

# Methow Valley State Airport Airport Layout Plan

**Project Coordination Public Meeting**

May 20, 2009



# ALP Project Team

## Local Planning Advisory Committee

Dave Sandoz – Town of Winthrop Building Official

Kurt Oakley – Winthrop Chamber of Commerce

Charlene Beam – Okanogan County Office of Planning & Development

John Button – North Cascades Smokejumper Base

Jeff Wilkens – Wenatchee Valley Transportation Council (North Central RTPO)

## WSDOT Aviation Division

John Sibold - Director

Eric Johnson- Aviation Construction Project Manager

Paul Wolf - State Airport Manager

Nisha Marvel - Communications

## Century West Engineering

Matt Rogers, P.E.-Project Manager

David Miller, AICP-Senior Aviation Planner

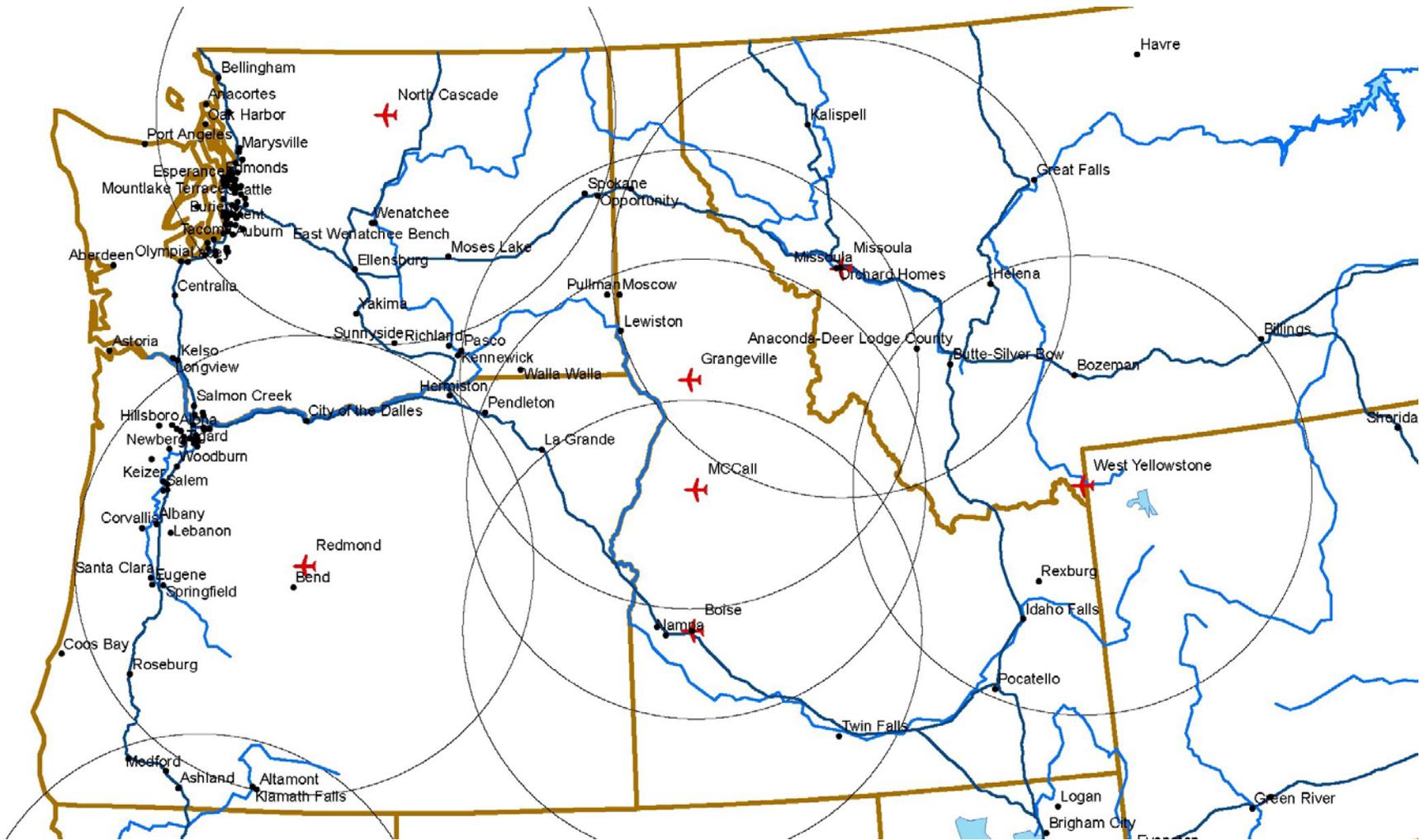
## FAA

Mary Vargas - Washington State Planner

Jeff Winter – Civil Engineer







# USFS NW Smoke Jumper Bases

# FAA Funding

- Federal Airport Improvement Program (AIP)
- Funding for Airports in the National Plan of Integrated Airport Systems (NPIAS)
- Up to \$150,000 per year in general aviation “non-primary entitlement” (NPE) grants
- NPE Funds can roll over for 4 years
- 5% local match required under current program
- FAA Discretionary Grants available for high priority large projects on a limited basis

# FAA Funding Requirements

- FAA Funding is only available for projects that are consistent with FAA design standards. Projects must be included on the FAA approved Airport Layout Plan
- The airport sponsor must sign grant assurances when funding is received that commit the airport to maintain facilities paid for with FAA grant funding for 20 years for construction projects and in perpetuity for land acquisition
- For most General Aviation airports, FAA funding is a vital component of the funding necessary to maintain the airport



# FAA Design Standards

- Applicable design standards for an airport are determined by the Design Aircraft, or family grouping of similar aircraft.
- The Design Aircraft is defined as the most demanding aircraft that uses an airport and has at least 500 take offs and landings annually.
- Based on the US Forest Service, Medevac, private and commercial turboprop and business jet activity at the Methow Valley State Airport, the applicable standards are FAA Airplane Design Group II (ADG II) and Aircraft Approach Category B for Runway 13/31

CENTURY WEST ENGINEERING CORPORATION Aviation				
A-I	B-I	A-II, B-II	B-II	A-III, B-III
less than 12,500 lbs. or less (small)	less than 12,500 lbs. or less (small)	less than 12,500 lbs. or less (small)	greater than 12,500 lbs.	greater than 12,500 lbs.
<b>Beech Baron 55</b> Beech Bonanza Cessna 150 Piper Archer Piper Seneca	Beech Baron 58 Beech King Air 100 Cessna 402 Cessna 421 <b>Piper Navajo</b> Piper Cheyenne Cessna Citation I	Super King Air 200 Cessna 441 <b>DHC Twin Otter</b> Cessna Caravan King Air C90	Super King Air 300, 350 Beech 1900 Jetstream 31 Falcon 20, 50 Falcon 200, 900 <b>Citation II, Bravo, XLS+</b> Citation CJ3	DHC Dash 7 DHC Dash 8 <b>Q-300, Q-400</b> DC-3 Convair 580 Fairchild F-27 ATR 72 ATP
				
C-I, D-I	C-II, D-II	C-III, D-III	C-IV, D-IV	D-V
<b>Lear 25, 35, 55, 60</b> Israeli Westwind HS 125 - 700	Gulfstream II, III, IV Canadair 600 <b>Canadair Regional Jet</b> Lockheed JetStar Citation X Citataton Sovereign Hawker 800 XP	Boeing Business Jet B 727-200 <b>B 737-300 Series</b> MD-80, DC- 9 Fokher 70, 100 A319, A320 Gulfstream V Global Express	B- 757 B- 767 DC- 8-70 DC- 10 <b>MD- 11</b> L 1011	<b>B- 747 Series</b> B- 777
				

# Key Project Elements

- **Inventory**-document and evaluate existing facilities and conditions
- **Forecasts** -define current activity and project future aviation activity through the twenty-year planning period:
  - Based Aircraft
  - Aircraft Operations
  - Design Aircraft (Current/Future)
  - Specific Activity Breakdowns  
(Peaking, Aircraft Fleet Mix, etc.)



# Key Project Elements

- **Facility Requirements**-translate forecast demand into specific facility requirements and evaluate airfield's conformance to FAA design standards
  - Airside-Runway Length, Taxiways, etc.
  - Landside-Aircraft Parking, Hangars, etc.
  - Lighting and Navigational Aids
  - Airfield Pavement
  - Other-FBO, Fuel Storage, Security, Utilities, Roadways

# Key Project Elements

- **Airport Development Alternatives** - create options for developing new facilities to meet forecast demand and facility requirements:

## Steps Taken

- Prepare and Present Draft Preliminary Options
- Public and Planning Advisory Committee Review
- Refine Option Elements Based on Input
- Prepare and Present Preliminary Preferred Alternative
- Public and Planning Advisory Committee Review
- Additional Refinement (as needed)
- WSDOT Aviation Division Selects Preferred Alternative for ALP

# Desired Outcomes

- Maintain the airport's current aeronautical capabilities and accommodate future needs, while meeting FAA standards.
- Create an effective improvement program that establishes clear priorities that are financially feasible
- Upgrade airport capabilities based on safety needs, technology, etc.
- Minimize impacts on surrounding property owners and neighbors

# Work Completed to Date

- Inventory of Existing Conditions
- Review of Conformance to FAA Standards
- Forecast of Aviation Activity
- Define Facility Requirements
- Preliminary Alternatives
- Refined Alternative



# METHOW VALLEY STATE AIRPORT

## AIRPORT LAYOUT PLAN UPDATE

**FAA AIRPORT DESIGN STANDARDS**

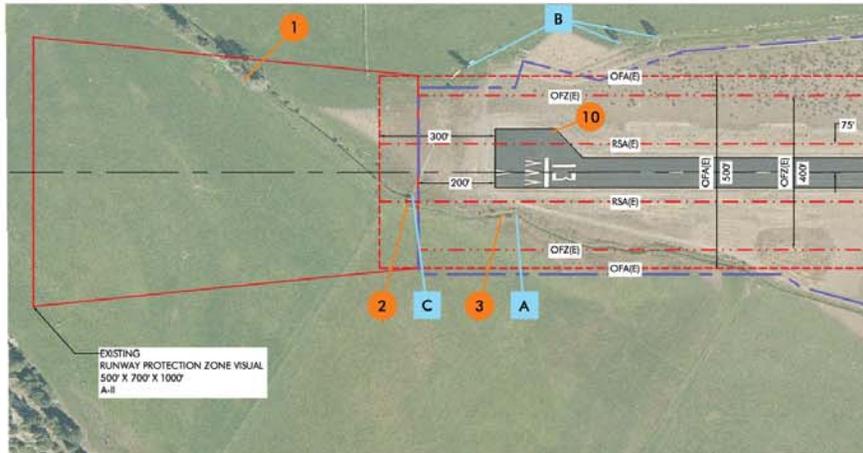
- 1 - RPZ (RWY 13) - TREES, PROPERTY OWNERSHIP
- 2 - RSA - IRRIGATION DITCH, PROPERTY OWNERSHIP
- 3 - OFA - TERRAIN
- 4 - OFZ - ROAD, CONCRETE BARRIERS
- 5 - RSA - ROAD, CONCRETE BARRIERS
- 6 - RPZ - ROAD
- 7 - RPZ - STRUCTURES
- 8 - RSA - RIVER CHANNEL
- 9 - RPZ - TREES
- 10 - OFZ - A/C HOLD
- 11 - OFA - FENCE

**FAR PART 77 SURFACE PENETRATIONS/CONFLICTS**

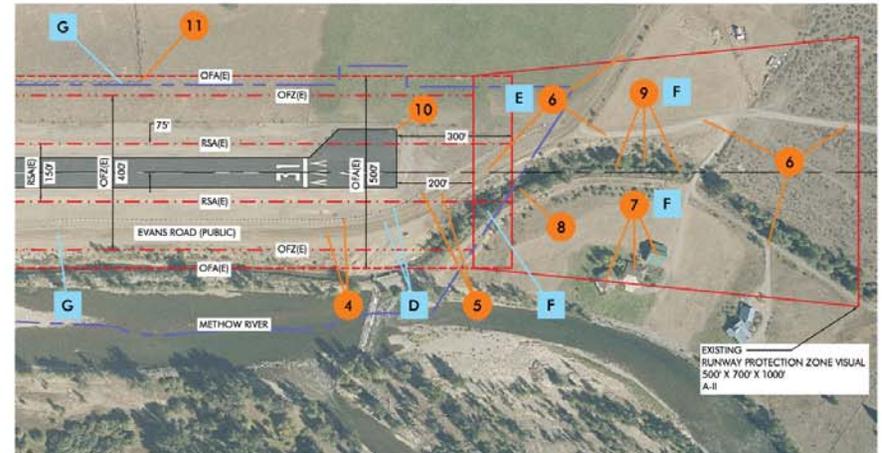
- A - PRIMARY - TERRAIN
- B - TRANSITIONAL - TREES
- C - APPROACH (RWY 13) - TERRAIN
- D - PRIMARY - CONCRETE BARRIERS; VEHICLES ON ROADWAY
- E - APPROACH (RWY 31) - VEHICLES ON ROADWAY
- F - APPROACH (RWY 31) - TREES, STRUCTURES
- G - PRIMARY - FENCE

**LEGEND**

	EXISTING	FUTURE
FACILITIES		
BUILDINGS		
RUNWAY		
BUILDING RESTRICTION LINE (BR)	BR (E)	
AIRCRAFT PARKING LINE (APL)	APL (E)	
AIRPORT PROPERTY LINE		
RUNWAY SAFETY AREA (RSA)		
OBJECT FREE AREA (OFA)		
TAXIWAY OBJECT FREE AREA (TOFA)		
OBSTACLE FREE ZONE (OFZ)		
RUNWAY PROTECTION ZONE (RPZ)		
GROUND CONTOURS		
AIRPORT REFERENCE POINT (ARP)		
REIL		
VISUAL GUIDANCE INDICATORS		
WIND INDICATOR		
FENCE		
BEACON		
THRESHOLD LIGHTS		
SEGMENTED CIRCLE WIND INDICATOR		
BUILDINGS HAVE BEEN REMOVED		



**RWY 13 END**



**RWY 31 END**



MAGNETIC DEC.  
142.54 DEGS  
(2006 VALUE)

**DRAFT**

# METHOW VALLEY STATE AIRPORT

## AIRPORT LAYOUT PLAN UPDATE

**FAA AIRPORT DESIGN STANDARDS**

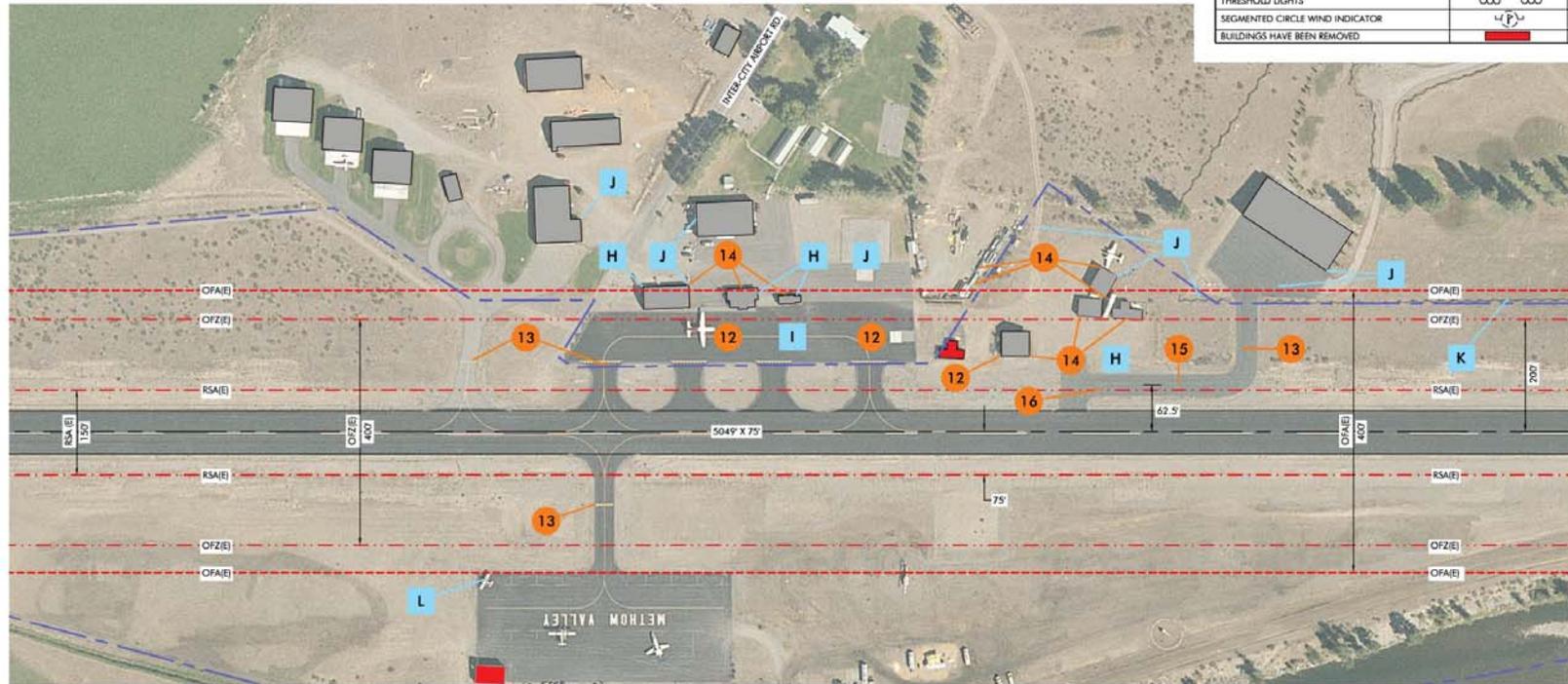
- 12 - OFZ, APL - PARKED AIRCRAFT, HANGAR (APRON)
- 13 - OFZ - A/C HOLD LINES
- 14 - OFA - STRUCTURES, EQUIPMENT, FENCE
- 15 - PARALLEL TAXIWAY SEPARATION
- 16 - RSA - TAXIWAY

**FAR PART 77 SURFACE PENETRATIONS/CONFLICTS**

- H - PRIMARY - STRUCTURES
- I - PRIMARY - PARKED A/C
- J - TRANSITIONAL - STRUCTURES, PARKED A/C, EQUIPMENT
- K - PRIMARY - FENCE
- L - TRANSITIONAL - PARKED A/C

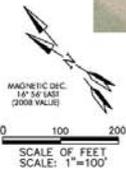
**LEGEND**

FACILITIES	EXISTING	FUTURE
BUILDINGS	[Grey Box]	
RUNWAY	[Black Line]	
BUILDING RESTRICTION LINE (BRL)	[Green Line]	
AIRCRAFT PARKING LINE (APL)	[Green Line]	
AIRPORT PROPERTY LINE	[Blue Line]	
RUNWAY SAFETY AREA (RSA)	[Red Dashed Line]	
OBJECT FREE AREA (OFA)	[Red Dashed Line]	
TAXIWAY OBJECT FREE AREA (TOFA)	[Red Dashed Line]	
OBSTACLE FREE ZONE (OFZ)	[Red Dashed Line]	
RUNWAY PROTECTION ZONE (RPZ)	[Red Dashed Line]	
GROUND CONTOURS	[Blue Line]	
AIRPORT REFERENCE POINT (ARP)	[Circle with Crosshair]	
BEEL	[Circle with X]	
VISUAL GUIDANCE INDICATORS	[Square with X]	
WIND INDICATOR	[Arrow]	
FENCE	[Line with X]	
BEACON	[Star]	
THRESHOLD LIGHTS	[Circle]	
SEGMENTED CIRCLE WIND INDICATOR	[Circle with Arrow]	
BUILDINGS HAVE BEEN REMOVED	[Red Box]	



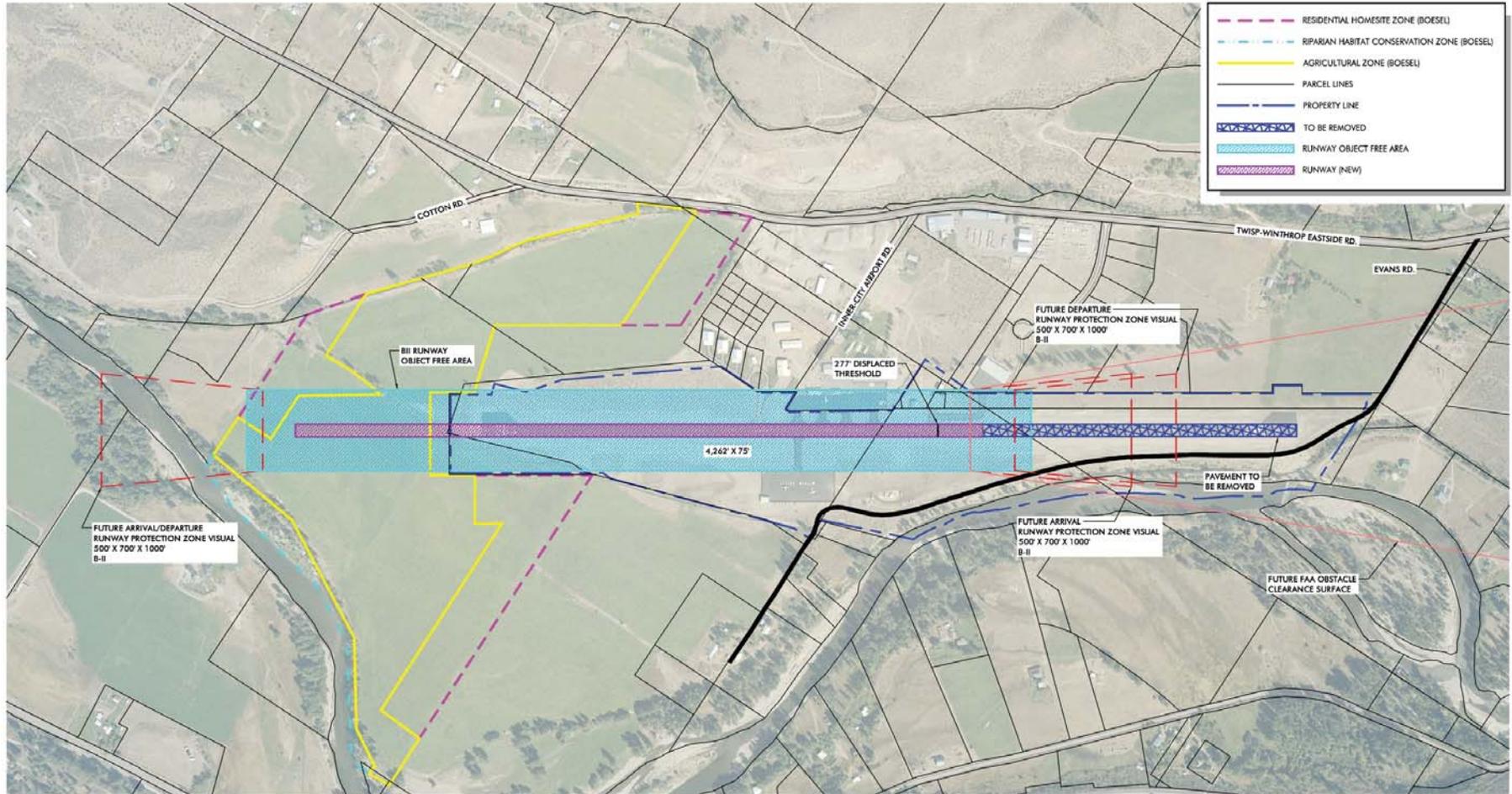
**EAST & WEST LANDSIDE AREAS**

**DRAFT**



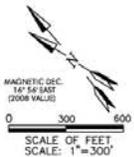
# METHOW VALLEY STATE AIRPORT

## AIRPORT LAYOUT PLAN UPDATE



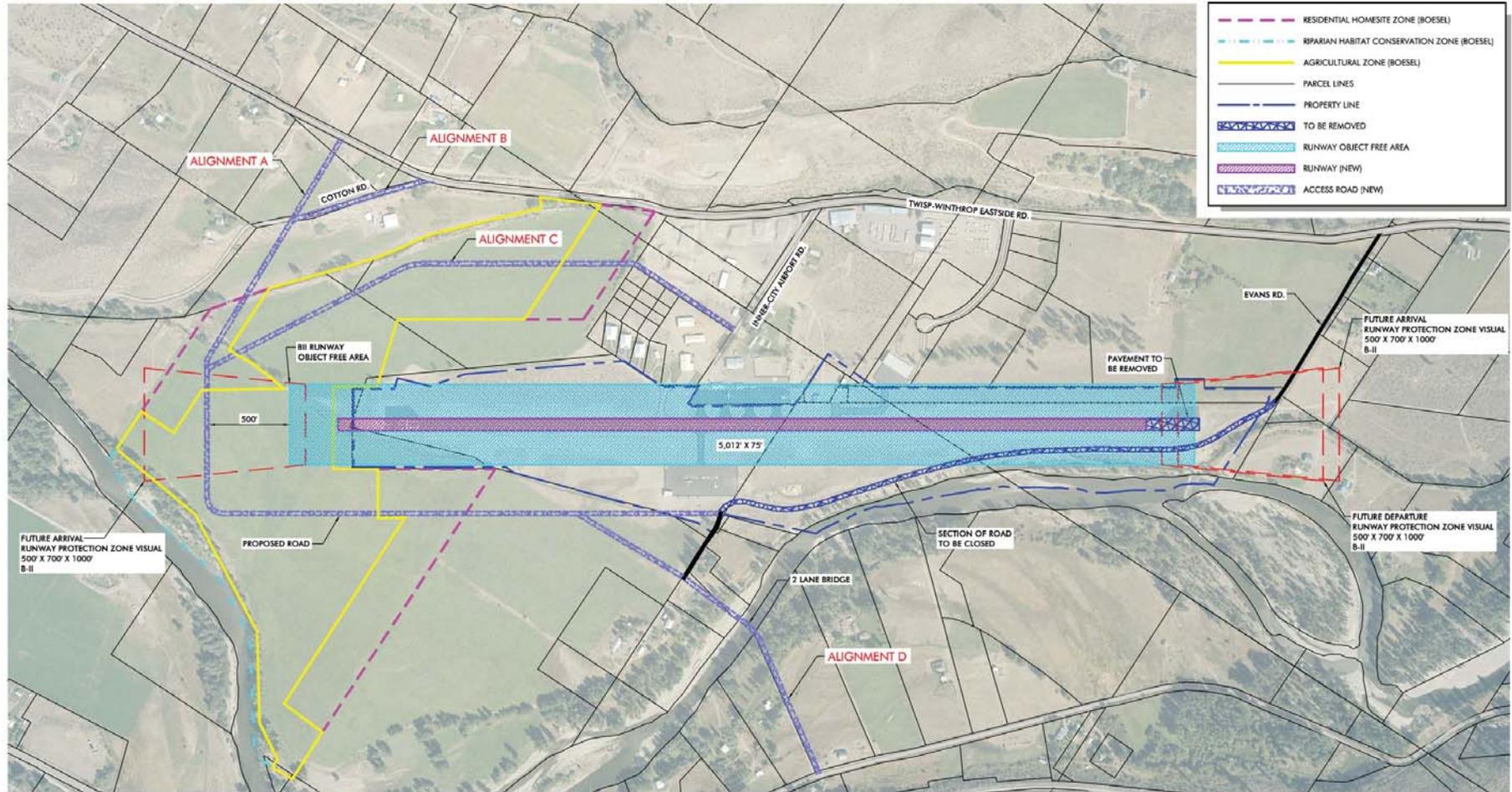
- RESIDENTIAL HOMESTEAD ZONE (BOESL)
- RIPARIAN HABITAT CONSERVATION ZONE (BOESL)
- AGRICULTURAL ZONE (BOESL)
- PARCEL LINES
- PROPERTY LINE
- ▨ TO BE REMOVED
- ▨ RUNWAY OBJECT FREE AREA
- ▨ RUNWAY (NEW)

OPTION A

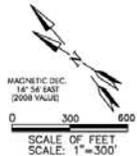


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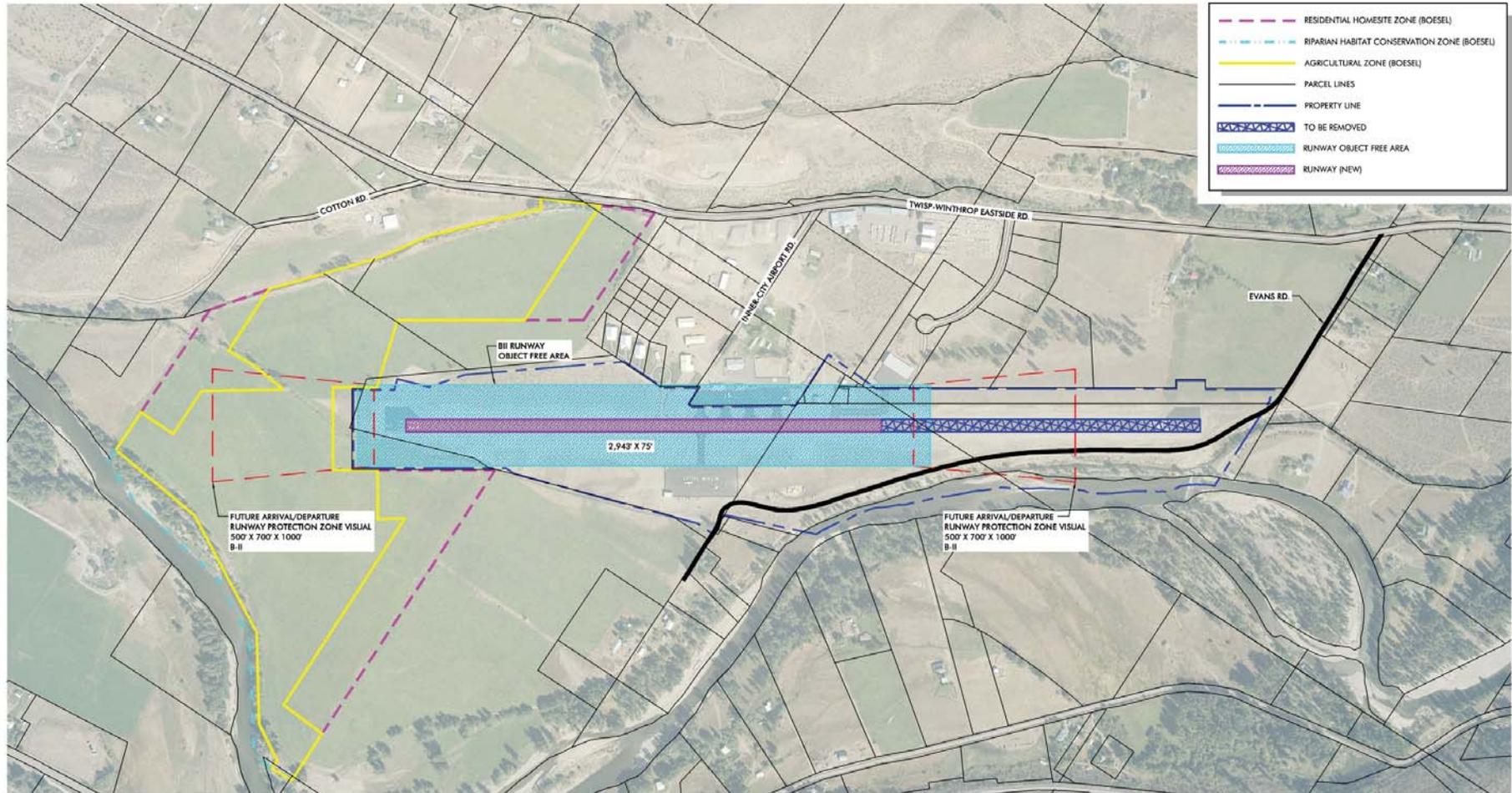


OPTION B

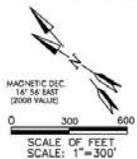


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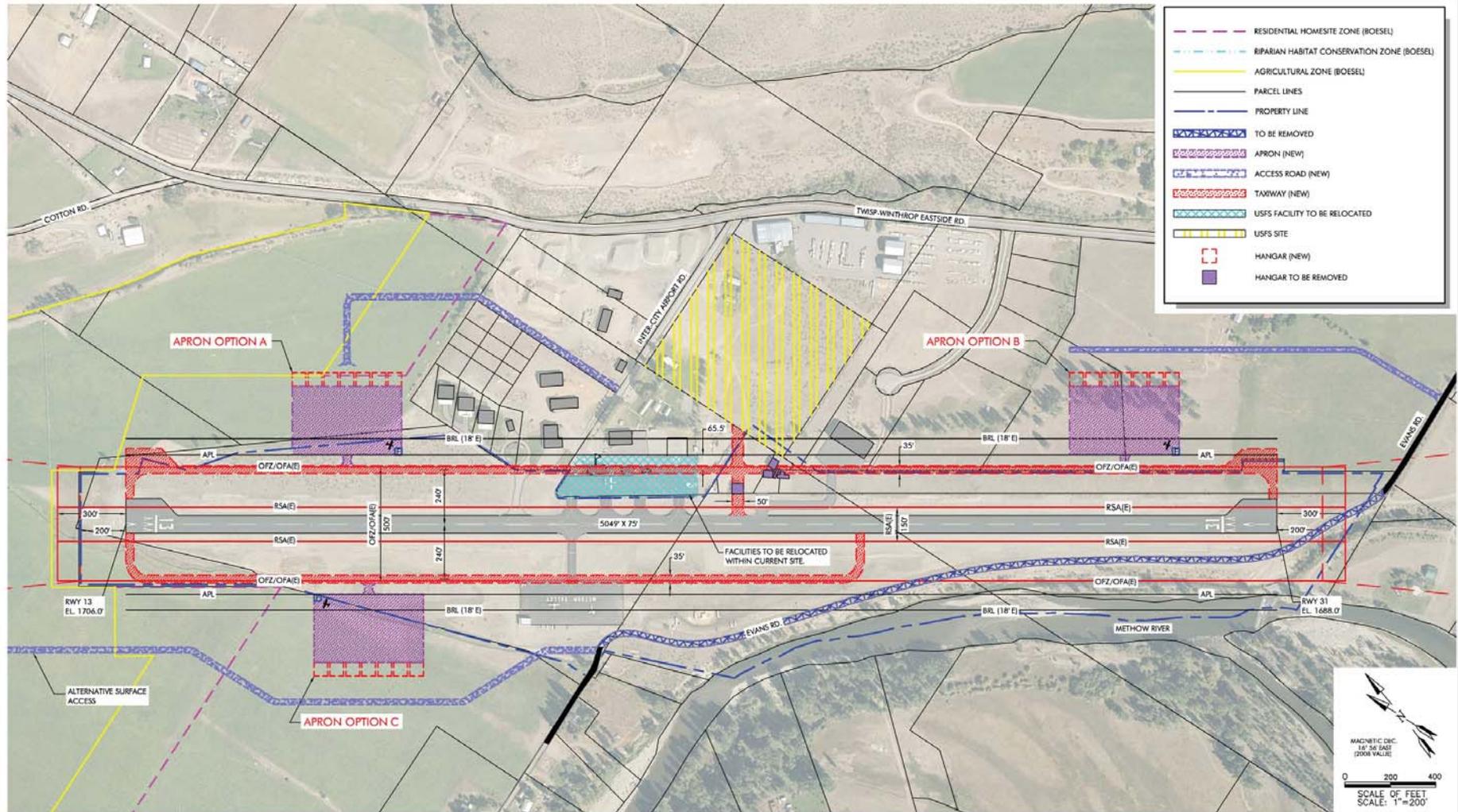


OPTION C



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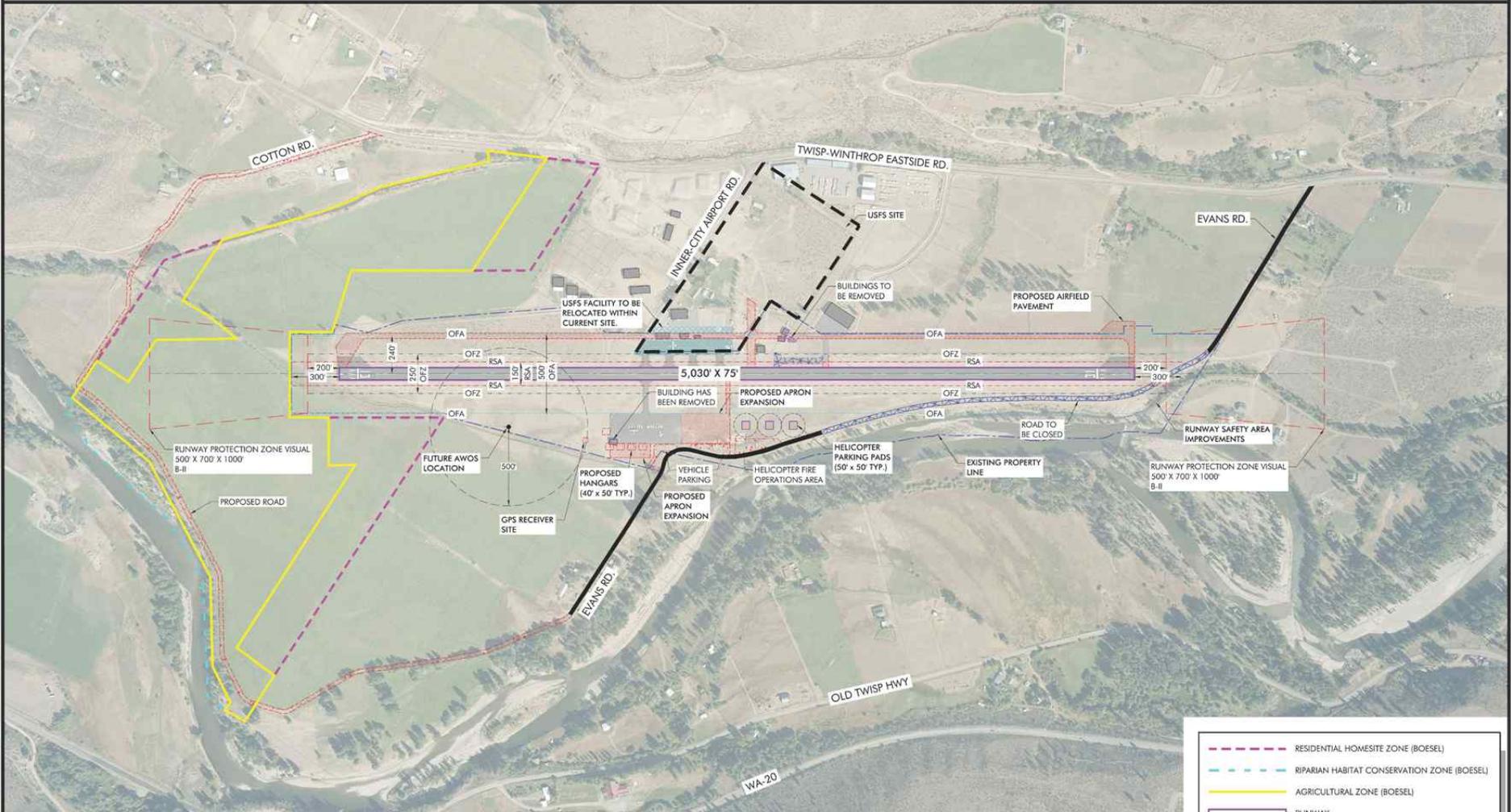


# Summary of Comments Received on Preliminary Alternatives

- For all Alternatives, the impact to adjacent agricultural land should be minimized
- Roadway alignments should avoid agricultural land and be as economical as possible
- Evans Road should remain as is and signals should be installed to stop traffic
- The jet traffic is disruptive to the Valley
- USFS, NW Medstar, Aero Methow have all commented that the existing runway length is necessary for their ongoing operations
- Maintain the Status Quo
- Do not seek Federal Funding
- Seek other alternatives
- The forecasts are too high

# METHOW VALLEY STATE AIRPORT

## AIRPORT LAYOUT PLAN UPDATE



- - - RESIDENTIAL HOMESITE ZONE (BOESL)
- - - RIPARIAN HABITAT CONSERVATION ZONE (BOESL)
- - - AGRICULTURAL ZONE (BOESL)
- RUNWAY

MAGNETIC DEC.  
16° 56' EAST  
(2008 VALUE)

PHOTO SOURCE: BERGMAN PHOTOGRAPHIC  
SERVICES INC. (8-08)

**DRAFT**

# Questions?



# Next Steps

- Receive FAA, Planning Advisory Committee, Stakeholder, and Public Comment on Preliminary Preferred Alternative. 30 Day Public Review Period (concludes June 19<sup>th</sup>). Select the Preferred Alternative (by July 1<sup>st</sup>)
- Complete the Airport Layout Plan and associated drawings
- Complete the Capital Improvement Program including all projects identified on the ALP
- Finalize ALP report and submit final deliverables to FAA for review and comment
- All future FAA -funded development projects require project specific environmental review under the Federal National Environmental Policy Act (NEPA)