

CHAPTER 2.0

Proposed Action and Alternatives

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2.0 PROPOSED ACTION AND ALTERNATIVES

This chapter describes alternatives for the proposed action and considers Navy *disposal* alternatives and subsequent *reuse* alternatives. NEPA requires that an EIS objectively evaluate a "reasonable" range of alternatives. Under NEPA, reasonable alternatives are those that are practical or feasible from a technical and economic perspective and that are based on common sense (Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations [CEQ 40 Most Asked Questions], 46 Fed. Reg. 18026, March 23, 1981; as amended, 51 Fed. Reg. 15618, April 25, 1986).

This chapter of the EIS is organized into seven primary sections. Section 2.1 discusses Navy disposal alternatives. Section 2.2 describes the generation of reuse alternatives. Alternatives eliminated from review in this EIS, and the reasons for their elimination, are addressed in section 2.3. Section 2.4 provides detailed descriptions of the reuse alternatives evaluated in this EIS. Section 2.5 identifies Navy's preferred alternative and the environmentally preferable alternative, and section 2.6 provides a list of permits and approvals required for disposal and subsequent reuse of NSTI. Finally, section 2.7 provides a summary comparison of the potential impacts and corresponding mitigation for each alternative.

2.1 NAVY DISPOSAL

Navy can either retain NSTI surplus property in federal ownership (No Action Alternative) or dispose of the property for subsequent reuse (Disposal Alternative). The description of retaining NSTI in federal ownership is included in the No Action Alternative (section 2.4.5). Navy disposal of surplus property at NSTI is the federal action evaluated in this EIS for potential environmental and socioeconomic impacts. Under the federal action, approximately 997 acres (403 ha) of federal property at NSTI would be conveyed to non-federal entities.

Although it will not retain control of the properties after their disposal, Navy is required, in accordance with DBCRA, to evaluate the reasonably foreseeable impacts arising from reuse. Consequently, this EIS evaluates the potential environmental and socioeconomic impacts associated with the reuse of NSTI property. The Federal Action, Navy disposal, is assumed as part of each reuse alternative.

2.2 REUSE PLANNING PROCESS

DoD Office of Economic Adjustment (OEA) designated San Francisco as the LRA for NSTI in May 1994. In late June 1994, the Mayor of San Francisco appointed the Treasure Island Citizens Reuse Committee (CRC) to make recommendations for the consideration of the Planning and Redevelopment Commissions and the San Francisco Board of Supervisors. The CRC consisted of a diverse group of community professionals and activists represented by environmentalists, architects, labor union members, educators, municipal finance experts, developers, homeless service providers, real estate analysts, neighborhood and cultural leaders, planners, and lawyers. The CRC convened its first public workshop in June 1994 and met regularly until it had completed its work in 1996.

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1 As part of the NSTI reuse planning process, numerous alternatives were proposed and then
2 evaluated using goals established by the LRA. The city's Office of Military Base Conversion
3 (OMBC), a partnership of San Francisco's Planning Department and Redevelopment Agency
4 and the Port of San Francisco, directed the reuse planning process. This process, described in
5 detail in the Draft Reuse Plan (San Francisco 1996e), included substantial public input and
6 technical direction from city departments, as summarized below.

7 Before, during, and after the approval of the Draft Reuse Plan, a continued effort was sustained
8 in soliciting meaningful public involvement by the OMBC and the CRC. CRC meetings were
9 open to the public, and public comment was invited and considered. CRC meeting minutes
10 were made available to the public and were regularly distributed to more than 100
11 organizations and individuals in the Bay Area.

12 The public also was informed about the progress of reuse planning through a regular
13 newsletter, *Treasure of the Bay*, the first issue of which was published in Spring 1994. Several
14 issues of the newsletter were published thereafter and mailed to over 2,400 community leaders,
15 neighborhood organizations, and citizens of San Francisco and the Bay Area. Newsletter issues
16 focused on important aspects of the reuse planning process, informed the public about other
17 ways to get information, and advertised the availability of reuse planning reports, which
18 present a more detailed account of NSTI reuse planning.

19 The OMBC and CRC, through their consultants, conducted public workshops and prepared a
20 number of publicly available documents to assist in formulating a reuse plan for NSTI. Two
21 widely publicized public planning workshops on the reuse planning process (including bus
22 tours of the islands) were held in June 1994 and August 1995. In July 1995, the CRC prepared
23 exhibits for public display at the Treasure Island Museum and the San Francisco Main Library,
24 accompanied by newsletters and questionnaires soliciting public input on the proposed reuse
25 plan. A draft set of reuse planning goals and objectives was produced as a result of these
26 workshops, and the goals and objectives were subsequently refined and approved by the CRC
27 on December 1, 1995.

28 Documents prepared include a two-volume Existing Conditions Report in August 1995 (San
29 Francisco 1995a; 1995b), with findings summarized in the August 1995 Issues and
30 Opportunities Report (San Francisco 1995d) and the January 1996 Alternatives Report (San
31 Francisco 1996a). The adopted goals and objectives address six specific topics—economics,
32 community, character, transportation, environment, and safety. For a detailed listing and
33 discussion of the goals and objectives envisioned by the CRC, refer to the Draft Reuse Plan (San
34 Francisco 1996e).

35 From information in these documents and based on public input, a concept plan, entitled
36 *Conceptual Planning Framework, Treasure Island - Yerba Buena Island* (San Francisco 1996d),
37 was developed and approved by the CRC in February 1996; this plan led to the publication of
38 the Draft Reuse Plan (San Francisco 1996e). Recommendations for the "preferred reuse
39 concept" included an emphasis on visitor-oriented recreational, commercial, and entertainment
40 uses to serve as a major jobs and revenue generator to support needed improvements and
41 services. Due to the instability of fill material on Treasure Island, phased implementation of
42 seismic upgrades to structures and utilities was also recommended to reduce the risk of failure
43 during an earthquake. The earlier phases of improvements focus on accommodating major

visitor-oriented uses. Another recommendation was that the reuse plan be developed to allow substantial flexibility to adapt to market conditions and emerging information.

On July 22, 1996, the San Francisco Board of Supervisors endorsed the Draft Reuse Plan. In September 1996, the San Francisco Redevelopment Agency contracted the Urban Land Institute (ULI), a non-government organization (NGO), to convene an advisory panel to evaluate the feasibility of the Draft Reuse Plan. The resulting report, entitled *Treasure Island Naval Station San Francisco, California: An Evaluation of Reuse Opportunities and a Strategy for Development and Implementation* (ULI 1996), suggested changes and revisions that were considered in the development of the reuse alternatives. Alternative 2 incorporates many of the changes suggested by the ULI study.

The Draft Reuse Plan proposes to maximize a range of public benefits within the major constraints of the site. The plan emphasizes publicly oriented recreational, entertainment, and hospitality uses that recall the spirit of the 1939 Golden Gate International Exposition (Exposition). These uses maximize the island's central location and outstanding views, and the plan links NSTI to San Francisco and the Bay Area by ferry. The Draft Reuse Plan also incorporates specific users and types of uses from the second homeless screening process. The Draft Reuse Plan was approved by the Department of Housing and Urban Development (HUD) on November 26, 1996 (see Appendix C). The Draft Reuse Plan is described in section 2.4.2 (Alternative 1), along with two other reuse scenarios, Alternative 2 and Alternative 3 (sections 2.4.3 and 2.4.4, respectively).

In 1997, the California State Legislature created a special reuse authority for Treasure Island, transferring the LRA status from San Francisco to the Treasure Island Development Authority (TIDA). TIDA is a state agency staffed by the San Francisco mayor's office and is the entity responsible for planning the reuse of Treasure Island. In March 1998, DoD OEA recognized TIDA as the implementing LRA for NSTI. TIDA submitted an *Economic Development Conveyance (EDC) Application and Business Plan for Naval Station Treasure Island* in June 2000 for land to be used and redeveloped in accordance with the Draft Reuse Plan.

2.2.1 Homeless Assistance Planning Process

Federal base closure law and regulations were changed during the period of reuse planning for NSTI. The Stewart B. McKinney Homeless Assistance Act of 1987 (McKinney Act) (Pub. L. 100-77, codified as amended, at 42 U.S.C. §§ 11341-11448) requires DoD and other federal agencies to give priority consideration for homeless assistance over other uses for property considered excess, surplus, or underutilized by federal agencies. HUD screens properties in these categories for suitability for homeless assistance (42 U.S.C. § 11411). Because NSTI was closed in 1993 under the '93 round of BRAC, homeless assistance screening was originally initiated under this law. In October 1994, the Treasure Island Homeless Development Initiative (TIHDI), a coalition of 14 nonprofit social service and homeless service organizations, submitted a revised plan to the San Francisco Department of Health and Human Services under the McKinney Act for providing homeless services.

The first TIHDI plan submitted to the San Francisco Department of Health and Human Services in October 1994 was building-specific. In the fall of 1994, the Base Closure Community Redevelopment and Homeless Assistance Act of 1994 (Redevelopment Act) (Pub. L. 103-421, 10

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U.S.C. § 2687) modified the federal process for accommodating the needs of the homeless in connection with disposal of military installations. This act provided the affected local community greater opportunity to participate in the decision regarding disposal of military properties by requiring homeless providers to work through LRAs. In 1995, the LRA notified Navy of its intent to conduct a second homeless screening process under this act. DoD approved this action on May 9, 1995.

TIHDI conducted an extensive solicitation process throughout 1995. TIHDI submitted a comprehensive Notice of Interest for surplus property at NSTI to the LRA on November 1, 1995, for incorporation into the LRA's reuse plan. The TIHDI Notice of Interest includes homeless housing, support services, employment, and economic development programs and services.

The 1995 plan provides economic development opportunities and employment for homeless individuals. TIHDI organizations may provide contract services, such as landscaping and grounds maintenance, and operate businesses, such as restaurants and convenience stores, at a level that is proportionate to overall development on the islands. These businesses would provide employment and job training and would be an important part of the ongoing transition of NSTI to civilian use.

According to the Draft Reuse Plan, up to 375 existing housing units will be leased to TIHDI to provide shelter for individuals and families, including 90 housing units on Yerba Buena Island and 285 housing units on Treasure Island. Discussions regarding the number of homeless housing to be leased are on-going, and they are currently proposed at approximately 218 units on Treasure Island, and none at Yerba Buena Island. If substantial new residential development occurs on NSTI in the future, TIHDI will be offered sites for constructing additional affordable housing.

The plan sets goals for providing long-term jobs for homeless persons and the working poor as a part of new uses on NSTI. The overall employment goals for NSTI include offering 25 percent of permanent jobs to homeless or other economically disadvantaged persons within a larger goal of setting aside 50 percent of all new jobs for San Francisco residents.

2.3 ALTERNATIVES ELIMINATED FROM DETAILED REVIEW

In determining the scope of alternatives to be considered under NEPA, the emphasis is on what is "reasonable." The term "reasonable" is used primarily to insure that federal agencies preparing NEPA documents make the effort to explore a number of common sense-based alternatives that meet the purpose and need of the project. Reasonable alternatives include those that are practical or feasible from a technical and economic standpoint (Question 2a, CEQ 40 Most Asked Questions, 46 Fed. Reg. 18026 [March 23, 1981]). An alternative can be eliminated from further discussion if it does not meet the purpose and need of the project.

During the reuse planning process, the LRA developed a purpose and need statement that served as the basis for evaluating reuse alternatives and for refining the Draft Reuse Plan. This purpose and need focused on reuse of NSTI property to support the local economic base, enhance the local image and identity, expand the range of recreational and entertainment opportunities available to the community, and enhance the overall livability of the local area and region. To meet these overall objectives, the proposed reuse alternatives must have

provided employment and housing opportunities and generated sufficient revenue (e.g., property tax) to support the investment necessary to upgrade the Treasure Island perimeter dike and to undertake other facility ground improvements that would improve the seismic safety of the site (San Francisco 1996e). In addition, reuse alternatives must have considered current access constraints (e.g., limited access via the SFOBB, inadequate on- and off-ramp design, and traffic congestion during peak hours) and proposed alternative access options, such as ferry service, to solve existing vehicular access deficiencies.

The Alternatives Report (San Francisco 1996a) that preceded the Draft Reuse Plan identified four preliminary land use alternatives. These four alternatives evolved in an iterative process with a series of meetings and discussions with the CRC. Table 2-1 lists the land use requirements of the four preliminary reuse alternatives that were considered by the LRA in 1995 to meet their reuse objectives. From these alternatives, a screening process was initiated by the LRA to determine if these alternatives would 1) attain the objectives of the LRA; 2) avoid or substantially lessen environmental effects of the project; 3) be technically feasible; and 4) be economically feasible. Although these four alternatives were eliminated from analysis by the LRA as a single plan to guide the redevelopment of NSTI, elements of each were included in the Draft Reuse Plan.

Navy reviewed the Draft Reuse Plan (San Francisco 1996e), the ULI report (ULI 1996), the Alternatives Report (San Francisco 1996a), scoping comments and letters, and newspaper articles related to reuse of NSTI to identify a range of reasonable alternatives and to determine which alternatives would be eliminated from detailed review in the EIS. While many reuse scenarios have been suggested, most major elements of the alternatives eliminated from review have been incorporated into one of the three reuse alternatives evaluated. For instance, some reuse suggestions, such as a public park or a sports center, were not feasible as a single use; however, they have been incorporated as elements in the three reuse alternatives evaluated. The four reuse alternatives that were eliminated by the Navy mirror the four preliminary alternatives studied in the Alternatives Report (San Francisco 1996a). Table 2-1 and subsequent discussions (sections 2.3.1 through 2.3.4) provide a description of those alternatives that were eliminated from further review.

2.3.1 Harbor-oriented Themed Attraction Alternative

This alternative envisioned Treasure Island as a major visitor destination. A large themed attraction occupying approximately 86 acres (35 ha) on the scale of Disneyland would be built primarily on Treasure Island, but it also would include Clipper Cove and the eastern tip of Yerba Buena Island. Visitors to the Treasure Island themed attraction would arrive by ferry to a new terminal on the west side of the island. Pier 1 would be incorporated into the themed attraction.

Under this alternative, the west side of Treasure Island would be devoted to visitor-serving uses, primarily hotels and supporting retail and entertainment uses, which would complement and support the new themed attraction. The remainder of the island would be unprotected by shoreline improvements and held in open space. The center of the island, which is more geologically stable, could be used for active recreational uses, such as a sports complex

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Table 2-1. NSTI Land Development Program for Alternatives Initially Considered by the LRA in 1995

Land Use	Alternatives							
	Harbor-oriented Themed Attraction		Destination Entertainment District		Residential Neighborhood		Major Themed Attraction	
	Acres	Program	Acres	Program	Acres	Program	Acres	Program
Treasure Island								
Themed Attraction	86.0	1 million s.f.						
Hotel/Entertainment	30.0	1,200 rooms 500,000 s.f.					30.0	2,000 rooms
Sports Complex	80.0							
Public Promenade	6.0		4.0		7.0		7.0	
Destination Entertainment			23.0	500,000 s.f.				
Film/Institutional			11.0	300,000 s.f.	14.0	300,000 s.f.		
Resort Hotel			18.0	600 rooms				
Business Hotel			13.0	400 rooms				
Golf Course			144.0	18 holes				
Marina				500 slips		500 slips		500 slips
Residential					88.0	3,520 units		
Residential/Mixed Use					37.0	1,480 units 200,000 s.f.		
Hotel/Conference					8.0	400 rooms		
School/Child Care/Gym					22.0			
Park/Open Space					125.0			
Roads					13.0			
Themed Attraction/Entertainment							263.0	
Film Production								300,000 s.f.
Job Corps	36.0		36.0		36.5		36.0	
Open Space	165.0		154.0		52.5		67.0	
Subtotal Acres	403		403		403		403	
Yerba Buena Island								
Themed Attraction	7.0	200 rooms 100,000 s.f.						
Hotel/Conference			7.0	200 rooms			7.0	200 rooms
Residential (new)					7.0	140 units		
Existing Housing	36.0	95 units	36.0	95 units	36.0	95 units	36.0	95 units
Open Space	72.0		72.0		72.0		72.0	
Subtotal Acres	115		115		115		115	
Source: Draft Reuse Plan (San Francisco 1996a).								
Notes for all alternatives:								
Improved land acreage includes stabilized land area within a footprint defined by an improved perimeter dike, including the Job Corps site. Land within the core is excluded for the Harbor-oriented Themed Attraction and Destination Entertainment District alternatives.								
Initial alternatives include 39 acres (16 ha) of dry land on Yerba Buena Island that was subsequently transferred to the U.S. Coast Guard and FHWA.								
s.f. = square feet								

consisting of amateur athletic fields. New uses on Treasure Island would be focused around a central roadway and utility corridor that provides access and services to each of the uses.

On Yerba Buena Island, it is assumed that one small 200-room hotel could be part of development on the flatter, eastern area. The Senior Officers Quarters would be preserved and incorporated into the themed attraction, either as lodging or as an attraction. The remainder of Yerba Buena Island would be primarily devoted to housing and open space uses.

Major elements of this alternative were incorporated into two of the reuse alternatives that are already included in this EIS. For example, the major themed attraction and use of the west side of Treasure Island for visitor-serving uses, such as hotels, is part of Alternative 1. Providing shoreline improvements only to portions of Treasure Island and dedicating the less reinforced part to open space and recreation is similar to Alternative 2. In addition, this alternative was found to be marginally economically feasible due to the single source of revenue and the reliance on supplemental funding from tax increment financing (San Francisco 1996a). Therefore, this alternative was eliminated from further review.

2.3.2 Destination Entertainment District Alternative

This alternative would include developing a resort hotel and a visitor-serving entertainment district along the Clipper Cove shoreline of Treasure Island. For illustrative purposes, this alternative envisions a fairly large facility similar in scale to the Inn at Spanish Bay in Pebble Beach. Another hotel and conference center would be established on the western side of the island. The area between the two hotels and along the Clipper Cove shoreline would be a visitor-oriented entertainment zone, similar in concept to Citywalk in Universal City in Los Angeles, incorporating themed attractions, along with clubs, restaurants, and shops oriented to the waterfront promenade. This alternative also provides an area for existing film production or a similar employment use, such as recording or multimedia studios, which could be related to the entertainment themes of the island.

Open space on Treasure Island would be developed as an 18-hole golf course to complement the hotels. Similar to the Harbor-oriented Themed Attraction Alternative, the outer perimeter of the island would be set aside as natural open space with limited public access. This alternative also envisions a small hotel and conference center on the eastern tip of Yerba Buena Island, with reuse of existing residential units and potentially up to 90 infill units.

This alternative was eliminated from further consideration due to economic factors. The principal source of revenue to support development of NSTI is the value that private development can pay for the land. Compared to the other three preliminary alternatives, the Destination Entertainment District Alternative would result in the lowest residual land values, which would not be sufficient to cover all costs even with supplemental tax revenues (San Francisco 1996a), therefore, this alternative was eliminated from further review. However, elements of this alternative have been integrated into the EIS reuse alternatives. For example, the golf course is represented in Alternative 2.

2.3.3 Residential Neighborhood Alternative

Under this alternative, both Treasure Island and Yerba Buena Island would be devoted primarily to residential uses; up to 4,000 new housing units would be added to the existing approximately 1,000 units at NSTI (approximately 900 units on Treasure Island and approximately 100 units on Yerba Buena Island). New residential uses on Treasure Island would be oriented around shoreline open space areas and a central park. A commercial residential mixed-use center would be established along the Clipper Cove shoreline. A new marina would be established on Treasure Island at Clipper Cove for recreational uses. On the west side of the island, a small business hotel and conference center would be located to take advantage of views and ferry access to downtown San Francisco. Redevelopment on Yerba Buena Island would include new housing units developed at townhouse densities (i.e., up to 20 units per acre for the level portion of the island and 10 units per acre for sloping and redeveloped areas). Up to 230 new dwelling units could be established on Yerba Buena Island in addition to rehabilitating existing housing units.

This alternative was eliminated from further consideration because of both economic and environmental factors. Economic feasibility studies during the master planning process revealed that given the high dike reinforcement, infrastructure, and service costs and the expected rate of absorption for residential uses, an alternative that relied primarily on residential uses would be economically infeasible. For example, it was estimated to take 25 years for this alternative to be built out. Even with the inclusion of tax increment financing, the revenues generated, primarily consisting of land sales, were found to be insufficient to cover the high costs associated with this alternative (San Francisco 1996a). It was also questionable whether a suitably amenable residential environment could be established in the early phases to establish new market-rate housing on Treasure Island.

This alternative also would be expected to generate unacceptably high traffic volumes on the SFOBB, based on a likely greater reliance on the private automobile for transportation and access to and from NSTI. Based on a residential trip generation rate of ten trips per day, this alternative would generate approximately 49,950 vehicle trips per day. Vehicle use would have to be stringently curtailed for this alternative to be feasible from a transportation standpoint, and the anticipated level of non-auto use (e.g., ferry and shuttle systems) that would be required of new residents would be generally unprecedented in the U.S. This alternative would not meet the LRA's purpose and need to enhance the overall livability of the local area and region because it would worsen existing vehicular access deficiencies on the SFOBB. For these reasons, this alternative was eliminated from further consideration.

2.3.4 Major Themed Attraction Alternative

This alternative would develop an extensive themed attraction on Treasure Island. The themed attraction would occupy approximately 260 acres (105 ha), on the scale of Universal Studios in Los Angeles, and would include film production. The western portion of Treasure Island would be developed primarily as hotels and visitor-serving uses. In this alternative, Clipper Cove and the associated shoreline would be for public use and would not be included within the themed attraction. Public access to the themed attraction would be through the west side ferry terminal and through Building 1. Pier 1 would serve as a ferry terminal and a second entrance to the themed attraction. This alternative also would include construction of a new

200-room hotel on the eastern tip of Yerba Buena Island. The existing housing would be reused and infilled, as feasible.

This alternative would meet the basic project purpose and need to enhance local image and identity and to expand the range of recreational and entertainment opportunities available to the community. However, this alternative was regarded as too narrowly drawn, relying too much on a very large themed attraction. The marketability of this alternative is questionable due to the unlikelihood that a developer or corporation would purchase such a large area of land for themed attraction purposes, particularly given the costs associated with land improvements and that the intensive use area is generally around 60 to 80 acres (24 to 32 ha) (San Francisco 1996a). For these reasons, this alternative was eliminated from consideration as a single development plan. However, the major themed attraction elements were incorporated in all three of the EIS reuse alternatives at a reduced scale.

2.4 DETAILED DESCRIPTION OF REUSE ALTERNATIVES

This section presents a detailed description of the three reuse alternatives developed and evaluated in this EIS—Alternatives 1, 2, and 3. Navy disposal is assumed as part of each of the three reuse alternatives. Alternative 1 represents full implementation of the development scenario described in the Draft Reuse Plan (San Francisco 1996e) developed by the LRA. Whereas the Draft Reuse Plan envisions buildout by 2030, this EIS alternative assumes buildout by 2015. Year 2015 was used as the EIS buildout year because it was the year for which there was the most representative data concerning projected population and economic growth at the time of the analysis. Alternative 2 is based on comments received during the scoping process, including the recommendations of an advisory panel convened by the ULI (ULI 1996). Alternative 3 represents a lower level of redevelopment than proposed in the Draft Reuse Plan.

Each reuse alternative is a broad conceptual plan characterized by a general land use concept and a development scenario. For example, residential uses for the three alternatives range from 250 to 2,840 dwelling units, while open space and recreation uses range from a combination of shoreline promenades and sports fields on 118 acres (47.8 ha) to a combination of these uses plus an 18-hole golf course on approximately 259 acres (104.8 ha). Alternative 1 proposes the largest population (employees, residents, and visitors). Alternative 3 proposes approximately half as much employment and resident population compared to Alternative 1. Alternative 2 provides more jobs than Alternative 3 and the fewest residents of all the reuse alternatives. Alternatives 1, 2, and 3 have different perimeter dike improvements to seismically upgrade Treasure Island. Alternative 3 includes a lower level of development, and many existing buildings are reused.

Each reuse alternative has general land use planning designations (residential, publicly oriented, institutional and community, and open space and recreation) that allow for a range of different types of land use. These four land use categories represent slightly revised versions of the land use categories discussed in the Draft Reuse Plan. The publicly oriented and institutional and community categories are composites and would include a range of land uses. For example, the publicly oriented category would include such uses as a themed attraction, hotels, and an expanded marina. The institutional and community category would include such uses as police and fire stations, schools, and the wastewater treatment plant. The residential land use category would include a range of housing options on both Treasure Island

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1 and Yerba Buena Island. The open space and recreation land use category would include
2 shoreline open space at Treasure Island and hillside open space on Yerba Buena Island. Figure
3 2-1 compares land use development proposed for each of the three alternatives.

4 Table 2-2 provides a summary comparison of land use development of the three alternatives.
5 This table is intended to help the reader identify specific differences among the three
6 alternatives. The resulting combination of the use categories provides a level of reuse intensity
7 that is analyzed and compared as part of this EIS. Analyses of the three reuse alternatives,
8 which include a range of possible uses, provide a basis for decision-makers and the public to
9 consider the environmental impacts of reuse.

10 The reuse alternatives are general, representative, and appropriate for the level of
11 environmental analysis needed to make a disposal decision. Use categories, such as a themed
12 attraction, sports fields, or residential developments, are representative of but are not the only
13 specific uses for a parcel or building. The use categories analyzed provide a basis for estimating
14 the potential numbers of future residents, employees, and visitors for environmental impact
15 analysis purposes. The numbers provided in Table 2-2 are estimates only since discussions are
16 on-going between Navy and San Francisco, and most uses depend on future conditions and
17 circumstances.

18 This section describes reuse alternative assumptions, followed by a more detailed description of
19 land use development for each alternative. The discussion of each alternative is organized by
20 the four general land use planning categories. For reference, Figure E-1 in Appendix E
21 identifies NSTI building numbers used in the following discussion.

22 2.4.1 Assumptions for Reuse Alternatives

23 *Construction and Demolition*

24 Development is expected to occur in phases in accordance with infrastructure improvements.
25 Phasing in the Draft Reuse Plan is illustrative and is expected to vary depending on actual
26 market conditions, funding, and policy decision. Each phase would include some demolition
27 and construction activities and would lead to additional employment and housing development
28 (San Francisco 1996e).

29 *Facility Improvements*

30 The extent of perimeter dike improvements and other seismic improvements on Treasure Island
31 would vary with each reuse alternative, as indicated in the alternative descriptions in sections
32 2.4.2, 2.4.3, and 2.4.4, and as shown on Figure 2-2.

33 Existing utility systems would be improved to provide better service and upgrades needed to
34 meet applicable codes. Water system upgrades, for example, would include improving the
35 chlorinating system, installing new water pumps, and replacing existing pipes and valves,
36 meters, back-flow preventers, and air valves, as needed. Sanitary sewer system upgrades
37 would include replacing sewage pipes or lining them for low-flow use. Storm drainage
38 improvements would include inspecting and replacing selected storm drains, rebuilding or

Table 2-2
Summary Comparison of Land Development Characteristics of Reuse Alternatives

Characteristic	Alternative 1	Alternative 2	Alternative 3
Residential	Dwelling Units	Dwelling Units	Dwelling Units
Existing residential	290	50	995 ¹
New residential	2,550	200	70
Total dwelling units	2,840	250	1,065
Publicly Oriented	Acreage	Acreage	Acreage
Themed attraction	59	74	39
Hotel/conference/lodging	25	45	14
Retail/specialty/restaurant	10	1	2
Entertainment center	0	6	0
Amphitheater	0	7	0
Wedding chapel	0	1	2
Museum	3	4	4
Mixed use/office	11	0	6
Film production	31	0	33
Marina (yacht club)	2	0	2
Other publicly oriented uses	14	14	20
Subtotal Acres	155	152	122
Institutional and Community			
Elementary school	9	0	9
Child development center	4	0	4
Fire training school	5	5	5
Warehouse/storage	0	0	4
Wastewater treatment plant	10	5	3
Brig	5	4	5
Fire station	4	2	2
Police station	3	2	3
Other institutional facilities	0	0	8
Subtotal Acres	40	18	43
Open Space and Recreation			
Golf course	0	147	0
Sports fields/complex	47	18	40
Shoreline promenade/open space ²	71	76	102
Wildlife habitat	0	18	0
Subtotal Acres	118	259	142
Land Use Categories³			
Public Oriented	155	152	122
Residential	137	21	143
Institutional and Community	40	18	43
Open Space and Recreation	118	259	142
Total Acres	450	450	450
Marina	Expansion	Expansion	Existing only
Ferry Terminals	New (west side) Retrofit (Pier 1)	New (west side) Retrofit (Pier 1)	Retrofit (Pier 12) Retrofit (Pier 1)
Approximate On-site Population	6,895	710	3,510
Approximate Employment	4,920	2,820	2,195
Approximate Average Daily Vehicle Trips	18,100	13,085	6,700

Source: Draft Reuse Plan (San Francisco 1996e).

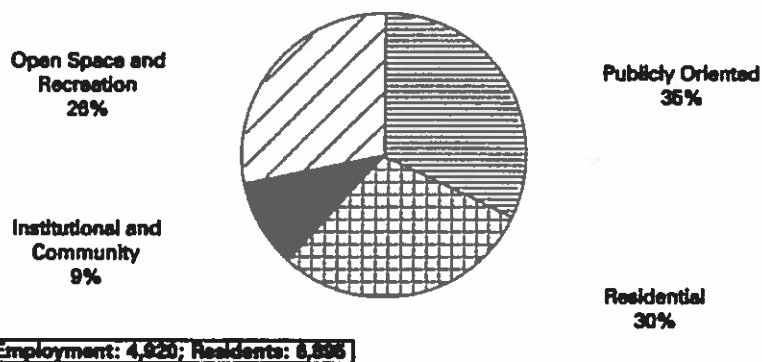
¹ Does not include 75 beds in barracks on Treasure Island.

² Open space on Yerba Buena Island includes small areas of native habitat.

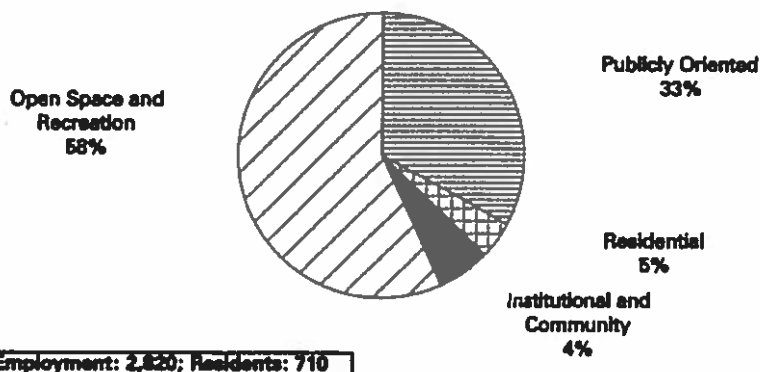
³ The land use categories represent slightly revised versions of the land use categories discussed in the Draft Reuse Plan.

Note: The numbers provided in this table are estimates only since discussions are on-going between Navy and San Francisco. Estimates in the text and the tables are included for discussion purposes.

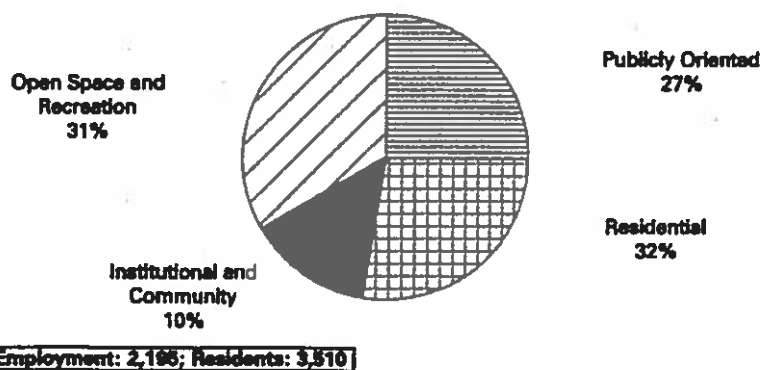
Alternative 1 Land Uses



Alternative 2 Land Uses



Alternative 3 Land Uses



Percentages of land uses may vary somewhat within each alternative, especially in the area of residential and open space/recreation use.

Comparison of Reuse Alternatives

Naval Station Treasure Island, California

replacing pump stations, and repairing and replacing outfalls. Alternative technologies, including establishing wetlands, may be considered as part of required improvements.

Ferry Service

Ferries would be an important mode of transportation to the islands under all of the reuse alternatives. Under Alternatives 1 and 2, a new ferry terminal would be built on the west side of Treasure Island. In all alternatives, Pier 1 would be retrofitted to serve as a ferry landing on the east side of the island. Under Alternative 3, Pier 12 would be adapted to accommodate ferry service rather than constructing a new ferry terminal.

Under all three reuse alternatives, ferry service would be provided between NSTI and San Francisco and the East Bay, with service to and from the Ferry Building in San Francisco at the foot of Market Street and Jack London Square in the Oakland/Main Street terminal in Alameda. Additional ferry service under Alternatives 1 and 2 would be provided between NSTI and Candlestick Point in San Francisco and Golden Gate Fields on the Berkeley and Albany border in the East Bay.

Dredging

Dredging may be associated with modifications necessary for ferry service (new ferry terminal and retrofitted piers). Dredging also may be necessary for maintenance of the marina under all alternatives and expansion of the marina under Alternatives 1 and 2. The exact location and amount of potential dredging is not known at present and therefore, this EIS can necessarily evaluate potential impacts from dredging in only a general way. All dredging activities would require permits and approvals from Bay Conservation and Development Commission (BCDC), San Francisco Bay Regional Water Quality Control Board (RWQCB), and the COE, which would require measures to minimize potential environmental impacts. (Disposal of dredge material is discussed in section 4.10, Water Resources.)

2.4.2 Alternative 1 (Preferred Alternative)

Alternative 1 features a combination of publicly oriented development, open space and recreation, and extensive residential development at full buildout, such as envisioned in the Draft Reuse Plan. Under this alternative, the NSTI project acreage would be occupied in the following manner: publicly oriented land uses, approximately 35 percent; residential, 30 percent; open space and recreation, 26 percent; and institutional and community services, 9 percent (see Figure 2-1 and Table 2-2). The four land use alternatives initially considered by the LRA (see section 2.3) were used to develop and further refine a "preferred reuse concept" that formed the basis of the Draft Reuse Plan, represented by Alternative 1. Figure 2-3 shows proposed land uses for Alternative 1. Table E-2 in Appendix E provides detailed assumptions for this alternative.

Seismic upgrades would include dike improvements to the entire Treasure Island perimeter, using soil cement columns in areas subject to rotational dike failure and stone columns in the other areas (see Figure 2-2). A new underground utility corridor would run along the perimeter of the island, carrying storm and sanitary sewer mains, water mains, reclaimed water mains,

2.0 Proposed Action and Alternatives

and electricity, gas, and telecommunications lines. The utility corridor also would cross Treasure Island along 9th Street.

Publicly Oriented Uses

Alternative 1 proposes 155 acres (63 ha) of publicly oriented uses. Unlike the preliminary alternative, Harbor-oriented Themed Attraction, Alternative 1 has a broader diversification of uses, while still proposing a Disneyland-like attraction. The major publicly oriented development on Treasure Island would be a themed attraction with the potential to attract an average of approximately 13,700 daily visitors and to employ up to approximately 3,500 seasonal and permanent workers (1,750 full-time equivalent jobs). This themed attraction would be similar to Disneyland, with lighting displays, some tall structures, such as a roller coaster, and at least one landmark structure assumed to be up to 100 feet (305 meters [m]) tall. Maximum building density at the themed attraction would be similar to existing conditions. Development also would include a 300-room and a 1,000-room hotel with three restaurants and offices. Existing film production uses would be expanded by an additional 100,000 square feet (9,290 m²). The total number of jobs expected to be generated by publicly oriented uses on Treasure Island is 4,482.

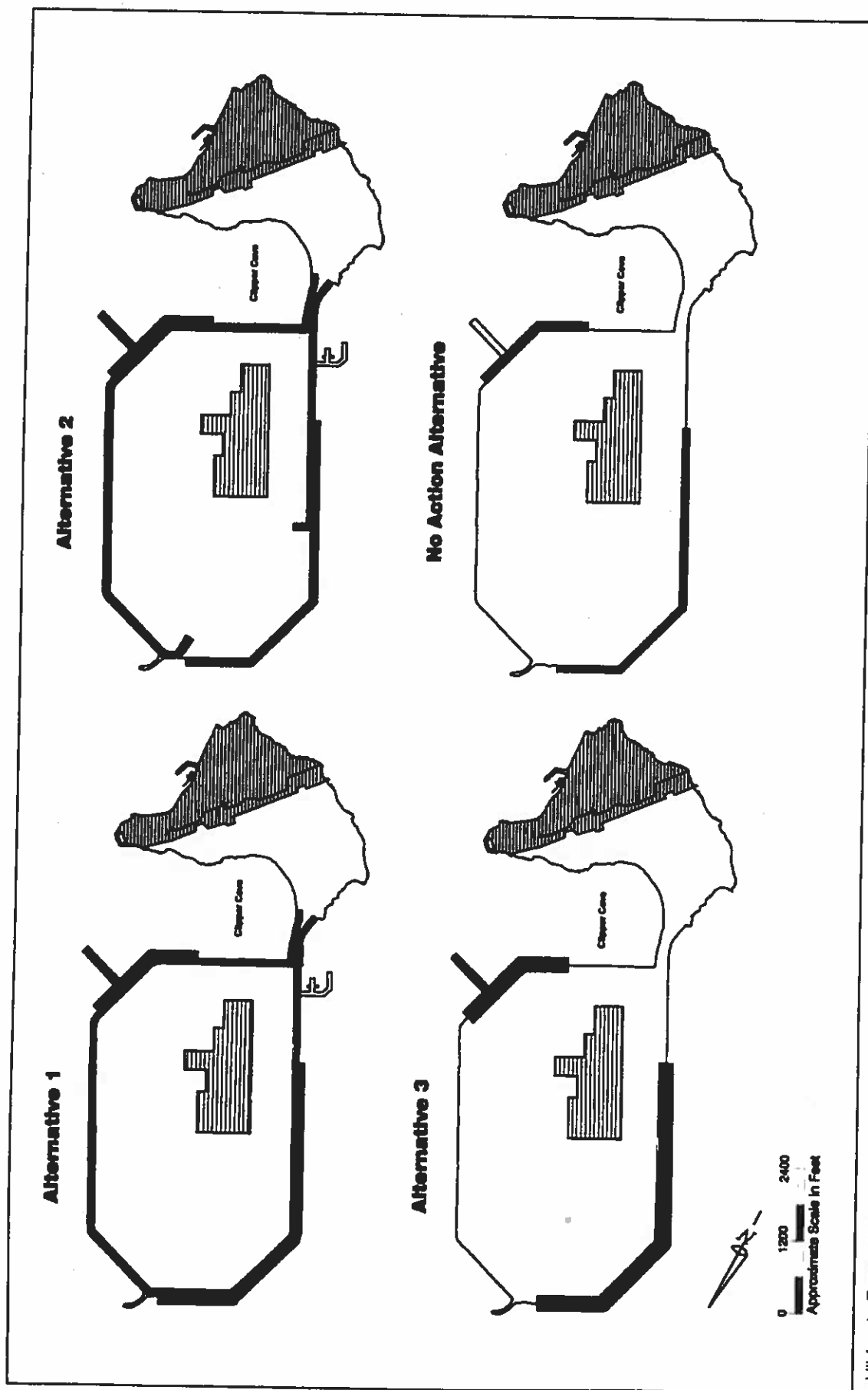
Publicly oriented uses on Yerba Buena Island would include a 150-room hotel, conference facilities, and a restaurant, and would generate approximately 168 new jobs. The approximately 100-slip Clipper Cove Marina would be expanded to 300 slips and 100 tie-up buoys, and a new 20,000 square-foot (1,858 square-meter [m²]) yacht club would be developed. Existing structures also would be reused for publicly oriented activities, such as a conference and reception center, and these buildings would be seismically upgraded.

Residential Uses

Alternative 1 proposes 137 acres (55 ha) of residential uses. Unlike the rejected Residential Neighborhood Alternative, this alternative has mixed uses including the themed attraction discussed above. On Treasure Island, about 200 of the approximately 900 existing housing units would be reused, and about 2,300 units would be built. On Yerba Buena Island, approximately 100 units of existing housing would remain in use, and 250 units would be built. The Torpedo building (Building 262) would be reused as live-work units. The total number of housing units associated with this reuse alternative would be about 2,850. TIHDI initially would manage the leasing of 375 units from the existing housing stock on the two islands, with promise of additional land for TIHDI housing if new housing is developed.

Institutional

Alternative 1 proposes 40 acres (16 ha) of institutional and community uses on Treasure Island, generating an estimated 200 jobs. A new wastewater treatment plant would be built to replace the existing plant. A new police station and a new fire station also would replace those existing on Treasure Island; these facilities and an existing fire station on Yerba Buena Island would be staffed with fire, paramedic, and police personnel. The elementary school, child development center, fire training school, and brig would be retained and reused, for their original uses, with some modifications.



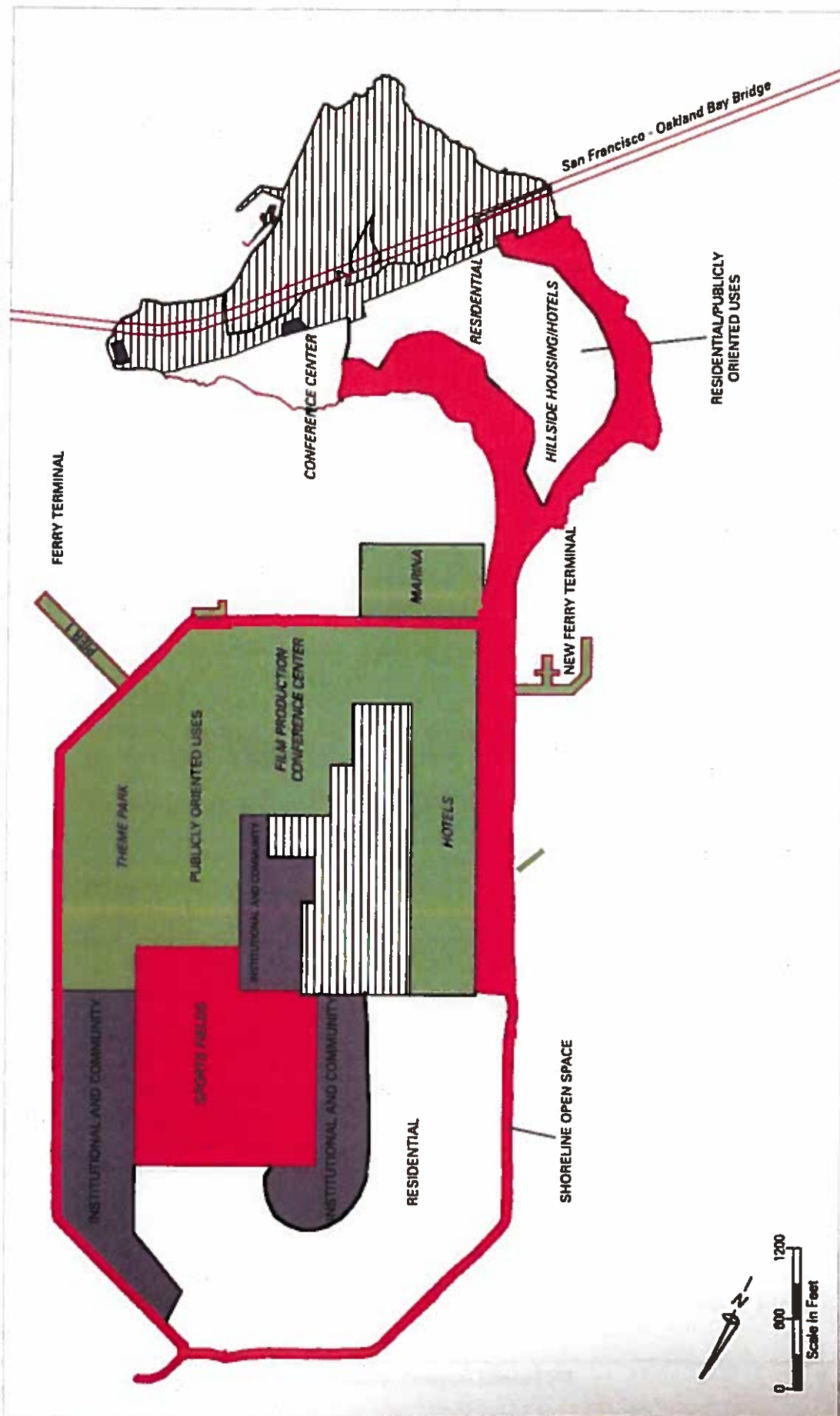
Stabilizing the Treasure Island causeway shoreline to reduce earthquake-induced lateral spreading would vary under each alternative. Full scale stabilization under Alternative 1 would be achieved by sinking rows of stone columns within 50-foot wide band along the shoreline and soil cement columns in the 8,700 linear feet of shoreline that is subject to rotational dike failure. There would be no stabilization under the No Action Alternative.

Extent of Perimeter and Seismic Stabilization

Naval Station Treasure Island, California

Source: CCSF 1998e

Figure 2-2



Alternative 1 Land Uses
 Naval Station Treasure Island, California

Figure 2-3

Source: CCSF 1988e; Developed by CCSF 1997

Open Space and Recreation Uses

Alternative 1 proposes 118 acres (48 ha) of open space and recreation uses on NSTI. The existing Treasure Island shoreline open space would be widened from 25 to 50 feet (7.5 to 15 m) to approximately 100 feet (30 m) and would feature a bikeway and pedestrian path. The proposed perimeter band would surround Treasure Island and would be linked to a series of parks, plazas, greens, and overlooks. The existing fitness center and gym would be retained, and there would be new spectator and competitive sports facilities. The majority of this area would consist of open playing fields for soccer, basketball courts, and tennis courts expected to generate 7 new jobs. Beach areas and picnic grounds at the foot of the cove would be retained, and existing mudflats would remain for shorebird forage and habitat. The hillside open space extending to the water on Yerba Buena Island's steep side, including interspersed native habitat, would remain as open space.

2.4.3 Alternative 2

Redevelopment under Alternative 2 is similar to Alternative 1, but less extensive. This alternative emphasizes open space and recreation and publicly oriented uses but on a smaller scale. Figure 2-4 identifies proposed land uses for Alternative 2. Table E-3 in Appendix E provides detailed assumptions for this alternative.

Under Alternative 2, open space and recreation land uses would occupy 58 percent of NSTI acreage, publicly oriented 33 percent, residential 5 percent, and institutional and community services 4 percent (see Figure 2-1 and Table 2-2). The existing housing would be reused initially. No new housing would be built on Treasure Island. An 18-hole golf course would occupy the present housing area on the northern part of the island.

Regarding seismic upgrade, except for the golf course area, full-scale perimeter dike improvements would be implemented around Treasure Island (see Figure 2-2). Extending a stone column dike reinforcement on the east to beyond Building 461 and on the west to 9th Street would reduce damage to structures, such as the brig and fire training center, in the event of an earthquake. Where dike improvements would end, an approximately 500-foot (152-m) soil cement column would be extended into the island (see Figure 2-2). The utility corridor would be constructed around the perimeter of Treasure Island, but it would not extend along the perimeter adjacent to the proposed golf course.

Publicly Oriented Uses

Alternative 2 proposes 152 acres (62 ha) of publicly oriented uses. A themed attraction would draw up to approximately 5,500 daily visitors and would employ approximately 1,400 seasonal and permanent employees (700 full-time equivalent jobs). As with Alternative 1, this themed attraction would be similar to Disneyland, with lighting displays, some tall structures, such as a roller coaster, and at least one landmark structure assumed to be up to 100 feet (305 m) tall. However, maximum building density at the themed attraction would be less dense and would include more open space and landscaping. Development would include a 700-room and 500-room hotel, a 5,000-seat amphitheater, and an entertainment and retail center. The total number of jobs expected to be generated by publicly oriented uses on Treasure Island is 2,513.

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The Clipper Cove Marina would be expanded to have 500 to 675 slips and tie-up buoys. Existing facilities (e.g., Senior Officers Quarters 1 through 7) would be reused for publicly oriented uses, such as a 100,000 square-foot (9,290 m²) conference and reception center or bed and breakfast facilities. The Torpedo building (Building 262) would be reused as a restaurant. The number of jobs expected to be generated by publicly oriented uses on Yerba Buena Island is 180.

Residential Uses

Alternative 2 proposes 21 acres (8 ha) of residential uses. On Treasure Island, all housing would eventually be demolished. There may be replacement homeless housing for TIHDI to manage and lease elsewhere off-island. On Yerba Buena Island, approximately 50 existing housing units would remain and approximately 200 new units would be added, for a total of about 250 units.

Institutional and Community Uses

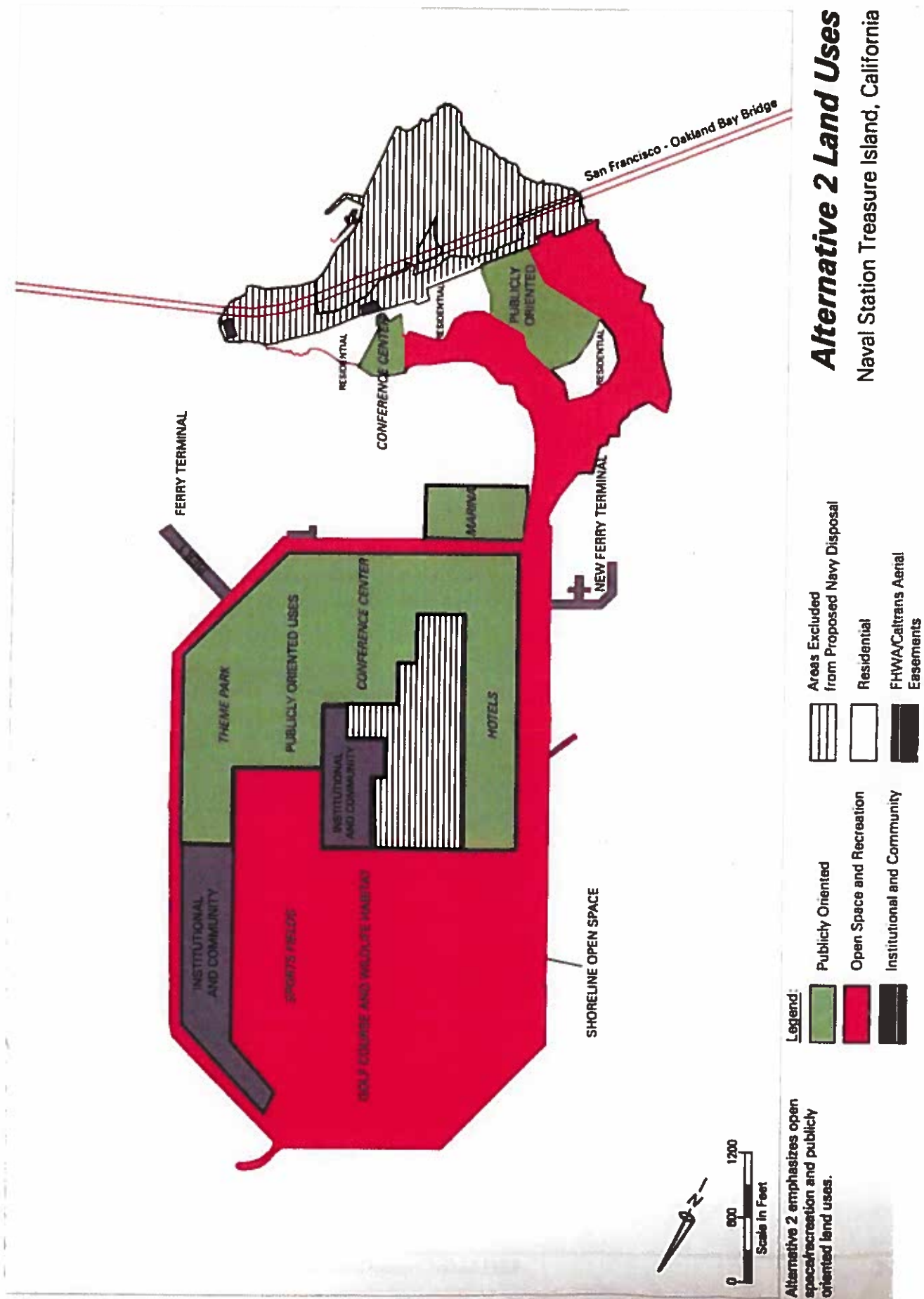
Alternative 2 proposes 18 acres (7 ha) of institutional and community uses on Treasure Island, generating an estimated 103 jobs. A new wastewater treatment plant would be built to replace the existing plant. Wetlands also could be constructed for treating stormwater runoff (see description below under Open Space and Recreation Uses). The elementary school and the child development center would ultimately be removed. A new fire station and police station would be built; these facilities and an existing fire station on Yerba Buena Island would be staffed with fire, paramedic, and police personnel. The brig and the fire training school would remain and be reused, for their original uses, with some modifications. The fire training school would be modified to include passenger aircraft fire-fighting training.

Open Space and Recreation Uses

Alternative 2 proposes 259 acres (104 ha) of open space and recreation uses. Similar to Alternative 1, the shoreline open space would be widened to approximately 100 feet (30 m) and would feature a bikeway and pedestrian path. An 18-hole golf course would be developed on the northern half of Treasure Island. An approximately 20-acre (8-ha) area near the proposed golf course would be set aside for wildlife habitat, for wildlife observation, and possibly for wetlands. There are no wetlands on NSTI. If wetlands were proposed, the type of wetlands would need to be defined and further studies conducted as part of site-specific environmental documentation. Wetlands could be introduced and analyzed as part of proposed infrastructure (e.g., stormwater system) improvements. The hillside open space extending to the water on Yerba Buena Island's steep side, including interspersed native habitat, would remain as open space.

2.4.4 Alternative 3

Alternative 3 represents the scenario where little new development would occur, and existing facilities would be reused. The wastewater treatment facility would be retained, and the existing housing and other structures would be reused. Building upgrades would include rehabilitation to meet life safety requirements recommended by the Federal Emergency



Source: CCSF 1996e; Developed by CCSF 1997

Figure 2-4

Management Agency (FEMA)-178 evaluations and other code requirements. Minimal development would occur.

Figure 2-5 identifies proposed land uses for Alternative 3. Table E-4 in Appendix E provides detailed assumptions for this alternative. Under Alternative 3, open space and recreation land uses would occupy 31 percent of NSTI acreage, residential 32 percent, publicly oriented 27 percent, and institutional and community services 10 percent (see Figure 2-1 and Table 2-2). Reuse under this alternative could include uses similar to those under existing leasing actions, such as film production, the conference center, fire-fighting school, marina, and elementary school. These uses would continue through 2015 under this alternative.

Seismic upgrade dike improvements would occur along those areas of Treasure Island subject to rotational dike failure (Figure 2-2).

Publicly Oriented Uses

Alternative 3 proposes 122 acres (49 ha) of publicly oriented uses. A themed attraction would reuse existing facilities and draw up to an average of approximately 2,740 daily visitors and employ up to approximately 700 seasonal and permanent workers (350 full-time equivalent jobs). Compared to Alternatives 1 and 2, the themed attraction would be much smaller in size with less extensive development. It would include at least one landmark structure assumed to be up to 100 feet (305 m) tall, and other new buildings would be similar in height to existing conditions.

On Yerba Buena Island, the Nimitz Conference Center (Building 140) would be reused, and the Torpedo building (Building 262) would be reused as a restaurant (building numbers are shown on Figure E-1 in Appendix E). On Treasure Island, the Fogwatch Restaurant (Building 227) would continue to be a restaurant and the existing film production uses would be expanded. Building 450 would be reused either for film production or for other publicly oriented uses, such as mixed use or office space. The existing marina would be retained but would not be expanded, and a new 20,000 square-foot (1,858 m²) yacht club would be developed. The number of jobs expected to be generated by publicly oriented uses on Treasure Island is 1,736.

On Yerba Buena Island, Quarters 1-7 would be reused for conference and reception and lodging. The number of jobs expected to be generated by publicly oriented uses on Yerba Buena Island is 180.

Residential Uses

Alternative 3 proposes 143 acres (58 ha) of residential uses. On Treasure Island, approximately 900 existing housing units (as well as approximately 75 beds in barracks) would be reused, but no new units would be constructed. Approximately 200 units of the existing housing units would be made available to TIHDI for leasing. On Yerba Buena Island, approximately 100 units would be reused, and about 70 housing units would be constructed by 2015. The number of housing units associated with this alternative would be approximately 1,100.

Institutional and Community Uses

Alternative 3 proposes 43 acres (17 ha) of institutional and community uses on Treasure Island, generating an estimated 276 jobs. Some of the same institutional and community facilities identified under Alternative 1 would be retained under this alternative, such as the school, the brig, the fire-fighting training school, and the fire station. A new police station would be constructed on Treasure Island. The fire and police facilities, including an existing fire station on Yerba Buena Island, would be staffed with fire, paramedic, and police personnel. The existing wastewater treatment plant would continue to be used. This alternative would include 4 acres (1.5 ha) of warehouse use.

Open Space and Recreation Uses

Alternative 3 proposes 142 acres (57 ha) of open space and recreation uses. Similar to Alternative 1, the shoreline open space would be widened to approximately 100 feet (30 m) and would feature a bikeway and pedestrian path. Existing indoor recreation facilities, such as the gym and fitness center, would become part of a larger sports facility. A series of open spaces would be created north of Building 1. The hillside open space extending to the water on Yerba Buena Island's steep side, including interspersed native habitat, would remain as open space.

2.4.5 No Action Alternative

No action may be defined as the continuation of an existing plan, policy, or procedure or as failure to implement an action. The No Action Alternative provides a benchmark to compare the magnitude of the environmental effects of the various alternatives.

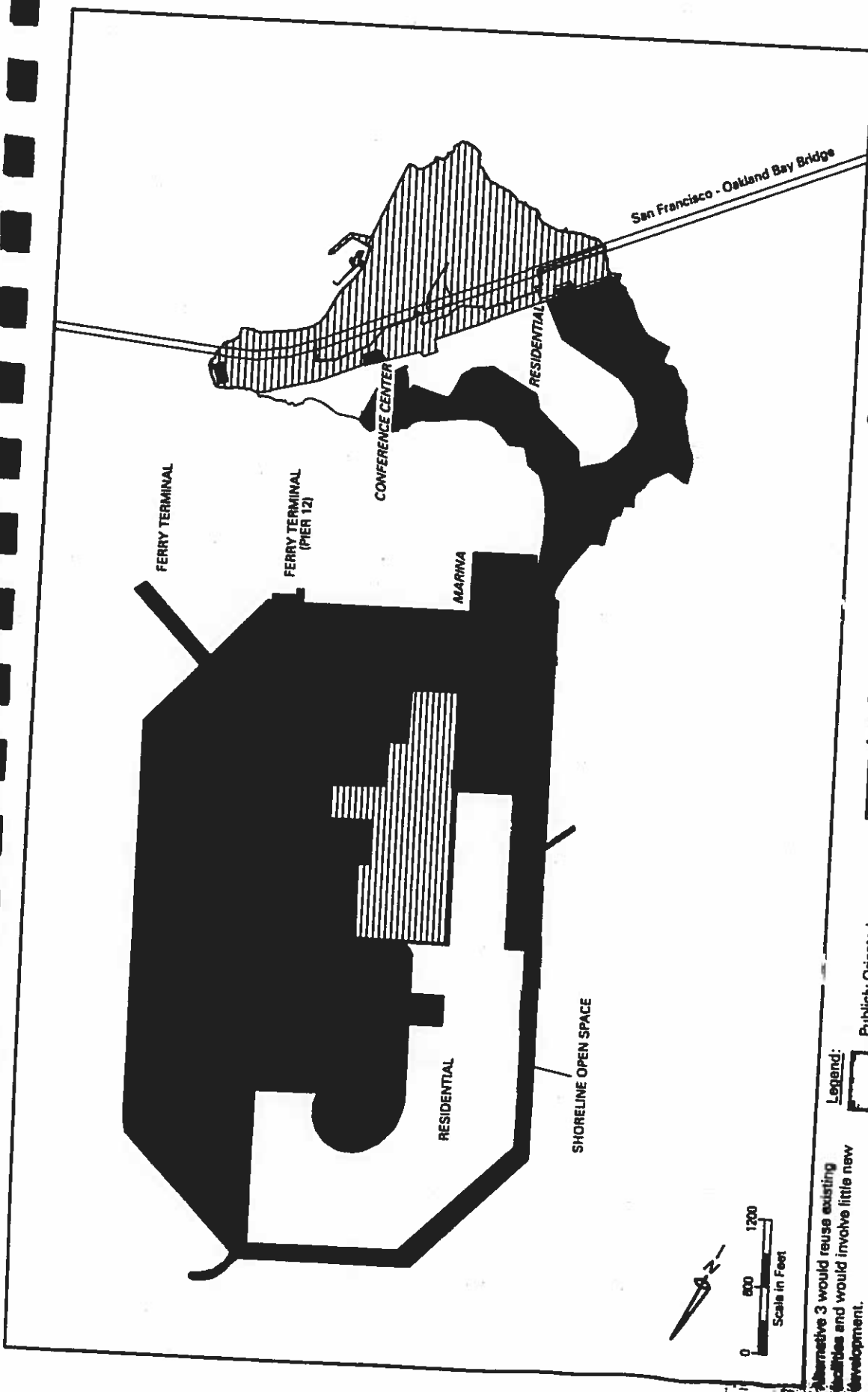
Under the No Action Alternative, Navy would retain ownership of NSTI. Except for existing building leases, all buildings would remain vacant, and all other facilities would remain but would be unused. Existing interim uses on NSTI include film production facilities, residential housing, a marina, a fire-fighting school, special events and meeting center, warehouses, and multipurpose office space. No new leases would be entered into under the No Action Alternative, and existing leases would continue until they expire or are terminated.

The property would be held in an inactive or caretaker status, as discussed in Chapter 1. Navy and San Francisco executed a cooperative agreement in April 1997 and amended it in September 1997. Under this agreement, San Francisco is responsible for providing those caretaker services. Site environmental cleanup would continue until completed. No construction would occur under this alternative, except as allowed by existing lease authorization. Approximately 50 persons are assigned to perform caretaker activities.

2.5 PREFERRED ALTERNATIVE

Navy has selected Alternative 1 as the preferred alternative because it best reflects the Draft Reuse Plan, and would result in no significant unavoidable adverse effects.

NEPA also requires that an environmentally preferable alternative be identified. The No Action Alternative would have no significant impacts, and for NEPA purposes it would be the environmentally preferable alternative. However, the No Action Alternative would not meet



Alternative 3 would reuse existing facilities and would involve little new development.

Legend:

- Publicly Oriented
- Areas Excluded from Proposed Navy Disposal
- Open Space and Recreation
- Residential
- Institutional and Community
- FHWA/Caltrans Aerial Easement

Alternative 3 Land Uses

Naval Station Treasure Island, California

Source: CCSF 1996e; Developed by CCSF 1997

Figure 2-5

the Navy's goals of property disposal and rapid economic recovery consistent with DBCRA 1990 and the Department of Defense Rule on Revitalizing Base Closure Communities-Base Closure Community Assistance (DoD Rule) (32 C.F.R. Part 175 [1998]). It also would not be consistent with former President Clinton's Five-Part Plan for Revitalizing Base Closure Communities, which emphasizes local economic redevelopment of closing military facilities and creation of new jobs as the means to revitalize these communities (32 C.F.R. Part 174 [1998]). The No Action Alternative would result in continued caretaker activities; therefore, socioeconomic gains in terms of new jobs and increased revenue in the region would not be realized.

2.6 PERMIT REQUIREMENTS AND RELATED COORDINATION

Approvals and permits would be required for disposal and subsequent reuse of NSTI. Table 2-3 lists the federal, state, and local permits, policies, and actions that may be required and lists the agencies that may use the information presented in the EIS to make decisions regarding issuance of permits or approvals.

2.7 COMPARISON OF ALTERNATIVES, INCLUDING IMPACTS AND MITIGATION

NEPA requires that the EIS include a presentation of the alternatives in comparative form, to define the issues and to provide a clear basis for choice among options by the decision-makers and the public. Table 2-4 lists potential significant impacts and corresponding mitigation measures for each alternative. Impacts that are not significant are described in Chapter 4 but are not included on this table.

Navy cannot control reuse after the property is conveyed from federal ownership; therefore, implementation of mitigation measures for reuse-related environmental impacts would be the responsibility of the LRA and not the responsibility of Navy.

Implementation of suggested mitigation measures would reduce all impacts to a level below significant except for impacts on cultural resources under Alternative 2. Implementation of Alternative 2 would require demolition of Building 2 and Building 3 on Treasure Island, buildings eligible for listing on the National Register of Historic Places (NRHP). This would result in the loss of significant historic resources. This adverse effect can be lessened or reduced by recording the affected resources to the standards of Historic American Buildings Survey (HABS)/Historic American Engineering Record (HAER), but recordation would not eliminate the adverse effect caused by the demolition of NRHP-eligible resources.

Table 2-3. Permits or Actions Potentially Required

Issuing Agency	Permit or Action	Requirement
Permits Required Prior to Disposal		
U.S. Environmental Protection Agency; California Department of Toxic Substances Control	CERCLA, 42 U.S.C. §§ 9601-9675	Requires deed that contains hazardous substance information and covenant warranting necessary remedial action has been taken or, in an early transfer, deferral with governor's approval.
San Francisco Bay Regional Water Quality Control Board (SFBRWQCB)	Porter-Cologne Water Quality Control Act (Cal. Water Code §§ 13000-13999.19)	Compliance with remedial action plans relative to groundwater.
State Historic Preservation Officer/ Advisory Council on History Preservation	National Historic Preservation Act, Section 106 Compliance, 16 U.S.C. § 470f (West 1985 & Supp. 1998)	Requires a memorandum of agreement to mitigate impacts to NSTI historic buildings.
Permits Related to Reuse/Responsibility of Local Reuse Authority		
San Francisco Bay Conservation and Development Commission	McAteer-Petris Act, Cal. Gov't Code §§ 66600-66682 (West 1997 & Supp. 1999) and San Francisco Bay Plan	Permit for fill, dredging, and construction in shoreline band.
U.S. Environmental Protection Agency; U.S. Army Corps of Engineers	Clean Water Act, Section 404, 33 U.S.C. § 1344 River and Harbors Act, Sections 9 and 10, 33 U.S.C. §§ 401, 403	Permit required for discharging dredged material, placing fill and pilings in waters of the U.S. Permit required for construction in navigable waters of the U.S.
Bay Area Air Quality Management District	Permit to Construct and Permit to Operate	Depends on specific future construction/operation activities
U.S. Environmental Protection Agency; San Francisco Bay Regional Water Quality Control Board	National Pollutant Discharge Elimination System (NPDES) Permit under Clean Water Act Section 402, 33 U.S.C. § 1342	Required for discharge of pollutants from any point source in waters of the U.S. and for stormwater discharges associated with industrial activity and from large and medium municipal storm sewer systems. US EPA must endorse NPDES permits issued by the RWQCB.
US Coast Guard	Aid to Navigation Permit	Permit required for navigational hazards.
City and County of San Francisco	EIR certification Adopt mitigation monitoring program General plan amendments Consistency with Priority Policies Building and demolition permits Redevelopment Plan adoption	Various permits and approvals required to accommodate proposed reuse development.

Table 2-4. Summary of Potential Significant Environmental Consequences and Mitigation Measures
(Page 1 of 16)

Resource Area	Alternative 1	Alternative 2	Alternative 3	No Action Alternative
Land Use	<i>Impact: Land use policy.</i> The zone classifications that would be required for Alternative 1 would be inconsistent with the existing San Francisco General Plan designation and zoning classification.	<i>Impact: Land use policy.</i> Similar to that described for Alternative 1.	<i>Impact: Land use policy.</i> Similar to that described for Alternative 1.	No impacts are expected.
	<i>Mitigation:</i> To achieve consistency between the selected reuse alternative and city policies, it will be necessary to amend the San Francisco General Plan to include land use designations for surplus property on Treasure Island and Yerba Buena Island prior to approving future land use actions.	<i>Mitigation.</i> Mitigation measures would be the same as described for Alternative 1.	<i>Mitigation.</i> Mitigation measures would be the same as described for Alternative 1.	
Visual Resources	No significant impacts are expected.	No significant impacts are expected.	No significant impacts are expected.	No significant impacts are expected.
Socioeconomics	No significant impacts are expected.	No significant impacts are expected.	No significant impacts are expected.	No significant impacts are expected.
Cultural Resources	No significant impacts are expected.	<i>Impact: Alteration or demolition of historic resources.</i> Alternative 2 involves the demolition of Building 2 and Building 3 on Treasure Island, both of which are eligible for listing on the NRHP.	No significant impacts are expected.	No impacts are expected.

Table 2-4. Summary of Potential Significant Environmental Consequences and Mitigation Measures
(Page 2 of 16)

Resource Area	Alternative 1	Alternative 2	Alternative 3	No Action Alternative
Cultural Resources (continued)		<i>Mitigation:</i> The irreversible loss of significant historic resources cannot be fully mitigated. HABS/HAER recordation would reduce but would not eliminate significant impacts caused by demolition.		
Transportation	<i>Impact:</i> Increased volumes and queuing on SFOBB/I-80 Yerba Buena Island westbound on-ramp (west side). Alternative 1 would result in peak-hour traffic volumes on the SFOBB/I-80 Yerba Buena Island westbound on-ramp on the west side of Yerba Buena Island that would exceed the current ramp capacity of 330 vph. The projected demand would result in a queue ranging from 7 vehicles (during the AM peak hour) to 239 vehicles (during the weekend midday peak hour). This queue would constrain vehicular circulation on the island.	No significant impacts are expected for increased volumes and queuing on SFOBB/I-80 Yerba Buena Island westbound on-ramp (west side).	No significant impacts are expected for increased volumes and queuing on SFOBB/I-80 Yerba Buena Island westbound on-ramp (west side).	No impacts are expected.
	<i>Mitigation:</i> SFOBB/I-80 Yerba Buena Island on-ramps are substandard by current Caltrans standards, primarily in acceleration/deceleration lengths, ramp radii, and sight distances.			

Table 2-4. Summary of Potential Significant Environmental Consequences and Mitigation Measures
(Page 3 of 16)

Resource Area	Alternative 1	Alternative 2	Alternative 3	No Action Alternative
Transportation (continued)	<p>Upgrading the on-ramps would increase ramp capacity and level of operation and decrease queuing impacts. However, upgrades to the on-ramps may be constrained by the geology of the site (elevation change and bedrock) and structural limitations due to the viaduct.</p> <p>Implement measures, including signage and notices to residents, to encourage residents and visitors to use the second westbound on-ramp east of the Yerba Buena Island tunnel.</p> <p>Redirecting traffic during the weekend midday peak hour to the second on-ramp east of the Yerba Buena Island tunnel would reduce the queue at the first westbound on-ramp.</p>			

Table 2-4. Summary of Potential Significant Environmental Consequences and Mitigation Measures
(Page 4 of 16)

Resource Area	Alternative 1	Alternative 2	Alternative 3	No Action Alternative
Transportation (continued)	<p>Implement a Travel Demand Management (TDM) program to further reduce traffic generation during peak hours, especially during the weekend.</p> <p>Implement additional or enhanced TDM measures, such as discounted ferry passes, flex-time, public relations campaigns, and giving employees working on Treasure Island or Yerba Buena Island preferential access to housing on NSTI, to encourage ferry use or to encourage vehicle-trips during the nonpeak period to reduce queues on both westbound on-ramps to tolerable levels.</p> <p>Monitor NSTI ramp traffic volumes to ensure that the transportation goals and objectives established by the Draft Reuse Plan are successfully implemented.</p> <p>Monitor NSTI bus transit demand on an annual basis (or at each phase of development) and ensure that planned services are implemented to meet or exceed demand. Implement a similar monitoring program for ferry demand.</p>			

Table 2-4. Summary of Potential Significant Environmental Consequences and Mitigation Measures
(Page 5 of 16)

Resource Area	Alternative 1	Alternative 2	Alternative 3	No Action Alternative
Transportation (continued)	Restripe the portion of Treasure Island Road between the Main Gate and the westbound on-ramp on the west side of the Yerba Buena Island tunnel from two lanes to accommodate three traffic lanes.			
	<i>Impact: Increased volumes and queuing on SFOBB/I-80 Yerba Buena Island eastbound off-ramp (west side). Alternative 1 would result in a substantial increase in traffic volumes on the eastbound off-ramp on the west side of Yerba Buena Island that would exceed the practical capacity of the off-ramp (500 vph), resulting in a maximum queue of 36 vehicles, or about 700 feet (219 m) on the SFOBB.</i>	No significant impacts are expected for increased volumes and queuing on SFOBB/I-80 Yerba Buena Island eastbound off-ramp (west side).	No significant impacts are expected for increased volumes and queuing on SFOBB/I-80 Yerba Buena Island eastbound off-ramp (west side).	No impacts are expected.
	<i>Mitigation: Use traffic control measures, such as signage, to encourage eastbound motorists to use the second Yerba Buena off-ramp (the off-ramp on the east side of Yerba Buena Island). Implement TDM and monitoring measures to reduce traffic volumes on this off-ramp.</i>			

Table 2-4. Summary of Potential Significant Environmental Consequences and Mitigation Measures
(Page 6 of 16)

Resource Area	Alternative 1	Alternative 2	Alternative 3	No Action Alternative
Transportation (continued)	<p><u>Impact: Increased volumes on SFOBB/I-80 Yerba Buena Island eastbound on-ramp (east side).</u> Alternative 1 would result in substantial increases in traffic volumes during the weekend midday peak hour on the eastbound on-ramp on the east side of Yerba Buena Island. While the increased volumes would be accommodated by the upgrade of this ramp as part of the SFOBB East Span project, it may create a secondary impact on potential traffic delays on SFOBB.</p> <p><u>Mitigation:</u> Caltrans should consider the installation of a ramp metering device in the future if the added traffic onto this on-ramp would cause significant traffic delay on SFOBB mainline.</p>	<p>No significant impacts are expected for increased volumes on SFOBB/I-80 Yerba Buena Island eastbound on-ramp (east side).</p>	<p>No significant impacts are expected for increased volumes on SFOBB/I-80 Yerba Buena Island eastbound on-ramp (east side).</p>	<p>No impacts are expected.</p>
	<p><u>Impact: Increased peak spreading on SFOBB/I-80.</u> Under Alternative 1, increased traffic onto and off of the SFOBB during the AM peak period (6:30 to 9:30) and PM peak period (3:30 to 6:30) would cause westbound traffic on certain segments of the SFOBB to deteriorate from LOS D to LOS F during the last hour of the AM peak period (8:30 to 9:30) and to deteriorate from LOS B to LOS E</p>	<p><u>Impact: Increased peak spreading on SFOBB/I-80.</u> Under Alternative 2, increased traffic onto and off of the SFOBB during the AM peak period (6:30 to 9:30) and PM peak period (3:30 to 6:30) would cause westbound traffic on certain segments of the SFOBB to deteriorate from LOS D to LOS E or LOS F</p>	<p><u>Impact: Increased peak spreading on SFOBB/I-80.</u> Under Alternative 3, increased traffic onto and off of the SFOBB during the AM peak period (6:30 to 9:30) and PM peak period (3:30 to 6:30) would cause westbound traffic on certain segments of the SFOBB to deteriorate from LOS D to LOS F during the last hour of the AM peak</p>	<p>No impacts are expected.</p>

Table 2-4. Summary of Potential Significant Environmental Consequences and Mitigation Measures

(Page 7 of 16)

Resource Area	Alternative 1	Alternative 2	Alternative 3	No Action Alternative
	or LOS F during the first hour of the PM peak period (3:30 to 4:30).	during the last hour of the AM peak period (8:30 to 9:30) and to deteriorate from LOS B to LOS F during the first hour of the PM peak period (3:30 to 4:30).	period (8:30 to 9:30) and to deteriorate from LOS B to LOS E or LOS F during the first hour of the PM peak period (3:30 to 4:30).	
	Mitigation. Monitor traffic volumes at each phase of development and if it is determined that traffic from NSTI is constraining the capacity of the SFOBB, either more aggressive TDM and transit improvements must be implemented or additional developments should be delayed until such improvements are implemented.	Mitigation. Mitigation measures would be the same as described for Alternative 1.	Mitigation. Mitigation measures would be the same as described for Alternative 1.	
	Impact: Transit operations – bus service to East Bay. Lack of direct bus service between NSTI and the East Bay is a significant and mitigable impact.	Impact: Transit operations – bus service to East Bay. The impact would be similar to that described under Alternative 1.	Impact: Transit operations – bus service to East Bay. The impact would be less than that described under Alternative 1 but would remain significant but mitigable.	No impacts are expected.

Table 2-4. Summary of Potential Significant Environmental Consequences and Mitigation Measures
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Resource Area	Alternative 1	Alternative 2	Alternative 3	No Action Alternative
Transportation (continued)	<p><i>Mitigation:</i> Establishing direct transit service between NSTI and the East Bay would mitigate this impact to a not significant level. Bus service would need to be at 10-minute headways (the interval between the trips of 2 successive vehicles) throughout the day during the weekday and at 15-minute headways throughout the day during the weekend.</p> <p>Monitor NSTI bus transit demand on an annual basis (or at each phase of development) and ensure that planned services are implemented to meet or exceed demand.</p> <p>Implement TDM measures to encourage transit rather than auto use.</p>	<p><i>Mitigation:</i> Mitigation measures would be the same as described for Alternative 1. However, at build-out, bus service would need to be at 15-minute headways throughout the day during both weekdays and weekends.</p>	<p><i>Mitigation:</i> Mitigation measures would be the same as described for Alternative 1. However, at build-out, bus service would need to be at 20-minute headways throughout the day during weekdays and 15-minute headways throughout the day during weekends.</p>	
Air Quality	No significant impacts are expected.	No significant impacts are expected.	No significant impacts are expected.	No impacts are expected.
Noise	No significant impacts are expected.	No significant impacts are expected.	No significant impacts are expected.	No impacts are expected.

Table 2-4. Summary of Potential Significant Environmental Consequences and Mitigation Measures
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Resource Area	Alternative 1	Alternative 2	Alternative 3	No Action Alternative
Biological Resources	<p><u>Impact: Mudflat Habitat Disturbance.</u> Significant impacts to mudflat habitat, including eelgrass beds, may occur as a result of increased pedestrian and boating activity around Clipper Cove. Expanding the marina or constructing a yacht harbor, new docks, or other structures that would cover the surface of the water would impact Waters of the United States but would require a permit from the BCDC and the COE.</p> <p><u>Mitigation:</u> Minimize disturbance to sensitive habitats during construction. Prepare and implement a plan to minimize disturbance of sensitive habitats due to recreational activity. Permittee could be required to post signs along the shore adjacent to the mudflats and at the marina to inform pedestrians and recreational boaters that the mudflats are a protected sensitive area and that trespassing is not permitted. Buoys could be placed in the bay to identify the restricted mudflat area. A 5-mph (8 kph) zone could be established in Clipper Cove to minimize shoreline and mudflat</p>	<p><u>Impact: Disturbance to sensitive mudflat habitat.</u> The impacts on mudflat habitat associated with pedestrians and boating activity would be similar, but reduced, from that described for Alternative 1. Pedestrian impacts would be approximately half of Alternative 1 while boating traffic impacts would be approximately 20 percent higher than Alternative 1.</p> <p><u>Mitigation.</u> Mitigation measures would be the same as described for Alternative 1.</p>	<p><u>Impact: Mudflat Habitat Disturbance.</u> The impacts on mudflat habitat associated with pedestrians and boating activity would be reduced from that described for Alternative 1 but would remain significant but mitigable.</p> <p><u>Mitigation:</u> Mitigation measures would be the same as described for Alternative 1.</p>	No impacts are expected.

Table 2-4. Summary of Potential Significant Environmental Consequences and Mitigation Measures
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Resource Area	Alternative 1	Alternative 2	Alternative 3	No Action Alternative
Biological Resources (continued)	<p>erosion. Any impacts related to construction or fill would be addressed during the COE Section 404 permitting process.</p> <p><u>Impact: Pedestrian and Boating Impacts on Migratory Birds.</u> Increased pedestrian and boating activity around Clipper Cove could have a significant impact on shorebirds by affecting mudflats and eelgrass beds where shorebirds forage.</p>	<p><u>Impact: Pedestrian and Boating Impacts on Wading Shorebirds.</u> Increased pedestrian and boating activity around Clipper Cove could have a significant impact on shorebirds by affecting mudflats and eelgrass beds where shorebirds forage. Pedestrian impacts would be approximately half of Alternative 1 while boating traffic impacts would be approximately 20 percent higher than Alternative 1.</p>	<p><u>Impact: Pedestrian and Boating Impacts on Wading Shorebirds.</u> Increased pedestrian and boating activity around Clipper Cove could have a significant impact on shorebirds by affecting mudflats and eelgrass beds where shorebirds forage. These impacts are likely to be reduced under Alternative 3 as there would be less of an increase in boating traffic compared with Alternative 1.</p>	No impacts are expected.

Table 2-4. Summary of Potential Significant Environmental Consequences and Mitigation Measures
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Resource Area	Alternative 1	Alternative 2	Alternative 3	No Action Alternative
Biological Resources (continued)	<p><i>Mitigation.</i> In conjunction with permitting by COE and BCD, permittees could be required to post signs along the shore adjacent to the mudflats and at the marina, informing pedestrians and boaters that the mudflats are a protected and sensitive area. Placing buoys in the bay, identifying the mudflat area as restricted, and establishing a five-mph (8 kph) zone in Clipper Cove could also reduce impacts.</p>	<p><i>Mitigation.</i> Mitigation measures would be the same as described for Alternative 1.</p>	<p><i>Mitigation.</i> Mitigation measures would be the same as described for Alternative 1.</p>	
	<p><i>Impact: Pedestrian and Boating Impacts on EFH.</i> Increased boat and pedestrian activity around Clipper Cove could have an indirect significant impact on EFH by degrading eelgrass vegetated areas and shallow water and mudflat areas that provide important fish spawning, rearing, and foraging habitat.</p>	<p><i>Impact: Pedestrian and Boating Impacts on EFH.</i> Increased pedestrian and boating activity around Clipper Cove and along the perimeter of the islands could have a significant impact on EFH, as described under Alternative 1.</p>	<p><i>Impact: Pedestrian and Boating Impacts on EFH.</i> Increased pedestrian and boating activity around Clipper Cove and along the perimeter of the islands could have a significant impact on EFH, as described under Alternative 1.</p>	<p>No impacts are expected.</p>
	<p><i>Mitigation.</i> Proposed mitigation measures are the same as those discussed under impacts to mudflat habitat above.</p>	<p><i>Mitigation.</i> Mitigation measures would be the same as described for Alternative 1.</p>	<p><i>Mitigation.</i> Mitigation measures would be the same as described for Alternative 1.</p>	

Table 2-4. Summary of Potential Significant Environmental Consequences and Mitigation Measures
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Resource Area	Alternative 1	Alternative 2	Alternative 3	No Action Alternative
Geology and Soils	<p><u>Impact: Exposure of individuals and property to liquefaction.</u> Seismically induced liquefaction could result in ground disturbances associated with lateral spreading and differential settlement.</p>	<p><u>Impact: Exposure of individuals and property to liquefaction.</u> Seismically induced liquefaction could result in ground disturbances associated with lateral spreading and differential settlement.</p>	<p><u>Impact: Exposure of individuals and property to liquefaction.</u> Seismically induced liquefaction could result in ground disturbances associated with lateral spreading and differential settlement.</p>	<p>No impacts are expected.</p>
	<p><u>Mitigation.</u> A zone of "improved ground" would be created around the perimeter of the island to reduce lateral spreading. Interior island areas shall be similarly improved to reduce large differential settlement. All sensitive structures (e.g., buildings greater than three stories, buildings intended for public occupancy, structures supporting essential services, and buildings housing schools, medical, police, and fire facilities) shall be supported on pile systems or other specially designed foundations. Detailed geotechnical studies shall be completed in accordance with San Francisco requirements for individual development sites.</p>	<p><u>Mitigation:</u> Mitigation measures would be the same as described for Alternative 1.</p>	<p><u>Mitigation:</u> Mitigation measures would be the same as described for Alternative 1.</p>	

Table 2-4. Summary of Potential Significant Environmental Consequences and Mitigation Measures
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Resource Area	Alternative 1	Alternative 2	Alternative 3	No Action Alternative
Water Resources	<p><u>Impact: Exposure of individuals and property to ponding from high tides.</u> The installation of residential development in low-lying areas on Treasure Island would result in increased exposure of occupants, visitors, and property to ponding hazards due to seepage through the dike during some high tide events.</p>	No significant impacts are expected from exposure of individuals and property to ponding from high tides.	<p><u>Impact: Exposure of individuals and property to ponding from high tides.</u> The impact would be similar to that described for Alternative 1.</p>	No impacts are expected.
	<p><u>Mitigation:</u> Filling low-lying portions of the residential area to at least 9 feet (3 m) National Geodetic Vertical Datum (NGVD) prior to development would mitigate this impact. In addition, other low-lying areas within 500 feet (152 m) of the Treasure Island perimeter should be similarly filled before development is allowed.</p>		<p><u>Mitigation:</u> Mitigation measures would be the same as described for Alternative 1.</p>	

Table 2-4. Summary of Potential Significant Environmental Consequences and Mitigation Measures

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Resource Area	Alternative 1	Alternative 2	Alternative 3	No Action Alternative
Water Resources (continued)	<u>Impact: Exposure of individuals and property to flooding.</u> Developing and reusing Treasure Island under Alternative 1 could expose occupants, visitors, and property to flooding hazards caused by dike overtopping during storms.	<u>Impact: Exposure of individuals and property to flooding.</u> This alternative would subject residents and daily visitors on the northern half of Treasure Island, where a golf course is proposed, to existing flood hazards. Flood hazards on the southern portion of the site would be similar to those described for Alternative 1.	<u>Impact: Exposure of individuals and property to flooding.</u> Alternative 3 could subject property to substantial flooding hazards throughout Treasure Island.	No impacts are expected.
	<u>Mitigation:</u> Set back development inboard of the perimeter dike to allow room for periodic dike raising without substantially increasing Bay fill. Raise the dike as necessary to account for site settlement, changes in maximum tidal heights, and rises in sea levels. In addition, inspect the dike after each major storm to identify repair needs, and repair the dike promptly.	<u>Mitigation:</u> Mitigation measures would be the same as described for Alternative 1.	<u>Mitigation:</u> Mitigation measures would be the same as described for Alternative 1.	
Utilities	No significant impacts are expected.	No significant impacts are expected.	No significant impacts are expected.	No impacts are expected.
Public Services	No significant impacts are expected.	No significant impacts are expected.	No significant impacts are expected.	No impacts are expected.

Table 2-4. Summary of Potential Significant Environmental Consequences and Mitigation Measures
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Resource Area	Alternative 1	Alternative 2	Alternative 3	No Action Alternative
Hazardous Materials and Waste	<p><u>Impact: Installation Restoration Program (IRP).</u> Construction activities at NSTI associated with future development of the housing unit area, including demolition of existing structures, may interfere with remedial actions under CERCLA.</p>	<p><u>Impact: Installation Restoration Program (IRP).</u> Development of a golf course in the northern part of the island would involve demolition of existing structures and the grading and reconfiguring of the soil, which may interfere with remedial actions under CERCLA.</p>	<p><u>Impact: Installation Restoration Program (IRP).</u> If subsequent redevelopment of the housing area involving demolition of existing structures and the grading and reconfiguring of the soil were to occur, it may interfere with remedial actions conducted under CERCLA.</p>	No impacts are expected.
	<p><u>Mitigation.</u> The Navy is in the process of implementing various remedial actions at NSTI pursuant to and in accordance with the requirements of CERCLA and the NCP that will remove, manage, or isolate any potentially hazardous substances present on the property prior to conveyance. These remedial actions will ensure that human health and the environment will be protected based on the land uses specified in the Draft Reuse Plan. If the CERCLA remedy for a particular site includes land use controls, the acquiring entity or entities will be required to comply with the land use controls during construction or operations to ensure continued protection of human health and the environment.</p>	<p><u>Mitigation.</u> Mitigation measures would be the same as described for Alternative 1.</p>	<p><u>Mitigation.</u> Mitigation measures would be the same as described for Alternative 1.</p>	

Table 2-4. Summary of Potential Significant Environmental Consequences and Mitigation Measures

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Resource Area	Alternative 1	Alternative 2	Alternative 3	No Action Alternative
Hazardous Materials and Waste (continued)	<p>Subsequent redevelopment of the housing area which would involve demolition of existing structures and the grading and reconfiguring of the soil would likely be subject to land use controls on the property, including compliance with a City-administered soil management plan that would require soil and ground water disturbance be permitted subject to proper characterization and management.</p> <p>In addition, deeds conveying the affected property will contain a notice that areas of the property not subject to remediation efforts (such as areas beneath existing foundations) may require additional characterization and possible response actions subject to appropriate regulatory oversight. Adherence to land use controls and regulatory requirements would mitigate potentially significant impacts to an acceptable level.</p>			