

CHAPTER X

COMMUNITY HEALTH AND SAFETY

GOALS:

Brisbane will be a place where...

The community is aware of the potential for natural and man-made disaster and has made sound preparations;

The City acts to prevent the loss of life and property and damage to the environment by addressing potential hazards in the use of the land;

Fire and police services actively prevent problems and stand ready to respond to community needs;

*The residents and businesses feel safe and can freely attend to their daily lives;
and*

There is peace and quiet.

COMMUNITY HEALTH AND SAFETY

Chapter Index

	<u>Page</u>
X.1 Emergency Preparedness	X-5
X.2 Seismic Safety	X-8
Structural Improvements.....	X-8
Public Awareness	X-9
X.3 Slope Stability	X-10
Development Requirements.....	X-10
X.4 Flood Hazard	X-17
X.5 Fire Hazard	X-20
Systems and Materials	X-22
Codes and Enforcement	X-22
Levels of Service	X-23
Public Education	X-23
X.6 Personal and Property Safety	X-24
Law Enforcement	X-25
Public Education	X-25
Community-Oriented Policing	X-26
X.7 Hazardous Materials	X-27
X.8 Land Contamination and Remediation	X-29
X.9 Noise	X-34
Transportation Noise	X-37
Land Use	X-38
Enforcement	X-39
Local Standards	X-39
Other Standards	X-39
X.10 Air Quality	X-40
Working with the BAAQMD	X-41
Mobile Sources	X-41

Stationary Sources.....	X-43
Public Action and Information	X-44
X.11 Water Supply and Quality.....	X-45
X.12 Sanitary Sewer and Storm Drains.....	X-47
Sanitary Sewer	X-47
Storm Drains	X-48

CHAPTER X

COMMUNITY HEALTH AND SAFETY

State law requires that a General Plan address the protection of the community from the risks of natural hazards. This chapter addresses this requirement and speaks as well to the man-made hazards that are a part of urban life. The underlying assumption of preparing safety policy is that the City can reduce hazards if the probability of hazardous conditions is known in advance and plans for dealing with such conditions have been prepared.

The chapter is divided into 12 sections: 1) Emergency Preparedness, 2) Seismic Safety, 3) Slope Stability, 4) Flood Hazard, 5) Fire Hazard, 6) Personal and Property Safety, 7) Hazardous Materials, 8) Land Contamination and Reclamation, 9) Noise, 10) Air Quality 11) Water Supply and Quality *and* 12) Sanitary Sewer and Storm Drain. Throughout the chapter are figures that illustrate the matters discussed in the text. The figures are either from or based upon the information in the technical background reports. It should be noted that the figures give generalized information from published sources of various agencies. For the environmental sensitivities identified on the figures, project applications would be required to produce finer scale, site-specific data.

There are three important distinctions that inform the issues addressed in this chapter. The first is that in many instances the City does not have the authority to regulate a potential hazard or to enforce violations because City authority has been preempted by the County or a State or Federal agency. Such preemption exists with regard to gas pipelines, electrical transmission lines, the tank farm, landfill sites, etc. In such instances, the City's policy direction emphasizes cooperation and close communication with the responsible agencies. The second point is that a major aspect of the City's ability to address hazards lies with the adequate provision of services, including equipment, personnel and infrastructure. The City's ability to discharge its responsibilities rests directly upon its financial well being, and so the policies in this chapter relate directly to those in Chapter IV. Finally, it is important to acknowledge that if new development occurs, the need for City infrastructure and safety services will increase. Without additional sources of revenues, new development has the potential of reducing existing service levels or burdening the existing community with new charges. This is an important issue for General Plan policy. That is why it was addressed as part of the General Plan alternatives survey. Respondents were asked their opinion about who should pay to provide infrastructure to undeveloped areas. Voters strongly responded that it should be the responsibility of the developers and property owners. (See Figure X-A.)

Policy: 144 Recognize that there are facilities in the City the safety of which is regulated by County, State or Federal agencies.

Program 144a: Actively consult with these governmental agencies regarding the location and safety requirements in conjunction with the processing of any land use development permit or City project.

Program 144b: Verify annually with responsible agencies the status of regulated facilities in Brisbane and any new safety requirements that have been imposed and cooperate with those agencies to ensure the earliest possible installation of any new safety equipment required.

Policy 145 **Recognize the need to ensure adequate revenues to provide safety services.**

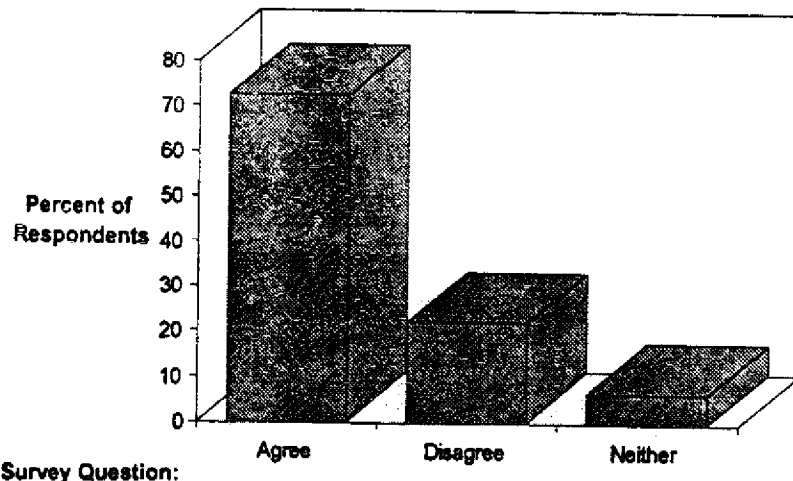
Program 145a: As apart of the City's annual budget process and Capital Improvements Planning, evaluate the City's ability to provide infrastructure and safety services and review fees and charges to assure adequate revenues.

Policy 146 **Require that developers and property owners in undeveloped areas who wish to build on their land provide infrastructure at their own expense, including water, sewer, storm drains and paved streets to City standards.**

Policy 147 **Develop impact fee programs so that new development contributes to safety services in order to maintain current service levels.**

FIGURE X-A

Response to Voter Survey



Survey Question:

"The City's policy requires that developers and property owners in undeveloped areas who wish to build on their land must provide, at their own expense, water and sewer connections, storm drainage, and paved streets where they don't already exist. Do you agree or disagree with this policy?"

X.1 EMERGENCY PREPAREDNESS

Emergency preparedness is critical for the well-being of Brisbane. Even though it is a small city, Brisbane's location in the San Francisco Bay Area puts it at risk for potential disasters, such as airplane crashes, major fires and hazardous materials incidents, in addition to earthquakes, landslides and floods. With limited access points and the physical barriers created by the Bay and the Mountain, it is necessary for the City to think carefully and plan well for the safety of its citizens.

Brisbane has developed an Emergency Operations Plan, also referred to as an Emergency Management Plan ⁽¹⁾⁽⁹⁾. That plan is updated regularly and provides procedures and establishes responsibilities for managing both manmade and natural disasters. It provides directions on evacuating the City, providing shelter and basic necessities, and on emergency communications and field responses. The Emergency Management Plan works in concert with a number of multi-agency mutual aid plans and with local volunteer efforts.

One such multi-agency effort is in the preparation of the County-wide Hazard Mitigation Plan ⁽¹⁰⁾. That plan responds to the federal mandates for emergency readiness provided in the Disaster Mitigation Act of 2000. The Hazard Mitigation Plan was prepared through a coalition of San Mateo county cities and special districts, to pool resources and create a uniform and coordinated hazard mitigation strategy across the county. That coordinated effort also helps ensure eligibility for federal grant funding. Individual agencies are responsible for participation in the preparation and adoption of their respective sections by all the jurisdictional partners, the plan is then subject to approval by the California Office of Emergency Services (CalOES) and the Federal Emergency Management Agency (FEMA). At the time of this writing, the latest Hazard Mitigation Plan was adopted in 2015 and it is scheduled for updates on a 5-year basis. This plan may also be referred to as the Local Hazard Mitigation Plan (LHMP), since, while it is a county-wide plan, it is also specific to the individual jurisdictions.

An Emergency Operations Center (EOC) has been built into City Hall. Regular training sessions and drills are conducted at the EOC using the Emergency Operations Plan. Field exercises are also held to maintain a state of readiness. (Refer to Safety background report (SA-1) for more information.)

The following policies address Emergency Preparedness:

Policy 148 Maintain the Emergency Operations Plan and continue to participate in the maintenance of the County-wide Hazard Mitigation plan as the central planning and management tools for disaster preparedness, response and recovery.

Program 148a: Through continuing participation in the coalition of San Mateo County cities and special districts, maintain the Local Hazard Mitigation Plan (LHMP) consistent with State Assembly Bill 2140 and applicable subsequent state and/or federal legislation. The LHMP is included

by reference as part of this General Plan element and should be consulted when addressing known hazards to ensure the general health and safety of people within Brisbane.

Program 148b: Update the Emergency Operations Plan as necessary and appropriate and consistent with the Local Hazard Mitigation Plan and maintain a state of readiness. This includes but is not limited to the following:

- i. Provide emergency response training to staff and volunteers.*
- ii. Update and refine the City's evacuation plan, as necessary.(2)*
- iii. Maintain the operations center in a state of readiness for an emergency response*
- iv. Be prepared to supplement City-owned equipment with that available from the private sector.*
- v. Periodically hold exercises, including evacuation drills, using the instructions in the Plan.*
- vi. Utilize the Community Emergency Response Team to provide community support and to assist emergency personnel during a disaster.*
- vii. Purchase and maintain necessary emergency equipment.*
 - i. Provide periodic information to citizens about the Plan.*
 - ii. Develop materials and hold meetings to train and advise on emergency preparations that individuals, families and businesses can make toward their personal safety.*
 - iii. Develop disaster plans for all City facilities, for example, the Community Center and City Hall.*
 - iv. Encourage public preparedness through the dissemination of literature and by presenting CPR and first aid classes.*
 - v. Work with the Brisbane School District to plan for the provision of emergency services to District facilities in Brisbane.*
 - vi. Coordinate with the evacuation plans of surrounding cities affecting U.S. 101 and Bayshore Boulevard to facilitate traffic flow through Brisbane in times of emergency.*

Policy 148.1 Hazard maps that are provided in the General Plan and the LHMP are illustrative of hazards on a city-wide scale and are not intended to substitute for site specific study, as may be required on a case-by-case basis for discretionary permits and/or building permits.

X.2 SEISMIC SAFETY

Earthquakes originate as shock waves generated by movement along an active fault. Primary seismic hazards are ground-shaking and ground-rupture along the surface traces of the fault. Secondary hazards result from the interaction of ground-shaking with existing soil and bedrock conditions, and include liquefaction, settlement, landslides, tsunamis and seiches.

The Technical Studies background report on geologic setting and hazards (NR-1) notes that only a few earthquakes, all of very low magnitude, have had epicenters within the planning area. No Alquist-Priolo special study zones have been identified. Seismic hazard to Brisbane stems primarily from three active faults that threaten the Bay Area as a whole.

A severe Bay Area seismic event can produce damage in Brisbane. The Technical Studies background report maps the City for potential ground-shaking intensity, landslide and debris flow, liquefaction and tsunami susceptibility. (See Figures X-B - X-F.) A community can prepare for a seismic event in several ways by:

- making improvements to existing structures and facilities to withstand seismic forces;
- constructing new structures and facilities to current seismic codes;
- avoiding construction in hazard areas or installing mitigations if these areas cannot be avoided;
- developing a Disaster Preparedness Plan;

- providing public information and preparing its citizens for the eventuality of an earthquake.

The policies below address these approaches:

Structural Improvements

Policy 149 Construct new buildings and retrofit existing ones to withstand seismic forces.

Program 149a: Require that all new construction meet current codes for seismic stability.

Program 149b: Consider a requirement, in conjunction with both residential and non-residential rehabilitation or reconstruction, that some portion of the improvements be devoted to improving seismic safety.

Program 149c: Provide information to citizens on the necessity for seismic retrofit and on typical methods of upgrading existing structures.

Program 149d: Continue to implement the City's Ordinance 354 regarding unreinforced masonry and pre-1973 tilt-up structures.

Program 149e: Require soils reports and engineering recommendations for structural stability in conjunction with building permit applications in areas which have been identified as prone to seismically-induced landslides or subsidence in seismic events.

Public Awareness

Policy 150 Encourage citizens to become educated about and take an active role in earthquake preparedness.

Program 150a: Develop programs to increase public awareness of seismic hazards and to educate the community on procedures that can help to minimize injury and property loss before, during, and after an earthquake.

Policy 151 Address the specific impacts and potential responses to seismic events through the City's Emergency Management Plan.

See Section X.1 on Emergency Preparedness for additional policies on seismic hazard.

X.3 SLOPE STABILITY

Slope, the steepness of the land, is a fundamental factor in many hazards. Combined with considerations of geology, soils, vegetation and drainage, slope determines potential for landslides, debris flow and erosion.

Seismically-induced landslides are deep-seated failures involving bedrock. Often these landslides are slow-moving, allowing time for evacuation of endangered structures or engineered mitigation in advance of development. Debris flows are rapid movements of soil and colluvium overlaying bedrock which occur rapidly and without warning.

Recent investigations have shown that the General Plan planning area is rated as having low susceptibility to landslides. However the slopes of San Bruno Mountain are prone to debris flow and much of the soil in the planning area is subject to erosion. The Technical Studies background report (NR-1) provides greater detail on the characteristics of slope stability and soils and maps levels of susceptibility to landslides, debris flows (See Figures X-C, X-D and X-E) and erosion (refer to NR-1, pp. 11-8, 11-9).

The following policies address issues of slope stability:

Development Requirements

Policy 152 Consider issues of slope stability in conjunction with development applications.

Program 152a: Require soil and geologic investigations in areas identified as prone to slope instability. Consider both on-site and off-site impacts.

Program 152b: Unless adequate mitigating measures are undertaken, prohibit land alteration, including any grading and structural development, in identified areas of slope instability.

Program 152c: Require topographical and soils information for all projects on slopes identified over 20%. (See Figure X-G.)

Program 152d: Certificates of compliance shall be conditioned upon a comprehensive and detailed slope analysis.

Program 152e: Encourage placement of structures away from areas identified as prone to slope failure or erosion unless effective mitigation measures are proposed as apart of the project design.

FIGURE X-B

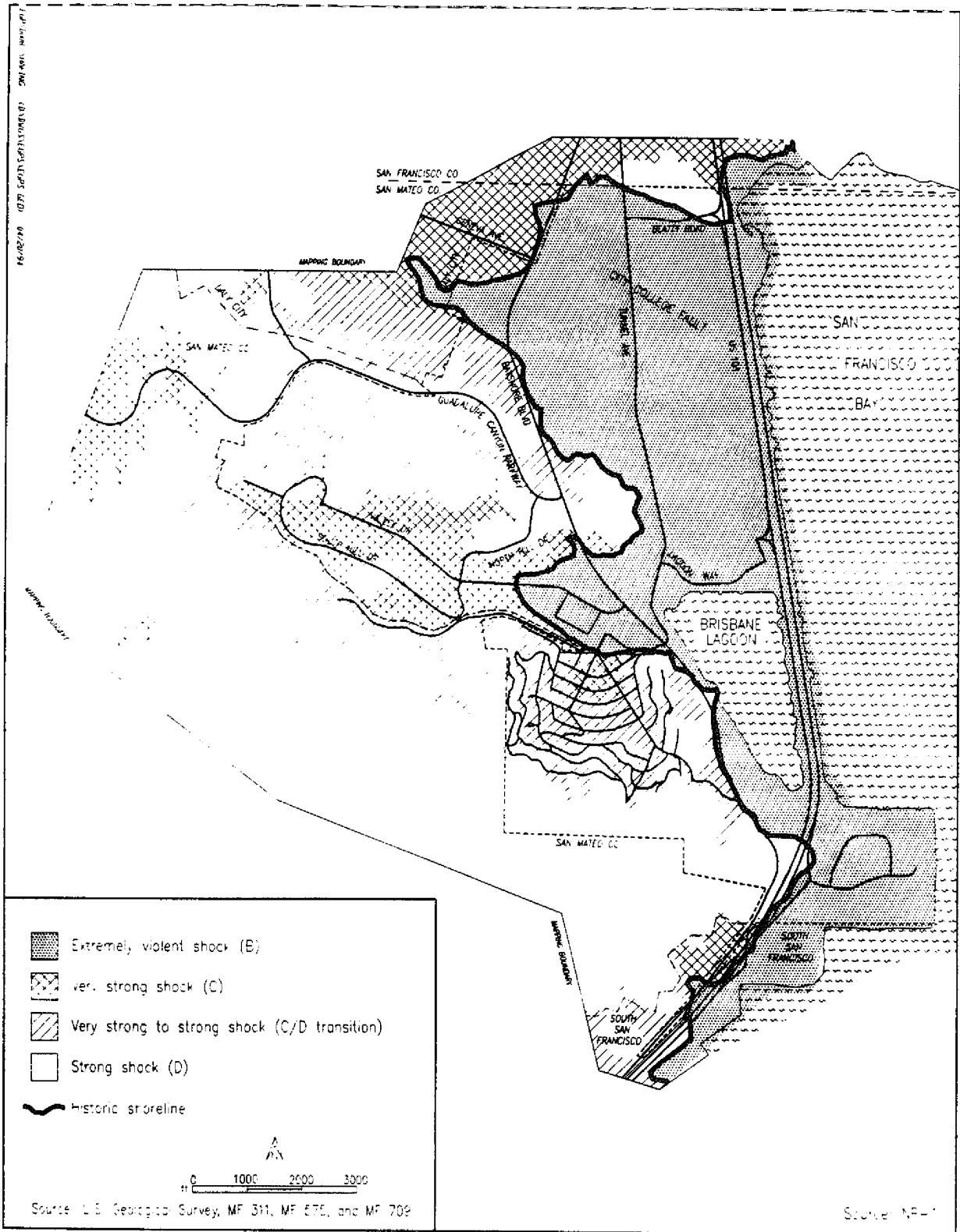


FIGURE X-C

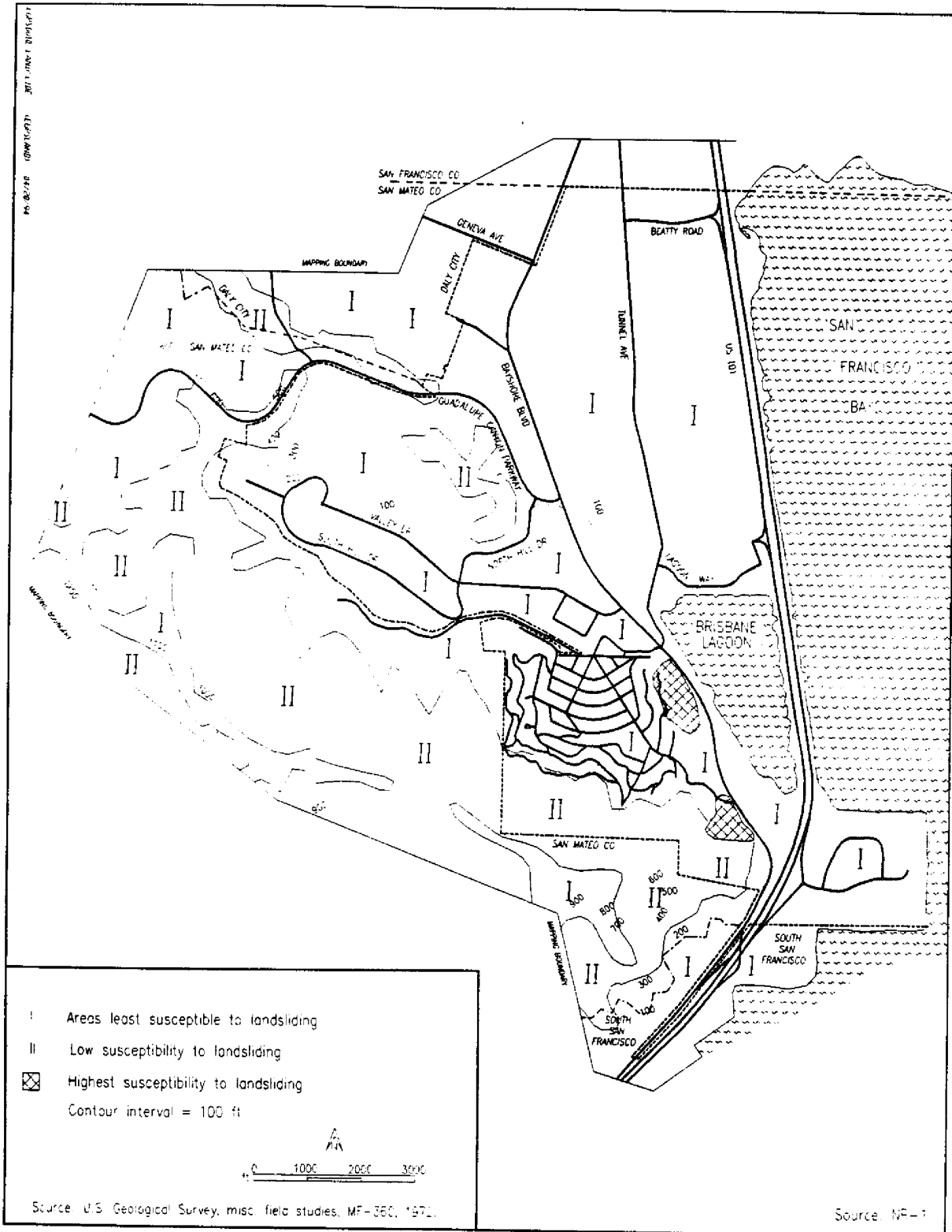
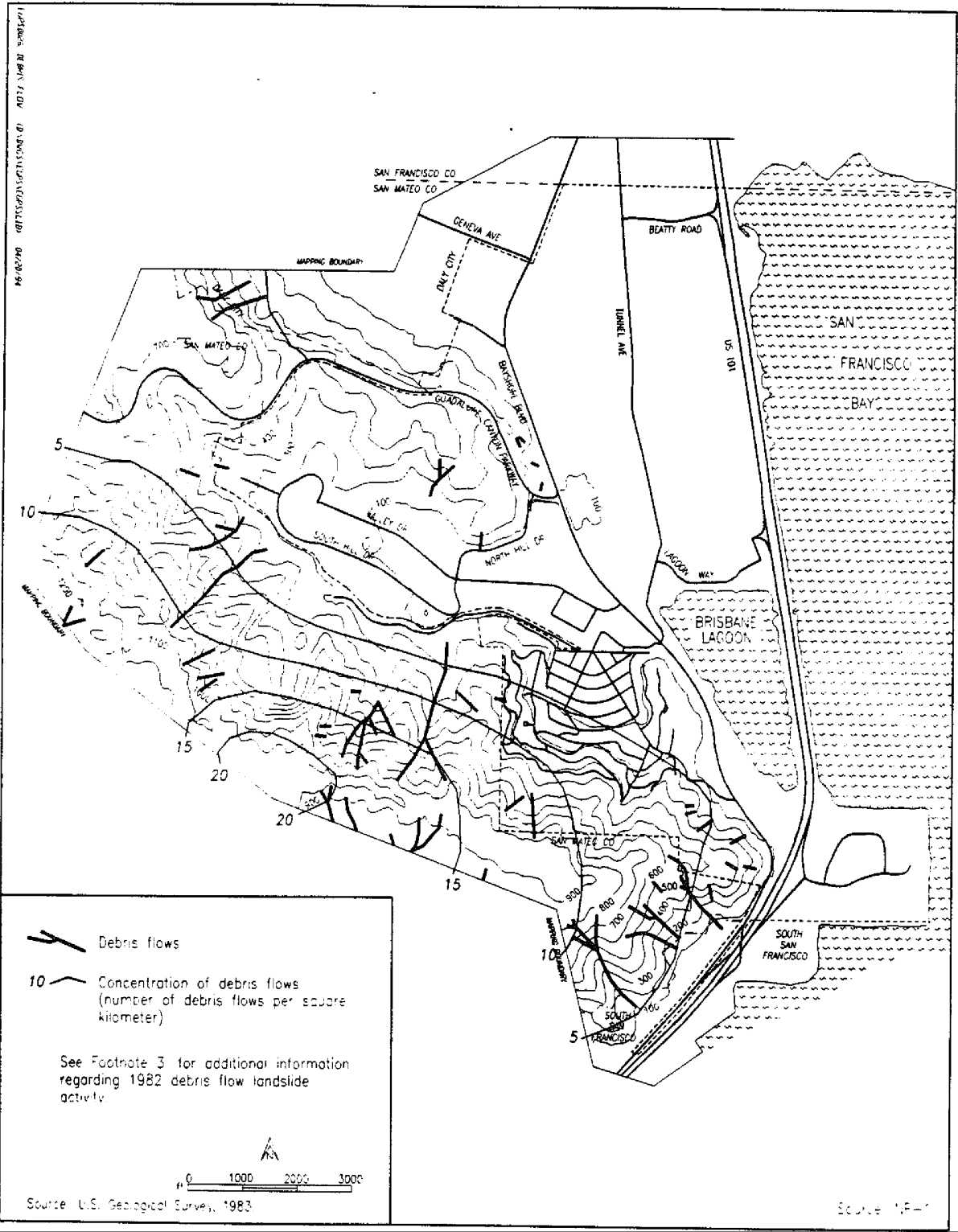


FIGURE X-D



SUSCEPTIBILITY TO SEISMICALLY-INDUCED LANDSLIDE

FIGURE X-E

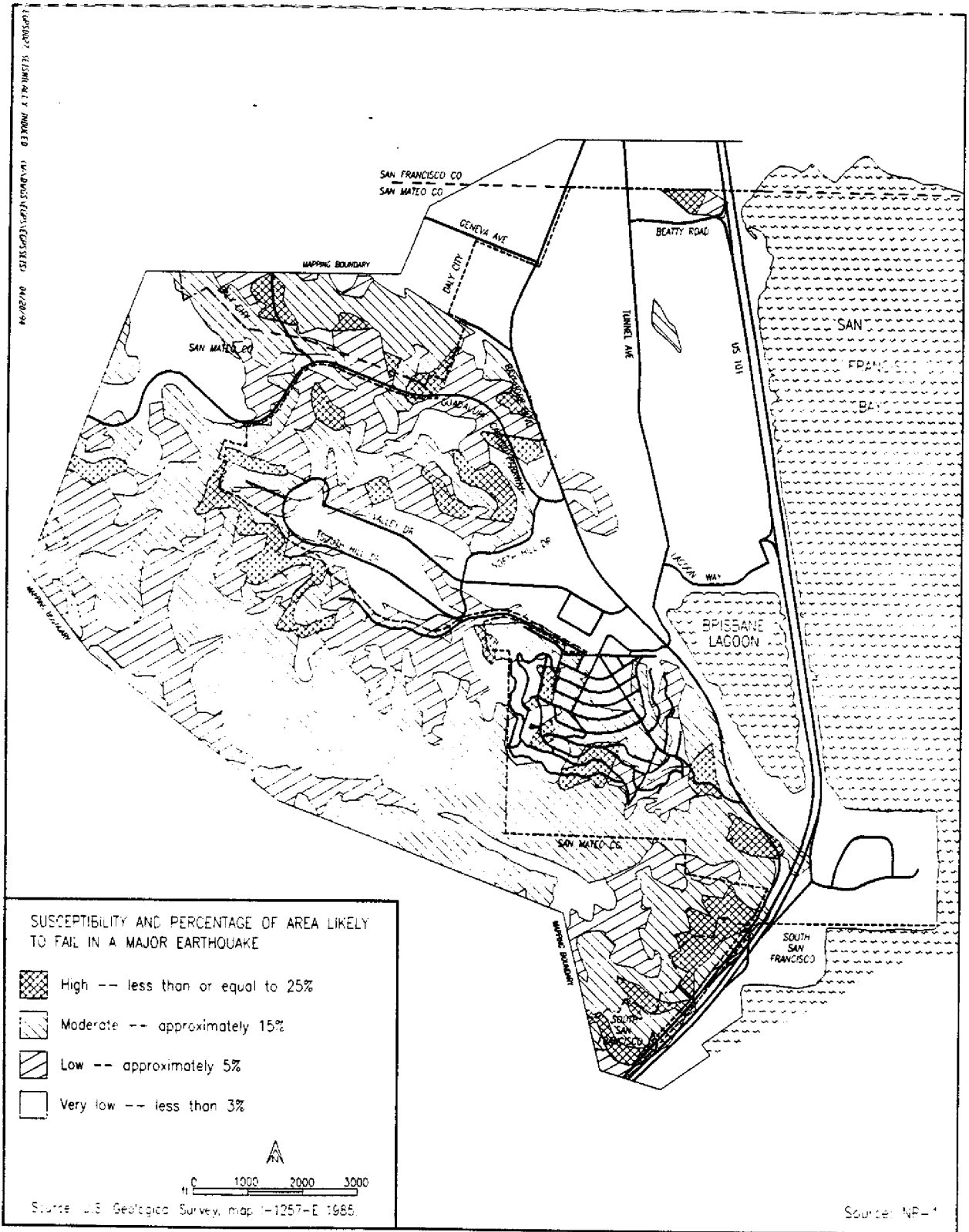


FIGURE X-F

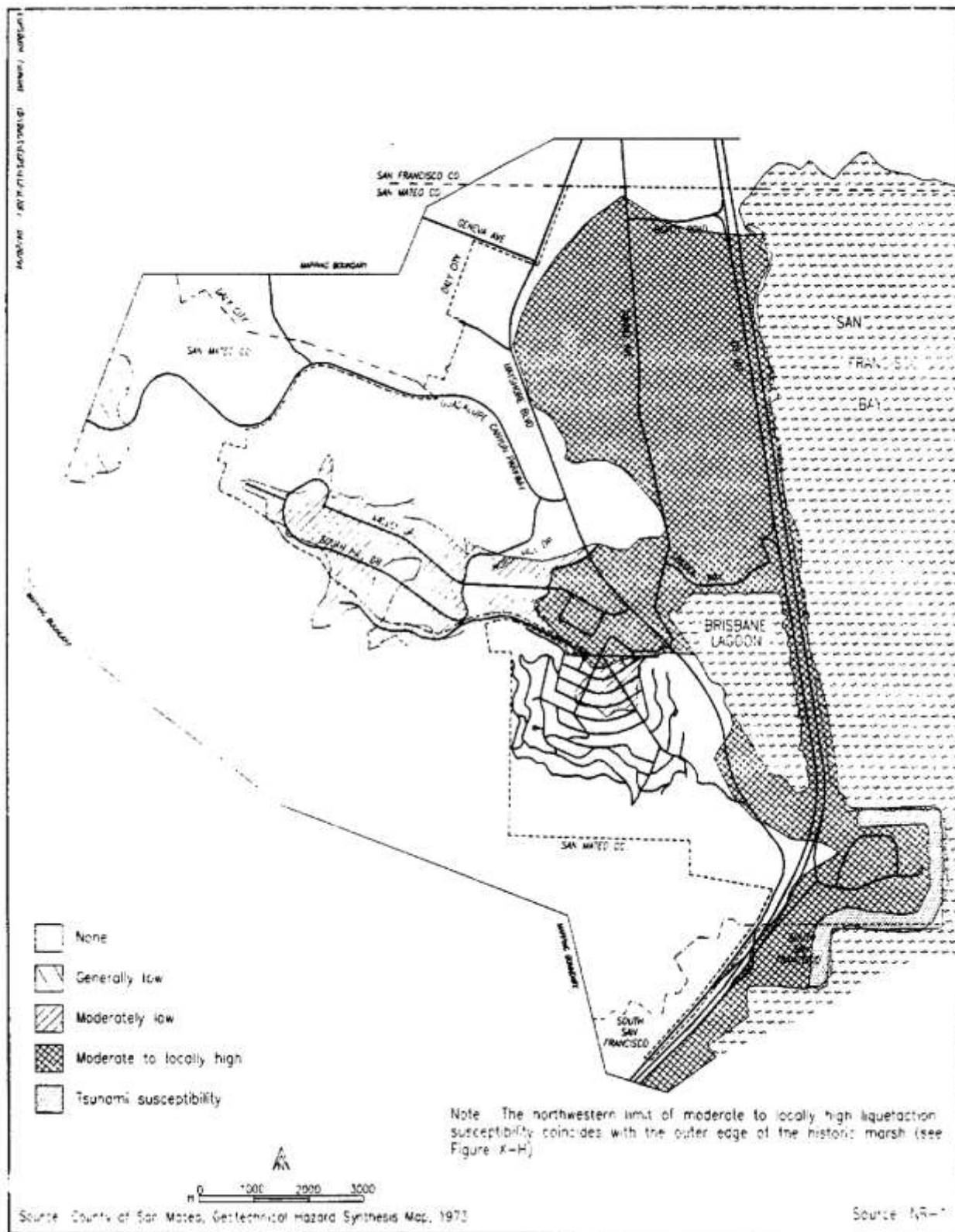
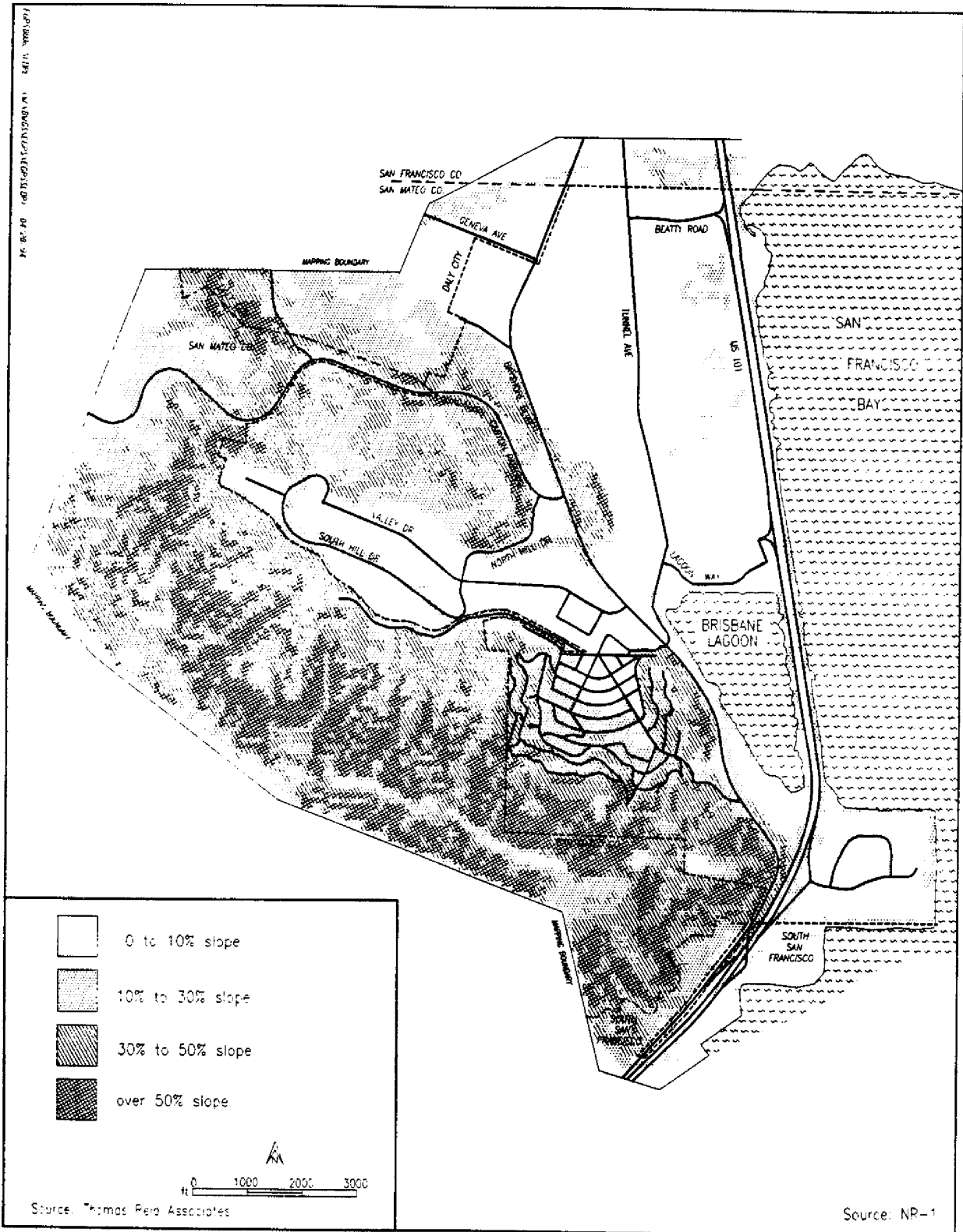


FIGURE X-G



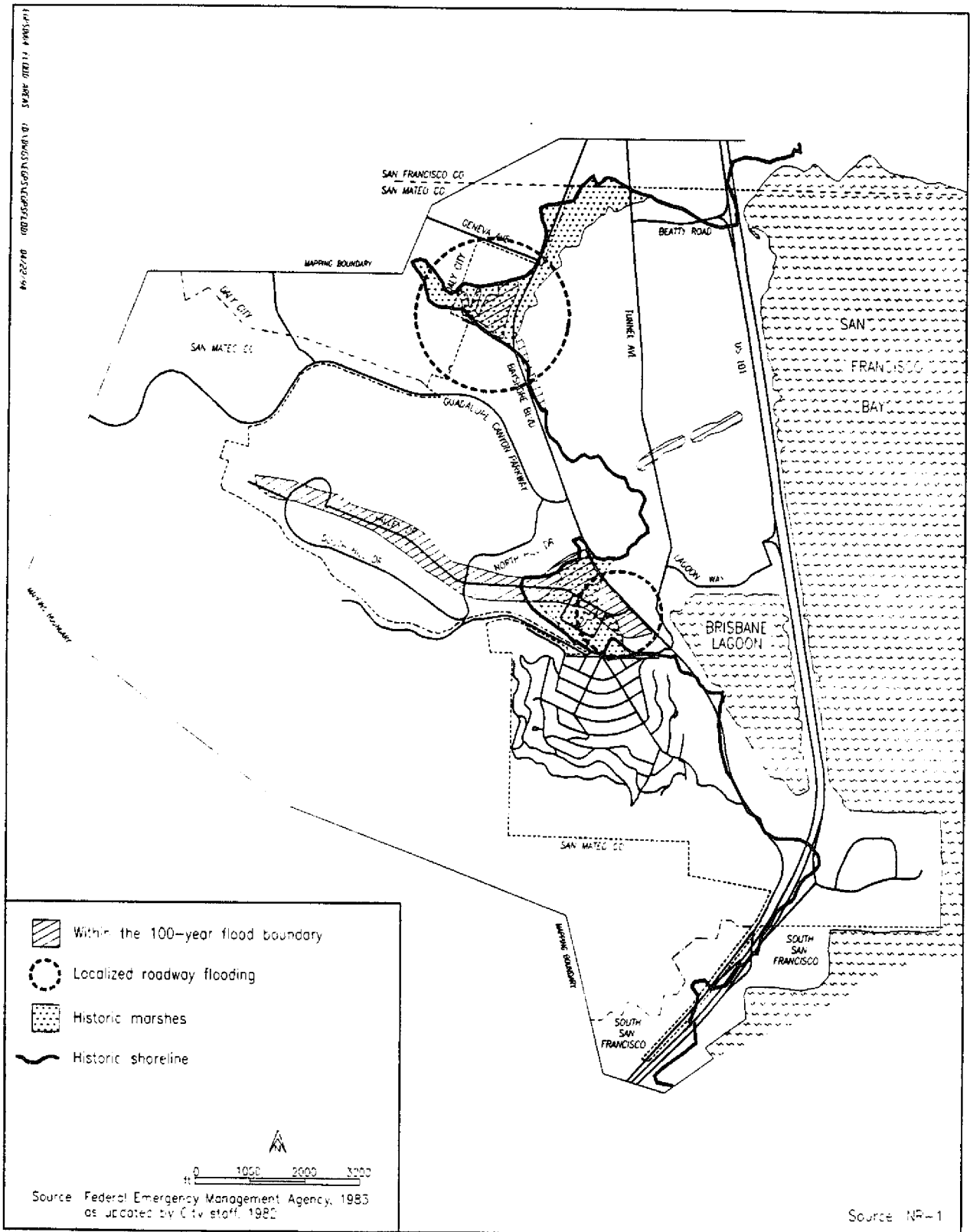
Program 152f: Require erosion control programs and revegetation on all disturbed slopes.

Program 152g: Strictly enforce the provisions of the City's Grading Ordinance.

X.4 FLOOD HAZARD

Areas subject to flooding are located on fill deposits overlying historic tidal marshes. The Technical Studies background report maps these tidal marshes as well as the boundary of the historic shoreline. (See Figures X-B and X-H.) The flooding occurs at what were the mouths of two intermittent streams, each emptying into estuaries. Current flooding problems result from inadequate drainage in these areas. Also illustrated in Figure X-H is land within the 100 year flood boundary as mapped by FEMA. On this map areas of localized roadway flooding during heavy rains and/or high tides are shown. Areas subject to flooding may change as a result of development projects and the installation of public improvements.

FIGURE X-H



The following policies address issues of flood hazard:

Policy 153 Require the construction of new improvements and the upgrade of existing stormwater infrastructure to mitigate flood hazard. (See Policy 130.2.)

Program 153a: Construct improvements to the GVMID storm drainage system to accommodate stormwater from the Northeast Ridge and increase the overall capacity of the drainage system, as required in the conditions of approval for the Northeast Ridge Development Project.

Program 153b: Work with Daly City and affected property owners to design improvements to alleviate flooding on the section of Bayshore Boulevard between Geneva Avenue and Main Streets.

Program 153c: In conjunction with design of infrastructure to serve the Baylands, require that the property owner address the issue of flooding around the open drainage channel that flows west to east across the property.

Policy 154 Keep information on flood areas and storm drain infrastructure updated and available to the public.

Program 154a: Apply to FEMA to update the FIRM maps to remove raised areas fixed by virtue of drainage improvements that are no longer within the 100 year flood boundary. Distribute updated maps to the public.

Program 154b: On a regular basis, update the City's storm drain base maps to include new facilities and information.

Policy 155 Pay special attention to the condition and maintenance of storm drain facilities to avoid flooding.

Program 155a: Schedule regular maintenance to remove silt and debris from storm drain facilities.

Program 155b: As part of Capital Improvements Planning, replace and repair, as economically feasible, storm drain facilities as needed to prevent flooding.

Program 155c: Study the drainage basins to determine responsibility for siltation of storm drain facilities. Consider methods of assessing maintenance costs to responsible properties.

X.5 FIRE HAZARD

Much of the residential area in Brisbane nestles up to steep slopes containing grass, brush and woodland vegetation. This vegetation is subject to periodic fires caused by arson or by accident. The California Department of Forestry considers three primary factors to determine the severity of wildland fire hazard: fuel loading, fire weather and slope.

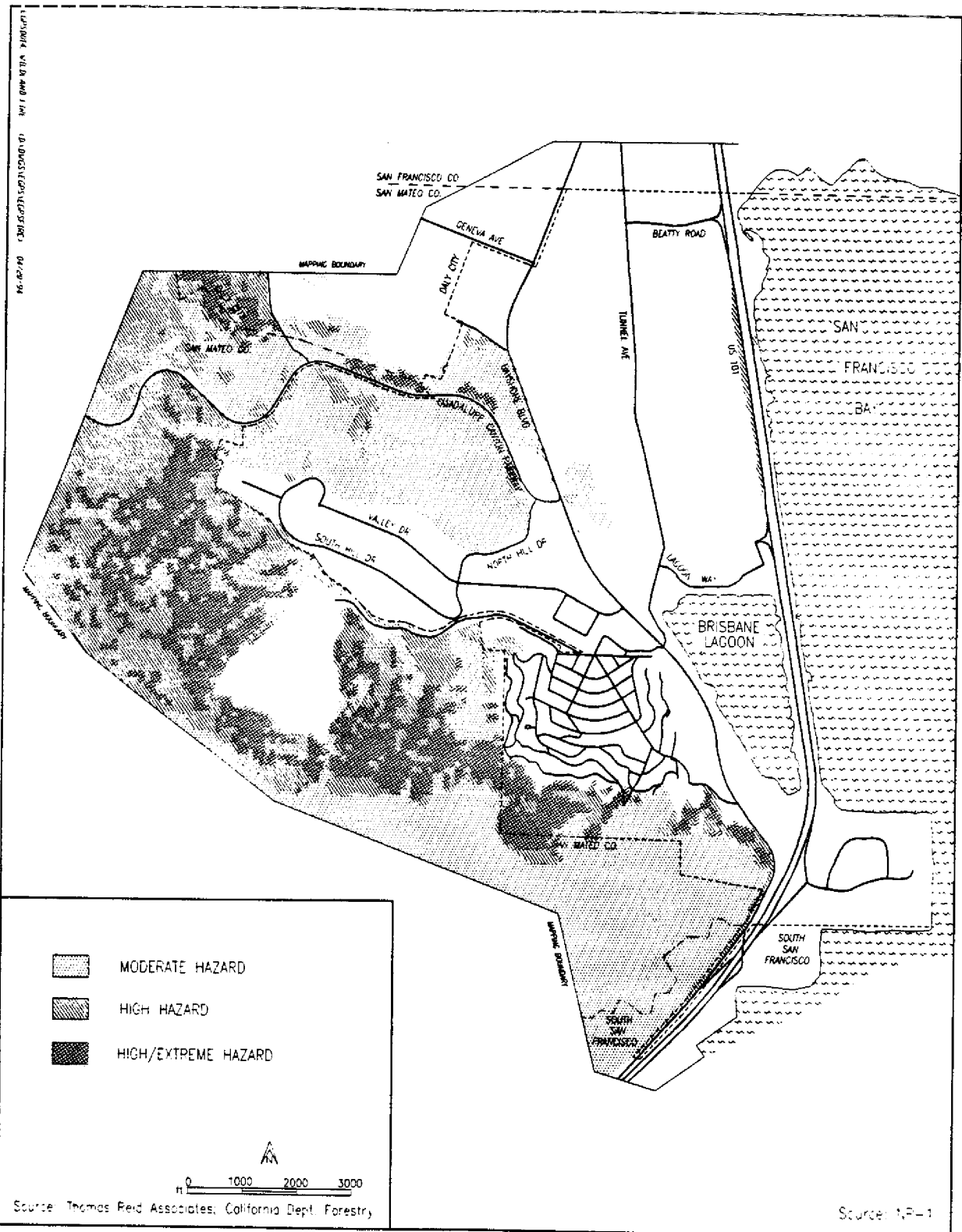
The Technical Studies background report maps these factors. (See Figure X-I.) Although specific locations are mapped as moderate-to-high, the overall wildland fire hazard in Brisbane is generally considered moderate due to the weather pattern of moist winds and fog, which result in increased plant moisture content.

In the developed areas of the City, there is a fire hazard of a different nature. Residential structures are built close together and on extreme elevation differences. Some structures have limited or difficult access, which impacts the ability of firefighters to effectively attack interior fires. In addition to residential structures, the City contains industrial warehouses and manufacturing facilities, which use or store hazardous chemicals. There is bulk storage of flammable liquids and gases, and there are non-residential buildings that are considered high-rise or have other unusual features of construction. Each condition presents a specific set of circumstances that must be considered in addressing the fire hazard.

Of special concern to the residential area are the long narrow hillside roads that provide difficult access and limited turn-around opportunities for fire vehicles. Areas of special concern are mapped in the Technical Studies background report. (See Figure X-L) Policies on road widths and safety improvements to improve access for public safety vehicles and facilitate evacuation are found in the chapter on Transportation and Circulation. That chapter also addresses the issues raised by on-street parking that results in insufficient clearance for emergency vehicles. Policies regarding responses to incidents involving hazardous materials are also found in Section X.7.

WILDLAND FIRE HAZARDS

FIGURE X-1



The following policies establish the City's approach to fire hazard in the General Plan period:

Systems and Materials

Policy 156 Take advantage of technology to require built-in fire safety systems using appropriate materials and technology.

Program 156a: Consider adopting additional requirements for built-in safety systems, such as fire sprinklers and sensors or alarms, in all new construction.

Program 156b: Consider adopting requirements for built-in safety systems in conjunction with building improvements.

Program 156c: Continue requirements for fire-resistant roofing materials for all new buildings and for re-roofing of existing buildings.

Program 156d: Encourage residential fire-sprinkler installation in conjunction with residential improvements along the urban wildland interface.

Program 156e: Underground utilities throughout the City, as economically feasible. Require undergrounding of all utilities for all new development and the undergrounding of service drops where existing service is in place.

Program 156f: Consider the adoption of landscaping standards for structures at the urban wildland interface to reduce fuel loading between the structures and the property line.

Program 156g: On an ongoing basis, provide information to citizens on landscaping materials and maintenance practices that contribute to fire safety.

Codes and Enforcement

Policy 157 Administer and enforce health and safety codes related to fire safety on an on-going basis.

Program 157a: Continue to notify property owners of hazardous conditions on their properties and enforce abatement of these conditions.

Program 157b: Enforce the provisions of the Uniform Building Code and the Uniform Fire Code and the Zoning Ordinance to address access, exiting, setbacks, materials and other design factors that contribute to fire safety.

Program 157c: Cooperate with the California Department of Forestry in the implementation of the Bates Bill, AB 33 7, to map areas of Very High Fire Hazard Severity Zones, and to adopt the maps required by the legislation.

Levels of Service

Policy 158 Provide a level of fire protection proportional to the size, risks and service demands of the community within budgetary constraints.

Program 158a: In conjunction with development applications, evaluate fire service requirements, response times and levels of risk. Require impact fees and exactions to maintain the level of service and to provide for any special equipment needs.

Program 158b: Coordinate with other agencies to maintain existing access roads to the Mountain.

Program 158c: Continue to participate in the automatic and mutual aid greater alarm and other reciprocal response plans to provide the availability of adequate fire suppression capacity.

Public Education

Policy 159 Continue to provide public education in the areas of fire hazards, prevention and response.

Program 159a: Provide training and information to citizens on fire safety and evacuation plans through community meetings and informational materials

Program 159b: Encourage businesses to prepare pre-emergency plans and to train their employees on emergency response procedures and evacuation.

X.6 PERSONAL AND PROPERTY SAFETY

Question: What do you like most about living in Brisbane?

Respondents: "The safety of a small secluded town."

"Most of my neighbors are pleasant and friendly and I don't worry about crime."

"I feel safe. Often I walk around in the dark from visiting, etc. and I'm not afraid."

"I like the feeling of safety here and the community feeling which makes Brisbane a great place for raising young children."

General Plan Survey Transcript
(4)

Brisbane is fortunate to be a safe community, one with a comparatively low crime rate. In part, this is because the residential community is somewhat isolated, with few access points. In part, it is because of the close-knit nature of the community and its awareness of its surroundings. In part, it is due to the City's focus on prevention.

For the Brisbane Police Department, prevention programs have had two main components: police presence and community involvement. The availability of officers, neighborhood patrols and quick response times have characterized safety services. In recent years community-oriented policing has been a significant part of the prevention philosophy.

Community partnerships that promote education *and* crime prevention and foster close ties between the Police Department and the Community have included the Neighborhood Contact Program and the use of the Peninsula Conflict Resolution Center's Community Mediation Program to promote non-arrest interventions. Both of these approaches seek to resolve problems before they become issues of public safety.

A major focus of the Police Department has been the youth of the community. Department Officers work closely with the Brisbane School District, providing drug education programs and actively supporting the Police Activities League that works with the Recreation Department to provide constructive activities for the young people in the community.

In the next ten years, the focus on community and youth will remain a key component of City policy on personal and property safety.

Law Enforcement

Policy 160 **Provide a level of police protection of persons and property proportional to the size and law enforcement needs of the community within budgetary constraints.**

Program 160a: In conjunction with land use development applications, evaluate police service requirements and response times. Require impact fees and exactions to maintain the level of service.

Program 160b: Continue to develop ongoing and accurate means of assessing the community's law enforcement needs and evaluating Police Department performance in addressing these needs.

Policy 161 **Participate in mutual aid and other reciprocal response plans to support established response times and provide adequate police protection.**

Policy 162 **Continue to ensure that all police personnel receive appropriate and up-to-date job-related training.**

Policy 163 **Continue to ensure a three minute emergency response average and a ten minute average response to other calls for service.**

Public Education

Policy 164 **On an on-going basis, provide training and information to citizens that fosters crime prevention and promotes respect for community values.**

Program 164a: Continue to provide drug education and other programs that encourage constructive activities and positive values for the City's youth.

Program 164b: Continue to develop public education programs in response to the needs and interests expressed by community members through the Neighborhood Contact Program or other community outreach programs.

Community-Oriented Policing

Policy 165 **To the fullest extent possible, involve the community in the process of identifying and solving problems that relate to personal and property safety in Brisbane.**

Program 165a: Continue to provide training to police personnel in the community-oriented, problem-solving approach to policing.

Program 165b: Continue and consider expanding foot patrols as part of officers' daily activity and investigate feasibility of use of bicycles.

Program 165c: Where appropriate, continue to encourage non-arrest interventions, such as mediation, that promote community-based problem solving.

Program 165d: Develop a system of evaluation and rewards for police personnel that reflects community development and problem-solving accomplishments in addition to more traditional law enforcement achievements.

Program 165e: Continue to develop community partnerships between the Police Department and other community groups and organizations to address the causes of crime, fear, and other issues regarding the welfare of the community.

Program 165f: Continue to work with community organizations to develop an awareness of the problems in the community as well as the services provided by the City to address these problems.

Program 165g: Establish a permanent police facility that is inviting and accessible to the community.

X.7 HAZARDOUS MATERIALS

A hazardous material has a significant potential to cause harm to human health or the environment. The hazards posed may vary substantially depending upon chemical composition, physical state, concentration and exposure of the substance to humans and the environment.

Since the late 1970s, many Federal and State regulations have been instituted to address the storage, disposal and transport of hazardous materials. Most of these laws preempt the authority of local government, although in some instances a local government may act as the enforcement agency. For example, the State has adopted lists of hazardous materials and thresholds to establish hazard, adopted best management practices and established agencies that grant hazardous materials permits. The Safety Background Report (SA-1, pages 19-25) gives further information on applicable laws and responsible agencies, and describes when and how the City becomes involved in hazardous materials management.

One of the City's major responsibilities regarding hazardous materials is set forth in State Assembly Bill AB 2185. This law requires that businesses that have or use hazardous materials exceeding established minimum quantities must file a Hazardous Materials Management Plan with a designated local agency. The plan must disclose the types, quantities, processes and locations of materials on the site, identify the hazards posed and processes used, and specify a safety plan. Regulations for storing and otherwise managing hazardous materials are found in California's Uniform Fire Code. As the local agency administering hazardous material safety plans, the Brisbane Fire Department administers State reporting requirements and, in conjunction, enforces the requirements of the Uniform Fire Code. The Fire Department inspects the site, verifies the information in the plan, and requires changes in storage and materials handling whenever necessary to ensure safety. In the event of a hazardous materials release or related hazard, the Fire Department will contact appropriate agencies, such as the County Department of Environmental Health, the State Department of Toxic Substance Control, and the State Office of Emergency Services, and cooperate with them to address the situation.

Hazardous materials are not only found in business and industry. In every household there are paints, cleaners, solvents, pesticides or other similar materials that contain hazardous substances. The proper handling and disposal of these materials is important to the safety of Brisbane households.

This section establishes the City of Brisbane's policies regarding hazardous materials.

Policy 166 Protect the community's health, safety, welfare, natural resources and property through regulation of the handling and storage of hazardous materials, with specific focus on prevention of accidents.

Program 166a: Work closely with County, State and Federal agencies in the regulation of hazardous materials.

Program 166b: Continue administration of Hazardous Materials Management Plans through the Brisbane Fire Department.

- Policy 166.1** **Require disclosure, in a risk analysis, of all hazardous materials to be utilized in research and development and biotechnical research, the assumptions that were used, and methods of safe handling and disposal. The City has a concern with and may exclude research and development and biotechnical research uses which involve high use or generation of hazardous materials and/or do not address public safety in handling and disposal to the City's satisfaction.**

Program 1661a: In connection with any application for a proposed specific plan or land use development project involving biotechnical research activities, determine the nature and extent of any regulations that should be adopted to protect the public health and safety before any such specific plan or land use development application is approved

- Policy 167** **Provide information on hazardous materials and non-hazardous substitutes to residents and businesses.**
- Policy 168** **Encourage the County of San Mateo to establish a safe collection station for hazardous wastes from households and small businesses that is convenient and accessible to Brisbane citizens, as addressed in the Household Hazardous Waste Element of the Integrated Waste Management Plan.**
- Policy 169** **Strongly encourage Federal and State agencies to accelerate efforts to evaluate human health impacts from, and to establish legally enforceable standards for hazardous materials.**
- Policy 170** **Participate, to the greatest extent feasible, in decision making regarding the location of hazardous waste treatment, collection and transfer stations proposed by adjacent jurisdictions to minimize risk and assure safety.**
- Policy 171** **investigate any existing and proposed use of Brisbane's circulation system to transport hazardous waste in regard to safety.**

X.8 LAND CONTAMINATION AND REMEDIATION

One of the areas of greatest change in both public awareness and legislative requirements in the last 13 years is that of land contamination and remediation. During this time period, there has been an increasing awareness that lands contaminated with hazardous materials have the potential to pose risks to public health and safety. Hazardous materials are injurious substances, such as pesticides, herbicides, toxic metals and chemicals, liquefied natural gas, explosives, volatile chemicals, and nuclear fuels. Present and future generations bear a tremendous burden resulting from the illegal and/or unregulated use and disposal of hazardous materials in the past. In general, the owners and operators of an assessed parcel can be required by law to remedy conditions of the parcel relating to releases or threatened releases of hazardous substances. The federal Comprehensive Environmental Response, Compensation and Liability Act of 1980, sometimes referred to as CERCLA or Superfund Act, is the most well known and widely applicable of these laws. The California laws with regard to hazardous substances are also stringent and similar. Under many of these laws, the owner or operator is obligated to remedy a hazardous substance condition of property, whether or not the owner or operator has anything to do with creating or handling the hazardous substances. There have been attempts to direct public funds to remediation efforts, but there are insufficient public funds to remediate identified sites, and the number of such sites is increasing as testing continues.

There are two primary agencies with authority to issue orders regulating the remediation of contaminated land and water: the Cal-EPA Department of Toxic Substances Control and the Regional Water Quality Control Board.

Figure X-J illustrates the three areas of land identified in Brisbane as contaminated by industrial materials for which orders have been issued and which are currently undergoing the remedial action process under the authority of the Department of Toxic Substances Control and the Water Quality Control Board. In addition, as of March 1994, 13 sites contaminated by leaking underground storage tanks were undergoing remediation under the regulatory authority of the San Mateo County Environmental Health Division.

There are also lands in the City that have a history of deposited materials, including municipal solid waste, rubble, and other related materials. Figure X-K illustrates these areas. There are a multitude of permits, agencies and testing requirements for development on solid waste landfill sites. Primary regulatory authority rests with the State Integrated Waste Management Board.

The San Mateo County Environmental Health Division is the Local Enforcement Agency for the California Integrated Waste Management Board and is responsible for the enforcement of the State Minimum Standards for Solid Waste Handling and Disposal, the issuance of Solid Waste Facility Permits and final approvals for closure and post-closure development of landfills in San Mateo County. The Water Quality Control Board and the Department of Toxics Substances Control have regulatory authority as well. Although the City of Brisbane lacks power to be involved directly in the State-supervised clean-up and abatement process, the City retains the power to regulate the use of this land through zoning, subdivision and

other municipal regulations. The City of Brisbane retains ultimate authority over land use for all properties within its jurisdiction. For both the remediation of contaminated lands and landfill development, there is a complex and fast-growing body of specialized technical rules and regulations under the control of these regulatory and permitting agencies. New methods of remediation are constantly being developed and included in remediation orders imposed by the agencies. The policies in this section reflect the necessity for the City to communicate well and work closely with these agencies so as to benefit from their knowledge and best understand how to plan for Brisbane's future.

FIGURE X-J

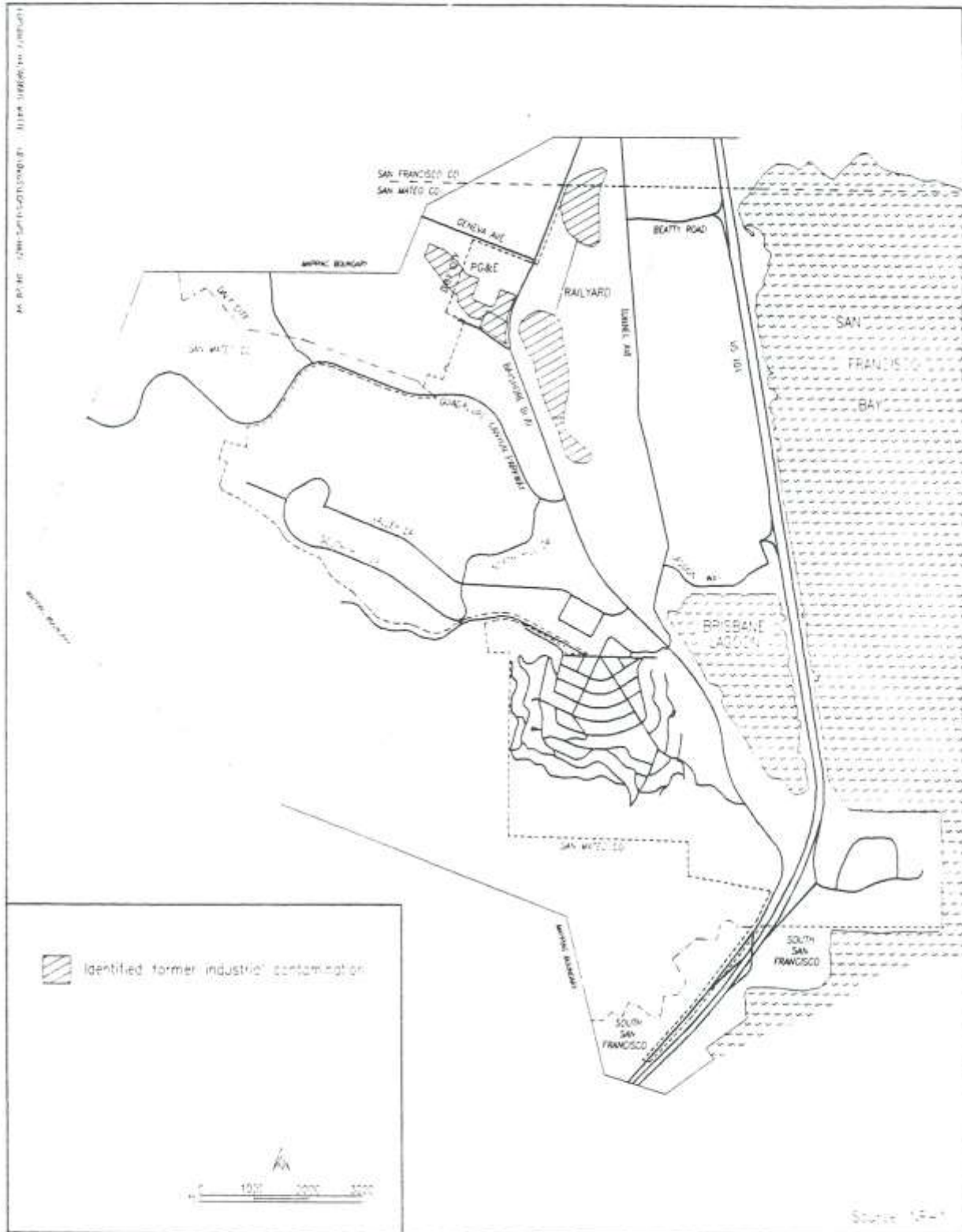
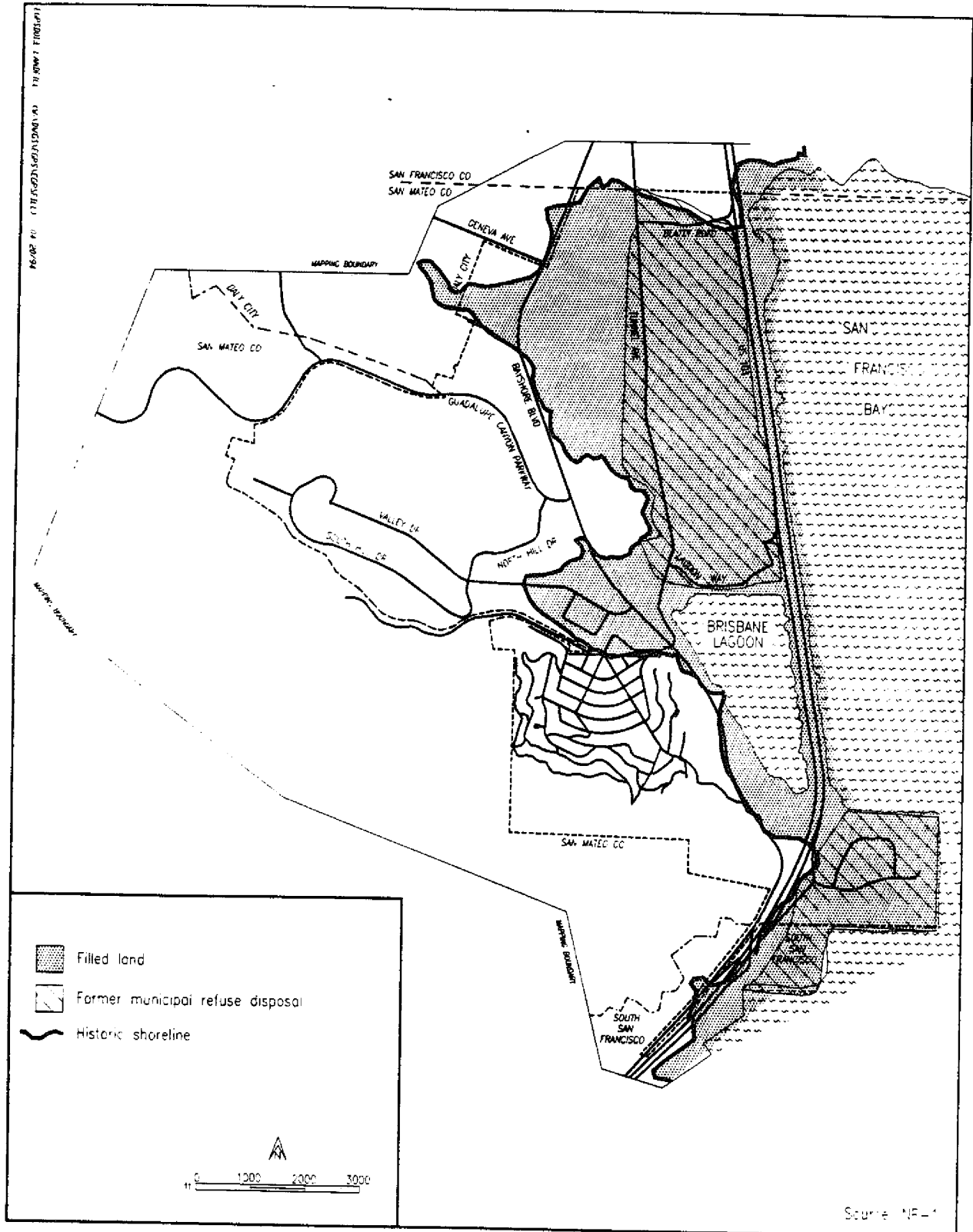


FIGURE X-K



Policy 172 **Establish that it is of the highest priority that contaminated lands in Brisbane be remediated.**

Program 172a: Communicate this priority to responsible State and Federal agencies and encourage these agencies to establish remediation plans and programs.

Program 172b: Seek to direct State and Federal funds to remediate contaminated lands in Brisbane.

Program 172c: Require private property owners to remediate contaminated lands consistent with State and Federal requirements.

Program 172d: Continue to maintain good communications and working relationships with the Cal-EPA Department of Toxic Substances Control, the Water Quality Control Board and other agencies regulating remedial actions.

Policy 173 **The City shall not grant approval of a development project on a contaminated site unless a plan for remediation of the site has first been approved and adopted by all Federal, State and local agencies having jurisdiction over the remediation plan.**

Policy 174 **Include the remediation requirements of Federal, State and local agencies in the process of making determinations on land use designations and development applications.**

Program 174a: Take into account risk assessments and other technical studies prepared by governmental agencies when making land use determinations for contaminated lands.

Program 174b: Condition all final approval of development projects on full compliance with all orders, remediation programs and mitigation measures imposed by regulatory agencies.

Program 174c: Require applicants to provide for analysis by environmental engineers, toxicologists or other technical specialists deemed necessary by the City to process development applications and complete environmental review for projects on contaminated lands.

Policy 175 **Assure that any development otherwise permitted on lands filled with municipal waste is safe by implementing the following programs.**

Program 175a: Exchange information with the California Integrated Waste Management Board, San Mateo County Environmental Health Division and other responsible agencies regarding the requirements for safe and successful landfill development, utilizing the experience of Sierra Point.

Program 175b: Require evidence that scientific testing and verification has taken place to the satisfaction of regulatory agencies.

Program 175c: Encourage property owners of filled lands to complete all testing and related requirements of the Federal, State and local agencies well in advance of requesting land use permits from the City.

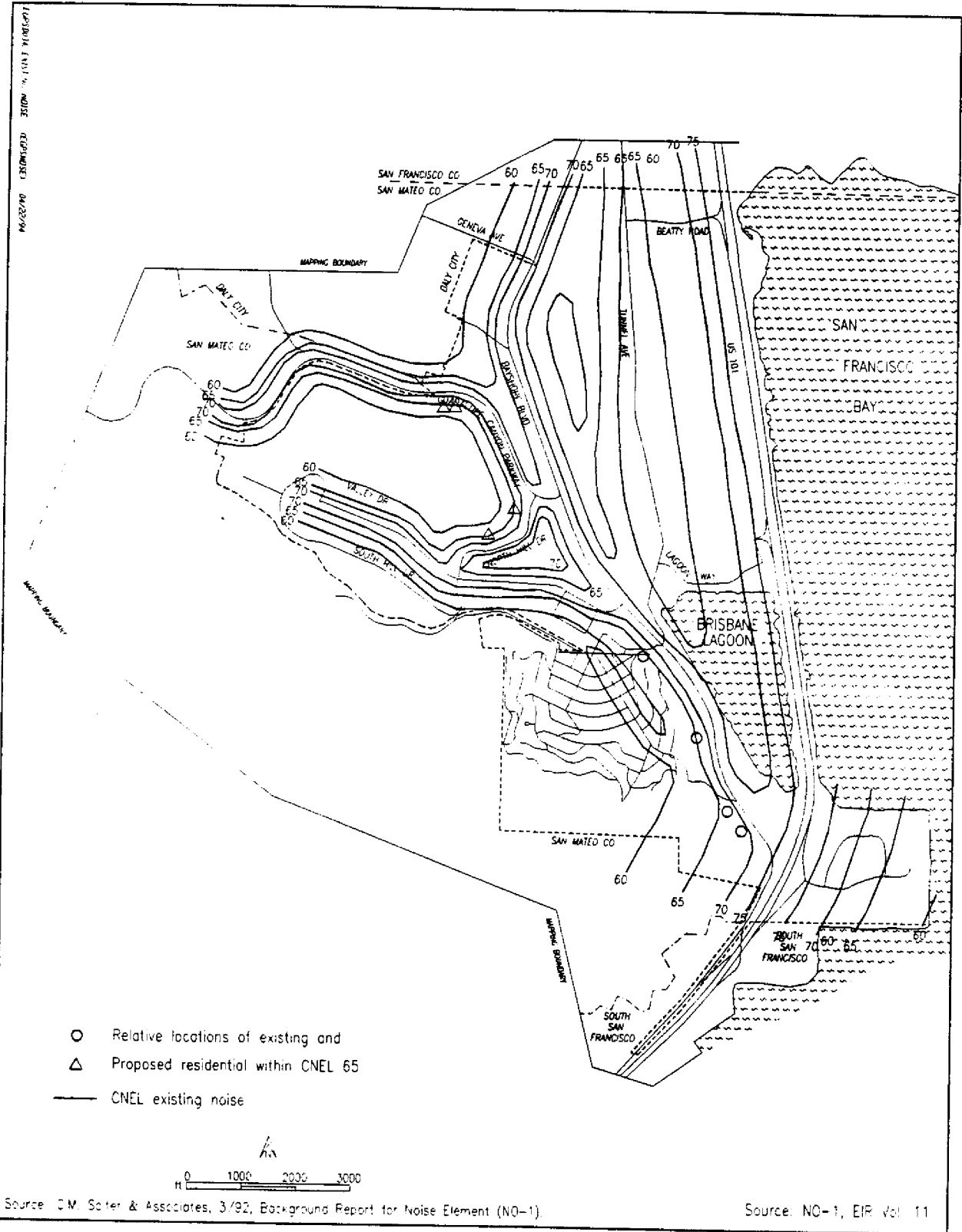
X.9 NOISE

In March 1992, a report was prepared for the City evaluating current noise levels in the planning area (NO-1). After taking readings at various locations, noise contours were delineated on the City base map illustrating the areas affected by continuous, on-going noise. A simplified version of that map is included as Figure X-L which illustrates the CNEL 65dB noise corridors caused by traffic. The CNEL 65dB measurement represents a noise level at which noise insulation features are generally required.

The Figure illustrates that the noisiest areas in the City are those immediately adjacent to major traffic corridors, especially those that accommodate a substantial amount of truck traffic, and that Highway 101 generates a moderate-to-high steady noise impact continually along its corridor. Figure X-L also shows where uses especially sensitive to noise, such as residential uses, are affected by these noise corridors..

TRAFFIC NOISE CORRIDORS

FIGURE X-L

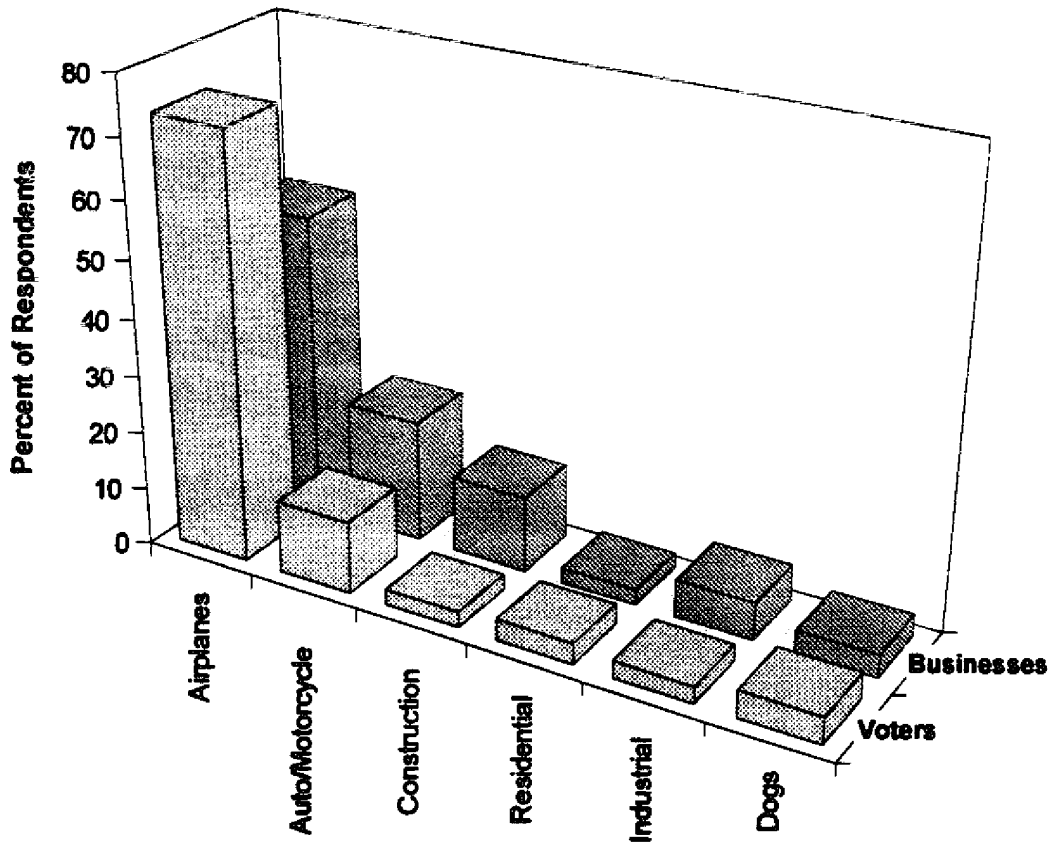


The Noise background report (NO-1) also speaks to the effects of single-event noise on the community. Since the Brisbane residential community is especially quiet, it is most impacted by flyover activity from San Francisco International Airport, especially in the early morning and evening hours.

In March 1993, as a part of the General Plan alternatives survey, citizens were asked the following question:

The existing General Plan calls for the reduction of noise in the City to acceptable levels. Here is a list of specific types of noise. In your opinion, what type of noise would you most like to see reduced.

FIGURE X-M
Results of Survey
Priority Noise to be Reduced



Of 684 voter respondents, 73.39% picked airplane noise, followed by automobile/motorcycle at 12.57%. Construction noise, other residential noises, industrial noises and dogs each elicited under 5% of the voter responses. Businesses responded similarly. (See Figure X-M.)

The survey results substantiate that the source of the noise most disruptive to the community is airplane overflights, which is not within Brisbane's jurisdiction to regulate.

Overflight noise has been a long-standing source of irritation for residents and businesses. To the extent that City actions can lessen noise impacts, policies to that end are included in this document. Many policies speak to requirements for insulating structures and equipment, constructing noise barriers and similar measures that can be implemented within the City's health and safety authority. Other policies speak to political and legislative actions that can be taken by City officials and citizens to attempt to protect the community from airplane overflights and other impacts of regional uses. Both approaches are important in this General Plan period. Consistent with the Government Code, the City of Brisbane's intent in the Noise Element is that the community be protected from exposure to excessive noise.

Policy 176 Minimize the intrusion of unwarranted and intrusive noise on community life.

Program 176a: Discourage new sources that generate excessive noise.

Transportation Noise

Policy 177 Maintain ongoing communication with County, State and Federal agencies in an effort to reduce noise impacts from regional uses.

Policy 178 Establish the reduction of overflights as the highest priority for noise control.

Program 178a: Investigate obtaining from San Francisco Airport and/or Federal Aviation Administration better monitoring information on overflight noise impacts on the community, including single-event noise.

Program 178b: Provide information to citizens on overflight impacts, airport operations and how to contact officials and agencies responsible for decisions that could result in overflights.

Program 178c: Cooperate with other jurisdictions affected by aviation noise to insist that noise impacts are considered when decisions are made regarding airport operations.

Program 178d: Communicate to local, State and Federal officials the City's position regarding the unwarranted impacts of overflights on the community.

- Policy 179** **Require the incorporation, when feasible, of new road or landscaping features that buffer traffic noise impacts on adjacent areas.**
- Policy 180** **Establish and enforce truck routes and times of operation for haul routes to minimize impacts on residential areas.**
- Policy 181** **Support efforts to establish stricter noise emission standards for vehicle design.**
- Policy 182** **Support efforts to reduce vehicle trips and keep smooth traffic flow to the extent that the number of trips and stop-and-start traffic contribute to traffic noise.**
- Policy 183** **Coordinate land uses and construction conditions to minimize noise impacts of the Caltrain corridor and major highway arterials on adjacent land uses.**

Land Use

- Policy 184** **In conjunction with development applications and other land use decisions, consider the potential for noise generation from, as well as noise impacts on, the project or area.**

Program 184a: Use the State Guidelines for land use compatibility to determine noise impacted uses.

Program 184b: Require acoustical studies for development applications in areas identified as noise impacted and potential noise generators.

Program 184c: For such projects, require a noise attenuation or a mitigation program to be submitted as a part of the project design.

- Policy 185** **Provide citizens with general information on noise insulating construction techniques and encourage them to include such features as part of new construction and remodeling projects.**

Techniques that can be used to mitigate or attenuate noise include incorporating sound insulation in construction, designing buildings to place sensitive areas and structural openings away from noise sources, utilizing the shielding effects of topography, setbacks, landscape and natural features, shielding with structural barriers, designing appropriate placement of mechanical equipment, using acoustic shielding of equipment, and placing noise generating activities within structures or in isolated locations.

Enforcement

Policy 186 For noises that most directly affect neighbors, such as barking dogs and electronic equipment, communicate the need for citizens to be sensitive to the needs of others and utilize the Peninsula Conflict Resolution Center's Mediation Program as an integral part of the local enforcement procedure.

Program 186a: Maintain an alternative dispute resolution program to allow neighbors to resolve issues in the first instance, if possible.

Policy 187 Enforce noise standards.

Local Standards

Policy 188 Periodically review Municipal Code noise standards for commercial and industrial operations.

Policy 189 In the Municipal Code, continue to restrict noise-producing construction activities to daytime hours of operation.

Program 189a: Continue to incorporate regulations in the Municipal Code to provide a framework to enforce noise standards and impose penalties for violations.

Program 189b: Periodically review the Municipal Code to update regulations based on new information and new technologies.

Program 189c: Periodically hold training sessions for City personnel to provide noise information and review enforcement procedures.

Program 189d: Provide information to citizens on how noise can be controlled and about City regulations and enforcement procedures.

Other Standards

Program 189e: Cooperate with other agencies with authority to monitor and regulate noise, such as the Department of Transportation and OSHA, in order to reduce noise impacts on individuals, neighborhoods and businesses.

X.10 AIR QUALITY

Air quality affects the health and welfare of every Brisbane resident and business. Although the City's natural setting between the Mountain and the Bay, as well as the prevailing winds, bless it with high quality air resources, local and regional emissions, which contribute a range of pollutants to the air, degrade Brisbane's air quality and affect the City's health, welfare and natural environment.

Since 1979, Federal, State and regional governments have prepared and adopted a substantial body of plans and regulations pertaining to air quality. This regulatory framework is described in the City's Air Quality technical background report (NR-2). The report also includes information on emissions standards, regulation of direct (point) sources of pollutants and the numerous programs adopted to affect transportation related impacts.

The Bay Area Air Quality Management District (BAAQMD) is the agency primarily responsible for both monitoring and enforcing air quality standards. BAAQMD collects data from a number of monitoring stations in the Bay Area to determine compliance with State and Federal standards and to prepare air pollutant concentration maps. BAAQMD also identifies "hot spots," where pollutants are especially concentrated and generate site specific public health issues.

In general, mobile sources (vehicles on roads and highways and airplanes) are the most significant producers of air pollution in San Mateo County. Stationary sources, although they generate much less pollution than mobile sources, are also significant because they can result in "hot spots" and are responsible for odor complaints. In addition, stationary sources, such as the quarry operation, generate suspended particulates, which, according to recent studies, may have serious implications for public health.

The City of Brisbane, as part of the Bay Area, is impacted by regional air quality degradation. Because there are major traffic corridors that traverse the City - Bayshore Boulevard and Highway 101 - the City is also impacted by the emissions generated by the traffic on these corridors. There are a number of businesses in the City that are required to have permits from the BAAQMD because of use of materials or practices they use at the site. The Air Quality background report contains information on these point sources, including the standards of emissions that pertain to the materials used and a complaint history. (See NR-2.)

The policies in this section regarding air quality fall into four major categories: 1) working with the BAAQMD; 2) mobile sources; 3) stationary sources; and 4) public action and information.

Working with the BAAQMD

Policy 190 **Cooperate with the Bay Area Air Quality Management District to facilitate the monitoring and enforcement of air quality standards.**

Program 190a: To the extent that the City is knowledgeable, inform the BAAQMD of point source violations of air quality standards and poor management practices and request that they proceed with strict enforcement.

Program 190b: Refer to the BAAQMD all applications for land use permits that need permit review by that agency, including but not limited to gasoline stations, dry cleaning plants, print shops and auto body shops.

Program 190c: Encourage the Bay Area Air Quality Management District to establish an air quality monitoring station in Brisbane.

Policy 191 **Develop a working relationship with the BAAQMD to assist the City with the development and implementation of air quality improvement programs.**

Program 191a: Request the BAAQMD to provide the City, on a periodic basis, with updated information on air quality conditions, emissions sources, public health risks, and air quality regulations to assist the City in decision-making.

Policy 192 **Encourage the BAAQMD to develop programs to increase local understanding of air quality and impact mitigation techniques.**

Program 192a: Encourage the BAAQMD to publish and distribute information and conduct training sessions on low-emission construction and industrial practices, air quality impact assessment methods, and effective mitigation controls.

Mobile Sources

Policy 193 **As a part of land use development analysis, consider the impacts on air resources that will be generated by a project through mobile sources.**

Program 193a: Consider the design of roadways, transit facilities, bikeways and pedestrian access in all subdivisions, specific plans and other land use proposals to evaluate whether and to what extent the design addresses air quality issues.

Program 193b: In conjunction with land use development applications and CEQA review, evaluate whether a proposal may have a significant effect on air quality because of mobile emissions. Require environmental impact analysis and mitigation plans and monitoring, as appropriate.

Program 193c: Discourage drive-up service windows and similar uses that generally result in vehicle idling.

Policy 194 Attempt to minimize dependence on automobile travel by encouraging transit, bicycle and pedestrian alternatives and incorporating alternatives to the automobile in land use planning and project design.

Program 194a: Provide park-and-ride facilities to facilitate use of transit.

Program 194b: Provide bicycle and pedestrian access to all areas of the City to provide alternatives to automobile use.

Program 194c: Require all new development to include design principles that are transit oriented and otherwise reduce dependence on the automobile.

Policy 195 Express support for Federal and State programs to improve emissions control devices, reformulate gasoline, develop fuel efficient vehicles, and other technological advances that could serve to reduce mobile emissions.

Policy 196 Support efforts to control fuel emissions and excessive idling of airplanes at San Francisco International Airport.

Policy 197 Continue to improve existing roadways to reduce congestion in order to reduce emissions generated by "stop-and-go" driving.

Program 197a: Use traffic management systems, such as signage and timed signals, to facilitate traffic flow and reduce congestion.

Policy 198 Actively participate in and support the development and implementation of transportation system management plans (TSMs) and transportation demand management measures (TDMs).

Program 198a: Support the implementation of transportation demand management measures by private businesses, such as transit and carpool subsidies, preferential carpool/vanpool parking, flexible work schedules and ride matching services.

Program 198b: Encourage the installation of bicycle lockers, changing rooms and showers, guaranteed ride home, the provision of on-site support services in private businesses and other measures to reduce vehicular trips by employees.

Program 198c: Consider providing incentives as apart of land use development permit approvals for the use of TSM and TDM measures.

Policy 199 **Encourage County and regional transportation agencies to improve transit and transportation systems in ways that reduce mobile source emissions.**

Program 199a: Support efforts to improve efficiency and reduce emissions in the CalTrain system.

Stationary Sources

Policy 200 **Express support for State and Federal programs to develop filter control devices, vapor recovery systems, leakless valves, reformulated surface coatings and solvents and other technological advances that could serve to reduce stationary emissions.**

Policy 201 **Encourage households and businesses to properly manage materials that affect air quality and replace these materials with safer alternatives whenever possible.**

Program 201a: Provide information on the effects on air quality from inefficient burning in old fireplaces and encourage citizens to clean fireplaces regularly.

Policy 202 **Incorporate emissions control practices into City ordinances as appropriate.**

Program 202a: Strictly enforce the City's Grading Ordinance provisions for dust control.

Program 202b: Require that demolition and construction projects conform to the BAAQMD recommended dust control measures.

Program 202c: On a periodic basis, review the City's ordinance requirements to assure conformance with BAAQMD standards.

Policy 203 **Consider issues of stationary emissions in land use planning and project review.**

Program 203a: As part of land use planning, establish buffer zones between sensitive receptors and significant emissions sources, including uses that cause offensive odors or dust.

Program 203b: In conjunction with any surface mining, oil and gas operation or industrial development land use permit, place strict conditions for compliance with best management practices for control of dust, odors and other emissions that have air quality impacts.

Public Action and Information

Policy 204 Cooperate with County, State and regional agencies to involve the public in planning for and implementing air quality improvement programs.

Program 204a: Working with the BAAQMD and regional transportation agencies, develop and provide information to citizens on the air quality impacts of automobile emissions and encourage citizens to reduce automobile trips for the benefit of the community.

Program 204b: With the assistance of the BAAQMD and environmental groups, provide information to citizens on the air emissions impacts of materials such as paints, solvents and spray cans, and encourage citizens to substitute safer materials.

Program 204c: Inform citizens, through water bill inserts and other publications, of how to contact the BAAQMD to file complaints regarding air quality violations and encourage citizen involvement in enforcement of air quality regulations.

Policy 205 Cooperate with the County of San Mateo and the Congestion Management Agency in the development of air resources policies and programs to ensure consistency between local activities and regional efforts to achieve Federal and State air quality standards.

X.11 WATER SUPPLY AND QUALITY

Water for domestic use and for fire protection is supplied to Brisbane by the San Francisco Water Department, with the supply guaranteed by contractual agreement. The water originates in the Sierra Nevada Mountains and is collected and transported to the Peninsula through the Hetch Hetchy aqueduct system. Water quality is generally excellent. The water is distributed to users through the City of Brisbane and the Guadalupe Valley Municipal Improvement District (GVMID).⁽⁵⁾

In general, existing water systems are considered adequate to provide for domestic, commercial and industrial consumer requirements. The Brisbane water system is currently comprised of three pressure zones, and pressure is generally adequate for fire flow purposes, except for certain locations on Paul Avenue, Thomas Avenue and Harold Road. Fire protection service is also adequate except in the current GVMID service area where an additional 1,490,000 gallons of storage are needed to service Crocker Park to current standards. Pipe friction tests indicate that the older cast iron pipe in the Brisbane water system is in poor condition and possibly nearing the end of its useful life. The GVMID system is in fair condition.

Future development in Brisbane, if permitted, will require the expansion of water utilities. The elevation of areas proposed for new services relates directly to the cost and practicality of providing water flows and the pressure required for domestic purposes and fire protection.

The focus of General Plan policies for water supply in the next ten years is threefold: upgrading existing infrastructure, meeting current fire protection requirements and installing new infrastructure. Policies on water conservation are found in Chapter IX, Conservation. Also see Chapter VI, Transportation and Circulation.

Policy 206 Upgrade and maintain the existing water distribution system.

Program 206a: As a part of the annual budget and Capital Improvements Program, schedule ongoing replacement and maintenance of the existing system.

Program 206b: On an ongoing basis, review water connection and service rates to assure sufficient revenues to provide for maintenance and upgrading of the system.

Program 206c: Take advantage of opportunities to apply special funds, such as grants, to the upgrade of the existing system.

Policy 207 Establish pressure zone(s) for water improvements and prohibit private on-site water tanks.

Policy 208 **If new development occurs, require infrastructure to be installed to City standards.**

Program 208x: In conjunction with land use development applications for vacant lands, require studies to estimate the needs for domestic water and fire protection and require infrastructure to be designed and installed, at the developer's expense, to the satisfaction of the City.

Policy 209 **Require, as feasible, all trunk water lines to be installed in dedicated public streets.**

Policy 210 **Developers and property owners who wish to build on their land in undeveloped areas where infrastructure does not currently exist shall provide the infrastructure for water distribution, fire protection and water connections to the City's service at their own expense.**

Policy 211 **On an ongoing basis, review requirements for fire protection.**

Program 211a: Require additional water storage for fire protection to be provided to service Crocker Park and the Quarry in conjunction with any redevelopment of Quarry lands.

Program 211b: Consider requirements for additional protective devices, such as residential sprinklers and alarms, for residences on Paul Avenue, Thomas Avenue and Harold Road.

X.12 SANITARY SEWER AND STORM DRAINS

The City of Brisbane has separate sanitary sewer and storm drain systems.

Sanitary Sewer

The City is served by two sanitary sewer districts: the City of Brisbane and the Bayshore Sanitary District. The City's sewer service area boundary currently encompasses approximately the southern half of the City's present corporate boundaries. The Bayshore Sanitary District, which collects wastewater from its service area and pumps the flow to the City of San Francisco's treatment plant, serves the northern part of the City, which is, for the most part, vacant land.⁽⁶⁾ The City sewer district has been developed and expanded over the years as vacant lands have been developed. The single largest expansion was the annexation of the Guadalupe Valley Municipal Improvement District facilities. Treatment for sewage generated within the City of Brisbane's service area also takes place at the San Francisco Southeast Water Pollution Control plant on Jerrold Avenue under a contractual agreement with San Francisco that guarantees a capacity in excess of current City needs.

The City's existing system consists of a network of gravity mains along with a number of lift stations that push sewage uphill from low areas. None of the City's existing trunk lines are deficient; however the system is aging.⁽⁷⁾

The major sewer problem facing Brisbane's residents concerns private lateral lines, which, due to the topography and history of development in Central Brisbane, may cross one or more private properties before connecting to the City's trunk line. These laterals are aging and are often difficult to access for replacement or maintenance. Maintenance agreements between private parties may not have been recorded or may have been misplaced over the years. Often access easements were not recorded, but were considered agreements between friends. With the passage of years and the transfer of properties, this history has resulted in considerable stress on the community, and the City is often asked to help resolve conflicts between private property owners regarding lateral maintenance or replacement.

In the interest of improving the safety of the existing system under this General Plan, the policies in this chapter speak to both the City's system and private lines.

Policy 212 Monitor the City's sanitary sewer trunk lines in Central Brisbane and the lines in Crocker Park for signs of failure and to identify areas in need of repair.

Program 212a: As a part of the annual budget and Capital Improvements Program, schedule ongoing replacement and maintenance of the trunk line system, as needed.

Program 212b: On an ongoing basis, review sewer connection and service rates to assure sufficient revenues to provide for the maintenance and replacement of the system.

Program 212c: Take advantage of opportunities to apply special funds, such as grants, to improvements of the existing system.

Policy 213 **If new development occurs, require trunk and lateral lines to be installed to City standards.**

Program 213a: In conjunction with land use development applications for vacant lands, require studies to determine capacity and design requirements for sanitary sewer services and require infrastructure design and installation to the satisfaction of the City at developer's expense.

Policy 214 **Require, as feasible, that all sanitary sewer lines be installed within dedicated public streets.**

Policy 215 **Sanitary sewer service to undeveloped areas where facilities do not currently exist shall be installed and connected to the City's system at the property owner or developer's expense.**

Policy 216 **If development occurs, extend City sanitary sewer service to currently undeveloped areas so that all new users within the City Limits are served by the City as legally permissible.**

Policy 217 **Continue to require removal of existing septic tanks and connection to the City's sanitary sewer system.**

Program 217a: Review the provisions in the Municipal Code to determine if amendments would make septic tank regulations easier to understand and enforce.

Program 217b: Require immediate removal of any septic tank that requires pumping more than once per year.

Program 217c: Require all existing septic tanks to be inspected and receive a permit from the County Department of Environmental Health.

Policy 218 **Discourage more than one single-family property on any lateral sewer line. If infeasible, require recorded sewer access and maintenance agreements between all parties sharing the line.**

Storm Drains

There are two major watersheds that affect the City of Brisbane: the 640.6 acre Visitacion Valley Watershed which includes parts of Daly City; and the 1,322 acre Guadalupe Valley Watershed which includes parts of unincorporated San Mateo County. Five smaller drainage basins are located within the City. The major influences from outside the City are the

stormwater that comes from Daly City and the runoff from the American Rock and Asphalt Quarry.⁽⁸⁾

The major issue with the existing stormwater system is flooding in the areas described in Section X.4, above. The existing brick arch sewer under Bayshore Boulevard, if cleaned of debris, may be able to handle a five-year storm, but not more significant events. Two other restrictions in the system are the 36 inch culvert on the PG&E property and the 36 inch storm drain on Bayshore Boulevard north of Main Street.

Other areas identified as needing improvements are the inlets at the intersection of Industrial Way and Bayshore Boulevard, the open channel from Bayshore Boulevard to the Brisbane Lagoon that runs through the new Fire Station site, some storm drains in Valley Drive, and the pipe at the intersection of Bayshore Boulevard and Valley Drive.

In general, facilities that are concrete structures are in good condition, but metal pipes are corroded and may be in need of replacement in the near future. In addition, in steeper terrain, some pipes may be separating at the joints.

The impacts of undirected and uncollected stormwater pose significant problems on private properties. Storm runoff, if uncollected, can cause severe erosion or landslides, especially on the steep slopes in Central Brisbane. Likewise, if runoff ponds near structures and is not carried to the City's system, severe property damage may occur.

The policies in this General Plan address drainage facilities on both public and private properties. The policies address areas of the City that are built and those that are currently undeveloped.

Policy 219 Monitor the City's storm drain system for signs of siltation and flooding. Identify areas in need of maintenance, repair or replacement.

Program 219a: As a part of the annual budget and Capital Improvements Program, schedule maintenance, repair and replacement as needed.

Program 219b: Consider fee assessments to provide for the maintenance and repair of the system.

Program 219c: Coordinate programs to control siltation with the Regional Water Quality Control Board, Daly City and San Mateo County.

Policy 220 Take advantage of special programs which may become available to make improvements to the system.

Policy 221 If new development occurs, require storm drain systems to be installed to City standards.

Program 221a: In conjunction with land use development applications for vacant lands, require studies to determine design requirements to collect and remove stormwater from the property or reuse stormwater to benefit the public. Require facilities to be designed and installed to City standards, at developer's expense.

Policy 222 **Require that all storm drain lines be installed within dedicated public streets.**

Policy 223 **Storm drains in undeveloped areas where facilities do not currently exist shall be installed at the property owner or developer's expense.**

Policy 224 **In conjunction with development applications that place substantial increased demands upon the existing system, require that the system be upgraded or replaced to the satisfaction of the City. Contributions from responsible parties should be proportional to the impact of their projects.**

Program 224a: Install stormwater system improvements to Valley Drive and Bayshore Boulevard as set forth in the Conditions of Approval for the Northeast Ridge Development Project.

Policy 225 **Ensure that stormwater systems in Crocker Park and the Northeast Ridge meet City standards.**

Policy 226 **Undertake drainage studies to determine responsibility for siltation of the system and seek opportunities to assess the responsible parties for maintenance costs.**

Program 226a: Consider environmental sensitivities in conjunction with drainage studies.

Policy 227 **Cooperate with Daly City, responsible property owners, and responsible agencies to develop plans to improve the storm facilities on Bayshore Boulevard to relieve flooding.**

Policy 228 **Establish requirements in the Municipal Code for the installation of stormwater collection systems on private properties.**

Program 228a: Require new construction and substantial renovation projects to provide roof gutters and leaders that direct stormwater through the curb to the City street so that the water can be collected in City facilities.

Program 228b: Require drainage plans to be submitted in conjunction with land use development applications, including those for building permits, as applicable to the project.

Program 228c: Provide public information on the safety aspects of dealing with stormwater and encourage homeowners and businesses to make necessary improvements and repairs.

Program 228d: Comply with National Pollutant Discharge Elimination System, as required.

FOOTNOTES

1. SA-1, p. 11
2. SA-1, p. 12
3. In addition to debris flows mapped by the U.S. Geological Survey in 1983, local incidents during the winter of 1982 were identified at the following locations: behind the building at 180 West Hill Place; from Harold Road to McLain Road at San Bruno Avenue; from Costanos Canyon to 405 Sierra Point Road; above Kings Road at San Mateo Lane; Sierra Point Canyon above Kings Road; from the Glen Parkway tank down Firth Canyon and through Firth Park to San Bruno Avenue; down Old Quarry Road to San Francisco Avenue; and numerous other locations on the Mountain. Source: Vince Marsili, City of Brisbane Public Works Department, 1994.
4. GP-5
5. The background report on Water (UT-3) contains a detailed description of the water systems and water quality in the planning area.
6. UT-2, Figure 2
7. A detailed description and analysis of the planning area's sewer system is contained in the Sewer System Evaluation background report (UT-2).
8. The Storm Drain background report contains detailed descriptions and analysis of the watersheds and storm water systems in the planning area.