Chapter Five
AIRPORT LAYOUT PLAN

The Airport Layout Plan (ALP) drawings are a pictorial representation and summarization of the efforts made in this planning process. The previous chapters supply the basis for the Airport's future airport layout as shown in the drawing set. In order for improvement projects to be eligible for Federal Airport Improvement Program Grants, the projects must appear on a Federal Aviation Administration (FAA)-approved ALP.

AIRPORT LAYOUT PLAN DRAWING SET

The following paragraphs describe the specific elements found on each sheet within the ALP drawing set.

Cover Sheet

The cover sheet shows a sheet index to the airport layout plan drawing set, and provides pertinent information such as the airport sponsor, airport name, grant number the project is funded through, location and vicinity maps, and date the plan was completed.

Airport Layout Plan Drawing (Sheet 1)

The airport layout plan depicts the current airport layout and proposed improvements to the Airport for the 20-year planning period and beyond. Descriptions of the improvements and costs over the next 20 years are included in Chapter Six*, Capital Improvement Plan*. The Master Plan Concept, as selected by the County in consultation with the Planning Advisory Committee

(PAC), was the basis for determining the proposed improvements at the Airport. The ALP is a development guide; the timing of development depends upon when it is needed and can be funded.

Runway approach visibility minimums, runway protection zones, runway object free area, runway safety area and other standard airport dimensions are shown in the plan and in the runway data tables. Other tables include an airport data table, buildings/facilities table, modifications to standards, and a non-standard conditions and disposition table. The wind rose depicts wind coverage for the runway alignment.

Airspace Plan Drawing (Sheet 2)

This drawing shows the Part 77 Imaginary Surfaces for the future layout of the Airport with a USGS topographic map as the background. Part 77 defines five distinct surfaces, each with a different size and shape. The dimensions of these surfaces are based on the type of runway and the type of approach ultimately planned for the Airport. Each imaginary surface and its dimension as it applies to the Airport are defined below and are depicted in **Exhibit 5A** for reference.

Primary Surface. The primary surface is rectangular, centered on the runway, extends 200 feet beyond each end of the runway, and has a width that varies according to airport-specific criteria. The elevation of the primary surface corresponds to the elevation of the nearest point of the runway centerline. The width of the primary surface of Runway 12-30 is 500 feet.

Approach Surface. The approach surface is centered on the extended runway centerline, starts at the end of the primary surface (200 feet beyond each end of the runway), and has a width equal to that of the primary surface. Approach surfaces slope upward and outward from the runway ends.

The ultimately planned approach surfaces at the Airport reflect nonprecision approaches to Runways 12 and 30.

The nonprecision instrument approach surface, with minimums not lower than 1 mile, to Runway 12 has an inner width of 500 feet extending outward 10,000 feet to an outer width of 3,500 feet at a slope of 34:1.

The Runway 30 approach surface, with minimums greater than ¾ mile, has an inner width of 500 feet extending for a horizontal distance of 10,000 feet to an outer width of 3,500 feet at a slope of 34:1.

Runway Protection Zones (RPZs) are not Part 77 surfaces, but mirror the inner portion of approach surfaces on the ground. Two RPZs are shown for the Runway 12 approach. The first RPZ has a dimension of 500 feet by 1,000 feet by 700 feet, which is the standard for an approach with minimums greater than ¾ mile. As stated in the Chapter Four, the County and PAC recommended a precision approach with minimums not lower than ¾ mile, which was later found infeasible due to various constraints. However, to protect the Airport for future approach

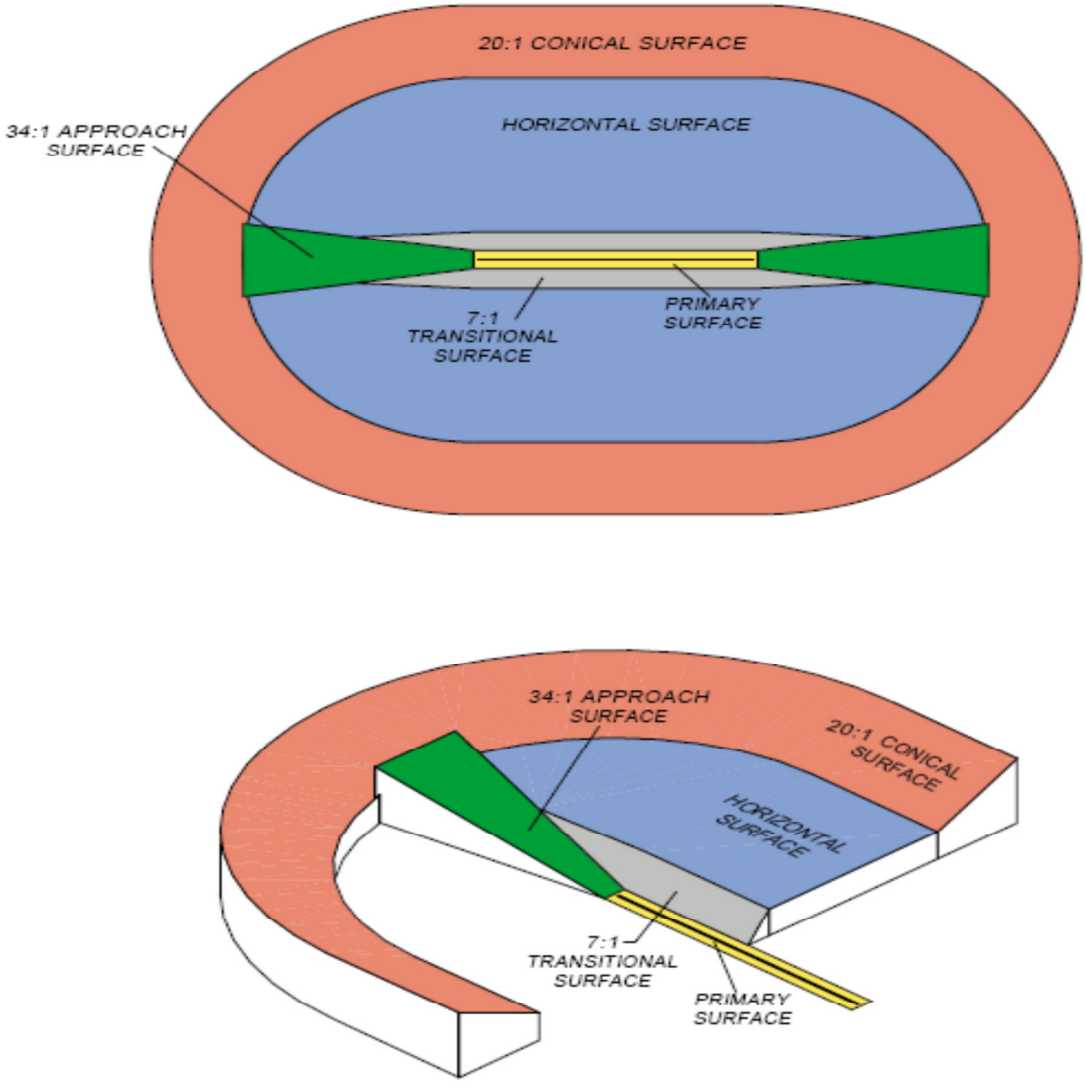
possibilities the dimensions for the precision approach RPZ are also shown, which are 1,000 feet by 1,700 feet by 1,510 feet.

Transitional Surface. The transitional surface is a sloping 7:1 surface that extends outward and upward at right angles to the runway centerline from the sides of the primary surface and the approach surfaces.

Horizontal Surface. The horizontal surface is a flat, elliptical surface at an elevation 150 feet above the established airport elevation. The extent of the horizontal surface is determined by swinging arcs of a 10,000-foot radius from the center of each end of the primary surface.

Conical Surface. The conical surface extends outward and upward from the horizontal surface at a slope of 20:1 for a horizontal distance of 4,000 feet.

Exhibit 5A. Graphical Depiction of FAR Part 77 Imaginary Surfaces



The Part 77 surfaces are the basis for protecting airspace around an airport; therefore, it is ideal to keep these surfaces clear of obstructions whenever possible. The FAA decides if any of the obstructions to Part 77 surfaces are hazardous to aviation. The obstruction data tables on Sheets 2 and 3 identify each obstruction and their location, along with the disposition to address the described obstruction.

The CIP prioritizes obstruction removal in the following manner: on-Airport obstructions, off-Airport obstructions within the approach surface, and off-Airport obstructions within the transitional surface. The negotiation and purchase of avigation easements will be necessary prior to the removal of any off-Airport obstructions.

Inner Portion of the Runway 12/30 Approach Surface Drawing (Sheet 3)

This drawing provides a plan and profile view of the runway, the RPZs and approach surfaces. Obstructions within the approach and transitional surfaces are indicated in the profile view.

Airport Land Use Plan and Noise Contour Drawing (Sheet 4)

A land use plan has been developed for the Airport and the surrounding area. This plan includes the land uses on and around the Airport per the Josephine County Rural Land Development Code.

Land uses around airports should be compatible with airport operations. Aircraft noise is also a major concern. Land uses and their associated activities that are of greatest concern to airports include:

- Nearby Lighting
- Glare, Smoke and Dust Emissions
- Bird Attractions and Landfills
- Airspace Obstructions
- Electrical Interference
- Concentrations of People

Any of these activities can create safety concerns for airport users and people on the ground. They may also be affected by airport operations. The airport sponsor should work with the local land use agency(s) to ensure that land uses around the airport are compatible with airport operations.

Noise contours are being developed for the Airport, based on existing and forecasted aircraft operations that will be added to this drawing. Based on FAA and Oregon Department of Environmental Quality noise standards, no compatibility issues are expected, but will be confirmed.

Runway Departure Surfaces Plan (Sheet 5)

The Runway Departure Surfaces Plan depicts the plan and profile view of the Runway 12/30 departure surface, which is applicable to all instrument runways with departure procedures. The Airport has a departure procedure in place to ensure obstacle clearance.

The departure surface at the Airport begins 200 feet from the end of the runway at a width of 400 feet. It extends outward for a length of 10,000 feet to an outer width of 1,900 feet. The designated obstacle clearance slope is 20:1.

Airport Property Map – Exhibit A (Sheet 6)

This drawing provides a history of the County's airport property acquisition by showing and listing all land transaction history.

The Consultant is currently working with the County to complete this exhibit.