

## 6.0 AIRPORT LAYOUT PLANS

Future development plans for AEJ have evolved from a variety of considerations. Aviation activity forecasts, facility requirements, environmental considerations, and aircraft operational characteristics are among the many factors evaluated to develop a dependable basis for planning. Forecasts are utilized as a framework for planning; however, development and facilities are constructed to meet actual demand.

Previous chapters in this Master Plan have presented recommendations for future improvements at Colorado Regional Airport (the Airport or AEJ), which are illustrated on the Airport Layout Plan (ALP) drawing set. These recommendations are represented in the following drawings: The Airport Layout Plan, the Terminal Area Plan, the Airport Airspace Drawing – Part 77, Airport Airspace Profile, Inner Approach Surface Drawings, Departure Surface Drawing, the Land Use Plan, and the Exhibit A Property Map.

The purpose of the ALP set of drawings is to graphically depict the existing and proposed airport facilities so that the relationships among the facilities, as well as the Airport's setting in the context of adjacent uses, can be evaluated. The full array of protected land areas and airspace are drawn in plan view, allowing planners to identify these areas to ensure proper control over safety critical areas and develop plans that efficiently utilize all airport land. When the Federal Aviation Administration (FAA) conditionally approves and signs the ALP set, FAA can then fund development that is eligible for FAA participation, subject to environmental processing through the National Environmental Policy Act (NEPA). These conditions are described in a letter that accompanies the ALP set and must be met prior to implementing depicted development.

The ALP set of drawings for this Master Plan were prepared according to relevant FAA Advisory Circulars and FAA Airports Division (ARP) Standard Operating Procedure No. 2.00 (October 1, 2013). The drawings were circulated among the various FAA lines of business that are affected by the development shown in the ALP set and their comments incorporated into the set. In accordance with FAA regulation the airport sponsor must keep the ALP up to date at all times. Thus, the ALP set that is included in this Master Plan may not be current. At the time this Master Plan was published, FAA signature was pending. Contact AEJ or FAA Denver Airports District Office in order to view the latest approved ALP set.

Each sheet of the set is briefly described in the following text and included in this chapter narrative.

### 6.1 Cover Sheet

The cover sheet (Sheet 01 of 11) contains basic required information about the location of the Airport along with an aerial overview of the Airport's setting. The index of drawings for the entire 11-sheet drawing set orients the reviewer with the location and order of each sheet.

### 6.2 Airport Layout Plan

The Airport Layout Plan - Future (Sheet 02 of 11) graphically represents the existing and future airport facilities required to enable the Airport to accommodate future demand. It provides detailed

information pertinent to airport and runway design criteria, which is necessary to define relationships with applicable standards. Tabulated data and wind roses have been included. These tables provide detail regarding the size, type, dimensions, and other design criteria applicable to the design standards AEJ is planning to establish and maintain. Additionally, there are facilities that are planned for ultimate implementation, but not necessarily within the 20-year planning horizon.

The following paragraphs describe the key development depicted on the Airport Layout Plan.

### **6.2.1 Terminal Area Plans**

The Terminal Area Plans (sheets 03 and 04 of 11) illustrate additional pavement and hangars that provide opportunity for expansion.

Depicted are areas for aircraft parking development and reconfiguration. The taxiway system shows reconfiguration that allows for safe and efficient movement of aircraft to each runway end while allowing more efficient use of the ramp. Adjustments to taxiways include connector widening to improve aircraft movement safety.

Hangar development could include a range of hangar sizes that meet the needs of third-party individuals and entities. Third-party developers will also establish the aprons that accompany new hangars and respective vehicle access/parking expansion. Construction is dependent upon the demand to accommodate transient aircraft and based aircraft. Activity demand and private investment will dictate the level of actual development; therefore, it is anticipated that construction will be phased over the 20-year planning period.

### **6.3 Airspace Drawing – 14 CFR Part 77 Imaginary Surfaces**

The Airport Airspace Drawing (05 of 11) is a graphic depiction of imaginary surfaces prescribed in 14 CFR Part 77, Objects Affecting Navigable Airspace. The Airport Airspace Drawing illustrates both existing and potential penetrations to the imaginary surfaces. The FAA grant assurances require airport sponsors to maintain their airspace clear of obstructions to the extent feasible, and prevent future penetrations to the surfaces.

The Part 77 Airspace drawings (Sheets 05, 06, 07, and 08 of 11) provide both plan and profile views that depict the imaginary surfaces and penetrations specific to AEJ. There are also data tables listing each object, type, and height. The objects were identified based on digital mapping compiled for FAA's Airport Geographic Information System (AGIS) program. The drawings provide a detailed resource for the Airport sponsor, in coordination with the FAA, to determine which penetrations of the imaginary surfaces should be removed, lowered, marked, and/or lighted.

### **6.4 Inner Approach Plans and Profiles**

The Inner Portion of the Approach Surface Drawings (Sheets 07 and 08 of 11) provide a detailed view of the inner areas of the runway protection zone (RPZ) surfaces and CFR 14 Part 77 approach surfaces. The RPZ is an area off each runway end designed to enhance the protection of people and property on the ground. The RPZ begins 200 feet off the end of the runway, and extends along the runway centerline in a trapezoidal shape. Size of the RPZ is a function of the design aircraft, and visibility minimums of the runway's instrument approach capabilities. The Inner Portion of the Approach Surface Drawings is based upon future planned approaches to each runway end and illustrates large-scale plan and profiles. The drawings identify roadways, railroads, structures, power lines, and other potential obstructions that may lie within the confines of each runway end's inner approach surface area.

### **6.5 Departure Plans and Profiles**

Departure Surface Drawing (Sheets 09 of 11) graphically depict applicable runway departure surface as defined in Table 3-2, Approach/Departure Standards in FAA AC 150/5300-13A, *Airport Design*. The departure surface off the end of Runway 15 is shown, and as noted elsewhere in this Plan, the FAA does not allow instrument departures from Runway 33 due to high terrain north of the Airport. As a result, there is no departure surface off the end of Runway 33.

### **6.6 Land Use**

The Land Use Drawing (Sheet 10 of 11) graphically depicts existing and recommended future land uses within the future property line, as well as the vicinity of AEJ. This is a primary planning document used to identify property and land uses that may or may not be compatible with the sustained long term operation of AEJ. The Land Use Plan provides guidance to local authorities to establish appropriate land use controls and/or zoning within the vicinity of AEJ, as well as a plan for future uses of revenue-producing areas contained on Airport property.

The Land Use Plan for AEJ is presented on Sheet 10. The predominant land uses adjacent to the AEJ airport boundary are open space, agricultural, light industrial, and low density residential. Because of the location of residential land uses in the vicinity of the Airport, it is recommended that the Town of Buena Vista monitor trends in land uses and limit residential and other noise sensitive land uses in the vicinity of the Airport, and also maintain an open dialog with the surrounding residents about Airport activity, even though the existing and future 65 DNL noise contours do not extend off Airport property.

## **6.7 Exhibit A Property Map**

The Airport Property Map (Sheet 11 of 11) illustrates the legal control exercised by the Town, as the Airport sponsor, over Airport property, as well as the acquisition history of various tracts of land within Airport boundaries, and the ownership status of any land that is recommended by the Master Plan for acquisition. The primary purpose of the Exhibit A is to certify to FAA that existing and future airport development has been and will be situated on land owned and/or controlled by the Airport sponsor, as required by the FAA Airport Improvement Program (AIP) Handbook, and FAA's Airport Compliance Handbook. The Exhibit A was prepared in compliance with FAA standard Operating Procedure (SOP) 3.00.

The property map graphically identifies individual parcels that have been acquired over time, and provides information for identifying each parcel boundary. The accompanying table provides detail about former ownership, recording data, purpose of the parcel, and information about which FAA grant(s) may have been used to acquire parcels. Alternatively, if land has been released or there is a different type of interest in the property the Exhibit A will be the document that maintains that information.

This Master Plan has identified several parcels that may be acquired during the planning period, dependent on availability and funds.