

# TOOELE VALLEY AIRPORT

Public Information Meeting #2  
**TVY Airport Master Plan**

SLC DEPARTMENT OF AIRPORTS



**RS&H**

APRIL 13, 2023

# Agenda

- » Master Plan Overview
- » Aviation Demand Forecast Recap
- » Facility Requirements Recap
- » Development Alternatives
- » Comprehensive Development Plan
- » Next Steps





# MASTER PLAN OVERVIEW



# Master Plan Process



Inventory existing conditions

- Facilities and equipment



Forecast aviation demand

- Aircraft operations and based aircraft



Determine future facility requirements

- Airfield, navigational aids, and supporting facilities
- Aircraft parking/storage, access roads/parking, and utilities



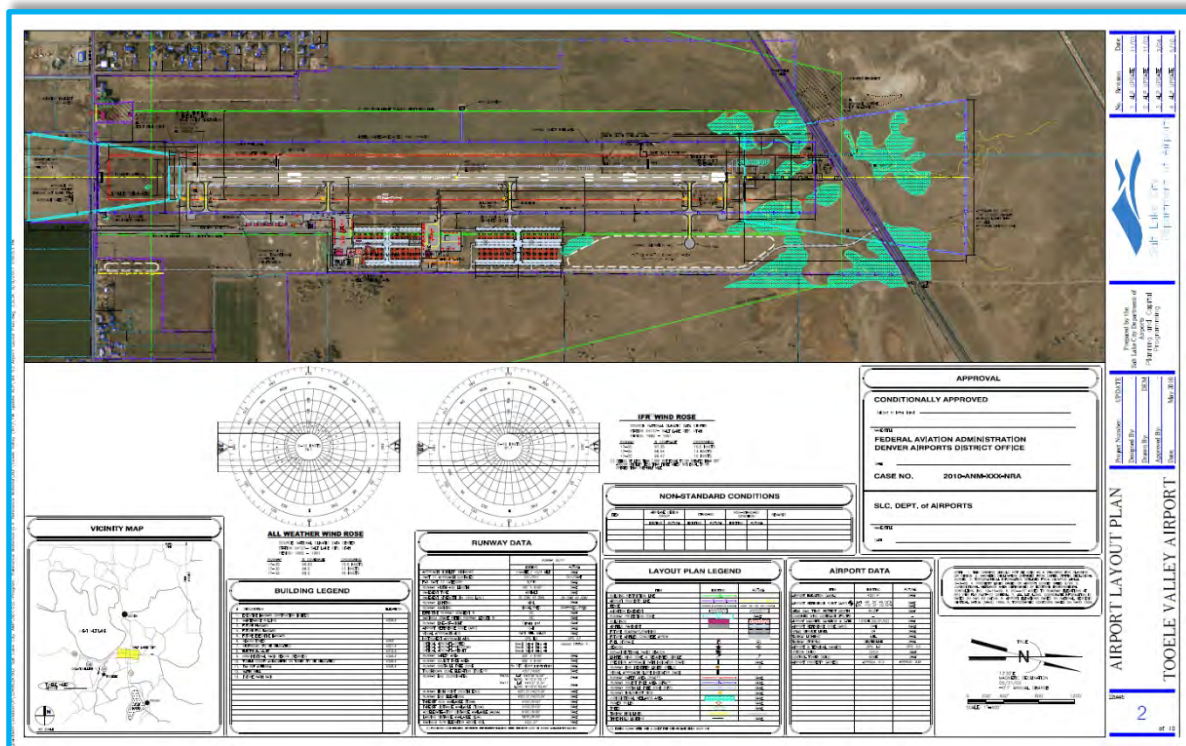
Identify and evaluate development alternatives

- Demand-driven solutions
- Financial feasibility

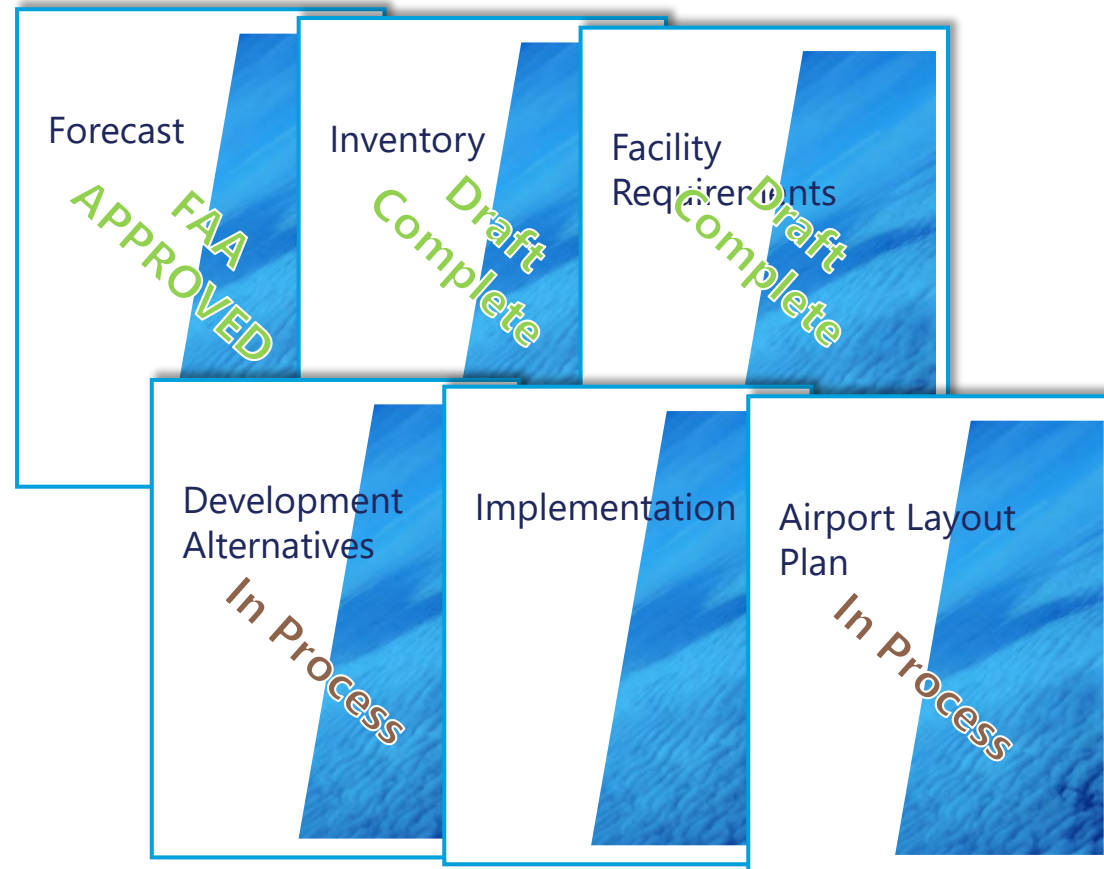


# Master Plan Work Products

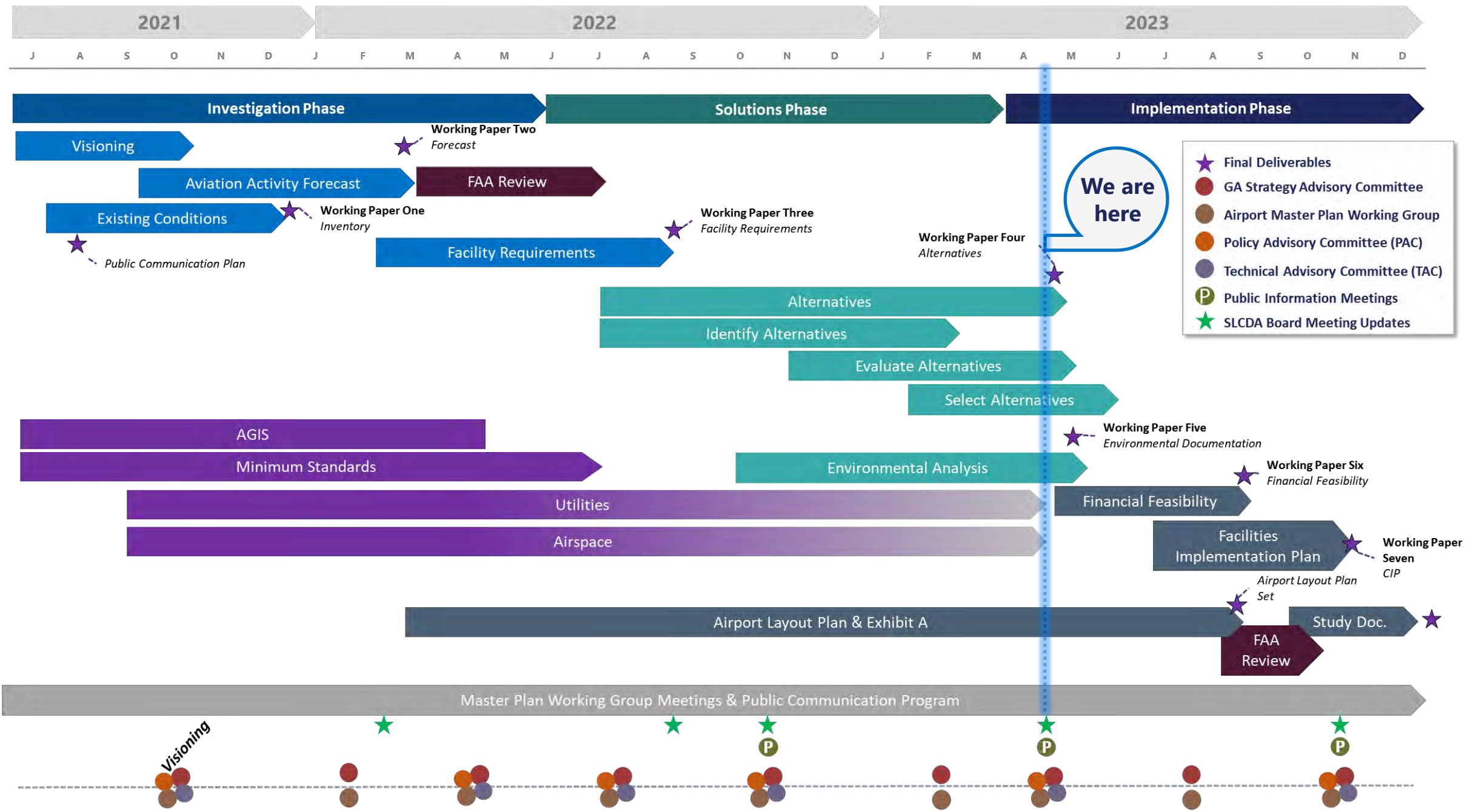
## Airport Layout Plan: *(Illustrates the plan)*



## Technical Report: *(Documents the why and how)*



# Master Plan Schedule



# *AVIATION DEMAND FORECAST*





# The Forecast Projects...



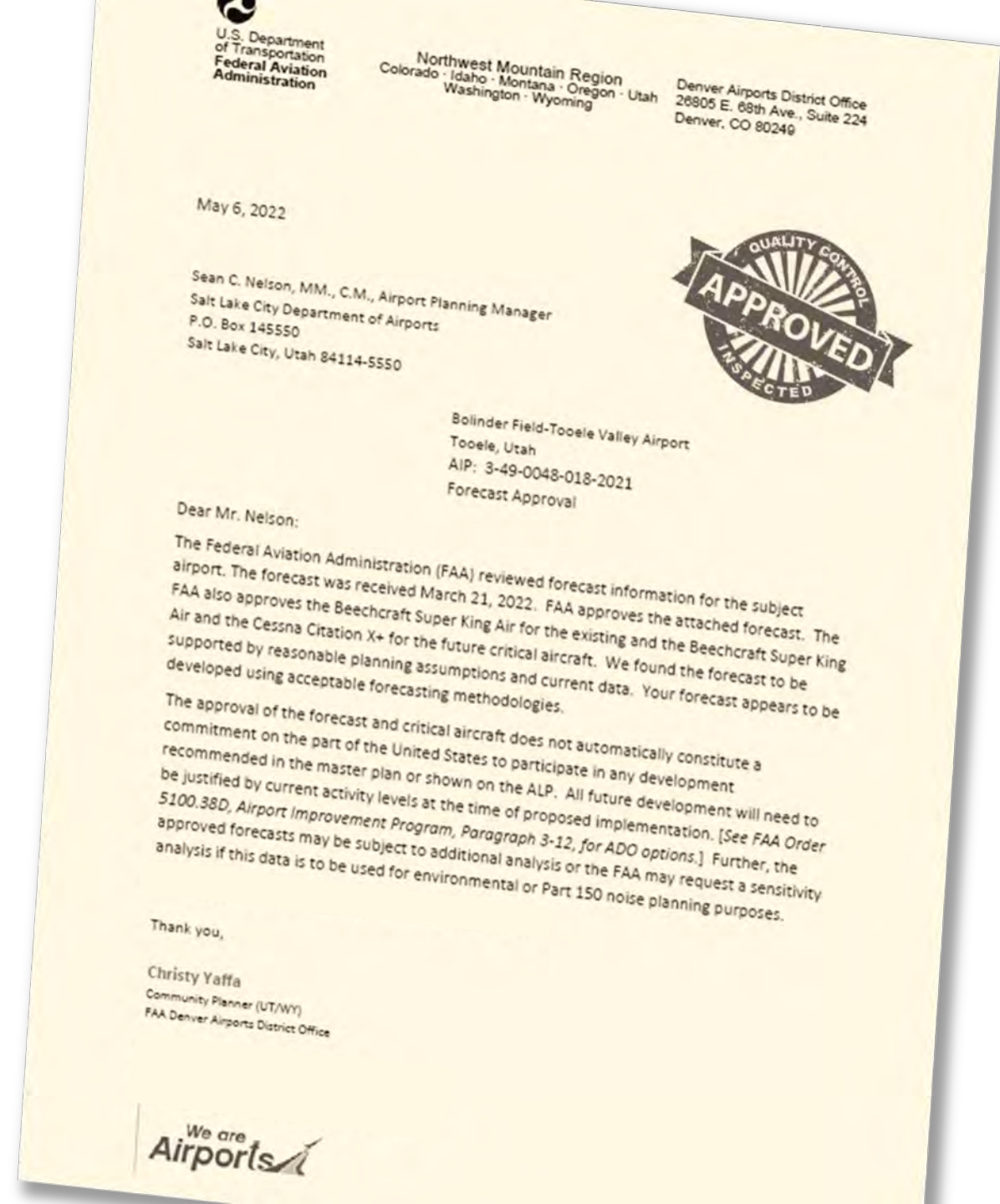
Based aircraft



Operations



Critical aircraft





# Planning Activity Levels

Forecast Year	Planning Activity Level (PAL)	Operations	Based Aircraft No Action	Based Aircraft High Growth
2020	Base Year	43,048	20	20
<b>2025</b>	<b>PAL 1</b>	<b>44,820</b>	<b>21</b>	<b>33</b>
<b>2030</b>	<b>PAL 2</b>	<b>46,665</b>	<b>22</b>	<b>34</b>
<b>2040</b>	<b>PAL 3</b>	<b>50,585</b>	<b>24</b>	<b>37</b>

# Airport Reference Code

» Aircraft Approach Category (AAC)  
 – What is the landing speed?

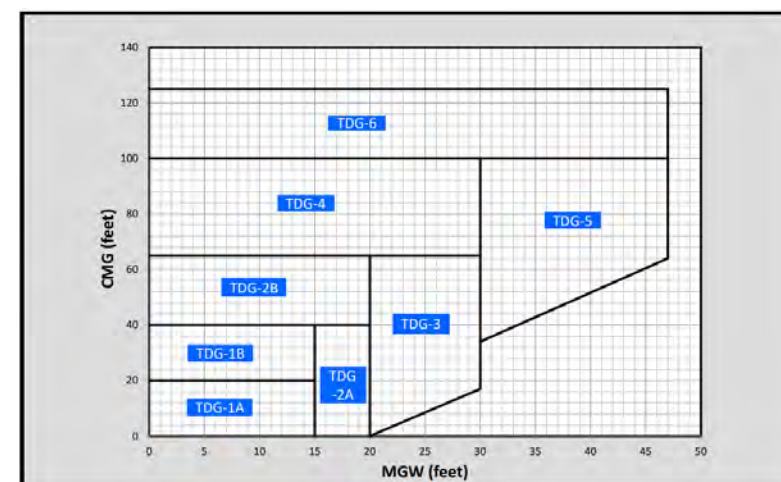
» Airplane Design Group (ADG)  
 – How much space does it take up?  
 – Length? Wingspan? Tail height?

» Taxiway Design Group (TDG)  
 – Landing gear dimensions?  
 – Required turning radius?

## FAA AC 150/5300-13B, Airport Design

AAC	Approach Speed
A	Approach speed less than 91 knots
B	Approach speed 91 knots or more but less than 121 knots
C	Approach speed 121 knots or more but less than 141 knots
D	Approach speed 141 knots or more but less than 166 knots
E	Approach speed 166 knots or more

Group #	Tail Height (ft)	Wingspan (ft)
I	< 20'	< 49'
II	20' - < 30'	49' - < 79'
III	30' - < 45'	49' - < 118'
IV	45' - < 60'	118' - < 171'
V	60' - < 66'	171' - < 214'
VI	66' - < 80'	214' - < 262'





# Critical Aircraft Validated

Critical Aircraft		AAC	ADG	TDG
Existing	Beechcraft Super King Air	B	II	2A
	Beechcraft Super King Air	B	II	2A
Future	Cessna Citation X+	C	II	1B
	<b>Composite</b>	<b>C</b>	<b>II</b>	<b>2A</b>



# *FACILITY REQUIREMENTS*





# Facility Requirements Recap

- » Bring utilities (water/sewer) to airport
- » Coordinate plans with future Midvalley highway extension
- » Correct airfield design standards and Part 77 penetration issues
- » Create plan that supports TVY role with system as reliever airport by:
  - » Meeting market demand – Based/transient aircraft storage and parking
  - » Providing tenant/user services – Fixed Base Operator, fueling facilities
  - » Considering future markets – electric aircraft/vehicles, eVTOL/VTOL, AAM
  - » Supporting ultimate runway length for future critical aircraft – Citation X
  - » Identifying support facilities – Maintenance, equipment storage, administration
  - » Maintaining/enhancing navigational aids and flight procedures

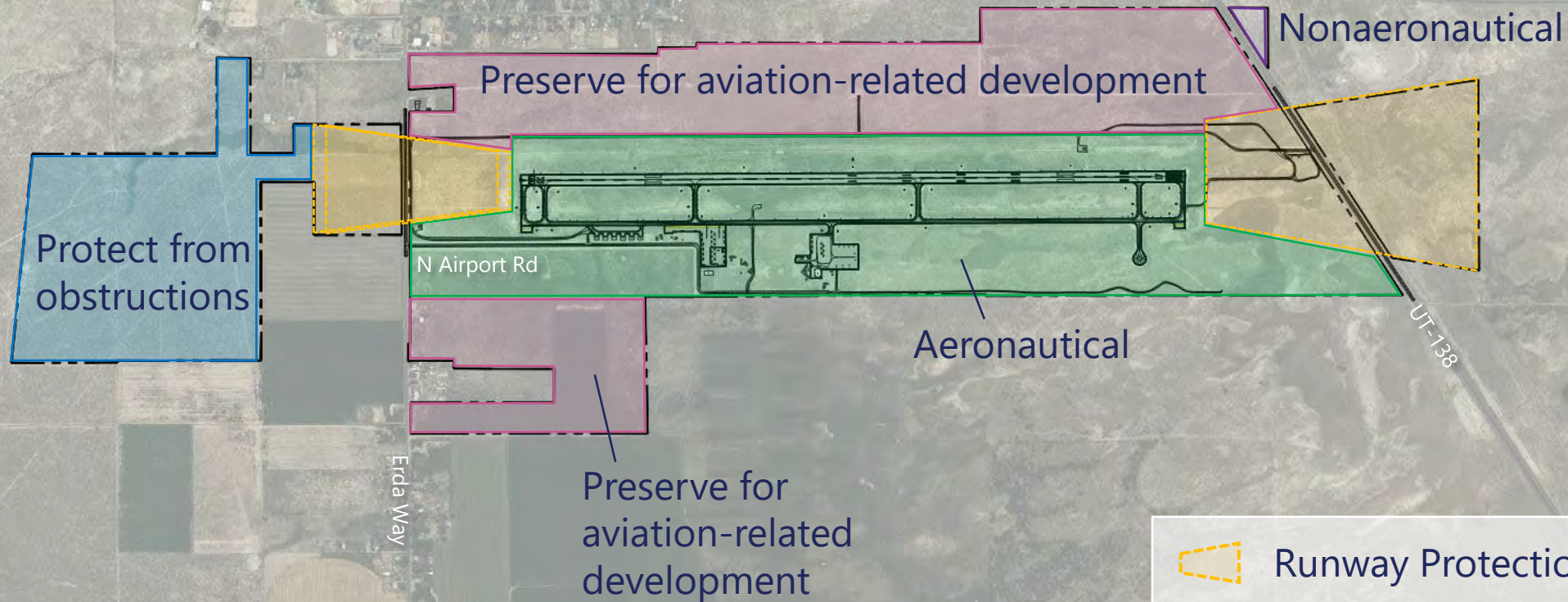
# ALTERNATIVES






# Preferred Land Use

- Focus aeronautical development on east side of airfield
- Protect from obstructions on south where terrain rises
- Preserve other land near airfield for aviation-related development



 Runway Protection Zone

 Property Boundary

1,200'





# Preferred Sub Area Land Use

Preserve for aviation-related development

UT-138

- Establish FBO/fueling facilities central to airfield
- Aircraft storage and parking flanks FBO facilities
- BLM campus established at north end of airfield
- Skydive facilities occupy south end of airfield

Aeronautical

N Airport Rd

**Skydive Facilities**

**Aircraft Parking/Storage**

**FBO and Fuel Storage**

**Aircraft Parking/Storage**

**BLM Campus**

Erda Way

Preserve for aviation-related development

 Runway Protection Zone

 Property Boundary



500'

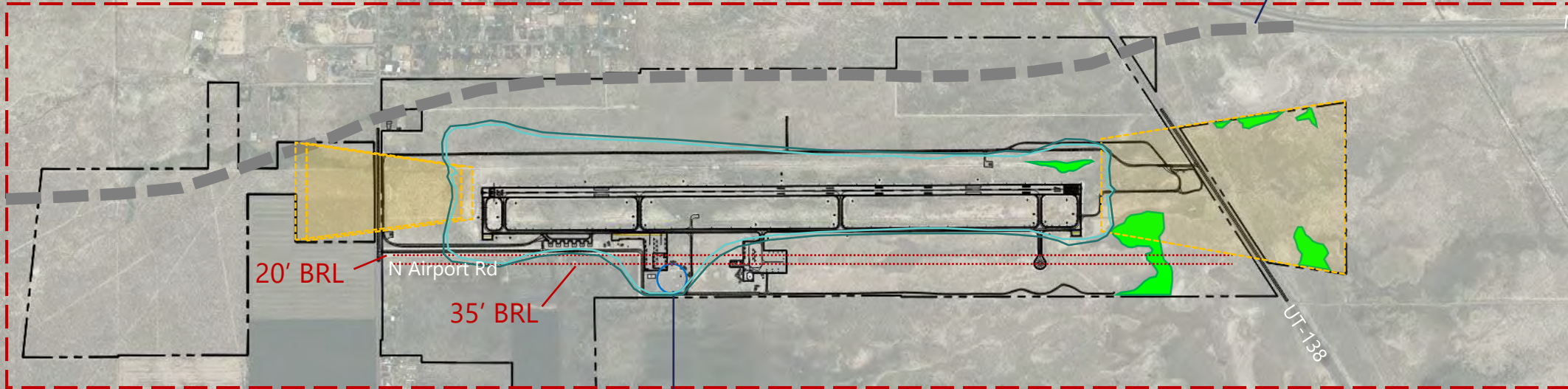


# Known Constraints

- Part 77 surfaces protected through defined BRLs (20' and 35')
- Well protection zone retained while operational
- Wetlands protected or impacts mitigated through NEPA
- Noise contours stay on airport property

Midvalley Highway Extension  
Preliminary Alignment

Proposed Airport Zone A (1/2021 Study)



20' BRL

N Airport Rd

35' BRL

Erda Way

Well Protection Area

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Midvalley Highway

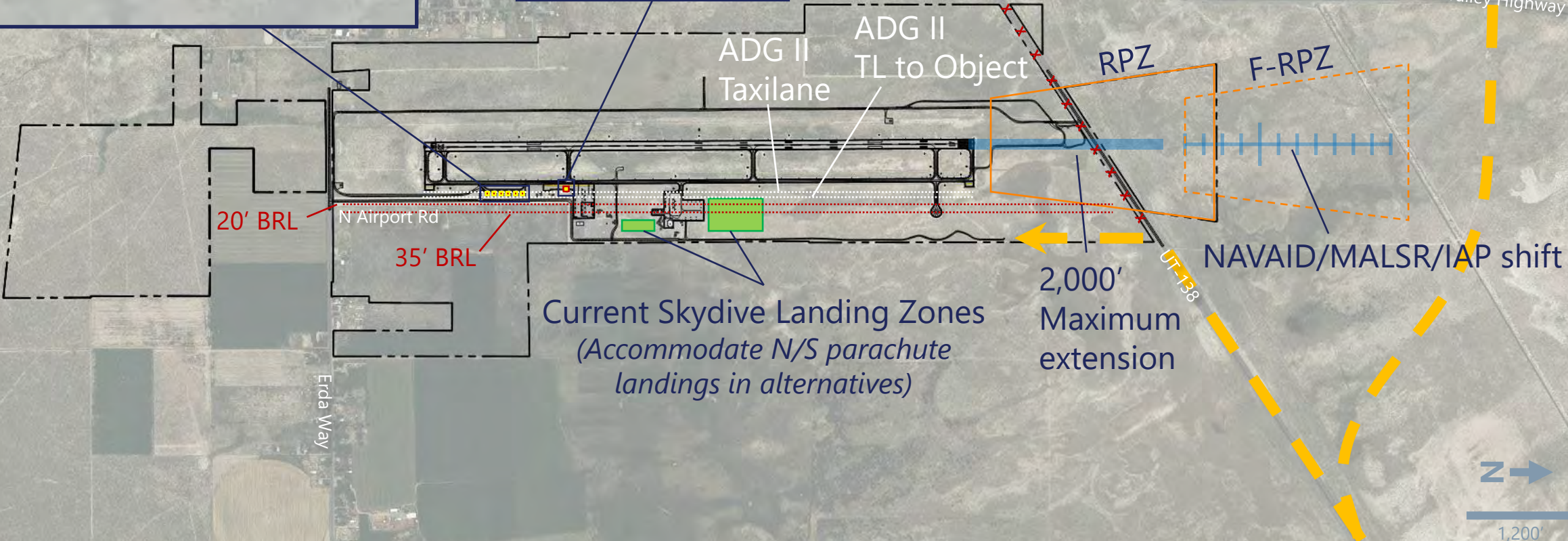
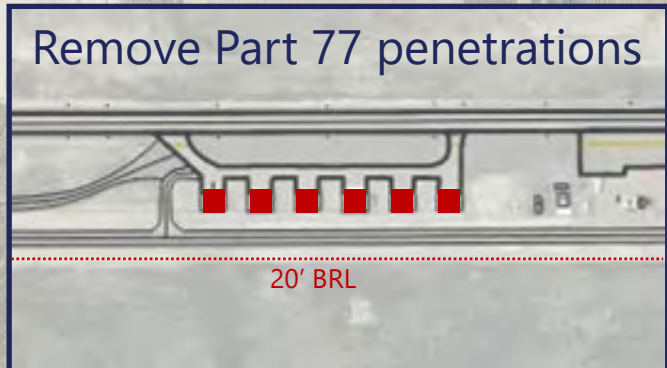
	Wetlands ( <i>in process</i> )		65 DNL Noise Contours
	Well Protection Area		65 DNL Noise Contours (future)
	Property Boundary		
	Airport Overlay Zone A (Proposed)		
	20' Building Restriction Line		

1,200'



# Airfield

Sheep L

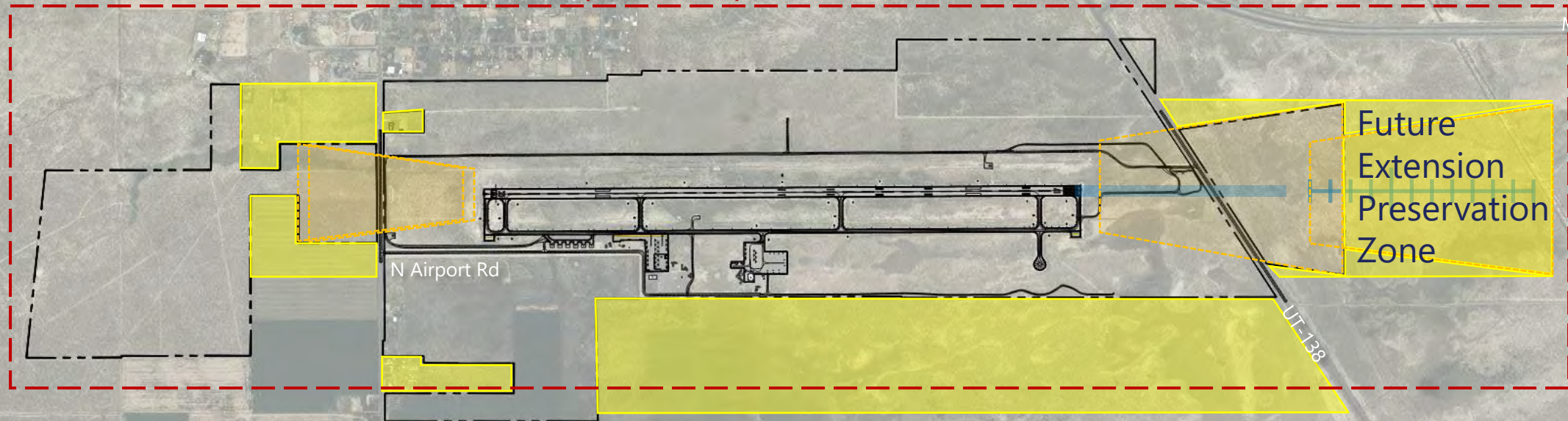





# Land Acquisition/Easement (Recommended)


- Recommended parcels for acquisition/easement to protect airport utility
- Strategic acquisitions/easements can enable meeting future demand needs

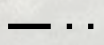
## Proposed Airport Zone A (1/2021 Study)




Future  
Extension  
Preservation  
Zone









 Strategic Land/Easement Acquisition

 Runway Protection Zone

 Property Boundary

 **Z** →  
1,200'



-  Study Area
-  Draft Alignment 1 (EIS)
-  Draft Alignment 2
-  Draft Alignment 3
-  Draft Alignment 4
-  Railroad
-  UNEV Pipeline
-  Historic Architecture



### DRAFT ALIGNMENT 1 (EIS)

This alignment was recommended by the original environmental impact statement (EIS).

- Heavy conflict with UNEV pipeline (high-pressure petroleum line with 50' easement)
- Impacts Tooele Army Depot, Tooele County landfill, and planned development, including Lakeview Business Park
- Double track rail crossing; 1 mile parallel alignment with UPRR; conflicts with future rail expansion

### DRAFT ALIGNMENT 2

- Utilizes open space between airport and historic architecture
- Medium conflict with UNEV pipeline (high-pressure petroleum line with 50' easement)
- Single track rail crossing

May conflict with existing/future Runway 35 RPZ

### DRAFT ALIGNMENT 3

Modifies draft alignment 2 to shift to the east.

- Utilizes open space between airport and historic architecture
- Avoids majority of UNEV pipeline
- Avoids Tooele County landfill
- Single track rail crossing

May conflict with existing/future Runway 35 RPZ

### DRAFT ALIGNMENT 4 (SHEEP LANE)

This alignment was developed based on public feedback and is an extension from Sheep Lane, utilizing the existing corridor.

- Utilizes existing infrastructure (Sheep Lane is a local road, not a state road)
- Impacts historical architecture, planned development, Utah Motorsports Campus
- Heavy conflict with UNEV pipeline (high-pressure petroleum line with 50' easement)
- Single track rail crossing; conflicts with future rail expansion





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# Regional Access

Sheep Lane

UNEV Pipeline

Midvalley Highway  
EA Alternatives

Midvalley Highway

N Airport Rd

A

B

Airport Road  
Alternatives

C

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Erda Way



1,200'



Sheep Lane ROW

Existing 6' Pressure Line ~3,000'

Sheep Lane

UNEV Pipeline



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Existing Hydrant  
And Lift Station

Grantsville A  
Sewer ~ 9,400'  
Water ~ 12,300'

Midvalley Highway

Stansbury Park SPID  
Sewer ~ 17,400'  
Water ~ 14,000'

Grantsville B  
Sewer ~ 12,800'  
Water ~ 12,800'

N Airport Rd

Existing TVY Well

UT-138

Erda Way

# Utilities

- Electrical
- Natural Gas
- Communication
- Water
- Sewer and Storm Drain
- - - Future Water
- - - Future Sewer



1,200'



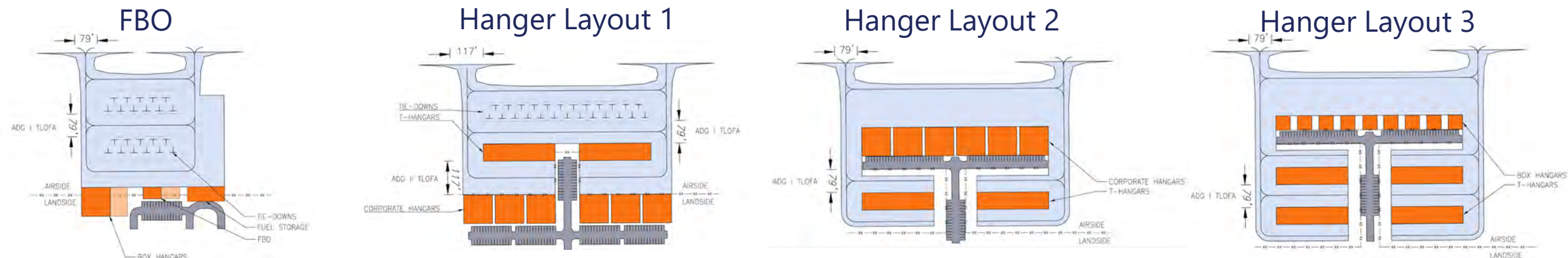
# Aircraft Storage and Tenants

- » ADG I and II Taxiway/Taxilane
- » Near-term focus on T-hangars and small boxes
- » Long-term flexibility to allow larger hangar development

LEGEND	
DESCRIPTION	INTERIM
AIRSIDE PAVEMENT	
LANDSIDE PAVEMENT	
FENCE	
BUILDINGS	

Runway 17-35

Taxiway A



N Airport Rd





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# Airport Support

UT-138



A



E



F



G

ADG II Taxilane

20' BRL  
35' BRL

ADG II  
TL to Object



BLM Campus

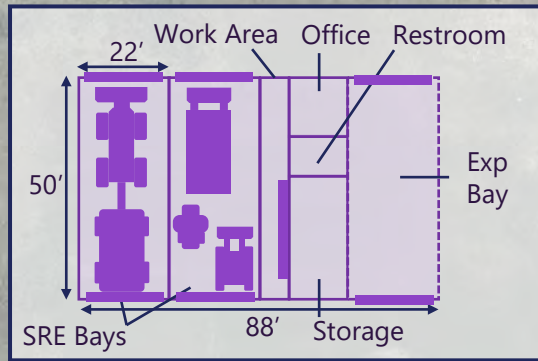
N Airport Rd

B

C

D

Erda Way



500'

# Support Facility Alternatives Evaluation

Evaluation Criteria	B	C	D	F	G
Safety	Good	Good	Good	Good	Good
Operational Efficiency	Good	Fair	Good	Good	Good
FAA Design Standards	Good	Good	Good	Good	Good
Resolves Current Issues	Good	Good	Good	Good	Good
Meets Long-Term Needs	Good	Good	Fair	Good	Fair
Quality Level of Service	Good	Fair	Good	Good	Good
Ease of Implementation	Good	Good	Good	Good	Good
Cost to Implement	Good	Good	Good	Good	Good
Flexible/Future Expansion	Good	Fair	Poor	Fair	Fair
EONS Impact	Good	Good	Good	Good	Good
Support Sustainability Principles	Good	Good	Good	Good	Good

Legend

Good

Fair

Poor

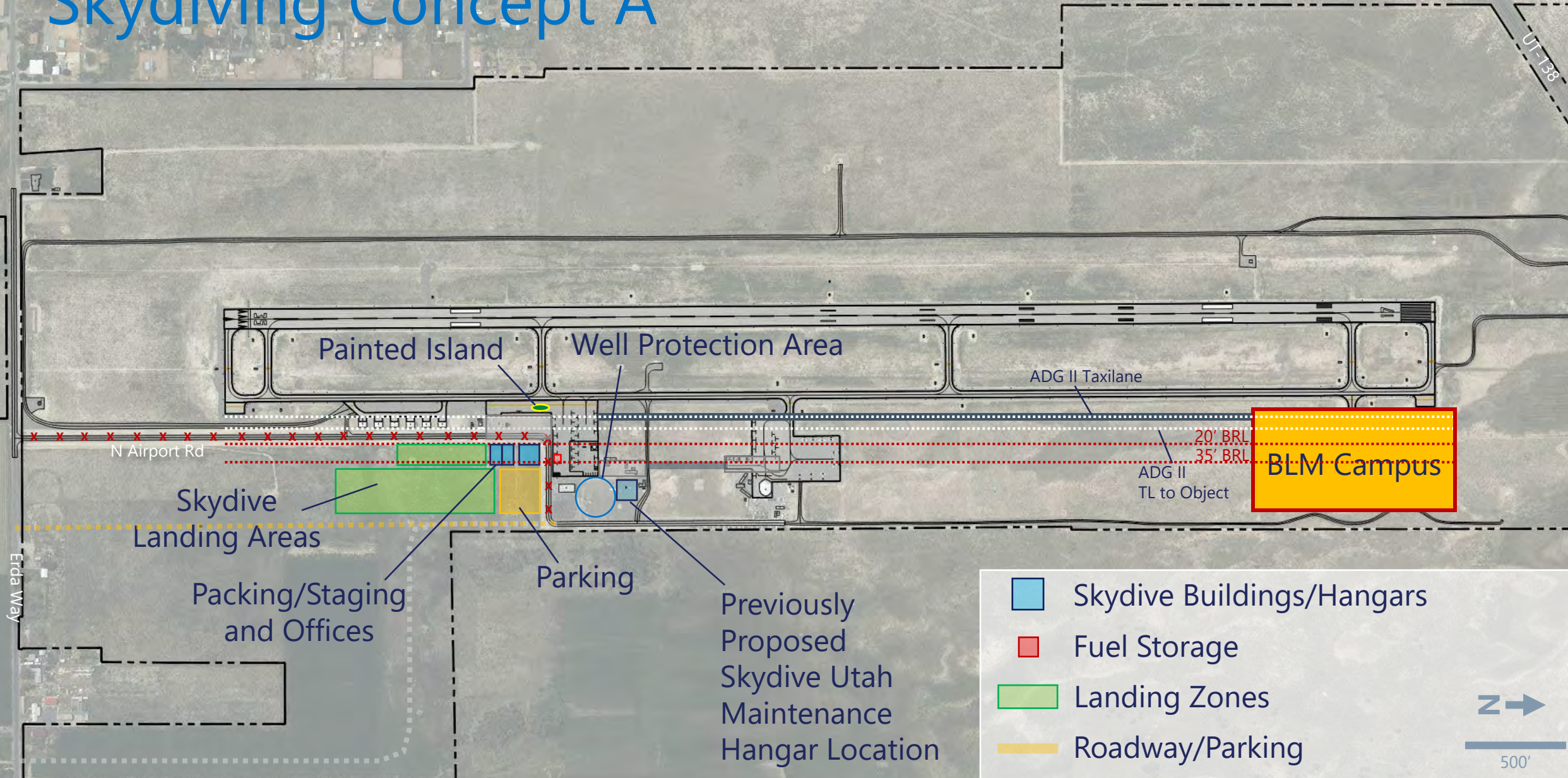
Note: A and E eliminated due to conflicts with UDOT preferred Midvalley Highway extension alignment.





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# Skydiving Concept A



Painted Island

Well Protection Area

ADG II Taxilane

N Airport Rd

20' BRL  
35' BRL  
ADG II  
TL to Object

BLM Campus

Skydive  
Landing Areas

Packing/Staging  
and Offices

Parking

Previously  
Proposed  
Skydive Utah  
Maintenance  
Hangar Location

 Skydive Buildings/Hangars

 Fuel Storage

 Landing Zones

 Roadway/Parking



500'





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# Skydiving Concept B

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Painted Island

Well Protection Area

ADG II Taxilane

N Airport Rd

20' BRL  
35' BRL  
ADG II  
TL to Object

BLM Campus

Skydive  
Landing Areas

Packing/Staging  
and Offices

Parking

Previously  
Proposed  
Skydive Utah  
Maintenance  
Hangar Location

 Skydive Buildings/Hangars

 Fuel Storage

 Landing Zones

 Roadway/Parking



500'

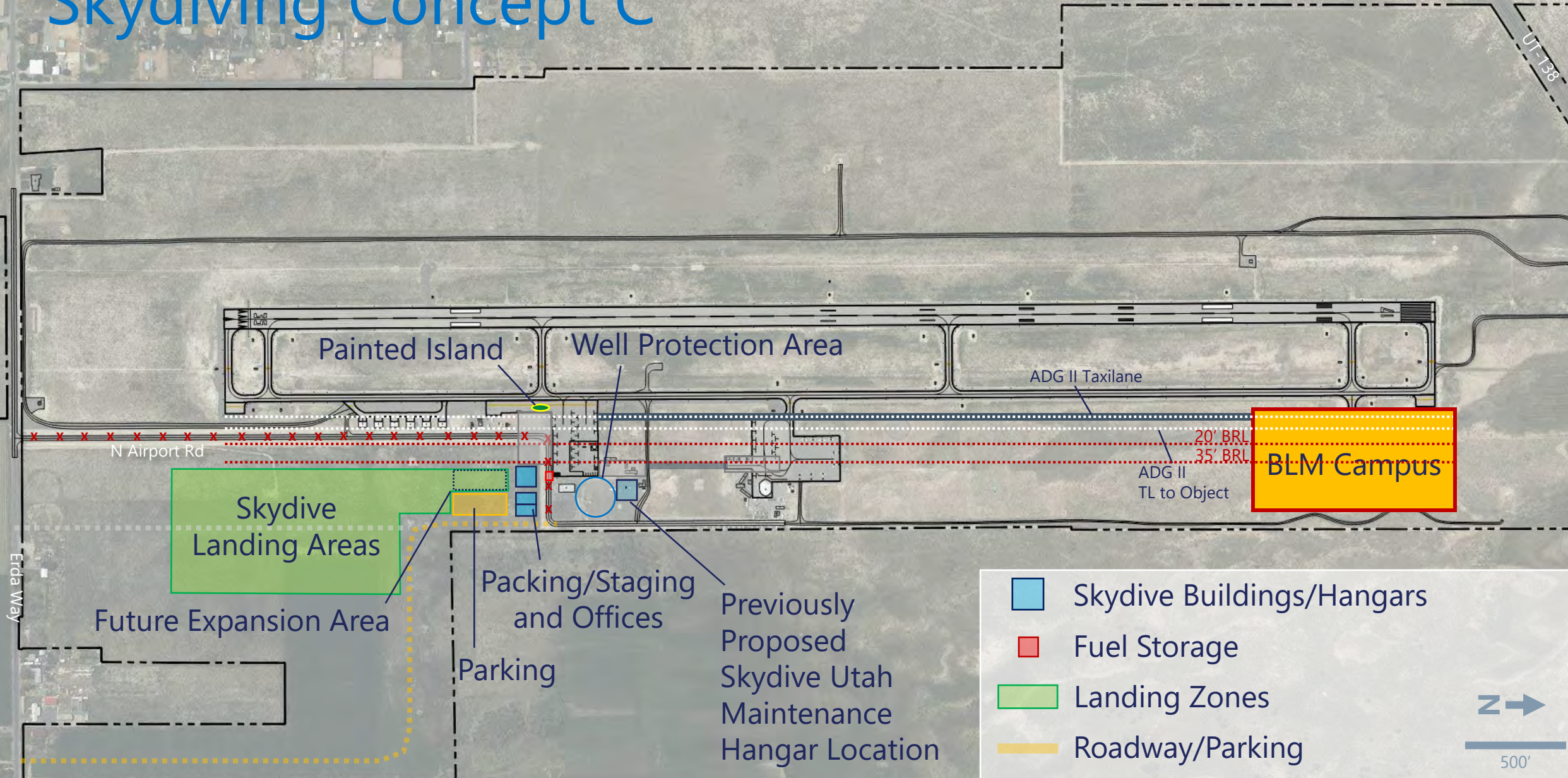
Erda Way





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# Skydiving Concept C



Painted Island

Well Protection Area

ADG II Taxilane

N Airport Rd

Skydive Landing Areas

Future Expansion Area

Packing/Staging and Offices

Parking

Previously Proposed Skydive Utah Maintenance Hangar Location

20' BRL  
35' BRL  
ADG II TL to Object

BLM Campus

Skydive Buildings/Hangars

Fuel Storage

Landing Zones

Roadway/Parking



500'



# Skydiving Facilities Alternatives Evaluation

Evaluation Criteria	A	B	C
Safety	Good	Good	Good
Operational Efficiency	Good	Good	Good
FAA Design Standards	Good	Good	Good
Resolves Current Issues	Good	Good	Good
Meets Long-Term Needs	Fair	Good	Good
Quality Level of Service	Good	Good	Good
Ease of Implementation	Good	Good	Good
Cost to Implement	Good	Good	Good
Flexible/Future Expansion	Fair	Fair	Good
EONS Impact	Good	Good	Good
Support Sustainability Principles	Good	Good	Good

Legend

Good

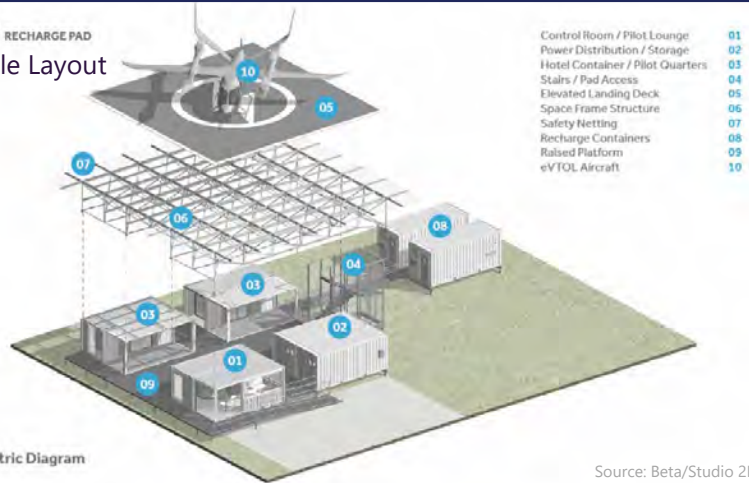
Fair

Poor



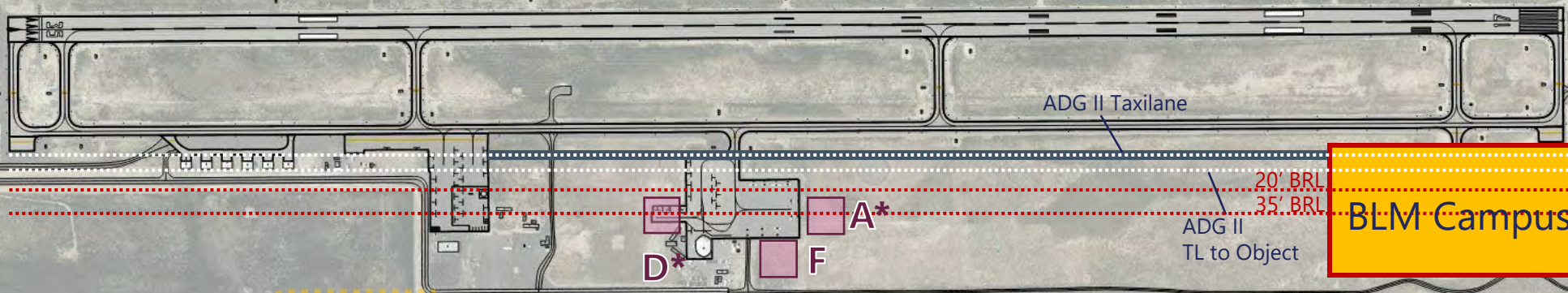
# eVTOL Pads

## BETA RECHARGE PAD Example Layout



UT-138

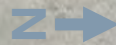
E



\* Integrate into hangar/apron layout much like helipad

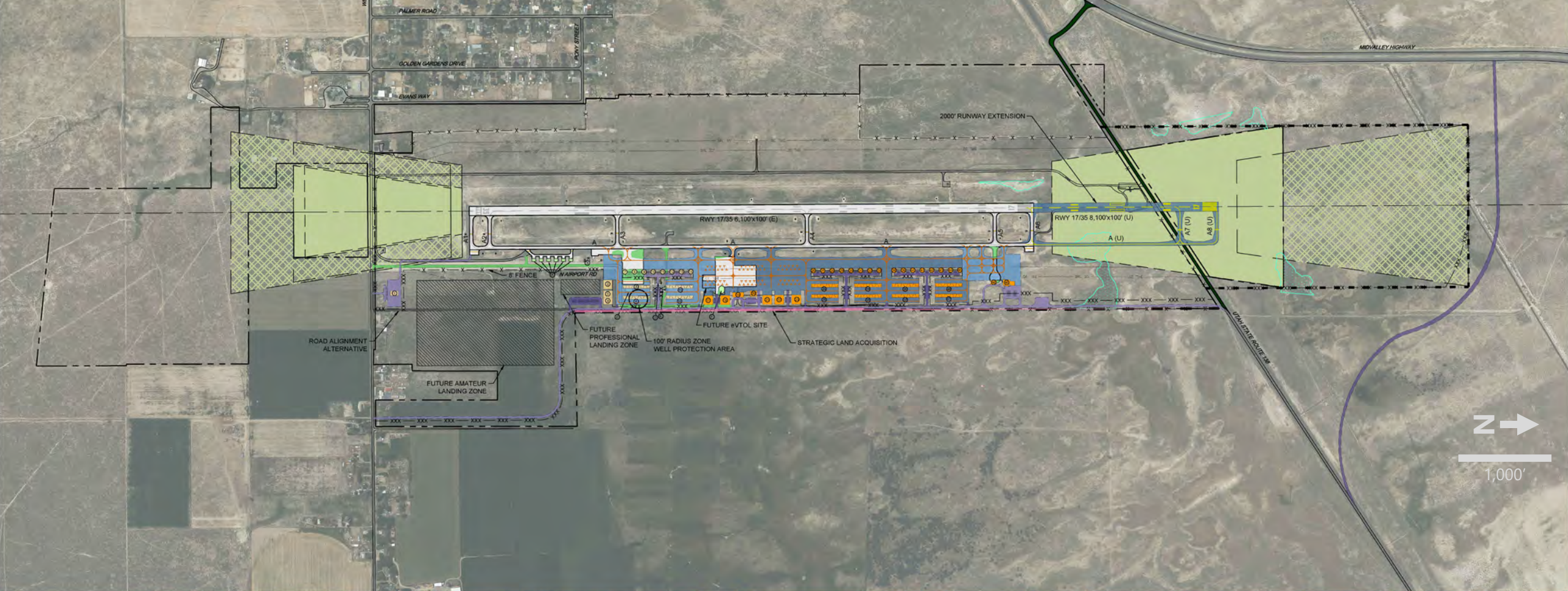
Erda Way

C



500'





EXISTING BUILDING LEGEND		
BUILDING NO	BUILDING DESCRIPTION	ELEVATION HIGHEST POINT (MSL)
A	EXECUTIVE HANGARS	4331.0'
B	RESTROOMS	4322.3'
C	MAINTENANCE BUILDING	4,328.4'
D	ELECTRICAL VAULT	4315.3'
E	NONDIRECTIONAL RADIO BEACON	4315.9'
F	HANGAR	4324.8'

NOTE: ALL ELEVATIONS ARE EXPRESSED IN FEET ABOVE MEAN SEA LEVEL (MSL).

FUTURE/ULTIMATE BUILDING LEGEND		
BUILDING NO	BUILDING DESCRIPTION	ELEVATION HIGHEST POINT (MSL)
1	AIRPORT SERVICES (F)	4355'
2	SKYDIVE UTAH HANGAR (F)	4350'
3	SKYDIVE UTAH OPERATIONS (F)	4335'
4	SKYDIVE UTAH OPERATIONS (F)	4335'
5	NESTED T-HANGARS (F)	4333'
6	NESTED T-HANGARS (F)	4333'
7	BOX HANGAR (F)	4338'
8	BOX HANGAR (F)	4338'
9	BOX HANGAR (F)	4336'
10	BOX HANGAR (F)	4336'
11	BOX HANGAR (F)	4334'
12	BOX HANGAR (F)	4332'
13	BOX HANGAR (F)	4330'
14	BOX HANGAR (F)	4330'
15	NESTED T-HANGARS (F)	4327'
16	NESTED T-HANGARS (F)	4327'
17	CORPORATE HANGAR (U)	4340'
18	CORPORATE HANGAR (U)	4340'
19	FBO TANKS (U)	4340'
20	FBO TERMINAL (U)	4323'
21	CORPORATE HANGAR (U)	4336'
22	CORPORATE HANGAR (U)	4336'
23	CORPORATE HANGAR (U)	4336'
24	NESTED T-HANGARS (U)	4317'
25	NESTED T-HANGARS (U)	4317'

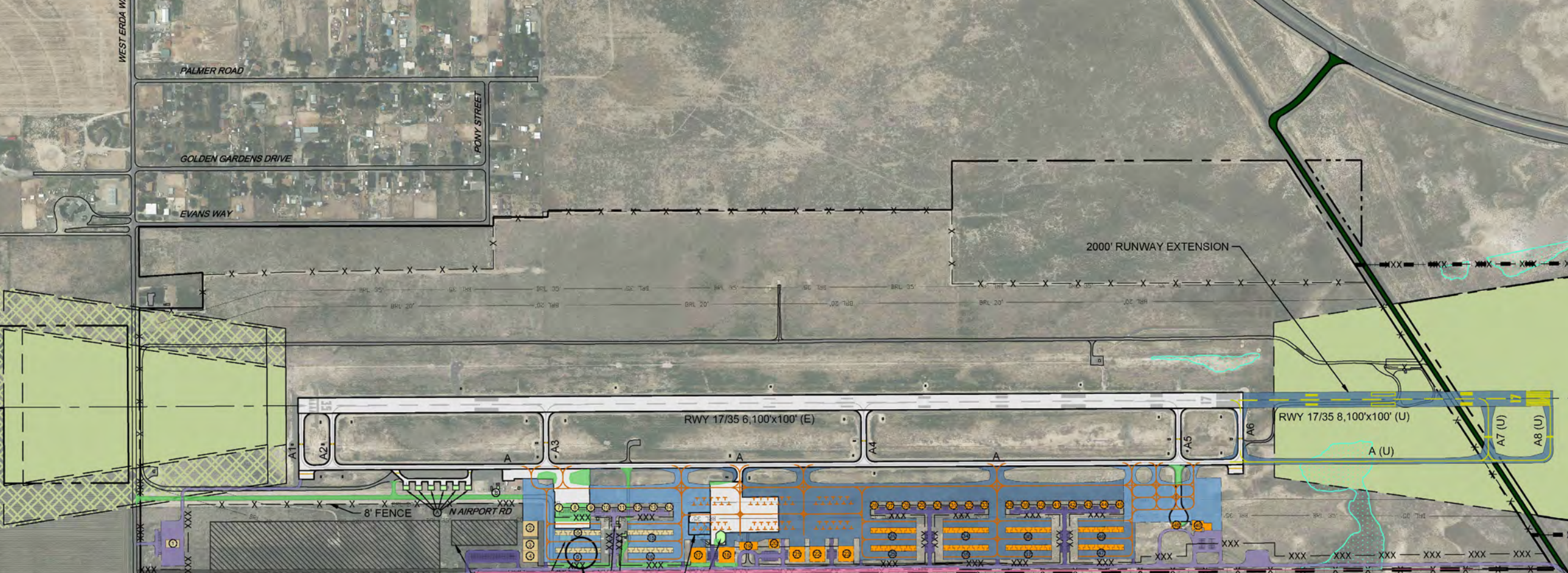
FUTURE/ULTIMATE BUILDING LEGEND		
BUILDING NO	BUILDING DESCRIPTION	ELEVATION HIGHEST POINT
26	BOX HANGAR (U)	4322'
27	BOX HANGAR (U)	4322'
28	BOX HANGAR (U)	4322'
29	BOX HANGAR (U)	4320'
30	BOX HANGAR (U)	4318'
31	BOX HANGAR (U)	4316'
32	BOX HANGAR (U)	4316'
33	BOX HANGAR (U)	4311'
34	NESTED T-HANGARS (U)	4313'
35	NESTED T-HANGARS (U)	4315'
36	NESTED T-HANGARS (U)	4311'
37	NESTED T-HANGARS (U)	4311'
38	BOX HANGAR (U)	4314'
39	BOX HANGAR (U)	4314'
40	BOX HANGAR (U)	4314'
41	BOX HANGAR (U)	4312'
42	BOX HANGAR (U)	4312'
43	BOX HANGAR (U)	4312'
44	BOX HANGAR (U)	4310'
45	BOX HANGAR (U)	4310'
46	NESTED T-HANGARS (U)	4307'
47	NESTED T-HANGARS (U)	4307'
48	BUREAU OF LAND MANAGEMENT RETARDANT TANK FARM (U)	4308'
49	BUREAU OF LAND MANAGEMENT OPERATIONS (U)	4303'

NOTE: FUTURE/ULTIMATE BUILDING ELEVATIONS ARE ESTIMATED.

DESCRIPTION	EXISTING (E)	FUTURE (F)	ULTIMATE (U)
PROPERTY LINE	---	---	---
RUNWAY PROTECTION ZONE	[Green Box]	N/A	[Cross-hatched Box]
BUILDING RESTRICTION LINE	---	N/A	N/A
AIRFIELD PAVEMENT	[Grey Box]	[Blue Box]	[Blue Box]
AIRFIELD PAVEMENT TO BE REMOVED	N/A	[Green Box]	[Dark Green Box]
BUILDINGS	[Grey Box]	[Yellow Box]	[Orange Box]
BUILDINGS TO BE REMOVED	N/A	[Light Green Box]	N/A
ROADWAY/PARKING	---	[Purple Box]	[Purple Box]
AIRCRAFT HOLDING POSITION	[Dashed Yellow Box]	N/A	[Dashed Yellow Box]
PAVEMENT MARKING	---	---	---
FENCE	- X - X - X - X -	- XX - XX - XX -	- XXX - XXX - XXX -
WETLANDS	[Light Blue Box]	N/A	N/A
STRATEGIC LAND ACQUISITION	[Pink Box]	N/A	N/A







ROAD ALIGNMENT ALTERNATIVE

FUTURE AMATEUR LANDING ZONE

FUTURE PROFESSIONAL LANDING ZONE

100' RADIUS ZONE WELL PROTECTION AREA

FUTURE eVTOL SITE

STRATEGIC LAND ACQUISITION

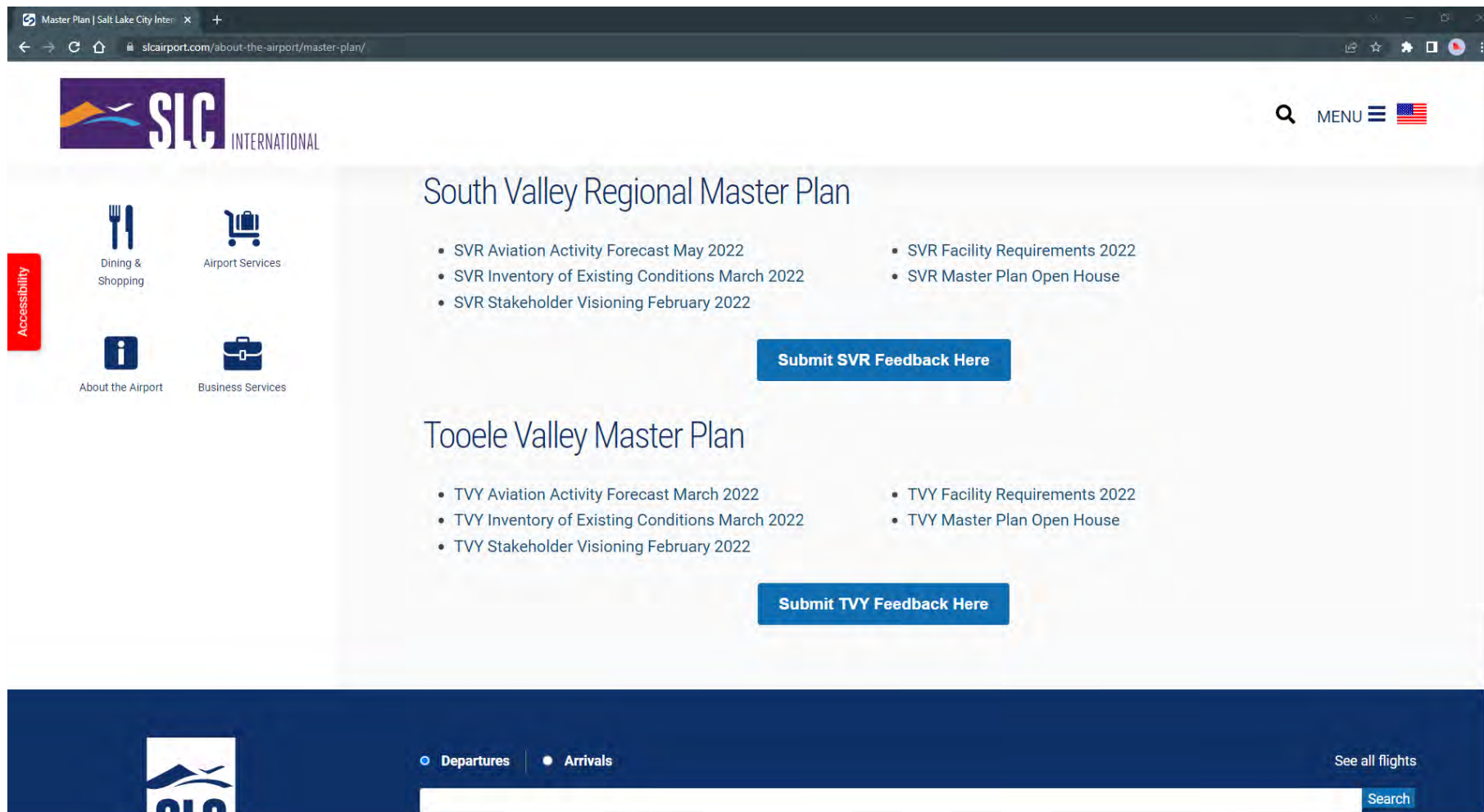
DESCRIPTION	EXISTING (E)	FUTURE (F)	ULTIMATE (U)
PROPERTY LINE	---	---	---
RUNWAY PROTECTION ZONE	Green hatched	N/A	Green hatched
BUILDING RESTRICTION LINE	---	N/A	N/A
AIRFIELD PAVEMENT	Grey	Blue	Blue
AIRFIELD PAVEMENT TO BE REMOVED	N/A	Green	Dark Green
BUILDINGS	Grey	Yellow	N/A
BUILDINGS TO BE REMOVED	N/A	Light Green	N/A
ROADWAY/PARKING	---	Purple	Purple
AIRCRAFT HOLDING POSITION	Yellow dashed	N/A	Yellow dashed
PAVEMENT MARKING	Orange	Orange	Orange
FENCE	-X-X-X-X-	XX-XX-XX	XXX-XXX-XXX
WETLANDS	Cyan	N/A	N/A
STRATEGIC LAND ACQUISITION	Pink	N/A	N/A





# Draft Reports Available Online

» <https://slairport.com/about-the-airport/master-plan>





# Next Steps

- » Select preferred comprehensive alternative
- » Implementation and financial planning
- » Complete Airport Layout Plan and Exhibit 'A' Property Map
- » Final Master Plan stakeholder meetings
- » Final documentation



*THANK YOU*

*QUESTIONS OR COMMENTS?*



SLC INTERNATIONAL  
SOUTH VALLEY REGIONAL  
TOOELE VALLEY

