
SAFETY ELEMENT

The Safety Element is divided into three major topics; Earthquake Risk, Flood Hazard, and Accident Potential from dangerous materials. Most of the existing condition information related to these topics, and mitigating methods are included in the **Environmental Impact Report** Section of this Plan.

EXISTING CONDITIONS

Earthquake Risk

The Rose Canyon-Tijuana Fault line runs through San Diego Bay. A trace of it has been identified at the water edge of the Port's 10th Avenue Terminal. Generally, the waterfront area at the tidelands (landfill area) has soils prone to liquefaction. Land Uses in this area should be of a low-risk nature and low-intensity development.

Flooding

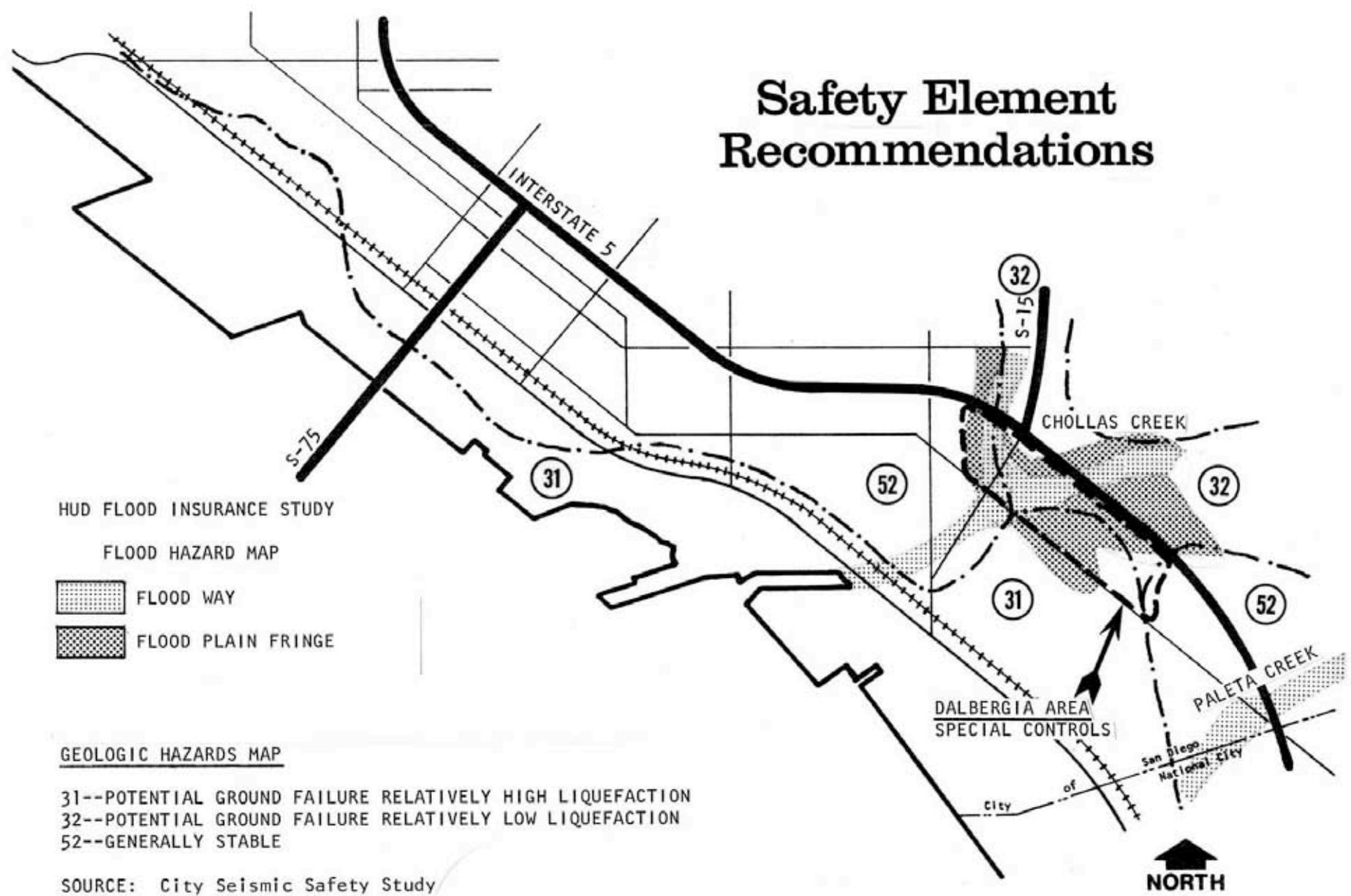
The southern section of the planning area is subject to the flooding of Chollas Creek and Paleta Creek. According to the Army Corps of Engineers, a 100-year-flood could occur under extreme rain conditions. The Corps has proposed a flood control project, since present facilities are not designed for the 100-year-flood conditions. The benefits of such a project, in the past, have not warranted the public expense. But with the proposed major improvements and the adjacent Navy development proposal, and capital improvements envisioned in this Plan, the protection works will probably be warranted and cost beneficial.

Freeway I-15 and I-5 interchanges are within this flooding area, but they are elevated and little affected by flooding. Areas subject to flooding would affect the Dalbergia housing area and some of the Navy facilities such as the golf course, recreational areas, some of the Navy's large residences on the base, and a portion of the Navy parking lot. The NASSCO industrial establishment and shipbuilding activities will also be affected.

Dangerous Materials

Tank farms exist presently along the tidelands area. It is, at this time, difficult to ascertain the types of materials being stored, but petrol, chemicals, and dangerous gases are probably stored in many of the areas adjacent to the heavy industry. Other potential problems stem from the dust and vapors emanating from some of the upland industry adjacent to the housing areas, such as paint vapors, not presently mitigated. The U.S. Navy industrial storage areas also fall into this category. Although these storage areas are protected by fencing, conditions could be critical in an earthquake.

Safety Element Recommendations



HUD FLOOD INSURANCE STUDY

FLOOD HAZARD MAP

-  FLOOD WAY
-  FLOOD PLAIN FRINGE

GEOLOGIC HAZARDS MAP

- 31--POTENTIAL GROUND FAILURE RELATIVELY HIGH LIQUEFACTION
- 32--POTENTIAL GROUND FAILURE RELATIVELY LOW LIQUEFACTION
- 52--GENERALLY STABLE

SOURCE: City Seismic Safety Study

NORTH

**Barrio Logan
Harbor 101**

RECOMMENDATIONS

Minimize earthquake risk by location, and relocation of new development together with proper rehabilitation standards.

The Plan proposes that the particular areas affected by liquefaction remain industrial, which is a compatible use. Rehabilitated industry and new industrial buildings will have to conform to standard structural engineering codes and property buffer development standards to mitigate potential safety problems. Development proposals in the Dalbergia area should consider surcharge, and earth compacting techniques to stabilize the land and mitigate liquefaction.

Establish flood protection methods for the protection of improvements and conservation of the floodplain whenever possible.

This Plan proposes that filling and construction in the floodway be avoided as much as possible. Development in the floodplain fringe should be adequately elevated above the 100-year flood level. Specifically, the areas affected by flooding in the Dalbergia area should be elevated with fill and dikes whenever new development takes place. In this manner, both flood protection and views could be established, although some constriction of the flood would result. Open space easements, as proposed in the **Open Space Element** of this Plan, would also be an important mitigation measure.

Outdoor storage and work areas containing dangerous materials should be relocated and protected.

The Plan proposes that as these areas are further identified, options for relocation and/or design of buffer areas to protect them and surrounding properties be studied, the best mitigating solution be pursued, and duly reviewed by the indicated agencies.

IMPLEMENTATION RECOMMENDATIONS

A study should be made specifically identifying dangerous materials storage areas. Development controls should be established to mitigate problems. These development standards should be reviewed by the adequate local, state and federal agencies, as discussed in the **Environmental Impact Report** section of this Plan.
