

## Chapter 5

### SAFETY ELEMENT

#### INTRODUCTION

Stanislaus County is susceptible to nearly every type of safety hazard in existence with the exception of tidal waves and major hazardous waste disposal sites. Information on the various types of safety hazards is provided in Chapter 5 of the "Stanislaus County General Plan - Support Documentation" and summarized herein.

**Seismic and Geological Hazard.** Several known faults exist within Stanislaus County. They are located in the extreme eastern part of the County and in the Diablo Range west of I-5. These faults could cause ground shaking of an intensity approaching "X" (ten) on the Modified Mercalli Scale, which would result in very serious damage to most structures. The existence of unreinforced masonry buildings could cause severe loss of life and economic dislocation in an earthquake.

The area west of I-5 (Diablo Range) is noted for unstable geologic formations that are susceptible to landslide. A portion of the southern part of this area includes the Ortigalita Fault, part of which is designated as an Alquist-Priolo Earthquake Fault Zone. This prohibits most construction without a geologic study.

One of the hazards associated with seismic activity that has a major potential for destruction and loss of life is dam failure. Entire cities could be under 10 feet of water or more within a few hours of failure.

**Flood Hazards.** The major flooding in Stanislaus County occurs along the San Joaquin River and isolated stretches of the Tuolumne River. Creeks such as Salado, Sand, and Orestimba also experience flooding. Portions of the Stanislaus River still flood to the extent that there can be crop damage, but the Corps of Engineers has purchased flowage easements so that they have the "right" to flood this area.

**Fire Hazards.** Urban fires are generally man-caused fires that can be mitigated through proper building code requirements, fire flow minimums and zoning or subdivision ordinance requirements. Wildland fires are generally limited to the foothills on either side of the County. Although there is less of a hazard to structures and people, controlling such fires is more difficult because of their inaccessibility.

**Hazardous Materials.** The use, transportation and disposal of hazardous materials is becoming an issue of increasing concern. State laws were passed in 1985 that require users of hazardous materials to disclose the type and location of such materials so that emergency response teams can be prepared for potential disasters. Routes are being specified to limit transportation of hazardous material such as nuclear waste.

**Other Safety Hazards.** Airports located in urban areas or areas with dwellings in the approach or take-off pattern may cause safety problems for both the airplanes and occupants on the ground. Large antennas in the agricultural area may be hazardous to crop dusters if not properly located. Streets and roads in terms of width, location and level of maintenance are important to safe travel of the public and for emergency vehicle (sheriff, fire, ambulance) access.

Unprotected canals in urban areas and lack of, or insufficient, street lighting are safety problems. Dust and dirt moved as a result of erosion can also cause safety problems, as can the uncovered transportation of sand and gravel material.

### **Multi-Jurisdictional Hazard Mitigation Plan**

The State Office of Emergency Services approved the County's Multi-Jurisdictional Hazard Mitigation Plan on April 29, 2005 and the plan was approved by the Federal Emergency Management Agency (FEMA) on July 22, 2005. The Board of Supervisors adopted the Plan on December 13, 2005.

The County and 48 other jurisdictions participated in the Multi-Jurisdictional Hazard Mitigation Plan. Each of these 48 participating jurisdictions had their governing body formally adopt the County of Stanislaus Multi-Jurisdictional Hazard Mitigation Plan, along with their individual plan, as their own Local Hazard Mitigation Plan. The County's plan serves as the umbrella plan with each individual jurisdiction's plan considered an annex. The Stanislaus County Multi-Jurisdictional Hazard Mitigation Plan is incorporated into the Safety Element of the General Plan and shall be implemented as appropriate.

# GOALS, POLICIES AND IMPLEMENTATION MEASURES

## GOAL ONE

Prevent loss of life and reduce property damage as a result of natural disasters.

(Comment: Stanislaus County is prone to a variety of natural disasters. With several rivers traversing the County, flooding is a concern. Although there are no major faults in the valley portion of Stanislaus County, some faults do exist in the foothills on the eastern and western edges of the County. Earthquakes could occur that would cause severe damage in portions of the County.)

## POLICY ONE

The County will adopt (and implement as necessary) plans inclusive of the Multi-Jurisdictional Hazard Mitigation Plan, to minimize the impacts of a natural and man-made disasters.

## IMPLEMENTATION MEASURES

1. The County Office of Emergency Services will continue to work with other jurisdictions to develop evacuation routes to be used in case of a disaster, including dam failure. Evacuation routes will serve all of the jurisdictions in the County; therefore plans for evacuation routes must be coordinated with these cities.  
**Responsible Department: Emergency Services**
2. The County will follow the policies included in the adopted emergency plan. New development shall not conflict with policies included in that document.  
**Responsible Department: Emergency Services**
3. The County will make information available to landowners in areas subject to flooding to help them form a flood control district.  
**Responsible Department: Public Works**
4. Development, except that which is consistent with the County General Plan at the time the Patterson Agreement is executed, in the area known as the Sperry Avenue Corridor, shall be required to participate in the solution of the Salado Creek flooding problem.  
**Responsible Departments: Planning Department, Planning Commission, Board of Supervisors**
5. In the event of a major wildfire threatening the towns of Knight's Ferry or La Grange, the Sheriff, Emergency Services and Fire Safety Departments may mandate and coordinate evacuation of those towns.  
**Responsible Departments: Sheriff, Fire Safety, Emergency Services**
6. The County has adopted a Multi-Jurisdictional Hazard Mitigation Plan, and will implement and evaluate the Plan on a regular basis as necessary to comply with state and federal laws. **Responsible Department: Office of Emergency Services.**

## POLICY TWO

Development should not be allowed in areas that are within the designated floodway.

(Comment: The Federal Emergency Management Agency (FEMA) has developed floodway maps which identify areas prone to flooding.)

### IMPLEMENTATION MEASURES

1. Development within the 100-year flood boundary shall meet the requirements of Chapter 16.40 (Flood Damage Protection) of the County Code and within the designated floodway shall obtain Reclamation Board approval.  
**Responsible Departments: Public Works, Planning Commission, Board of Supervisors**
2. The County shall utilize the California Environmental Quality Act (CEQA) process to ensure that development does not occur that would be especially susceptible to flooding. Most discretionary projects require review for compliance with CEQA. As part of this review, potential impacts must be identified and mitigated.  
**Responsible Departments: Planning Department, Public Works, Planning Commission, Board of Supervisors**

## POLICY THREE

Development should not be allowed in areas that are particularly susceptible to seismic hazard.

### IMPLEMENTATION MEASURES

1. The County shall enforce the Alquist-Priolo Earthquake Fault Zoning Act.  
**Responsible Departments: Building Inspections, Planning Department, Planning Commission, Board of Supervisors**
2. Development in areas of geologic hazard shall be considered for approval only where the development includes an acceptable evacuation route.  
**Responsible Departments: Sheriff, Fire Safety, Emergency Services, Public Works, Planning Department, Planning Commission, Board of Supervisors**
3. Development proposals adjacent to reservoirs shall include evaluations of the potential impacts from a seismically induced seiche.  
**Responsible Departments: Planning Department, Parks and Recreation, Planning Commission, Board of Supervisors**
4. The routes of new public roads in areas subject to significant seismic hazard shall be designed to minimize seismic risk.  
**Responsible Departments: Public Works, Planning Commission, Board of Supervisors**
5. Where it is found that right-of-way widths greater than those specified in the Circulation Element are necessary to provide added safety in geologically unstable areas, additional width shall be required.  
**Responsible Departments: Public Works, Planning Department, Planning Commission, Board of Supervisors**

## **POLICY FOUR**

Development west of I-5 in areas susceptible to landslides (as identified in this element) shall be permitted only when a geological report is presented with (a) documented evidence that no such potential exists on the site, or (b) identifying the extent of the problem and the mitigation measures necessary to correct the identified problem.

### **IMPLEMENTATION MEASURES**

1. The County shall utilize the California Environmental Quality Act (CEQA) process to ensure that development does not occur that would be especially susceptible to landslide. Most discretionary projects require review for compliance with CEQA. As part of this review, potential impacts must be identified and mitigated or a statement of overriding concerns adopted.  
**Responsible Departments: Planning Department, Planning Commission, Board of Supervisors**
2. Development west of I-5 shall include a geological report unless the Chief Building Official and Planning Director are satisfied that no need for the study is present.  
Responsible Departments: Planning Department, Building Inspections
3. The routes of new public roads in areas subject to landslides shall be designed to minimize landslide risks.  
**Responsible Departments: Public Works, Planning Commission, Board of Supervisors**

## **POLICY FIVE**

Stanislaus County shall support efforts to identify and rehabilitate structures that are not earthquake resistant.

### **IMPLEMENTATION MEASURE**

1. The County shall take advantage of programs that would provide funds to identify and rehabilitate structures that do not currently meet building standard minimums for earthquake resistance.  
**Responsible Department: Building Inspections**

## GOAL TWO

Minimize the effects of hazardous conditions that might cause loss of life and property.

### POLICY SIX

All new development shall be designed to reduce safety and health hazards.

#### IMPLEMENTATION MEASURES

1. Review development proposals and require redesign when necessary to ensure that buildings are designed and sited to minimize crime and assure adequate access for emergency vehicles.  
**Responsible Departments: Sheriff, Fire Safety**
2. Fencing shall be required between canals and new urban development when recommended by an irrigation district.  
**Responsible Departments: Planning Department, Planning Commission, Board of Supervisors**
3. Development standards shall be imposed to provide street lighting, storm drainage, setbacks, fire walls.  
**Responsible Departments: Public Works, Planning Department, Fire Safety, Planning Commission, Board of Supervisors**
4. All building permits shall be reviewed to ensure compliance with the Uniform Building Code.  
**Responsible Departments: Building Inspections**

### POLICY SEVEN

Adequate fire and sheriff protection shall be provided.

#### IMPLEMENTATION MEASURES

1. The County shall continue to implement the funding strategies identified under Policy Twenty-Two of the Land Use Element.  
**Responsible Departments: Building Inspection, Board of Supervisors**
2. All discretionary projects in the County shall be referred to the Fire Safety Department and to the appropriate fire district for comment. The comments of these agencies will be used to condition or recommend modifications of the project as it relates to fire safety and rescue issues.  
**Responsible Departments: Planning Department, Fire Safety**

3. The County Fire Safety Department shall work with the California Department of Forestry and Fire Protection and with local fire districts to minimize the danger from wildfire.  
**Responsible Department: Fire Safety**
4. Discretionary projects outside of fire districts shall be considered for approval only when they are found to include adequate fire protection.  
**Responsible Departments: Fire Safety, Planning Department, Planning Commission, Board of Supervisors**
5. New development, other than agricultural, shall have adequate water to meet the fire flow standards established in Appendix 5-A.  
**Responsible Departments: Fire Safety, Planning Department, Planning Commission, Board of Supervisors**
6. All discretionary projects shall be referred to the Sheriff's Department for comment. Comments from the Sheriff will be used to either condition or modify the project.  
**Responsible Departments: Sheriff, Planning Department, Planning Commission, Board of Supervisors**
7. All building permits and discretionary projects within the State Responsibility Areas, as identified by the California Department of Forestry and Fire Protection, shall meet the minimum development standards included in Article 1-5, Subchapter 2 SRA Fire Safe Regulations, Chapter 7 - Fire Protection, Division 1.5 - Department of Forestry, Title 14 - Natural Resources, or more stringent specific standards as may be adopted by the Board of Supervisors for this County.  
**Responsible Departments: Building Inspection, Public Works, Planning Department, Fire Safety, Planning Commission, Board of Supervisors**
8. All discretionary projects shall be referred to the Regional Emergency Medical Services Office for comments related to ambulance service.  
**Responsible Departments: Planning Department, Planning Commission, Board of Supervisors**

## **POLICY EIGHT**

Roads shall be maintained for the safety of travelers.

## **IMPLEMENTATION MEASURES**

1. New urban development shall provide street lighting, storm drainage, setbacks, fire walls, and other safety features as the specific case may require.  
**Responsible Departments: Public Works, Fire Safety, Planning Commission, Board of Supervisors**
2. New development shall conform to the standards in the County Specifications and Improvement Standards for maintenance and improvement of roads.  
**Responsible Departments: Public Works, Planning Commission, Board of Supervisors**

3. The Sheriff's Department shall enforce California Vehicle Code Section 23114 related to material falling from overloaded trucks carrying sand, gravel and other materials.  
**Responsible Department: Sheriff's Department**
4. Private access roads in the State Responsibility Areas, as designated by the California Department of Forestry and Fire Protection, shall be designed to meet state-mandated standards for such roads.  
**Responsible Departments: Fire Safety, Planning Department, Planning Commission, Board of Supervisors**
5. Private access roads in agricultural parcel maps should not include "dead ends" longer than one mile.  
**Responsible Departments: Planning Department, Planning Commission, Board of Supervisors**

## **POLICY NINE**

The County shall support the formation of improvement districts (including flood control districts) to eliminate safety hazards.

## **IMPLEMENTATION MEASURES**

1. Fire Districts, Sheriff's Department, etc. should be encouraged to request that the Board of Supervisors impose development fees to help support their services. Such requests shall be accompanied by supporting documentation.  
**Responsible Departments: Fire Safety, Sheriff, County Executive Office, Board of Supervisors**
2. The County will work with the Fire Safety Department, the State Department of Forestry and Fire Protection and local fire districts to ensure that adequate fire suppression measures are provided in areas without access to a public water system. These measures may include restrictions on building materials as well as the provision of adequate access and appropriate facilities for suppressing a fire.  
**Responsible Departments: Fire Safety, Building Inspections, Board of Supervisors**

## **POLICY TEN**

The County shall limit the siting of air strips.

## **IMPLEMENTATION MEASURE**

1. The County policy regarding the siting of air strips shall be enforced. (See Appendix 5-B)  
**Responsible Departments: Planning Department, Planning Commission, Board of Supervisors**

## POLICY ELEVEN

Restrict large communications antennas within the agricultural area with respect to maximum height, markings (lights) and location to provide maximum safety levels.

### IMPLEMENTATION MEASURES

1. An amendment to the A-2 (General Agriculture) zoning districts will be processed by June 30, 1995 to require that, before communication towers are approved, a finding must be made that measures have been taken to minimize the effect of the tower on crop dusting activities. (On September 19, 1995, the Board of Supervisors approved an amendment to the zoning ordinance establishing siting standards for communication towers in all zoning districts.)  
**Responsible Departments: Planning Department, Planning Commission, Board of Supervisors**
2. Use permit applications for communication towers in the A-2 (General Agriculture) zone district shall be referred to the crop dusting companies which typically service the area of the proposed tower for notice and comment.  
**Responsible Department: Planning Department**

## POLICY TWELVE

The Airport Land Use Commission Plan and County Airport Regulations (Chapter 17 of the County Code) shall be updated as necessary, maintained and enforced.

### IMPLEMENTATION MEASURES

1. Development within areas protected by the Airport Land Use Commission Plan shall only be approved if they meet the requirements of the Plan.  
**Responsible Departments: Planning, Airport Land Use Commission, Planning Commission, Board of Supervisors**
2. The Airport Land Use Plan shall be updated to conform to current state law when funds are budgeted for the project.  
**Responsible Departments: Planning Department, Airport Land Use Planning Commission**
3. All amendments to a land use designation, zoning district, or zoning regulation affecting land within the Airport Land Use Plan boundary shall be referred to the Airport Land Use Commission for comment. If that commission recommends denial, the Board of Supervisors may overrule that recommendation only by a two-thirds majority vote.  
**Responsible Departments: Planning Department, Airport Land Use Commission, Board of Supervisors**
4. The height and exterior materials of new structures in the Airport Zone of the Modesto, Oakdale, Patterson or Turlock airports as defined in the Stanislaus County Airport Regulations, shall be reviewed to determine whether they conform to those regulations.  
**Responsible Departments: Planning Department, Board of Supervisors**

## POLICY THIRTEEN

The Department of Environmental Resources shall continue to coordinate efforts to identify locations of hazardous materials and prepare and implement plans for management of spilled hazardous materials as required.

### IMPLEMENTATION MEASURES

1. The County will continue to provide planning efforts to locate and minimize the effects of hazardous materials through the County's adopted emergency plan.  
**Responsible Department: Environmental Resources**
2. The County has prepared a Hazardous Waste Management Plan which is the guideline for managing hazardous waste in this County. The goals, objectives, conclusions, recommendations and implementation measures of that plan are hereby incorporated as a part of the Safety Element, along with any modifications which may result from state review of the Hazardous Waste Management Plan.  
**Responsible Departments: Board of Supervisors, Environmental Resources**
3. The Area Plan for Emergency Response to Hazardous Substance Release, required by the California Health and Safety Code, will be incorporated as part of the Safety Element when that plan is adopted.  
**Responsible Departments: Environmental Resources, Fire Safety, Sheriff, Emergency Services**

## POLICY FOURTEEN

The County will continue to enforce state-mandated structural Health and Safety Codes, including but not limited to the Uniform Building Code, the Uniform Housing Code, the Uniform Fire Code, the Uniform Plumbing Code, the National Electric Code, and Title 24.

(Comment: The Uniform Building Code includes provisions for safe construction under the most current standards. The Uniform Housing Code provides for upgrading of existing dwellings to eliminate health and safety problems without requiring upgrading of non-hazardous conditions.)

### IMPLEMENTATION MEASURES

1. All building permits shall be reviewed to ensure compliance with the Uniform Building Code.  
**Responsible Department: Building Inspections**
2. All complaints of substandard dwellings shall be acted upon to ensure compliance with the Uniform Housing Code.  
**Responsible Departments: Building Inspections, Environmental Resources**
3. The Uniform Fire Code shall be followed in inspections and maintenance of structures regulated under that code.  
**Responsible Department: Fire Safety**

## **POLICY FIFTEEN**

The County will support the Federal Emergency Management Agency (FEMA) Flood Insurance Program so that residents who qualify may purchase such protection.

(Comment: If Stanislaus County adopts a flood hazard reduction ordinance that meets FEMA standards, property owners whose property is located within certain areas identified by FEMA as flood hazard areas may purchase insurance against flood damage. Chapter 16.40 of the Stanislaus County Code meets the FEMA standards.)

## **IMPLEMENTATION MEASURE**

1. Stanislaus County will maintain and enforce Chapter 16.40 (Flood Damage Protection) of the County Code to meet FEMA standards.  
***Responsible Departments: Public Works, Board of Supervisors***

## APPENDIX 5-A

# FIRE FLOW STANDARDS

### New or Existing Water Systems

New development shall not be permitted to diminish the fire flow of an existing water system below the following minimum standards:

- |    |                                                                                      |           |
|----|--------------------------------------------------------------------------------------|-----------|
| 1. | Lot density of three or more single-family residential units per acre.               | 1,000 gpm |
| 2. | Duplex residential units, neighborhood business of one story.                        | 1,500 gpm |
| 3. | Multiple residential, one and two stories; light commercial or light industrial.     | 2,000 gpm |
| 4. | Multiple residential, three stories or higher; heavy commercial or heavy industrial. | 2,500 gpm |

New water systems also must meet the minimum fire flow standards established above.

Exception: With the installation of an approved, supervised, automatic sprinkler system in accordance with the National Fire Protection Association Pamphlet #13, throughout the building, a 50% reduction may be granted. In no case shall there be less than 500 gpm provided on site.

### No Existing Water System

Where there is no established water system, in the rural areas of Stanislaus County, the following guidelines shall apply:

The installation of reservoirs, pressure tanks, elevator tanks, or other fixed systems capable of supplying the required fire flow and/or static source shall be in accordance with the National Fire Protection Association Pamphlet #1231, Water Supplies for Rural and Suburban Fire Fighting.

Source: Stanislaus County Fire Warden's Office

**APPENDIX 5-B**  
**AIRPORT SITING STANDARDS**

THE BOARD OF SUPERVISORS OF THE COUNTY OF STANISLAUS  
STATE OF CALIFORNIA

Date: March 6, 1984

No. 84-367

On motion of Supervisor Blom, Seconded by Supervisor Simon  
and approved by the following vote,  
Ayes: Supervisors: Blom, Simon, Cannella and Chairman Starn  
Noes: Supervisors: None  
Excused or Absent: Supervisors: Terry  
Abstaining: Supervisor: None D-2

THE FOLLOWING RESOLUTION WAS ADOPTED:

IN RE: ESTABLISHING POLICIES FOR THE SITING OF NEW AIRPORTS, AGRICULTURAL  
SERVICE AIRPORTS AND TEMPORARY AGRICULTURAL SERVICE AIRPORTS

WHEREAS, after receiving a report concerning private airports in Stanislaus  
County, this Board referred the matter to the Planning Commission for study and  
possible recommendations; and

WHEREAS, the Commission held a public hearing to gain input from private  
airport owners, pilots, cropdusters and other interested parties; and

WHEREAS, after much discussion, the Planning Commission recommends that this  
Board adopt the "Establishing Policies for the Siting of New Airports, Agricultural  
Service Airports and Temporary Agricultural Service Airports" as submitted,

NOW, THEREFORE, BE IT RESOLVED that this Board of Supervisors does hereby  
adopt the "Establishing Policies for the Siting of New Airports, Agricultural Service  
Airports and Temporary Agricultural Service Airports" to wit:

ATTEST: BETH MEYERSON-MARTINEZ, Clerk  
Stanislaus County Board of Supervisors,  
State of California,



By: Rochelle A. Tilton, Assistant Clerk

ESTABLISHING POLICIES FOR THE SITING OF NEW  
AIRPORTS, AGRICULTURAL SERVICE AIRPORTS, AND TEMPORARY  
AGRICULTURAL SERVICE AIRPORTS

WHEREAS, it is the duty of the Stanislaus County Board of Supervisors to promote and protect the health, safety, comfort, convenience and general welfare of the residents of Stanislaus County; and

WHEREAS, private airstrips, private airports, crop duster landing strips and heliports are presently permitted upon approval of a use permit in A-2 (Exclusive Agriculture) and certain R-A (Rural Residential) zones; and

WHEREAS, the Board of Supervisors recognizes the fact that airports, agricultural service airports and temporary agricultural service airports are necessary for the economy and convenience of the people of Stanislaus County; and

WHEREAS, careful consideration must be given to the siting, layout and design of any new airport, agricultural service airport or temporary agricultural service airport in these areas to protect the health, safety, comfort, and general welfare of the residents of Stanislaus County,

NOW, THEREFORE, BE IT RESOLVED that the following policies shall be utilized as guidelines by Stanislaus County when considering an application for a use permit or staff approval application to locate any new airport or temporary agricultural service airport or expand any existing airport or temporary agricultural service airport.

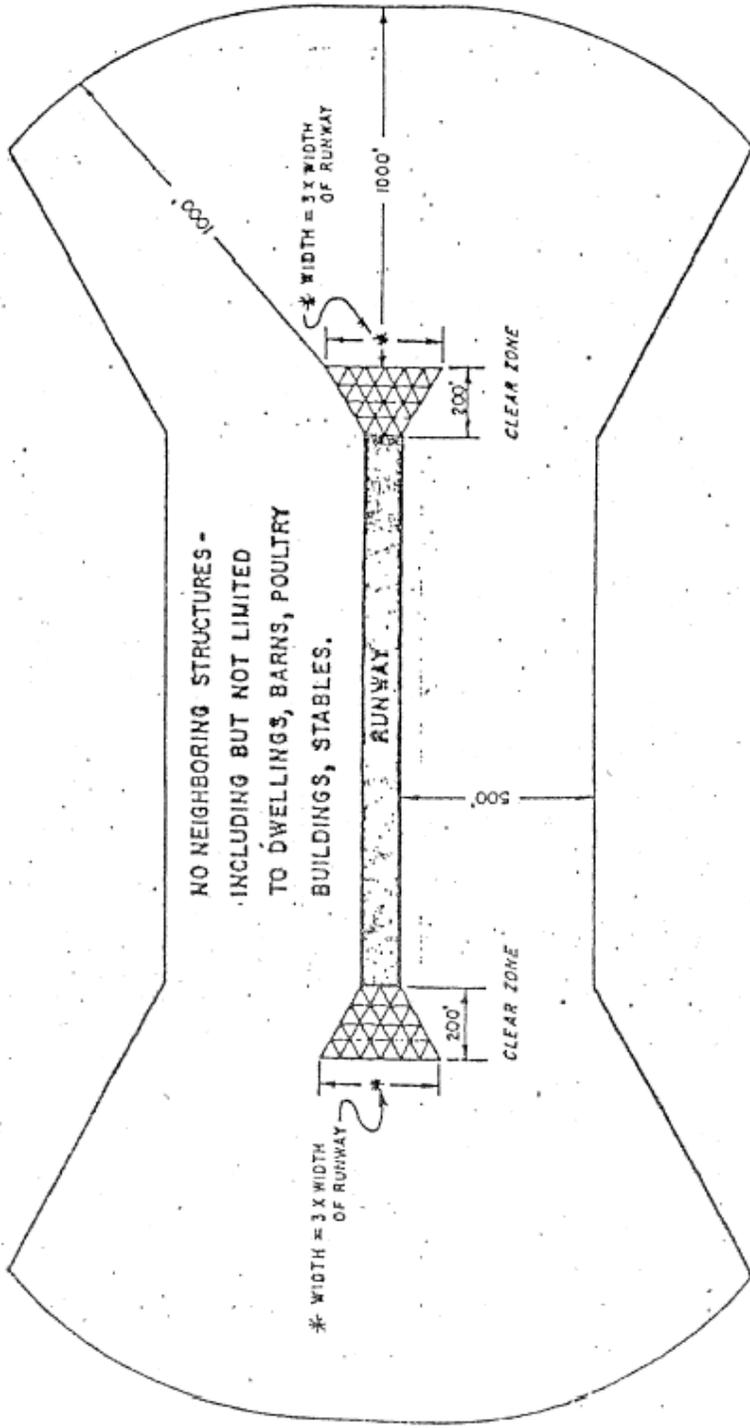
1. Provide a clear zone for a distance of two-hundred feet (200') from the end of the runway. The clear zone shall start at the ends of the runway and at a point two-hundred feet (200') from the end of the runway be three (3) times the width of the runway.

2. Be no closer to any neighboring dwelling, barn, shop, poultry building, or similar agricultural structure than: (a) 1000 feet from the ends of the runway, or (b) 500 feet to the sides of the runway. This shall not be construed so as to prohibit the owner of any airport from having their own dwelling(s), barn(s), shop(s), poultry building(s), or similar agricultural structure(s) within this area.

3. Be located so that air or surface traffic shall not constitute a nuisance or danger to neighboring property, farms, dwellings or structures.

4. Show that adequate controls or measures will be taken to prevent offensive dust, noise, vibrations, or bright lights.

5. Obtain when necessary approval of the California Department of Transportation, Division of Aeronautics and the Federal Aviation Administration prior to the issuance of the use permit.



NO NEIGHBORING STRUCTURES -  
INCLUDING BUT NOT LIMITED  
TO DWELLINGS, BARNs, POULTRY  
BUILDINGS, STABLES.

\* WIDTH = 3 X WIDTH  
OF RUNWAY

\* WIDTH = 3 X WIDTH  
OF RUNWAY

RUNWAY

CLEAR ZONE

CLEAR ZONE

500'

200'

200'

1000'

1000'