

AIRPORT PLANS

AIRPORT PLAN DRAWINGS

Airport plan drawings are of equal or even greater importance than the Master Plan text in representing the County of Glenn's intentions regarding the future course of development of Orland Haigh Field. The three drawings in the official Orland Haigh Field plan set are presented here in reduced size: the Airport Layout Plan (Figure 1), Building Area Plan (Figure 2), and the Approach and Clear Zone Plan (Figure 3).

The Airport Layout Plan (ALP) is the most important of the airport plan drawings. An ALP adopted by the airport owner and approved by the FAA is a prerequisite to funding of airport improvement projects under both the Federal Aviation Administration Airport Improvement Program (AIP) and the State Division of Aeronautics California Aid to Airports Program (CAAP). The Orland Haigh Field Airport Layout Plan depicts the existing development and the improvements proposed to be implemented during the 20-year time frame of the Master Plan.

The Building Area Plan shows details of the Airport's core area not fully illustrated in the Airport Layout Plan. These include aircraft tiedown and automobile parking arrangements, lease boundaries, landscaping areas, etc.

The purpose of the Approach and Clear Zone Plan is to help monitor and protect the airspace essential to the safe operation of aircraft in the vicinity of the Airport. The criteria which define the limits of this airspace are established in Federal Aviation Regulations (FAR), Part 77, "Objects Affecting Navigable Airspace."

MAJOR FEATURES OF THE PLAN

Proposed Improvements

The overall form of Orland Haigh Field is largely set by the existing facilities already in place and no reason for major changes is apparent. Certain modifications are proposed, but most of the airport improvements fit within the existing basic airfield and building area configuration.

The major features of the proposed Master Plan include:

- **Runway Modifications** – Reduction of the runway length to 4,500 feet by relocating the north end; elimination of both displaced thresholds; widening to 60 feet; installation of new medium-intensity edge lighting.
- **Parallel Taxiway Improvements** – Repositioning the parallel taxiway 240 feet from the runway centerline and extending it to provide access to both future ends of the runway; establishment of defined runway exits and removal of portions of the asphalt mat pavement between the runway and taxiway to facilitate drainage; and installation of edge reflectors.
- **Approach Area Property Acquisition** – Acquisition of approximately 40 acres of conservation easements encompassing the Runway 15 clear zone; purchase of fee title to an additional 40 acres of property in and around the Runway 33 clear zone.
- **Additional Hangar Space** – Construction of up to 40 new T-hangar units; removal of 20 units in two old T-hangar buildings; allocation of sites for at least 20 additional portable units.
- **New Airport Office and Pilots' Lounge** – Long-term replacement of the existing facility with a new, more functional facility.
- **Automobile Access and Parking** – Establishment of a defined automobile parking lot adjacent to the airport office and separated from aircraft operating areas; replacement of the existing deteriorating access roads with a new road connecting to County Road P and another running north/south through the building area.
- **Security Fencing** – Construction of a fence around the perimeter of all aircraft operating areas.
- **Nonaviation Commercial Development** – Designation of lands on the east and west sides of the Airport as excess to aviation needs and available to be leased for development of nonaviation commercial facilities.

Staging and Costs

Table 1 lists the numerous proposed improvement projects, both the major ones noted above and the many smaller ones. The projects are listed according to the anticipated timing of their implementation – short term (within 5 years), mid-range (5 to 10 years), or long term (10 to 20 years).

Also itemized for each project are the estimated total cost and the share which would have to come from county funds. Extensive use of grants from both the Federal Aviation Administration and the California Division of Aeronautics is planned. Private funds are expected to be used for T-hangars plus a portion of the new access roads.

Many of the projects indicated for implementation in the mid-range and beyond could be beneficially developed earlier. The Airport's ability to afford the projects must be considered, however. The recommended development staging thus is not only a reflection of when the actual need is expected to occur, but also a judgment regarding the relative priority of the various needs.

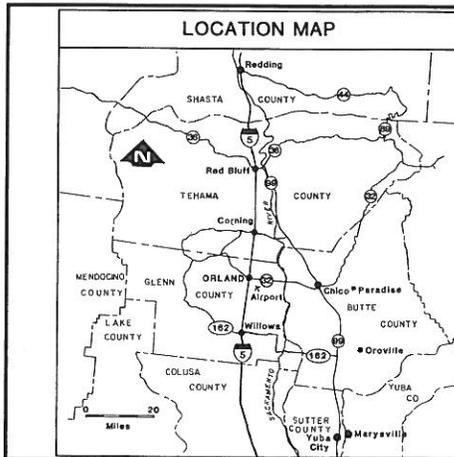
Table 1
PROPOSED AIRPORT IMPROVEMENTS

	Costs (in 1988 \$ values)				
	Total	Federal	State	County	Private
Short-Term Projects (within 5 Years)					
<i>Airfield</i>					
Reconstruct runway (new length 4,500 feet) Including: pavement overlay and widening to 60 feet	\$ 285,000	\$ 0	\$ 256,500	\$ 28,500	\$ 0
Install medium-intensity runway edge lighting Including: construction of power vault building	190,000	171,000	0	19,000	0
Install Visual Glide Slope Indicators (both runway ends)	25,000	22,500	0	2,500	0
Install new lighted wind indicator and replace rotating beacon	13,000	11,700	0	1,300	0
Reconstruct parallel taxiway at distance of 240 feet from runway and extend to runway ends Including: overlay of pavement on asphalt mat; establishing exit locations; construct of holding bays; installing striping, signing, and edge reflectors	260,000	0	234,000	26,000	0
Construct drainage improvements Including: removal of asphalt mat between runway and taxiway; installation of culverts	100,000	0	90,000	10,000	0
Construct graded runway safety area at each end of runway	9,000	0	8,100	900	0
Acquire property for runway clear zone protection Including: Runway 15 - 38 acres easements Runway 33 - 39 acres fee	100,000	90,000	0	10,000	0
<i>Building Area</i>					
Construct new 10-unit T-hangar building (center apron) Including: removal of existing 6-unit T-hangar building	180,000	0	0	0	180,000
Mid-Range Projects (5 to 10 Years)					
<i>Airfield</i>					
No Projects					
<i>Building Area</i>					
Overlay existing apron area pavement and reposition tiedowns Note: Assumes use of cold tar slurry seal plus patching 10% of surface	240,000	216,000	0	24,000	0
Construct new 10-unit T-hangar building (south apron area)	160,000	0	0	0	160,000
Construct new taxiway to new hangar area off east edge of asphalt mat	25,000	22,500	0	2,500	0

Table 1 Continued

	Costs (in 1988 \$ values)				
	Total	Federal	State	County	Private
<i>Building Area (continued)</i>					
Construct interim automobile parking lot Note: use temporary barriers such as telephone poles	2,000	0	0	2,000	0
Install new perimeter fencing Note: chain link in building area, field fence around remainder of airport	65,000	58,500	0	6,500	0
Construct new access roads from County Road P and County Road 200	150,000	135,000	0	15,000	0
Long-Term Projects (10 to 20 Years)					
<i>Airfield</i>					
No Projects					
<i>Building Area</i>					
Construct new 10-unit T-hangar building (south apron area) Including: removal of existing 14-unit T-hangar building	180,000	0	0	0	180,000
Construct new 10-unit T-hangar building (south apron area)	160,000	0	0	0	160,000
Construct new administration building/pilots' lounge Including: landscaping; fencing; removal of existing building	450,000	0	0	450,000	0
Construct new internal south access road	160,000	0	0	80,000	80,000
Construct permanent automobile parking lot	25,000	0	0	25,000	0
Construct new fuel storage and fuel island	170,000	0	0	170,000	0
Totals					
Short Term	\$ 1,162,000	\$ 295,200	\$ 588,600	\$ 98,200	\$ 180,000
Mid Range	642,000	432,000	0	50,000	160,000
Long Term	1,145,000	0	0	725,000	420,000
MASTER PLAN TOTALS	\$ 2,949,000	\$ 727,200	\$ 588,600	\$ 873,200	\$ 760,000

Source: Hodges & Shutt



BUILDING AND FACILITY LEGEND

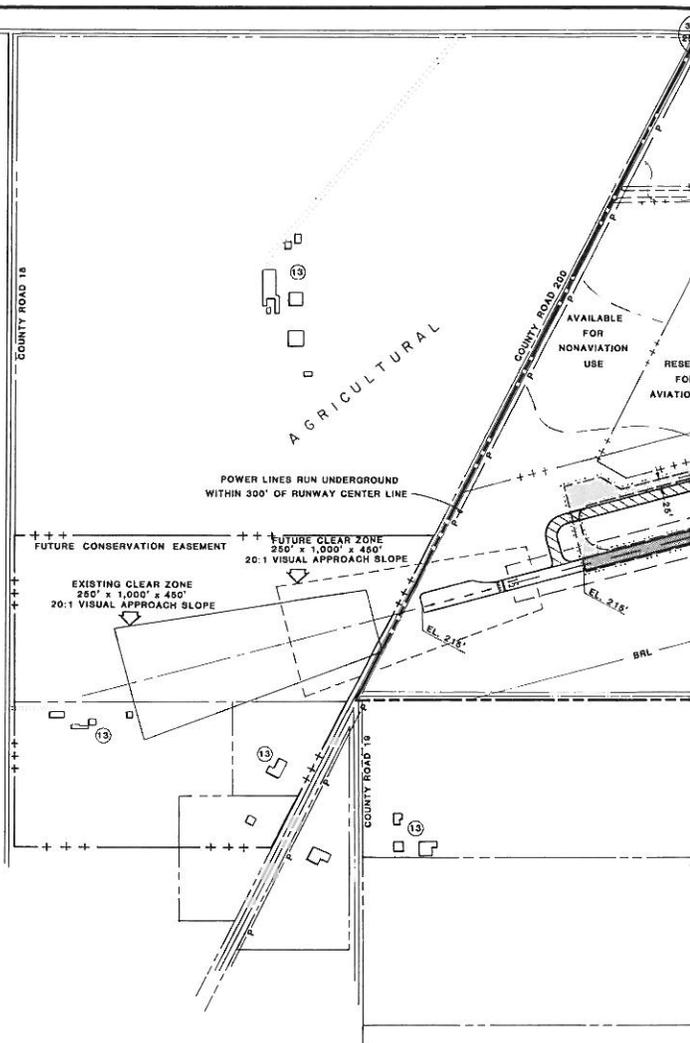
NO.	DESCRIPTION
1	AIRPORT OFFICE AND PILOTS' LOUNGE (To be replaced)
2	FBO MAINTENANCE HANGAR
3	T-HANGAR BUILDING
4	CONVENTIONAL STORAGE HANGAR
5	PORTABLE HANGARS
6	RESIDENCE/WATCHMAN'S QUARTERS
7	MOBILE HOME
8	UNDERGROUND FUEL STORAGE (Private)
9	AGRICULTURAL DISPOSAL POND (To be removed)
10	WIND CONE AND SEGMENTED CIRCLE
11	STORAGE SHED
12	SHOOTING RANGE
13	RESIDENCE/FARM BUILDING
14	AIRPORT OFFICE/PILOTS' LOUNGE (Future)
15	T-HANGAR BUILDING (Future)
16	CONVENTIONAL/CORPORATE HANGAR SITES (Future)
17	PORTABLE HANGAR SITES (Future)
18	BASED AIRCRAFT APRON
19	TRANSIENT AIRCRAFT APRON (Future)
20	POWER VAULT/ROTATING BEACON SITE (Future)
21	FUEL ISLAND (Future)
22	AUTO PARKING (Future)
23	SUPPLEMENTAL WIND CONES (Future)

RUNWAY DATA

		RUNWAY 15-33		
		EXISTING	FUTURE	
RUNWAY CLASSIFICATION		GENERAL UTILITY I	SAME	
PHYSICAL LENGTH AND WIDTH		5,160' X 50'	4,500' X 60'	
EFFECTIVE GRADIENT		0.2%	SAME	
PAVEMENT STRENGTH (SINGLE WHEEL)		8,000 lbs. (FAA estimate)	20,000 lbs. [B]	
APPROACH TYPE	15	VISUAL	SAME	
	33	VISUAL	SAME	
APPROACH SLOPE: REQUIRED/CLEAR	15	20:1/18:1 [C]	20:1/25±:1 [D]	
	33	20:1/55±:1 [C]	20:1/40±:1 [D]	
APPROACH AND LANDING AIDS	15	NONE	VGSI [E]	
	33	NONE	VGSI	
RUNWAY END COORDINATES [A]	15	Latitude	39° 43' 41" N	39° 43' 35" N
		Longitude	122° 08' 51" W	122° 08' 49" W
	33	Latitude	39° 42' 52" N	SAME
		Longitude	122° 08' 35" W	SAME
CRITICAL AIRCRAFT	Runway Length	MED. TWIN	SAME	
	Pavement Strength	SM. BUSINESS JET	SAME	
	Wingspan	MED. TWIN	SAME	
RUNWAY LIGHTING		LOW INTENSITY	MED. INTENSITY	
TAXIWAY LIGHTING		NONE	REFLECTORS	
RUNWAY MARKING		BASIC	SAME	

AIRPORT DATA

		EXISTING	FUTURE
TERMINAL NAVIGATIONAL AIDS		CHICO VOR [F]	SAME
AIRPORT ELEVATION		215' MSL	SAME
AIRPORT REFERENCE POINT [A]	Latitude	39° 43' 17" N	39° 43' 13" N
	Longitude	122° 08' 43" W	122° 08' 42" W
MEAN MAX. TEMP., HOTTEST MONTH		96° F.	SAME
AIRPORT SERVICE LEVEL		G.A.	SAME
AIRPORT ACREAGE	Fee Simple Title	390±	430±
	Easements	0	40±
BASED AIRCRAFT SPACES	County Tiedowns	28	41
	HANGAR SPACE (County and Private)	55	100±
	FBO AREA (Approx.)	0	10±
TRANSIENT AIRCRAFT SPACES (County)		[G]	14

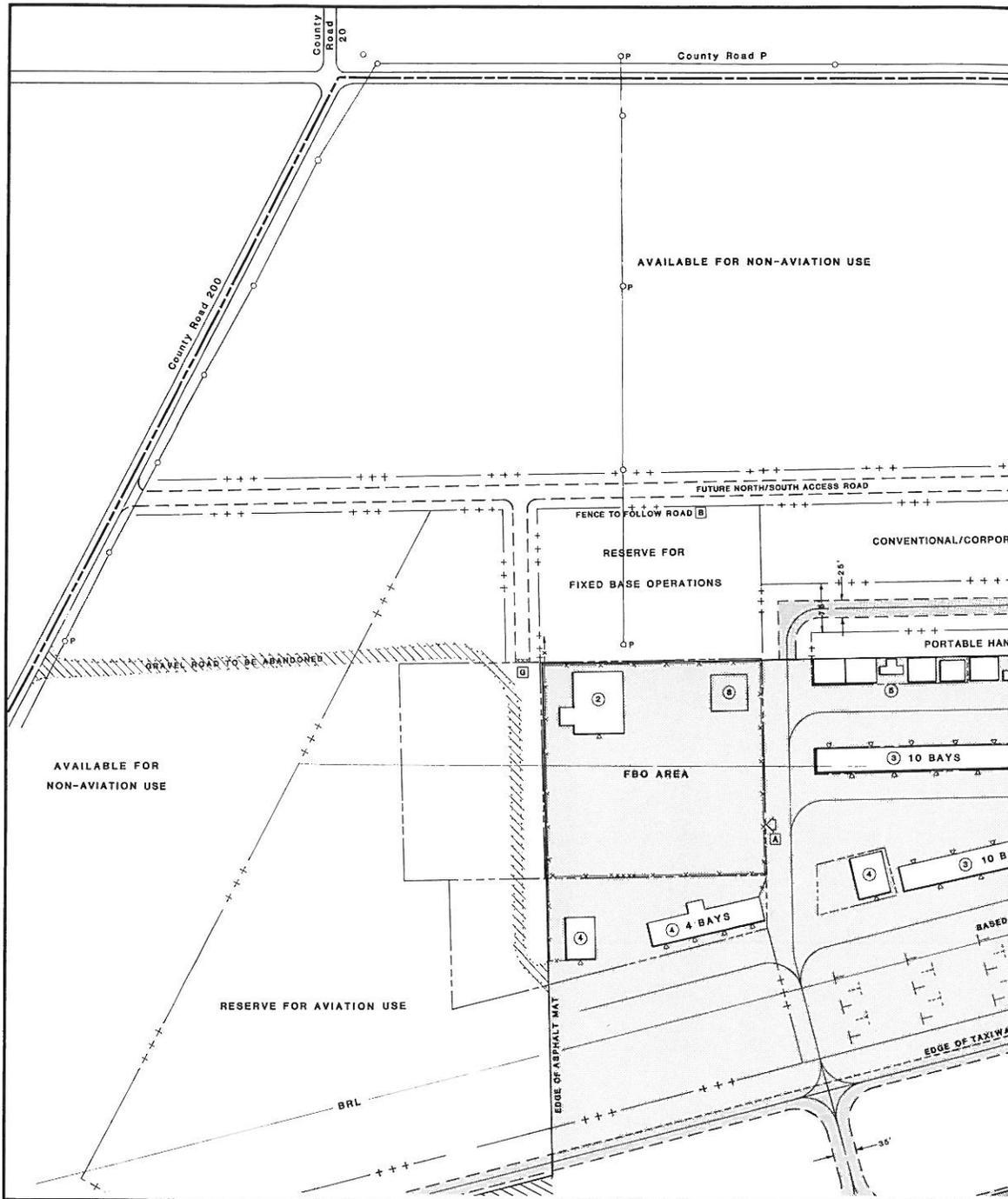


DRAWING LEGEND

	EXISTING	FUTURE
ASPHALT MAT IN AVIATION USE	[Symbol]	[Symbol]
PAVEMENT OVERLAY/NEW PAVEMENT	[Symbol]	[Symbol]
OTHER PAVEMENT IN USE	[Symbol]	[Symbol]
GRAVEL SHOULDER/ROAD	[Symbol]	[Symbol]
PAVEMENT TO BE REMOVED	[Symbol]	[Symbol]
AIRPORT PROPERTY LINE	[Symbol]	[Symbol]
AVIGATION/CONSERVATION EASEMENT	[Symbol]	[Symbol]
INTERNAL LEASE OR LAND USE BOUNDARY	[Symbol]	[Symbol]
OTHER PROPERTY LINES	[Symbol]	[Symbol]
BUILDING RESTRICTION LINE	[Symbol]	[Symbol]
AIRCRAFT PARKING LIMIT	[Symbol]	[Symbol]
BUILDINGS	[Symbol]	[Symbol]
BUILDINGS TO BE REMOVED	[Symbol]	[Symbol]
GATE	[Symbol]	[Symbol]
TOPOGRAPHIC CONTOURS	[Symbol]	[Symbol]
POWER LINE	[Symbol]	[Symbol]
AIRPORT REFERENCE POINT	[Symbol]	[Symbol]
SECTION CORNERS	[Symbol]	[Symbol]

25
26

[A] Coordir
maps;
[B] A 2" c
strengt
[C] To dis
[D] To pri
[E] Visual
[F] VOR-A
of 540
[G] Current
and tr



BUILDING AND FACILITY LEGEND				DRAWING LEGEND	
NO.	DESCRIPTION	NO.	DESCRIPTION	EXISTING	FUTURE
1	AIRPORT OFFICE AND PILOTS' LOUNGE	11	UNDERGROUND FUEL STORAGE (Private)	ASPHALT MAT IN AVIATION USE	
2	FBO MAINTENANCE HANGAR	12	AGRICULTURAL DISPOSAL POND (to be removed)	PAVEMENT OVERLAY/NEW PAVEMENT	
3	T-HANGAR BUILDING	13	AIRPORT OFFICE/PILOT'S LOUNGE (Future)	GRAVEL SHOULDER/ROAD	
4	CONVENTIONAL STORAGE HANGAR	14	T-HANGAR BUILDING (Future)	PAVEMENT TO BE REMOVED	
5	PORTABLE HANGARS	15	PORTABLE HANGARS (Future)	TAXIWAY STRIPES	
6	RESIDENCE/WATCHMAN'S QUARTERS	16	POWER VAULT (Future)	AIRPORT PROPERTY LINE	
7	MOBILE HOME	17	ROTATING BEACON (Future)	INTERNAL LEASE OR LAND USE BOUNDARY	+++
8	AIRCRAFT WASH RACK	18	FUEL ISLAND (Future)	OTHER PROPERTY LINES	+++
9	ROTATING BEACON (On roof/to be replaced)	19	ABOVE GROUND FUEL STORAGE (Future)	BUILDING RESTRICTION LINE	---
10	WATER WELL			AIRCRAFT PARKING LIMIT	---
				BUILDINGS	---
				BUILDINGS TO BE REMOVED	---
				FENCE & GATE	---
				POWER LINE AND POLES	o-p
				AIRCRAFT TIEDOWN	T
				OVERFLOW TIEDOWN POSITION	T
				HANGAR DOOR LOCATIONS	△

