



**TO:** Mayor and Councilmembers

**FROM:** Vyto Adomaitis, Redevelopment Agency, Neighborhood Services & Public Safety Director

**CONTACT:** Martin Johnson, Captain  
Santa Barbara County Fire Department

**SUBJECT:** Fire Department Annual Report

**RECOMMENDATION:**

Accept the Fire Department's Annual Report

**BACKGROUND:**

The Santa Barbara County Fire Department provides "All-Risk" services within the County of Santa Barbara. The department has sixteen fire stations strategically located within the county. Nine stations are located in the North County and seven are in the South County. The services include three fire stations and associated support within the City of Goleta. Additionally, the department provides many other services that are not readily visible to the community.

This report provides an overview of the services and support provided to the City of Goleta by the Santa Barbara County Fire Department, station staffing, types of calls responded to, and standards for fire protection in urbanized areas. The future fire station needs in western Goleta will also be addressed in this report.

**DISCUSSION:**

Prior to the incorporation of the City of Goleta, the Santa Barbara County Fire Department provided fire and rescue services to the Goleta Valley. Since incorporation, the services within the fire district have been provided at no cost to the city.

**Fire Station 11**

Each Fire Station reflects the characteristics of the area being served. As an example, Engine 11 calls in Isla Vista involve a high incidence of couch dumpster fires. Isla Vista also has a high number of medical emergencies.

Total Emergency Responses for Station 11 in 2007: **1,585**

Fire Station 11, at 6901 Frey Way, is our Task Force Station. This station houses the specialists in urban search and rescue, trench rescue, confined space rescue and rescue systems 1 and 2, as certified by the State of California, Office of Emergency Services (OES). The station also houses the water rescue team, with two jets skis. The water rescue team is cross-staffed by all station personnel assigned to Station 11, with additional assistance from Fire Stations 12, 14, or 17 (UCSB) and the Battalion Chief. The ability to access resources in any water rescue situation, including Sheriff, Harbor Patrol, Coast Guard and adjoining fire departments is mutually beneficial.

As indicated in the table below, call statistics for Engine 11 in 2007 reflected a high number of couch and dumpster fires that Engine 11 responded to. This is a direct reflection of the Isla Vista Community and the impact that community has on public safety services. They also have a very high number of medical emergencies and other non-fire related responses. These "Non-Fire" responses represent calls such as: public assists, alarms ringing, hazardous conditions such as arcing wires or smell of natural gas outside of a structure, etc.

**Engine 11 Emergency Responses**

**2007**

Structure Fires	81
Vehicle Fires	9
Vegetation Fires	16
Couch/Dumpster Fires	48
Vehicle Accidents	91
Medical Emergencies	558
Non-Fires*	178
<b>TOTAL</b>	<b>981</b>

**Truck 11 Emergency Responses**

**2007**

Structure Fires	123
Vehicle Fires	8
Vegetation Fires	2
Couch/Dumpster Fires	7
Vehicle Accidents	335
Medical Emergencies	38
Other	91
<b>Total</b>	<b>604</b>

**Fire Station 12**

Fire Station 12 is located at 5330 Calle Real. It is staffed with three personnel consisting of an engine company captain, engineer and firefighter. The station provides immediate response on incidents as determined by the type of call. Please note the high volume of Medical Emergency responses for Engine 12.

**Engine 12 Emergency Responses in 2007**

Structure Fires	94
Vehicle Fires	12
Vegetation Fires	20
Couch/Dumpster Fires	6
Vehicle Accidents	76
Medical Emergencies	962
Other	175
<b>TOTAL</b>	<b>1,345</b>

**FIRE STATION 14**

Fire Station 14 is located at 320 N. Los Carneros Road adjacent to the "Stow House". It is staffed with three personnel, consisting of an engine company captain, engineer, and firefighter. This station houses an Engine and a 4-wheel drive wildland type engine known as a "Type III Engine" or "Brush Truck." Due to Fire Station 14's centralized location in the middle of the "Goleta Valley", of the 123 structure fires that occurred in 2007, Engine 14 responded to 106 of them.

**Engine 14 Emergency Responses in 2005**

Structure Fires	106
Vehicle Fires	13
Vegetation Fires	42
Couch & Dumpster fires	8
Vehicle Accidents	53
Medical Emergencies	328
Non-Fires	75
<b>TOTAL</b>	<b>625</b>

There is one Battalion Chief assigned to the South Battalion. In addition, the South Battalion Chief is backed up by the Deputy Fire Marshal/Battalion Chief in all second alarm calls where assistance is required.

**Future Fire Station 10 needed in Western Goleta**

The county fire department essentially looks at two standards when determining the need for future fire stations.

1. Response time analysis, and
2. The Population to Firefighter ratio.

The Santa Barbara County Fire Department has established the following emergency response time criteria in urbanized areas. This criterion is based on the National Fire Protection Association (NFPA) standards for fire protection.

1. One minute for turnout time.
2. Four minutes or less for the arrival of the first engine company.

It is important to note that the five-minute response time requirement is a National Standard. This standard is critical in the event of medical emergencies where a patient's breathing or heart has stopped. Due to the lack of oxygen to the brain, after five minutes, brain cells begin to die and the damage is irreversible. If advanced life support can be initiated within this 5 minute time frame, the patient may be revived without permanent brain damage. This 5 minute response time is also critical in responding to structure fires as the survivability of someone trapped in a burning building diminishes exponentially if a fire is allowed to burn unchecked. Anytime this response time is exceeded in an urbanized area, the Fire Department looks at the need to place an additional fire station in that geographical area.

It should also be noted that from the time the 911 emergency call is dispatched, to the time an engine is responding, is defined as the "turnout time". When the Fire Department conducts its analysis of time and distance from the nearest fire station, it is based upon four-minute travel distance criteria due to the initial minute as "turnout time".

The NFPA as well as the International City Managers Association (ICMA) recommends a firefighter to population ratio of one firefighter on duty 24hrs a day for every 2,000 in population as an "ideal" ratio. For example, if a fire station serves a population of 20,000 citizens, there should be ten firefighters on duty 24/7 to serve that population.

The County of Santa Barbara has set as an absolute maximum firefighter to population ratio of 1 to 4,000. This represents a doubling of the NFPA and ICMA recommendations (Goleta General Plan). Any level above this 1 to 4,000 ratio would present a significant negative impact upon the public safety. Under this scenario, if a fire station serves a population of 20,000 citizens, the firefighter to population ratio should never drop below 5 firefighters on duty 24/7.

Station 11 located at 6901 Frey Way in Goleta serves a population of 21,594 residents (2000 US Census) in their first-in district. Engine 11 is staffed with three firefighters and is a dedicated paramedic response unit for this area. This represents a population to firefighter ratio of 7,198; almost double the maximum allowable.

With the firefighter to population ratio in station 11's district exceeding even the most conservative 4,000 to 1 threshold, and with response times to the West end of Goleta exceeding the 5 minute criteria, the Santa Barbara County Fire Department, in concert with the City of Goleta, is aggressively pursuing the construction and staffing of new fire station 10 in western Goleta.

**ALTERNATIVES:**

Not Applicable

**FISCAL IMPACTS:**

Not Applicable

Submitted By:

Reviewed By:

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Martin Johnson  
Captain

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Vyto Adomaitis  
RDA, NS & Public Safety

Reviewed By:

Approved By:

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Michelle Greene  
Administrative Services Director

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Daniel Singer  
City Manager

**ATTACHMENTS:**

1. Slides to PowerPoint presentation.
2. NFPA 1710, Chapter 4, section 4.1.2.1

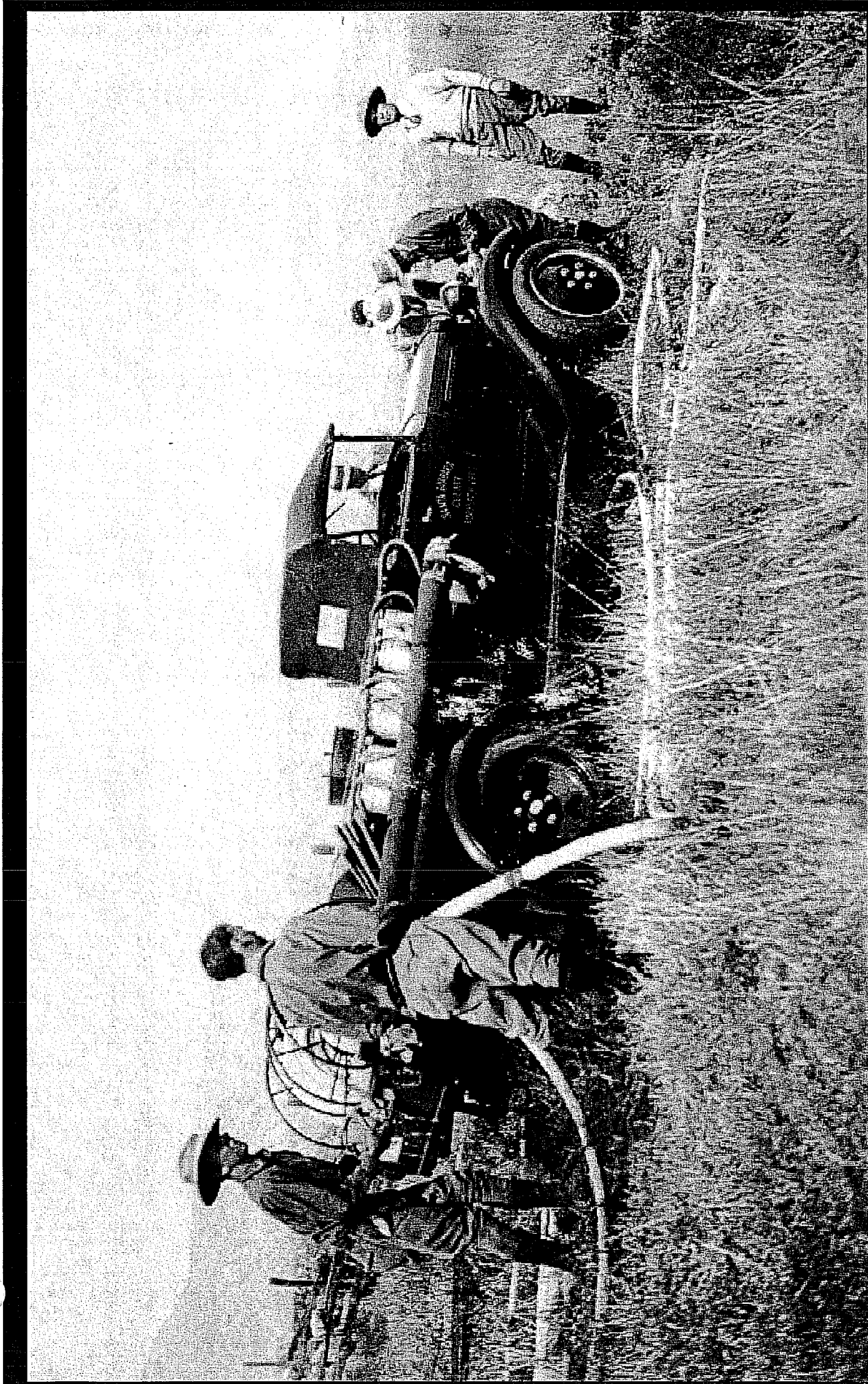
**Santa Barbara County Fire Department  
2007 Annual Report**

**April 15, 2008**

**Fire Captain: Martin Johnson**

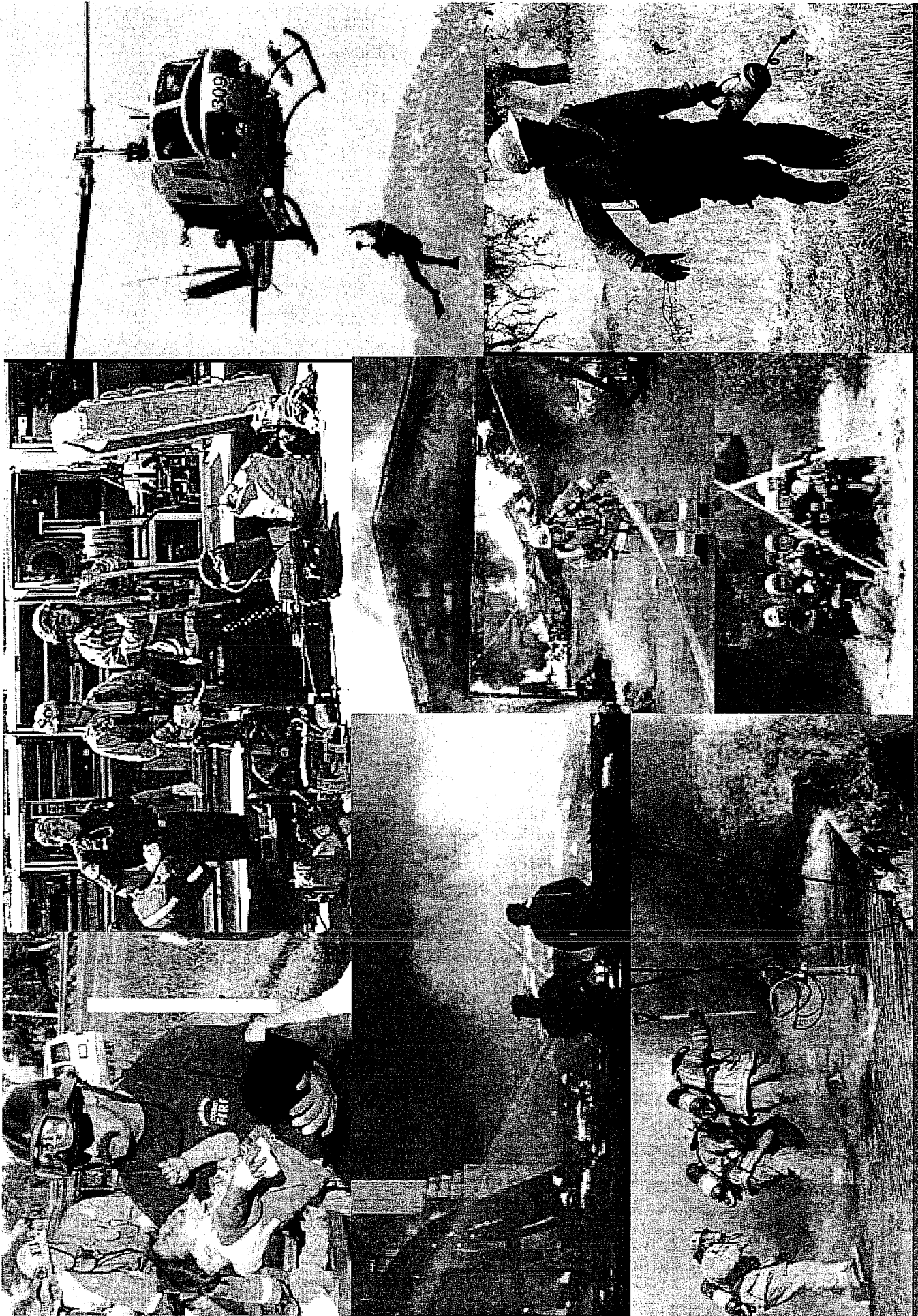


Established 1926



# Santa Barbara County Forestry Dept.





# 2008 - "All Risk"

# Santa Barbara County

## Fire Department

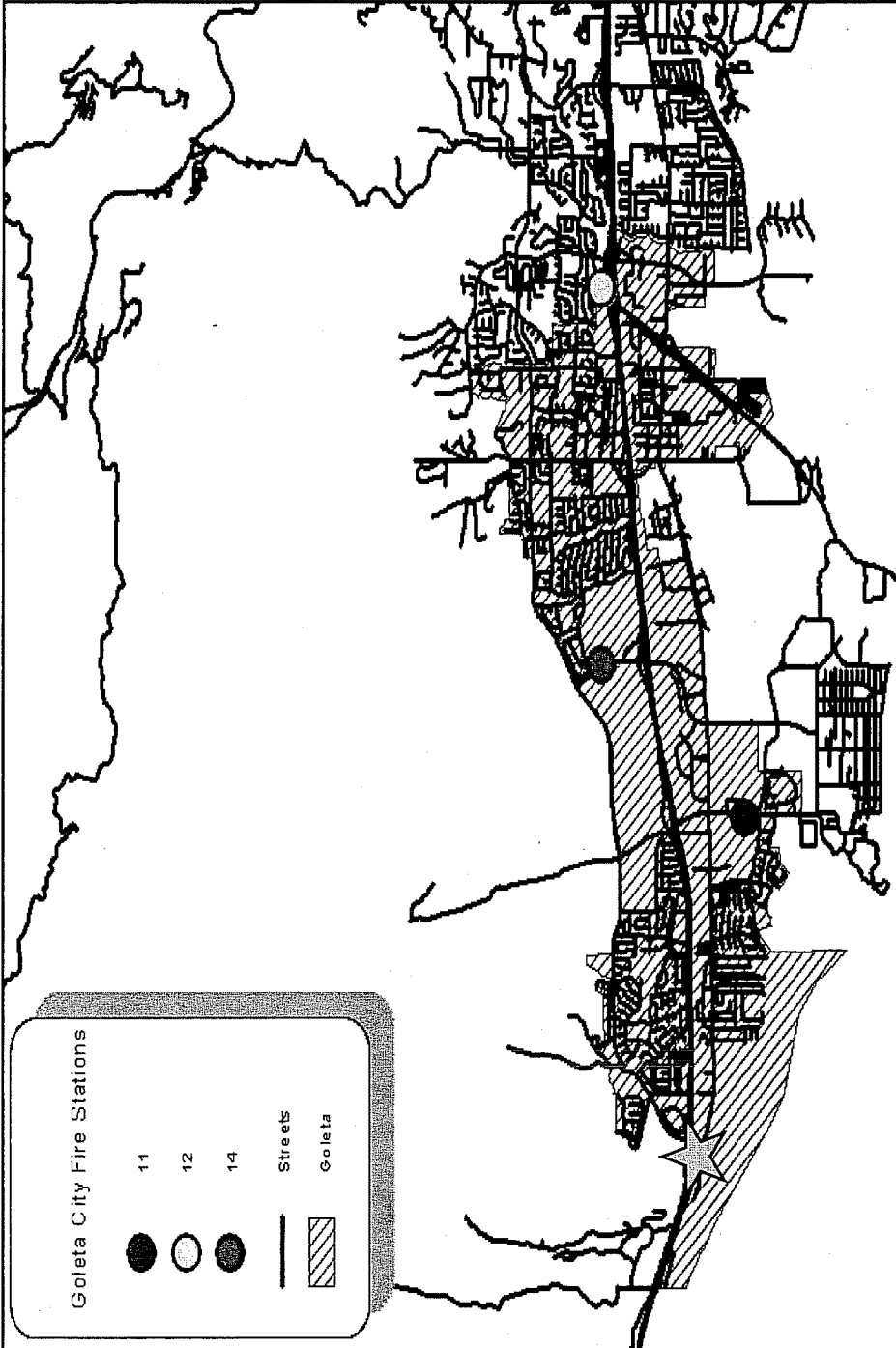
16 Fire Stations

9 North County

7 South County

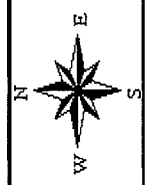
3 in the City of Goleta





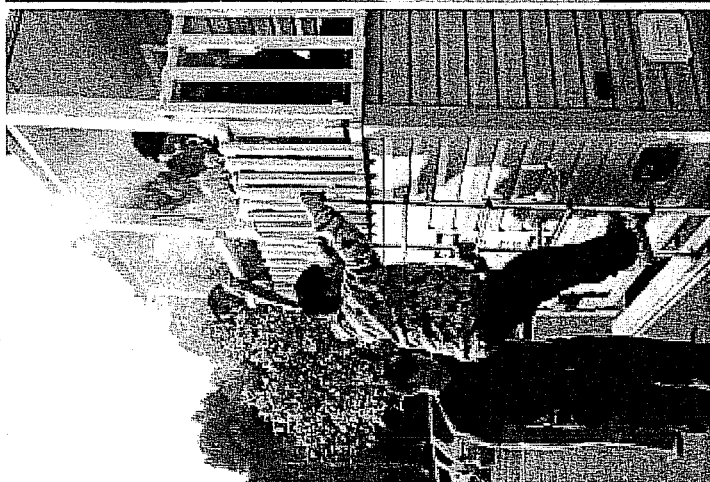
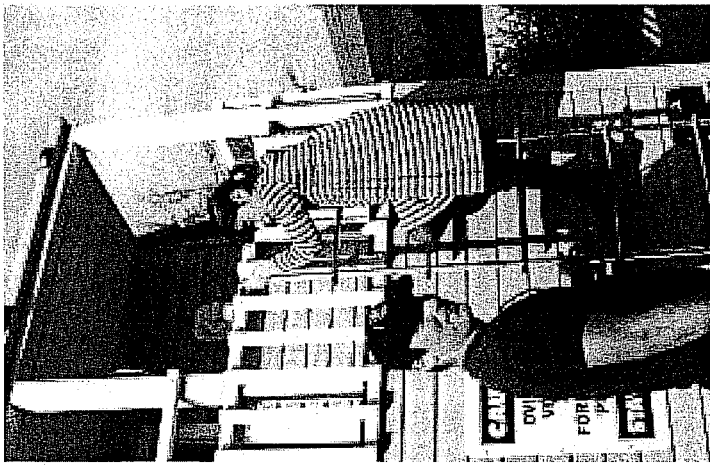
# ★ General location of new Fire Station 10

Technical Services (DAE)  
 August 9, 2003  
 1702 Hours

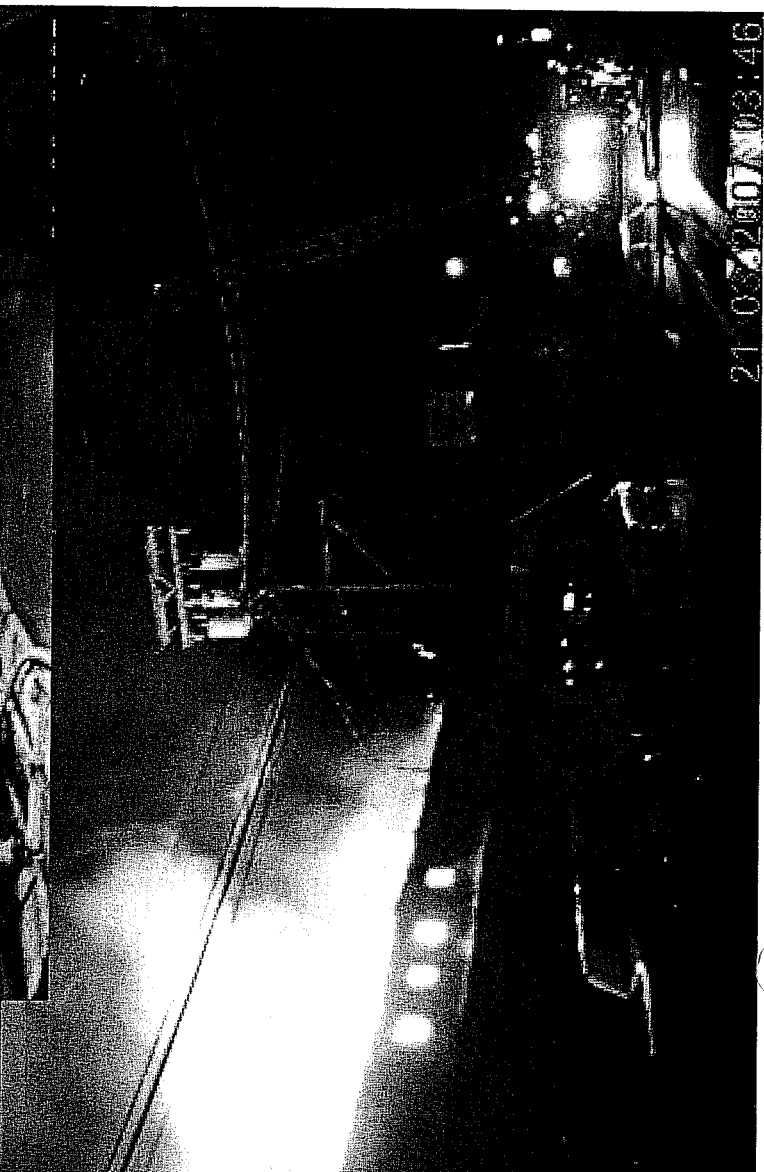
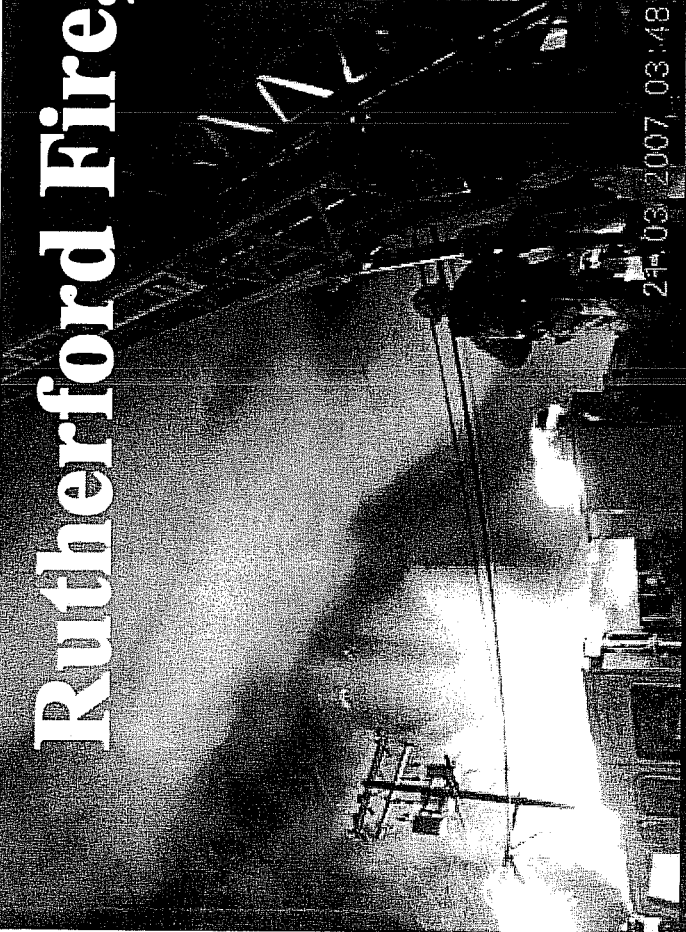
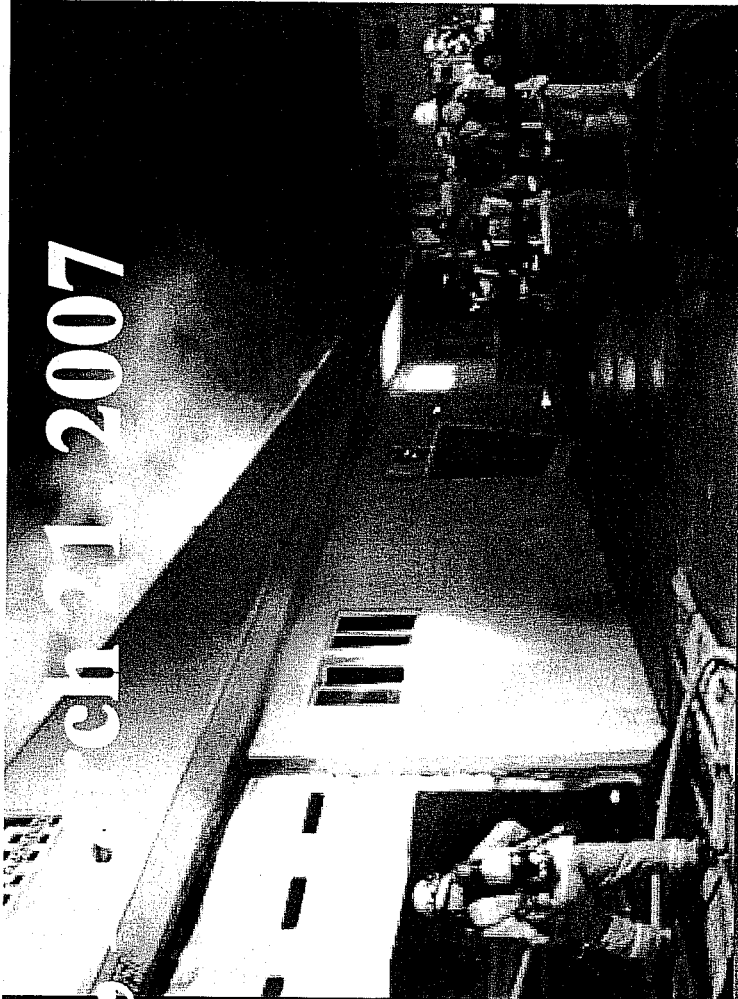


Santa Barbara County Fire Department  
**GOLETA CITY FIRE STATIONS**





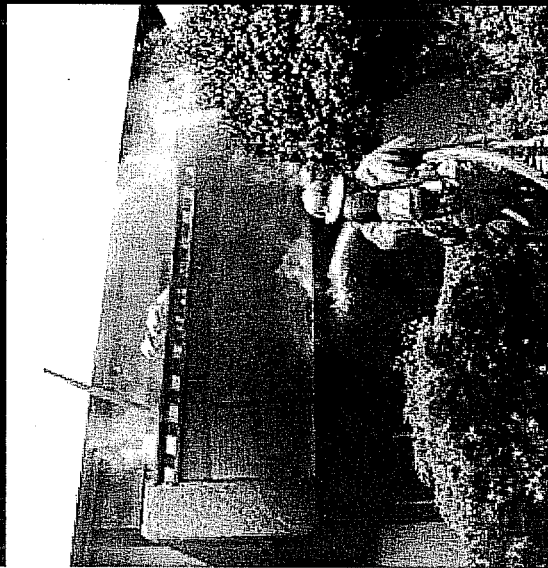
# Rutherford Fire, March 21, 2007

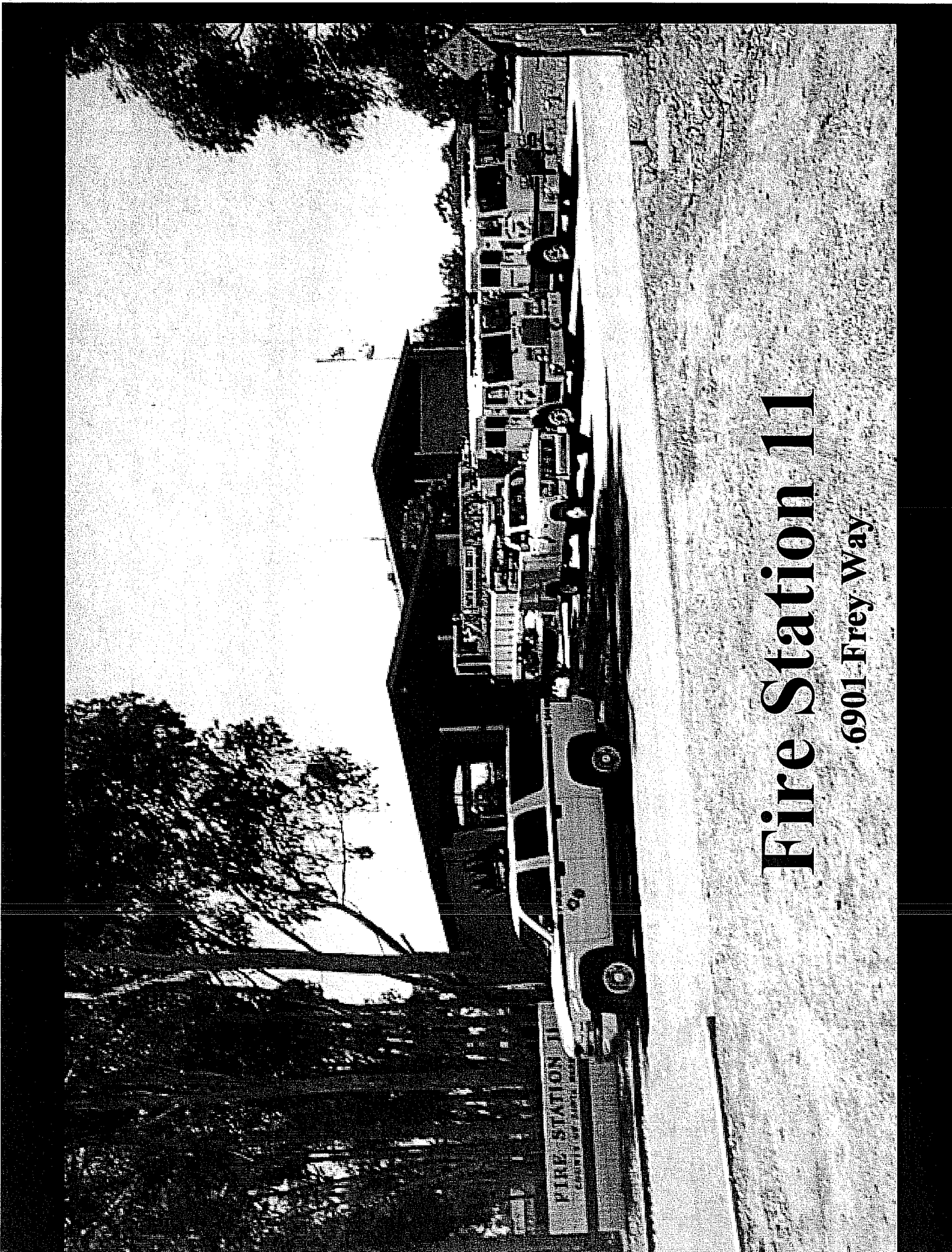


21-03-2007, 03:48

# Linfield Fire off Whittier Drive

June 14, 2007





# Fire Station 11

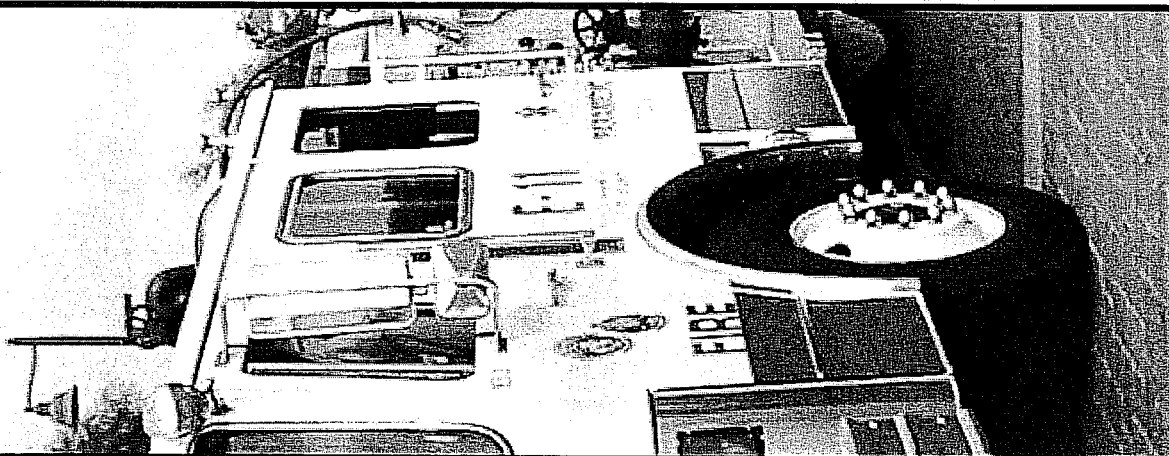
6901 Frey Way

# Engine 11 Emergency

## Responses 2007

• Structure Fires	81
• Vehicle Fires	9
• Vegetation Fires	16
• Couch/Dumpster Fires	48
• Vehicle Accidents	91
• Medical Emergencies	558
• <u>Other</u>	<u>178</u>

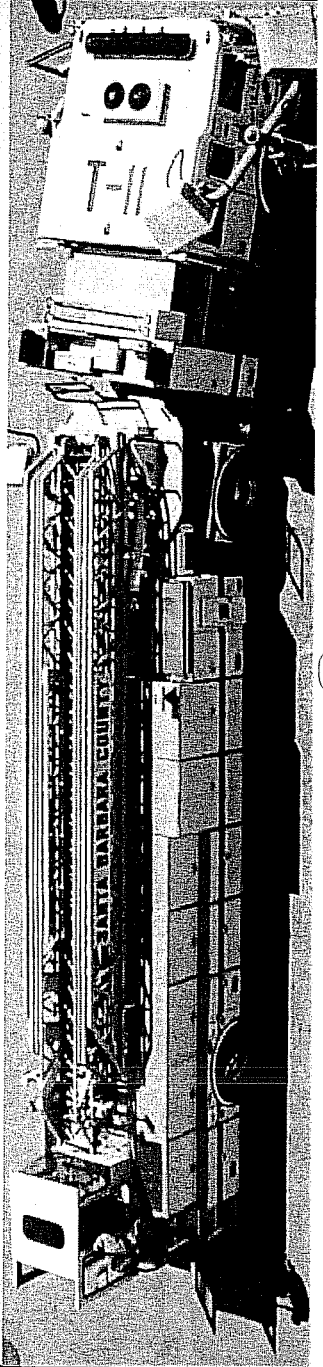
**TOTAL 981**

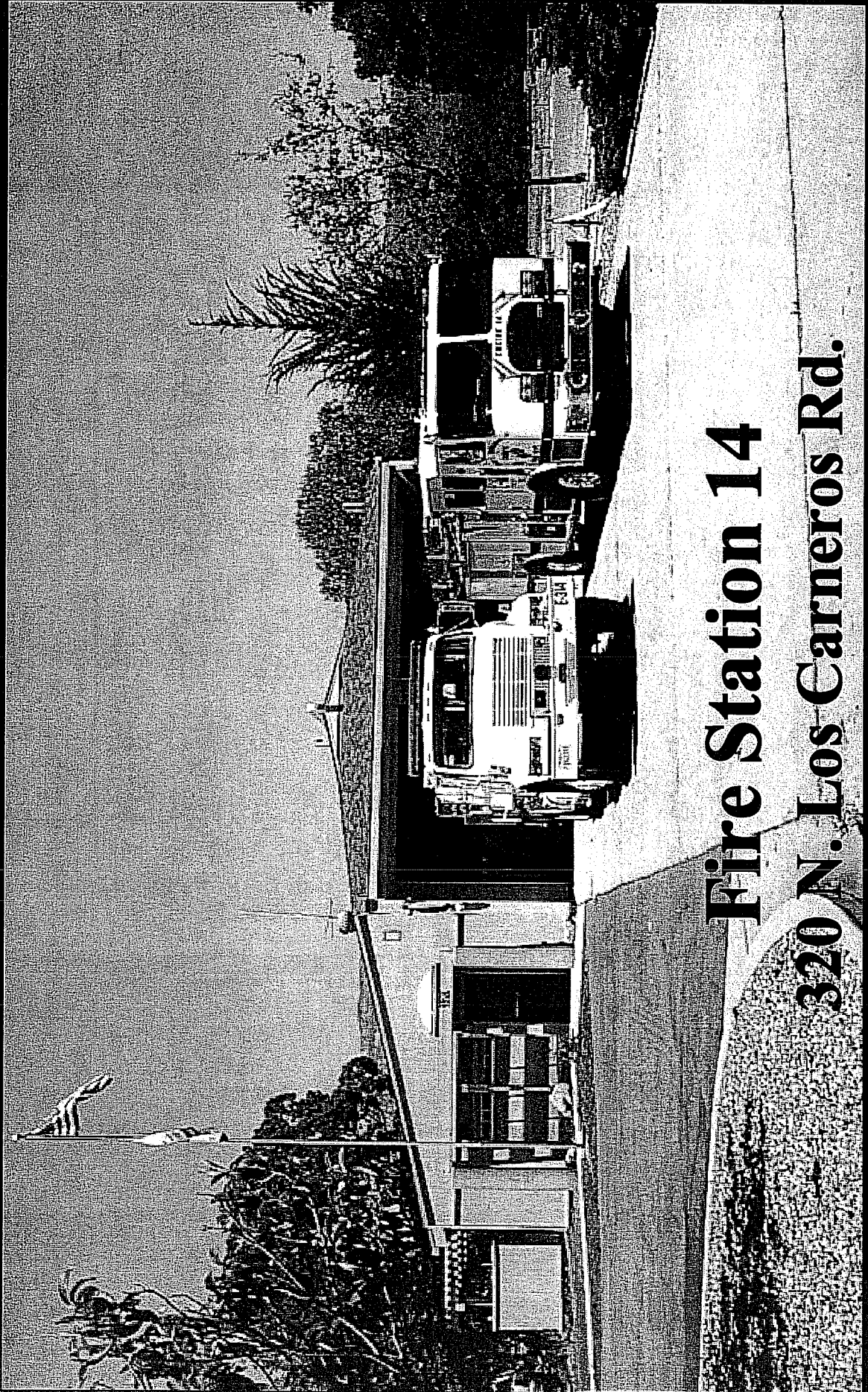




# Truck 11 Emergency Responses 2007

• Structure Fires	123
• Vehicle Fires	8
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• Medical Emergencies	38
• <u>Other</u>	<u>91</u>
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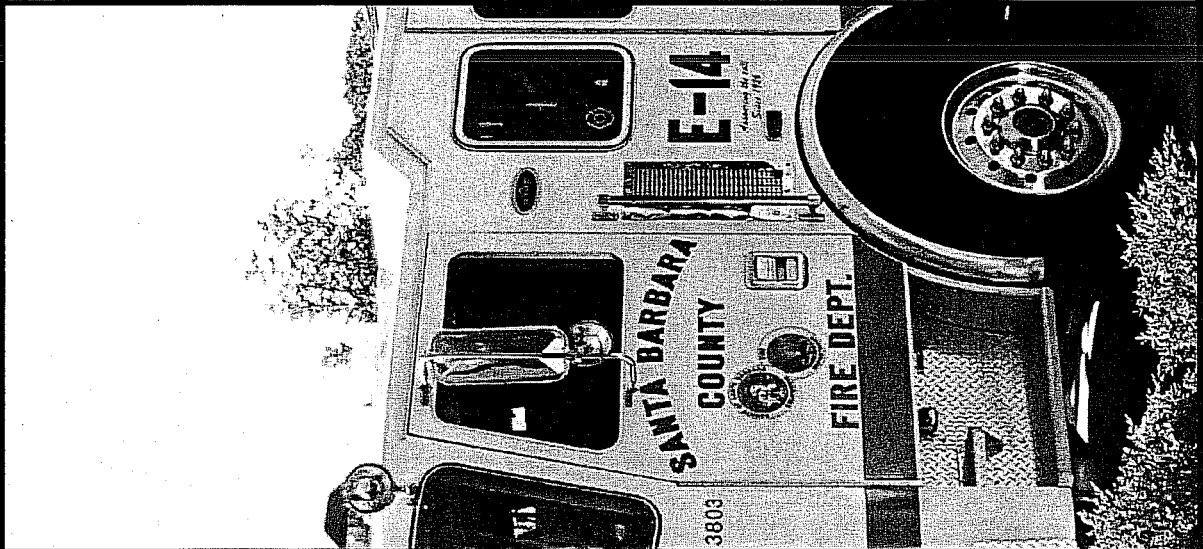


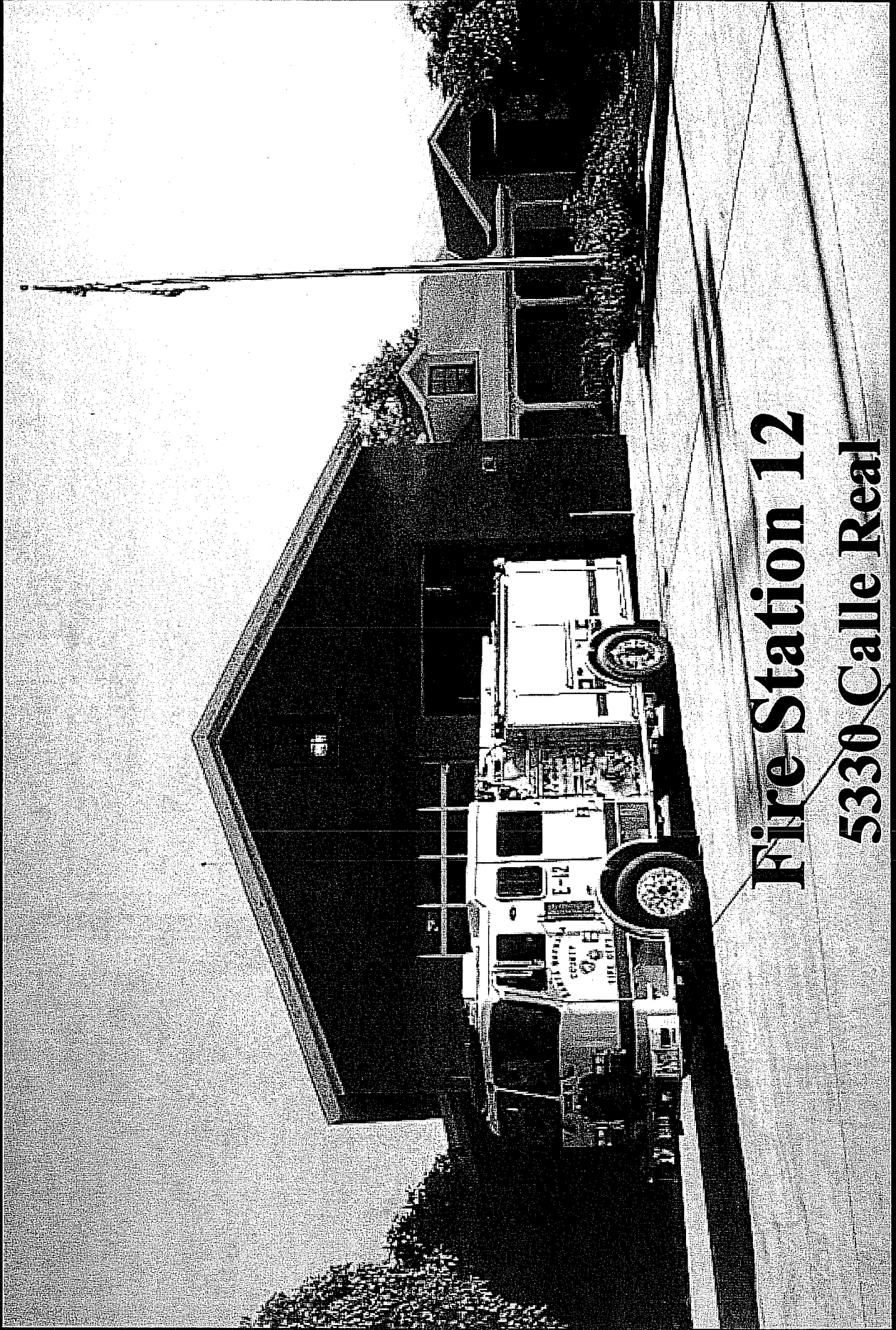
**Fire Station 14**  
**320 N. Los Carneros Rd.**

# Engine 14 Emergency

## Responses 2007

• Structure Fires	106
• Vehicle Fires	13
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• Couch/Dumpster Fires	8
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**Fire Station 12**  
**5330 Calle Real**

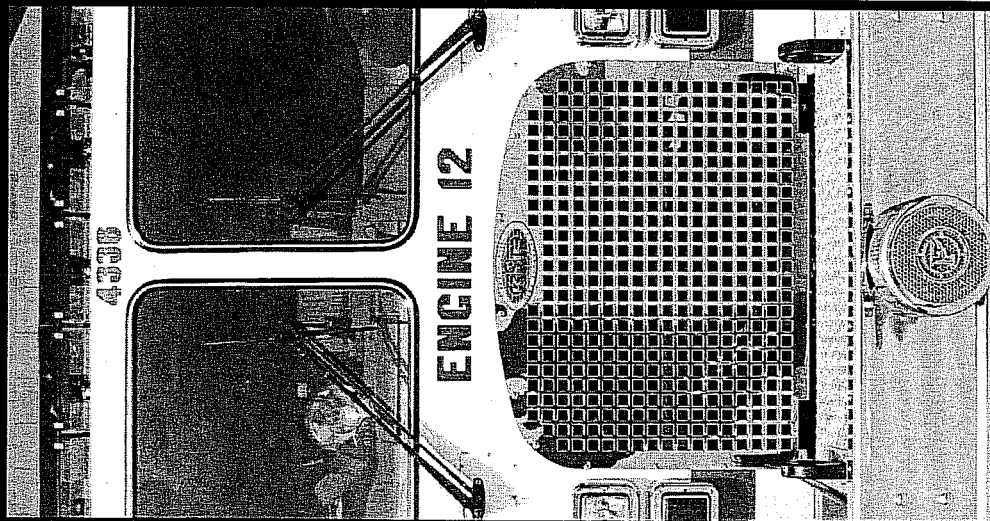
# Engine 12 Emergency

## Responses 2007

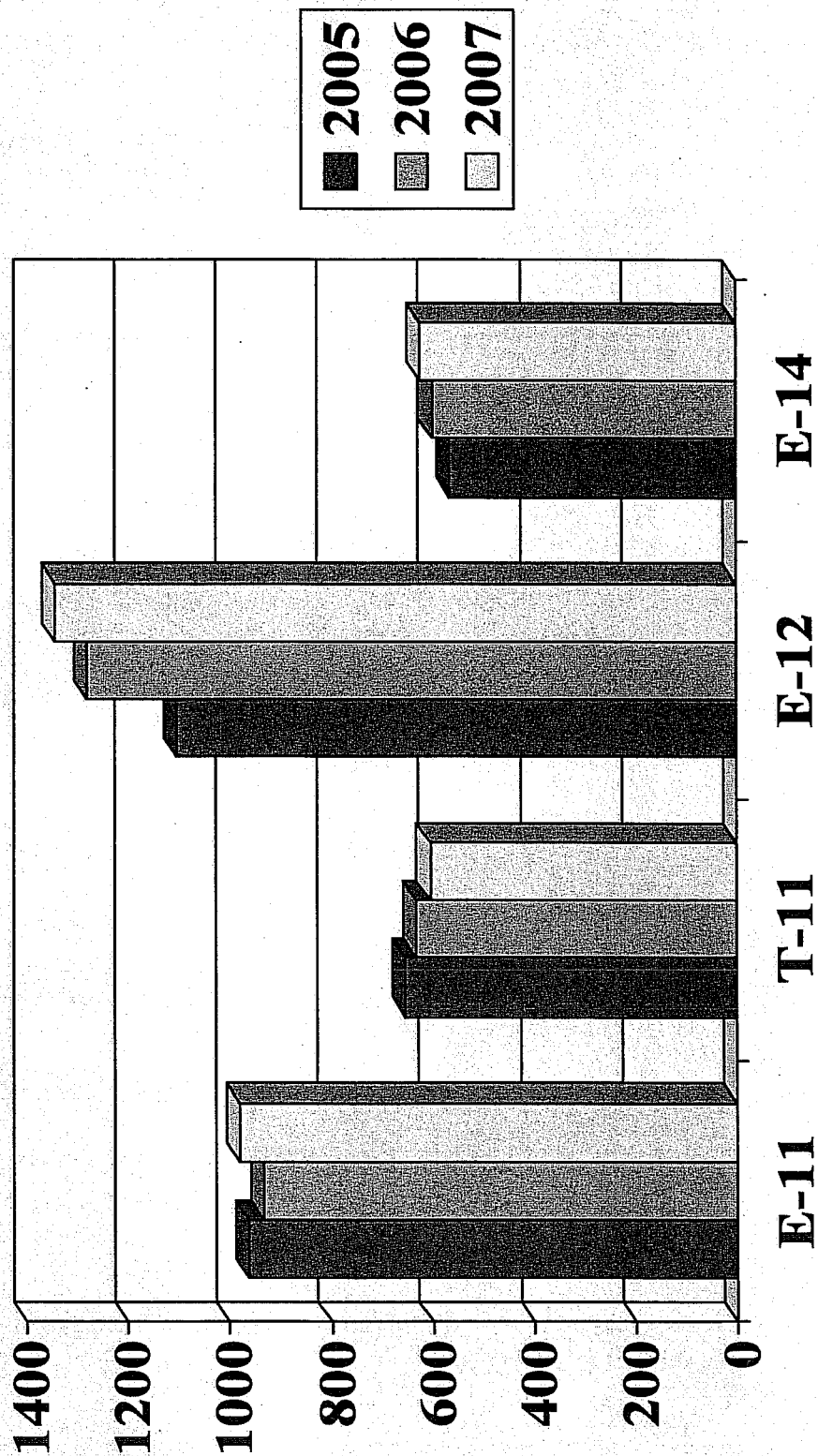
• Structure Fires	94
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**TOTAL**

**1,345**



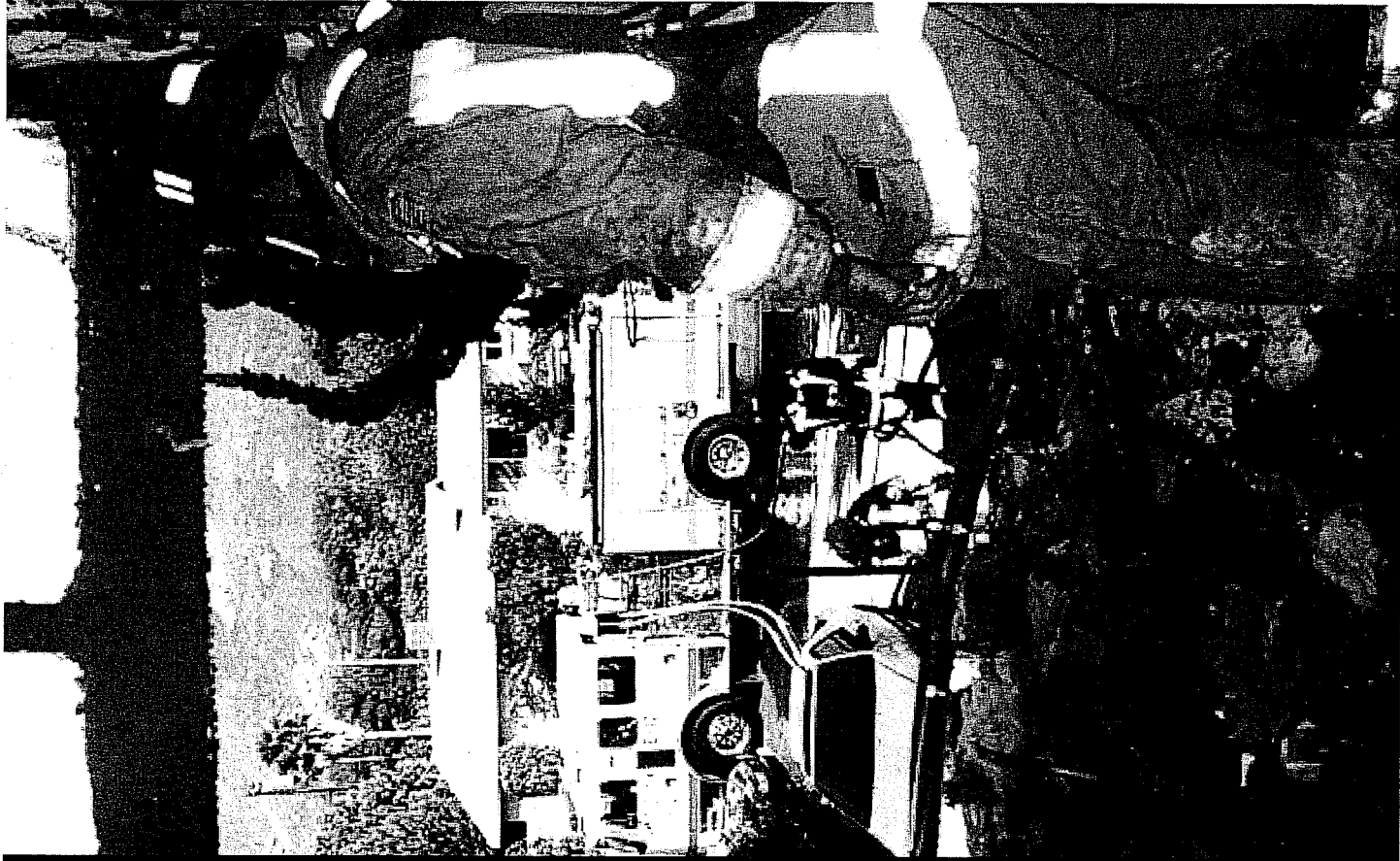
# *Number of Calls for service in 2007 compared to 05 & 06*



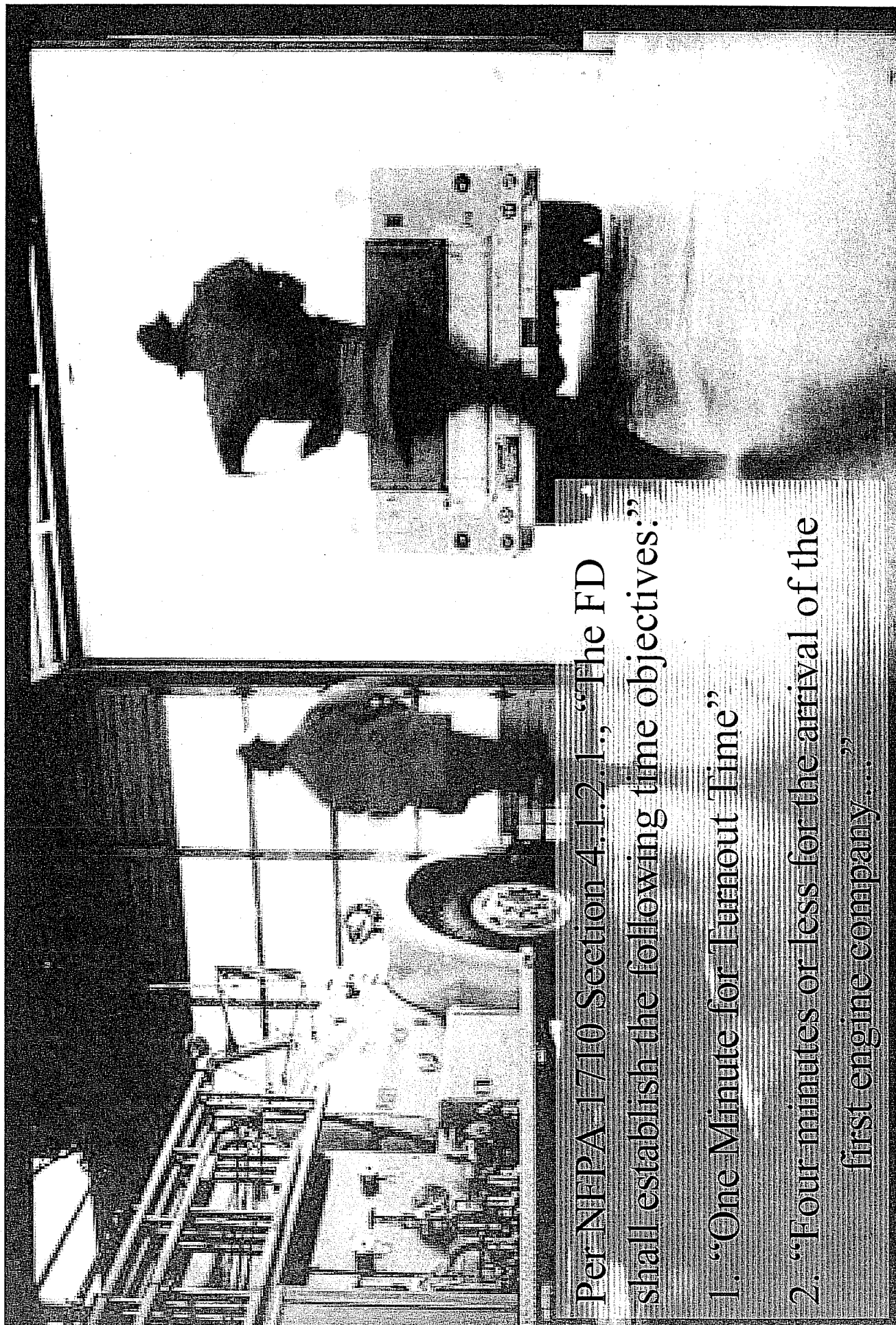
# Standards for determining adequate Fire Protection:

- **5 minute emergency response time**
- **Population to Firefighter ratio**

NOTE: If either one of these criteria are triggered in an urban area, fire protection is considered to be below acceptable levels.



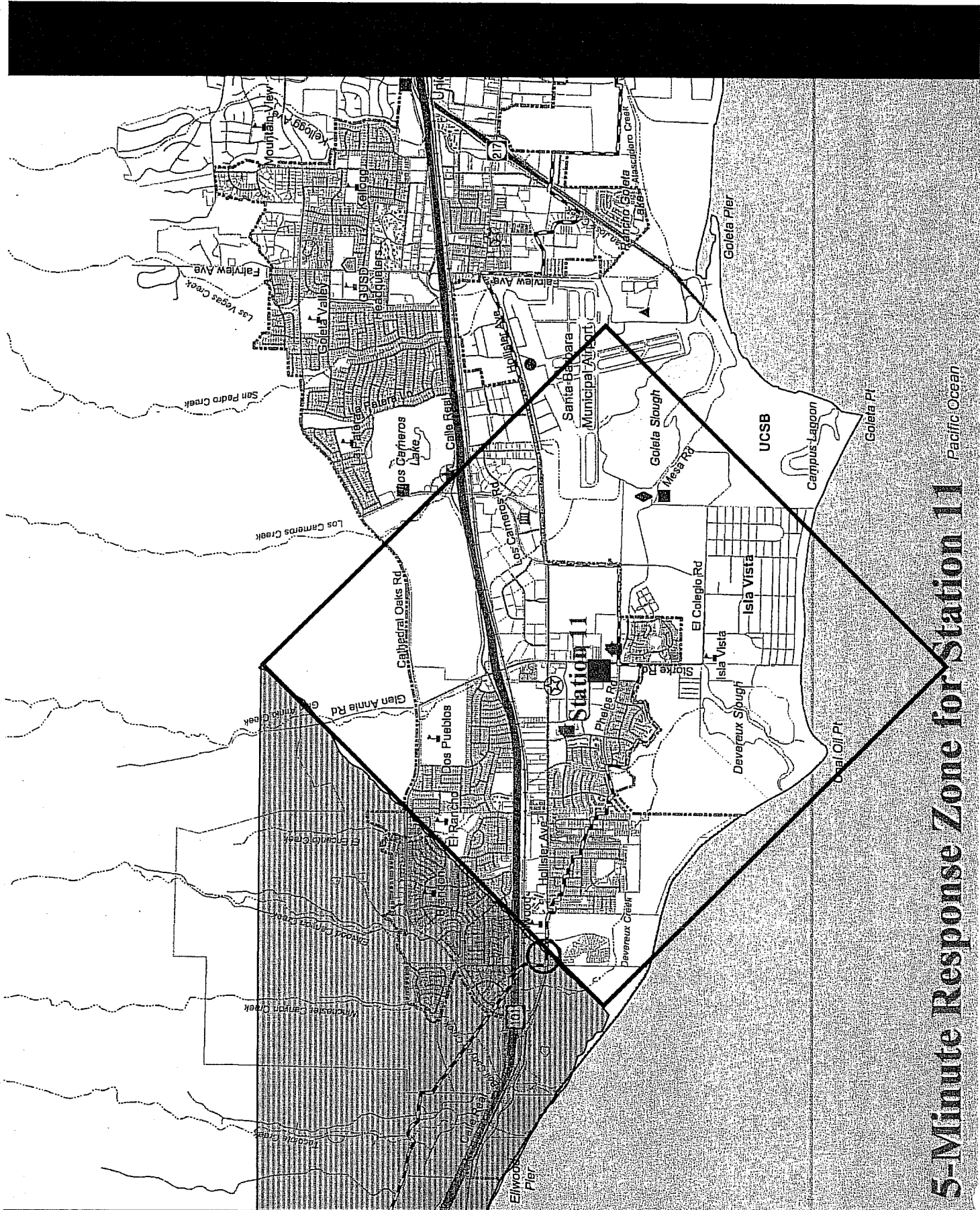
# 5-MINUTE RESPONSE TIME



Per NFPA 1710 Section 4.1.2.1, "The FD shall establish the following time objectives:"

1. "One Minute for Turnout Time"
2. "Four minutes or less for the arrival of the first engine company...."





**5-Minute Response Zone for Station 11** Pacific Ocean

# Population to FF Ratio

2000:1 Pop to FF ratio

= “Ideal”

3000:1 Pop to FF ratio

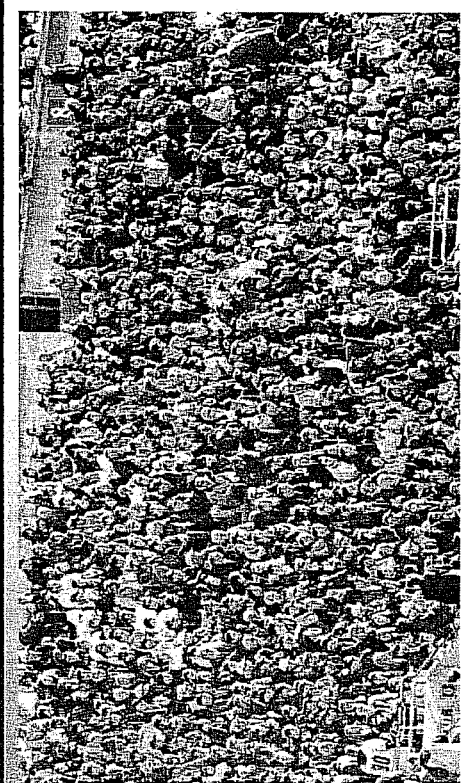
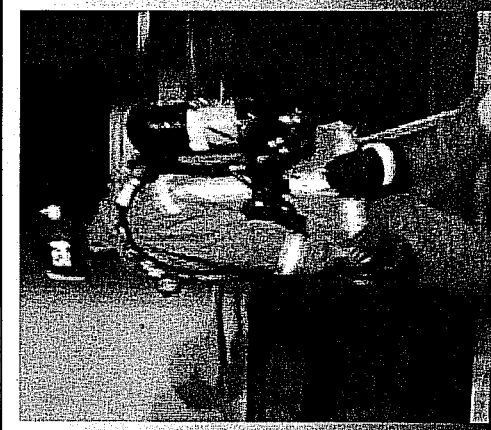
= “Good”

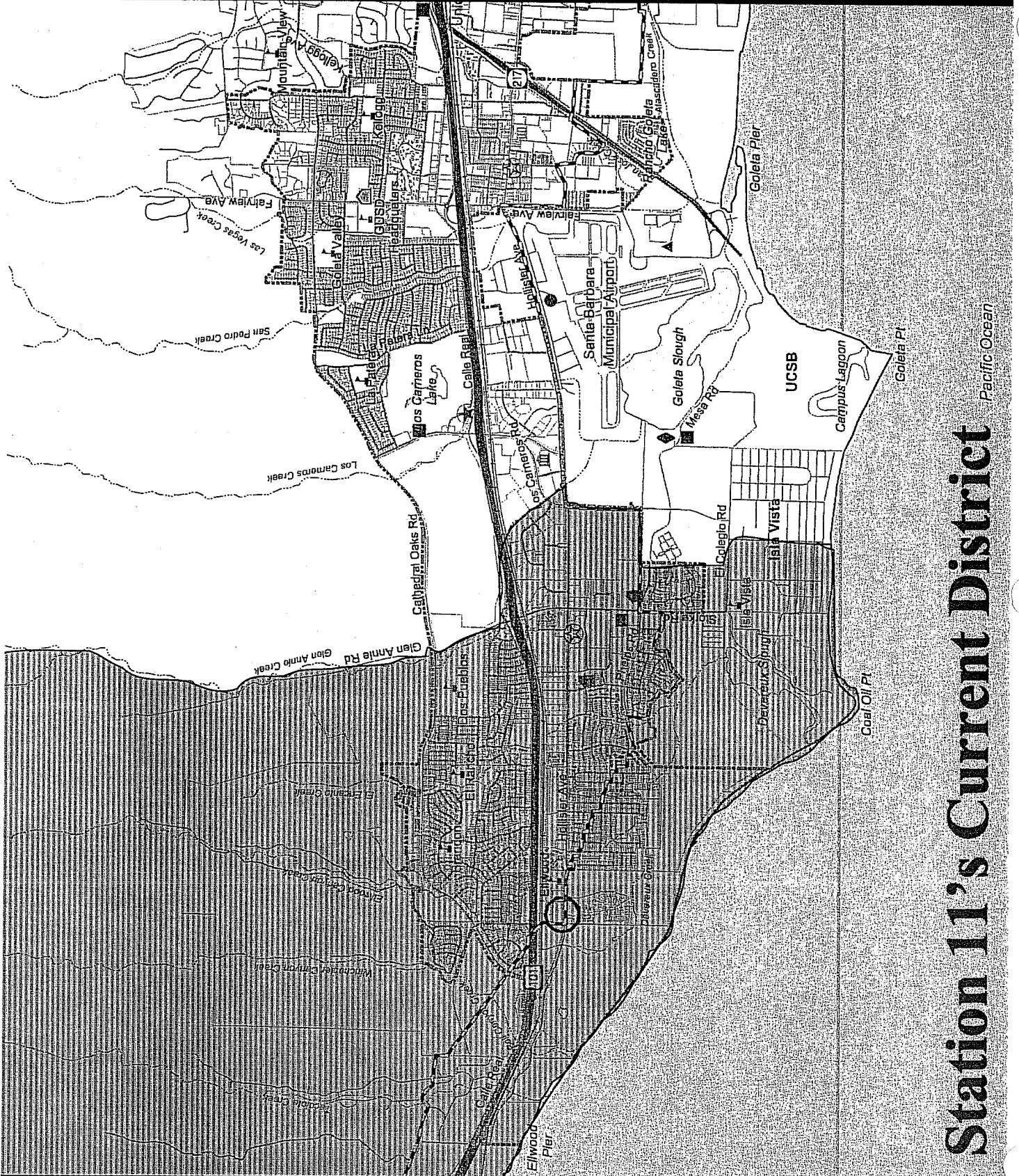
4000:1 Pop to FF ratio

= “Absolute Maximum

Population that can be

adequately served” (GCP, 110)



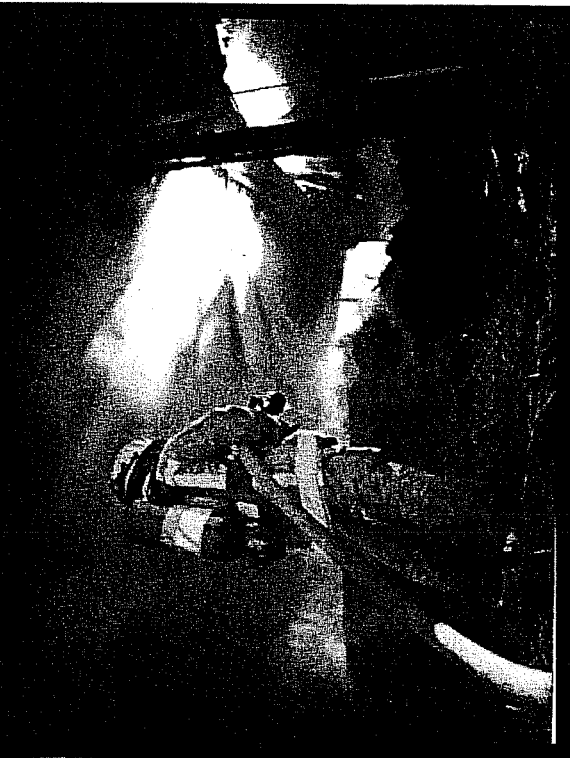
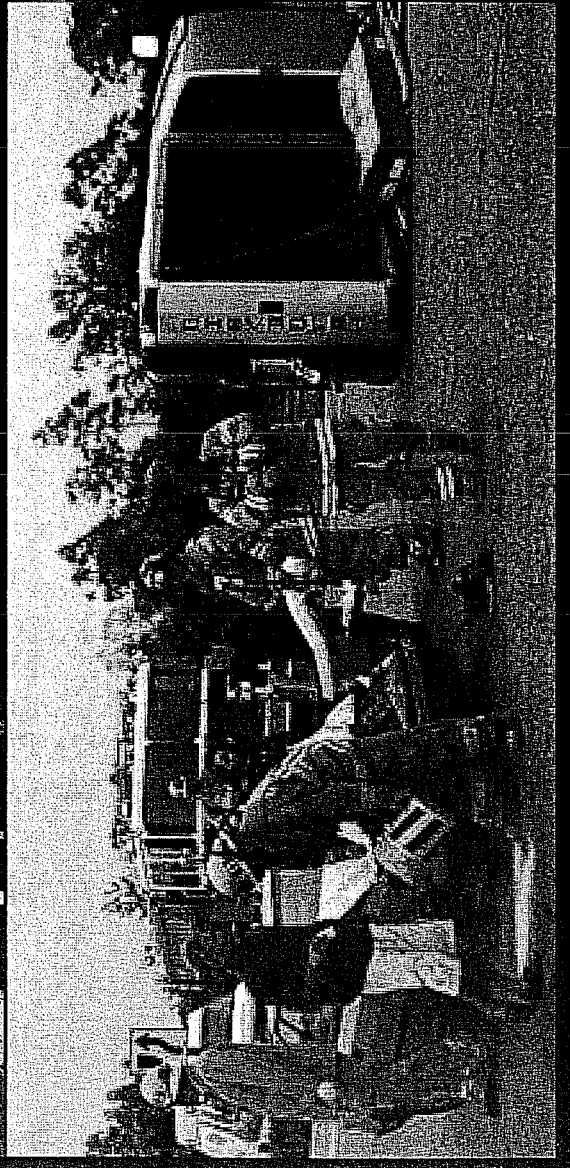


# Station 11's Current District

Pacific Ocean

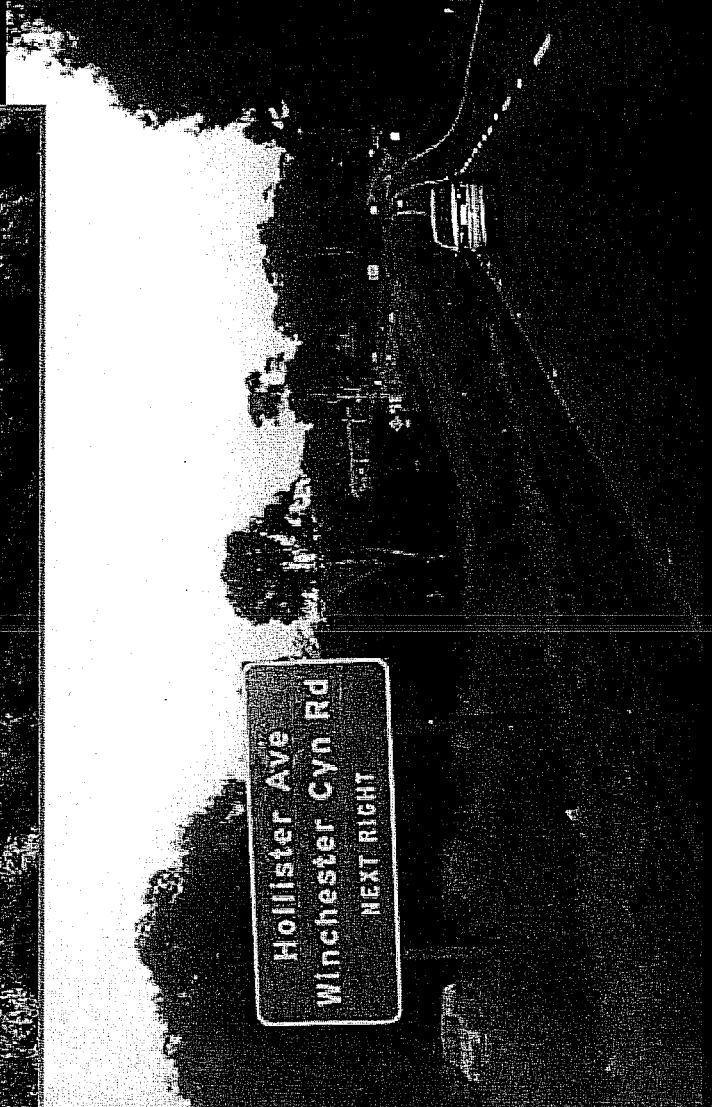
# Fire Station 11 Population to FF Ratio

21,594 to 3 = 7,198 to 1

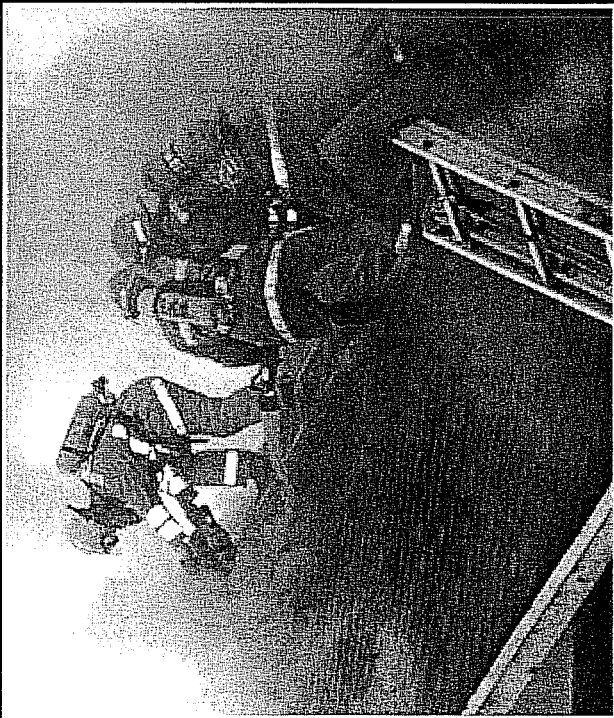




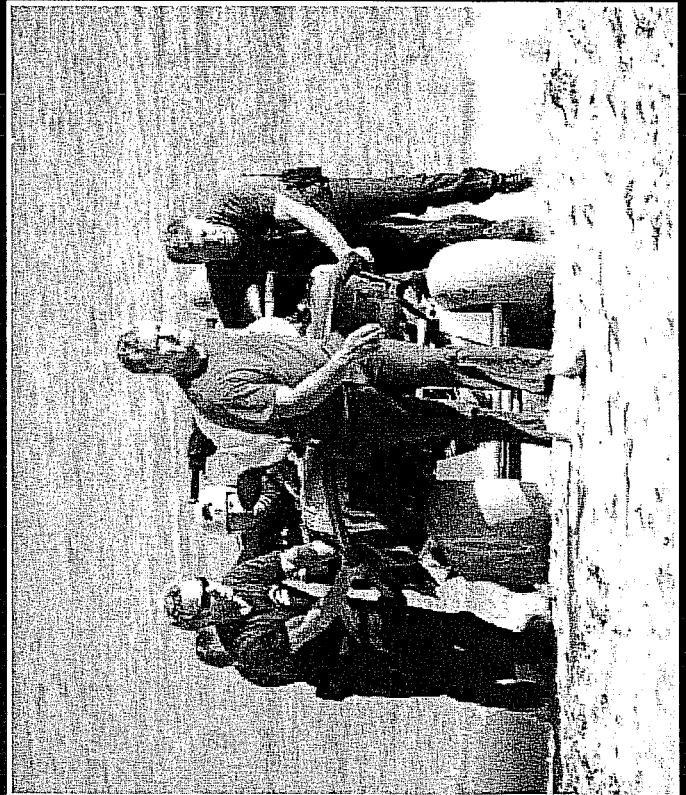
- “The Santa Barbara County Fire Department has determined that the most under-served area in Goleta is the extreme western portion near Winchester Canyon.”



(City of Goleta General Plan, p. 8-10)



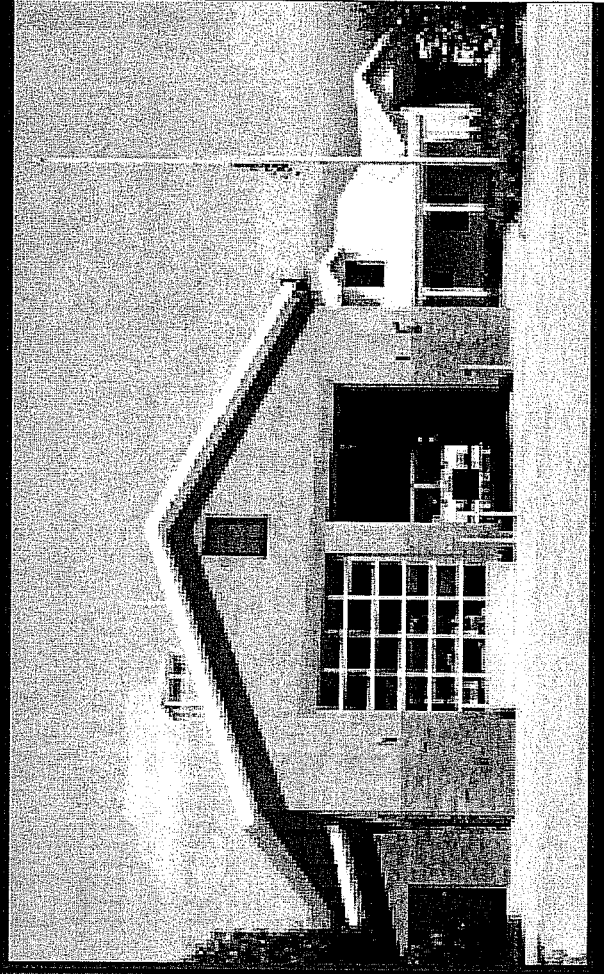
- Currently, Fire Station 11 serves a population of 21,594 (2000 US census) which exceeds the maximum population to firefighter ratio of 4000:1 by 9594 people.

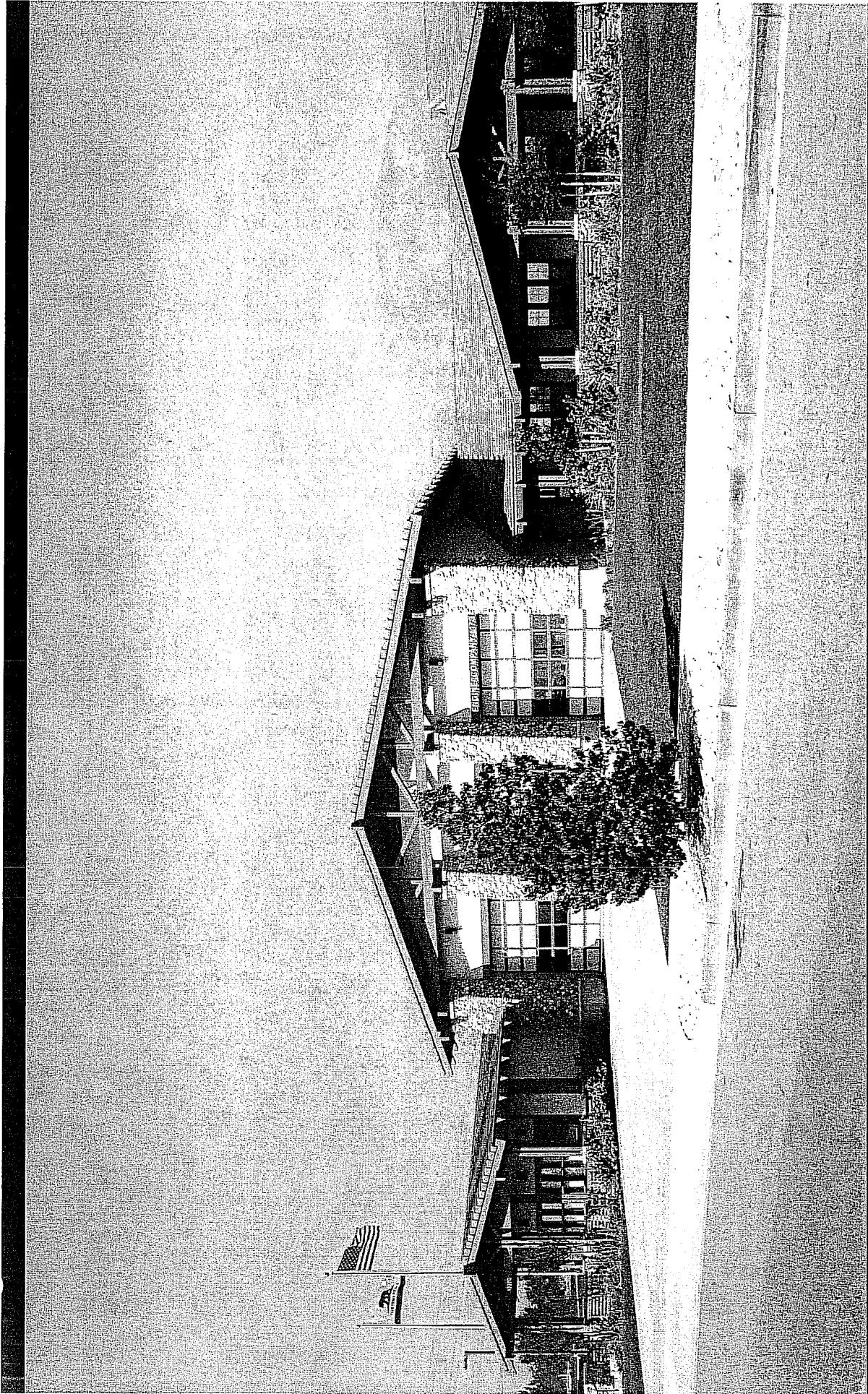


- Based on these facts, Fire Station 10 in Western Goleta is the County Fire Department's highest future capital improvement project priority.



Winchester Canyon





# Example of a new Fire Station



# Questions.

## Chapter 4 Organization

### 4.1 Fire Department Organizational Statement.

**4.1.1\*** The authority having jurisdiction (AHJ) shall maintain a written statement or policy that establishes the following:

- (1) Existence of the fire department
- (2) Services that the fire department is required to provide
- (3) Basic organizational structure
- (4) Expected number of fire department members
- (5) Functions that fire department members are expected to perform

**4.1.2\*** The fire department organizational statement shall provide service delivery objectives, including specific response time objectives for each major service component (i.e., fire suppression, EMS, special operations, aircraft rescue and fire fighting, marine rescue and fire fighting, and/or wildland fire fighting) and objectives for the percentage of responses that meet the response time objectives.

**4.1.2.1** The fire department shall establish the following time objectives:

- (1) One minute (60 seconds) for turnout time
- (2)\*** Four minutes (240 seconds) or less for the arrival of the first arriving engine company at a fire suppression incident and/or 8 minutes (480 seconds) or less for the deployment of a full first alarm assignment at a fire suppression incident
- (3) Four minutes (240 seconds) or less for the arrival of a unit with first responder or higher level capability at an emergency medical incident
- (4) Eight minutes (480 seconds) or less for the arrival of an advanced life support unit at an emergency medical incident, where this service is provided by the fire department

**4.1.2.2** The fire department shall establish a performance objective of not less than 90 percent for the achievement of each response time objective specified in 4.1.2.1.

#### **4.1.2.3 Evaluations.**

**4.1.2.3.1** The fire department shall evaluate its level of service and deployment delivery and response time objectives on an annual basis.

**4.1.2.3.2** The evaluations shall be based on data relating to level of service, deployment, and the achievement of each response time objective in each geographic area within the jurisdiction of the fire department.

**4.1.2.4** The fire department shall provide the AHJ with a written report, quadrennially, which shall be based on the annual evaluations required by 4.1.2.3.

**4.1.2.4.1** The quadrennial report shall define the geographic areas and/or circumstances in which the requirements of this standard are not being met.

**4.1.2.4.2** The quadrennial report shall explain the predictable consequences of these deficiencies and address the steps that are necessary to achieve compliance.

### **4.2 Fire Suppression Services.**

The fire department organizational statement shall set forth the criteria for the various types of fire suppression incidents to which the fire department is required to respond.

### **4.3 Emergency Medical Services.**

**4.3.1** The fire department organizational statement shall set forth the criteria for the various types of emergency medical incidents to which the fire department is required and/or expected to respond.

**4.3.2** The fire department organizational statement shall ensure that the fire department's emergency medical response capability includes personnel, equipment, and resources to deploy at the first responder level with automatic external defibrillator (AED) or higher treatment level.

**4.3.3** Where emergency medical services beyond the first responder with AED level are provided by another agency or private organization, the AHJ, based upon recommendations from the fire department, shall include the minimum staffing, deployment and response criteria as required in Section 5.3 in the following:

- (1) The fire department organizational statement
- (2) Any contract, service agreement, governmental agreement, or memorandum of understanding between the AHJ and the other agency or private organization

### **4.4 Special Operations.**

**4.4.1** The fire department organizational statement shall set forth the criteria for the various types of special operations response and mitigation activities to which the fire department is required and/or expected to respond.

**4.4.2\*** The fire department organizational statement shall ensure that the fire department's hazardous materials response capability includes personnel, equipment, and resources to deploy at the first responder operational level as required by 29 CFR 1910.120.

**4.4.3** The fire department organizational statement shall ensure that the fire department's confined space response capability includes personnel, equipment, and resources to deploy at the confined space operational level as required by 29 CFR 1910.146.

**4.4.4** The fire department organizational statement shall set forth the criteria for the various types of fire department response during natural disasters or terrorism incidents, weapons of mass destruction incidents, or large-scale or mass casualty events.

### **4.5 Airport Rescue and Fire-Fighting Services.**

The fire department organizational statement shall set forth the criteria for the various types of airport rescue and fire-fighting incidents to which the fire department is required and/or expected to respond.

### **4.6 Marine Rescue and Fire-Fighting Services.**

The fire department organizational statement shall set forth the criteria for the various types of marine rescue and fire-fighting incidents to which the fire department is required and/or expected to respond.

### **4.7 Wildland Fire Suppression Services.**

The fire department organizational statement shall set forth the criteria for the various types of wildland fire suppression incidents to which the fire department is required and/or expected to respond.

### **4.8 Intercommunity Organization.**

**4.8.1\*** Mutual aid, automatic aid, and fire protection agreements shall be in writing and shall address issues such as liability for injuries and deaths, disability retirements, cost of service, authorization to respond, staffing, and equipment, including the resources to be made available and the designation of the incident commander.

**4.8.2** Procedures and training of personnel for all fire departments in mutual aid, automatic aid, and fire

protection agreement plans shall be comprehensive to produce an effective fire force and to ensure uniform operations.

**4.8.3** Companies responding to mutual aid incidents shall be equipped with communications equipment that allow personnel to communicate with incident commander and division supervisors, group supervisors, or sector officers.

## **NEXT CHAPTER**