



SOUTHWEST WASHINGTON REGIONAL AIRPORT
Kelso Airport - Airport Master Plan

Southwest Washington Regional Airport Airport Master Plan

Planning Advisory Committee Meeting #3
May 2, 2018



Airport Facility Requirements Introduction

The purpose of the facility requirements analysis is to define current and future facility needs for the 20-year planning period.

- **Airside** Facilities (runways, taxiways, lighting, etc.)
- **Landside** Facilities (aircraft parking, hangars, terminal, etc.)
- **Support** Facilities/Infrastructure (vehicle roads, parking, utilities, etc.)

Design Aircraft

Design Aircraft (Existing)

- Airport Reference Code (ARC): B-I
- Raytheon/Beechcraft Baron 58
(Representative AC type, multi-engine piston)



Design Aircraft (Future)

- ARC: B-II
- Cessna Citation 550/560 Series
(Representative AC type, multi-engine jet)



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<p>A-I 12,500 lbs. or less (small)</p>	<p>B-I 12,500 lbs. or less (small)</p>	<p>A-II, B-II 12,500 lbs. or less (small)</p>	<p>B-II Greater than 12,500 lbs.</p>	<p>A-III, B-III Greater than 12,500 lbs.</p>
<p>Beech Baron 55 Beech Bonanza Cessna 182 Piper Archer Piper Seneca</p>	<p>Beech Baron 58 Beech King Air 100 Cessna 402 Cessna 421 Piper Navajo Piper Cheyenne Cessna Citation I</p>	<p>Super King Air 200 Cessna 441 DHC Twin Otter Cessna Caravan King Air C90</p>	<p>Super King Air 300, 350 Beech 1900 Jetstream 31 Falcon 20, 50 Falcon 200, 900 Citation II, Bravo XLS+ Citation CJ3</p>	<p>DHC Dash 7 DHC Dash 8 Q-300, Q-400 DC-3 Convair 580 Fairchild F-27 ATR 72 ATP</p>
				
<p>C-I, D-I</p>	<p>C-II, D-II</p>	<p>C-III, D-III</p>	<p>C-IV, D-IV</p>	<p>D-V</p>
<p>Lear 25, 35, 55, 60 Israeli Westwind HS 125-700</p>	<p>Gulfstream II, III, IV Canadair 600 Canadair Regional Jet Lockheed JetStar Citation X Citation Sovereign Hawker 800 XP</p>	<p>Boeing Business Jet B 727-200 B 737-300 Series MD-80, DC-9 Foker 70, 100 A319, A320 Gulfstream V Global Express</p>	<p>B-757 B-767 DC - 8-70 DC - 10 MD - 11 L 1011</p>	<p>B - 747 Series B - 777</p>



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AIRPORT REFERENCE CODES (ARC)



Airside Facility Requirements

Runway 12/30

DESIGN STANDARDS

FAA Standards	B-I Existing Standards	B-II Future Standards
Runway Width	60 feet	75 feet
Runway RSA Width	120 feet	150 feet
Runway OFA Width	400 feet	500 feet
Runway OFA Length Beyond Ends	200 feet	300 feet
Runway Protection Zone Length	1,000 feet	1,000 feet
Runway Protection Zone Inner Width	500 feet	500 feet
Runway Protection Zone Outer Width	700 feet	700 feet
Runway Centerline – Parallel Taxiway Centerline Separation	225 feet	240 feet

Airport Conformance Items

Airside Conformance

- Runway 12 & 30 RPZs – Extend beyond airport property & buildings/development in RPZs
- Runway 30 RPZ – Road in RPZ (Talley Way)
- Runway 12 RPZ – Road in RPZ (Douglas St.)
- Runway OFA – Property Control (SW Corner)
- Part 77 Transitional Surface – Trees/Buildings
- East Parallel Taxiway Separation (future ADG II)

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CONFORMANCE ITEMS

- | | |
|--|---|
| 1 RWY 30 RPZ; PROPERTY CONTROL | 6 ROFZ; AIRCRAFT HOLD LINE INSIDE OFZ AT EACH TWY CONNECTOR |
| 2 RWY 30 RPZ; ROAD | 7 RWY 12 RPZ; PROPERTY CONTROL/BUILDINGS |
| 3 RWY 30 RPZ; BNSF RAILROAD | 8 RWY 12 RPZ; ROAD |
| 4 ROFA; PROPERTY CONTROL | 9 TRANSITIONAL SURFACE (PART 77); TREES |
| 5 RWY TO PARALLEL TWY SEPARATION <240' | |

LEGEND

--- AIRPORT PROPERTY BOUNDARY



NOTE:
1. CONFORMANCE TO FAA AIRPORT DESIGN STANDARDS PER AC 150/5000-2 AND FAR PART 77 (UNPAVED).

Airport Conformance Items

Landside Conformance

- Apron Taxilane OFA – Tiedown Separation <79’
- Hangar Taxilane OFA – T-hangar Separation <79’
- Part 77 Transitional Surface – Hangar Heights



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LEGEND

- AIRPORT PROPERTY BOUNDARY
- TAXIWAY/TAXILANE OBJECT-FREE AREA
- 2' FIM
- TRANSITIONAL SURFACE PENETRATION (FEET)
- AIRCRAFT HULL BUILDING

EAST APRON
Scale: 1"= 100'



CONFORMANCE ITEMS

1 ADG-I TAXILANE OFA; SMALL AIRPLANE TIEDOWNS	8 RWY 12 RPZ; PROPERTY CONTROL/BUILDINGS
2 ADG-I TAXILANE OFA; LARGE AIRPLANE TIEDOWNS	9 RWY 12 RPZ; ROAD
3 ADG-I TAXILANE OFA; T-HANGAR SEPARATION	10 ADG-I TAXILANE OFA; AIRCRAFT WASH RACK
4 ADG-II TAXILANE OFA; T-HANGAR BUILDINGS	11 TRANSITIONAL SURFACE (PART 77); BUILDINGS/HANGARS/TREES
5 DIRECT TAXI BETWEEN APRON AND RWY	12 ROFZ; AC HOLD LINE INSIDE ROFZ
6 RWY TO PARALLEL TWY SEPARATION <240'	
7 ADG-I TAXILANE WIDTH; >25'	

WEST APRON
Scale: 1"= 100'

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NOTE:
1. CONFORMANCE TO FAA AIRPORT DESIGN STANDARDS PER IAC 5615.500-5.04 AND FAR PART 77 (RANSFAGE)

Landside Development (Forecast Demand)

- Net increase of 21 based aircraft (2017-2037)
 - 19 of 21 based aircraft are stored in hangars
- Aircraft Parking – Transient & Based Aircraft

Preliminary Development Alternatives

Introduction

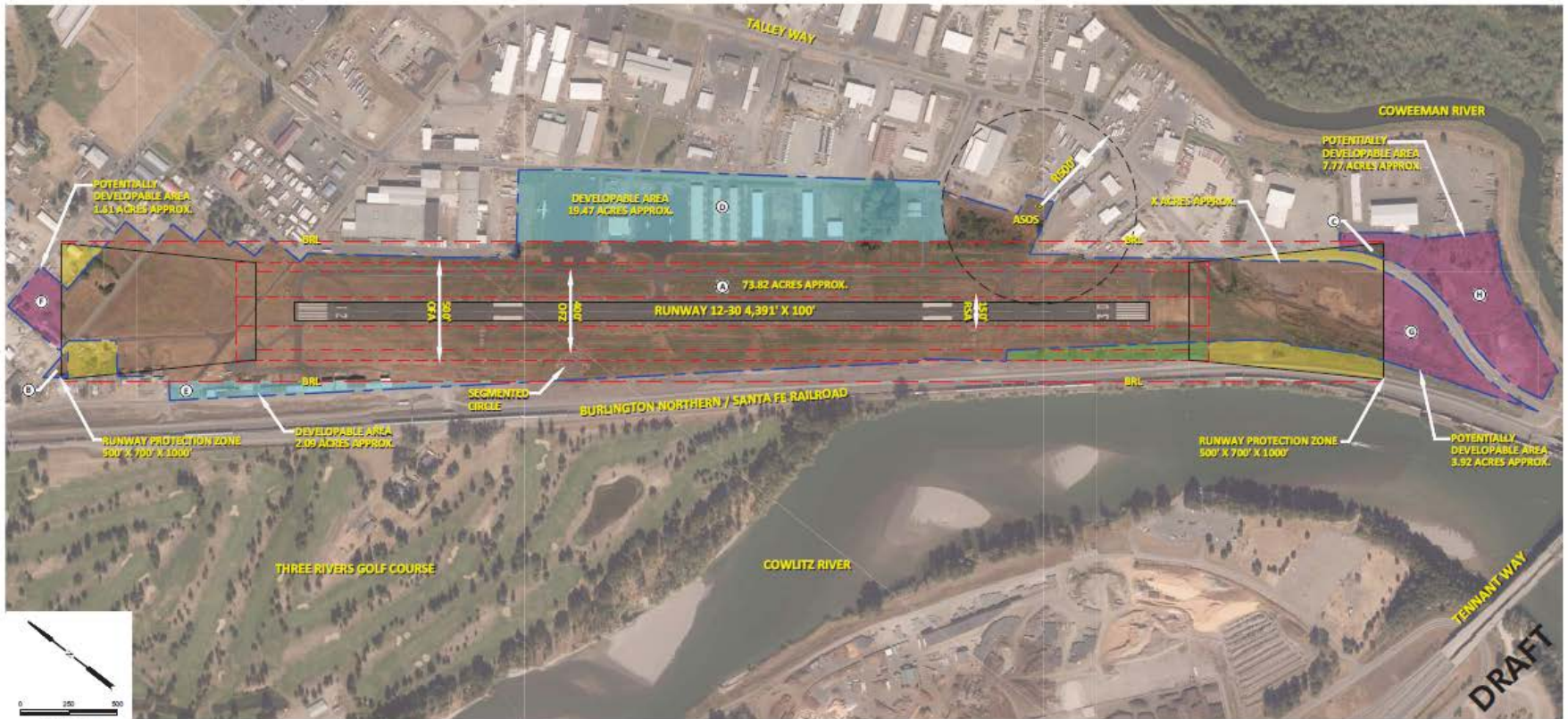
- Developable Land Capacity
- Runway Length & Width (Existing & Future)
- Taxiway Configuration - East Parallel Taxiway (Alpha)
- West Hangar Taxilane

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LEGEND	
	PROPERTY BOUNDARY
	BUILDING RESTRICTION LINE
	DEVELOPABLE AREA
	POTENTIALLY DEVELOPABLE AREA
	OFF PROPERTY RUNWAY PROTECTION ZONE
	OFF PROPERTY OF/OFZ RUNWAY PROTECTIVE SURFACES

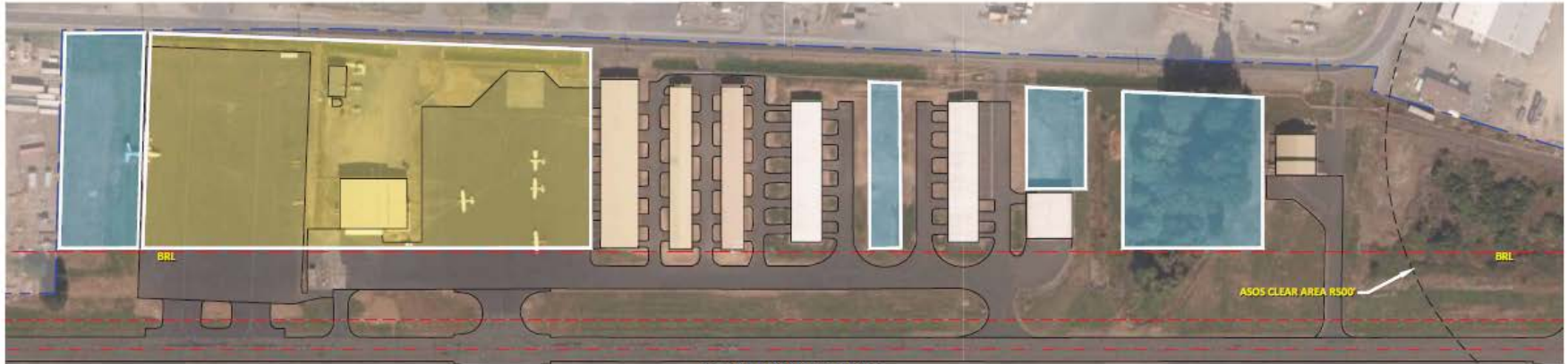
ACREAGE BREAKOUTS	
(A) 73.43 ACRES	(I) 2.09 ACRES
(B) .20 ACRES	(J) 1.51 ACRES
(C) .19 ACRES	(K) 3.92 ACRES
(D) 19.47 ACRES	(H) 7.77 ACRES
TOTAL ACREAGE: 108.58 ACRES	



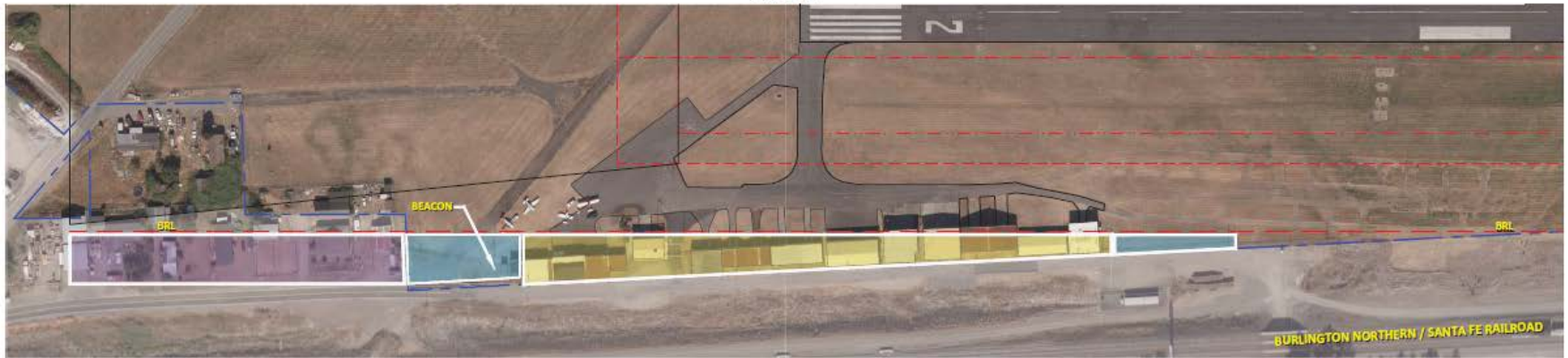


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EAST LANDSIDE AREA
Scale: 1"=80'



WEST LANDSIDE AREA
Scale: 1"=80'

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LEGEND	
	PROPERTY BOUNDARY
	BUILDING RESTRICTION LINE
	REDEVELOPMENT AREA
	DEVELOPMENT AREA (EXIST. AIRPORT PROP.)
	DEVELOPMENT AREA (FUTURE)



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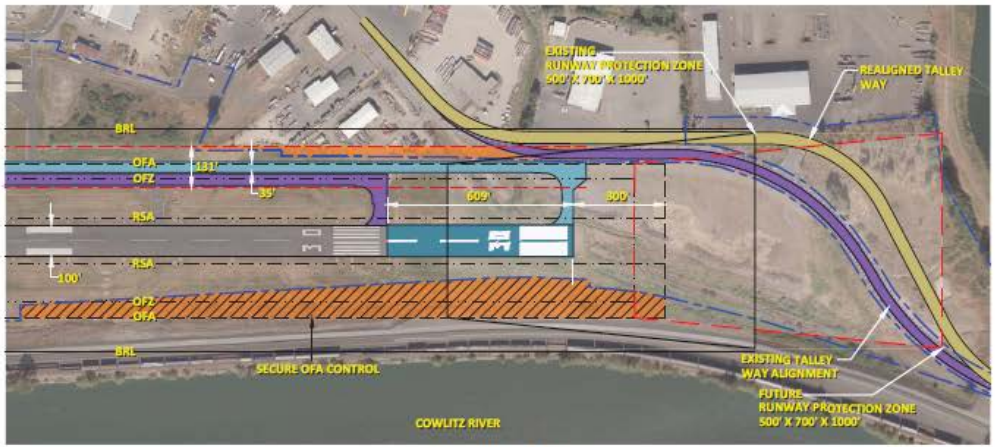
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LEGEND		
AIRPORT PROPERTY BOUNDARY	PROPOSED BUILDINGS (REQUIRES PROPERTY ACQUISITION)	OFF AIRPORT PROPERTY WITHIN RUNWAY OBJECT FREE AREA (ROFA) & RUNWAY OBJECT FREE ZONE (ROFZ)
PROPOSED RUNWAY WIDTH	TALLEY ROAD REALIGNEMENT	
PROPOSED TAXIWAY ALIGNMENT (REQUIRES PROPERTY ACQUISITION)	PAVEMENT TO BE REMOVED	
PROPOSED BUILDINGS	OFF AIRPORT PROPERTY WITHIN TAXIWAY OBJECT FREE AREA (TOFA)	



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LEGEND			
	AIRPORT PROPERTY BOUNDARY		OFF AIRPORT PROPERTY WITHIN RUNWAY OBJECT FREE AREA (ROFA) & RUNWAY OBJECT FREE ZONE (ROFZ)
	PROPOSED RUNWAY ALIGNMENT		PAVEMENT TO BE REMOVED
	PROPOSED TAXIWAY ALIGNMENT (REQUIRES PROPERTY ACQUISITION)		OFF AIRPORT PROPERTY WITHIN TAXIWAY OBJECT FREE AREA (TOFA)
	PROPOSED BUILDINGS		
	PROPOSED BUILDINGS (REQUIRES PROPERTY ACQUISITION)		
	TALLEY ROAD REALIGNMENT		