOPMENT
AVIATION DEVELOPMENT
DEAD INDIAN MEMORIAL RD
PARALLEL TAXIWAY
OFA/OFZ(E)
OFA/OFZ(E)
RSA(E)
RSA(E)
RUNWAY 12/30
3,603' X 75'
SCALE OF FEET
SCALE: 1"=60'

PAVEMENT CONDITION

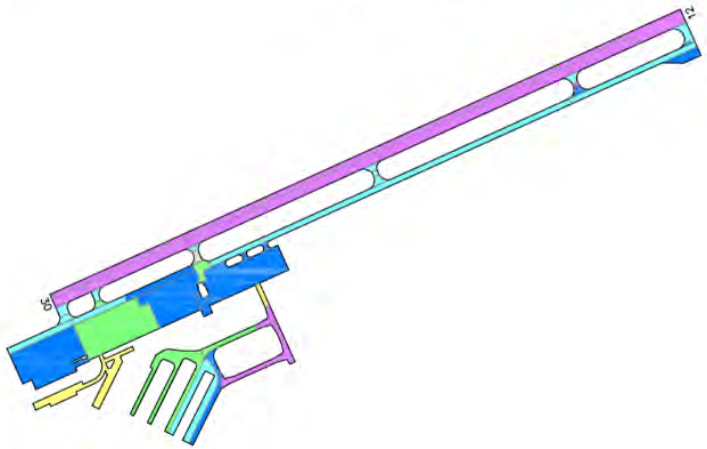
Figure AS-3. Pavement Condition in July 2016.
Ashland Municipal Airport (Sumner Parker Field)



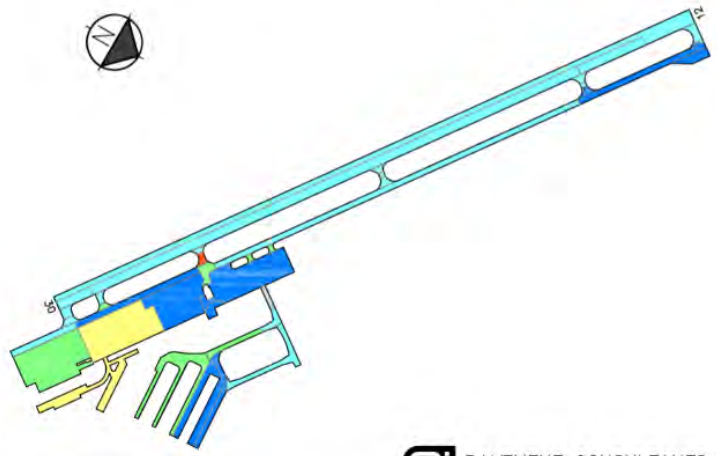
PAVEMENT CONSULTANTS INC.

Drawing Date: August 2016

Predicted Condition in 2021.



Predicted Condition in 2026.



Drawing Date: August 2016

PAVEMENT CONSULTANTS INC.

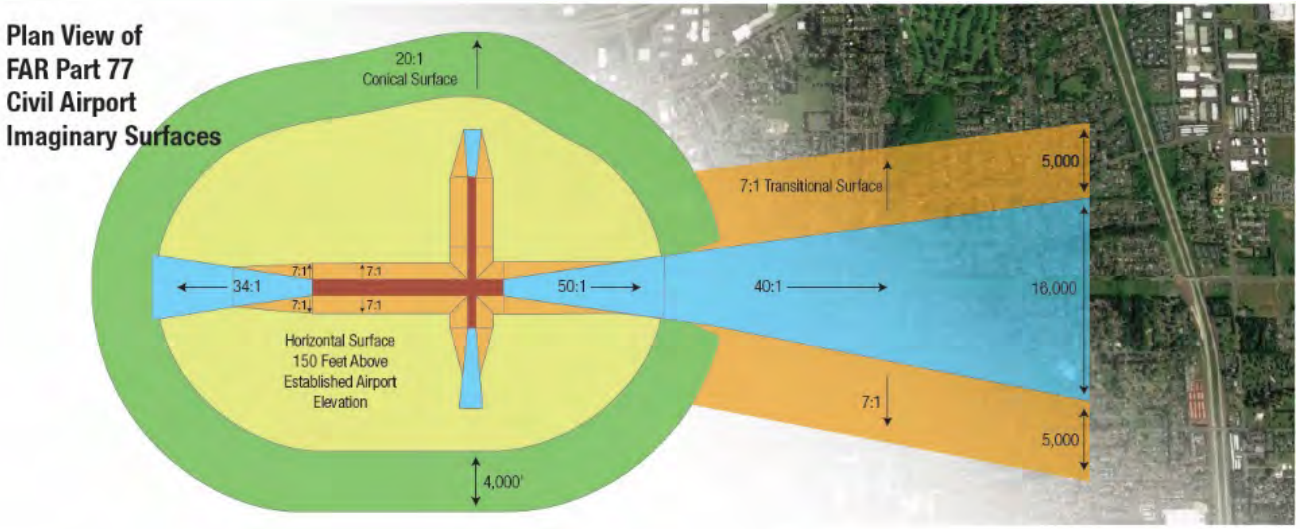
AIRSIDE REQUIREMENTS

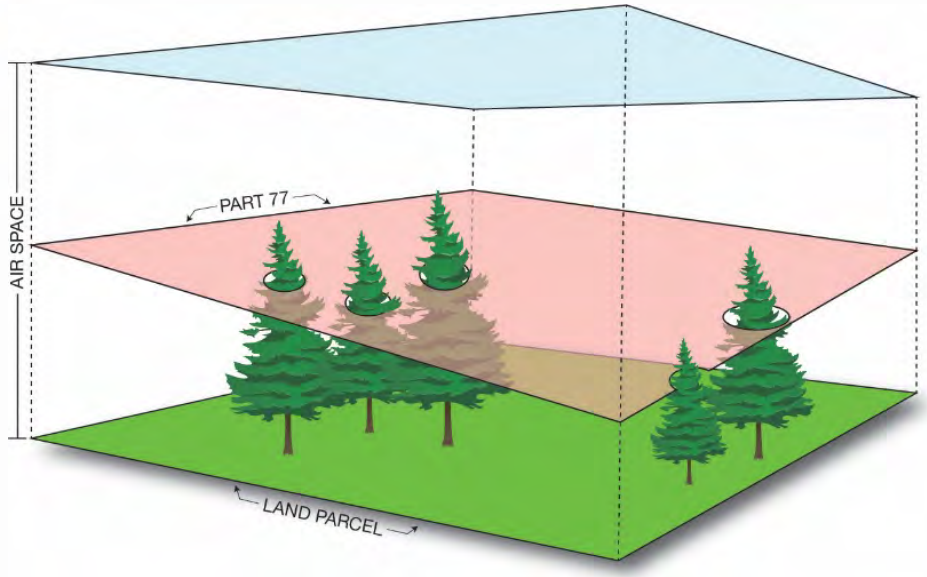
- Approach Type
- Airspace/Off-Airport Land Use
- Approach Obstructions
- RPZ
- Runway Length
- Direct Entry and Displaced Threshold
- Runway Width
- Taxiways/Taxilanes
- Apron/Aircraft Parking
- Taxilanes/Hangars
- Airfield Signage/Lighting

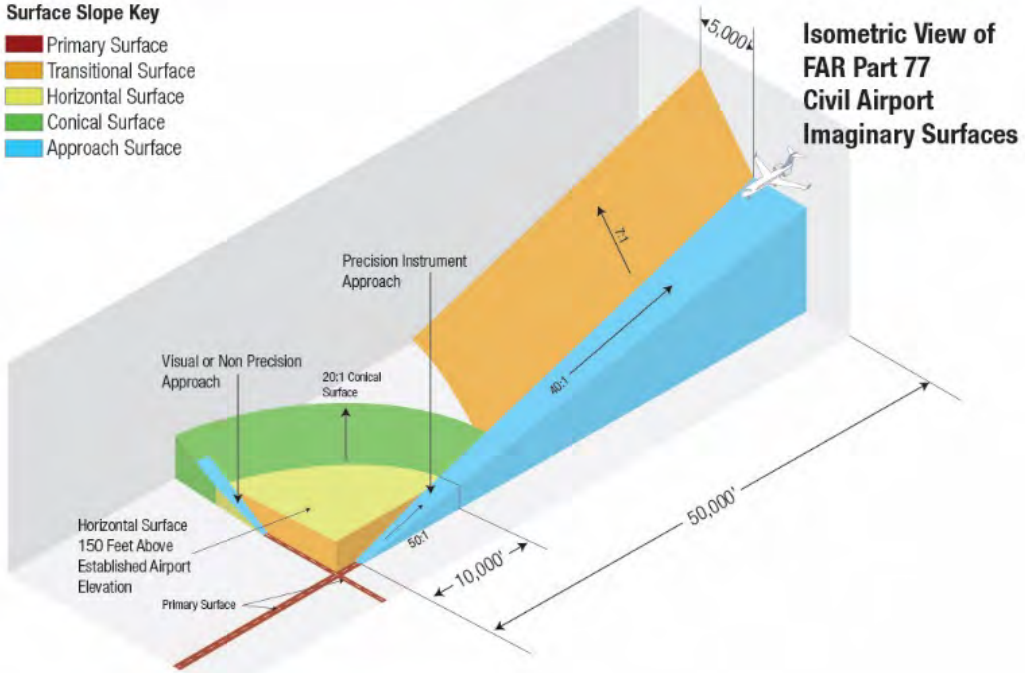
APPROACH TYPE

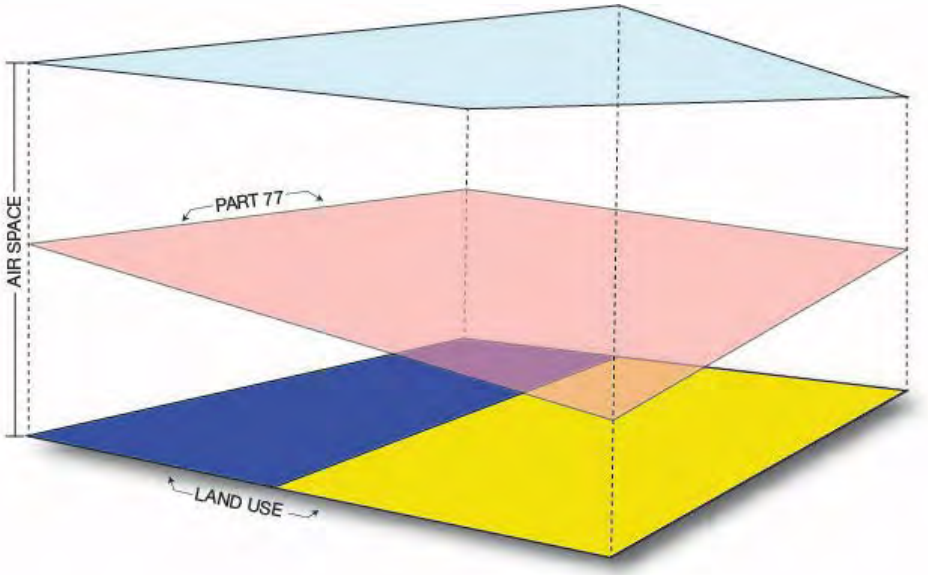
- Remain Visual or Pursue Circling IAP?
- Weather phenomena at Ashland that may warrant an IAP is typically ground based fog which results in visibilities/ceilings too low for an effective IAP to be implemented.
- Previous planning shows “greater than 1 mile” for circling to land IAP procedure.
- This planning precedent could be carried forward for two reasons:
  - “Visual” and “greater than 1 mile” standards are identical.
  - To make sure the Airport is prepared to obtain a circling IAP if desired/possible.
- SuperAWOS would need to be replaced with AWOS-III, which creates additional siting challenges.

AIRSPACE/OFF-AIRPORT LAND USE

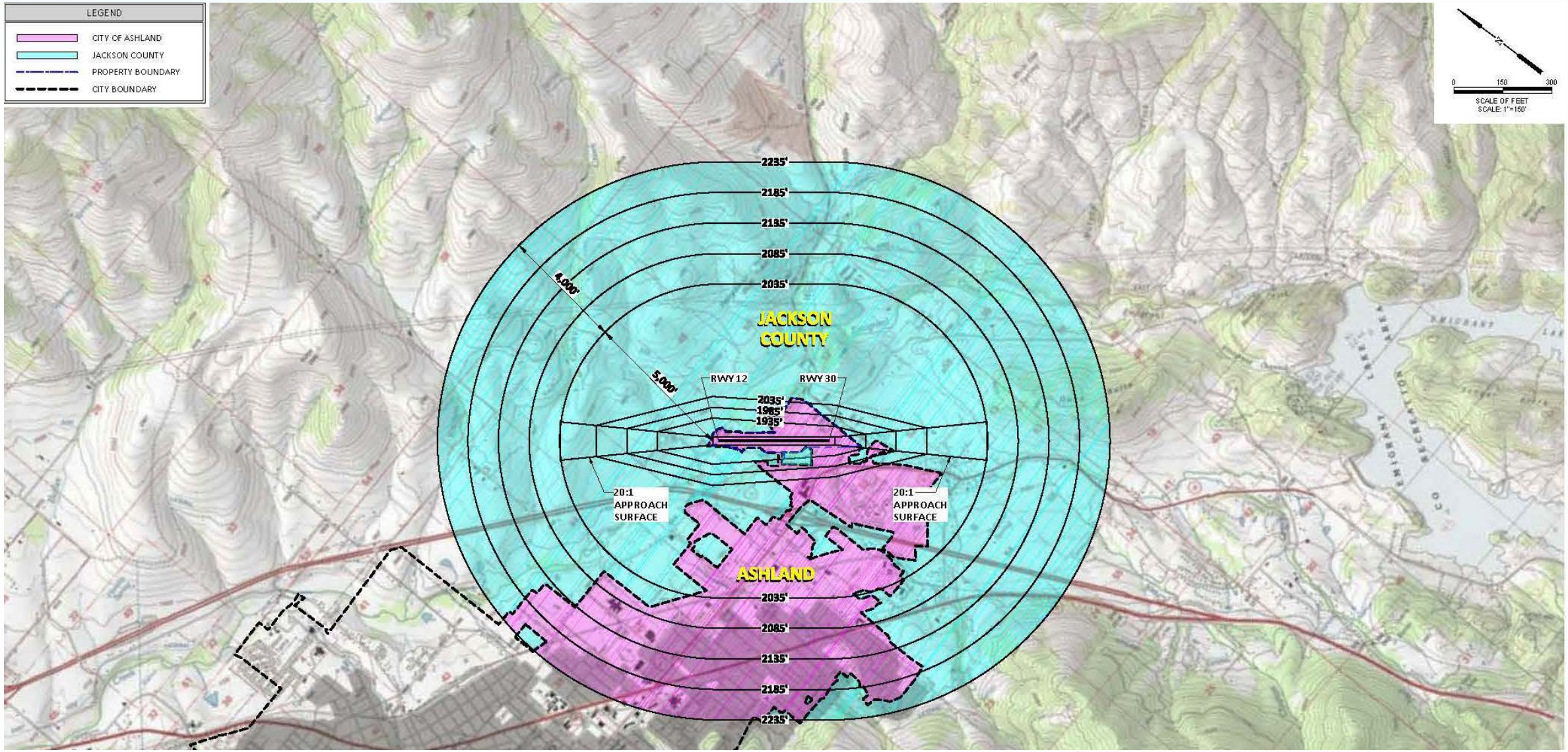






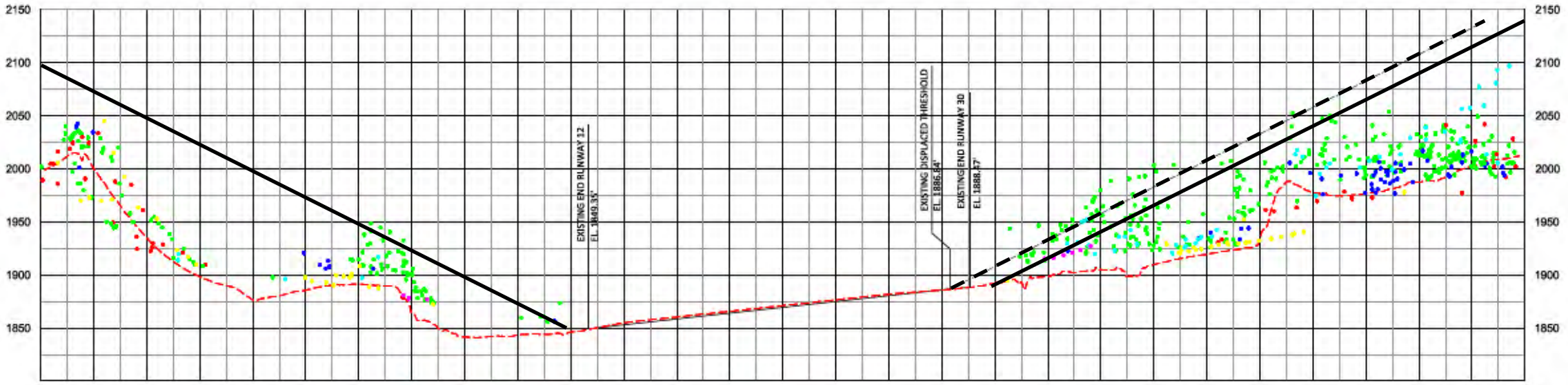


AIRSPACE/OFF-AIRPORT LAND USE



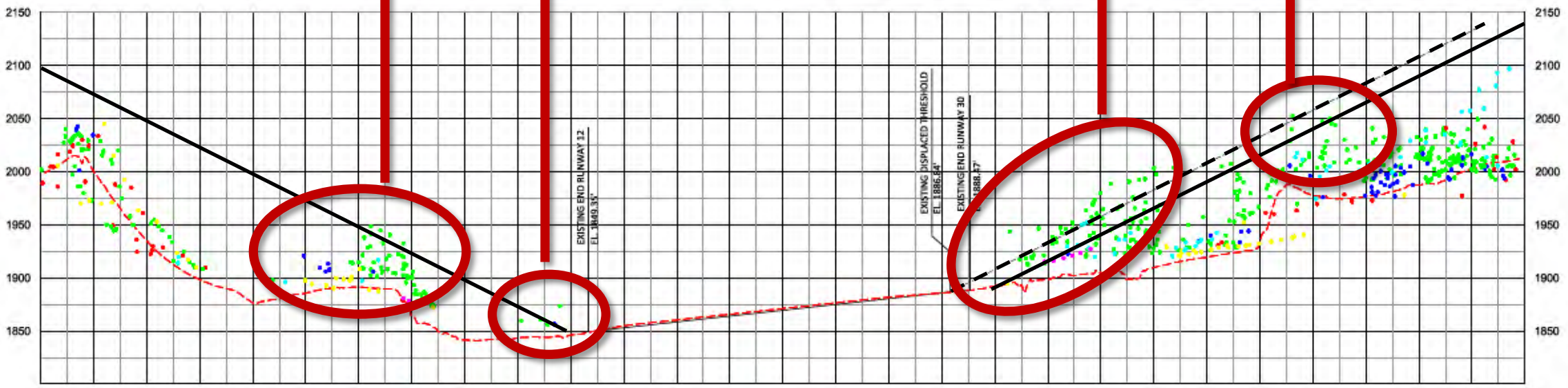
APPROACH OBSTRUCTIONS

RUNWAY 12-30 PLAN VIEW

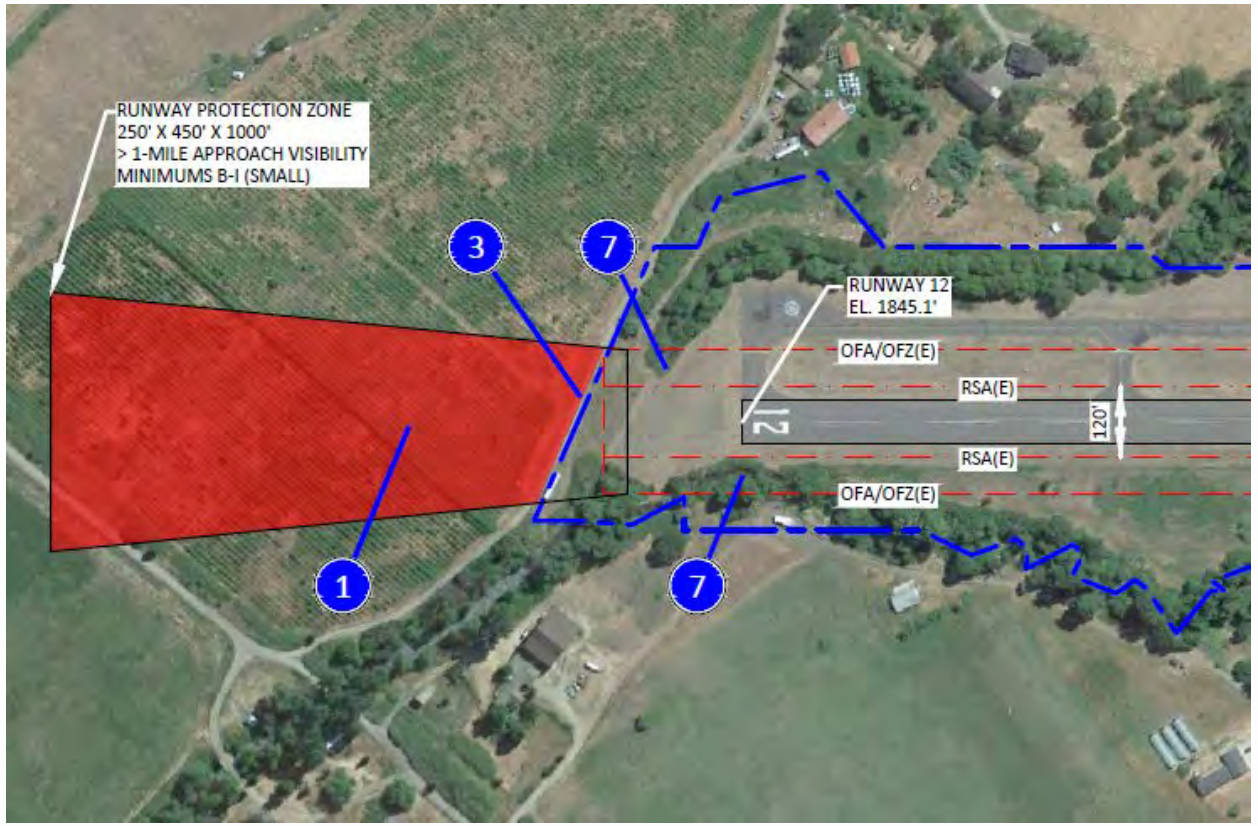


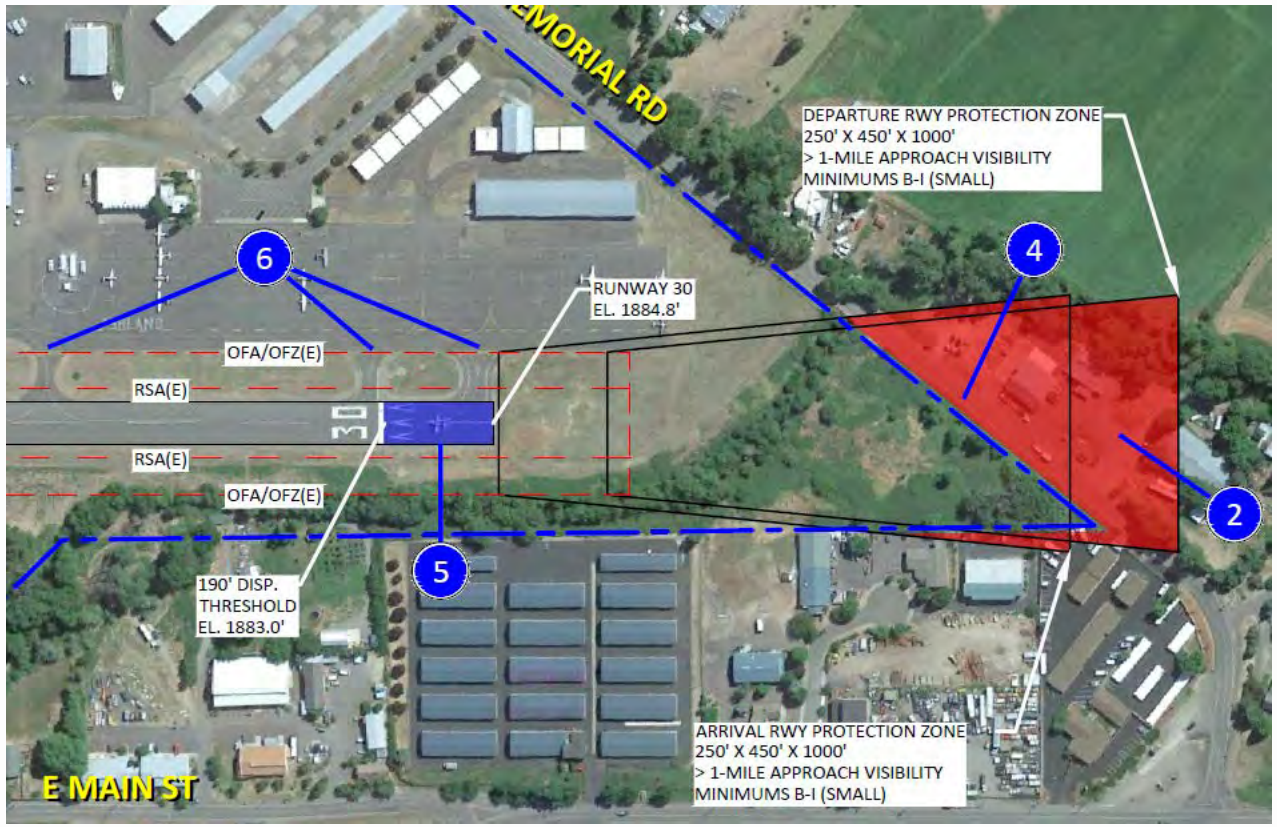
APPROACH OBSTRUCTIONS

RUNWAY 12-30 PLAN VIEW

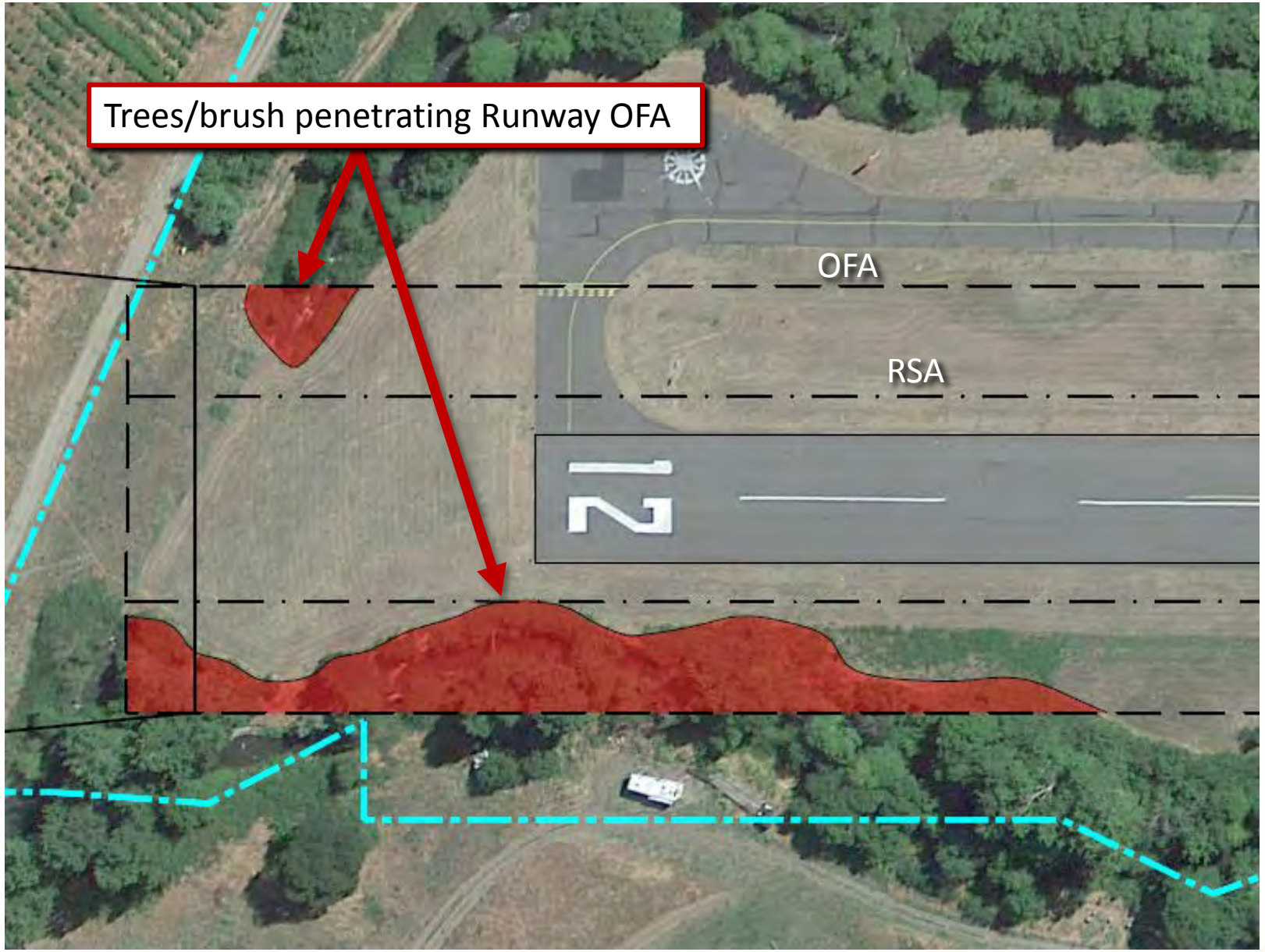


RUNWAY PROTECTION ZONE (RPZ)





RUNWAY OBJECT FREE AREA (OFA)

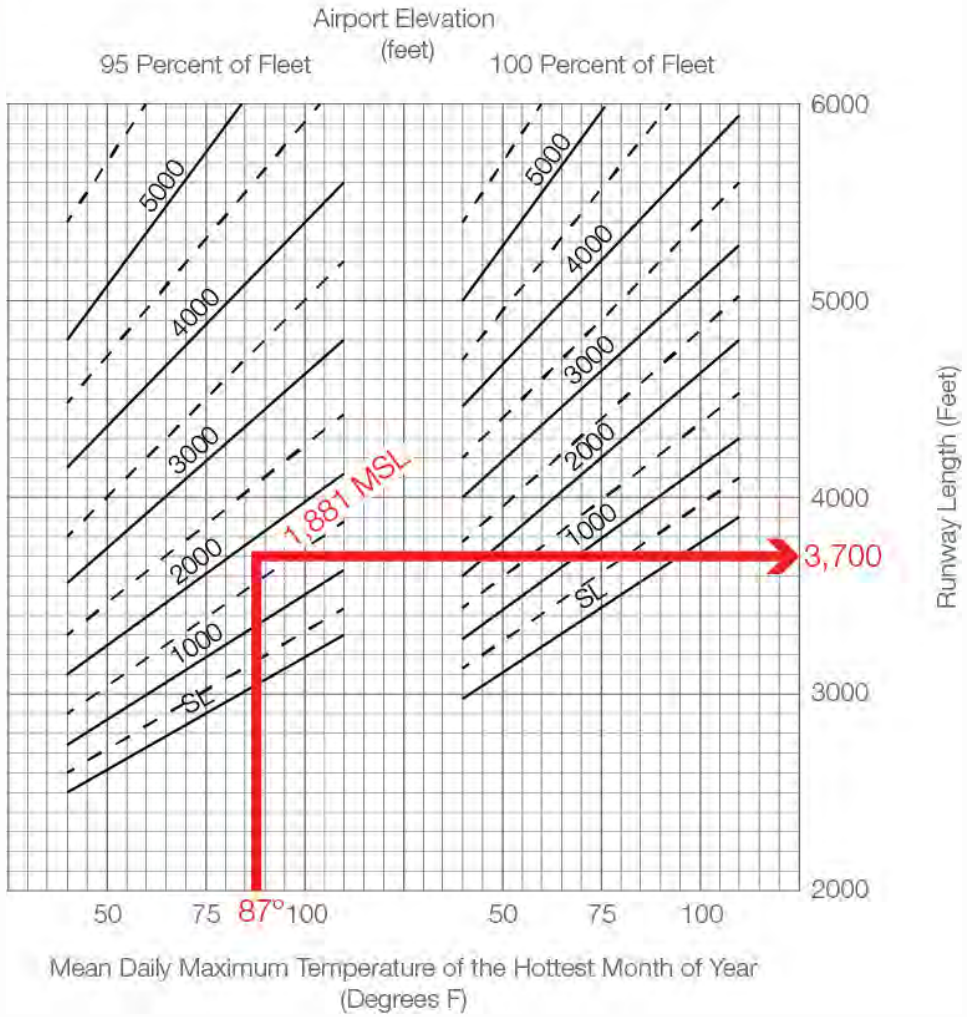


- OFA Grading
- Obstructions
- Neil Creek?

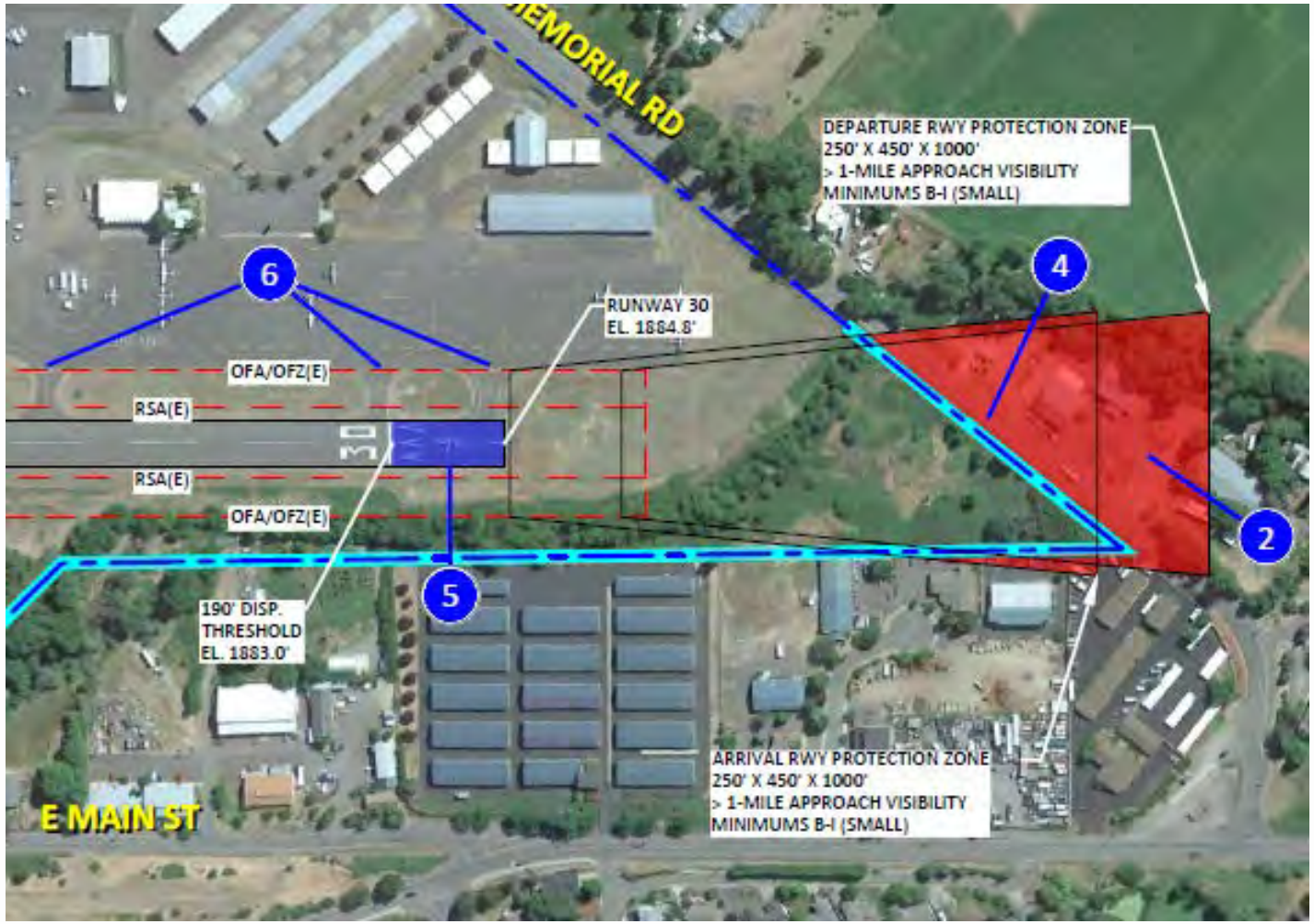
RUNWAY LENGTH

- Existing Length: 3’603
- Runway 30 Displaced Threshold: 190’
- Runway 30 Landing: 3,413’
- FAA Recommended Runway Length: 3,700’

Figure 2-1. Small Airplanes with Fewer than 10 Passenger Seats



DISPLACED THRESHOLD AND DIRECT ENTRY TO RUNWAY



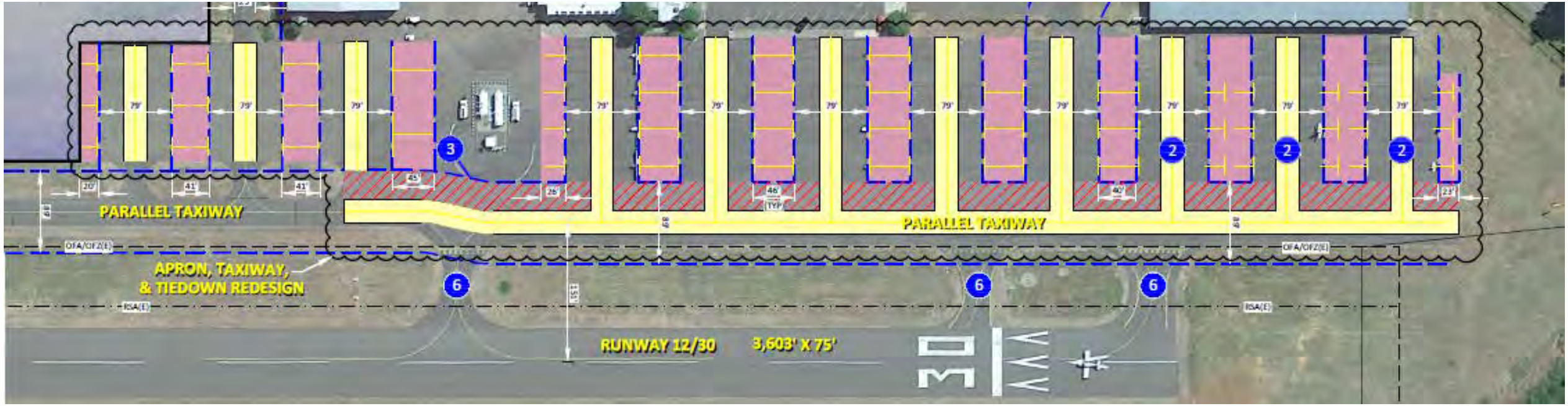
- Displaced threshold should be mitigated.
- Direct entry from apron to runway should be mitigated.
- More on this in alternatives…

RUNWAY WIDTH

- Existing Width = 75’
- FAA Standard = 60’
- City will be required to maintain additional 15’.
- 60’ width will require lighting, signage, grading, drainage, etc. updates.

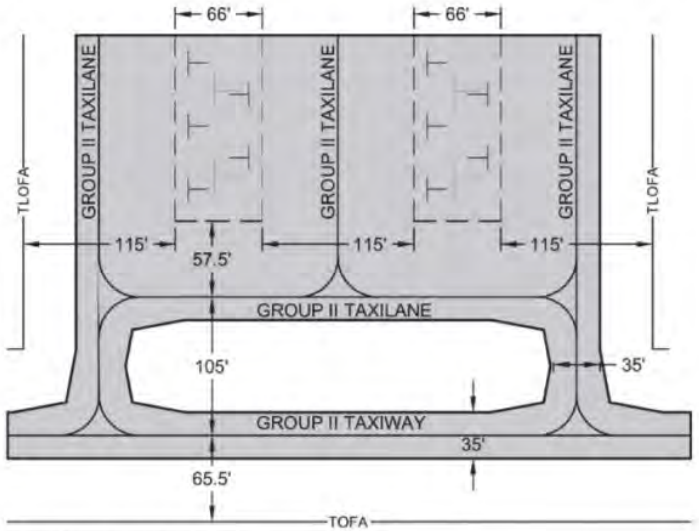
Runway 12/30 Crosswind Analysis	
All Weather	
10.5 KNOTS	99.42%
13 KNOTS	99.74%
VFR	
10.5 KNOTS	99.35%
13 KNOTS	99.71%
IFR	
10.5 KNOTS	99.92%
13 KNOTS	99.95%
Runway 12/30 Bearing = 141.0 Degrees True Wind Data Source: National Climate Data Center (2007-2016 KMFR ASOS data)	

TAXIWAYS/TAXILANES/APRON



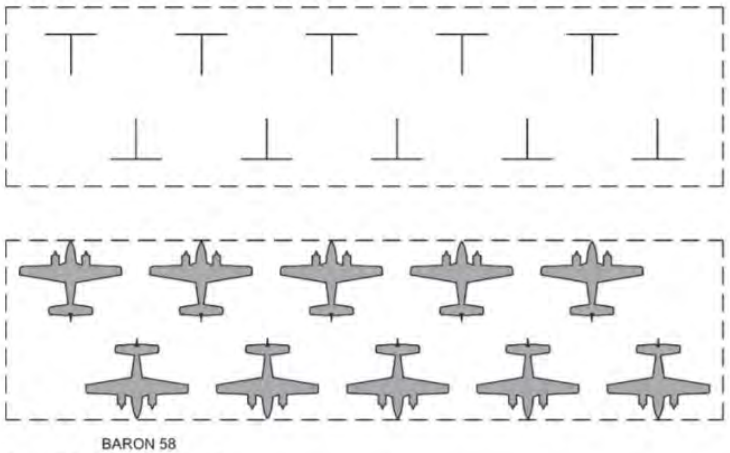
- Runway to taxiway/aircraft parking separation standards are met.
- As a system, other deficiencies were noted:
  - Long expanse of pavement
  - Direct entry from apron to runway (3x)
  - TLOFA & tiedown nonconformance

APRON & AIRCRAFT PARKING



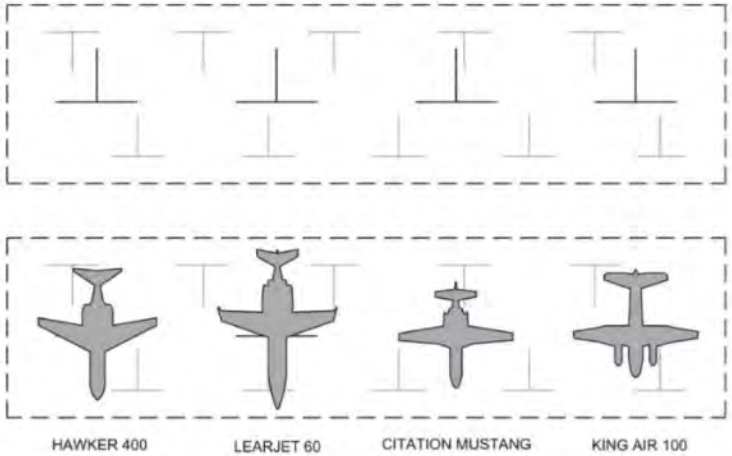
Source: Delta Airport Consultants, Inc.

Figure B-6. Sample Group II Apron Layout Two.



Source: Delta Airport Consultants, Inc.

Figure B-2. Parking area for 10 Beech Baron 58 tie-down positions.

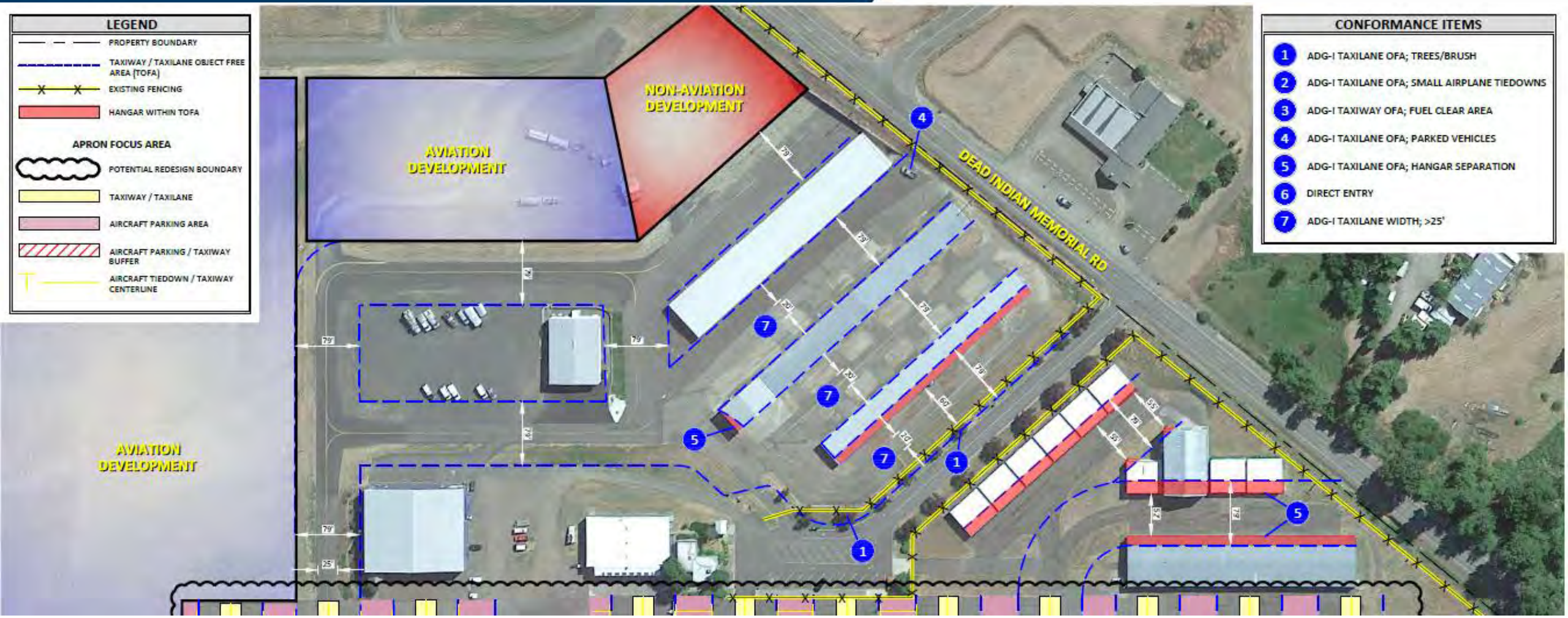


Note: The lighter lines depict the nested tie-down positions available for small aircraft
Source: Delta Airport Consultants, Inc.

Figure B-3. Parking area for 10 Beech Baron 58 tie-down positions marked for larger aircraft.

- Several layouts depicting preferred layouts for aircraft parking.
- Accommodates ADG I aircraft.
- With some planning/design, can include standard parking to accommodate the occasional ADG II aircraft.

TAXILANES & HANGARS



Hangar/Taxilane OFA obstructions will require modification to standards.

TAXILANES & HANGARS

Future development/redevelopment will require floodplain development permits from City of Ashland.

Adapt, Maintain, and Relocate Airfield Marking, Signage, and Lighting as Required

LANDSIDE REQUIREMENTS

- Hangars
- FBO/Corporate/Terminal Area
- Surface Access and Vehicle Parking
- On-Airport Land Use

HANGARS

TABLE 4-3: APRON AND HANGAR FACILITY REQUIREMENTS SUMMARY

ITEM	BASE YEAR (2017)	2022	2027	2032	2037
Based Aircraft Forecast	60	67	71	74	77
Aircraft Parking Apron - Existing Aircraft Parking Type/Capacity					
Existing Apron Areas[1]	29,623 sy				
Small & Large Aircraft Parking	72 Tiedowns[6]				
Transient Helicopter Parking [2]	0				
Projected Needs (Gross Demand) [3]					
Locally Based Tiedowns (@ 300 SY each)		7 spaces / 2,100 sy	7 spaces / 2,100 sy	7 spaces / 2,100 sy	8 spaces / 2,400 sy
Small Airplane Itinerant Tiedowns (@ 360 SY each)		20 spaces / 7,200 sy	21 spaces / 7,560 sy	21 spaces / 7,560 sy	23 spaces / 8,280 sy
Business Aircraft Parking Positions (@ 625 SY each)		1 space / 625 sy	1 spaces / 625 sy	1 space / 625 sy	2 spaces / 1,250 sy
Small Helicopter Parking Positions (@ 380 SY each)		2 spaces / 760 sy	3 spaces / 1,140 sy	3 spaces / 1,140 sy	3 spaces / 1,140 sy
Total Apron Needs		**30** spaces / 10,685 sy	**32** spaces / 11,425 sy	**32** spaces / 11,425 sy	**36** spaces / 13,070 sy
Aircraft Hangars (Existing Facilities)					
Existing Hangar Units/Aircraft Storage Capacity	18 Units[4]				
Projected Needs (Net Increase in Demand) [5]					
(New) T-Hangar Space Demand (@ 1,500 SF per space) (Cumulative twenty-year projected demand: 8 Units / 15,000 SF)		**2 Units / 3,000 sf**	**5 Units / 7,500 sf**	**7 Units / 10,500 sf**	**8 Units / 12,000 sf**

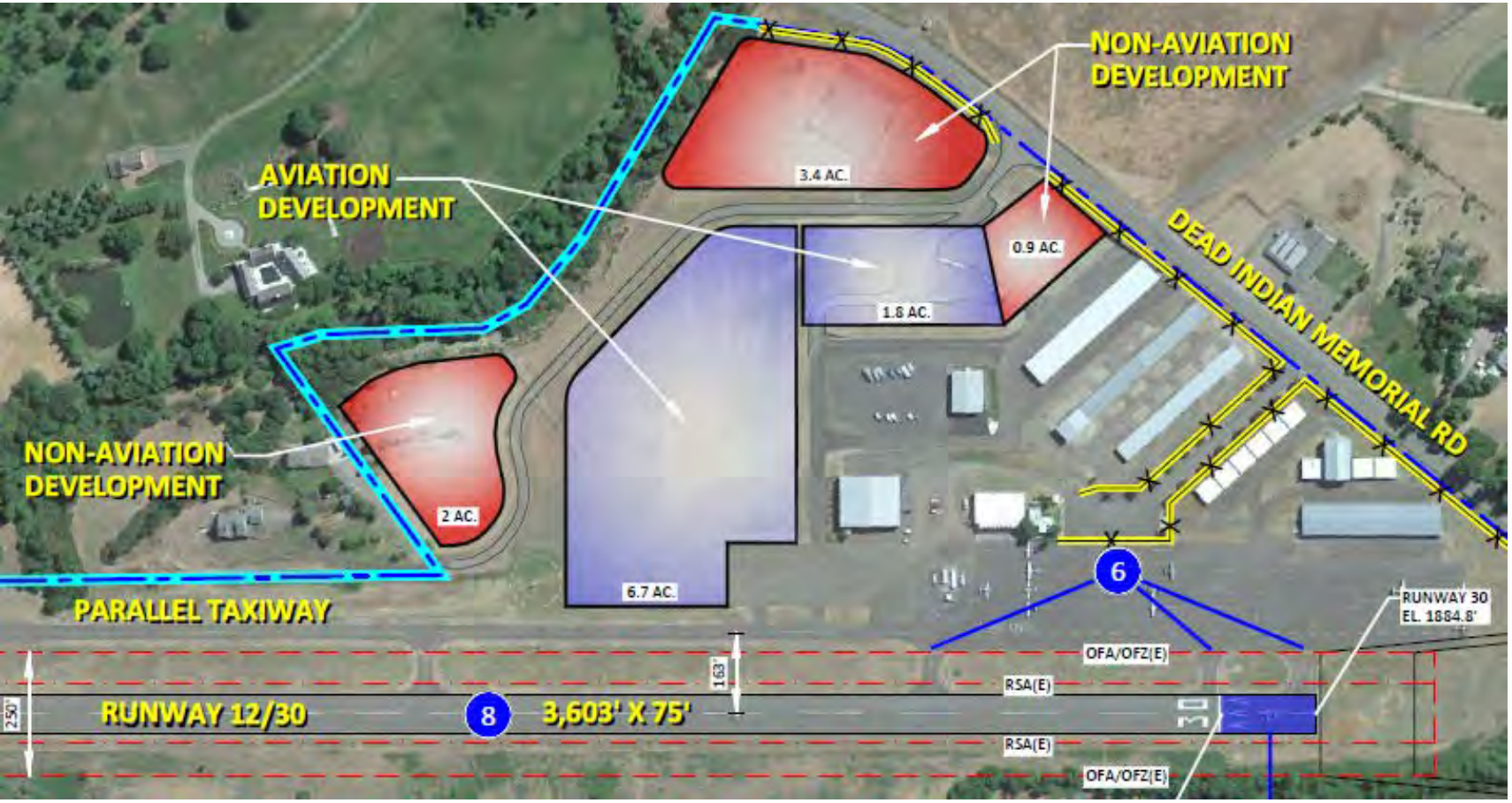
1. Apron pavement area as defined in ODA Pavement Management Plan database.
2. No designated helicopter parking spaces; helicopter parking is accommodated within the existing apron.
3. Apron parking demand levels identified for each forecast year represents estimated gross demand.
4. 18 hangars including four T-hangars (42 spaces or 56,525 SF); 12 small/medium conventional hangars (26,500 SF); and two large commercial hangars consisting of approximately 18,500 SF, which provides storage capacity for approximately 72 aircraft.
5. Aircraft hangar demand levels identified for each forecast year represent forecast cumulative demand; assumed 90% of new based aircraft will be stored in hangars.
6. 72 marked tiedowns; however, apron/tiedown reconfiguration is required to meet TOFA standards between tiedown rows and to provide standard aircraft parking. It is assumed a 50% reduction in tiedowns could occur.

FBO/CORPORATE/TERMINAL AREA

SURFACE ACCESS AND VEHICLE PARKING

- Two access points off of Dead Indian Memorial Road
- No changes anticipated

ON-AIRPORT LAND USE



SUPPORT FACILITIES REQUIREMENTS

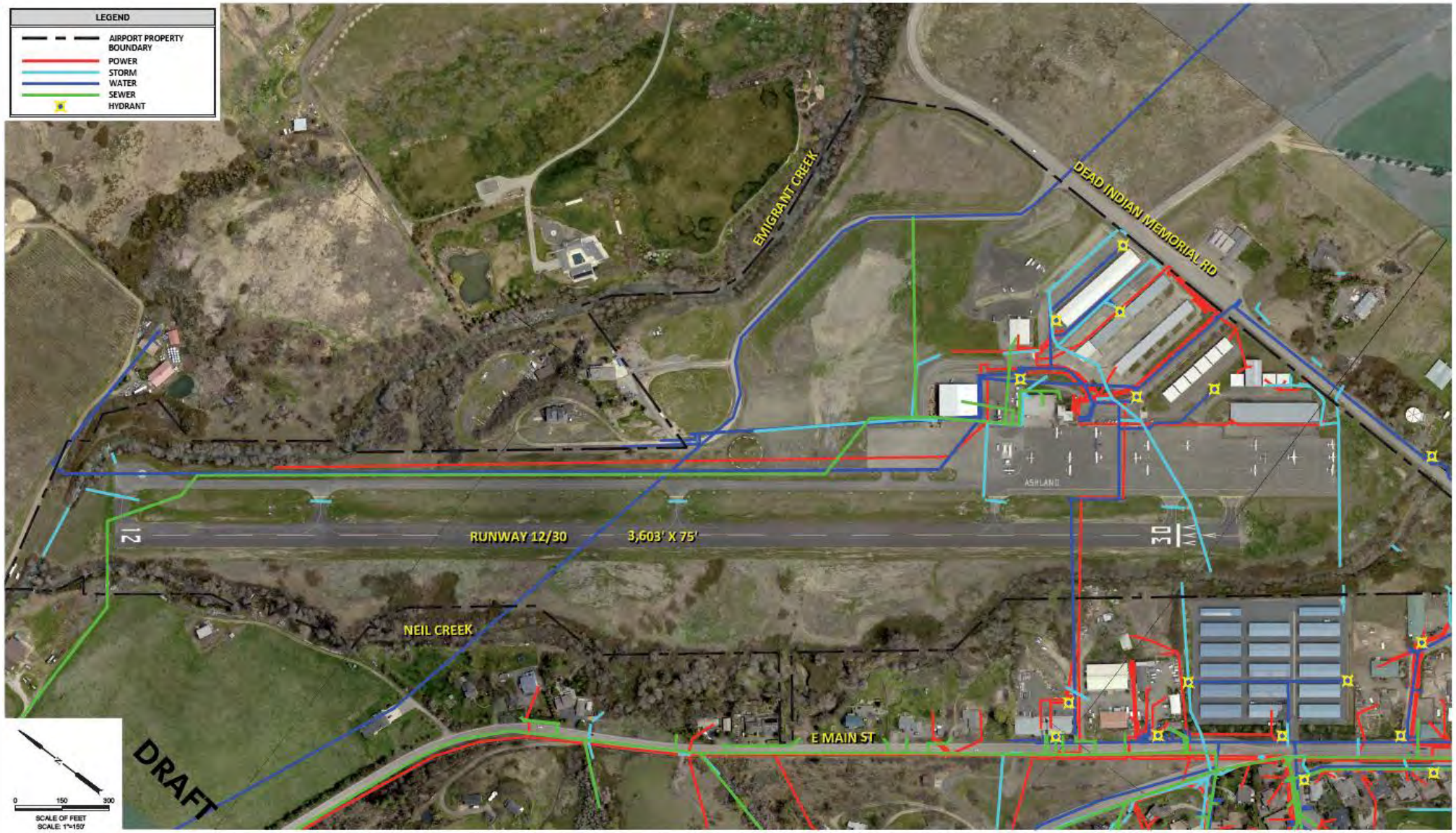
- Fuel Facilities
- Public Utilities
- Security/Perimeter Fencing – Alternatives and siting the fence line.

FUEL FACILITIES

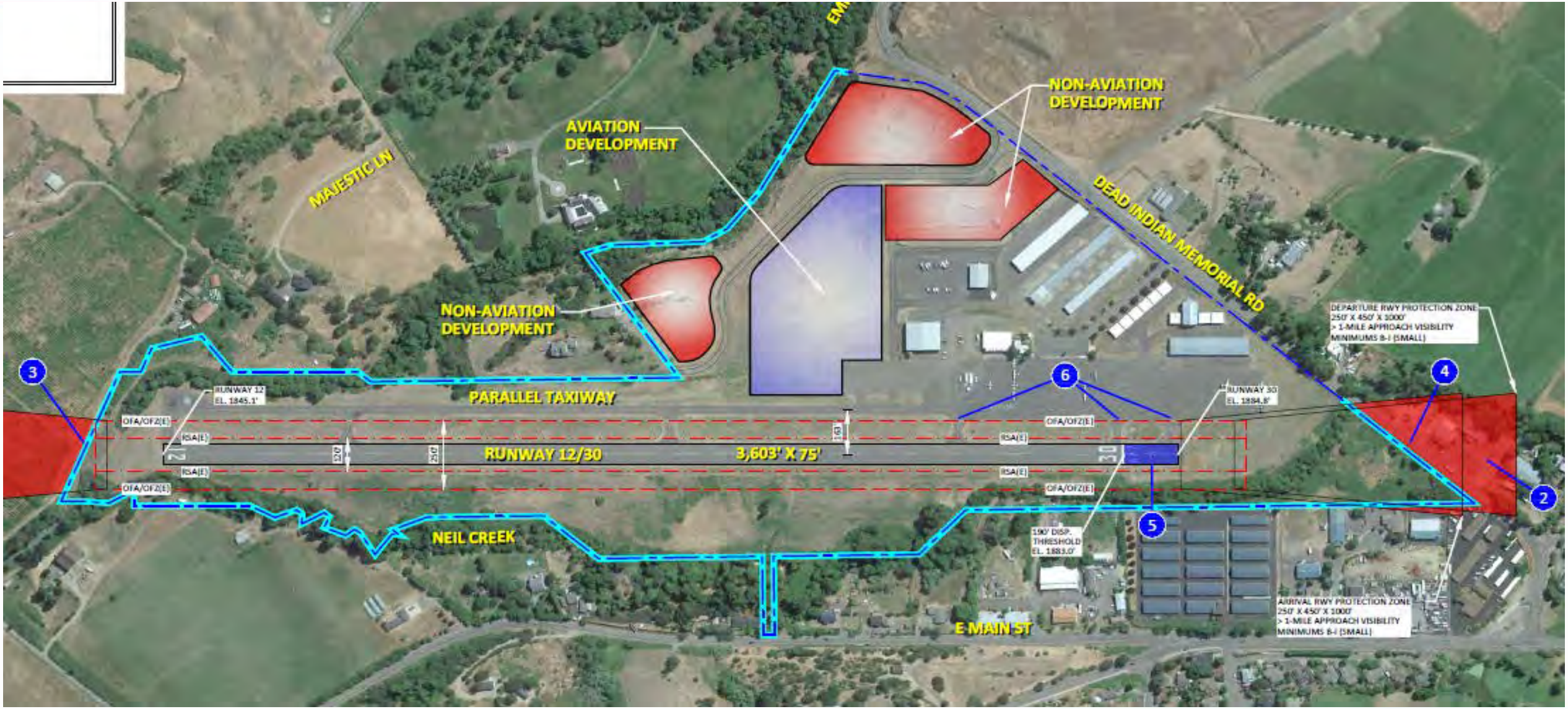
FUEL TYPE	TANK CAPACITY (GALLONS)	LOCATION	TANK OWNERSHIP
100LL	12,000	Fuel Apron	City
Jet-A	10,000	Fuel Apron	City
Jet-A	6,000	Brim Aviation	Private
Jet-A	4,000	Brim Aviation	Private
Jet-A	3,800	Brim Aviation	Private

Note: Brim Aviation purchases 100LL through the FBO.

UTILITIES


LEGEND
AIRPORT PROPERTY BOUNDARY
POWER
STORM
WATER
SEWER
HYDRANT
EMIGRANT CREEK
DEAD INDIAN MEMORIAL RD
RUNWAY 12/30
3,603' X 75'
12
30
NEIL CREEK
E MAIN ST
DRAFT
0
150
300
SCALE OF FEET
SCALE: 1"=150'

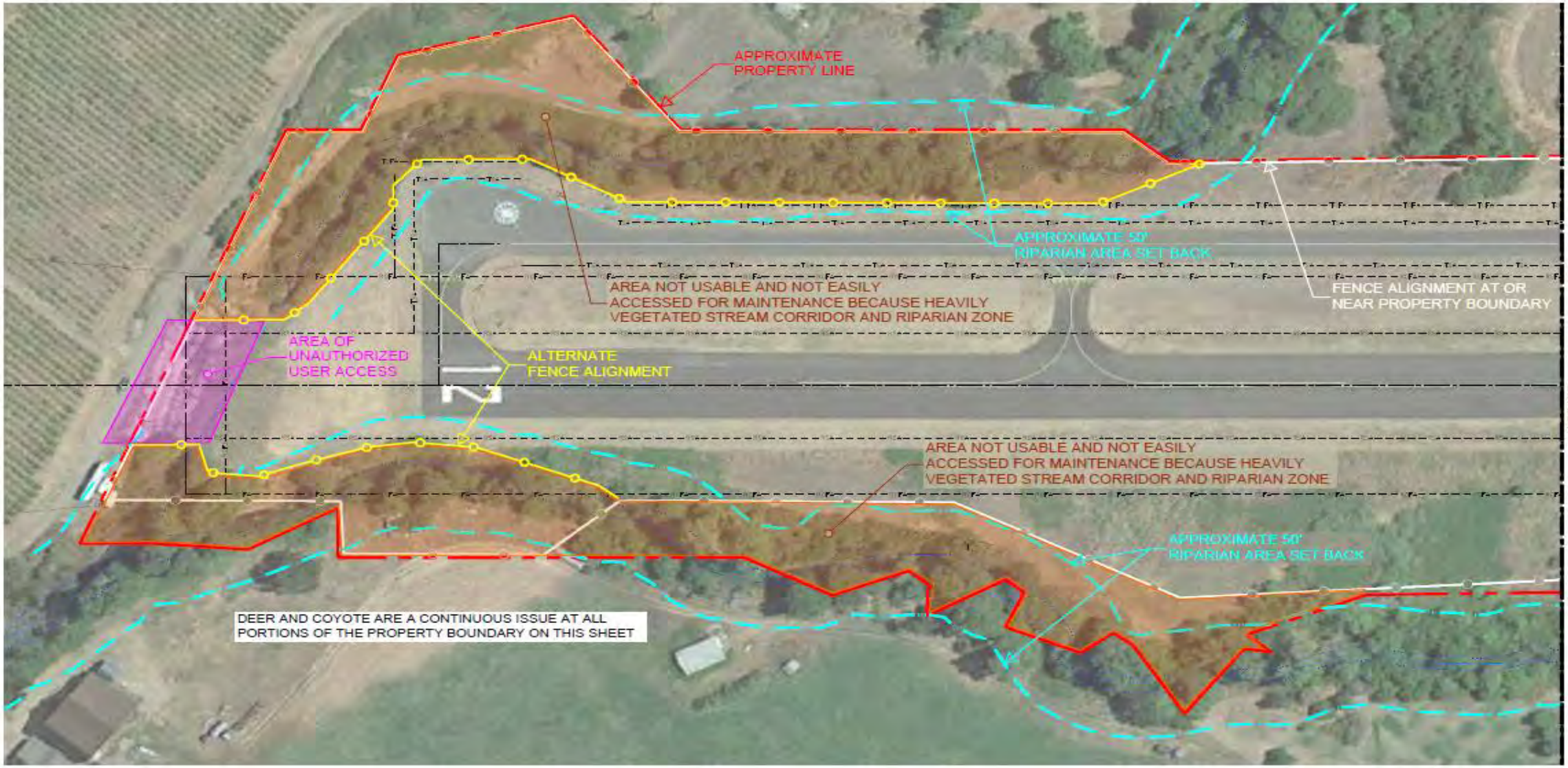
SECURITY/PERIMETER FENCING



SECURITY/PERIMETER FENCING

Why did the previous fencing project design not proceed in to construction?

- FAA required the fence line to encompass all airport property.
- Local environmental/governmental policies do not allow fencing within riparian setbacks.
- City ordinance and riparian setback requirements are valid and should be considered in the development of alternatives.



0 25 50 100
SCALE IN FEET

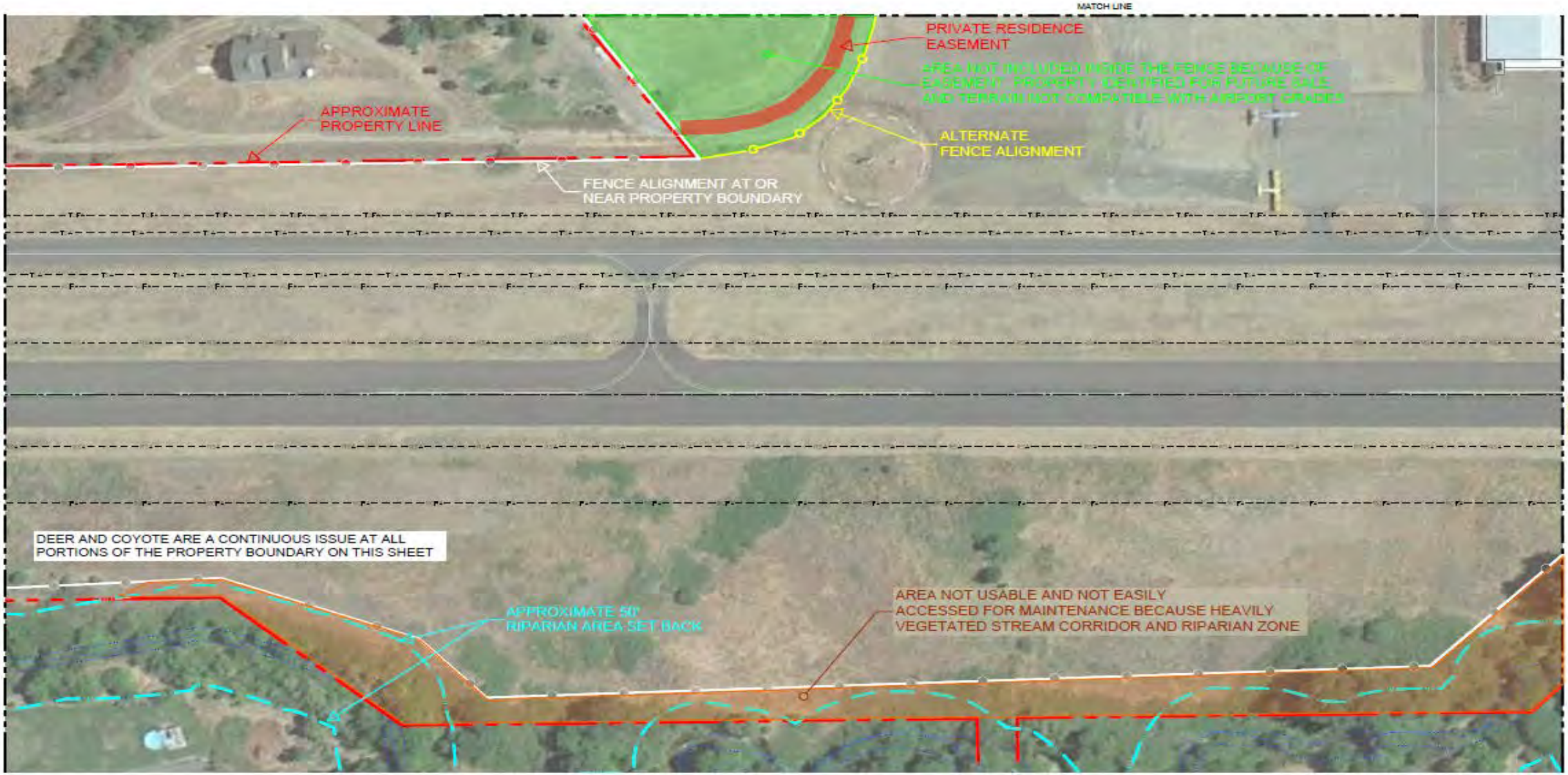
ASHLAND MUNICIPAL AIRPORT
PERIMETER FENCE AND TAXILANE IMPROVEMENTS

PRECISION APPROACH ENGINEERING

PERIMETER FENCE ALIGNMENT

1 OF 4

February 3, 2014



0 25 50 100
SCALE IN FEET

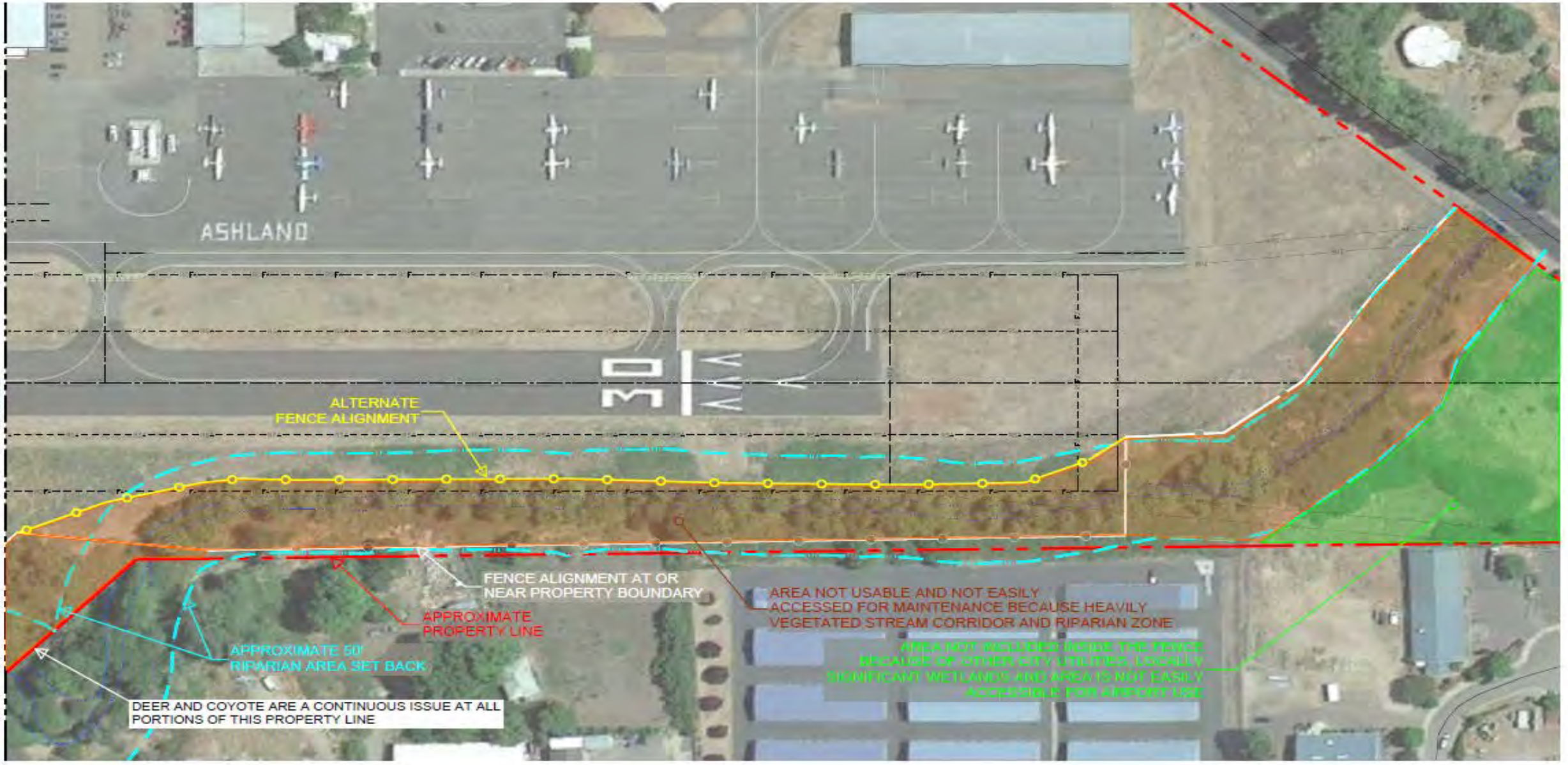
ASHLAND MUNICIPAL AIRPORT
PERIMETER FENCE AND TAXILANE IMPROVEMENTS

PRECISION APPROACH ENGINEERING

PERIMETER FENCE ALIGNMENT

2 OF 4

February 3, 2014



0 25 50 100
SCALE IN FEET

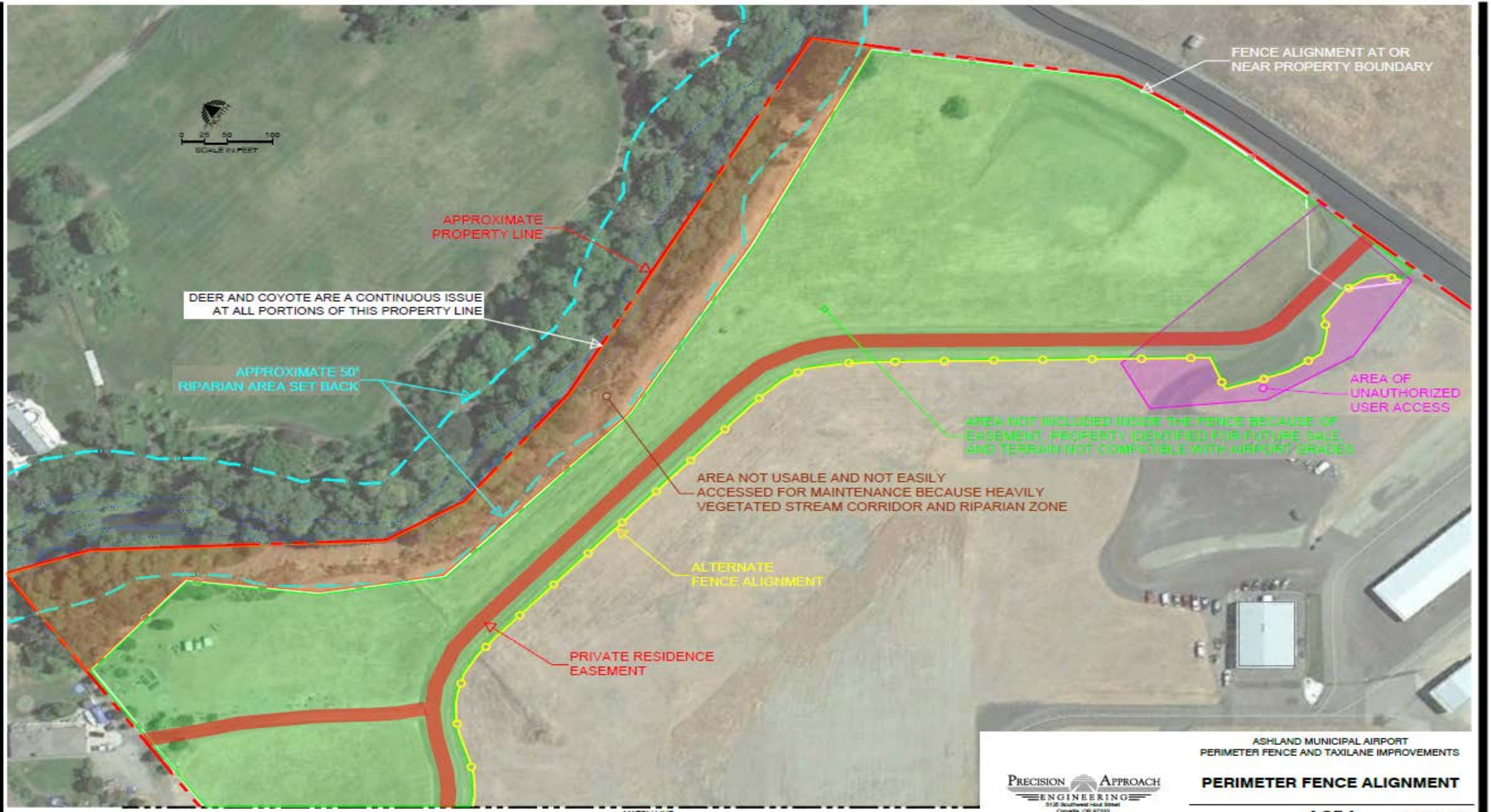
ASHLAND MUNICIPAL AIRPORT
PERIMETER FENCE AND TAXILANE IMPROVEMENTS

PRECISION APPROACH ENGINEERING

PERIMETER FENCE ALIGNMENT

3 OF 4

February 3, 2014

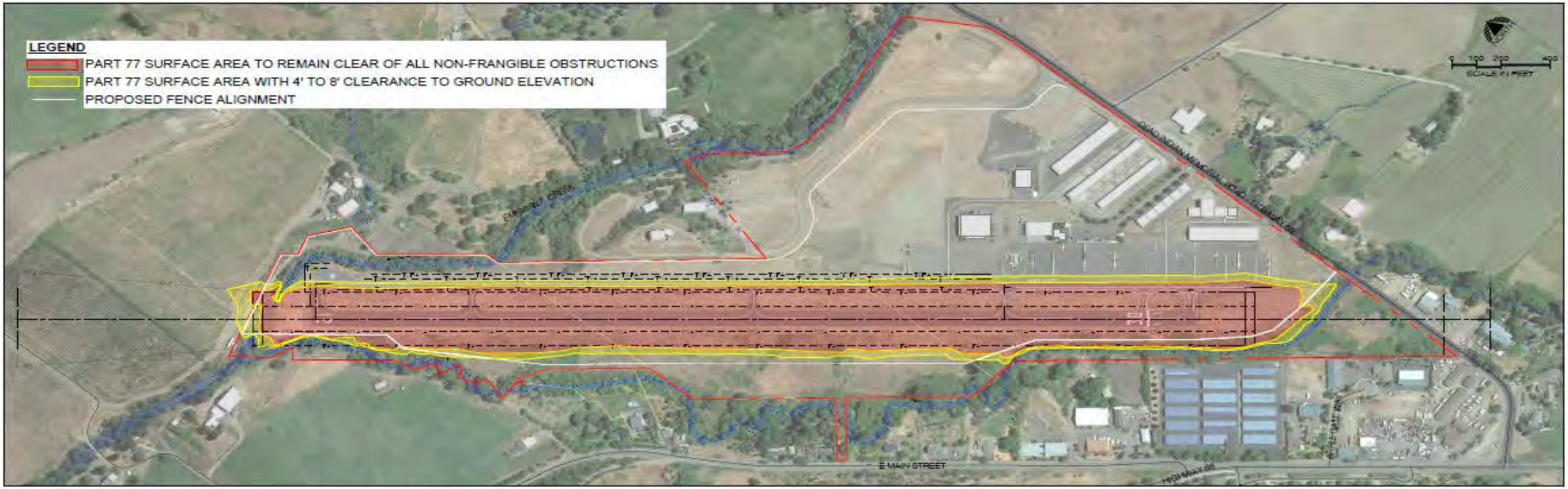


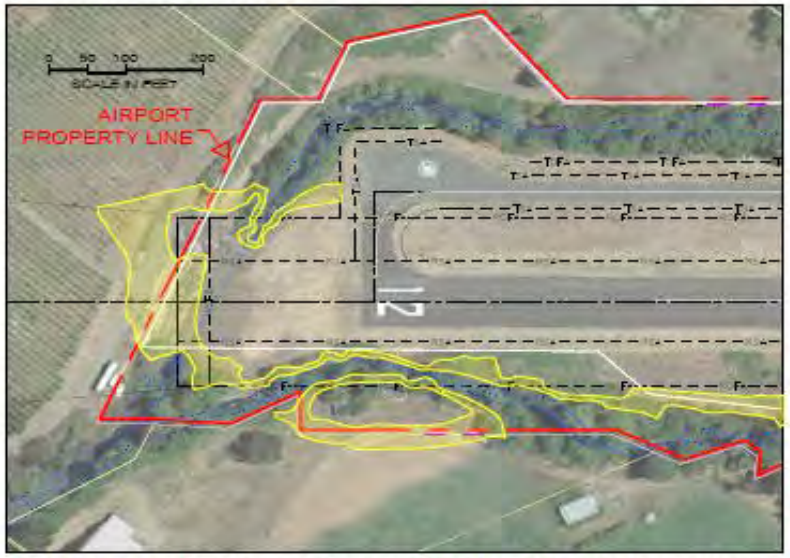
ASHLAND MUNICIPAL AIRPORT
PERIMETER FENCE AND TAXILANE IMPROVEMENTS

PRECISION APPROACH ENGINEERING
5125 Southwest Hout Street
Corvallis, OR 97333
541-754-0043

PERIMETER FENCE ALIGNMENT

February 9, 2014





INFORMATION BASED ON LIDAR TERRAIN DATA DOWNLOADED FROM THE COUNTY WEBSITE

PRECISION APPROACH ENGINEERING

ASHLAND MUNICIPAL AIRPORT
PERIMETER FENCE AND TAXILANE IMPROVEMENTS

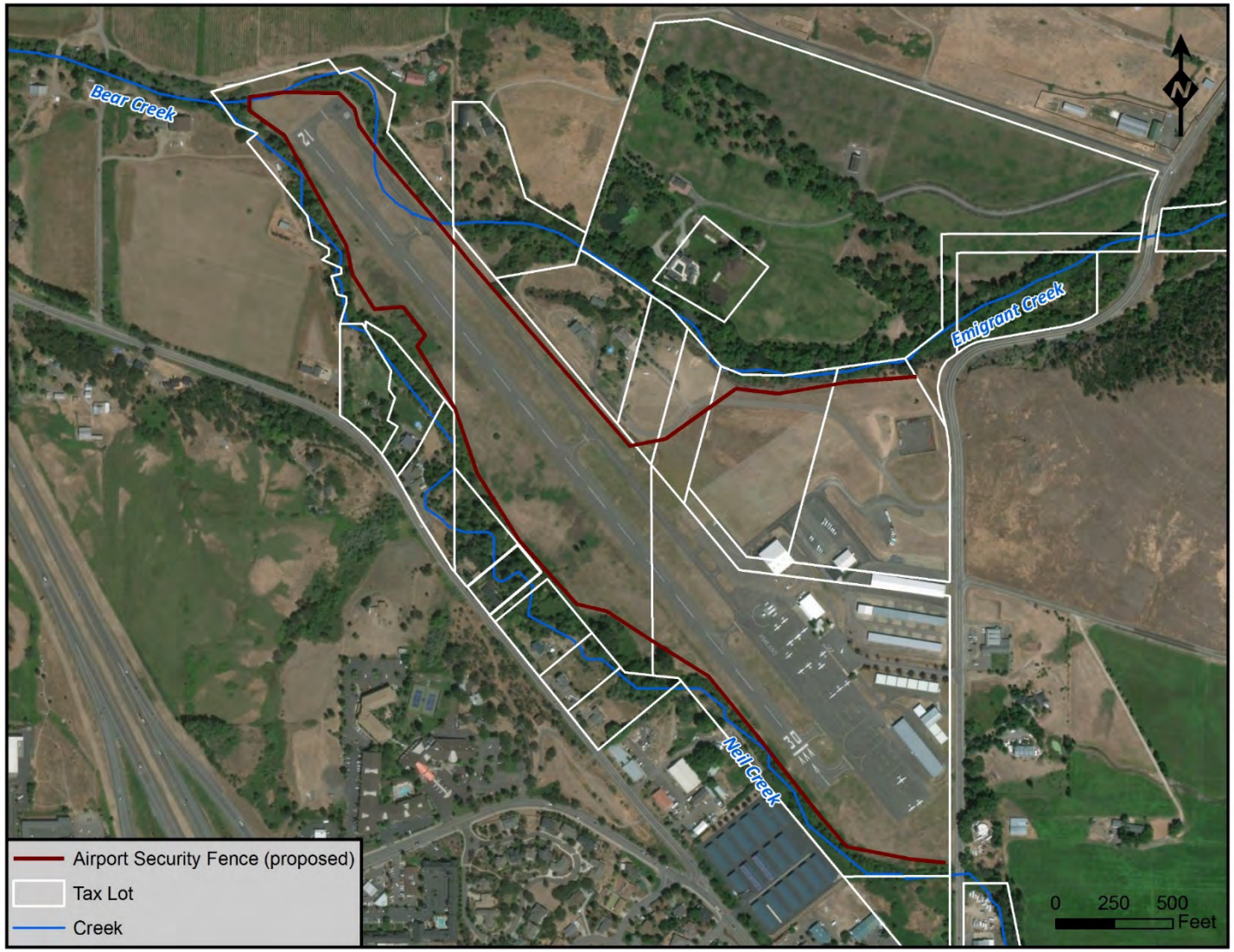
FAR PART 77 FENCE HEIGHT RESTRICTIONS

EXHIBIT 1 January 29, 2014

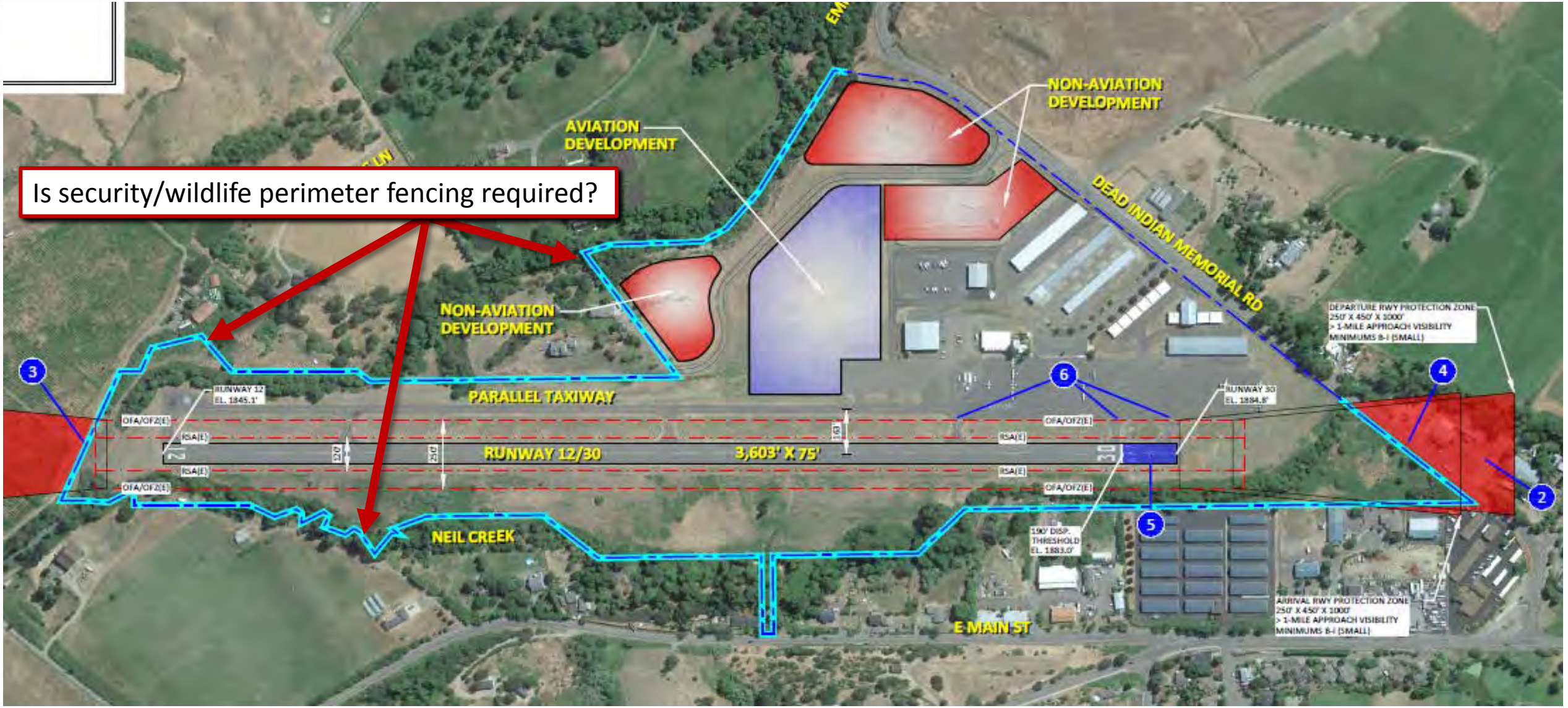
SECURITY/PERIMETER FENCING

Freshwater Trust

Proposed Fence line



SECURITY/PERIMETER FENCING

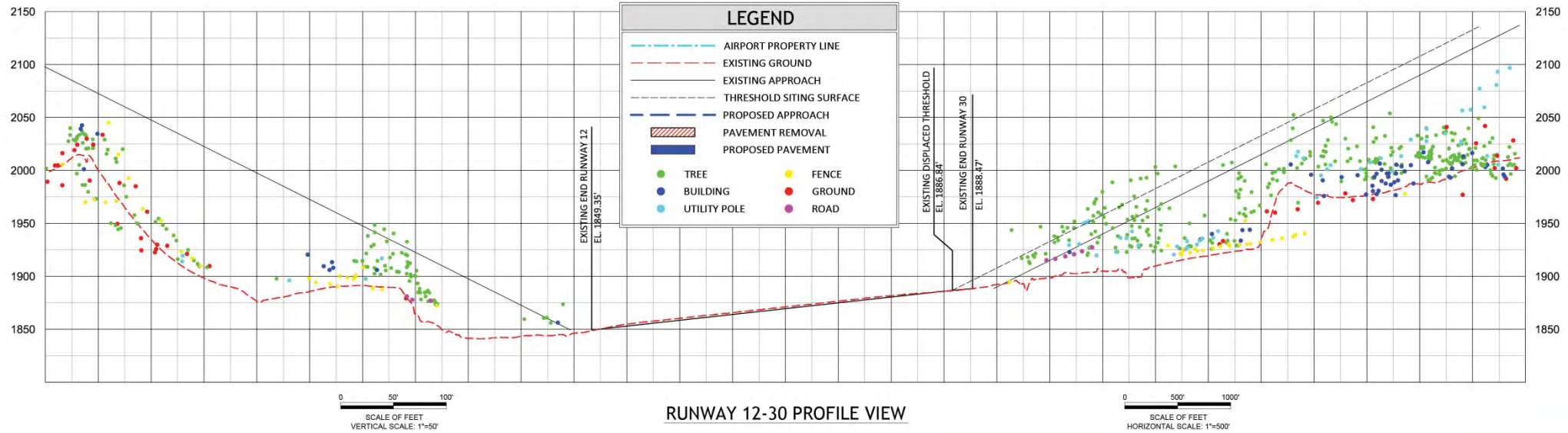


Preliminary Development Alternatives

NO CHANGE ALTERNATIVE

RUNWAY 12-30 PLAN VIEW

0 500' 1000'
SCALE OF FEET
SCALE: 1"=50'



0 50' 100'
SCALE OF FEET
VERTICAL SCALE: 1"=50'

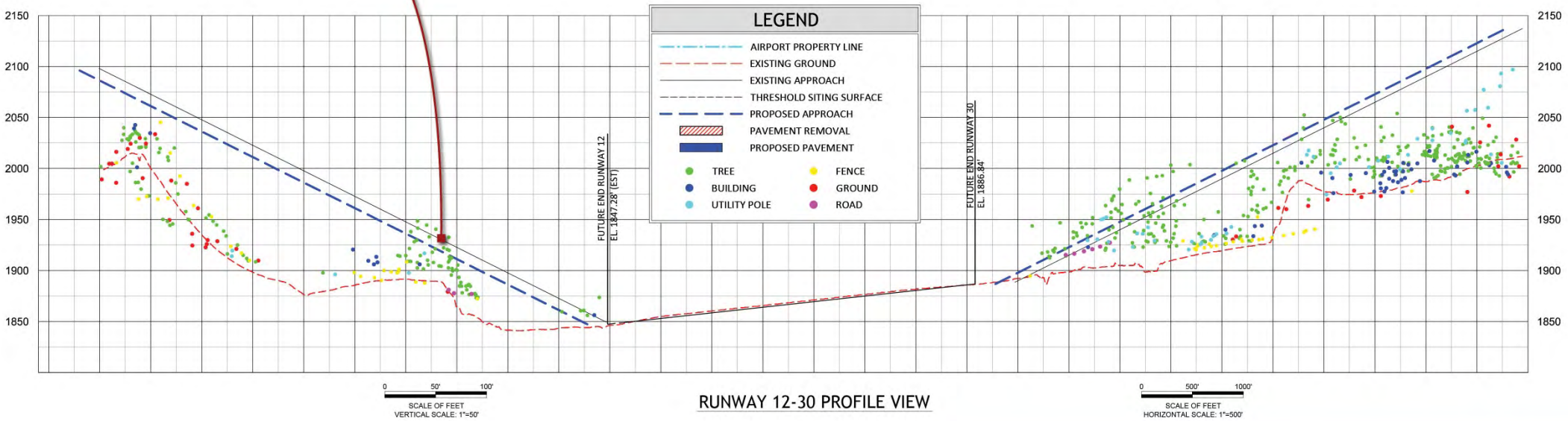
RUNWAY 12-30 PROFILE VIEW

0 500' 1000'
SCALE OF FEET
HORIZONTAL SCALE: 1"=500'

AIRSIDE ALTERNATIVE ONE

RUNWAY 12-30 PLAN VIEW

0 500' 1000'
SCALE OF FEET
SCALE: 1"=50'



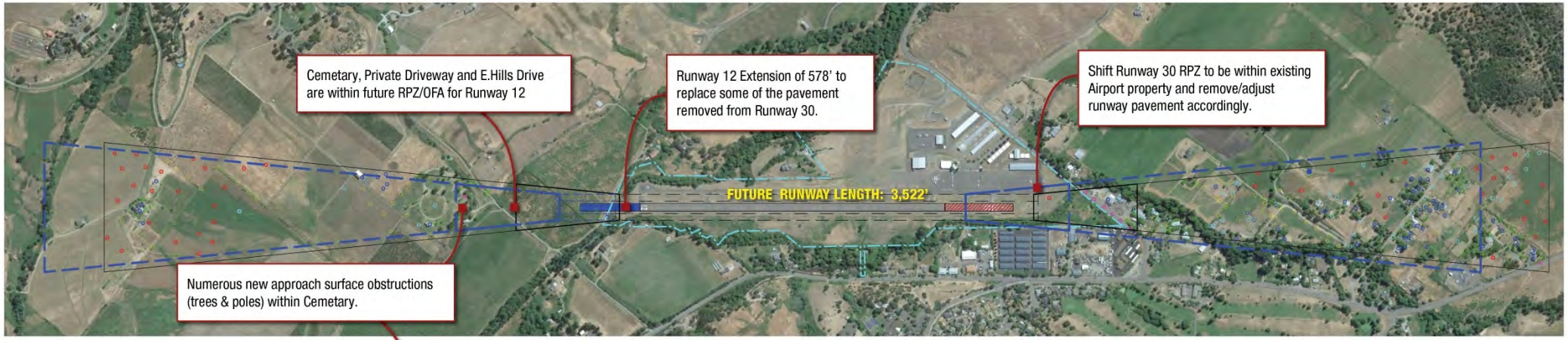
0 50' 100'
SCALE OF FEET
VERTICAL SCALE: 1"=50'

RUNWAY 12-30 PROFILE VIEW

0 500' 1000'
SCALE OF FEET
HORIZONTAL SCALE: 1"=500'

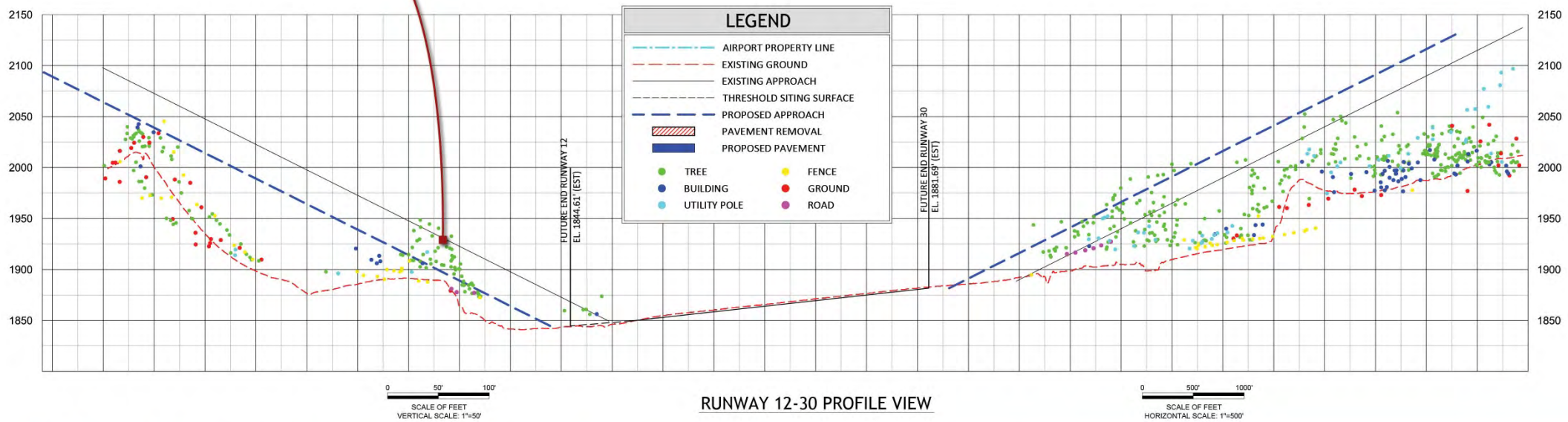
Remove and replace displaced threshold pavement to maintain runway length at 3,603'.

AIRSIDE ALTERNATIVE TWO



RUNWAY 12-30 PLAN VIEW

0 500' 1000'
SCALE OF FEET
SCALE: 1"=50'



0 50' 100'
SCALE OF FEET
VERTICAL SCALE: 1"=50'

RUNWAY 12-30 PROFILE VIEW

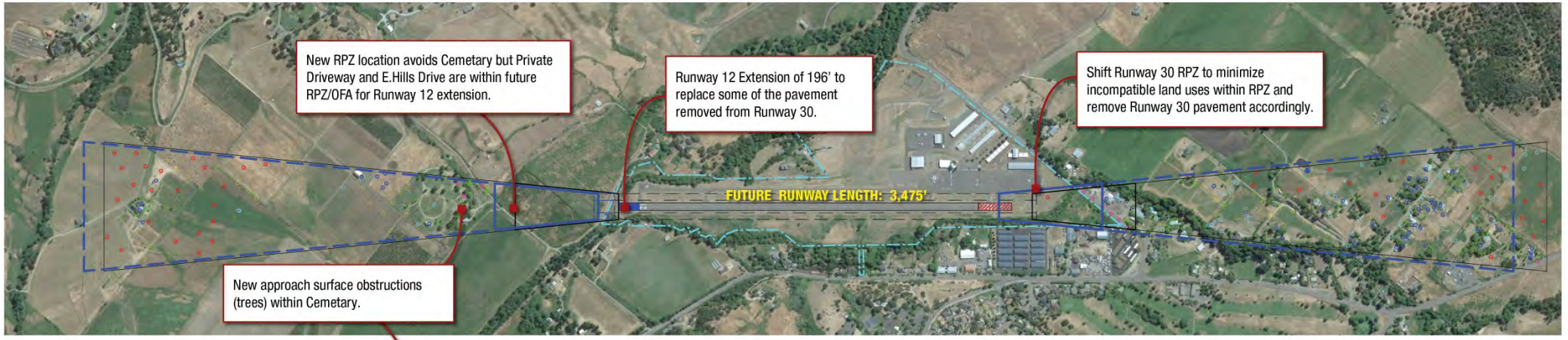
0 500' 1000'
SCALE OF FEET
HORIZONTAL SCALE: 1"=500'

Shift and shorten runway to address Runway 30 RPZ and minimize Runway 12 obstructions resulting in 3,522' length.

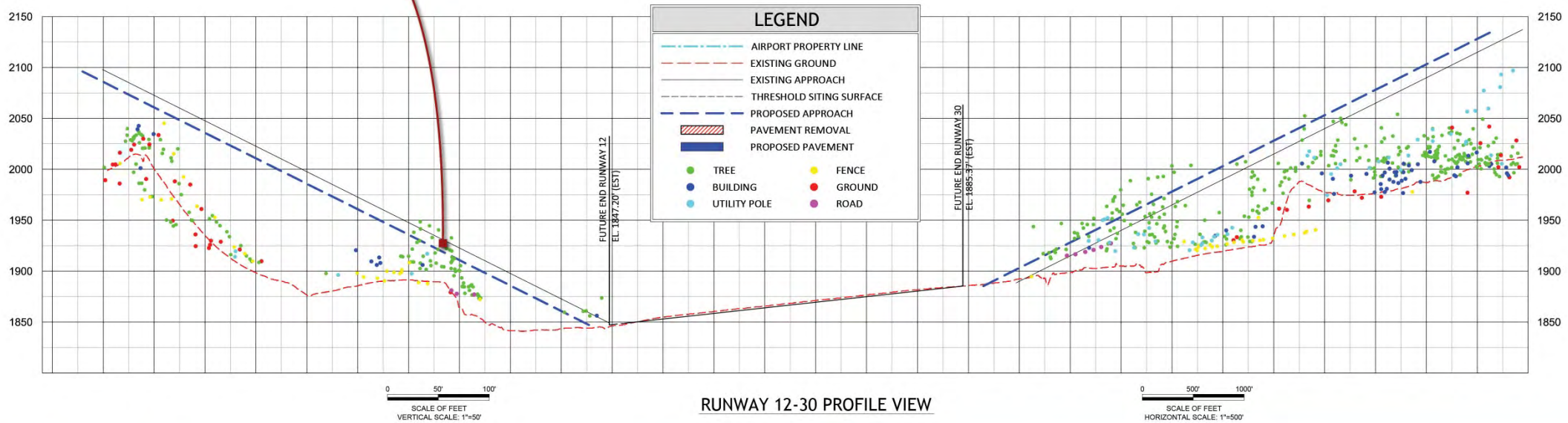
ASHLAND MUNICIPAL AIRPORT
Airport Master Plan Update - 2018

CENTURY WEST ENGINEERING

AIRSIDE ALTERNATIVE THREE



RUNWAY 12-30 PLAN VIEW



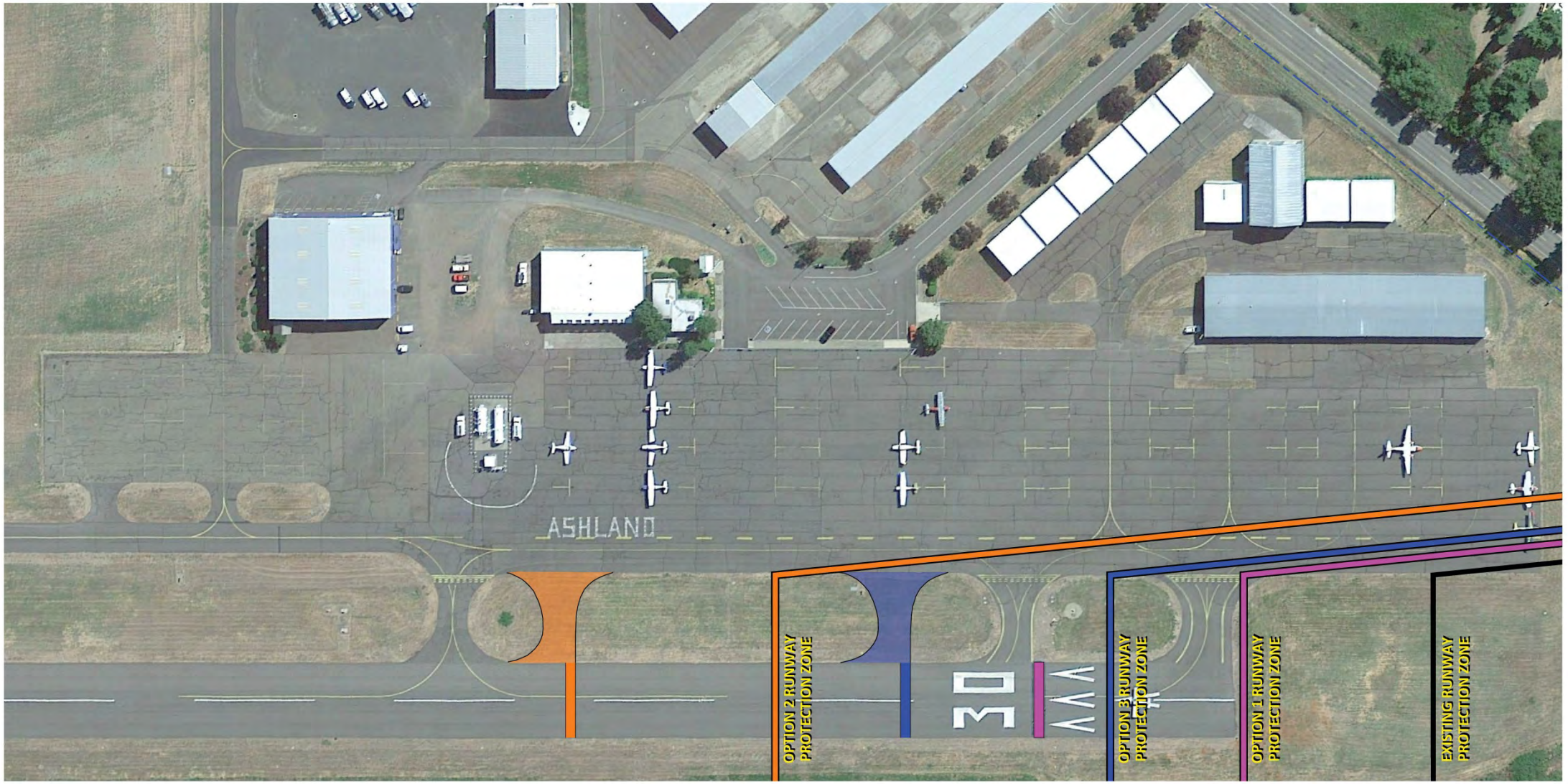
RUNWAY 12-30 PROFILE VIEW

Shift and shorten runway to minimize impacts of Runway 30 RPZ and minimize Runway 12 RPZ impacts resulting in 3,475' length. 3,280' length with no changes to Runway 12 end.

ASHLAND MUNICIPAL AIRPORT
Airport Master Plan Update - 2018

CENTURY WEST ENGINEERING

AIRSIDE RPZ AND APRON



AIRSIDE ALTERNATIVE FOUR

OBSTRUCTION CHART

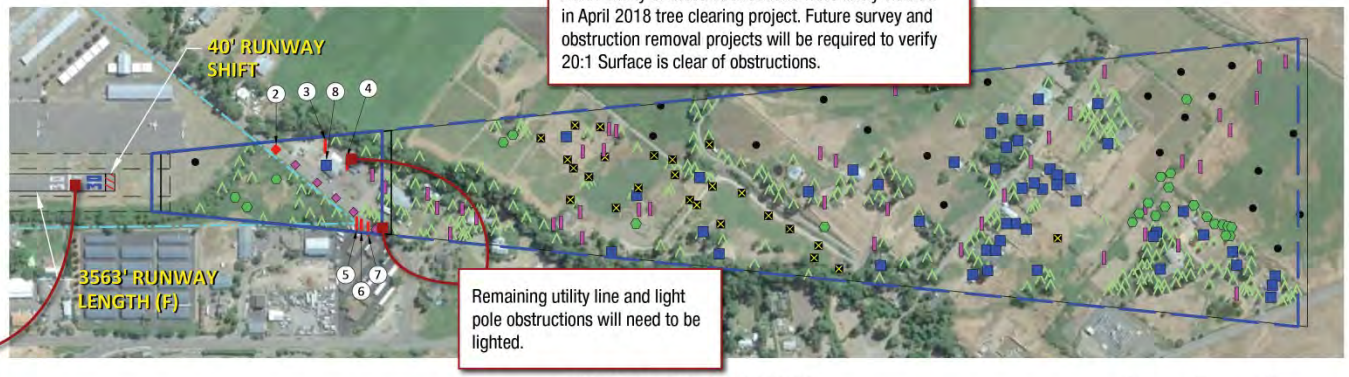
NO.	ITEM	PART 77 SURFACE	MSL TOP ELEV (EST.)	DISTANCE FROM RWY CL	DISTANCE FROM RWY END		AMOUNT OF PENETRATION (ESTIMATED)		AIRPORT PROPERTY	DISPOSITION
					EXISTING	FUTURE	EXISTING	FUTURE		
2	ROAD (+15' VEHICLE)	APPROACH	1915.10'	142.99' L	699.64'	739.64'	1.6'	0'	NO	SHIFT RWY 30 END
3	UTILITY POLE	APPROACH	1929.53'	156.78' L	913.44'	953.44'	5.3'	3.7'	NO	OBSTRUCTION LIGHT
4	UTILITY POLE	APPROACH	1930.46'	81.97' L	1008.24'	1048.24'	1.5'	0'	NO	SHIFT RWY 30 END
5	UTILITY POLE	APPROACH	1949.93'	177.60' R	1049.80'	1089.80'	18.9'	17.3'	NO	OBSTRUCTION LIGHT
6	UTILITY POLE	APPROACH	1950.77'	186.85' R	1069.46'	1109.46'	18.8'	17.1'	NO	OBSTRUCTION LIGHT
7	UTILITY POLE	APPROACH	1952.15'	201.17' R	1099.39'	1139.39'	18.6'	17'	NO	OBSTRUCTION LIGHT
8	BUILDING	APPROACH	1922.77'	74.65' L	1108.59'	1148.59'	0'	0	NO	FOR REF. ONLY

LEGEND

- AIRPORT PROPERTY LINE
- EXISTING GROUND
- EXISTING APPROACH
- FUTURE APPROACH
- TREE/BUSH
- BUILDING
- UTILITY POLE
- FENCE
- GROUND
- ROAD

● ITEMS THAT CONFLICT WITH PART 77 SURFACES ARE DEPICTED IN RED.

Tree obstructions identified were obtained from 2016 AGIS. Many of these obstructions were likely cleared in April 2018 tree clearing project. Future survey and obstruction removal projects will be required to verify 20:1 Surface is clear of obstructions.

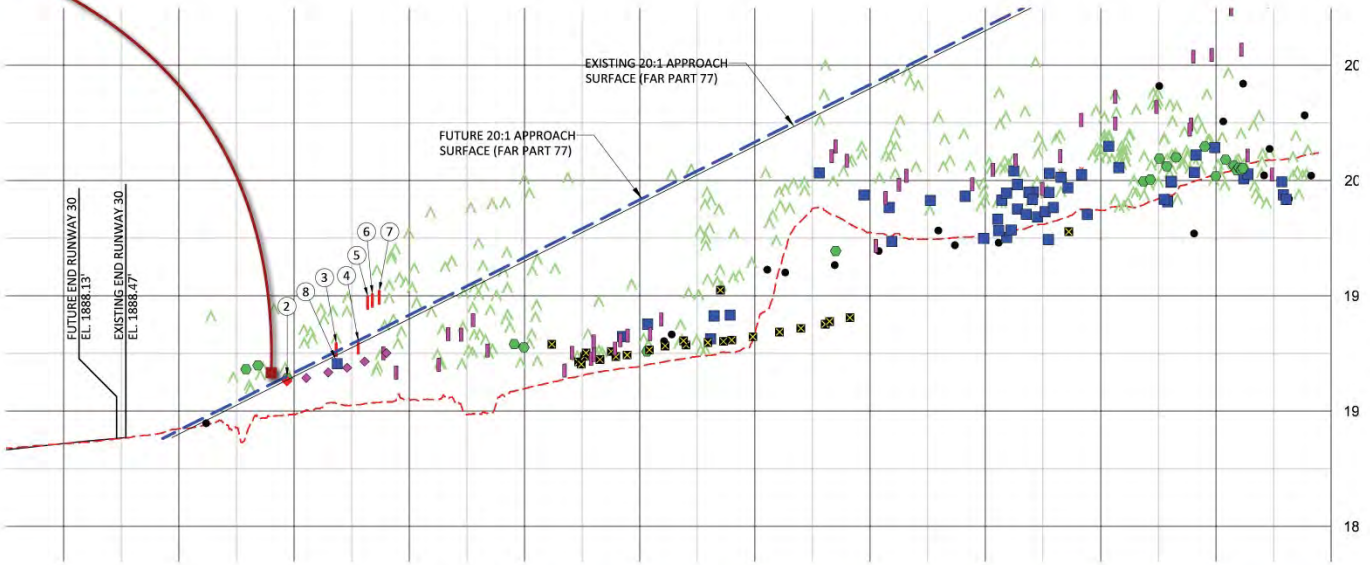


Remaining utility line and light pole obstructions will need to be lighted.

Remove displaced threshold and shift Runway 30 end 40' to mitigate road obstructions and minimize impact of remaining obstructions.

RUNWAY 30 PLAN VIEW

0 300' 600'
SCALE OF FEET
SCALE: 1"=300'



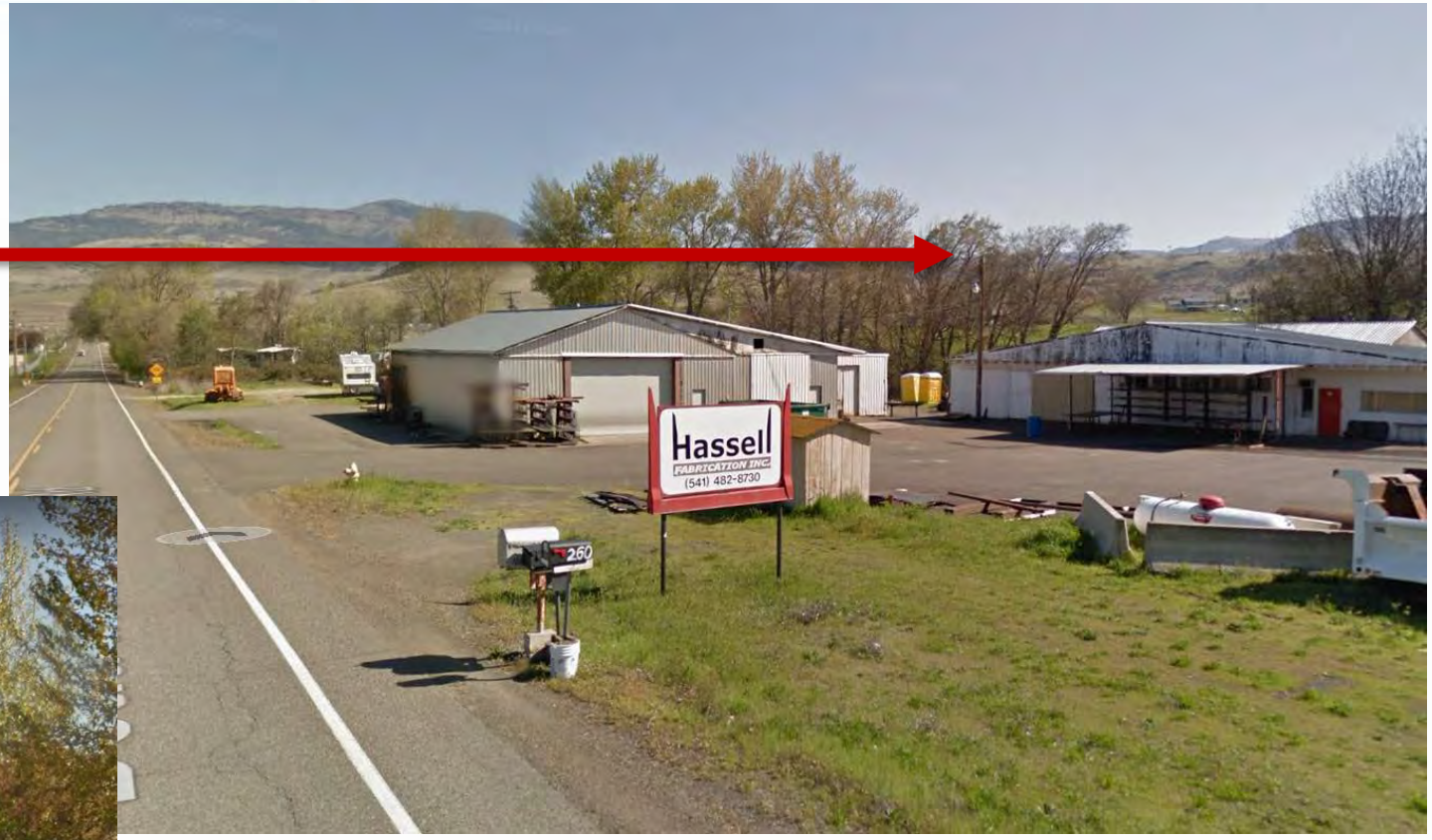
Remove displaced threshold and shift Runway 30 end 40' north to clear road obstruction. Install lighting on remaining obstructions for mitigation of man-made20:1 Approach Surface obstructions.

ASHLAND MUNICIPAL AIRPORT
Airport Master Plan Update - 2018

CENTURY WEST ENGINEERING

AIRSIDE ALTERNATIVE FOUR

Obstruction Lighting Required

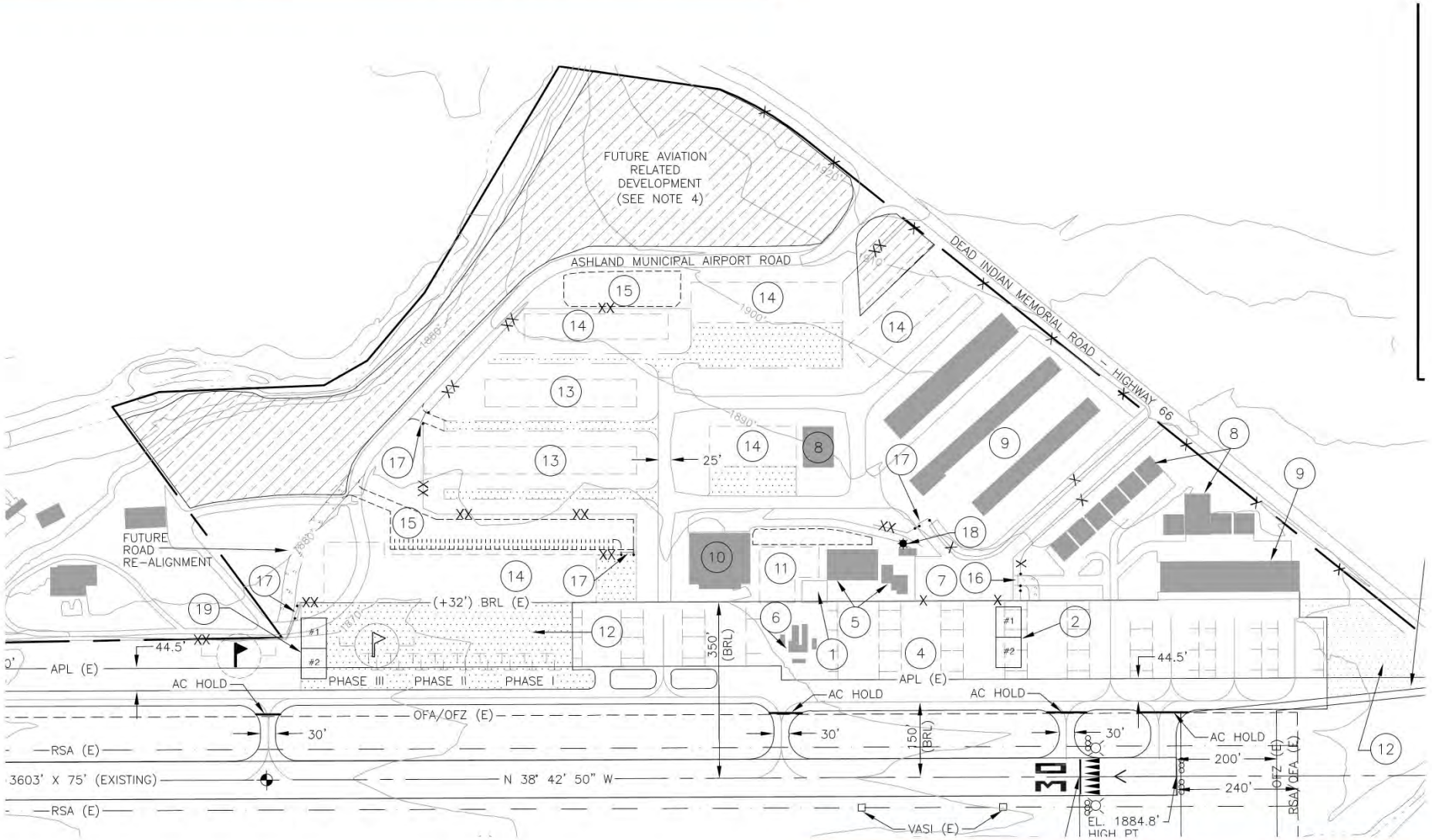


NO CHANGE ALTERNATIVE

ASHLAND MUNICIPAL AIRPORT
Airport Master Plan Update - 2018

CENTURY WEST ENGINEERING

EXISTING ALP ALTERNATIVE



ASHLAND MUNICIPAL AIRPORT
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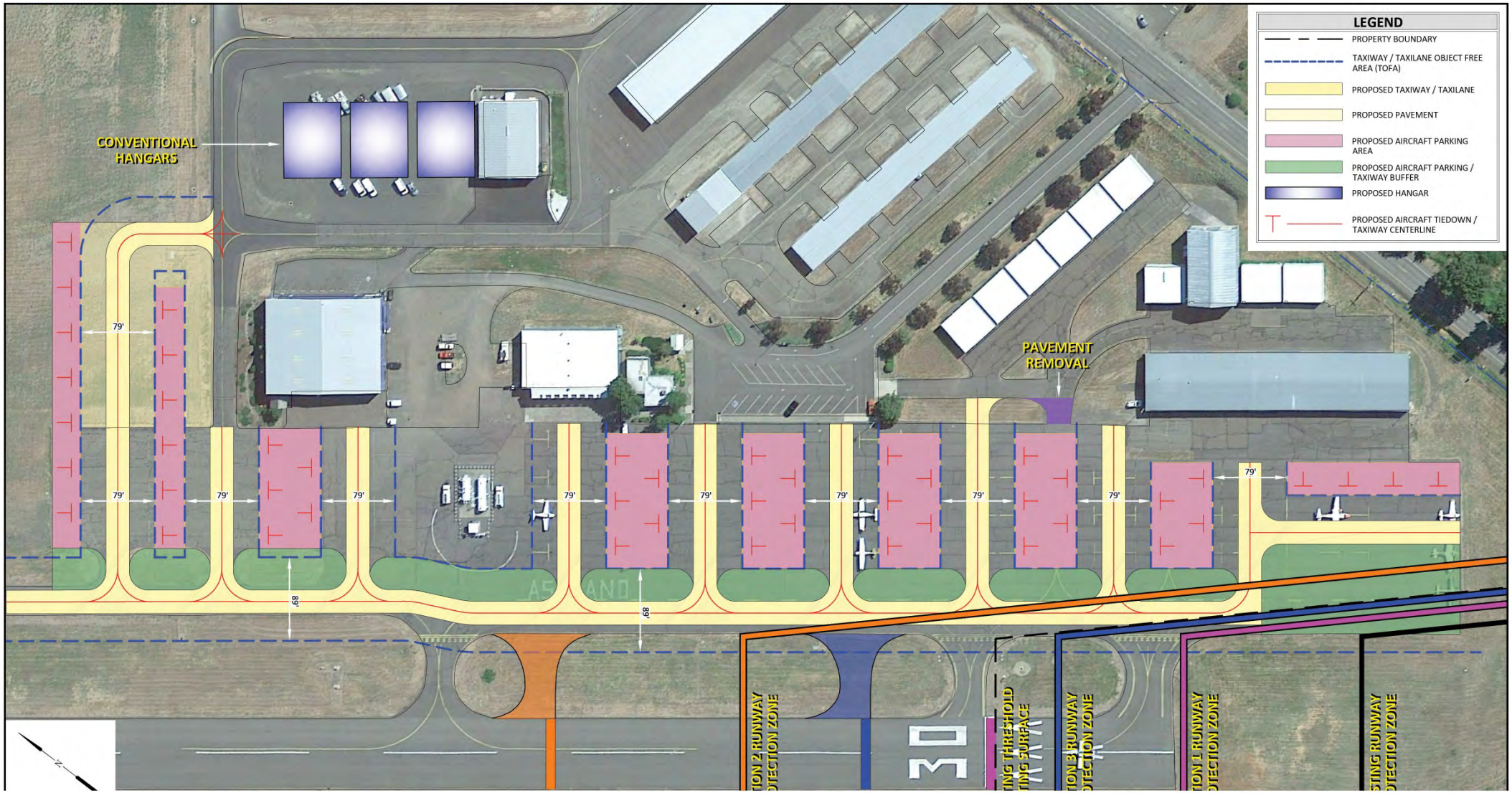
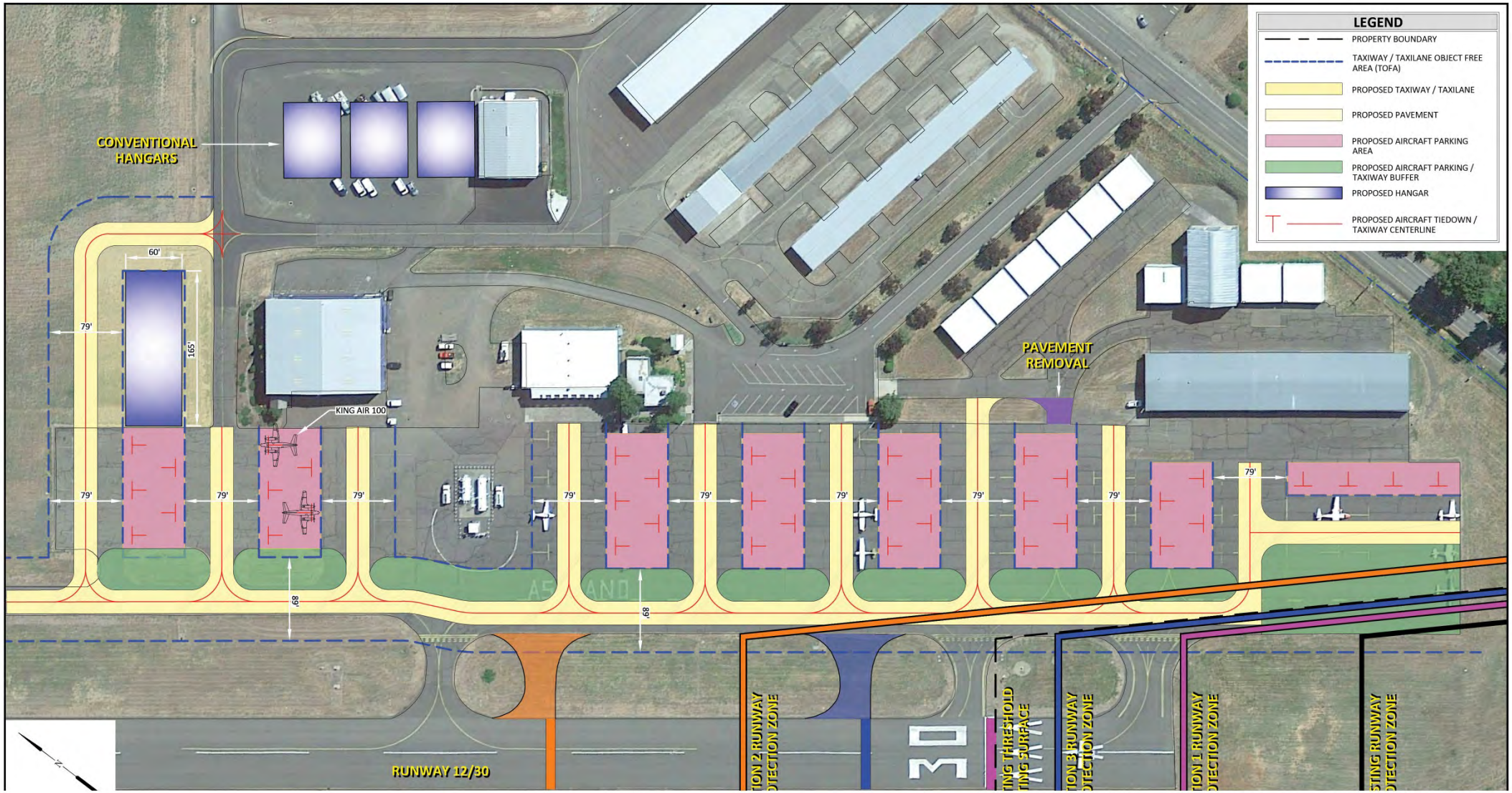
CENTURY WEST ENGINEERING

LANDSIDE ALTERNATIVE ONE



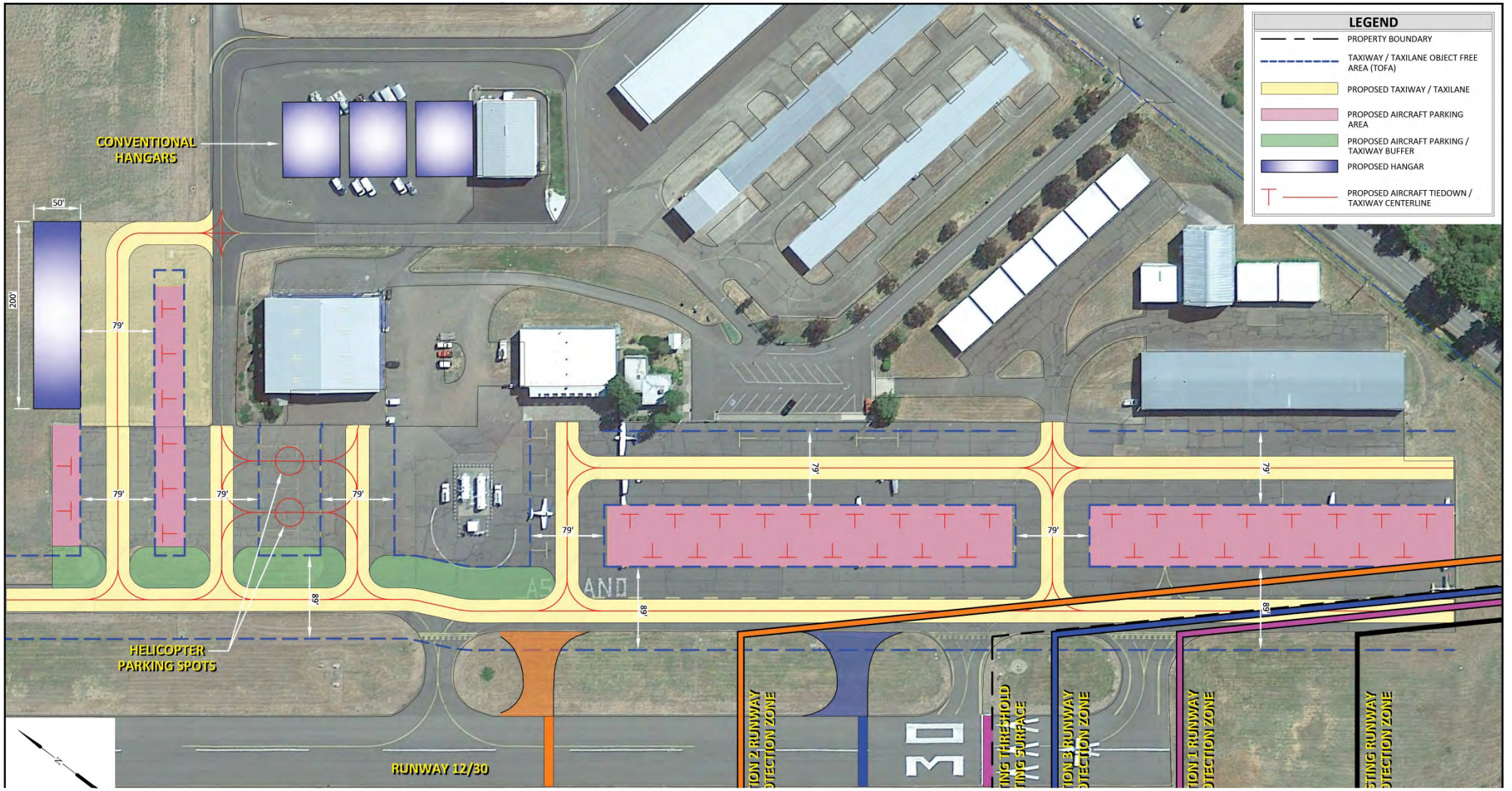
LANDSIDE ALTERNATIVE TWO



ASHLAND MUNICIPAL AIRPORT
Airport Master Plan Update - 2018

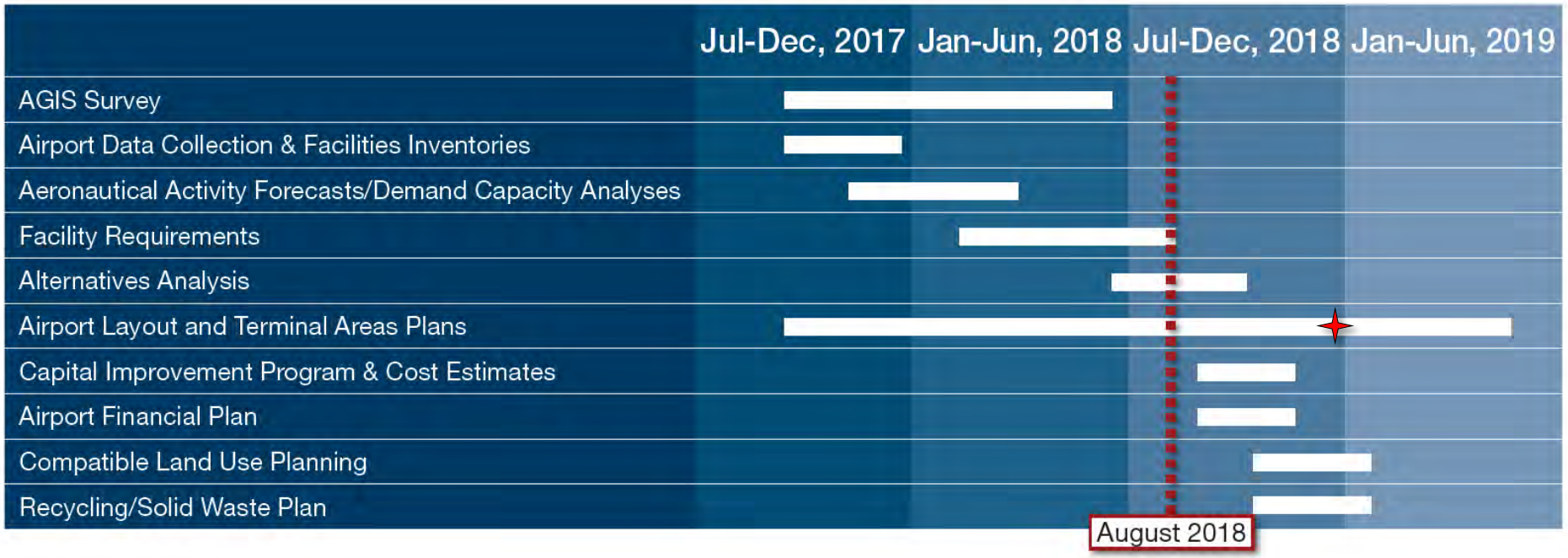
CENTURY WEST ENGINEERING

LANDSIDE ALTERNATIVE THREE



NEXT STEPS

- Refine Development Alternatives
- Select Preferred Alternative
- Present Preferred Alternative/ALP at PAC Meeting #5
- Present and Discuss Remaining Tasks



Next PAC Meeting Dec 2018