

# **MENDOCINO COUNTY AIRPORT COMPREHENSIVE LAND USE PLAN**



**AIRPORT LAND USE COMMISSION  
ADOPTED OCTOBER 21, 1993  
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**Part I**

**Policies**

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# 1

## Introduction

### FUNCTION AND AUTHORITY

The basic purpose of airport land use commissions is to help ensure that proposed development in the vicinity of airports will be compatible with airport activities.

This *Airport Land Use Compatibility Plan* sets forth the criteria and policies which the Mendocino County Airport Land Use Commission will use in assessing the compatibility between the public-use airports in Mendocino County and proposed land use development in the areas surrounding them. The emphasis of the Plan is on review of local general and specific plans, zoning ordinances, and other land use documents covering broad geographic areas. Certain individual land use development proposals also may be reviewed by the Commission as provided for in the policies enumerated in the next chapter. The Commission does not have authority over existing incompatible land uses or the operation of any airport.

The Plan specifically pertains to the land uses surrounding the following airports:

- Boonville Airport
- Round Valley Airport
- Ells Field
- Little River Airport
- Ocean Ridge Airport

Additionally, the Plan provides guidance for Commission review of new airports and heliports proposed for construction in the County.

## State Statutes

The statutory authority for establishment of airport land use commissions and the adoption of airport land use compatibility plans is provided in the California Public Utilities Code, Sections 21670 et seq. (Chapter 4, Article 3.5 of the State Aeronautics Act). Every county in which a public-use airport is located is required to establish an airport land use commission. The commissions' charge is expressly stated as being:

*...to protect public health, safety, and welfare by ensuring the orderly expansion of airports and the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards within areas around public airports to the extent that these areas are not already devoted to incompatible uses.*

As a means of fulfilling this responsibility, each commission is required to formulate a comprehensive land use plan for the areas surrounding the airports within its jurisdiction. The plan must reflect the anticipated growth of the airports during at least the next 20 years. Limitations on building heights, restrictions on the use of land, and standards for building construction can be specified in the plan.

The state legislation establishing airport land use commissions was originally enacted in 1967. Since that time, several major revisions and numerous minor ones have been adopted.

## MENDOCINO COUNTY AIRPORT LAND USE COMMISSION

The Mendocino County Airport Land Use Commission was formed in 1993. Its first meeting was held on April 1 of that year. The Commission has seven members: three are appointed by the Board of Supervisors from the County Planning Commission; three are appointed by the city selection committee; and one member at large is appointed by the other six Airport Land Use Commissioners. Two of the seven members are required to have aviation expertise. Staff for the Commission is provided by the Mendocino County Department of Planning and Building Services.

## RELATIONSHIP TO LOCAL JURISDICTIONS AND PLANS

The fundamental relationships between the Mendocino County Airport Land Use Commission and local jurisdictions – as well as their respective plans – is set by state law. Although the Commission functions under the general auspices of Mendocino County government, it is not controlled by the County. In this respect, the Airport Land Use Commission is similar to the Local Agency Formation Commission. Within the bounds provided by state law, the decisions of the Commission – including the adoption of this plan – are final. The County does not have any greater legal authority over the Commission than do the individual cities in the County.

The major power which the local governments hold over the Airport Land Use Commission is the ability to override certain Commission decisions. If the Commission rules that a local plan or land use action is inconsistent with the Commission's plan, state law allows the local agency to override the Commission by a two-thirds vote of its governing body. Before doing so, the local agency must hold a public hearing on the matter and must make specific findings that the proposed action is consistent with the purposes of the state law. However, if a public agency overrides an Airport Land Use Commission decision regarding an airport not operated by that agency, state law (Section 21678) provides that the airport operator "... shall be immune from liability for damages to property or personal injury caused by or resulting directly or indirectly from the public agency's decision to override the commission's action or recommendation."

## USING THIS DOCUMENT

This *Airport Land Use Compatibility Plan* document is divided into three parts:

- Part I — Policies
- Part II — Supporting Information
- Part III — Appendices

### Policies

The compatibility criteria, compatibility maps, and review process policies set forth in Part I (Chapters 2 and 3) are the core of the document. The most vital pieces of these chapters are the Compatibility Criteria table in Chapter 2 and the Compatibility Map for each airport in Chapter 3. The table and maps provide a single, combined set of zones and associated criteria covering each of the basic types of airport impacts — noise, safety, airspace, and overflight. This combined approach is intended as a means of facilitating projected review. It is anticipated that the compatibility of the majority of land use proposals can be evaluated with reference to these elements alone. More detailed supporting criteria policies and policies applicable to individual airports are provided as clarification and to aid in review of proposals that are not clearly compatible or incompatible.

An important point to note about this plan is that the criteria are performance-oriented rather than list-oriented. That is, the criteria contain standards to be achieved (e.g., occupancy limits), rather than a list of specific uses which are permitted in each zone. This format directly relates a concern (e.g., safety) to a criterion (e.g., occupancy limits).

State law requires that local entities, including the county, submit copies of their general and specific plans, and future amendments, to the Commission for review as to consistency with the Commission's plan. When the local jurisdictions modify their individual land use plans to be

consistent with this *Airport Land Use Compatibility Plan*, they have the option of developing a detailed land use list by applying the performance criteria to the individual land use designations included in their locals plans and zoning ordinances.

## **Additional Contents**

Part II of the document contains background information used in development of the policies. Chapter 4 supplies essential data regarding each of the airports and their environs. Chapter 5 discusses some of the strategies which local jurisdictions can use to implement the *Airport Land Use Compatibility Plan* criteria and policies.

The final part of the document, Part III, provides various materials useful in implementation of the Plan.



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# 2

## Policies

### 1. SCOPE OF REVIEW

#### 1.1. Geographic Area of Concern

The Mendocino County Airport Land Use Commission's planning area encompasses:

- 1.1.1. *Airport Vicinity* – All lands on which the uses could be negatively affected by present or future aircraft operations at the following airports in the County and lands on which the uses could negatively affect said airports. The specific limits of the planning area for each airport are depicted on the respective *Compatibility Map* for that airport as presented in Chapter 3.
  - (a) Boonville Airport.
  - (b) Ells Field.
  - (c) Little River Airport.
  - (d) Ocean Ridge Airport.
  - (e) Round Valley Airport.
- 1.1.2. *Countywide Impacts on Flight Safety* – Those lands, regardless of their location in the County, on which the uses could adversely affect the safety of flight in the County. The specific uses of concern are identified in Paragraph 1.2.
- 1.1.3. *New Airports and Heliports* – The site and environs of any proposed new airport or heliport anywhere in the County.

#### 1.2. Types of Airport Impacts

The Commission is concerned only with the potential impacts related to aircraft noise, land use safety (with respect both to people on the ground and the occupants of air-

craft), airspace protection, and aircraft overflights. Other impacts sometimes created by airports (e.g., air pollution, automobile traffic, etc.) are beyond the scope of this plan. These impacts are within the authority of other local, state, and federal agencies and are addressed within the environmental review procedures for airport development.

### 1.3. Types of Actions Reviewed

- 1.3.1. *General Plan Consistency Review* — Within 180 days of adoption of the *Comprehensive Land Use Plan*, the Commission shall review the general plans and specific plans of affected local jurisdictions to determine their consistency with the Commission's policies. At the time the Commission reviews the general and specific plans of the local agencies, the local agency should submit a map which identifies those areas it believes meets the definition of "infill" contained in Policy 2.1.6. The Commission will include a determination on the infill as part of its action on the consistency of the general and specific plans. Until such time as (1) the Commission finds that the local general plan or specific plan is consistent with the *Comprehensive Land Use Plan*, or (2) the local agency has overruled the Commission's determination of inconsistency, the local jurisdiction shall refer all actions, regulations, and permits (as specified in Paragraph 1.3.3) involving the airport area of influence to the Commission for review (Section 21676.5 (a)).
- 1.3.2. *Statutory Requirements* — As required by state law, the following types of actions shall be referred to the Airport Land Use Commission for determination of consistency with the Commission's plan *prior to their approval* by the local jurisdiction:
  - (a) The adoption or approval of any amendment to a general or specific plan affecting the property within an airport's planning area (Section 21676 (b)).
  - (b) The adoption or approval of a zoning ordinance or building regulation which (1) affects property within an airport's planning area and (2) involves the types of airport impact concerns listed in Paragraph 1.2 (Section 21676 (b)).
  - (c) Adoption or modification of the master plan for an existing public-use airport (Section 21676 (c)).
  - (d) Any proposal for a new airport or heliport whether for public use or private use (Section 21661.5) which requires a state airport permit.
- 1.3.3. In the interim period between the adoption of a Comprehensive Land Use Plan and the time that the ALUC either (1) finds that the local general plan or specific plan is consistent with the CLUP, or (2) the local agency has overruled the ALUC's determination of inconsistency, State law empowers the Commis-

sion to review additional types of land use "actions, regulations, and permits" which might affect airport/land compatibility within an airport planning area. The Commission must act to require the local agency to submit these individual actions under the provisions of Section 21676.5(a).

For the purposes of this plan, the specific "actions, regulations, and permits" located in the A and B zones which the Commission shall review include:

- (a) Any proposed expansion of a city's sphere of influence.
- (b) Proposed land use project by a government entity which exceeds 10,000 square feet.
- (c) Proposed storage of more than 2,000 gallons of fuel or flammables per parcel in portions of the B Zone not lateral to the runway.
- (d) Reconstruction of existing incompatible development within Compatibility Zone A.
- (e) Any proposed land use action, as determined by the local planning agency, involving a question of compatibility with airport activities.

1.3.4. Following the interim period referenced in Policy Section 1.3.3, local agencies will continue to refer the following individual actions/projects located in the A and B zones to the ALUC:

- (a) Any proposed expansion of a city's sphere of influence.
- (b) Proposed land use project by a government entity which exceeds 10,000 square feet.
- (c) Proposed storage of more than 2,000 gallons of fuel or flammables per parcel in portions of the B Zone not lateral to the runway.
- (d) Reconstruction of existing incompatible development within Compatibility Zone A.
- (e) Any proposed land use action, as determined by the local planning agency, involving a question of compatibility with airport activities.

## 1.4. Review Process

1.4.1. *Timing of Project Submittal* — Proposed actions listed in Paragraph 1.3.2 and 1.3.3 must be submitted to the Commission for review prior to approval by the local government entity. All projects should be referred to the Commis-

sion at the earliest reasonable point in time so that the Commission's review can be duly considered by the local jurisdiction prior to formalizing its actions. At the local government's discretion, submittal of a project for Airport Land Use Commission review can be done before, after, or concurrently with review by the local planning commission or other local advisory bodies. This discretion gives the local agency the ability to obtain the ALUC review at the most effective point in the review process. The timing may vary depending upon the nature of the specific project.

- 1.4.2. *Commission Action Choices* — When reviewing a land use project proposal, the Airport Land Use Commission has a choice of either of two actions: (1) find the project *consistent* with the *Airport Land Use Compatibility Plan*; or, (2) find the project *inconsistent* with the Plan. In making a finding of inconsistency, the Commission may note the conditions under which the project would be consistent with the Plan. The Commission cannot, however, find a project consistent with the Plan subject to the inclusion of certain conditions in the project.
- 1.4.3. *Subsequent Review* — Once a project has been found consistent with the *Airport Land Use Compatibility Plan*, it need not be referred for review at subsequent stages of the planning process (e.g., for a general plan amendment and again for a zoning change) unless: (1) major changes to the project are made during subsequent review and consideration by the local jurisdiction; or (2) the local jurisdiction agrees that further review is warranted.
- 1.4.4. *Response Time* — The Airport Land Use Commission must respond to a local agency's request for a consistency determination on a project within 60 days of referral (Section 21676 (d)). If the Commission fails to make the determination within that period, the proposed action shall be deemed consistent with the *Airport Land Use Compatibility Plan*. Regardless of Commission action or failure to act, the proposed action must also comply with other applicable local, state, and federal regulations and laws.
- 1.4.5. *Airport Master Plans* — When reviewing airport master plans for existing airports, the Commission has three action choices:
  - (a) Find the airport master plan consistent with the *Airport Land Use Compatibility Plan*.
  - (b) Disapprove the airport master plan on the basis that it is inconsistent with the Commission's Plan.
  - (c) Modify the *Airport Land Use Compatibility Plan* (after duly noticed public hearing) to reflect the assumptions and proposals in the airport master plan.
- 1.4.6. *New Airports and Heliports* — When reviewing proposals for new airports or heliports, the Commission's choices of action are:

- (a) Approve the proposal as being consistent with the specific review policies listed in Section 2.3 below.
- (b) Approve the proposal and adopt a Compatibility Plan for that facility. Adoption of such a plan is required if the airport or heliport will be a public-use facility.
- (c) Disapprove the proposal on the basis that the noise, safety impacts it would have on surrounding land uses are not adequately mitigated.

## 2. PRIMARY REVIEW POLICIES

### 2.1. Land Use Actions

- 2.1.1. *Project Submittal Information* — A proposed land use action submitted to the Commission for review shall include the following information:
  - (a) An accurately scaled map showing the relationship of the project site to the airport boundary and runways.
  - (b) If applicable, a detailed site plan showing ground elevations, the location of structures, open spaces, and water bodies, and the heights of structures and trees.
  - (c) A description of permitted or proposed land uses and restrictions on the uses.
  - (d) For residential uses, an indication of the potential or proposed number of dwelling units per acre; or, for non-residential uses, the number of people potentially occupying the total site or portions thereof at any one time.
- 2.1.2. *Primary Criteria* — The compatibility of land uses in the vicinity of the airports covered by this plan shall primarily be evaluated in terms of: (1) the Compatibility Criteria table (Table 2A) and accompanying notes; (2) the Compatibility Plan for each airport; and (3) specific policies established for individual airports.
- 2.1.3. Parcels less than two acres which are intersected by airport compatibility zones shall be considered to be entirely within the less restrictive zone. For example, a parcel less than two acres intersected by a Zone B and Zone C shall be determined to be entirely within Zone C for the purposes of compatibility criteria on Table 2A.
- 2.1.4. *Supporting Policies* — Additional evaluation criteria are provided in the Supporting Policies which follow (Section 3). The Commission may refer to these additional policies to clarify or supplement its review.

**Table 2A**  
**Compatibility Criteria**  
**Mendocino County Airport Land Use Commission**

Zone	Location	Impact Elements	Maximum Densities		Open Land <sup>3</sup>
			Residential <sup>1</sup>	Other Uses (people/ac) <sup>2</sup>	
<b>A</b>	<b>Runway Protection Zone or within Building Restriction Line</b>	<ul style="list-style-type: none"> <li>• High Risk</li> <li>• High noise levels</li> </ul>	0	10	All Remaining Required
<b>B1</b>	<b>Approach/Departure Zone and Adjacent to Runway</b>	<ul style="list-style-type: none"> <li>• Substantial risk - aircraft commonly below 400 ft. AGL or within 1,000 ft. of runway</li> <li>• Substantial noise</li> </ul>	10 acres	60	30% Required
<b>B2</b>	<b>Extended Approach/Departure Zone</b>	<ul style="list-style-type: none"> <li>• Moderate risk - aircraft commonly below 800 ft. AGL</li> <li>• Significant noise</li> </ul>	2 acres	60	30% Recommended
<b>C</b>	<b>Common Traffic Pattern</b>	<ul style="list-style-type: none"> <li>• Limited risk - aircraft at or below 1,000 ft. AGL</li> <li>• Frequent noise intrusion</li> </ul>	15 units per acre	150	15% Recommended
<b>D</b>	<b>Other Airport Environs</b>	<ul style="list-style-type: none"> <li>• Negligible risk</li> <li>• Potential for annoyance from overflights</li> </ul>	No Limit	No Limit	No Requirement

Zone	Additional Criteria		Examples	
	Prohibited Uses <sup>1</sup>	Other Development Conditions	Normally Acceptable Uses <sup>4</sup>	Uses Not Normally Acceptable <sup>5</sup>
<b>A</b>	<ul style="list-style-type: none"> <li>• All structures except ones with location set by aeronautical function</li> <li>• Assemblages of people</li> <li>• Objects exceeding FAR Part 77 height limits</li> <li>• Hazards to flight<sup>6</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Dedication of aviation easement</li> </ul>	<ul style="list-style-type: none"> <li>• Aircraft tiedown apron</li> <li>• Pastures, field crops, vineyards</li> <li>• Automobile parking</li> </ul>	<ul style="list-style-type: none"> <li>• Heavy poles, signs, large trees, etc.</li> </ul>
<b>B1 and B2</b>	<ul style="list-style-type: none"> <li>• Schools, day care centers, libraries</li> <li>• Hospitals, nursing homes</li> <li>• Highly noise-sensitive uses (e.g. amphitheaters)</li> <li>• Storage of highly flammable materials<sup>6</sup></li> <li>• Hazards to flight<sup>6</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Locate structures maximum distance from extended runway centerline</li> <li>• Dedication of aviation easement</li> </ul>	<ul style="list-style-type: none"> <li>• Uses in Zone A</li> <li>• Single-story offices</li> <li>• Single-family homes on an existing lot</li> <li>• Low-intensity retail, office, etc.</li> <li>• Low-intensity manufacturing</li> <li>• Food processing</li> </ul>	<ul style="list-style-type: none"> <li>• Residential subdivisions</li> <li>• Intensive retail uses</li> <li>• Intensive manufacturing or food processing uses</li> <li>• Multiple story offices</li> <li>• Hotels and motels</li> <li>• Multi-family residential</li> </ul>
<b>C</b>	<ul style="list-style-type: none"> <li>• Schools</li> <li>• Hospitals, nursing homes<sup>5</sup></li> <li>• Hazards to flight<sup>6</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Dedication of overflight easement for residential uses</li> </ul>	<ul style="list-style-type: none"> <li>• Uses in Zone B</li> <li>• Parks, playgrounds</li> <li>• Two-story motels</li> <li>• Residential subdivisions</li> <li>• Intensive retail uses</li> <li>• Intensive manufacturing or food processing uses</li> <li>• Multi-family residential</li> </ul>	<ul style="list-style-type: none"> <li>• Large shopping malls</li> <li>• Theaters, auditoriums</li> <li>• Large sports stadiums</li> <li>• Hi-rise office buildings</li> </ul>
<b>D</b>	<ul style="list-style-type: none"> <li>• Hazards to flight<sup>6</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Deed notice required for residential development</li> </ul>	<ul style="list-style-type: none"> <li>• All except ones hazardous to flight</li> </ul>	

**Table 2A Continued**  
**Compatibility Criteria**  
**Mendocino County Airport Land Use Commission**

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**NOTES**

- 1 Residential parcels should not be smaller than the indicated size nor have more than the indicated number of units per acre. Maximum densities expressed in acres are gross acres; those expressed in units per acre are net acres.
- 2 The land use should not attract more than the indicated number of people per acre at any time. This figure should include all individuals who may be on the property (e.g., employees, customers/visitors, etc.). These densities are intended as general planning guidelines to aid in determining the acceptability of proposed land uses. Special short-term events related to aviation (e.g., air shows), as well as non-aviation special events, are exempt from the maximum density criteria.
- 3 Open land requirements are intended to be applied with respect to the entire zone. This is typically accomplished as part of the community's master plan or a specific plan.
- 4 These uses typically can be designed to meet the density requirements and other development conditions listed.
- 5 These uses typically do not meet the density and other development conditions listed. They should be allowed only if a major community objective is served by their location in this zone and no feasible alternative location exists.
- 6 See Policy Section 3.3.
- 7 May be modified by airport-specific policies.
- 8 In those portions of the B Zones located lateral to the runway, no restrictions on the storage of flammables apply. Within the balance of the B1 and B2 Zones, up to 2,000 gallons of fuel or flammables is allowed per parcel. More than 2,000 gallons of fuel or flammables per parcel within the balance of the B1 and B2 Zones requires the review and approval by the ALUC. See Appendix G for a diagram of typical area lateral to the runway.
- 9 Refer to Policy 3.2.3. for definitions which distinguish between hospitals and medical clinics.

- 2.1.5. *Reconstruction* — Where an *existing* incompatible development has been partially or fully destroyed, it may be allowed to be rebuilt to a density not exceeding that of the original construction. Reconstruction within Compatibility Zone A requires review and approval of the ALUC.
- 2.1.6. *Infill* — Where substantial incompatible development already exists, additional infill development of similar land uses may be allowed to occur even if such land uses are to be prohibited elsewhere in the zone. This exception does not apply within the Compatibility Zone A. Projects can be considered "infill" if they meet *all* of the following criteria:
- (a) The Airport Land Use Commission has determined that "substantial development" already exists.
  - (b) The project site is bounded by uses similar to those proposed.
  - (c) The proposed project would not extend the perimeter of the area developed with incompatible uses.
  - (d) The proposed project does not otherwise increase the intensity and/or incompatibility of use through use permits, density transfers or other strategy.
  - (e) The infill area has been identified by the local jurisdiction in its general plan or related document and approved by the Commission.
- 2.1.7. *Land Use Conversion* — The compatibility of uses in the airport planning areas shall be preserved to the maximum feasible extent. The conversion of land from existing or planned agricultural, industrial or commercial use to residential uses within Compatibility Zones A and B is strongly discouraged. With respect to Compatibility Zone C, discretionary activities such as general plan amendments, rezonings, subdivisions, use permits, etc., which propose conversions to residential land uses, or increased intensity of residential uses, should be subject to careful consideration of maximum permissible noise levels.
- 2.1.8. Within the context of the CLUP, expansion of non-conforming uses up to 20% of the existing structure floor area or 1,000 square feet, whichever is greater, is exempt from ALUC formal consistency review and findings. Other expansions outside of the identified "infill" areas discussed in Section 2.1.6 are subject to the discretionary review process normally imposed by the local jurisdictions with review and formal consistency finding by the ALUC. Expansion of a single-family residence is exempt from ALUC consistency review and formal consistency finding unless the expansion is considered both an expansion of a nonconforming use and an increase in residential density, i.e., additional living unit.



## 2.2. Master Plans for Existing Airports

- 2.2.1. *Project Submittal Information* — An airport master plan submitted to the Commission for review shall contain sufficient information to enable the Commission to adequately assess the noise, safety, overflight, and height restriction impacts of airport activity upon surrounding land uses. A master plan report should be submitted, if available. At a minimum, information to be submitted shall include:
- (a) A layout plan drawing of the proposed facility showing the location of: (1) property boundaries; (2) runways or helicopter takeoff and landing areas; and (3) runway protection zones or helicopter approach/departure zones.
  - (b) Airspace surfaces in accordance with Federal Aviation Regulations, Part 77.
  - (c) Activity forecasts, including the number of operations by each type of aircraft proposed to use the facility.
  - (d) Proposed flight track locations and projected noise contours or other relevant noise impact data.
  - (e) A map showing existing and planned land uses in the vicinity of the proposed airport or heliport.
  - (f) Identification and proposed mitigation of impacts on surrounding land uses.
- 2.2.2. *Substance of Review* — When reviewing airport master plans, the Commission shall determine whether activity forecasts or proposed facility development identified in the plan differ from the forecasts and development assumed for that airport in this *Airport Land Use Compatibility Plan*. Attention should specifically focus on:
- (a) Activity forecasts that are: (1) significantly higher than those in the *Airport Land Use Compatibility Plan*; or which (2) include a higher proportion of larger or noisier aircraft.
  - (b) Proposals to: (1) construct a new runway or helicopter takeoff and landing area; (2) change the length, width, or landing threshold location on an existing runway; or (3) establish an instrument approach procedure.
- 2.2.3. *Consistency Determination* — The Commission shall determine whether the proposed airport master plan is consistent with the *Airport Land Use Compatibility Plan*. The Commission shall base its determination of consistency on findings that the forecasts and development identified in the airport master plan would not result in greater noise, overflight, and safety impacts or height restrictions on surrounding land uses than are presently assumed in the *Airport Land Use Compatibility Plan*.

## 2.3. Plans for New Airports or Heliports

- 2.3.1. *Project Submittal Information* — When submitted to the Commission for review, a proposal for a new airport or heliport shall include the same types of information required by Paragraph 2.2.1.
- 2.3.2. *Substance of Review* — In reviewing proposals for new airports and heliports, the Commission shall focus on the noise, safety, overflight, and height limit impacts upon surrounding land uses.
  - (a) Other types of environmental impacts (e.g., air quality, water quality, natural habitats, vehicle traffic, etc.) are not within the scope of Commission review.
  - (b) The Commission shall evaluate the adequacy of the facility design (in terms of federal and state standards) only to the extent that it affects surrounding land use.
  - (c) The Commission must base its review on the proposed airfield design. The Commission does not have the authority to require alterations to the airfield design.
- 2.3.3. *Airport/Land Use Relationships* — The review shall examine the relationships between existing and planned land uses in the vicinity of the proposed airport or heliport and the impacts that the proposed facility would have upon these land uses. Questions to be considered should include:
  - (a) Would the existing or planned land uses be considered incompatible with the airport or heliport if the latter were already in existence?
  - (b) What measures are included in the airport or heliport proposal to mitigate the noise, safety, and height restriction impacts on surrounding land uses? Such measures might include: (1) location of flight tracks so as to minimize the impacts; (2) other operational procedures to minimize impacts; (3) acquisition of property interests (fee title or easements) on the impacted land.

## 3. SUPPORTING COMPATIBILITY CRITERIA

### 3.1. Noise

- 3.1.1. *Projected Noise Levels* — The evaluation of airport/land use noise compatibility shall consider the *future* Community Noise Equivalent Level (CNEL) contours of each airport. These contours are calculated based upon aircraft activity

forecasts which are set forth in adopted airport master plans or which are considered by the Commission to be plausible (refer to Chapter 4 for noise exposure maps). The Commission should periodically review the projected noise level contours and update them if appropriate.

- 3.1.2. *Application of Noise Contours* — The locations of CNEL contours are one of the factors used to define compatibility zone boundaries and criteria. It is intended that noise compatibility criteria be applied at the general plan, specific plan, or other broad-scale level. Because of the inherent variability of flight paths and other factors that influence noise emissions, the depicted contour boundaries are not absolute determinants of the compatibility or incompatibility of a given land use. Noise contours can only quantify noise impacts in a general manner; except on large parcels or blocks of land, they should *not* be used as site design criteria.
- 3.1.3. *Noise Exposure in Residential Areas* — The maximum CNEL considered normally acceptable for residential uses in the vicinity of the airports covered by this plan is 60 dBA.
- 3.1.4. *Noise Exposure for Other Land Uses* — Noise level standards for compatibility with other types of land uses shall be applied in the same manner as the above residential noise level criteria. Examples of acceptable noise levels for other land uses in an airport's vicinity are presented in Table 2B.
- 3.1.5. *Other Noise Factors* — The extent of outdoor activity associated with a particular land use is an important factor to be considered in evaluating its compatibility with airport noise. In most locations, noise level reduction measures are only effective in reducing interior noise levels.
- 3.1.6. *Single-Event Noise Levels* — Single-event noise levels should be considered when evaluating the compatibility of highly noise-sensitive land uses such as schools, libraries, and outdoor theaters. Single-event noise levels are particularly important in areas which are regularly overflowed by aircraft, but which do not produce significant CNEL contours. Flight patterns for each airport (illustrated in Chapter 4) should be considered in the review process. Acoustical studies or on-site noise measurements may be required to assist in determining the compatibility of sensitive uses.

## 3.2. Safety

- 3.2.1. *Objective* — The intent of land use safety compatibility criteria is to minimize the risks associated with an off-airport aircraft accident or emergency landing.
  - (a) Risks both to people and property in the vicinity of an airport and to people on board the aircraft shall be considered.

**Table 2B**  
**Noise Compatibility Criteria**

LAND USE CATEGORY	CNEL, dBA				
	50-55	55-60	60-65	65-70	70-75
<b>Residential</b>					
single family, nursing homes, mobile homes	+	o	-	--	--
multi-family, apartments, condominiums	++	+	o	--	--
<b>Public</b>					
schools, libraries, hospitals	+	o	-	--	--
churches, auditoriums, concert halls	+	o	o	-	--
transportation, parking, cemeteries	++	++	++	+	o
<b>Commercial and Industrial</b>					
offices, retail trade	++	+	o	o	-
service commercial, wholesale trade, warehousing, light industrial	++	++	+	o	o
general manufacturing, utilities, extractive industry	++	++	++	+	+
<b>Agricultural and Recreational</b>					
cropland	++	++	++	++	+
livestock breeding	++	+	o	o	-
parks, playgrounds, zoos	++	+	+	o	-
golf courses, riding stables, water recreation	++	++	+	o	o
outdoor spectator sports	++	+	+	o	-
amphitheaters	+	o	-	--	--
<hr/>					
LAND USE AVAILABILITY		INTERPRETATION/COMMENTS			
++	Clearly Acceptable	The activities associated with the specified land use can be carried out with essentially no interference from the noise exposure.			
+	Normally Acceptable	Noise is a factor to be considered in that slight interference with outdoor activities may occur. Conventional construction methods will eliminate most noise intrusions upon indoor activities.			
o	Marginally Acceptable	The indicated noise exposure will cause moderate interference with outdoor activities and with indoor activities when windows are open. The land use is acceptable on the conditions that outdoor activities are minimal and construction features which provide sufficient noise attenuation are used (e.g., installation of air conditioning so that windows can be kept closed). Under other circumstances, the land use should be discouraged.			
-	Normally Unacceptable	Noise will create substantial interference with both outdoor and indoor activities. Noise intrusion upon indoor activities can be mitigated by requiring special noise insulation construction. Land uses which have conventionally constructed structures and/or involve outdoor activities which would be disrupted by noise should generally be avoided.			
--	Clearly Unacceptable	Unacceptable noise intrusion upon land use activities will occur. Adequate structural noise insulation is not practical under most circumstances. The indicated land use should be avoided unless strong overriding factors prevail and it should be prohibited if outdoor activities are involved.			

- (b) More stringent land use controls shall be applied to the areas with greater potential risk.
- 3.2.2. *Risks to People on the Ground* — The principal means of reducing risks to people on the ground is to restrict land uses so as to limit the number of people who might gather in areas most susceptible to aircraft accidents.
- (a) A method for determining the concentration of people for various land uses is provided in Appendix C.
- 3.2.3. *Land Uses of Particular Concern* — Land uses of particular concern are ones in which the occupants have reduced effective mobility or are unable to respond to emergency situations. Schools, hospitals, nursing homes, and other uses in which the majority of occupants are children, the elderly, and the handicapped shall be prohibited within Compatibility Zones A, B, and C. This general policy may be superseded by airport specific policies (see Chapter 3). Hospitals are medical facilities which include provision for overnight stays by patients. Medical clinics are permitted in B and C zones as long as these facilities meet the maximum density standards found in Table 2A, "Compatibility Criteria".
- 3.2.4. *Other Risks* — Any use, other than aviation related uses, involving the potential for aboveground explosion or the release of toxic or corrosive materials shall be prohibited in Compatibility Zone A and subject to restrictions in Zone B as identified in Table 2A.
- 3.2.5. *Open Land* — In the event that an aircraft is forced to land away from an airport, the risks to the people on board can best be minimized by providing as much open land area as possible within the airport vicinity. This concept is based upon the fact that the large majority of aircraft accidents occurring away from an airport runway are controlled emergency landings in which the pilot has reasonable opportunity to select the landing site.
- (a) To qualify as open land, an area must be: (1) free of structures and other major obstacles such as walls and overhead wires. Roads and automobile parking lots are acceptable as open land areas if they meet the preceding criteria.
  - (b) Open land requirements for each compatibility zone are to be applied with respect to the entire zone. Individual parcels may be too small to accommodate the minimum-size open area requirement. Consequently, the identification of open land areas must initially be accomplished at the general plan or specific plan level or as part of large-acreage projects.
  - (c) Clustering of development and providing contiguous landscaped and parking areas is encouraged as a means of increasing the size of open land areas.

- (d) Building envelopes and the approach zones should be indicated on all development plans and tentative maps within an airport's planning area in order to assure that individual development projects provide the open land areas identified in a general plan, specific plan, or other large-scale plan.

### 3.3. Airspace Protection

- 3.3.1. *Height Limits* – The County of Mendocino (or any city located within the airport planning area) shall establish a means of limiting the height of structures, trees, and other objects in the vicinity of an airport in accordance with Part 77, Subpart C, of the Federal Aviation Regulations and with the United States Standard for Terminal Instrument Procedures (TERPS). Airspace plans for each airport which depict the critical areas for airspace protection are provided in Chapter 4.
- 3.3.2. *Avigation Easement Dedication* – The owner of any property proposed for development within Compatibility Zones A and B may be required to dedicate an avigation easement to the jurisdiction owning the airport. In cases where the airport is privately owned, the avigation easement may be dedicated to the County/City in the name of the airport. An easement dedicated for the benefit of a private airport shall remain in force only as long as the airport remains a public use airport. An airport shall be considered to be a public use airport only if it has a current state airport permit in either the "public-use" or "special-use" category.
  - (a) The avigation easement shall: (1) provide the right of flight in the air-space above the property; (2) allow the generation of noise and other impacts associated with aircraft overflight; (3) restrict the height of structures, trees and other objects; (4) permit access to the property for the removal or aeronautical marking of objects exceeding the established height limit; and (5) prohibit electrical interference, glare, and other potential hazards to flight from being created on the property. An example of an avigation easement is provided in Appendix E.
  - (b) Within Compatibility Zones A and B, height restrictions of less than 35 feet may be required. See the adopted airspace plan for the specific airport or review FAR Part 77.
- 3.3.3. *Minimum Restriction* – Other than within Compatibility Zones A and B, no restrictions shall be set which limit the height of structures, trees, or other objects to less than 35 feet above the level of the ground on which they are located even if the terrain or objects on the ground may penetrate Federal Aviation Regulations Part 77 surfaces.

- (a) In locations within Compatibility Zone C where the ground level exceeds or comes within 35 feet of a Part 77 surface, dedication of an aviation easement limiting heights to 35 feet shall be required in accordance with Paragraph 3.3.2. (This policy may be applicable to future airports; there are no such locations near the existing airports in Mendocino County.)
- 3.3.4. *FAA Notification* — Proponents of a project which may exceed a Part 77 surface must notify the Federal Aviation Administration as required by FAR Part 77, Subpart B, and by the California State Public Utilities Code Sections 21658 and 21659. (Notification to the Federal Aviation Administration under FAR Part 77, Subpart B, is required even for certain proposed construction that does not exceed the height limits allowed by Subpart C of the regulations. Refer to Appendix B for the specific Federal Aviation Administration notification requirements.)
  - (a) Local jurisdictions shall inform project proponents of the requirements for notification to the Federal Aviation Administration.
  - (b) The requirement for notification to the Federal Aviation Administration shall not necessarily trigger review of an individual project by the Airport Land Use Commission if the project is otherwise in conformance with the compatibility criteria established in the *Airport Land Use Compatibility Plan*.
  - (c) Any project coming before the Airport Land Use Commission for reason of height-limit issues shall include a copy of FAR Part 77 notification to the Federal Aviation Administration.
- 3.3.5. *Other Flight Hazards* — Land uses which may produce hazards to aircraft in flight shall not be permitted within any airport's planning area. Specific characteristics to be avoided include: (1) glare or distracting lights which could be mistaken for airport lights; (2) sources of dust, steam, or smoke which may impair pilot visibility; (3) sources of electrical interference with aircraft communications or navigation; and (4) any use which may attract large flocks of birds, especially landfills and certain agricultural uses.

### 3.4. Overflight

- 3.4.1. *Nature of Impact* — All locations within an airport's planning area are regarded as potentially subject to routine aircraft overflight. Although sensitivity to aircraft overflights varies from individual to individual, overflight sensitivity is particularly important within residential land uses.
  - (a) The County of Mendocino (or any city located within the airport planning area) shall establish a zoning district or overlay zone for all properties located within the airport's planning area. The purpose is to provide constructive notice that real property is within the airport planning area

and thus necessitates that this information be disclosed by a seller of real property to any prospective buyer.

- (b) The County of Mendocino (or any city located within the airport planning area) may require other appropriate measures, including, but not limited to, requiring the dedication of aviation or overflight easements and deed noticing. See "Other Development Conditions" in Table 2A for guidance on where measures should be applied.



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# 3

## Individual Airport Policies and Compatibility Maps

### GENERAL

The Compatibility Maps contained in this chapter are to be used in conjunction with the Compatibility Criteria set forth in Table 2A. The Compatibility Zones shown on each map represent areas in which the land use compatibility concerns are similar in character. The zone boundaries reflect a composite of the four basic compatibility concerns: noise, safety, overflight and airspace.

The boundaries of the four compatibility zones were initially set according to the methodology described below. These boundaries were then modified to take into account aircraft traffic pattern restrictions, distinct geographic features, and other factors unique to each airport.

**Zone A:** The building restriction lines were used to define the lateral limits of this zone. Building restriction lines are commonly set so that structures up to 35 feet in height remain below the airspace surfaces defined by Federal Aviation Regulations Part 77. The length of this zone is defined by the runway protection zones (formerly called clear zones). Runway protection zone dimensions are set in accordance with Federal Aviation Administration standards for the proposed future runway location, length, width, and approach type. Building restriction lines and runway data were taken from the approved Airport Layout Plan for each airport.

**Zone B1:** The outer boundary of the Approach/Departure Zone is defined as the area where aircraft are commonly below 400 feet above ground level. For visual runways, this location encompasses the base leg of the traffic pattern as commonly flown. For instrument runways, the altitudes established by approach procedures are used. Zone B1 also includes areas within 1,000 feet laterally from the runway centerline.

**Zone B2:** The Extended Approach/Departure Zone includes areas where aircraft are commonly below 800 feet above ground level on a straight-in approach or straight-out departure. It applies to runways with more than 500 operations per year by large aircraft (i.e., over 12,500 pounds maximum gross takeoff weight) and/or runway ends with more than 10,000 total annual takeoffs.

**Zone C:** The outer boundary of the Common Traffic Pattern Zone is defined as the area where aircraft are commonly below 1,000 feet above ground level (i.e., the traffic pattern and pattern entry points). This area is considered to extend 5,000 feet laterally from the runway centerline. Length along the runway's axis will vary from 5,000 to 10,000 feet from the end of the runway's primary surface. The length depends upon the runway classification (visual versus instrument), and the type and volume of aircraft accommodated. For runways having an established track solely on one side, the shape of the zone is modified accordingly.

**Zone D:** The outer boundary of the Other Airport Environs Zone conforms to the Federal Aviation Regulations Part 77 horizontal surface.

## **INDIVIDUAL AIRPORT POLICIES**

The policies listed in Chapter 2 are intended to apply broadly to all of the airports in Mendocino County. In some instances, however, policies addressing concerns specific to a single airport are necessary. Such policies are presented on the pages which follow.

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## **1. Boonville Airport**

- 1.1.** The planning area is 2,000 feet longer than standard to encompass the common traffic pattern. Arriving aircraft typically make their turn to the base leg south of town. Aircraft typically make their crosswind turn (following departure) so as to avoid overflying the Anderson Valley School.
- 1.2.** Residential parcels located laterally from the runway and designed to provide aircraft access to the airport may be as small as 1 acre in size. Residences may be placed as close as 250 feet from the runway centerline if the structure would not penetrate FAR Part 77 surfaces. If this setback is not feasible, the greatest possible setback should be provided.
- 1.3.** New schools, hospitals, and nursing homes may be permitted in Zone C, following a project-specific review by the ALUC. Existing school facilities may be expanded through the construction of new structures or additions as long as no habitable structures penetrate FAR Part 77 surfaces or are located closer than 250 feet from the runway centerline.

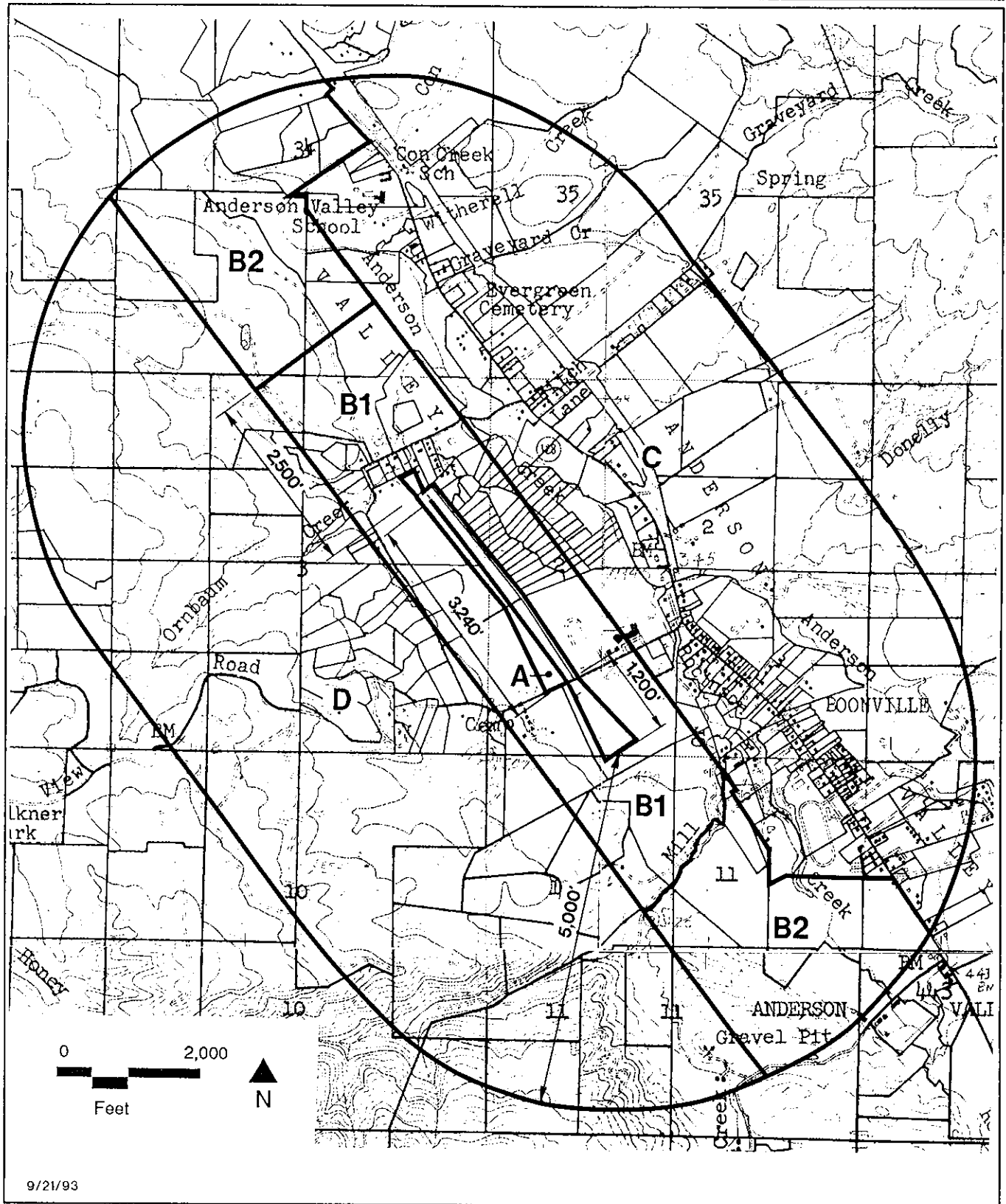


Figure 3A

# **Compatibility Map** Boonville Airport

## **2. Ells Field**

- 2.1. The compatibility zones include provisions to protect the planned 1,000-foot runway extension. Once the runway is extended, the dashed portion of the B1 zone may be converted to a C zone.
- 2.2. A single-family dwelling may be constructed on any existing lot in Zone B1.
- 2.3. Multi-family units in Zone B1 shall not qualify as infill development as defined in Section 2.1.6.

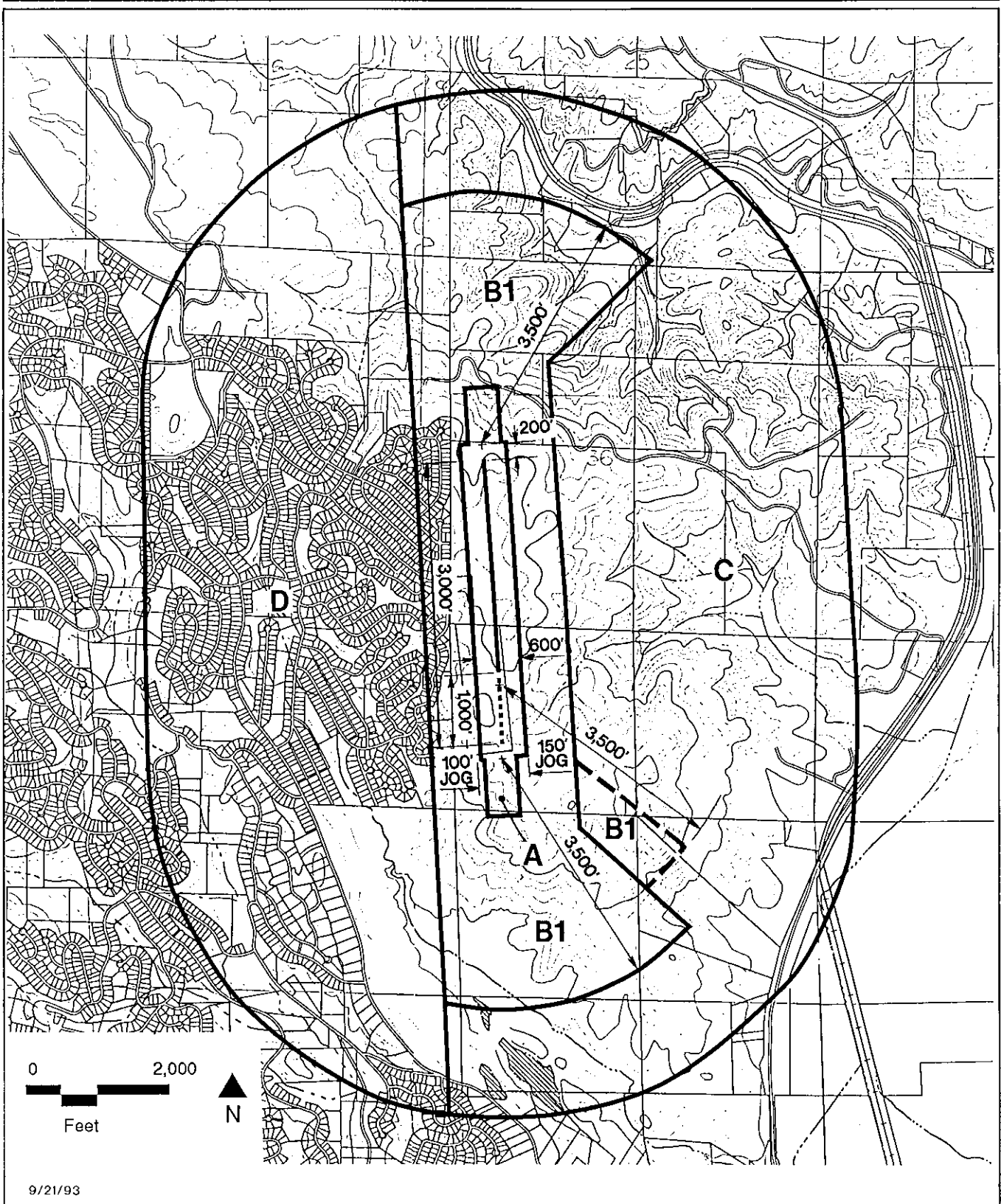


Figure 3B

# Compatibility Map Ells Field

### **3. Little River Airport**

- 3.1.** There are relatively few landings on Runway 11. Therefore, land use restrictions are applied to only those areas where aircraft turn to the base leg during approaches.



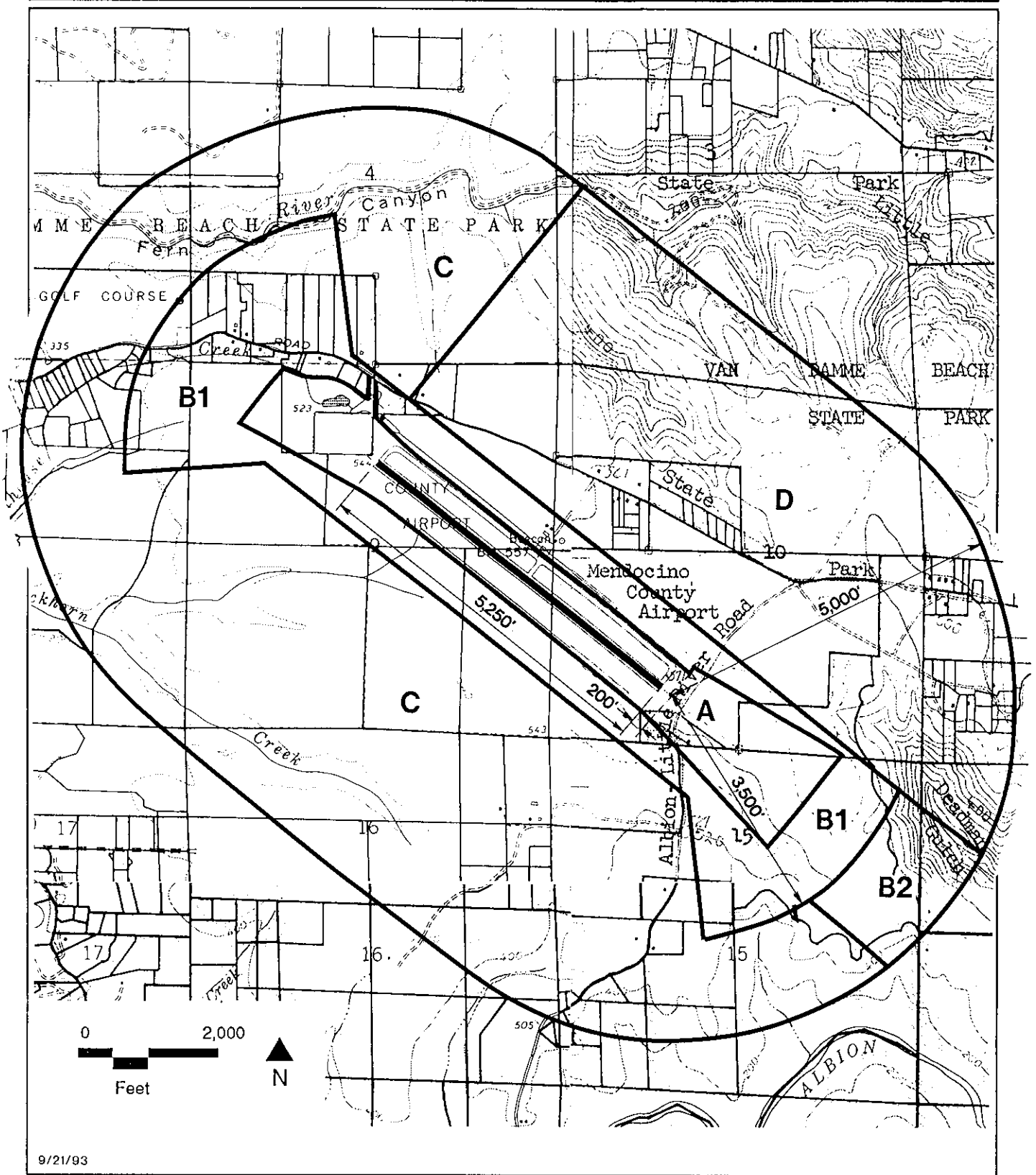


Figure 3C

# **Compatibility Map** Little River Airport

## **4. Ocean Ridge**

- 4.1.** In order to simplify implementation of the Compatibility Map for Ocean Ridge Airport, Old Stage Road is used to define the boundary of the D Zone.

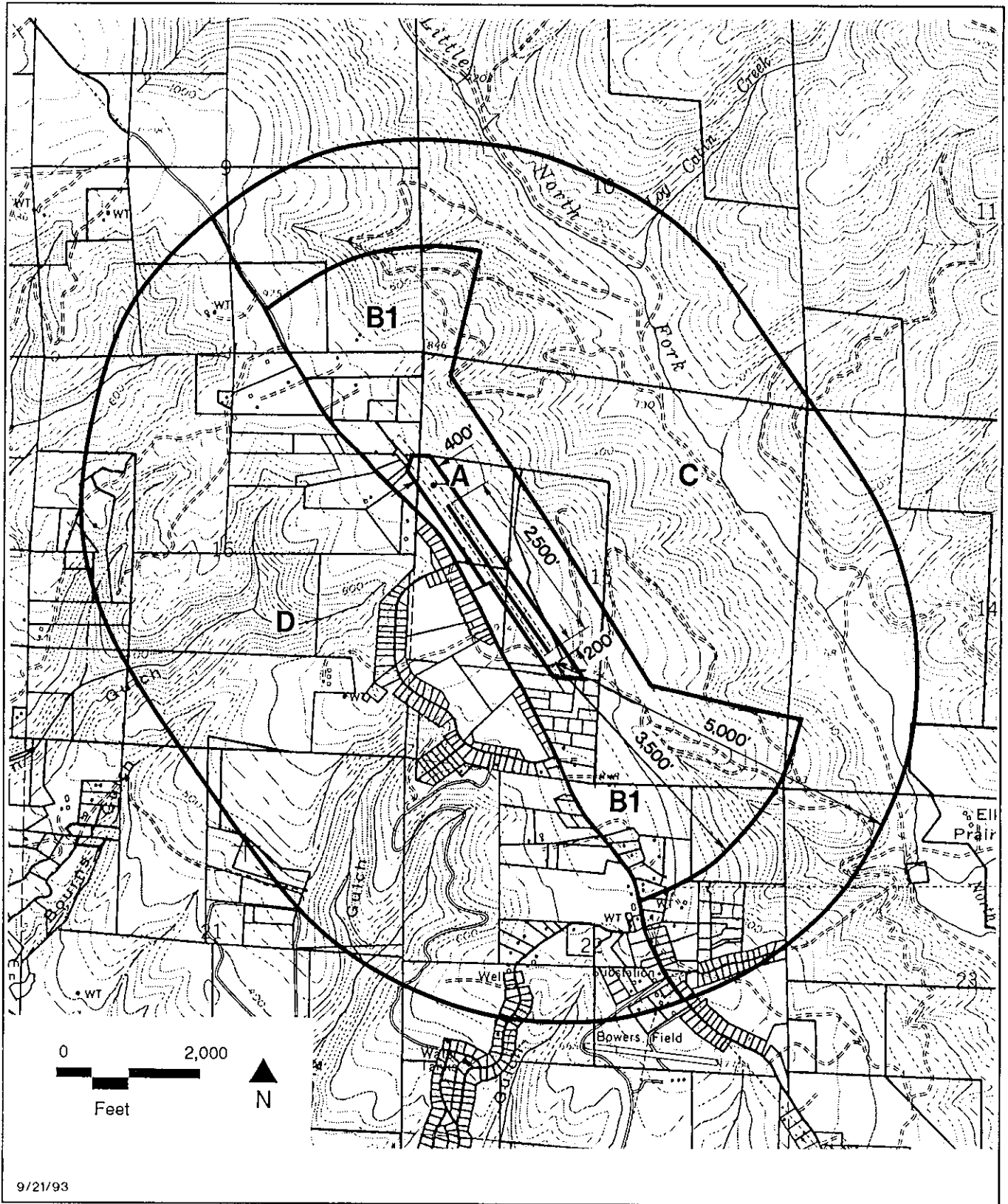


Figure 3D

## Compatibility Map

Ocean Ridge Airport

## **5. Round Valley Airport**

- 5.1.** ALUC policies are not applicable on Tribal lands. However, the tribal council should consider these policies when making land use decisions.
- 5.2.** The B1 zone is narrower than standard on the southeastern end. The width reflects the fact that arriving aircraft typically do not overfly the town of Covelo.
- 5.3.** Schools, hospitals and nursing homes may be permitted in Zone C, following a project-specific review by the ALUC.

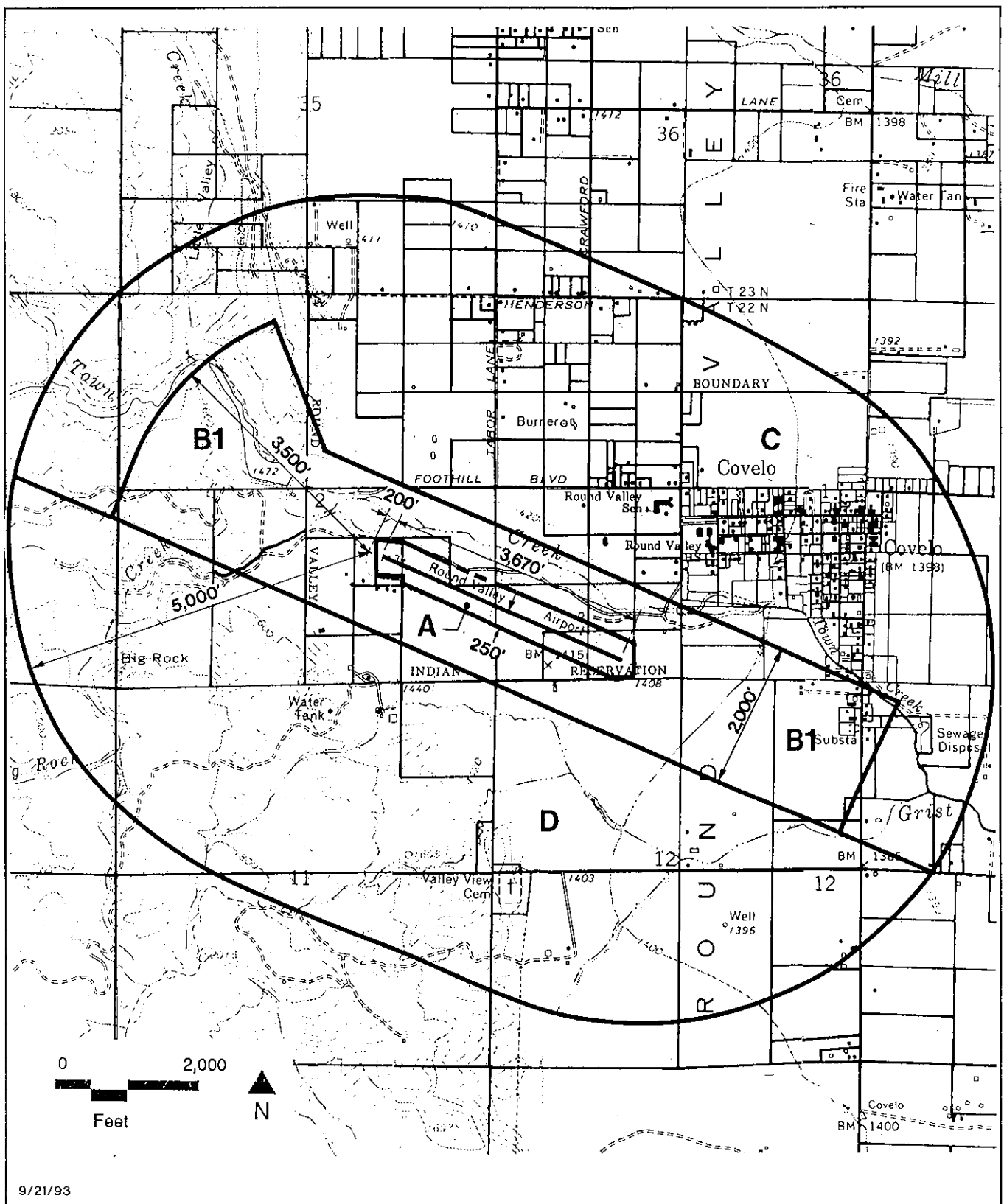


Figure 3E

# Compatibility Map Round Valley Airport

## **6. Ukiah Municipal Airport**

- 6.1.** Lands within the A\* and B1\* zones are currently not under airport ownership. However, it is the intention of the City of Ukiah to provide long-term control of the land uses within these areas by either acquiring the property in fee or obtaining approach protection easements restricting the type and density of land uses permitted.
- 6.2.** The B2 zone north of the Airport largely encompasses existing development. Some vacant land remains, however, and redevelopment of other parcels is anticipated. The Infill policy (Policy 2.1.6) of the County-wide Compatibility Plan is applicable to the entirety of this B2 zone. This policy allows new development of a similar intensity to that of surrounding, already existing, uses.

A survey of the area has been conducted to determine the current types and intensity of uses. The following limits on future development of this zone are set accordingly:

- (1) New residential development is discouraged in this zone. However, where such development is considered the best land use for a particular parcel with regard to general city planning factors, high-density, multifamily residential development shall – because of its lower sensitivity to noise compared to single-family residential uses – be deemed normally acceptable. Any new multifamily residential development shall not exceed 28 dwelling units per acre. Any proposed multifamily residential development greater than four acres shall maintain a minimum of 30 percent open lands including non enclosed automobile parking lots, major landscaping areas and a share of adjacent roads. New single-family residential uses shall continue to be regarded as normally unacceptable.
  - (2) Non-residential uses shall not exceed 90 people per acre.
  - (3) Routinely occupied portions of buildings shall not exceed two stories in height (equipment rooms, etc., are exempt).
  - (4) Restaurants and motels are acceptable uses in the B2 infill zone provided that they do not exceed the above two criteria.
  - (5) An existing school or hospital located within the B2 infill zone may be expanded provided that the buildings are single story and the use does not exceed an intensity of 60 people per acre.
- 6.3.** Recording of a Deed Notice is considered an acceptable alternative to dedication of an avigation or overflight easement in the B2 and C zones.
- 6.4.** Establishment of a Real Estate Noise Disclosure requirement shall be considered an acceptable alternative to a Deed Notice requirement in the D zone.

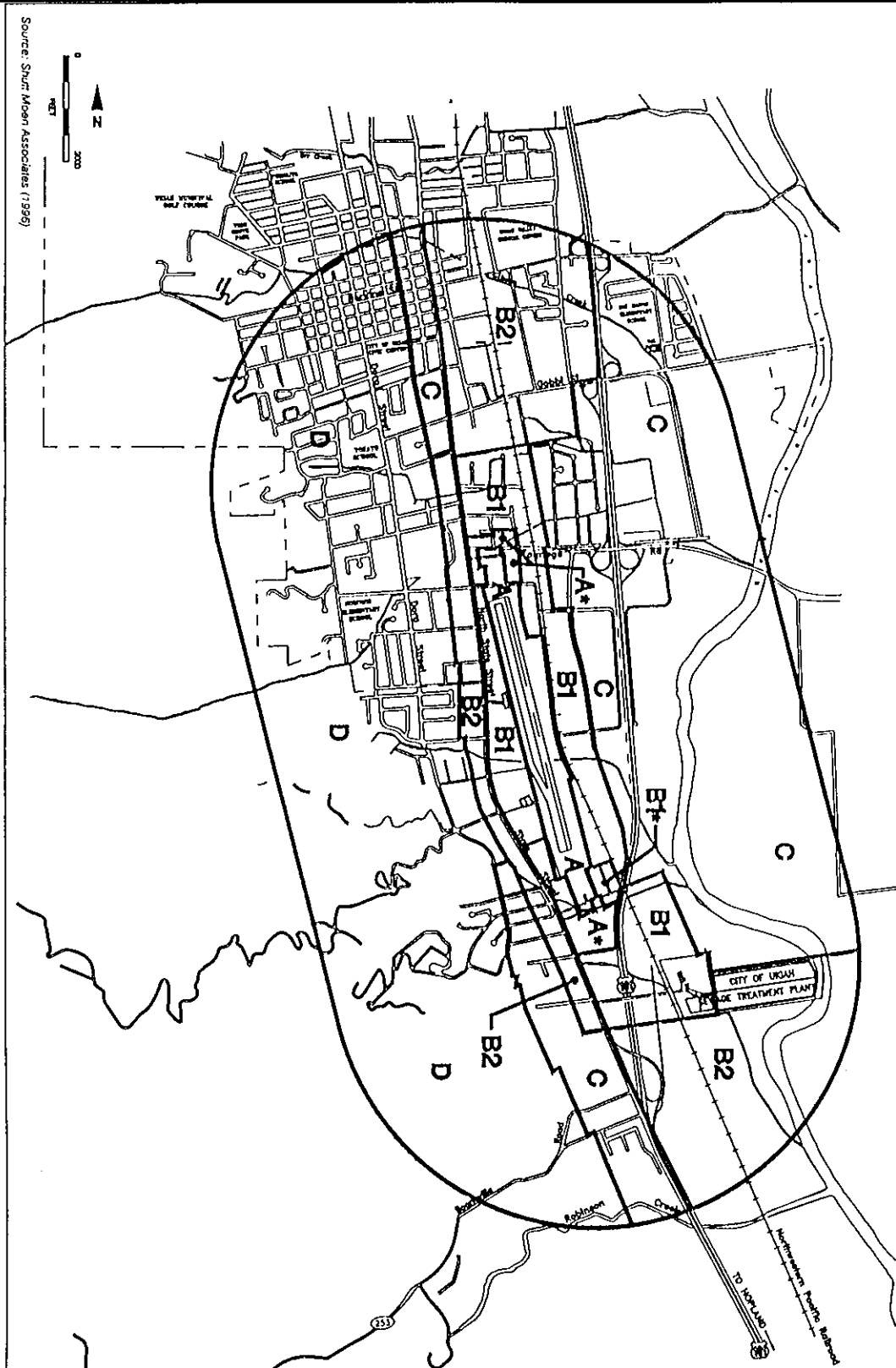


Figure 3F

**Compatibility Map**  
**Ukiah Municipal Airport**

## **Part II**

### **Supporting Information**



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# 4

## Background Data

### INTRODUCTION

This chapter contains background information relevant to land use compatibility planning for the areas surrounding each of the airports covered by this plan. The information is current as of May 1993.

For each airport, the following information is presented:

- **Airport Environs** — A description of existing and planned land uses in the vicinity of the airport.
- **Airport Features** — A listing of the principal physical features and services of the airport. The emphasis is on data having potential implications for land use compatibility.
- **Airport Plan** — A copy of the most recent airport layout plan for each airport. Where an airport layout plan did not exist, an airport layout diagram was prepared as part of this study. In such cases, the airport owner reviewed the diagram and approved its accuracy.
- **Airport Activity** — Data regarding forecast airport activity. The only official forecasts which exist for four of the airports were those in the California Aviation System Plan. The state forecasts are for no growth. Therefore, for compatibility planning purposes, these forecasts were increased 50% for: Round Valley, Boonville, and Ocean Ridge Airports. The forecast for Ells Field was increased by 100% due to the anticipated large increase in population associated with the build-out of Brooktrails.
- **Noise Contours** — A map depicting future noise contours for each airport. The contours are generated from the forecast activity levels indicated in the airport activity table.
- **Airspace Plan** — Height limit surfaces defined by Part 77 of the Federal Aviation Regulations.

## OVERVIEW OF KEY ISSUES

### Boonville Airport

The runway protection zones do not lie on airport property. Land use regulation cannot secure the same level of protection that ownership would confer. It would be highly desirable for the Anderson Valley Community Services District, which owns the airport, to acquire all of the land which lies within the runway protection zones. Funding this acquisition, however, may be beyond the District's means, even if grant funds are used.

Additionally, the permitted residential parcel sizes in the immediate vicinity of the airport are significantly smaller than desirable. It is particularly important to minimize the number of additional residences constructed along the extended runway centerline.

### Ells Field

There are about 100 parcels located within the B1 Zone which are part of the Brooktrails subdivision. Although undesirable from a compatibility standpoint, there are only a few modifications which could potentially be achieved through land use regulation to improve the compatibility. Every opportunity should be taken to reduce the number of potential residential units. Approximately 35 of these parcels are designated neighborhood commercial, but are undeveloped. The neighborhood commercial designation permits the development of multifamily housing. Compatibility would be improved if either: multifamily housing were prohibited on these lots or the parcels were redesignated for single-family dwellings.

Southwest of the airport substantial acreage has been designated suburban residential. With sewer and water service, residential parcels as small as 6,000 square feet could be created. No investment in infrastructure has yet been made and the land remains in large parcels. It is appropriate to change the existing land use designations to conform to the CLUP for this airport.

### Little River Airport

The airport master plan for this airport identifies the need to acquire additional property in the approaches to its runway. Implementation of this measure is important to the maintenance of the existing level of compatibility.

Many of the parcels within the B1 Zone have been divided into parcels smaller than recommended. It would be desirable to prevent additional redivision within the remaining parcels.

## **Ocean Ridge Airport**

Ocean Ridge is a privately-owned airport. Given the size of the airport, it is likely that the airport does not financially support itself. Revenues from the industrial uses on the airport are probably needed to support continued operation of the facility. It is important to avoid restricting the nonaviation uses to the point where the financial consequences force closure of the airport. It is believed that the recommended occupancy levels will permit a wide range of potential uses. However, this issue should be carefully evaluated. Additional clarification of the policies may be appropriate.

Permitted residential lot sizes within the B1 Zone are smaller than recommended. The land use designation should be changed so that further redivisions below the recommended level do not occur.

Mendocino County has an airport height overlay zone ordinance which limits the height of objects near airports. However, this zoning has not been applied to the Ocean Ridge Airport. It is desirable to do so.

## **Round Valley Airport**

The runway protection zones do not lie on airport property. As was noted for the Boonville Airport, land use regulation cannot secure the same level of protection that ownership would confer. It would be highly desirable for Mendocino County, which owns the airport, to acquire all of the land which lies within the runway protection zones. Funding this acquisition, however, may be beyond the County's means, even if grant funds are used. Changes to land use designation to ones which would permit additional residential uses within the airport's approaches should be prohibited.

The Round Valley Airport planning area encompasses a significant portion of Indian Reservation lands. ALUC policies are not applicable to Tribal lands, however, the Tribal Council should consider these policies when making land use decisions.

## **Ukiah Municipal Airport**

Although convenient for users, the Airport's location immediately adjacent to developed residential and commercial/residential areas presents problems in terms of land use compatibility and facility expansion potential. Noise-sensitive land uses, primarily nearby residences, schools, and churches, are located within the Airport's environs. Also impacting airport operations is the presence of high mountainous terrain located to the east, south, and west of the Airport. The location of the Ukiah Municipal Airport within this physical environment creates interactions which restrict both aircraft and airport operational flexibility.

**Table 4A**  
**Airport Environs**  
**Boonville Airport**

**AIRPORT LOCATION AND ACCESS**

- Located 0.5 miles from the center of Boonville.
- Airport and approaches in county jurisdiction.
- Airport access via State Highway 128, then 0.3 mile west to south end of airport.

**EXISTING AIRPORT AREA LAND USES**

**General Character**

- Mostly agricultural with rural residential immediately north and along highway to the east.
- Mixture of residential and commercial in town of Boonville to southeast.

**Runway Approaches**

- *Runway 13 (northwest) Approach* — Three houses within the runway protection zone; open land beyond.
- *Runway 31 (southeast) Approach* — Mountain View Road at end of runway; pasture and open land beyond.

**Traffic Pattern**

- Mostly agricultural with scattered rural residential.
- No pattern on west side.

**LOCAL LAND USE PLANS AND ZONING**

- *County of Mendocino General Plan* — Adopted in September 1981 with subsequent amendments; remains current land use plan for area.

**PLANNED LAND USES IN AIRPORT AREA**

- Continued infill of low density residential and small-scale commercial uses.
- No major development proposals currently active.

**ESTABLISHED APPROACH PROTECTION MEASURES**

- Airport Height Combining District restricts the height of objects in the airport's vicinity.

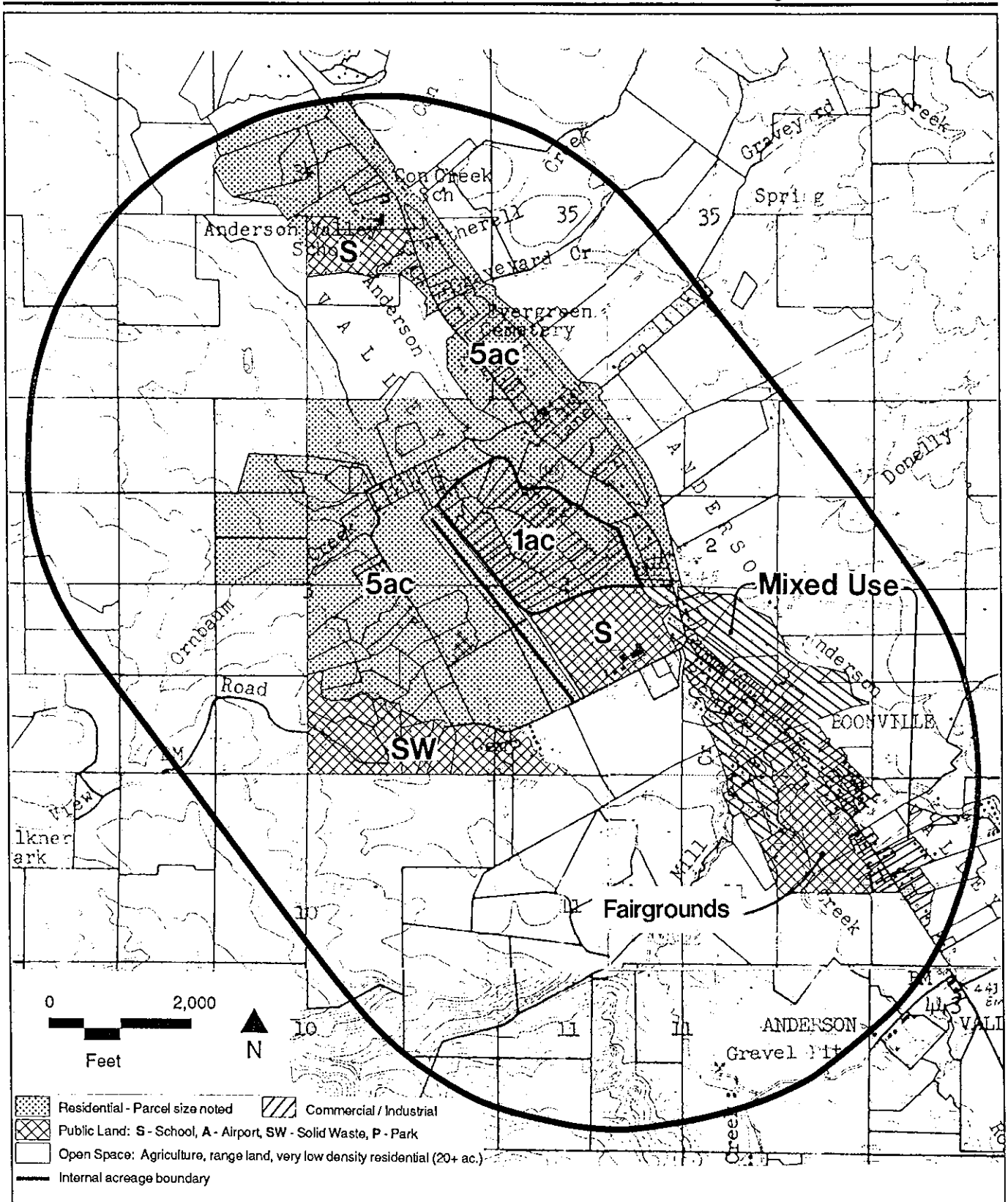


Figure 4A

## Land Use Designations

### Boonville Airport

**Table 4B**  
**Airport Features**  
**Boonville Airport**

**AIRPORT PROPERTY**

- *Ownership* — Boonville Community Services District.
- *Size* — 26 acres in fee.
- *Elevation* — 371 feet MSL.

**AIRPORT PLANNING**

- *Adopted Plans*
  - Master Plan adopted in March 1991.
- *Planned Improvements*
  - No runway extension or other changes which would change off-airport effects.

**BUILDING AREA**

- *Location* — Transient tie-downs are adjacent to runway. All hangars are on adjacent private property.
- *Aircraft Parking Capacity* — Seven designated tie-downs and space for approximately 40 in grass.
- *Other Major Facilities* — None.
- *Services* — None.

**RUNWAY SYSTEM****Runway 13-31**

- *Critical Aircraft* — Single-engine propeller; also occasional small twin-engine propeller aircraft.
- *Classification* — Airport Reference Code A-I.
- *Dimensions* — 3,240 feet long, 50 feet wide; Runway 13 threshold displaced 448'; Runway 31 threshold displaced 252'.
- *Lighting* — None.
- *Surface* — Asphalt, excellent condition, repaved Summer 1992.
- *Primary Taxiways* — None.

**RUNWAY APPROACHES****Runway 13**

- *Approach Type* — Visual.
- *Runway Protection Zone* — Off airport property; land not covered by approach protection easement.
- *Approach Obstacles* — Trees 400' from runway end.

**Runway 31**

- *Approach Type* — Visual.
- *Runway Protection Zone* — Off airport property; land not covered by approach protection easement.
- *Approach Obstacles* — Hill 3,345' from runway end.

**Traffic Pattern**

- *Location* — Established pattern east of runway only.
- *Altitude* — 800 feet above airport elevation.
- *Approach Procedure* — Avoid overflying town of Boonville and Anderson Valley School.

Source: Hodges & Shutt (August 1992)

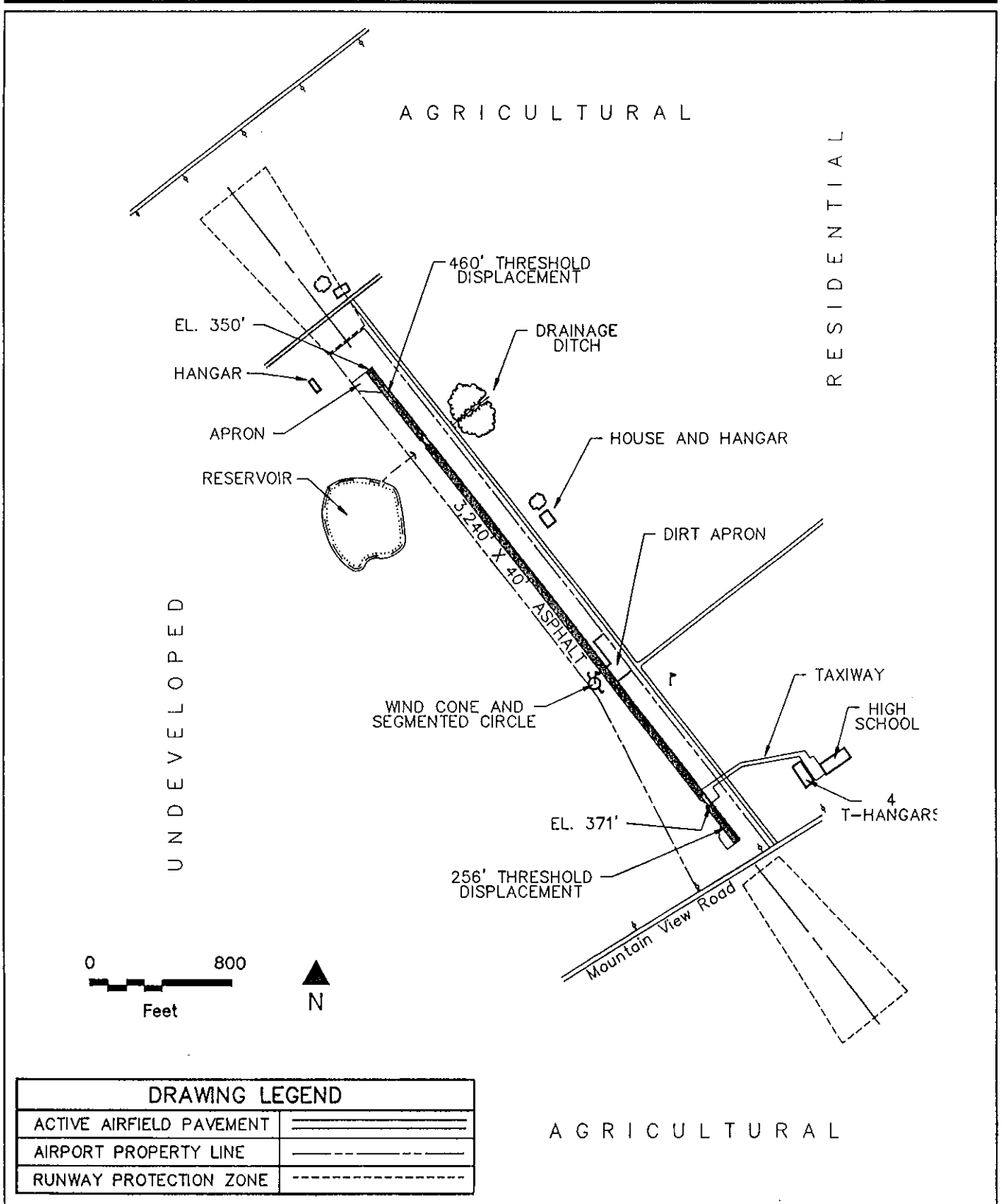


Figure 4B

## Airport Layout Diagram

### Boonville Airport

**Table 4C**  
**Forecast Airport Activity**  
**Boonville Airport**

**AIRCRAFT OPERATIONS**

Total	
Annual	6,000
Average Day	16
Distribution	
Single-Engine	90.0%
Twin-Engine	10.0%

**TIME OF DAY DISTRIBUTION**

All Aircraft	
Day (0700-1900)	99.0%
Evening (1900-2200)	1.0%
Night (2200-0700)	0.0%

**RUNWAY USE DISTRIBUTION**

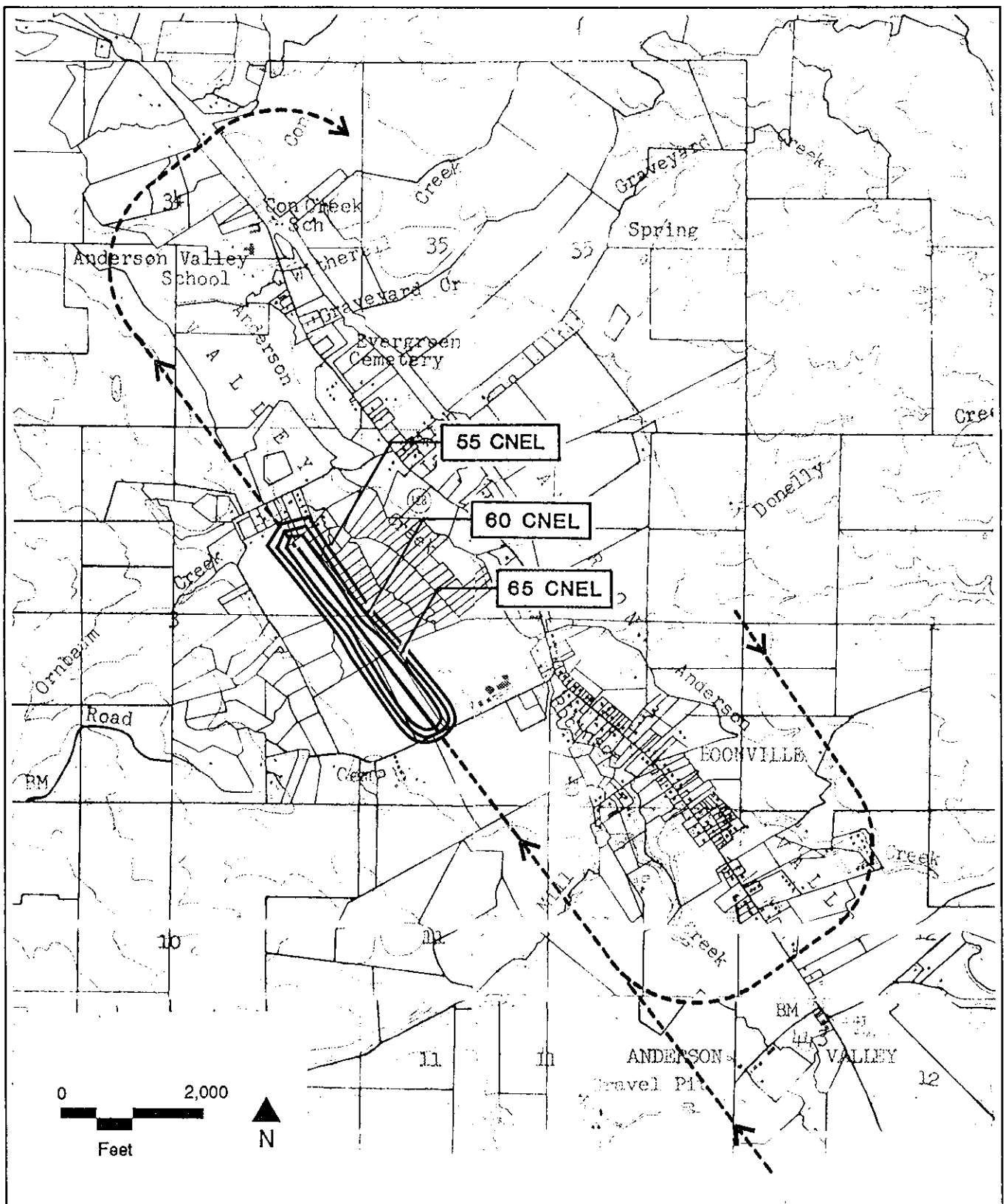
All Aircraft	
All Operations	
Runway 13	8.0%
Runway 31	92.0%

**FLIGHT TRACK DATA**

- Pattern Altitude – 800 feet AGL.
- Right traffic on Runway 31 (no west side pattern).

Source: Hodges & Shutt (May 1993 - for year 2013)





**Figure 4C**

## Noise Contours 2013

### Boonville Airport

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**Table 4D**  
**Airport Environs**  
**Ells Field**

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**AIRPORT LOCATION AND ACCESS**

- Approximately 3 miles north of the City of Willits.
- Airport and approaches within unincorporated portion of County.
- Access via Poppy Drive; access to area via Sherwood Drive from State Highway 101.

**EXISTING AIRPORT AREA LAND USES**
**General Character**

- Urban density residential in Brooktrails subdivision to west.
- Undeveloped within 1 mile to north, east and south.

**Runway Approaches**

- *Runway 16 (north) Approach* — Undeveloped.
- *Runway 34 (south) Approach* — Undeveloped.

**Traffic Pattern**

- Pattern only on east side; widely scattered rural residential.

**LOCAL LAND USE PLANS AND ZONING**

- *Mendocino County General Plan* — Adopted by County September 1981; subsequently amended; sets land use policies for environs.
- *Brooktrails Specific Plan* — Currently under preparation; adoption likely in 1993.

**PLANNED LAND USES IN AIRPORT AREA**

- Brooktrails Specific Plan may recommend some changes in land use designations; however most of the designations are anticipated to remain unchanged.
- Continuing infill of Brooktrails subdivision with residential and small scale commercial.
- No major projects currently under consideration.

**ESTABLISHED APPROACH PROTECTION MEASURES**

- Airport Height Combining District restricts the height of objects in the airport's vicinity.

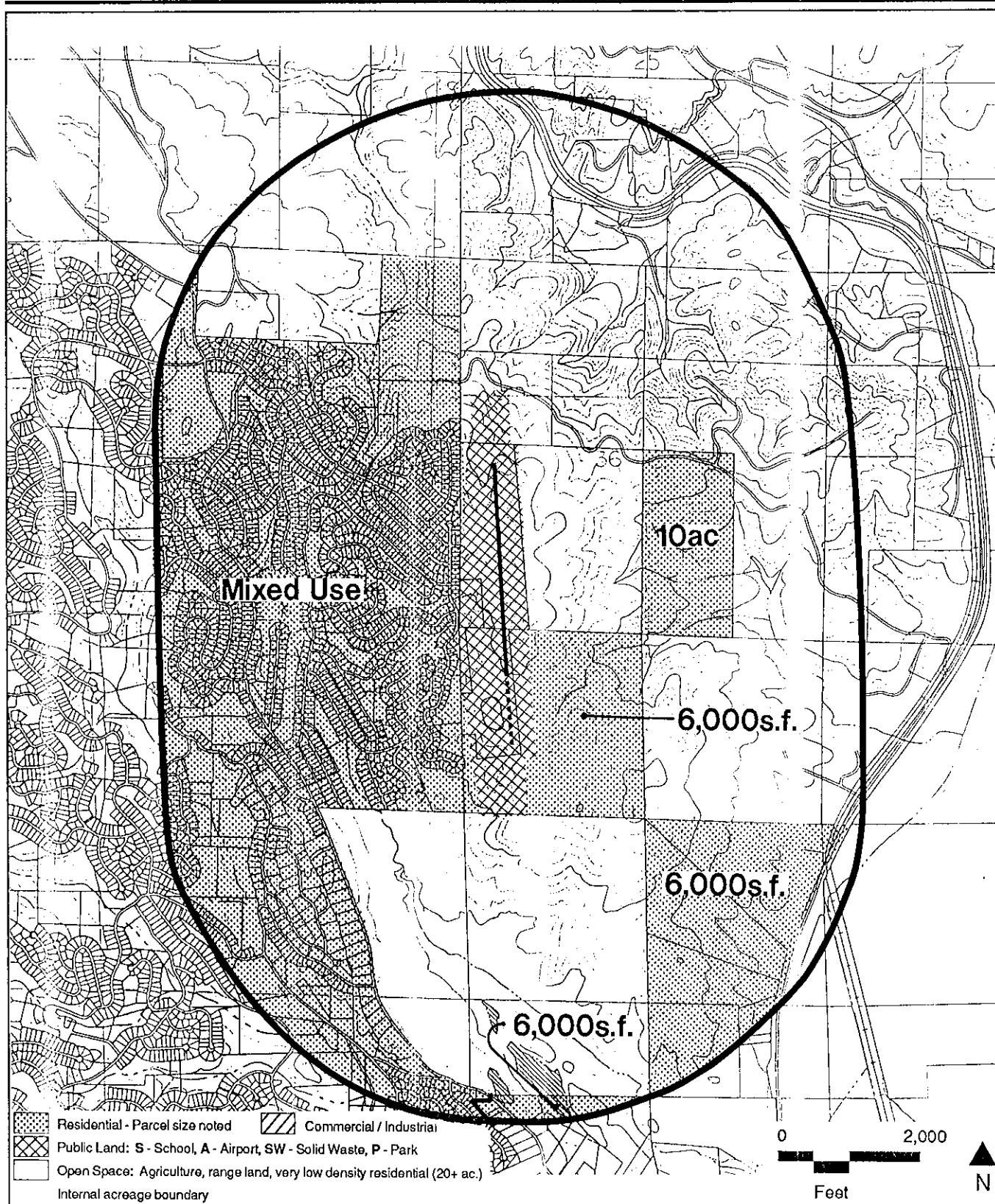


Figure 4E

## Land Use Designations

Ells Field

Table 4E  
**Airport Features**  
Ells Field

**AIRPORT PROPERTY**

- *Ownership* — City of Willits.
- *Size* — Approx. 75 acres fee title.
- *Elevation* — 2,085 feet MSL.

**AIRPORT PLANNING**

- *Adopted Plans*
  - Airport Layout Plan adopted in 1991.
- *Planned Improvements*
  - 1,000-foot extension of the runway to the south.

**BUILDING AREA**

- *Location* — North end west of runway.
- *Aircraft Parking Capacity* — Approximately 30 based and transient tie-downs.
- 20 T-hangar units in two banks and one portable hangar.
- *Other Major Facilities* — Two fixed base operations' maintenance hangars and offices.
- *Services* — Fixed base operator services include fuel, aircraft sales, engine and airframe maintenance, and flight instruction.

**RUNWAY SYSTEM****Runway 16-34**

- *Critical Aircraft* — Light twin-engine propeller.
- *Classification* — Airport Reference Code B-I, small aircraft.
- *Dimensions* — 3,000 feet long, 75 feet wide.
- *Lighting* — Medium-intensity runway edge lighting.
- *Surface* — Asphalt, good condition.
- *Primary Taxiways* — One exit taxiway to building area.

**RUNWAY APPROACHES****Runway 16**

- *Approach Type* — Visual.
- *Runway Protection Zone* — Essentially all is within airport property line.
- *Approach Obstacles* — No penetrations of approach surface.

**Runway 34**

- *Approach Type* — Visual.
- *Runway Protection Zone* — All of existing RPZ is on airport property, but 3 acres of future RPZ is not on airport property.
- *Approach Obstacles* — No penetrations of approach surface.

**Traffic Pattern**

- *Location* — Established pattern east of runway only.
- *Altitude* — 1,000 feet above airport elevation.

Source: Hodges & Shutt (August 1992)

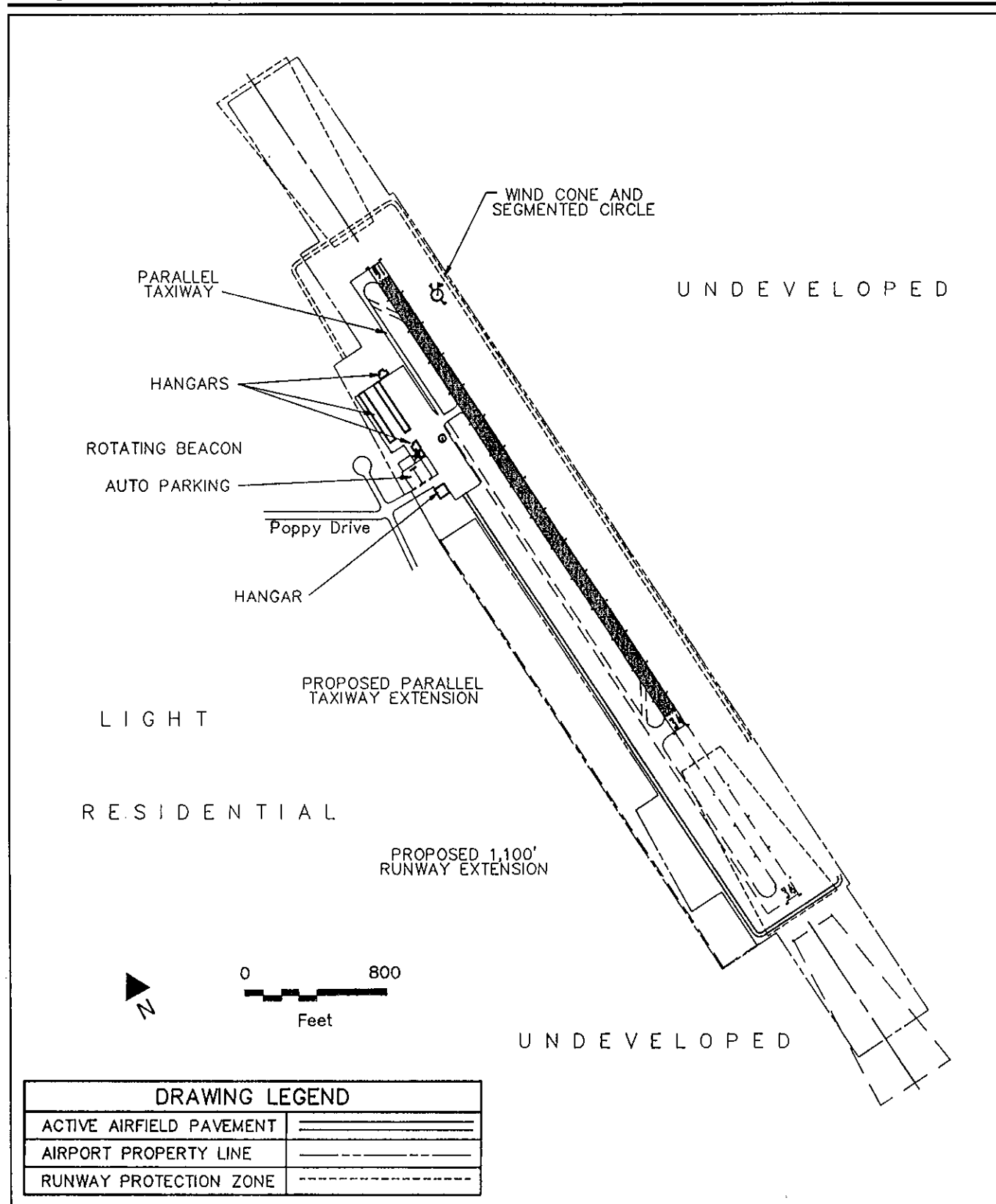


Figure 4F

## Airport Layout Diagram

Ellis Field

Table 4F  
**Future Airport Activity**  
 Ells Field Airport

---

**AIRCRAFT OPERATIONS**

Total	
Annual	13,000
Average Day	36
Distribution	
Single-Engine	85.0%
Twin-Engine	15.0%

**TIME OF DAY DISTRIBUTION**

All Aircraft	
Day (0700-1900)	94.0%
Evening (1900-2200)	5.0%
Night (2200-0700)	1.0%

**RUNWAY USE DISTRIBUTION**

All Aircraft	
All Operations	
Runway 16	90.0%
Runway 34	10.0%

**FLIGHT TRACK DATA**

- Pattern Altitude – 1,000 feet AGL.
- Right traffic on Runway 34 (no west side pattern).

Source: Hodges & Shutt (May 1993 - for year 2013)



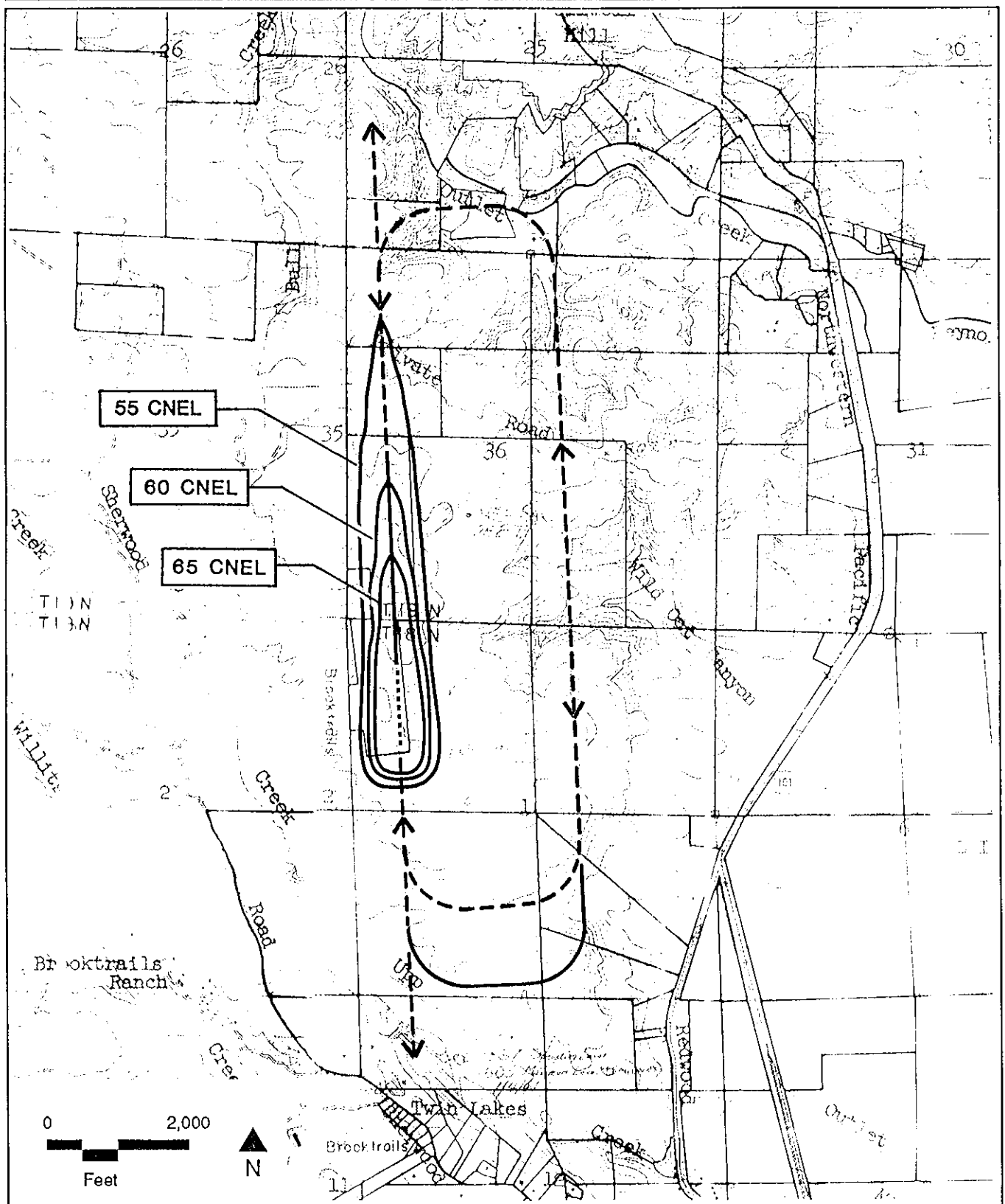


Figure 4G

## Noise Contours - 2013

Ells Field

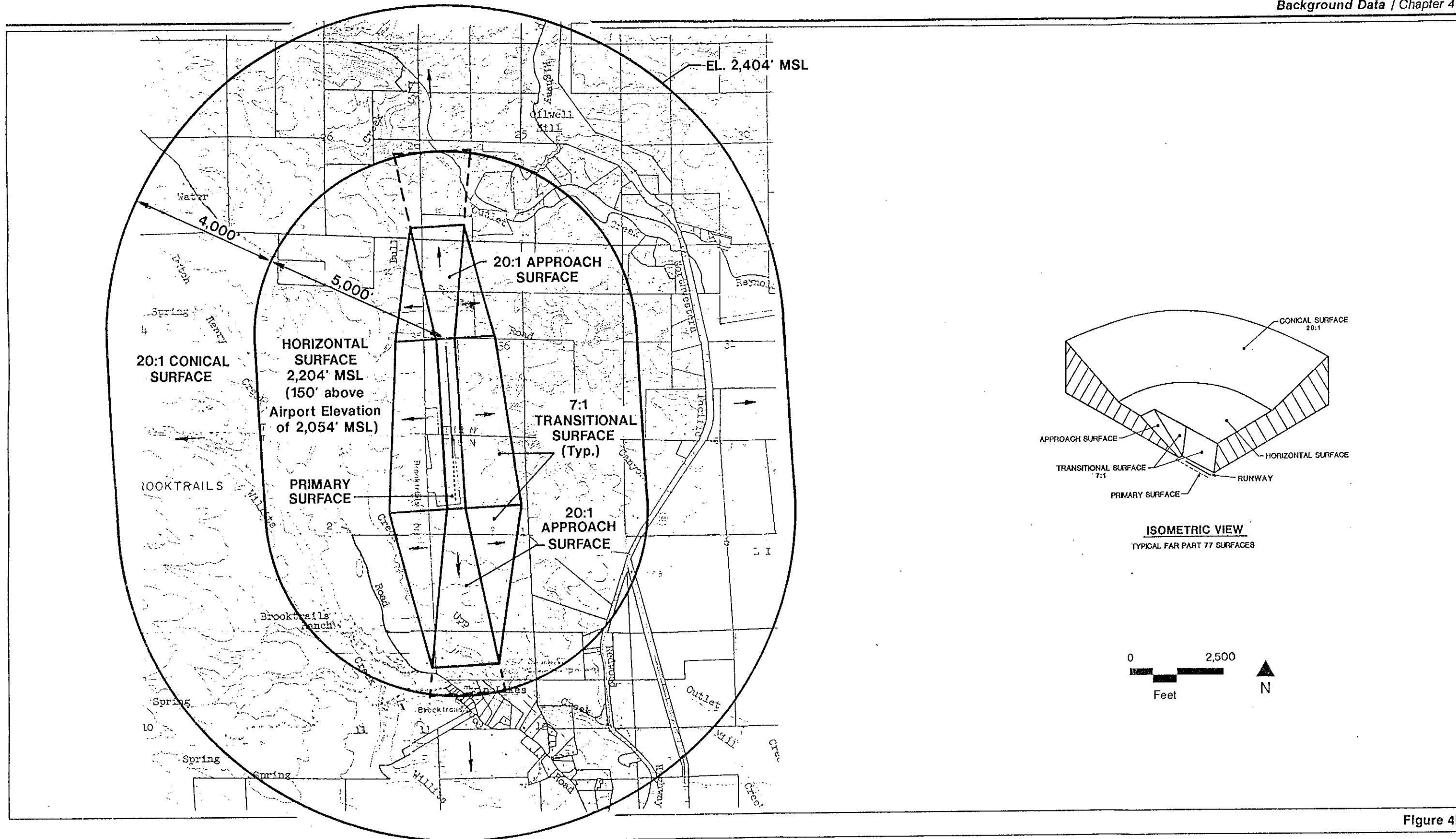


Figure 4H

**Airspace Plan**  
Ells Field

Table 4G

**Airport Environs****Little River Airport****AIRPORT LOCATION AND ACCESS**

- Located approx. 3 miles southeast of the community of Little River.
- Airport and approaches totally in county jurisdiction.
- Access from State Highway 1 via Little River Airport Road.

**EXISTING AIRPORT AREA LAND USES****General Character**

- A mixture of scattered rural residential and forest.

**Runway Approaches**

- *Runway 11 (northwest) Approach* — Three ponds, one group of residences with majority of area forested.
- *Runway 29 (southeast) Approach* — Forested area sloping down to Albion River.

**Traffic Pattern**

- One residential subdivision immediately north of airport; widely scattered residences elsewhere.

**LOCAL LAND USE PLANS AND ZONING**

- *Mendocino County General Plan* — Adopted in September 1981 with subsequent amendments; remains current land use plan for area.
- *Coastal Element* — Adopted by county November 1985; sets land use policies for western edge of airport's environs.

**PLANNED LAND USES IN AIRPORT AREA**

- Continued residential infill on large lots.
- Residential care center proposed in subdivision north of airport.

**ESTABLISHED APPROACH PROTECTION MEASURES**

- Airport Height Combining Zone limits the height of objects in the vicinity of the airport.

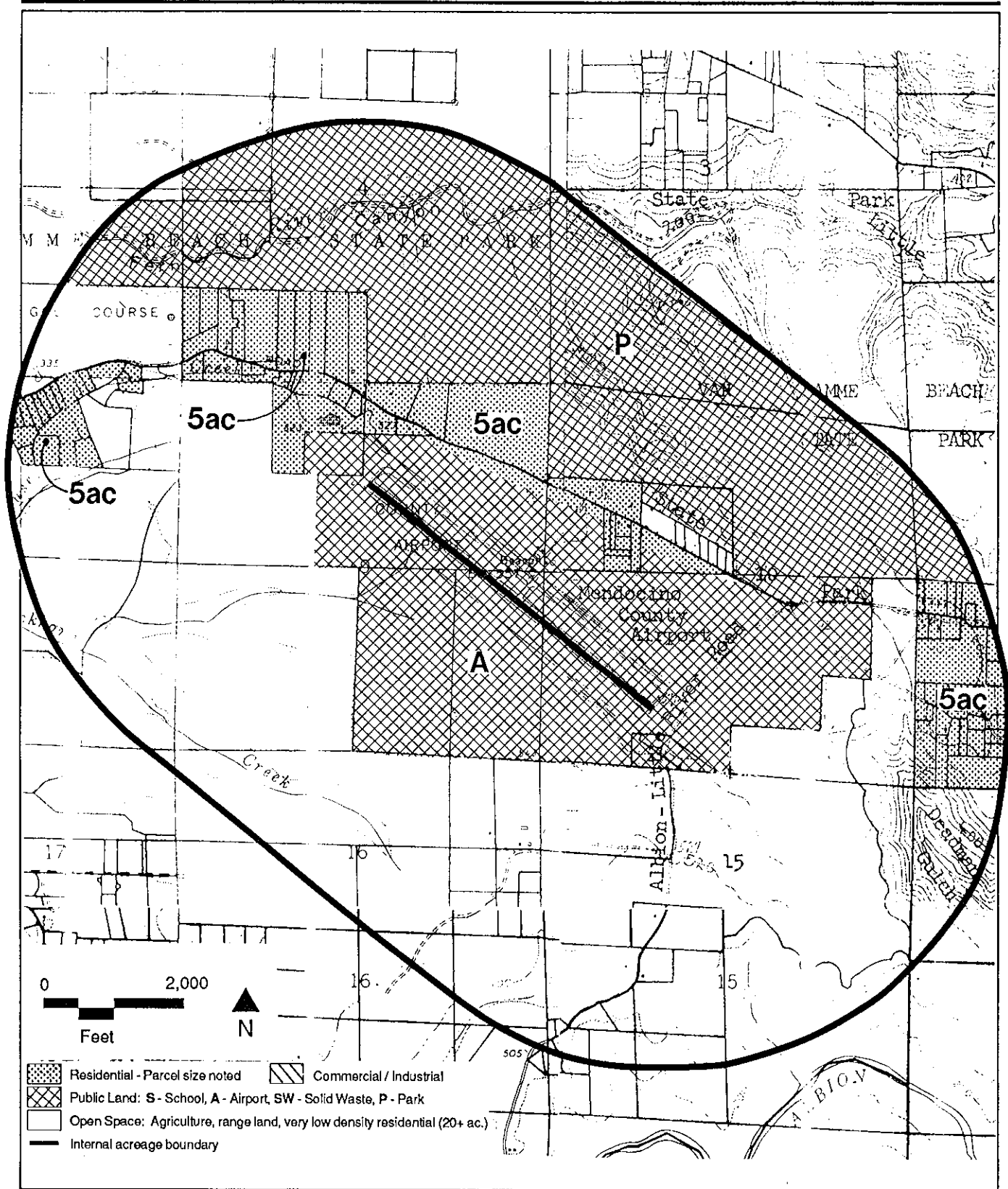


Figure 41

## Land Use Designations

### Little River Airport



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**Table 4H**  
**Airport Features**  
**Little River Airport**

**AIRPORT PROPERTY**

- *Ownership* – County of Mendocino
- *Size* – 548 acres in fee.
- *Elevation* – 572 feet MSL.

**AIRPORT PLANNING**

- *Adopted Plans*
  - 1990 Master Plan adopted by County Board of Supervisors.
- *Planned Improvements*
  - No change to runway proposed.
  - Additional areas for hangars provided.

**BUILDING AREA**

- *Location* – On north side of runway.
- *Aircraft Parking Capacity* – 48 tiedown spaces, and 13 T-hangars.
- *Other Major Facilities* – Fixed base operations maintenance hangar; offices; fuel facilities.
- *Services* – Fuel only. FBO services discontinued.

**RUNWAY SYSTEM****Runway 11-29**

- *Critical Aircraft* – Medium business jet.
- *Classification* – Airport Reference Code C-II.
- *Dimensions* – 5,250 feet long, 150 feet wide; Runway 11 displaced 200 feet.
- *Lighting* – Medium-intensity runway edge lighting.
- *Surface* – Asphalt.

**RUNWAY APPROACHES****Runway 11**

- *Approach Type* – Visual.
- *Runway Protection Zone* – All but approx. one-half acre on airport property.
- *Approach Obstacles* – Trees located 500 feet from runway end penetrate the approach surface.

**Runway 29**

- *Approach Type* – Visual.
- *Runway Protection Zone* – All but approximately 1 acres on airport property.
- *Approach Obstacles* – Trees 700 feet from runway end penetrate approach surface.

Source: Hodges & Shutt (August 1992)

**Table 4I**  
**Forecast Airport Activity**  
**Little River Airport**

**AIRCRAFT OPERATIONS**

Total	
Annual	19,500
Average Day	53
Distribution	
Single-Engine	80.0%
Twin-Engine	18.0%
Business Jet (Cessna)	1.0%
Business Jet (Lear)	1.0%

**TIME OF DAY DISTRIBUTION**

All Aircraft	
Day (0700-1900)	85.0%
Evening (1900-2200)	10.0%
Night (2200-0700)	5.0%

**RUNWAY USE DISTRIBUTION**

All Aircraft	
All Operations	
Runway 11	3.0%
Runway 29	97.0%

**FLIGHT TRACK DATA**

- Pattern Altitude — 800 feet AGL.
- Standard left traffic to both runway ends.

Source: Hodges & Shutt (May 1993 - for year 2013)



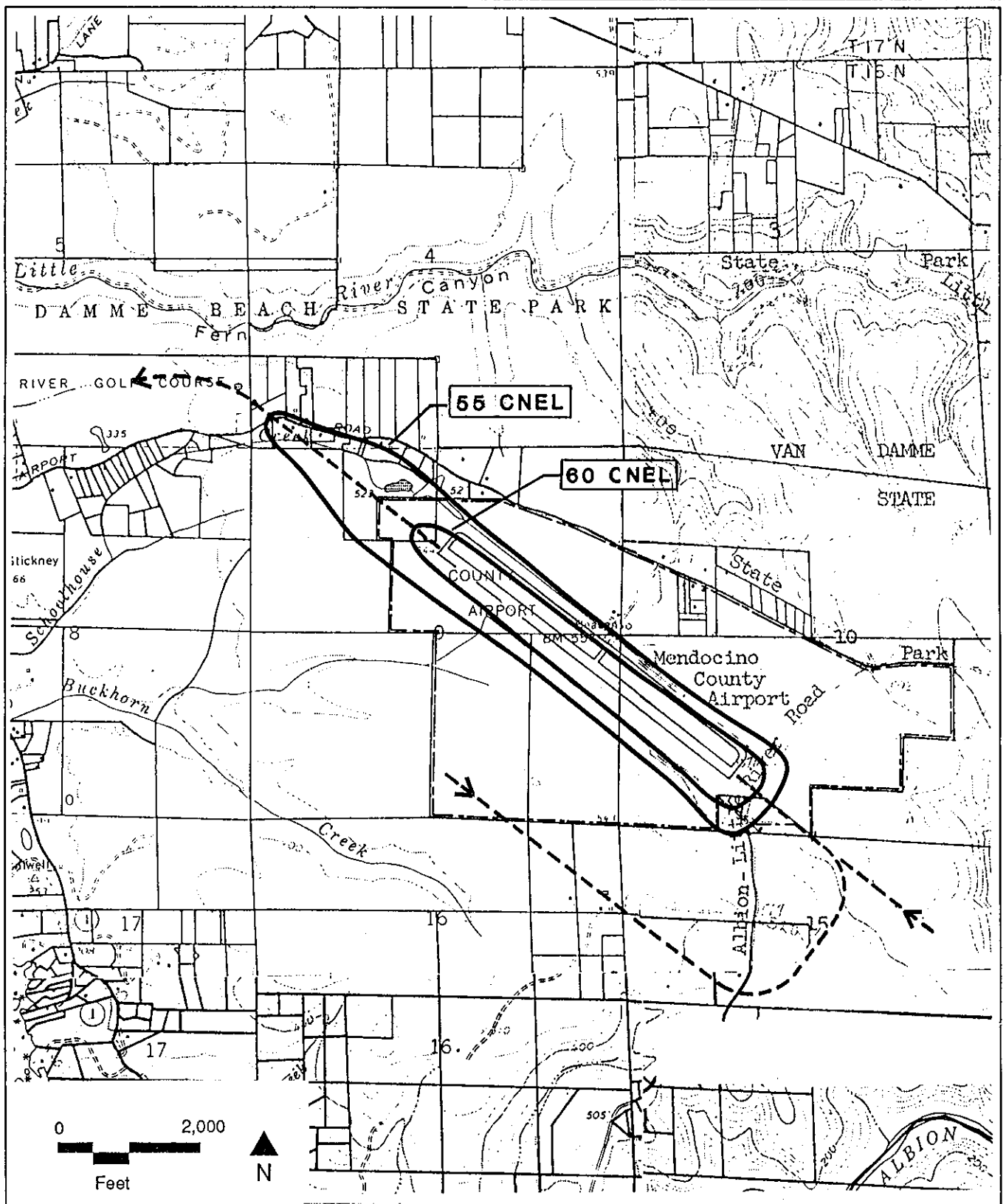


Figure 4K

## Noise Contours - 2007

Little River Airport

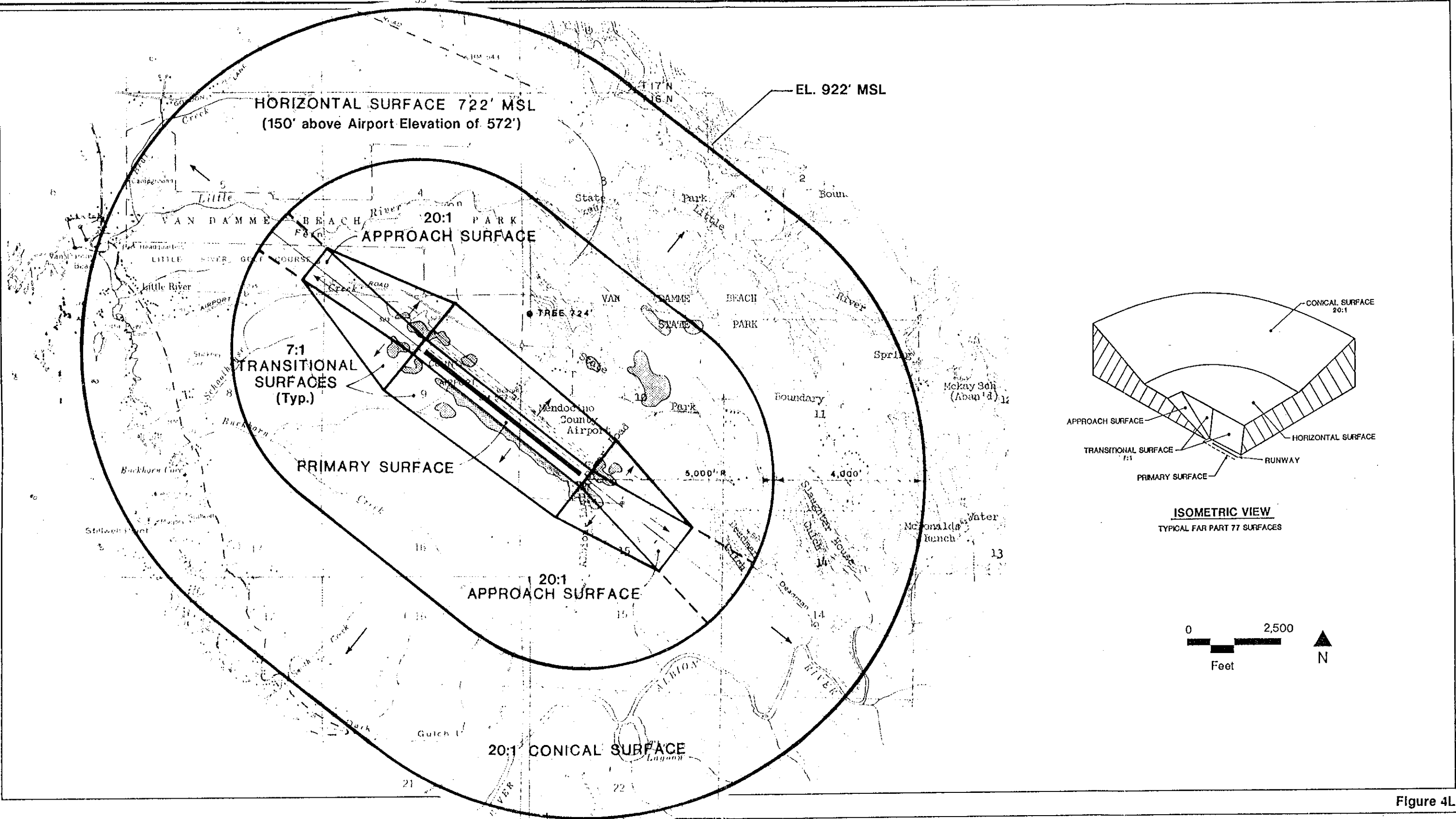


Figure 4L

**Table 4J**  
**Airport Environs**  
**Ocean Ridge Airport**

**AIRPORT LOCATION AND ACCESS**

- Located 2 miles from the center of Gualala.
- Airport and approaches in county jurisdiction.
- Airport access via State Highway 1, then 2 miles east along Old Stage Road to airport entrance.

**EXISTING AIRPORT AREA LAND USES**
**General Character**

- Rural residential except to east where land is in timber production.
- Industrial/commercial uses on west side of airport.

**Runway Approaches**

- *Runway 13 (northwest) Approach* — One house 2,000 feet from runway end; forest elsewhere.
- *Runway 31 (southeast) Approach* — Access road to east side of airport below end of runway; scattered houses beyond.

**Traffic Pattern**

- Forested, hilly terrain.
- No pattern on west side.

**LOCAL LAND USE PLANS AND ZONING**

- *Mendocino County General Plan* — Adopted in September 1981 with subsequent amendments; remains current land use plan for area.
- *Coastal Element* — Adopted November 1985; remains current land use plan for western half of planning area.

**PLANNED LAND USES IN AIRPORT AREA**

- Continued infill of low density residential and small-scale industrial/commercial uses.
- No major development proposals currently active.

**ESTABLISHED APPROACH PROTECTION MEASURES**

- Airport owner has easement over one adjacent property.

Source: Hodges & Shutt (August 1992)

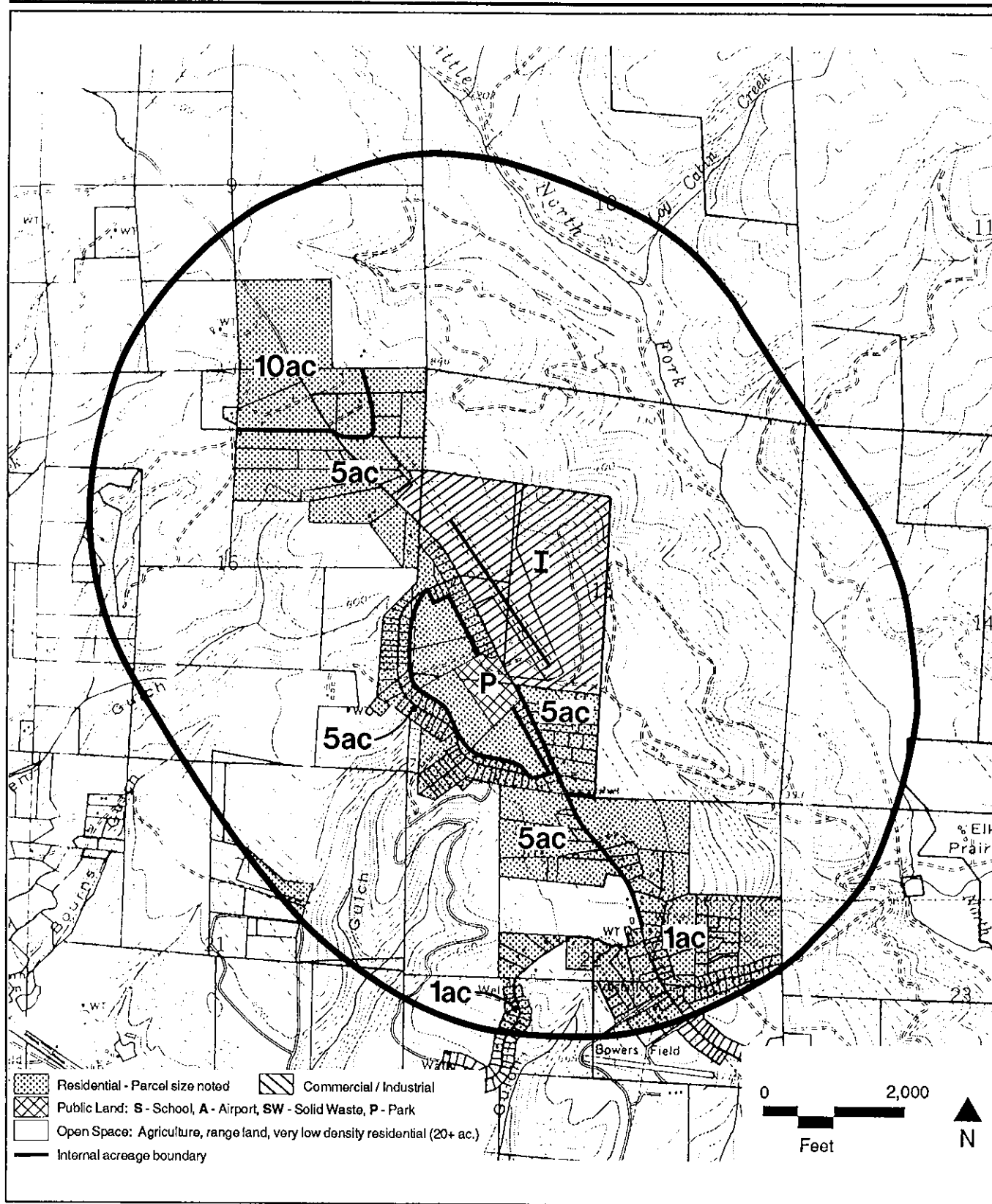


Figure 4M

## Land Use Designations

### Ocean Ridge Airport

**Table 4K**  
**Airport Features**  
**Ocean Ridge Airport**

**AIRPORT PROPERTY**

- *Ownership* — privately owned.
- *Size* — 30 acres in fee.
- *Elevation* — 940 feet MSL.

**AIRPORT PLANNING**

- *Adopted Plans* - Site plan developed for owner dated 6/3/84.
- *Planned Improvements* - No runway extension or other changes which would change off-airport effects.

**BUILDING AREA**

- *Location* — Transient tiedowns are northeast of runway. Hangars are located on both sides of runway.
- *Aircraft Parking Capacity* — Eleven tiedowns.
- *Other Major Facilities* — seven hangar buildings and pilots' lounge.
- *Services* — None.

**RUNWAY SYSTEM****Runway 13-31**

- *Critical Aircraft* — Single-engine propeller; also occasional small twin-engine propeller aircraft.
- *Classification* — Airport Reference Code A-I.
- *Dimensions* — 2,500 feet long, 50 feet wide; Runway 13 threshold displaced 400'; Runway 31 threshold displaced 300'.
- *Lighting* — Low intensity runway edge lighting.
- *Surface* — Asphalt, good condition.
- *Primary Taxiways* — Partial parallel on northeast side; one exit taxiway on southwest side.

**RUNWAY APPROACHES****Runway 13**

- *Approach Type* — Visual.
- *Runway Protection Zone* — All but about 5% on airport property.
- *Approach Obstacles* — Trees 200' from runway end.

**Runway 31**

- *Approach Type* — Visual.
- *Runway Protection Zone* — Mostly off airport property; one parcel covered by approach protection easement.
- *Approach Obstacles* — Trees 300' from runway end.

**Traffic Pattern**

- *Location* — Established pattern northeast of runway only.
- *Altitude* — 800 feet above airport elevation.
- *Approach Procedure* — Calm wind land Runway 31 and take-off Runway 13.

Source: Hodges & Shutt (August 1992)

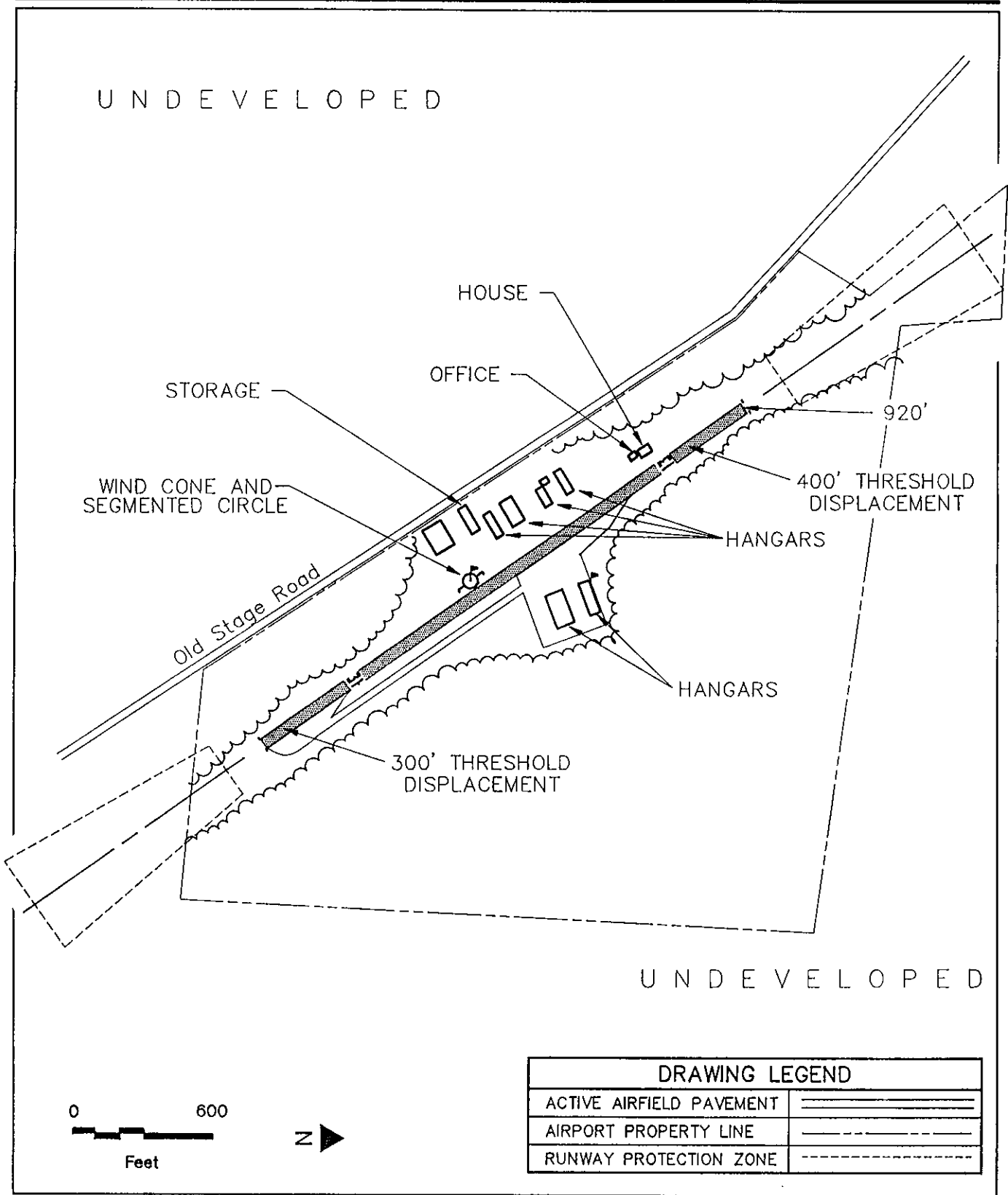


Figure 4N

## Airport Layout Diagram

### Ocean Ridge Airport

Table 4L  
**Airport Activity**  
 Ocean Ridge Airport

**AIRCRAFT OPERATIONS**

Total	
Annual	7,500
Average Day	21

Distribution	
Single-Engine	90.0%
Twin-Engine	10.0%

**TIME OF DAY DISTRIBUTION**

All Aircraft	
Day (0700-1900)	95.0%
Evening (1900-2200)	5.0%
Night (2200-0700)	0.0%

**RUNWAY USE DISTRIBUTION**

All Aircraft	
All Operations	
Runway 13	25.0%
Runway 31	75%

**FLIGHT TRACK DATA**

- Pattern Altitude – 800 feet AGL.
- Right traffic on Runway 31 (no west side pattern).

Source: Hodges & Shutt (May 1993 - for year 2013)

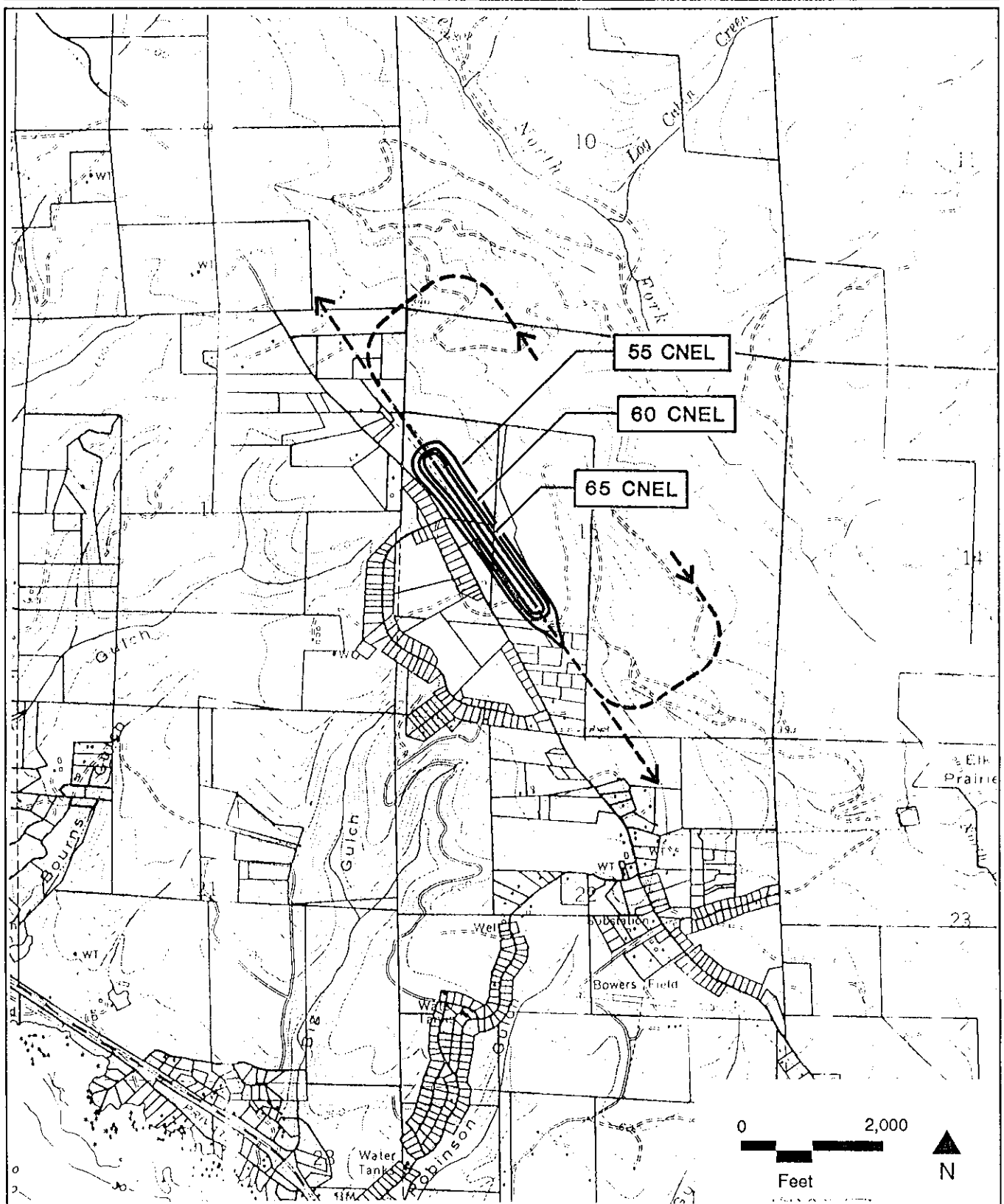
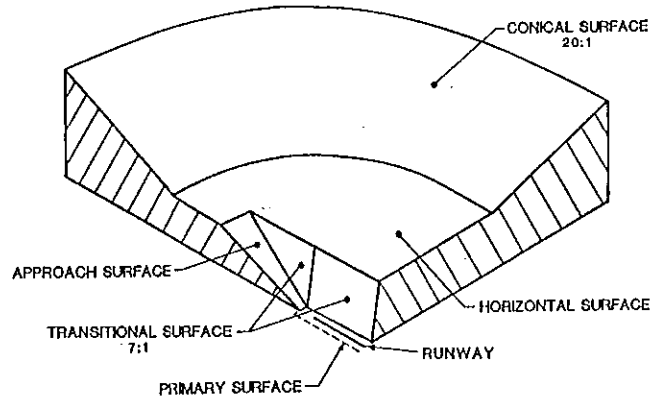
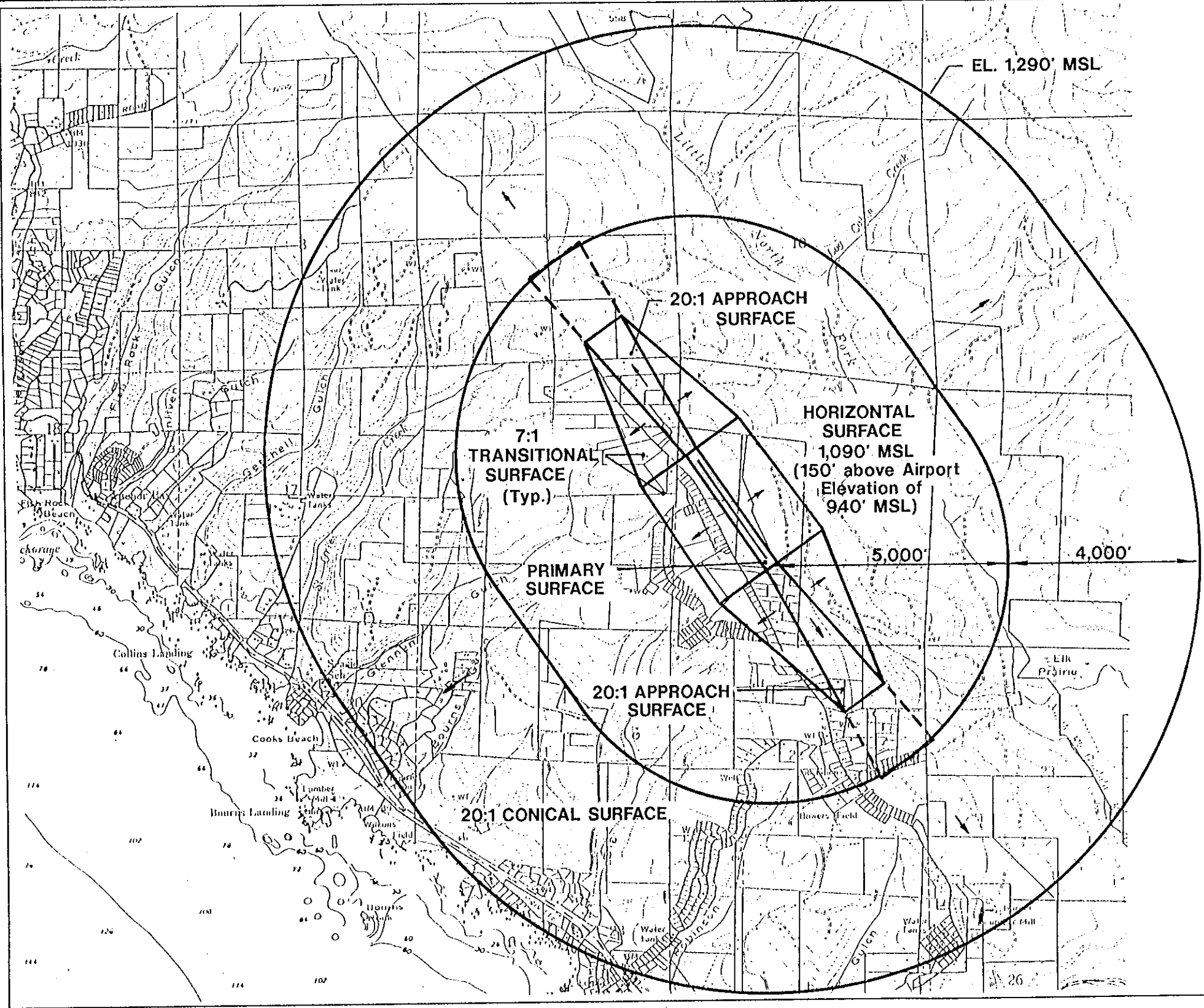


Figure 40

## Noise Contours - 2013

Ocean Ridge Airport





**ISOMETRIC VIEW**  
TYPICAL FAR PART 77 SURFACES

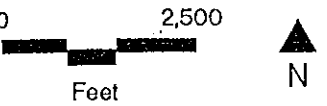


Figure 4P

Table 4M

## Airport Environs

### Round Valley Airport

#### AIRPORT LOCATION AND ACCESS

- Approximately one-half mile west of the town of Covelo.
- Airport and approaches within unincorporated portion of County.
- Access from State Highway 162 via Howard Drive and South Airport.

#### EXISTING AIRPORT AREA LAND USES

##### General Character

- Urban density residential and commercial in town of Covelo to west.
- Scattered rural residential to north and immediately west.
- Agricultural uses to south; mountains to west.

##### Runway Approaches

- *Runway 10 (west) Approach* — Undeveloped.
- *Runway 28 (south) Approach* — Agriculture.

##### Traffic Pattern

- Pattern only on north side; scattered rural residential and portions of town of Covelo.

#### LOCAL LAND USE PLANS AND ZONING

- *Mendocino County General Plan* — Adopted by County September 1981; subsequently amended; sets land use policies for airport environs.

#### PLANNED LAND USES IN AIRPORT AREA

- Continuing infill of Covelo with residential and small scale commercial/industrial.
- Continuing infill of rural residential north of airport.
- No major projects currently under consideration.

#### ESTABLISHED APPROACH PROTECTION MEASURES

- Airport Height Combining District limits the height of objects in the vicinity of the airport.

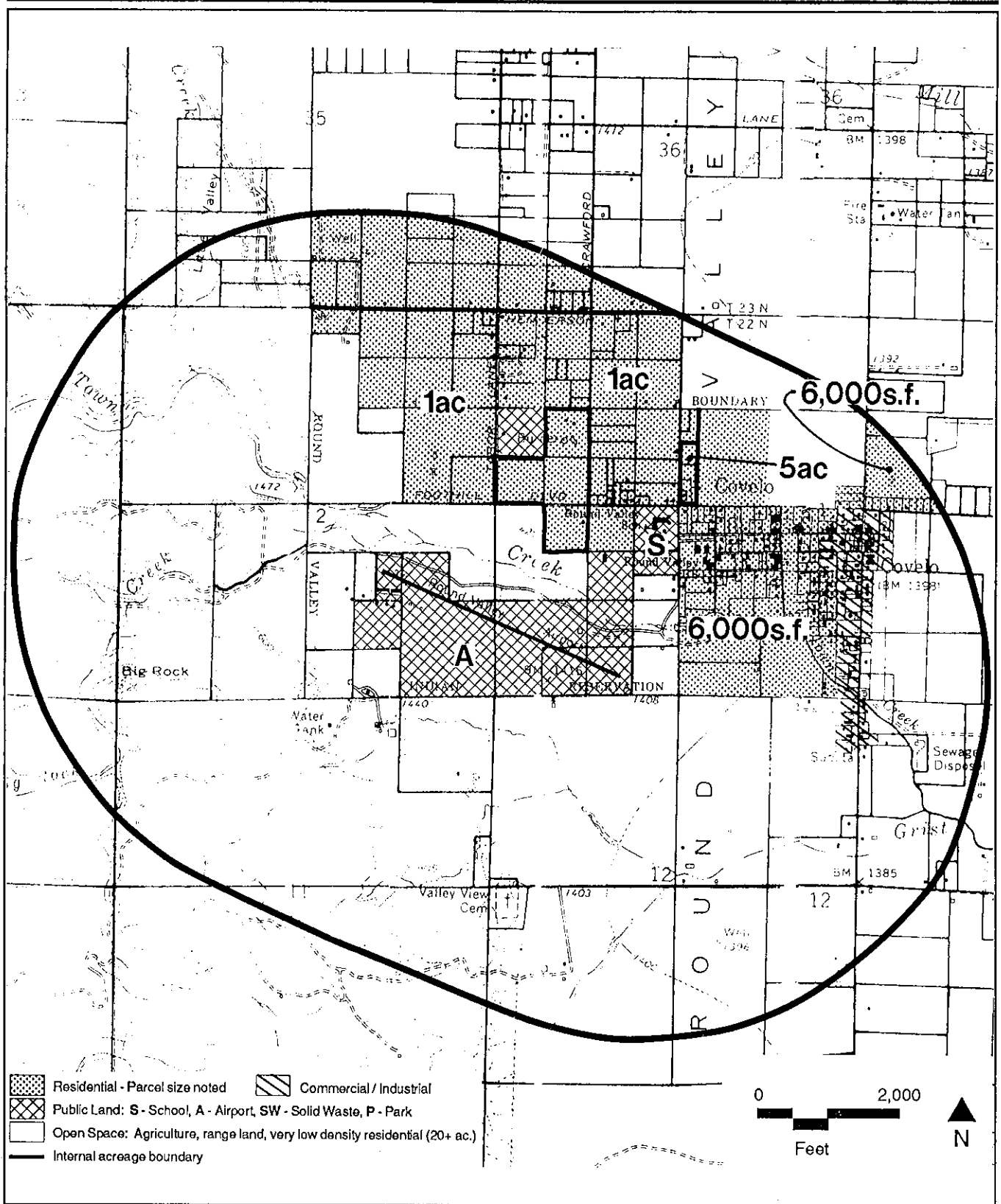


Figure 4Q

## Land Use Designations Round Valley Airport

**Table 4N**  
**Airport Features**  
**Round Valley Airport**

**AIRPORT PROPERTY**

- *Ownership* — County of Mendocino.
- *Size* — Approx. 110 acres fee title.
- *Elevation* — 1,434 feet MSL.

**AIRPORT PLANNING**

- *Adopted Plans*
  - None
- *Planned Improvements*
  - No change to runway.

**BUILDING AREA**

- *Location* — East end north of runway.
- *Aircraft Parking Capacity* — Six based and transient tie-downs.
  - Seven individual T-hangars; one large box hangar.
- *Other Major Facilities* — Fuel island, pilots lounge.
- *Services* — Flying club; charter.

**RUNWAY SYSTEM****Runway 10-28**

- *Critical Aircraft* — Light twin-engine propeller.
- *Classification* — Airport Reference Code B-I, small aircraft.
- *Dimensions* — 3,670 feet long, 75 feet wide; 210' displaced threshold for Runway 10; 270' displaced threshold for Runway 28.
- *Lighting* — Medium-intensity runway edge lighting.
- *Surface* — Asphalt, fair condition.
- *Primary Taxiways* — One paved exit taxiway to tiedown apron.

**RUNWAY APPROACHES****Runway 10**

- *Approach Type* — Visual.
- *Runway Protection Zone* — Essentially all is off of airport property line.
- *Approach Obstacles* — Hill penetrates approach surface 2,500 from runway end.

**Runway 28**

- *Approach Type* — Visual.
- *Runway Protection Zone* — Essentially all of existing RPZ is off airport property.
- *Approach Obstacles* — Road passes near end of runway.

**Traffic Pattern**

- *Location* — Established pattern north of runway only.
- *Altitude* — 800 feet above airport elevation.

Source: Hodges & Shutt (August 1992)

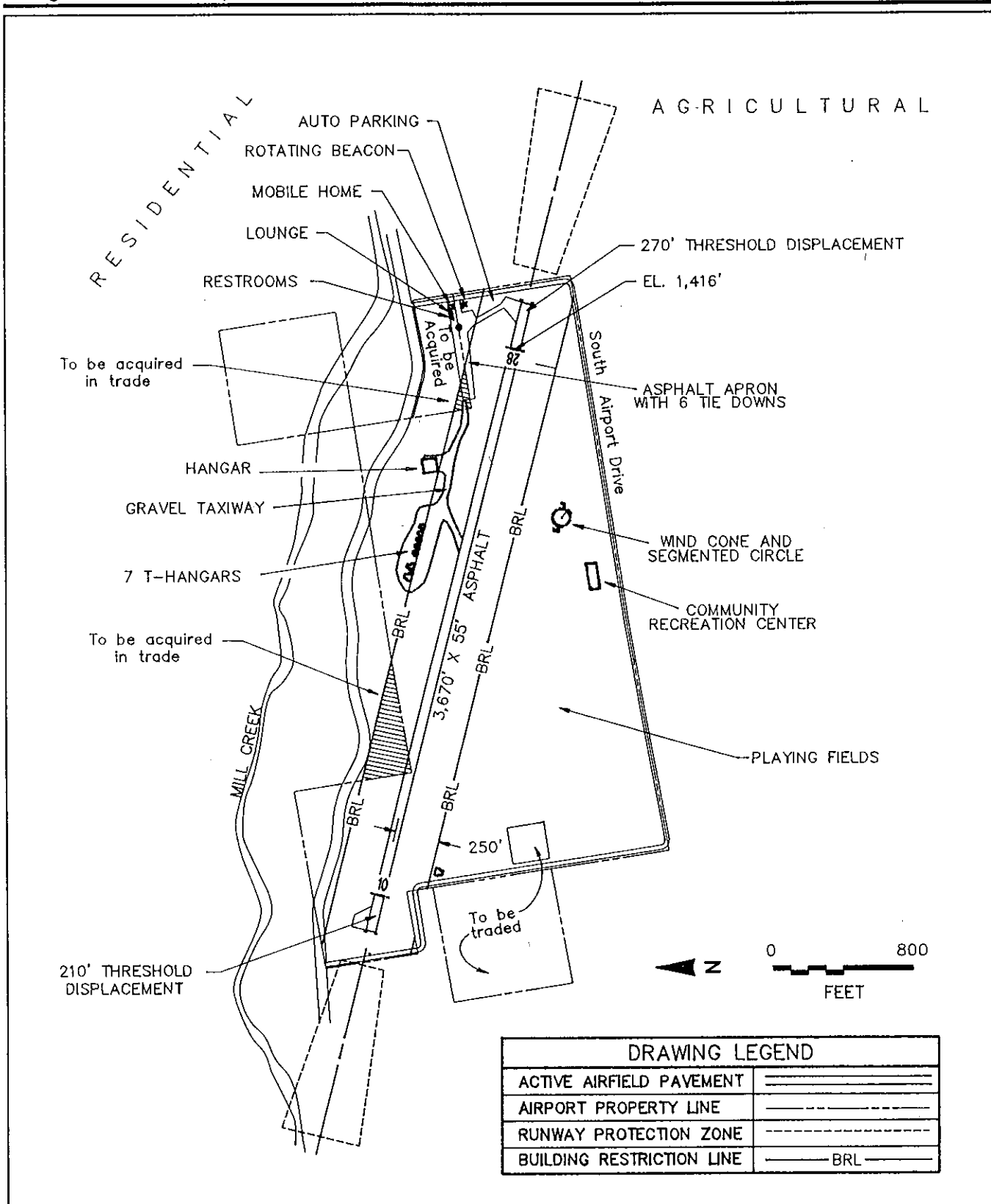


Figure 4R

## Airport Layout Diagram

### Round Valley Airport

**Table 4O**  
**Future Airport Activity**  
**Round Valley Airport**

**AIRCRAFT OPERATIONS**

Total	
Annual	12,000
Average Day	33
Distribution	
Single-Engine	89.0%
Twin-Engine	9.5%
Business Jets	1.0%
Turboprop	0.5%

**TIME OF DAY DISTRIBUTION**

All Aircraft	
Day (0700-1900)	95.0%
Evening (1900-2200)	4.0%
Night (2200-0700)	1.0%

**RUNWAY USE DISTRIBUTION**

All Aircraft	
All Operations	
Runway 10	43.0%
Runway 28	57.0%

**FLIGHT TRACK DATA**

- Pattern Altitude — 800 feet AGL.
- Right traffic on Runway 28 (no south side pattern).

Source: Hodges & Shutt (May 1993 - for year 2013)

## Noise Contours - 2013

### Round Valley Airport

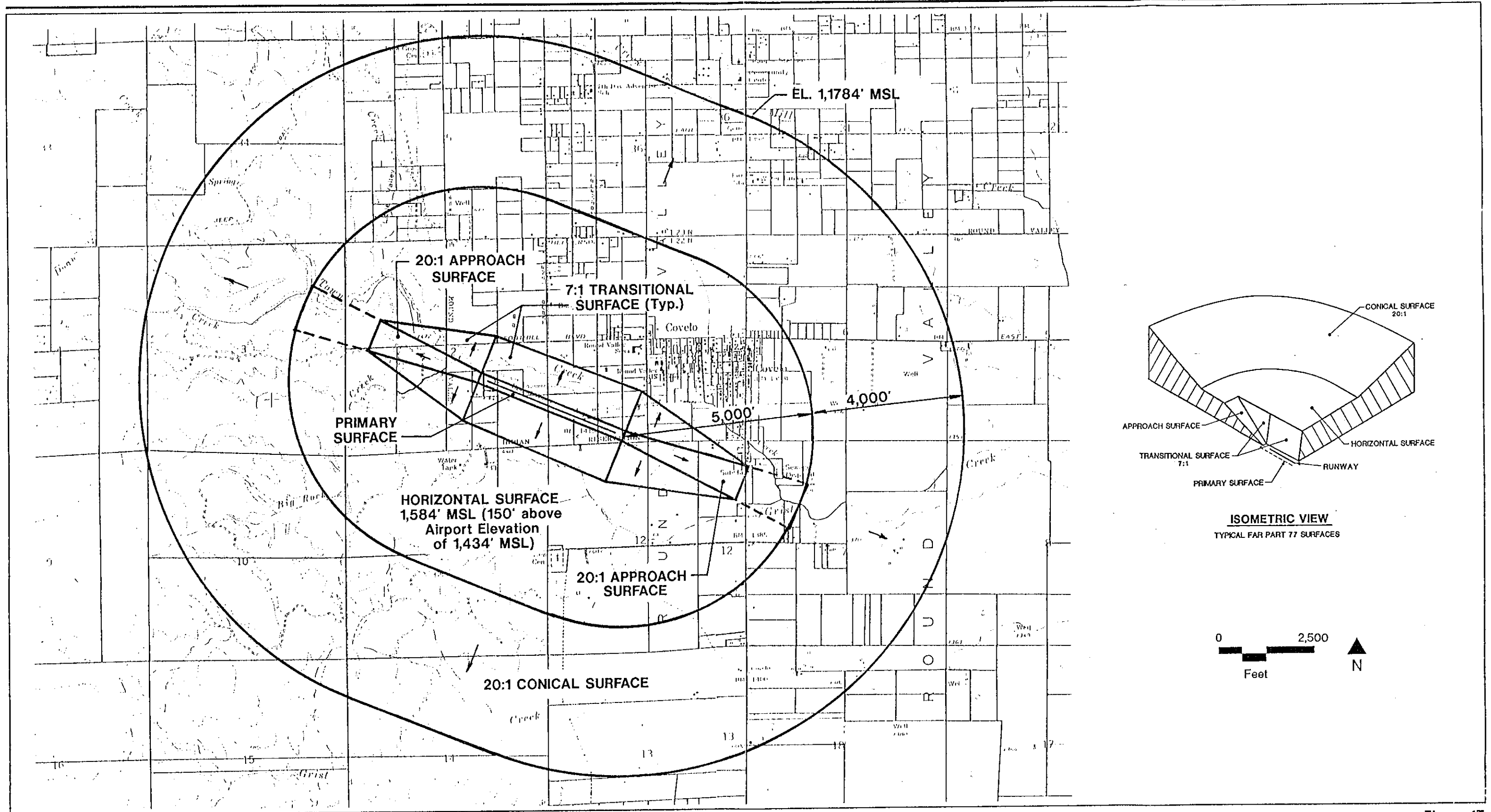


Figure 4T

## Airspace Plan

### Round Valley Airport



**Table 4P**  
**Airport Facilities**  
**Ukiah Municipal Airport**

**RUNWAY/TAXIWAY SYSTEM****Runway 15-33**

- Pavement – 4,415' long; 150' wide. Effective gradient: 0.27%. Section (estimated): 4" asphalt course; 6" base aggregate. Strength: 28,000# (single-wheel).
- Shoulders – West Side: Dirt/grass; surface graded and level. East Side: Dirt/Grass; surface graded and level.
- Runway Safety Areas – Length: Minimum of 300' beyond runway departure ends. Width: Minimum of 150' (225' recommended).
- Markings – Nonprecision. Relocated threshold Runway 15: 585'.
- Lighting – Medium-intensity runway edge lights.

**Taxiways**

- West Side Parallel – 50' wide; asphalt full length of runway. Runway-to-taxiway separation: 300' along northern 2/3 to 225' at southern end. Low-intensity taxiway edge lights and centerline/edge reflectors. Exit signs.
- Runway Entrances/Exits – Four designated entrances/exits – one at each end, one 1,400' southeast of the Runway 15 threshold, and one 1,000' northwest of the Runway 33 threshold. Hold lines: 200' from runway centerline at Runway 33 threshold taxiway and 150' all others.
- Blast Pads – None. Entrance taxiway on approach end of Runway 15 serves as blast pad.
- Holding Bays – Located adjacent to each runway entrance taxiway.
- Marking – Standard centerline stripes. Standard holdline stripes. Standard runway designation numbers. "Ukiah" is painted on the east side of the runway.
- Visual Approach Aids – Four-box VASI serving Runway 15. REILs serving Runways 15 and 33. No VGSI on Runway 33 due to terrain constraints. Runway 15: V4L @3.0° GA with TCH of 27'.

**Other**

- Wind Indicators – Lighted wind cone on east side of runway. Unlighted wind cone in southwest corner of airport property near Runway 33 threshold. Segmented circle with traffic pattern indicators and wind tee on east side of runway.
- Radio Aids – On-Airport Localizer/DME (109.1 mHz IUKI) and LOM (KEARN NDB-371 mHz). Off-Airport VORTAC (MENDOCINO-112.3 mHz) located 5.5 m.n. at 202°. On-Airport Flight Service Station (1615Z-0145Z).
- Rotating Beacon – One beacon located on T-hangar in airport building area and one beacon located on mountain 250° and 2 miles from the Airport.

**BUILDING AREA****Aircraft Aprons**

- North Apron (North of FSS) – 1.1 acres; asphalt. 15 aircraft parking positions.
- Central Apron (East of FSS to CDF apron) – 1.9 acres; asphalt and concrete. 20 based tiedown positions. 15 transient parking positions. Aviation fuel storage facility (one 12,000 gallon 100LL aboveground tank).
- CDF Apron (South of aviation fuel storage facility) – 1.0 acres; asphalt and concrete. 4 CDF aircraft parking positions.

**Other Facilities**

- Fuel Storage – One aboveground steel tank (12,000 gal. 100LL octane). Jet-A stored in 750 gallon refueler truck. Various tenants also have on-site fuel storage facilities.
- Fuel Dispensing – All fuel (100LL and Jet A) dispensed by two 750 gallon refueler trucks.
- Perimeter Fencing – Security fencing completely encloses Airport perimeter. Primary controlled-access (push-button code) entrance gate to main apron from terminal auto parking area. Secondary controlled-access (push button code) entrance gate serving south FBO apron area.

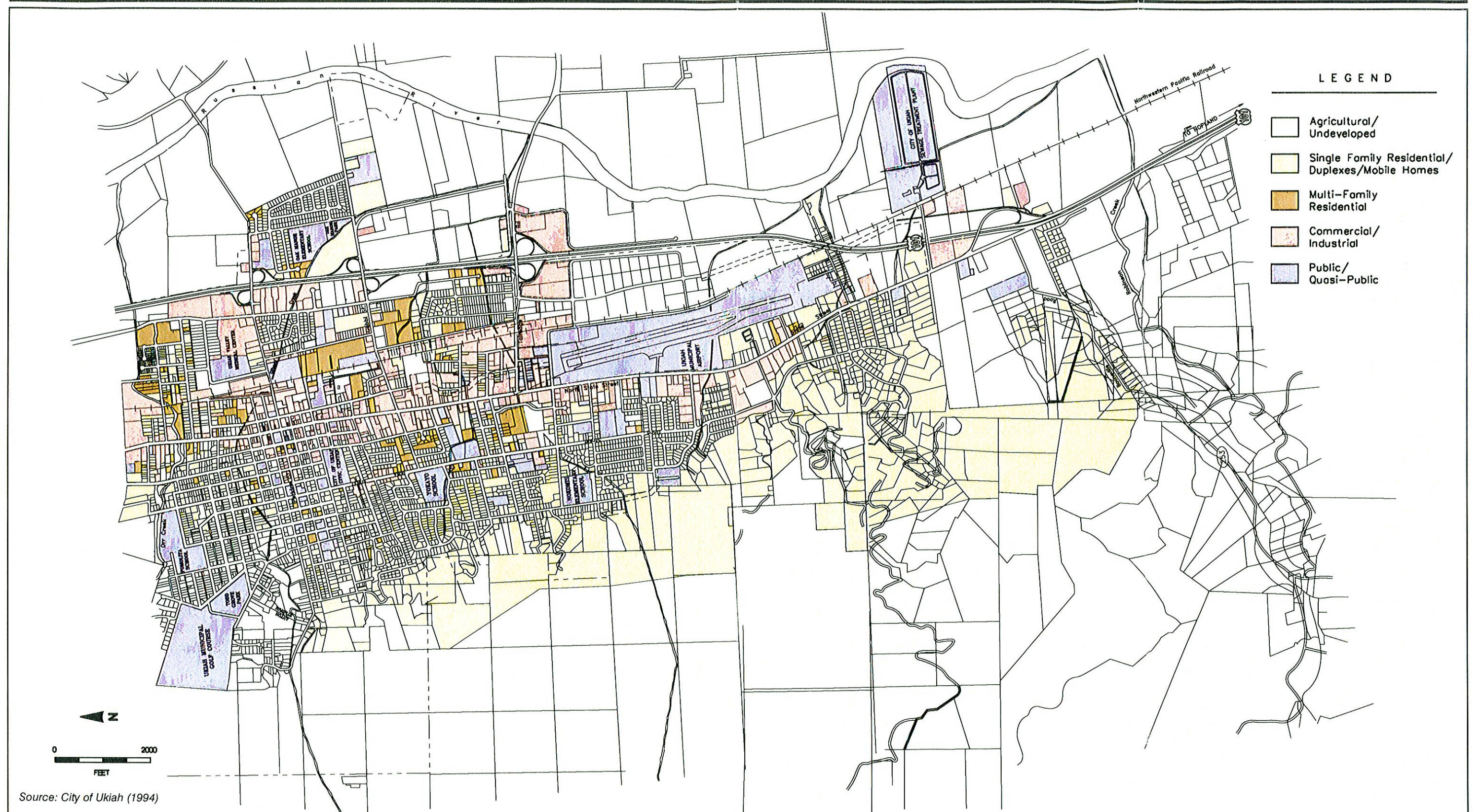
**ROADS AND PARKING**

- Main Public Access Point – Off South State Street. Serves various FBO areas via internal access roads.
- Controlled Access Points – From main auto parking lot near airport terminal building (serves main apron area) and from side street off of South State Street (serves south FBO apron area).
- Public Auto Parking – Adjacent to airport terminal building area and various FBO offices/hangars.

**UTILITIES**

- Electricity – Supplier: City of Ukiah.
- Telephone – Supplier: Pacific Bell. Public phones located at terminal and FBO facilities.
- Water – Supplier: City of Ukiah.
- Sewer – City of Ukiah sewer system.
- Natural Gas – Supplier: PG&E.





**Figure 4U**

## Existing Airport Vicinity Land Uses

**Ukiah Municipal Airport**



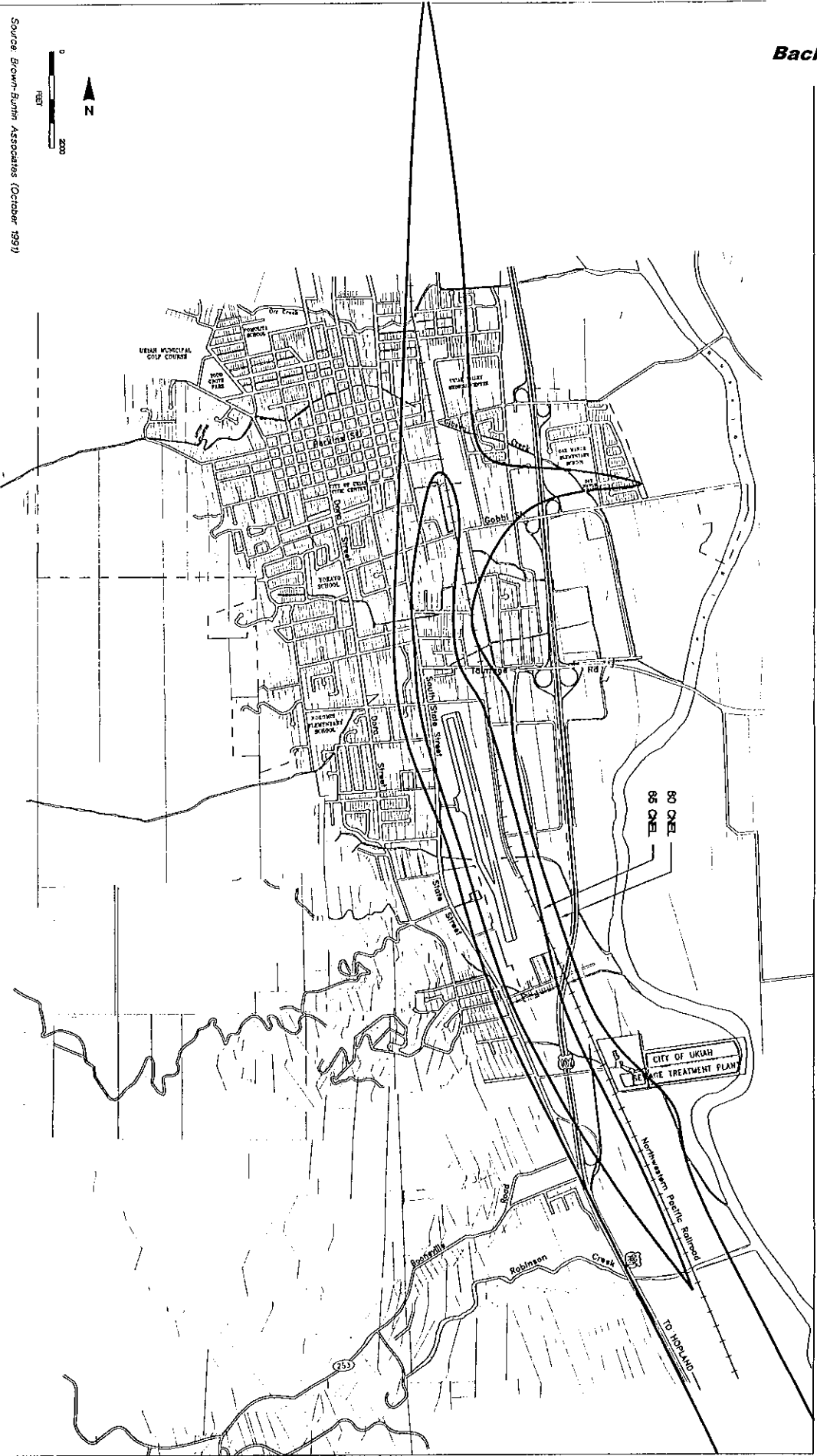


Figure 4V

Figure

Noise Impacts -  
1994 Peak Fire Attack Day  
Ukiah Municipal Airport

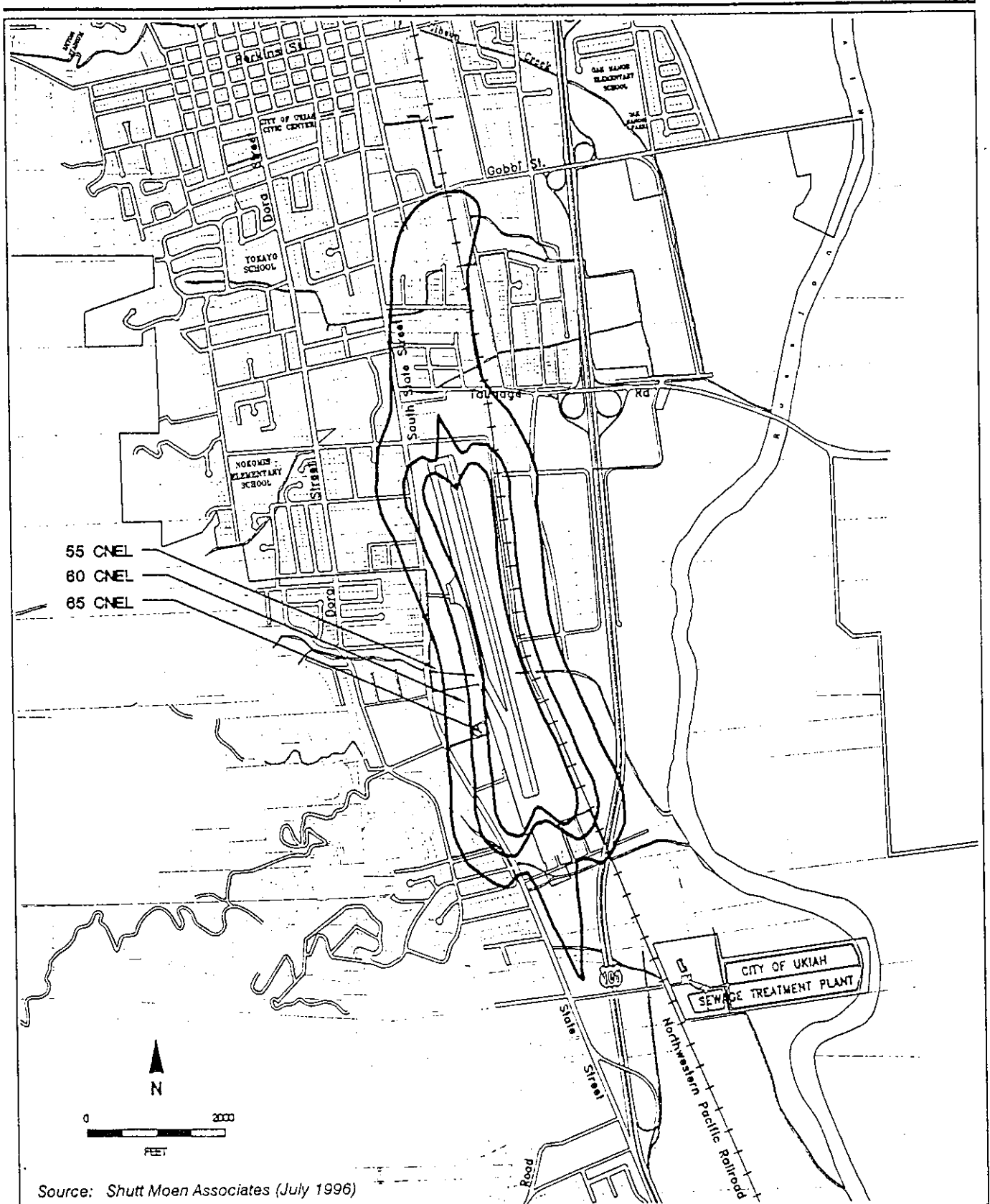
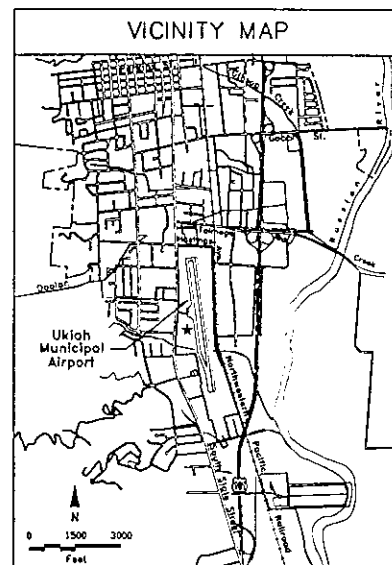


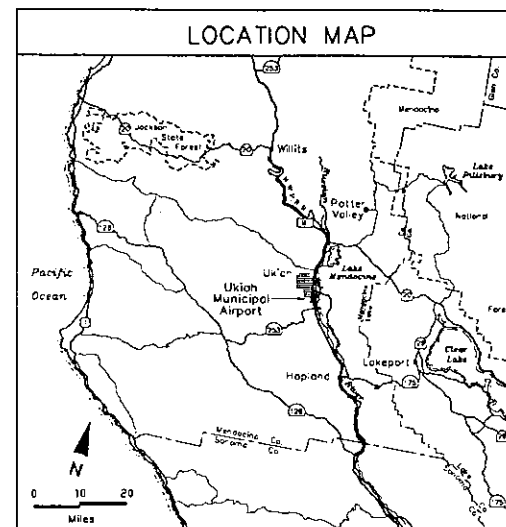
Figure 4W

## Noise Impacts - 1994 Average Day

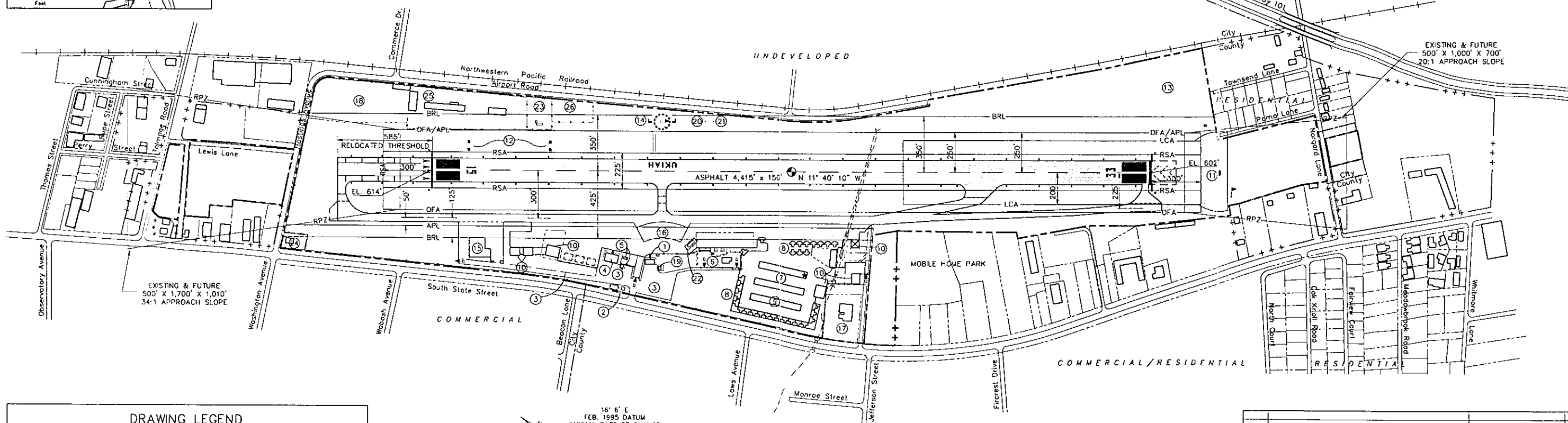
### Ukiah Municipal Airport



BUILDING AND FACILITY LEGEND			
(1) Airport Terminal Building/Offices	(14) Segmented Circle, Lighted Wind Cone, & Wind Tee	(15) FEDEX Hangar	
(2) AWOS-III & Electrical Vault	(16) Concrete Apron	(17) Nursery	
(3) Automobile Parking	(18) Lumber Yard	(19) City of Ukiah Employee Credit Union	
(4) FAA Flight Service Station	(20) Ceilometer	(21) Wind Direction and Velocity Indicator	
(5) Office & Shed	(22) Aviation Fuel Storage Facility (Former Location)	(23) Aviation Fuel Storage Facility	
(6) CDF Air Attack Base (Existing)	(24) Mayocoma Industries (Landscaping)	(25) City of Ukiah Corporation Yard	
(7) T-Hangars	(26) Commercial Fence Storage Area		
(8) Portable T-Hangars			
(9) Shade Hangar			
(10) Conventional Hangar			
(11) Localizer Antenna			
(12) VASI (V4L) GA 3.0'			
(13) CDF Air Attack Base (Potential Future Site)			



NOTES	
(a)	Airport coordinates and approach slope data source: U.S. Department of Commerce, National Ocean Service, Ukiah Obstruction Chart (February 1993); horizontal datum is NAD 83 & vertical datum is NGVD 29.
(b)	The entire airport perimeter is enclosed by fence.
(c)	There are two existing deviations from ARC B-II standards; 1) the southern 400' of the parallel taxiway is located less than 240' and 2) the western edge of the parallel taxiway Object Free Area (also the Aircraft Parking Limit) is located 50' from the parallel taxiway centerline.
(d)	A second rotating beacon is located on a mountain 250' and 2 miles from the Airport.
(e)	Acquisition of fee simple title is encouraged as an alternative to approach protection easements wherever practical.
(f)	Wind Data not available.
(g)	The airport is also served by a nonprecision/circle-to-land instrument approach procedure based on the ENI VOR and GPS.



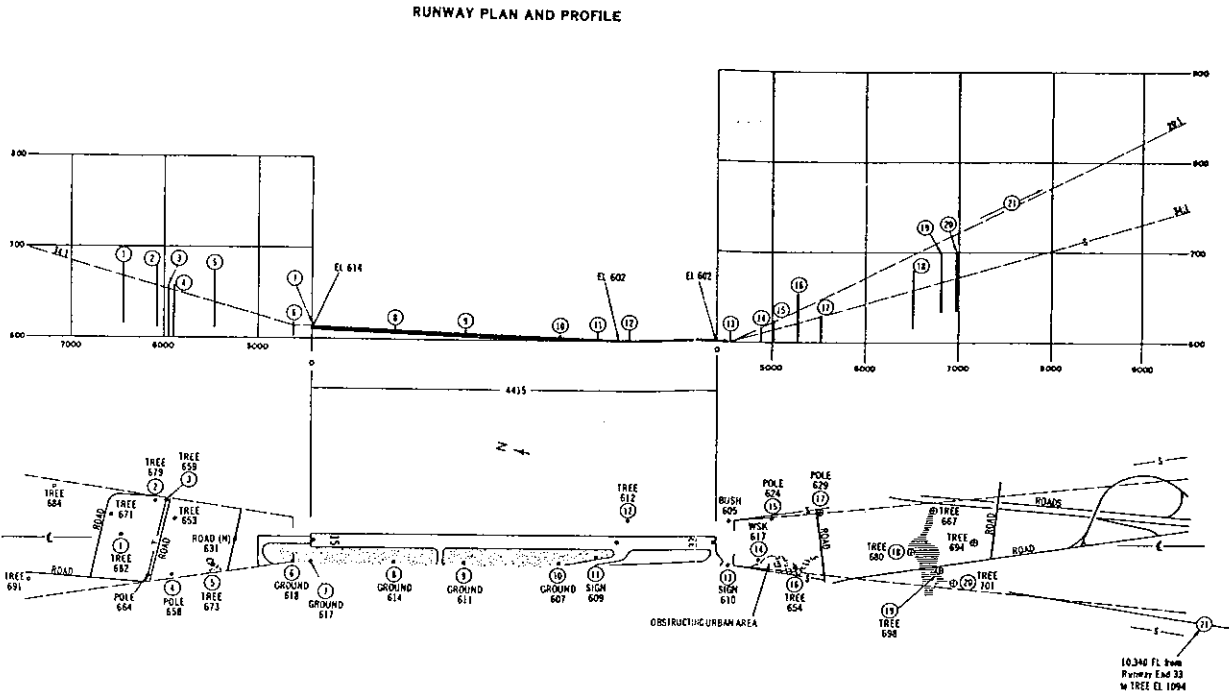
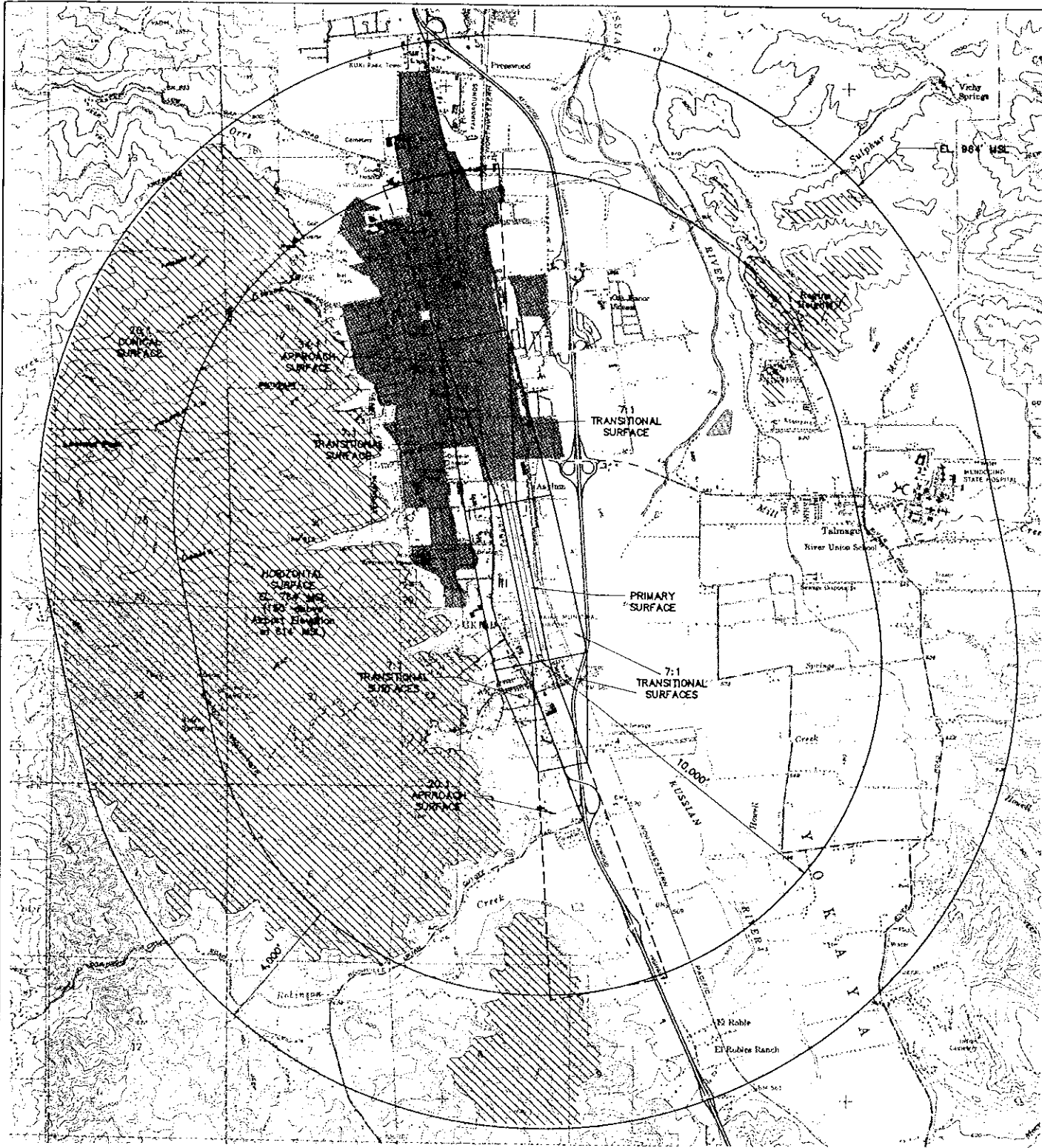
DRAWING LEGEND		
	EXISTING	FUTURE
ACTIVE AIRFIELD PAVEMENT		
OTHER PAVEMENT IN USE		
PAVEMENT TO BE REMOVED		
ABANDONED AIRFIELD PAVEMENT		
GRAVEL SHOULDER/ROAD		
AIRPORT PROPERTY LINE		
OTHER PROPERTY LINES		
INTERNAL BOUNDARY (e.g., lease, R.O.W., etc)		
APPROACH PROTECTION EASEMENT		
AIRFIELD FUNCTIONAL LINES	XYZ	-XYZ
BUILDINGS		
BUILDINGS TO BE REMOVED		
FENCE		
VEHICLE GATE		
WIND CONE		
AIRFIELD LIGHTS: SINGLE/GROUP/FLASHING		
ROTATING BEACON		
AIRPORT REFERENCE POINT		
DITCH/CULVERT/CHANNEL		

APL - Aircraft Parking Limits  
 BRL - Building Restriction Line  
 RSA - Runway Safety Area  
 LCA - Localizer Critical Area  
 RPZ - Runway Protection Zone  
 OFA - Object Free Area

AIRPORT DATA			
	EXISTING	FUTURE	
AIRPORT SERVICE LEVEL (NPIAS)	GENERAL AVIATION	No Change	
AIRPORT REFERENCE POINT (a)	Latitude 39° 07' 33.45" N	No Change	
	Longitude 123° 12' 03.08" W	No Change	
AIRPORT ELEVATION (Above Mean Sea Level)	614'	No Change	
MEAN MAX. TEMP. (Hottest Month)	95°	No Change	
TERMINAL NAVIGATIONAL AIDS	VORTAC & GPS	No Change	
AIRPORT ACREAGE	Fee Simple	160	163.4
	Easement (c)	None	55
BASED AIRCRAFT SPACES	Tiedowns	30	No Change
	T-Hangars	50	No Change
	Shade Hangars	14	No Change
	FBO Area (Approx.)	20	No Change
TRANSIENT AIRCRAFT SPACES		15	20

RUNWAY DATA			
		RUNWAY 15-33	
		EXISTING	FUTURE
AIRPORT REFERENCE CODE		B-II (c)	No Change
CRITICAL AIRCRAFT		BEECH SUPER KING AIR	No Change
PHYSICAL LENGTH AND WIDTH		4,415' x 150'	No Change
EFFECTIVE GRADIENT (PERCENT)		0.27	No Change
PAVEMENT STRENGTH (1000#) S/D/DT		28/-/-	No Change
APPROACH TYPE: [FAR PART 77 CATEGORY]	Approach End of Runway	15	Nonprecision [C]
		33	Visual [B(V)]
APPROACH SLOPE: REQUIRED/CLEAR (d)	Approach End of Runway	15	34:1/14:1
		33	20:1/12:1
APPROACH AND LANDING AIDS (g)	Approach End of Runway	15	VASI, REIL, LOC
		33	REIL
RUNWAY END COORDINATES (d)	Approach End of Runway 15	Latitude 39° 07' 54.81" N	No Change
		Longitude 123° 12' 08.75" W	No Change
	Approach End of Runway 33	Latitude 39° 07' 12.08" N	No Change
		Longitude 123° 11' 57.41" W	No Change
RUNWAY LIGHTING		Medium-Intensity	No Change
TAXIWAY LIGHTING		Low-Intensity	No Change
RUNWAY MARKING		Nonprecision	No Change

NO.		REVISION		SPONSOR		DATE	
SUBMITTED BY: CITY OF UKIAH				By _____ Date _____			
Figure 4X UKIAH MUNICIPAL AIRPORT UKIAH, CALIFORNIA AIRPORT LAYOUT PLAN				SHUTT MOEN ASSOCIATES AIRPORT CONSULTANTS & ENGINEERS 707 Aviation Blvd., Santa Rosa, California 95403			
				DESIGN: DBH DRAWN: RGL DATE: JULY 1996 SH 4-40 F 3			

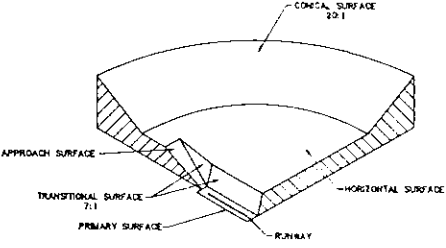


- LEGEND
- - With elevation - Object does not penetrate specified surface  
Without elevation - Position only
  - - Object penetrates specified surface
  - - Ground area penetrates specified surface
  - - Wooded area penetrates specified surface
  - - Object penetrates supplemental surface only
  - - Wooded area penetrates supplemental surface only
  - Road (I) - Interstate Highway
  - Road (N) - Noninterstate Highway
  - S - Supplemental Surface

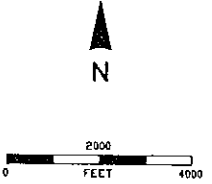
NOTES

All elevations in feet above mean sea level (MSL).  
Fifteen feet added to noninterstate road elevations.  
Seventeen feet added to interstate road elevations.  
Transitional surface slopes are 7:1 unless otherwise indicated.  
Obstructing area limits are approximate.  
Runway Plan and Profile: U.S. Department of Commerce, National Ocean Service, Ukiah Obstruction Chart (February 1993).

Figure 4Y



Terrain penetrates specified surface



NO.	REVISION	SPONSOR	DATE
UKIAH MUNICIPAL AIRPORT UKIAH, CALIFORNIA AIRSPACE PLAN			
SHUTT MOEN ASSOCIATES AIRPORT CONSULTANTS & ENGINEERS 707 Aviation Blvd., Santa Rosa, California 95403			
DESIGN: MRS	DRAWN: MRS	DATE: JULY 1996	SHEET 4-41 3