SAN FRANCISCO GENERAL HOSPITAL & TRAUMA CENTER

Institutional **Master Plan**

update

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City and County of San Francisco
Department of Public Health

Fong & Chan Architects

Table of Contents

Section 1 **Introduction**
- Purpose of the IMP

Section 2 **Institutional Overview**
- Statement of Institutional Goals and Objectives
- Services Provided
  - *Ambulatory Services*
  - *Emergency Services*
  - *Diagnostic Services & Ancillary Services*
  - *Academics & Research*
- Population Characteristics
  - *Patients*
  - *Employees*
- Affirmative Action Programs
- History of Growth

Section 3 **Facilities Overview**
- Campus Description
  - *History*
  - *Campus Buildings*
- Surrounding Land Use
- Transportation Conditions
  - *Traffic*
  - *Parking*
  - *Transit*
  - *Pedestrian Conditions*
  - *Bicycle Conditions*

Section 4 **Development Objectives**
- Medical Helipad
  - *Background*
  - *Project Description*
- New Emergency Generator Capacity
  - *Background*
  - *Project Description*
- New Acute Care Hospital

Section 5 **General Plan Conformity**
Plan Development Conformity with General Plan Elements
Description of General Plan Elements
Project Description
Medical Helipad
New Emergency Generator Capacity
New Acute Care Hospital
Plan Development Conformity with Eight Priority Policies

Section 6 **Environmental Conditions**
Anticipated Impacts on the Surrounding Neighborhoods
Medical Helipad
New Emergency Generator Capacity
New Acute Care Hospital
Identification of any Alternatives to Lessen or Avoid Adverse Impacts Upon the Surrounding Neighborhood
Medical Helipad
New Emergency Generator Capacity
New Acute Care Hospital
Identification of Mitigating Actions to Lessen Adverse Impacts on the Surrounding Neighborhood
Medical Helipad
New Emergency Generator Capacity
New Acute Care Hospital

Section 7 **References**

Section 1 Introduction

Fig. 1-1
SFGH&TC as seen from McKinley Square Park

The **San Francisco General Hospital & Trauma Center (SFGH&TC)** submits this Institutional Master Plan (IMP) to update the September 2006 IMP Update **with a revision dated March 2008** currently on file with the Planning Department. **Items in bold type indicate a revision to an existing section of the document.**

Items with an orange bar indicate a completely new section added to the document.

Since 1987, there have been several modest developments on the **SFGH&TC** campus; these are described in sections 2 and 3 of this IMP Update. The remaining sections will present summary information regarding the following three future plan developments:

- Medical Helipad
- New Emergency Generator Capacity
- New Acute Care Hospital

SFGH&TC, under the mandate of Senate Bill 1953, is obligated to insure its acute care building meets established seismic standards by 2013. As a result of detailed planning analysis performed in 2004, it has been determined that retrofitting the existing acute care building would be intrusive, challenging for the hospital to remain in operation during construction, reduces available space, and that construction of a new acute care hospital facility is required; planning for which is still in development.

A full IMP that reflects all proposed plan developments and their impacts, will be prepared and submitted separately from this update. Owing to the time that will elapse before definite planning for the new hospital will be completed, this update has been prepared for the interim.

The hospital would also like to continue the dialogue and participation with the neighboring communities and the City and County of San Francisco regarding future measures and programs for the development and growth of **SFGH&TC.**

PURPOSE OF THE INSTITUTIONAL MASTER PLAN

The IMP serves to advise the Commission and the public of long-range development projects proposed by SFGH&TC; according to the three principal purposes set in Section 304.5 of the San Francisco Planning Code:

A "To provide notice and information to the Planning Commission, community and neighborhood organizations, other public and private agencies and the general public as to the plans of each affected institution at an early stage, and to give an opportunity for early and meaningful involvement of these groups in such plans prior to substantial investment in property acquisition or building design by the institution."

B "To enable the institution to make modifications to its master plan in response to comments made in public hearings prior to its more detailed planning and prior to any request for authorization by the City of new development proposed in the master plan."

C "To provide the Planning Commission, community and neighborhood organizations, other public and private agencies, the general public, and other institutions with information that may help guide their decisions with regard to use of, and investment in, land in the vicinity of the institution, provision of public services, and particularly the planning of similar institutions in order to insure that costly duplication of facilities does not occur.

Furthermore, its purpose is to identify the impacts of these developments to the City's Master Plan and to the adjacent neighborhood(s); and also to identify alternative development.[1]

[1] Guideline for Applications for Institutional Master Plans, November 2002, p.1

Section 2 Institutional Overview

Fig. 2-1
Aerial View of **SFGH&TC**

Overview San Francisco General Hospital & Trauma Center (SFGH&TC) is a general acute care hospital within the Community Health Network, which is owned and operated by the City and County of San Francisco, Department of Public Health.

During its 150 year history, the San Francisco County Hospital, later to be renamed **San Francisco General Hospital & Trauma Center**, has been providing humanistic, cost-effective, and culturally competent health services to the residents of the City and County of San Francisco. **SFGH&TC provides health care services to vulnerable populations in San Francisco, including the uninsured, homeless, children, elderly, low-income, and racial and ethnic minorities.**

SFGH&TC is one of two acute care hospitals serving the southeast section of San Francisco; Saint Luke's Hospital, located at 3555 Cesar Chavez Street, also serves the southeast quadrant of the City and is one of California Pacific Medical Center's four campuses. SFGH&TC provides services to local residents.
Around 50% of the patients treated at the SFGH&TC reside in the area. SFGH&TC serves as a safety net for the uninsured and the homeless. Less than 2% of SFGH&TC's patients have commercial insurance coverage, 7% were homeless, or on the street at the time of service. Approximately 85% of the patient population either receives health care services subsidized by government programs such as Medicare or Medical or are uninsured.

Since its establishment in 1854, providing care to 400 sick people that year, the Hospital has evolved into a major-academic tertiary care medical center. **SFGH&TC** is the only hospital in the City and County to operate a **Trauma Center (Level 1)** for 1.5 million residents of San Francisco and northern San Mateo County. **SFGH&TC** also has a full complement of mental health care from psychiatric emergency services to in-patient psychiatric care and rehabilitation and post-hospitalization care. **SFGH&TC** has gradually expanded and modernized its hospital facilities, providing the community with a complete range of emergency, trauma, inpatient, primary care, specialized medical and surgical services, diagnostic and rehabilitation services.

SFGH&TC has a long history and strong commitment to healthcare education; physician, nurse and health worker training; and medical research. It takes pride in its longtime affiliation, since 1884, with the University of California, San Francisco serving as a major teaching hospital and home to a number of prominent research centers and institutes.

In the most recent development for the future of **SFGH&TC**, the San Francisco Health Commission passed a resolution in January 2004, supporting the rebuild of the acute care facility.

Fig. 2-2
View of San Francisco General Hospital Campus from the southwest.

STATEMENTS OF INSTITUTIONAL GOALS AND OBJECTIVES

SFGH&TC Mission: To provide quality healthcare and trauma service with compassion and respect and to deliver humanistic, cost-effective, and culturally competent health services as an integral part of the Department of Public Health for the City and County of San Francisco by:

- Providing access to all residents by eliminating financial, linguistic, physical and operational barriers;
- Providing quality services that treat illness, promoting and sustaining wellness, and preventing the spread of disease, injury and disability;
- Participating in and supporting training and research; and
- Serving the healthcare needs of the community.

Vision Statement: Rebuild SFGH&TC so we can continue to provide healthcare and trauma services for people in need. "To be the Best Public Hospital in the Country."

Value Statement: To promote access to services, quality of care, patient safety, customer satisfaction, staff morale, resource

management, effective partnerships, and academic excellence.

- Patient and staff safety
- Quality healthcare
- Disease prevention
- Staff retention and recruitment
- Culturally responsive care
- Efficient resource management
- Academic excellence in training and research

Goals 2007-2008:

- Promote patient safety
- Implement healthy San Francisco
- Promote organizational and staff cultural responsiveness
- Promote staff retention & recruitment
- Improve hospital infrastructure
- Plan a replacement hospital
- Comply with all regulatory standards and performance improvement initiatives

SERVICES PROVIDED

Since its inception, SFGH&TC has served as a community hospital with its primary goal to provide all San Franciscans with quality medical services. After overcoming several crises and problems in the early 20th century, SFGH&TC today is a licensed 539 bed general acute care hospital, providing a full complement of inpatient, outpatient, emergency, skilled nursing, diagnostic, behavioral health and rehabilitation services for adults and children. This includes 403 acute care beds, 106 psychiatric beds, and 30 skilled nursing level beds.

Clinical Service Groups at SFGH&TC :

- Anesthesiology
- Cardiology
- Dermatology
- Emergency Medicine
- Family Medicine
- Gastroenterology
- General Surgery
- Gynecology
- Hematology
- HIV Infection
- Internal Medicine
- Interventional Radiology
- Laboratory Medicine
- Maxilo-Facial/Plastic Surgery
- Neonatology
- Neurology
- Neurosurgery
- Normal Newborns
- Obstetrics
- Oncology
- Ophthalmology
- Orthopedic
- Otolaryngology
- Pediatrics
- Psychiatry
- Pulmonary
- Rehabilitation Medicine
- Substance Abuse
- Trauma
- Urology

Fig. 2-3
10,173 skilled nursing days were provided in the year of **2006-2007**

- Nephrology
- Vascular Surgery

The services provided at **SFGH&TC** are grouped into the following major categories:

- Diagnostic Services
- Inpatient Services
- Ambulatory Services (Primary & Specialty Care)
- Emergency Services
- Trauma Services

Within each of these categories is a broad range of services, which define the complex level of care provided at the Hospital.

INPATIENT SERVICES

Currently **SFGH&TC** is licensed for 403 general acute beds, 106 acute psychiatric beds, and **30** Skilled Nursing beds. It is the largest provider of acute psychiatric care in San Francisco

In Fiscal Year **2006-2007**, there were **16,209** acute admissions, of which **16%** were acute psychiatric. There were **109,959** patient days of which **27%** were acute psychiatric. The ten most frequently occurring acute inpatient diagnoses **were**:

- **Newborn Delivery**
- **Psychosis**
- **Schizophrenia-Affective**
- **Pneumonia**
- **Congestive Heart Failure**
- **Depressive Disorder**
- **HIV Disease**
- **Paranoid Schizophrenia**
- **Alcohol Withdrawal**
- **Leg Cellulites**

SFGH&TC maintains a 30 bed short-term Medical/Surgical Skilled Nursing unit. This unit provides short-term non-acute care for patients awaiting or recovering from a procedure, patients requiring aftercare that is unable to be administered at home, and patients awaiting placement. Average length of stay is **26** days.

San Francisco Behavioral Health Center In addition, **SFGH&TC** is home to the San Francisco Behavioral Health Center (SFBHC). SFBHC serves the sub-acute psychiatric population of the City and County of San Francisco, providing diagnostic evaluation and treatment services, with a rehabilitation focus that promotes improved independence and enables residents to achieve their highest level of functioning, for residents with severe and persistent mental illness. The SFBHC is designed to help residents move along the continuum of care and to transition to the most appropriate community setting.

SFBHC has three level of care:

- Mental Health Rehabilitation: licensed by the California Department of Mental Health (DMH), the Mental Health

Fig. 2-4
San Francisco General Hospital Clinic Entrance
94,266 outpatient admissions were registered in the year of 2006-2007

Rehabilitation Program has 47 beds and focuses on psychosocial rehabilitation of clients with severe and persistent mental illness.

- Skilled Nursing Facility: licensed by the Department of Health Services (DHS), the Skilled Nursing Facility has 59 beds and provides for continued care of psychiatric patients with medically complex needs.

- Adult Residential Care Facility: licensed under the California Department of Social Services' (DSS) Community Care Licensing Division, the Adult Residential Care Facility has 41 beds and helps clients transition back into their community.

AMBULATORY SERVICES

In Fiscal Year 2006-2007, over 94,000 people were treated in the hospital's clinics. 506,150 visits were documented, of which 25% were primary care, 28% were specialty care and 4% were urgent care. Ambulatory clinic services are organized and provided under 6 major centers:

Adult Medical Center The Adult Medical Center provides comprehensive primary care services through its General Medicine Clinic and specialty services to persons over 18 years of age. Specialties services include:

- Chest
- Diabetes
- Oncology
- Endocrinology
- Gastrointestinal
- Hepatomegaly
- Cardiac
- Dermatology
- Renal
- Rheumatology
- Hematology
- Hypertension

Adult Surgery Center The Adult Surgery Center provides a full-range of ambulatory surgical specialties, where comprehensive consultation, surgical procedures and recovery are provided in the hospital setting. Surgical Specialty Services includes:

- Trauma
- General Surgery
- Vascular
- Proctology
- Plastic/Maxilo-Facial
- Hand
- Foot
- Breast
- Orthopedic
- Otolaryngology
- Ophthalmology
- Neurology
- Neurosurgery
- Optometry
- Urology
- Oral Surgery

Children's Health Center The Children's Health Center provides

culturally competent and sensitive medical services to children and young people up to the age of 21. It serves children requiring evaluation of health status, diagnosis and treatment of acute illness. In addition to primary and specialty care services, off-hours pediatric urgent care services are available for patients of the Community Health Network and its affiliated partners.

Specialty services include:

- Asthma
- Dermatology
- Cardiac
- Urology
- Hematology
- Renal
- Neurology
- Nutrition

Women's Health Center The Women's Health Center provides general obstetrical and primary women's health care for women of adolescent to geriatric age.

Specialty services include:

- Infertility treatment
- Prenatal education and exercise programs
- Teen obstetrics programs

Extensive family planning services, including therapeutic abortions, and counseling services are provided within the Family Planning Clinic.

Family Health Center The Family Health Center provides comprehensive primary care to all family members of all ages, including culturally competent care for the diverse population of the community served by SFGH&TC. Using a Family Practice model, staff incorporates patient education, counseling, diagnostic, screening and therapeutic services in the patients' care and emphasis is on prevention, health maintenance and early diagnosis and treatment of illness.

Services include:

- Prenatal care
- Perinatal case management
- Well child care
- Pharmacist consultation
- Mental health services
- Nutritional assessment and education
- Substance abuse counseling
- Family therapy
- HIV family clinic
- Social services
- Minor surgery
- Health education
- Diabetes education and case management

Fig. 2-5
29% of all ambulance traffic in San Francisco is received by the SFGH&TC Emergency and Trauma Center

Positive Health Program The Positive Health Program is a multi-disciplinary service that provides specialized care to HIV-infected patients. The program delivers compassionate care with a focus on continuity and quality provided by an enabled, committed, expert staff. Research is focused to improve care, and maintain adequate resources for meeting the care demands of its service population.

Services include:

- Primary Care
- Dermatology
- Pulmonary
- Endocrinology
- Neurology
- Mental health services
- Lymphoma
- Women's Health
- Oncology
- Health education

EMERGENCY SERVICES

The **SFGH&TC** Emergency Department (ED) is a 24-hour, 7-day a week service licensed by the State of California for comprehensive emergency services. The ED provides resuscitation care for the **Trauma Center (Level 1)** and is the primary receiving facility for mass casualties' events. In Fiscal Year **2006-2007**, over 53,000 Emergency Room visits occurred, of which **22%** resulted in an admission.

Psychiatry Emergency Services (PES) provides 24-hour, 7-day a week emergency assessment, stabilization and disposition for acute psychiatric patients. Last year, over **7,700** people were treated, of which **25%** were admitted.

Trauma Program The **SFGH&TC** Trauma Center was one of the first programs organized in the United States to combat death and disability due to injury. It has also been designated as the Level I Trauma Center for both adults and children by the Emergency Medical Service Agency [EMSA] of both San Francisco and San Mateo Counties.

A designated **Trauma Center (Level 1)** is defined as a specialized hospital facility that has an adequate depth of personnel, resources, services, equipment and supplies to provide care for the injured patient throughout all phases of the patient's care from resuscitation through discharge. This continuum of care includes the Emergency Department, Radiology/Imaging Services, Laboratory and Blood Bank, Operating Room, Intensive Care Nursing, Medical-Surgical Nursing, Physical Therapy, Social Services and psychological support for the patient and family. This level of comprehensive care is immediately available 24 hours/day every day of the year.

Fig. 2-6
Every year **2,500,000** doses of medication are dispensed

As San Francisco's only Trauma Center **SFGH&TC** provides resuscitation, diagnosis, treatment and rehabilitation for complex injuries affecting all areas of the human body. Approximately **3,300** adults and children are treated each year for injuries requiring activation of a multi-disciplinary team of surgeons, nurses, technicians and therapists.

Poison Control Center SFGH&TC is the home for the Poison Control Center in northern California, where information about poisonings and treatment is provided around the clock to healthcare providers and the general public over a telephone network.

Urgent Care The Adult Urgent Care Service provides evaluation and treatment to patients with non-emergent conditions, who, in the past, were diagnosed and treated in the Emergency Department. The clinic is open 7 days per week including holidays for 80 hours of service coverage. Adult Urgent Care documented over **21,800** medical encounters in the year **2006-2007**.

DIAGNOSTIC SERVICES & ANCILLARY SERVICES

- Clinical Laboratories
- Food and Nutrition
- Infection Control
- Nursing
- Pastoral Care
- Rehabilitation
- Respiratory Therapy
- Pharmaceutical
- Medical/Psychiatric Social
- Radiology
- Interpreter
- Material Management
- Messengers
- Medical Staff Office
- Parking
- Patient/Visitor Center
- Utilization Management
- Admitting
- Biomedical Engineering
- Business
- Education and Training
- Environmental
- Facilities Management
- Human Resources
- Health and Safety
- Hospital Administration
- Health Information System
- Information System
- Quality Management
- Risk Management
- Security
- Telecommunications
- Volunteers

Fig. 2-7
Around 200 clinical nursing placements for students from California State University System, community colleges, private universities and colleges are offered each year.

ACADEMICS AND RESEARCH

The UCSF Dean's Office is confirming the number of principal investigators conducting research on the hospital campus. Through its long-standing affiliation with the University of California, San Francisco (UCSF), **SFGH&TC** serves as a major teaching hospital for Medicine, Nursing, Pharmacy and Dentistry. All of the physicians at

Fig. 2-8
Over 160 UCSF principal investigators conduct research through programs based at SFGHMC

SFGH&TC are UCSF faculty. Approximately **1,400** UCSF physicians, specialty nurses, health care professionals and other professionals work side-by-side with **3,000** City employees at **SFGH&TC**. The City and County Of San Francisco pays UCSF for the patient care services through an affiliation agreement. Each year, over 350 third or fourth year medical students, 800 residents and 60 clinical fellows are trained at **SFGH&TC**. Thirty-two percent of all the UCSF interns training, in 17 academic departments, and 35% of all UCSF medical students' clinical training are conducted at **SFGH&TC**.

In addition **SFGH&TC** provides approximately 200 clinical nursing placements at the Associate, Baccalaureate and Masters level for students from UCSF, the California State University System, community colleges, and Bay Area private universities and colleges each year.

The hospital is also home to more than 20 research centers and major laboratories. Over 160 principal investigators conduct research through programs based at the hospital campus.

Research work and studies in the following areas are currently being carried out at the **SFGH&TC** :

Trauma related research:
- Rapid response improvement
- Emergency Department Management
- Violence Prevention
- Surgical techniques and Wound Care
- Brain Spinal Cord Injury Management
- Bone regeneration.

Bioterrorism and Mass Casualty:
- Development of Treatment for Botulism Toxin
- Decontamination methods for exposures
- Drug and Antibody Delivery Systems
- Predictive models of needed resources.

AIDS related research:
- Treatment to the homeless
- Adherence to treatment
- Outcomes in the urban poor
- Treatment and prevention of Drug Resistant HIV
- Immunology of AIDS
- Drug Trials
- Management of Illness to preserve productivity
- Reducing sexual risk behavior
- Post exposure prophylaxis (needle stick, prenatal, sexual, etc.)

Cancer related research:
- Treatment of Mesothelioma

- Medical Marijuana use
- Breast cancer treatment and preventions
- Ovarian Cancer Drug Delivery System
- Prevention of Basal Cell Carcinomas

Cardiovascular related research:
- Heart attack prevention and treatment
- Stroke prevention and treatment
- Vascular malformations and aneurysms prevention and treatment

Pulmonary related research:
- Asthma-treatment, prevention, and genetics
- Interstitial lung disease-management and causes
- Chronic Lung Disease-pathology and preventions
- TB-prevention, control, and treatment
- Pneumonia-genetic risk factors, treatment.

Health Disparities:
- Racial and Ethnic Disparities in adults, children and newborns
- Genetic Differences
- Health Care Delivery Systems, Literacy and Cultural Effects
- Comparisons of the SFGH&TC system to other systems.

POPULATION CHARACTERISTICS

The following tables and maps show the population characteristics for the year 2005 in comparison with the last IMP in 1987 or with figures available for recent years.

PATIENTS

Gender / Race / Age The total number of all **SFGH&TC** patients In the fiscal year of **2006-2007** was **98,244** with the following percentage regarding gender, race and age compared to 1992.

Gender	FY 2004 - 2005	FY 2006 – 2007
Female	43%	**49%**
Male	57%	**51%**

Race	FY 2004 - 2005	FY 2006 – 2007
Caucasian	27%	**24%**
African American	24%	**19%**
Hispanic	29%	**29%**
Native American	0%	**1%**
Asian/Pacific Islander	15%	**20%**
Other /Unknown	5%	**7%**

Age	FY 2004 - 2005	FY 2006 – 2007
0-17	20%	**14%**
18-44	55%	**46%**
45-64	18%	**32%**
Over 64	6%	**8%**

Patient's origins by zip code SFGH&TC plays a vital role in providing quality health care services to San Francisco's vulnerable populations, which include the uninsured, homeless, children, frail elderly, low-income, racial and ethnic minorities, and persons from low-income neighborhoods.

The following maps indicate, by zip code, the origin of all inpatients in **2006-2007** (Fig.2-9) and all patients in **2006-2007** (Fig.2-10) treated at the **SFGH&TC**.

0 – 2 %
2 – 4 %
5 – 7 %
8 -10 %
11 – 12 %

District	*Zip Code*	
Mission	**12%**	94110
Hunters Point	**9%**	94124
Outer Mission	**9%**	94112
North of Market	**7%**	94102
South of Market	**7%**	94103
Visitacion Valley	**5%**	94134
Civic Center	**4%**	94109
Parkside	**3%**	94116
Potrero Hill	**2%**	94107
Western Addition	**2%**	94115
Western Addition	**2%**	94117
Other	**1%**	

Fig. 2-9
Percent of **SFGH&TC** Inpatients by zip code of residence in the year of **2006-2007**
13% are homeless

0 – 2 %
2 – 4 %
5 – 7 %
8 -10 %
11 – 12 %

District	*Zip Code*	
Mission	**12%**	94110
Hunters Point	**8%**	94124
Outer Mission	**9%**	94112
North of Market	**7%**	94102
South of Market	**6%**	94103
Visitacion Valley	**6%**	94134
Civic Center	**4%**	94109
Parkside	**3%**	94116
Potrero Hill	**2%**	94107
Western Addition	**2%**	94115
Western Addition	**3%**	94117
Sunset	**2%**	94122

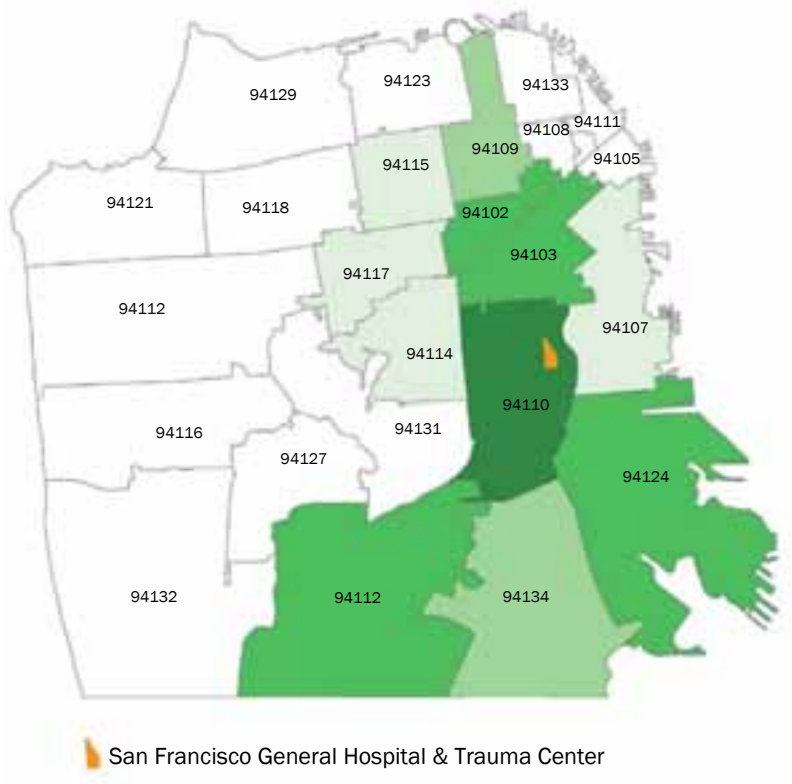


Fig. 2-10
Percent of all **SFGH&TC** Patients by zip code of residence in the year of **2006-2007**
7% are homeless

Sources of Patient Revenue The following table shows the current activities by payer type for fiscal year FY 2006-2007.

Payer Sources	Inpatient days	Outpatient Encounters
Uninsured	28%	35%
Commercial	4%	2%
Medi-Cal	34%	26%
Medicare	23%	18%
Other	8%	19%

Utilization Statistics The following summary describes the hospital activity during the recent fiscal year of 2006-2007.

Inpatient Services

- The number of acute patient days for the fiscal year of 2006-2007 was 109,959, of which 27% were related to the acute psychiatry
- 16,209 acute admissions, of which 16% were to acute psychiatry
- There was a total of 43,222 skilled nursing days, 84% were at the SFBHC

In Surgery:

- 6,612 surgical procedures were performed in 10 operating rooms, of which 50% were emergent.
- 41,089,390 surgical minutes were performed

In Obstetric/Gynecology:

- 1,232 babies were born at SFGH&TC
- Over 2,300 women received prenatal care, of which 30% were high-risk cases

Outpatient Services

- 94,266 individuals were seen
- Total of 506,150 clinic visits; of which 25% were primary care, 28% were specialty care, 4% were Urgent care visits and 20% were diagnostic

Emergency Services

- Over 53,000 Emergency Department visits, with 22% resulting in an admission
- Over 7,700 Psychiatry Emergency encounters, with 25% being admitted
- 29% of all ambulance traffic in San Francisco was received by SFGH&TC.

Trauma Center

- 3,279 adults and children are treated for injuries requiring activation of the trauma team

Number of Discharges by Service The following table shows a comparison between 1992 and 2007 for the number of discharges by service

Number of discharges by service	FY 1992		FY 2007	
Medical	4,903	23.00%	**4,797**	28%
Surgical	8,072	37.87%	**7,132**	42%
Pediatrics	1,380	6.47%	**401**	2%
Psychiatry	1,589	7.45%	**2,688**	17%
Nursery	2,058	9.70%	**1,247**	7%
Total	21,315	100.00%	16,265	100%

Licensed Beds The following table shows a comparison between 1992 and 2007 for the number of licensed beds. It shows an increase of acute psychiatric beds and 130 new skilled nursing beds due to the opening of the SFGH&TC Behavioral Health Center.

Licensed Beds	FY 1992	FY 2007
General acute beds	495	403
Acute psychiatric beds	87	106
Skilled nursing beds	--	**136**
Total	582	645

Average Length of Stay The following table shows a comparison between 1992 and 2007 for the number of discharges by service

Average Length of Stay	FY 1992	FY 2007
Medical / Surgical Acute Care	5.0	**5.7**
Psychiatric Acute Care	17.7	**11.5**
Skilled Nursing	--	**28.4**
SF Behavioral Health	--	**138.0**

EMPLOYEES

SFGH&TC has approximately **2,800** City and County of San Francisco (CCSF) fulltime equivalent **positions** and approximately **1,100** University of California, San Francisco (UCSF) full-time equivalent **positions** including physicians and house staff and totals approximately 3510 persons. Not all positions are filled at any given time.

The following table shows a comparison of employee figures in the year of 1987 and today.

Number of fulltime equivalent employees (FTE)	FY 1987	FY 2007
CCSF	2,700	**2,828**
UCSF	1,200	1,010
Total	3900	3,838

Number UCSF staff	
Medical Students	Over 350
Residents	800
Clinical Fellows	60
Clinical Nurses	200

The **SFGH&TC** is formally affiliated with UCSF by contract to provide medical care, medical student and resident for teaching and research. There are over 437 active (over 50% time) and 514 courtesy (under 50% time) members of Medical Staff and approximately 951 interns, residents and fellows each year.

Additionally, **SFGH&TC** employs advanced practice nurses, nurse practitioners and physician assistants to provide care in the inpatient and clinic settings, as part of the overall healthcare delivery team.

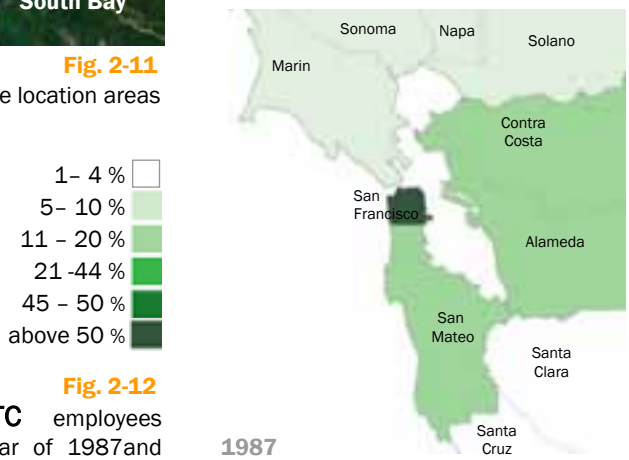
The following table shows the number of employees by shift in 1987 and today.

Number of employees by shift	FY 1987	FY 2006-2007
Midday Daytime 8:00am – 3:00pm	2,610	**2,750**
Evening 5:00pm – 11:00am	440	**525**
Overnight 11:30pm – 7:00pm	300	**300**
Weekend – all shifts	550	**500**
Total	3900	3510

Although as in 1987 the majority of the employees reside in San Francisco there has been an increase of 7% of employees coming from the south bay. The following table and maps indicate the number of employees by their residence location in 1987 and 2005.

Employees Residence Location	FY 1987	FY 2005
San Francisco	60 % - 2010	45.4% - 1595
Northeast	8 % - 160	4.7% - 75
Northwest	12.5% - 250	4.9% - 78
Southeast	34.8% - 699	20.8% - 322
Southwest	44.7% - 898	14.3% - 228
Peninsula	17 %	21%
East Bay	17 %	21%
North Bay	5 %	5%
South Bay	1 %	8%

Fig. 2-11
SFGHMC employees' residence location areas



1– 4 %
5– 10 %
11 – 20 %
21 -44 %
45 – 50 %
above 50 %

Fig. 2-12
Percent of all SFGH&TC employees residence location in the year of 1987and 2005

0 - 50	
51 - 100	
101 - 150	
151 - 200	
above 200	

Northeast	***District***	***Zip Code***
	North of Market	94102
	South of Market	94103
	Financial District	94104
	Rincon Hill	94105
	Civic Center	94109
	Embarcadero	94111
	North Beach	94133

Northwest	***District***	***Zip Code***
	Western Addition	94115
	Inner Richmond	94118
	Outer Richmond	94121
	Marina	94123
	Presidio	94129

Southeast	***District***	***Zip Code***
	Potrero Hill	94107
	Mission	94110
	Outer Mission	94112
	Hunters Point	94124
	Visitacion Valley	94134

Southwest	***District***	***Zip Code***
	Castro	94114
	Parkside	94116
	Haight/Ashbury	94117
	Sunset	94112
	St Francis Woods	94127
	Twin Peaks/Glen Park	94131
	Merced Park	94132

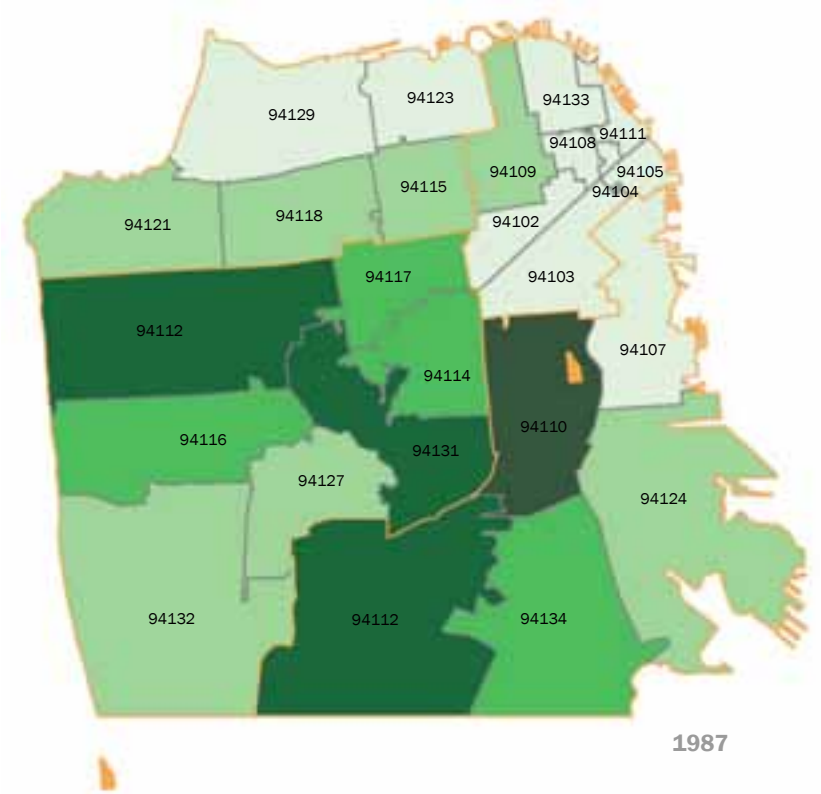


Fig. 2-13

Number of SFGH&TC employees by zip code of residence in San Francisco in the year of 1987 and 2005.

AFFIRMATIVE ACTION PROGRAM

SFGH&TC follows the Policy Statement of the Department of Public Health by the City and County of San Francisco:

> "It is the policy of the Department of Public Health to afford equal opportunity for employment to all individuals regardless of race, religion, sex, national origin, ethnicity, age, physical handicap or other disabilities, political affiliation, or sexual orientation."[1]

HISTORY OF GROWTH[2]

As one of the oldest continuously operating public health hospitals in the United States, San Francisco General Hospital has a very rich and colorful history. The following chronology summarizes the events that have shaped the history of San Francisco General Hospital.

1854 "The first independent City Hospital in which the destitute could receive care was located in a former brick school house near Stockton Street. A series of wooden shacks developed around this structure. The complex became known as the "Old County Hospital" which, according to a prominent physician of the time, "packed in, fed, lodged and purged 400 sick people in a chicken coop occupying a 137-square-foot area."

1867 A large almshouse was built near Lake Honda to accommodate the overflow of patients. On the same grounds, a four-room isolation hospital, known as the "Pest House," was opened to house smallpox patients. The Pest House was operated by a matron and three assistants who were quarantined and allowed to leave only once or twice a month. In spite of these new facilities, the need for additional and more up-to-date facilities continued to grow.

1872 Construction of a new County Hospital at the present Potrero location was completed. The Hospital was a collection of quaint wood frame structures that featured two-story open wards along a long corridor and a number of outlying support buildings. The complex included two primitive operating rooms and an autopsy area. There were no laboratories. Intended as a temporary structure, the Hospital remained in use until 1908.

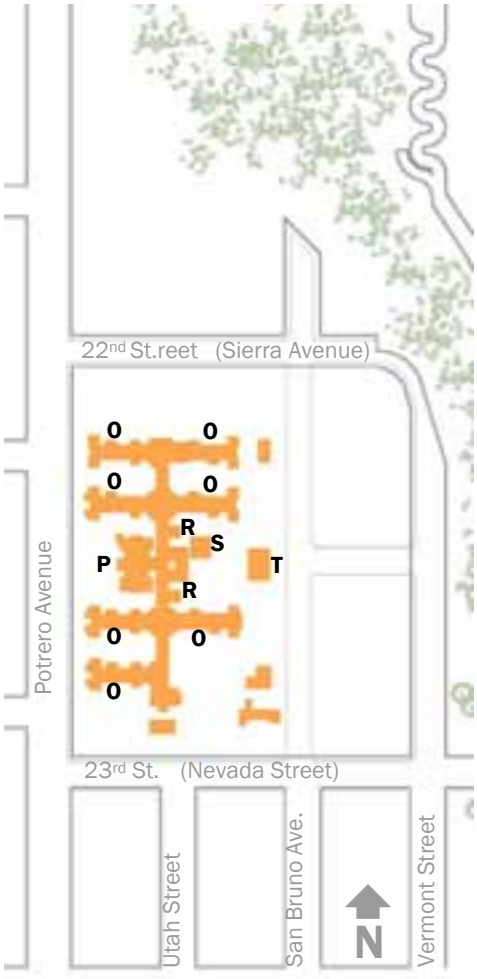


Fig. 2-14
Potrero Campus Site Plan, 1872 – 1908

Fig. 2-15
SFGH has been at the same location in the Mission/Potrero neighborhood since 1872

1884 University of California participation at the Hospital began with the introduction of six UC graduates as interns for a one-year period. They received room and board but no pay. Not long after, students from Stanford joined the intern program.

Fig. 2-16
The Potrero Emergency Hospital around 1900

1906 The Hospital was spared in the Great Earthquake but was fraught with numerous scandals and problems of its own, including severe infestations by rats and political neglect.

1908 The Hospital was closed by order of the Board of Supervisors after two epidemics of plague – the last epidemic having been traced directly to rats living within the buildings. The patients were moved to the old race track at the Ingleside Jockey Club and were bedded in the stalls. Operating rooms and other facilities were set up in the grandstand. In April, the sixteen buildings compromising the Potrero complex were doused with gasoline and burned to the ground.

Fig. 2-17
The "new" San Francisco General Hospital in 1915, from Rhode Island and 22nd Street looking west toward Mission District.

1915 With the acquisition of two parcels of land directly to the east the new County Hospital was opened on an expanded site. The Hospital consisted of three main institutions:

- the General Hospital
- the Hospital for Infectious Diseases **K**
- the Tuberculosis Hospital **Y**

The new facilities were considered to be the most modern in the country. Three medical/surgical amphitheatres and up-to-date research facilities attracted outstanding physicians and house staff and provided opportunities for excellent medical work. Designed by City Architect Newton J. Tharp, the buildings were steel framed structures with reinforced concrete floors and roofs in a Neo Italian Renaissance style. The buildings exhibited beautifully patterned red brick exteriors with terra cotta and marble trim and ornamentation. Electric elevators and the most advanced telephone, lighting, heating and ventilating systems were installed.

The General Hospital complex consisted of eleven buildings:

- The Administration Buildings **V**
- 4 Ward Buildings **I , L**
- Receiving Building **E**
- Pathology Building **U**
- Nurses Home **N**
- Services Building **W**
- Laundry
- Power House **X**

Each ward building contained four wards, a roof garden with penthouse and a basement. The large open ward system was still in effect and provided the Hospital with a bed capacity of 770.

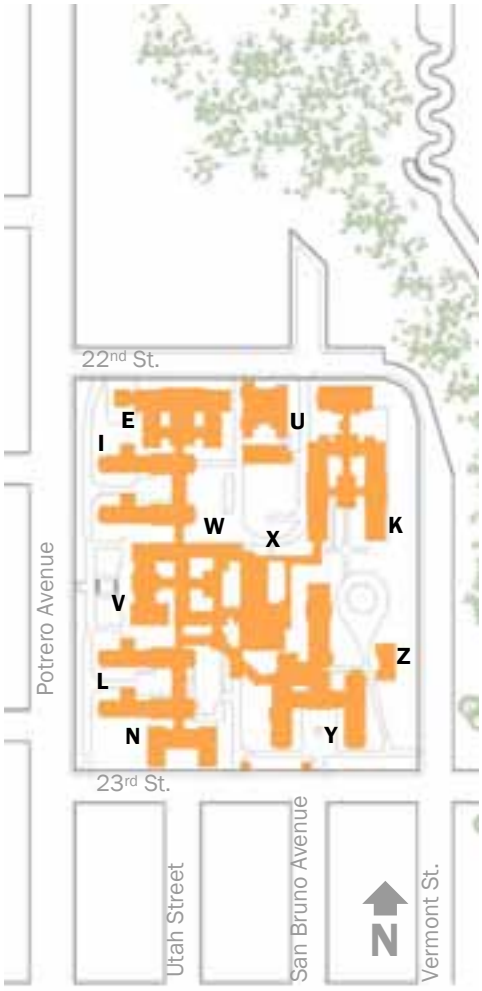


Fig. 2-18
Potrero Campus Site Plan, 1915

Fig. 2-19
Right: Brick façade of the Hospital facilities (Buildings 10/20 and 30/40) built in 1915

1928 The addition of a fifth floor to the Ward Buildings and two wards to the Tuberculosis Hospital increased the bed-capacity from 770 to 1000. To meet this expansion, the volunteer staff grew as

well and, by 1930, the Hospital had a house staff of 70 physicians, a volunteer staff of 150, and a faculty staff from UC and Stanford.

1932 The site boundaries were extended again – this time to the north. The Psychopathic (**C**) and Maternity Hospitals (**B**) were opened on this newly acquired land where in 1869 a Magdalen Asylum for "wayward girls" was built on and run by the Sisters of Mercy. In 1904 The Asylum was re-named St. Catherine's Home and Training School for girls. The new buildings conformed in construction to the original Hospital buildings; however, the design was more in keeping with the art deco style. An existing Lourdes Grotto, once part of the St. Catherine's Home was incorporated into the gardens.

Maternity Hospital - Building 80 **B**
Psychiatry Hospital – Building 90 **C**
Emergency Hospital - Building 1 **E**
Pathology - Building 3 **H**
Clinical Laboratories - Building 100 **K**
Garage **AA**
Morgue **U**

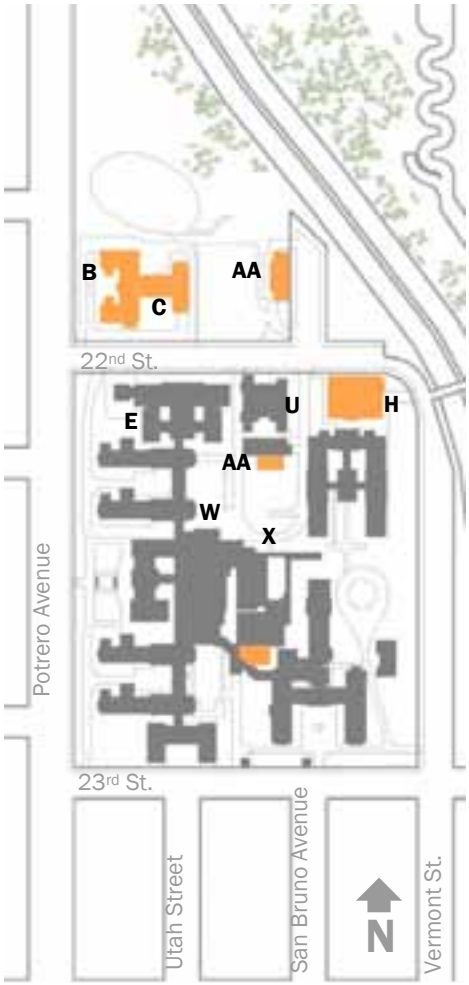


Fig. 2-20
Potrero Campus Site Plan, 1932 - 1965

Fig. 2-21
Top Right: The Old Magdalen Asylum, now known as St. Catherine's Home for wayward girls. Photo taken Feb. 1925 from Potrero Ave. & 21st St.
Bottom Right: North on Potrero Avenue 1924

1934-1954 The existing facilities were continually reorganized and improved. (**W, X, AA**)

1959 The City of San Francisco and the University of California signed a formal agreement that provided house staff for the Hospital in exchange for research and teaching facilities for the University. Stanford moved its medical school to Palo Alto.

1965 A new Pathology Building (**H**) was built in place of the North Wing of the Hospital for Infectious Diseases. The Hospital for Infectious Diseases was converted into Clinical Laboratories.

A $34 million bond issue was passed by 77 percent vote to build a modern medical facility. The new complex would meet the needs of a changing society, in particular:

1. Increased numbers of indigent patients
2. Increased numbers of patients not qualifying for private hospitalization
3. Increased violence and more emergency cases
4. New problems of drug abuse, alcoholism, infections and mental illness

1971 The new Service Building (**D** with parking deck: - 42,700 sq.ft.) opened on the north side of the site. Phase I of the demolition process was completed and construction of the new Hospital began.

1976 The new Hospital (**J** – 617,400 sq.ft.) opened on the site formerly occupied by the north wing of the Tuberculosis Hospital, the Laundry and Power House, and the Chapel. The new medical complex incorporated modern facilities with advanced mechanical and electrical systems. The construction was poured-in-place concrete with post-tensioned stressed steel cables. The exterior surfaces were sandblasted to allow for low-maintenance of the structure. A primary feature is the "stacking" of all emergency and critical care departments, one above the other, and the connection of these services with specially controlled high-speed elevators and conveyor systems. A network of underground tunnels connects the main hospital to the vital utilities of the Service Building. The new facility was equipped with modern heating, ventilating and air-conditioning, circulation food, supplies and waste systems as well as a communication center.

Service Building **D**
Volunteer Center **G**
Main Hospital - Building 5 **J**

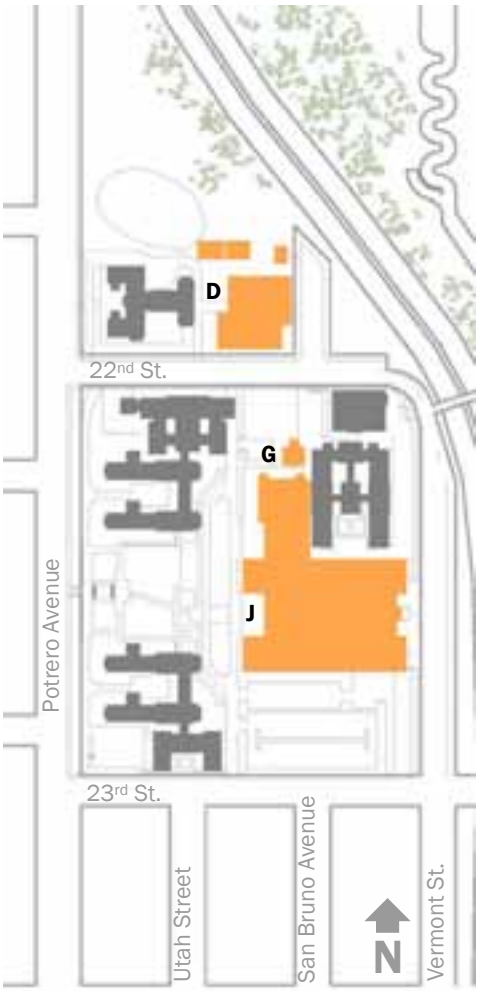


Fig. 2-22
Potrero Campus Site Plan, 1971 - 1987

Fig. 2-23
Right: San Francisco General Hospital around 1930

Behavioral Health Rehabilitation **A**
Ambulatory Care - Building 80 **B**
Ambulatory Care - Building 90 **C**
Research - Building 1 **E**
Volunteer Center **G**
Research/Pathology - Building 3 **H**
Research/Administration - Buildings 10/20 **I**
Ancillary - Building 100 **K**
Research/Administration - Buildings 30/40 **L**
Administration/Clinic - Building 9 **N**
Parking Structure **O**

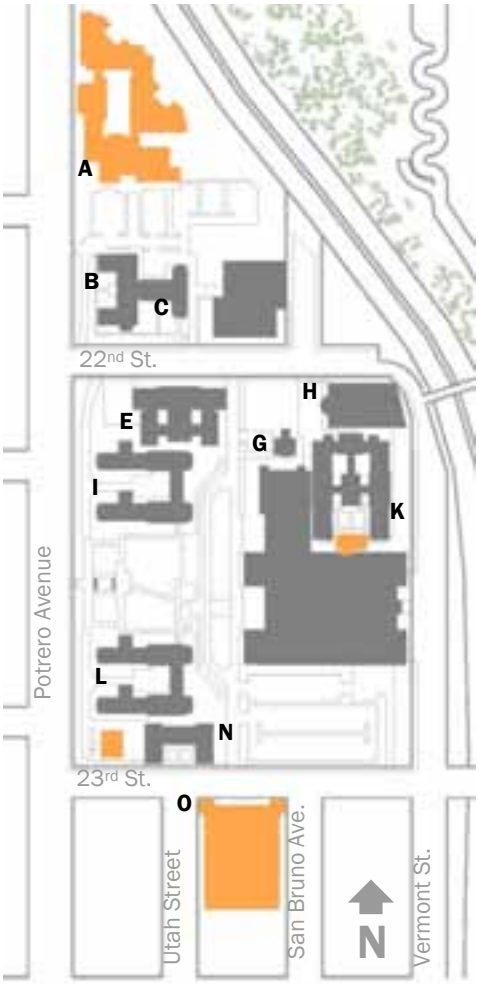


Fig. 2-24
Potrero Campus Site Plan, 1996

Fig. 2-25
Right: View towards the new Hospital Building completed in 1976

The Hospital met all life safety, seismic and security requirements. The open ward model with a 50-bed capacity was replaced by private and semi-private rooms. The new facility had a 582-bed capacity. Public art enhanced the interiors as well as the grounds. The old Services Building was torn down and the parking areas and landscaping were completed."

1970s-1980s The hospital continued to develop the campus and facilities throughout the 1970s and 1980s. The introduction of Federal Medicare/Medicaid programs enables the hospital to expand outpatient services, to develop important specialties, to acquire new laboratories and to use new diagnostic procedures.

1990 Two new floors for the Statewide AIDS Research Laboratory are added to the Pathology Building. (**H** – 36,900 sq. ft.)

1992 The San Francisco Behavioral Health Facility (**A –** 98,000 sq.ft.) is completed at the northern end of the campus, adding residential care beds.

1996 The San Francisco Behavioral Health Center, formerly known as Mental Health Rehabilitation Center is opened for services including behavioral health skilled nursing facilities.

Adjacent to the SFGH campus and closely associated with the Medical Center an 811 stall parking structure (**O** – 163,388 sq.ft.) was opened in 1996. The site previously was a MUNI maintenance facility that was demolished for the parking facility. The parking facility is owned and operated by the City's Parking Authority, and not under control of the Medical Center.

Avon Breast Center – Building 4 **F**

Fig. 2-26
Potrero Campus Site Plan, 2004

2004 The Avon Comprehensive Breast Care Center (**F** – 5,500 sq.ft.) clinic building is opened to expand mammography and ultrasound capacity for underserved women in the community, completing the current extent of the hospital campus.

Fig. 2-27
Top Right: Parking structure completed in 1996
Bottom Right: The AVON Comprehensive Breast Center opened in 2004

[1] Kaplan-McLaughlin-Diaz / Gordon H. Chong & Associates, Institutional Master Plan (November 1987), p. 2.21

[2] Kaplan-McLaughlin-Diaz / Gordon H. Chong & Associates, Institutional Master Plan (November 1987),), p. 2.22-2.29 (parts of the text were shortened)

Section 3 Facilities Overview

San Francisco General Hospital & Trauma Center is located in the southeast quadrant of San Francisco, where the Mission and Potrero Hill Districts meet.

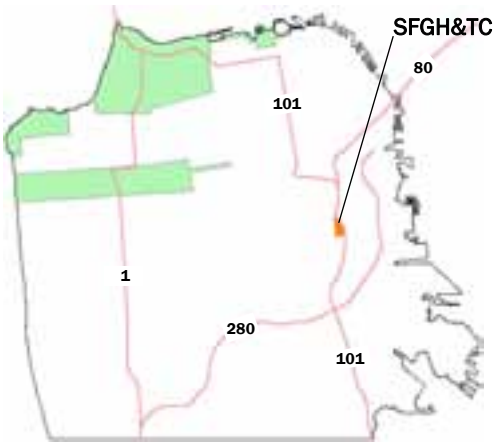


Fig. 3-1
Map of San Francisco

Fig. 3-2
Enlarged Map of San Francisco

CAMPUS DESCRIPTION

The hospital campus occupies an area of approximately 24 acres defined on the west by Potrero Avenue, on the south by 23rd Street, and on the east and north by U.S. Highway 101 and Vermont Street.

Dept. of Public Health (Built after 1987)
Dept. of Public Health (Built before 1987)
Dept. of Parking and Traffic

Behavioral Health Rehabilitation	A
Building 80	B
Building 90	C
Service Building	D
Building 1	E
Avon Center (Building 4)	F
Volunteer Center	G
Building 3	H
Buildings 10/20	I
Building 5 (Main Hospital Building)	J
Building 100	K
Buildings 30/40	L
Building 9 Trailer	M
Building 9	N
Parking Structure	O

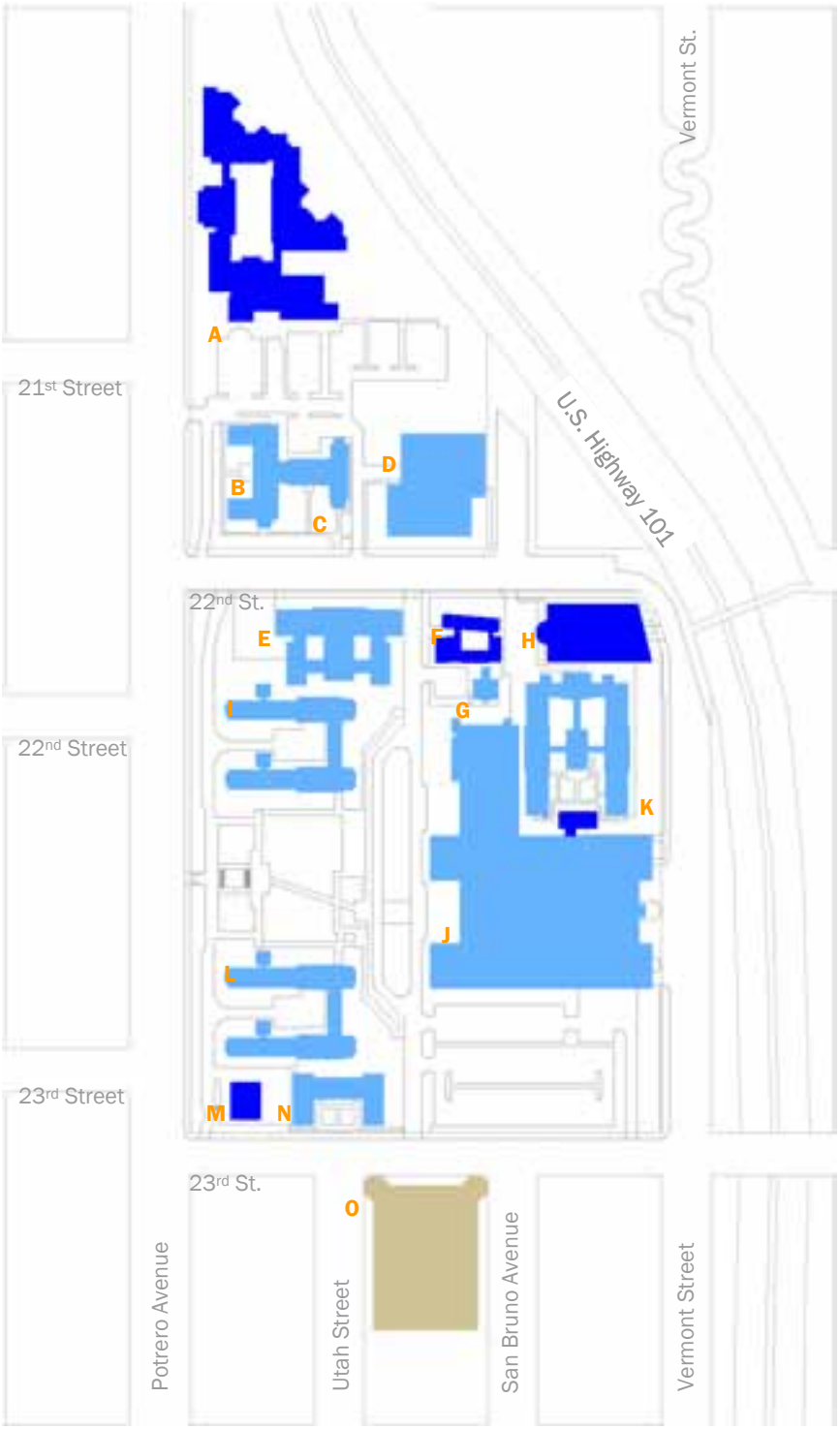


Fig. 3-3
Campus Plan

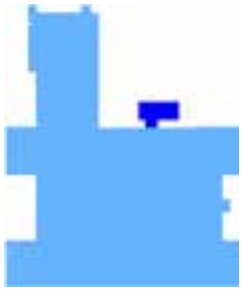
On its north-south axis the campus is approximately 1700 feet long, and from the east to west about 750 feet wide. Moving east from Potrero Avenue, the terrain slopes upward by approximately 20 feet over street level, while the portion of the site occupied by the main hospital building is relatively level. Approaching the northeast, the campus continues to slope upwards, gaining another 25 feet in elevation as it reaches the freeway.

HISTORY

The fifteen buildings, including a parking structure, that constitute the campus were constructed throughout the last century. The first hospital buildings at the present site, built to replace the crude City Hospital facilities of the 1850s, were completed in 1872 and remained in operation until an infestation of vermin forced their destruction in 1908. New land was acquired for a more modern hospital complex, and in 1915, the new County Hospital opened as one of the most advanced facilities of its time in the United States. A subsequent land purchase in 1932 gave the campus its modern-day shape. In addition to the construction of new research and service facilities, various improvements and renovation projects were undertaken to keep pace with the city's growth. The large new Hospital that is the main building of the current facility was completed in 1976. To provide much-needed parking for the hospital, a parking structure was built in 1995 on the south side of 23rd Street.

CAMPUS BUILDINGS

At the present day, the following buildings make up the physical plant of San Francisco General Hospital & Trauma Center.



Building 5 (Main Hospital Building)

Present Use	Acute/Ambulatory Care
Architect	Stone, Marraccini & Patterson
Date Completed	1976
Construction Type	Poured-in-place concrete with post-tensioned stressed steel cables
Style	"New Brutalist"/Modern
Special Features	Terraces
Shape	"L"-shaped
Height	7 stories + basement
Gross Square Feet	658,342 sq. ft.
Designated GSF	491,864 sq. ft.
Licensed Beds	403 acute care 106 acute psychiatric 30 skilled nursing

Building 100

Present Use	Ancillary
Architect	Newton J. Tharp, City Architect
Date Completed	1915

Construction Type	Exterior walls: Unreinforced brick masonry Floors and roofs: Steel frame with reinforced concrete Roofing: Clay tile
Style	Neo-Italian Renaissance
Special Features	Central courtyard building
Shape	"E"-shaped
Height	3 stories (1 story central building)
Gross Square Feet	**91,192** sq. ft.
Designated GSF	**44,336** sq. ft.

Building 3

Present Use	Research/Pathology
Architect	Maher & Martens, Architects
Date Completed	1965
Construction Type	Poured-in-place concrete with ceramic veneer
Major Alterations	2-story addition, 1989, Fong & Chan Architects
Style	Modern
Shape	Rectangular
Height	5 stories
Gross Square Feet	**63,783** sq. ft.
Designated GSF	**42,739** sq. ft.

Service Building

Present Use	Central Utility Plant
Architect	Stone, Marraccini & Patterson
Date Completed	1971
Construction Type	Poured-in-place concrete with both reinforced concrete and post-tensioned members
Style	Modern
Shape	Rectangular
Height	2 stories + parking deck
Gross Square Feet	**39,800** sq. ft.
Designated GSF	**34,880** sq. ft

Behavioral Health Rehabilitation

Present Use	Behavioral Health Rehabilitation
Architect	Kaplan McLaughlin Diaz
Date Completed	1995
Construction Type	Type I
Height	3 stories
Gross Square Feet	98,000 sq. ft.
Designated GSF	**91,402** sq. ft.

Building 80

Present Use	Ambulatory Care
Architect	Martin Rist, Architect
Date Completed	1932

Construction Type	Exterior walls: Unreinforced brick masonry Floors and roofs: Steel frame with reinforced concrete Roofing: Clay tile
Major Alterations	Exterior fire stairs added, 1954
Style	Art Deco
Shape	"U"-shaped
Height	6 stories, plus partial 7th floor
Gross Square Feet	**71,849** sq. ft.
Designated GSF	**43,976** sq. ft.

Building 90

Present Use	Ambulatory Care
Architect	Martin Rist, Architect
Date Completed	1932
Construction Type	Exterior walls: Unreinforced brick masonry Floors and roofs: Steel frame with reinforced concrete Roofing: Clay tile
Major Alterations	Exterior fire stairs added, 1954
Style	Art Deco
Shape	"T"-shaped
Height	5 stories
Gross Square Feet	**36,137** sq. ft.
Designated GSF	**27,343** sq. ft.

Building 1

Present Use	Research
Architect	Newton J. Tharp, City Architect
Date Completed	1916
Construction Type	Exterior walls: Unreinforced brick masonry Floors and roofs: Steel frame with reinforced concrete Roofing: Clay tile
Style	Neo-Italian Renaissance
Shape	"B"-shaped
Height	5 stories
Gross Square Feet	**70,159** sq. ft.
Designated GSF	**45,216** sq. ft.

Buildings 10 and 20

Present Use	Research/Administration
Architect	Newton J. Tharp, City Architect
Date Completed	1915
Construction Type	Exterior walls: Unreinforced brick masonry Floors and roofs: Steel frame with reinforced concrete Roofing: Clay tile
Major Alterations	Fifth floor added, 1928
Style	Neo-Italian Renaissance
Shape	"U"-shaped

Height	5 stories
Gross Square Feet	**110,609** sq. ft.
Designated GSF	**67,997** sq. ft.

Buildings 30 and 40

Present Use	Research/Administration
Architect	Newton J. Tharp, City Architect
Date Completed	1915
Construction Type	Exterior walls: Unreinforced brick masonry Floors and roofs: Steel frame with reinforced concrete Roofing: Clay tile
Major Alterations	Fifth floor added, 1928
Style	Neo-Italian Renaissance
Shape	"U"-shaped
Height	5 stories
Gross Square Feet	**104,460** sq. ft.
Designated GSF	**63,490** sq. ft.

Building 9

Present Use	Administration/Clinic
Architect	Newton J. Tharp, City Architect
Date Completed	1915
Construction Type	Exterior walls: Unreinforced brick masonry Floors and roofs: Steel frame with reinforced concrete Roofing: Clay tile
Style	Neo-Italian Renaissance
Shape	"U"-shaped
Height	3 stories
Gross Square Feet	**35,704** sq. ft.
Designated GSF	**26,246** sq. ft.

Parking Structure

Present Use	Parking
Architect	Fong & Chan Architects
Date Completed	1995
Construction Type	Concrete
Style	Modern
Shape	Rectangular
Height	3 stories (plus roof deck)
Gross Square Feet	163,388 sq. ft.

Avon Center (Building 4)

Present Use	Ambulatory Care
Architect	Tsang Architecture
Date Completed	2004
Construction Type	Modular building construction Single-ply membrane
Style	Modern
Shape	Rectangular

Height	1 story
Gross Square Feet	5,597 sq. ft.
Designated GSF	4,580 sq. ft.

Volunteer Center

Present Use	Ancillary
Architect	Design-Build
Date Completed	1984
Construction Type	Modular building construction
Shape	Rectangular
Height	1 story
Gross Square Feet	2,064 sq. ft.
Designated GSF	1,761 sq. ft.

Green spaces on the SFGH&TC campus The plan below indicates the distribution and extents of major green spaces on the **SFGH&TC** campus. The largest open, planted areas are concentrated in the western portion in front of the Hospital Tower.

Fig. 3-4
Green Spaces within the SFGH Campus

The green spaces shown in Figure 3-4 occupy a total area of approximately 2.9 acres, or somewhat over 10% of the total area of the campus. Although access to some of these spaces is limited, over 85% of their combined area is open to the public.

Height and bulk requirements Buildings on the **SFGH&TC** campus conform to height and bulk limits imposed by the municipal planning code.

	Max. Height	*Max. Plan Length*
40-X	40’	N/A*
50-X	50’	N/A*
65-A/B	65’	110’ (125’ Diag.)
80-B	80’	110’ (125’)
105-E	105’	110’ (140’)
OS	Open Space	

** Limits based on lot slope*

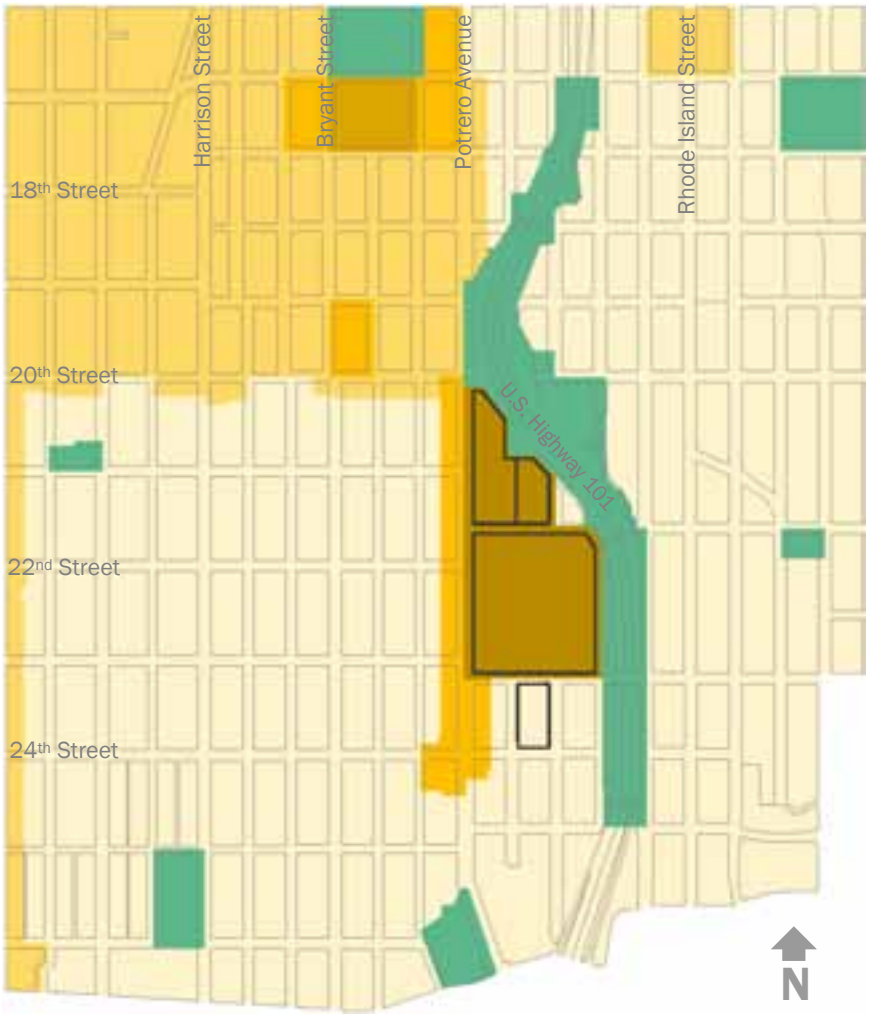


Fig. 3-5
Height and Bulk Districts

The height limit on the campus is 105 feet. Within the parameters established by the planning code, the following exemptions apply to this limit:

- Mechanical equipment and appurtenances necessary to the operation of the building itself, together with visual screening, limited to the top 16 feet of any such features
- Elevator, stair, and mechanical penthouses, fire towers, and skylights, limited to the top 16 feet of such features. Further

exemptions for elevator penthouses may be granted if necessary to meet state or federal laws or regulation
- Railings, parapets, and catwalks, with a maximum height of 4 feet
- Unroofed recreation facilities with open fencing, including tennis and basketball courts at roof level, swimming pools with a maximum height of four feet and play equipment with a maximum height of 10 feet
- Unenclosed seating areas limited to tables, chairs and benches, and related windscreens, lattices and sunshades with a maximum height of 10 feet
- Landscaping, with a maximum height of four feet for all features other than plant materials

The SFGH&TC campus is zoned as a bulk district E. Within such districts, the following requirements apply:[1]

- Maximum plan length (for buildings higher than 65 feet): 110 feet
- Maximum diagonal dimension: 140 feet

Exemptions from the bulk requirements may be granted under the following conditions:

- Achievement of a distinctly better design, in both a public and a private sense, than would be possible with strict adherence to the bulk limits, avoiding an unnecessary prescription of building form while carrying out the intent of the bulk limits and the principles and policies of the Master Plan
- Development of a building or structure with widespread public service benefits and significance to the community at large, where compelling functional requirements of the specific building or structure make necessary such a deviation[2]

Adjacent to the western edge of the SFGH&TC campus, the height limit is 65 feet. However, this narrow district includes only the half-blocks facing Potrero Ave. Beyond this district and on the southern end of the campus, the height limit is 40 feet. The northern and eastern sides of the campus, occupied by the U.S. Highway 101 corridor, are zoned for open space, in which:

> the height and bulk of buildings and structures shall be determined in accordance with the objectives, principles and policies of the Master Plan, and no building or structure or addition thereto shall be permitted unless in conformity with the Master Plan.[3]

Height conditions The west façade of the Main Hospital Building measures 99 feet to the top of the roof parapet. Including its highest point, which is the top of the elevator penthouse roof, the Main Hospital has a total height (measured from the base of the west façade) of 121’6”.

Buildings in the adjacent residential neighborhoods are typically one, two, or three stories. In addition, they are at a lower elevation than the **SFGH&TC** campus, giving the hospital buildings a distinct height advantage over their surroundings.

SURROUNDING LAND USE

Urban context The area surrounding **SFGH&TC** is largely residential, interspersed with some light industrial and manufacturing facilities. Residential buildings in the surrounding blocks are typically single- and multiple-family homes. Commercial activity in the neighborhood is centered primarily on 24th Street to the south, where a variety of markets, restaurants, and shops serve a diverse community.

City zoning, as shown in the following map, provides a key to the organization of housing, commerce, and public facilities.

RH-1 Residential, House: One-Family
RH-2 Two-Family
RH-3 Three-Family
RM-1 Residential, Mixed: Low Density
RM-2 Moderate Density
RM-3 Medium Density
RC-1 Residential-Commercial: Low Density
C-M Heavy Commercial
M-1 Light Industrial
M-2 Heavy Industrial
P Public Use
NC-1 Neighborhood Commercial District
NC-2 Small-Scale NCD
NC-3 Moderate-Scale NCD
NCD 24th St.-Mission NCD

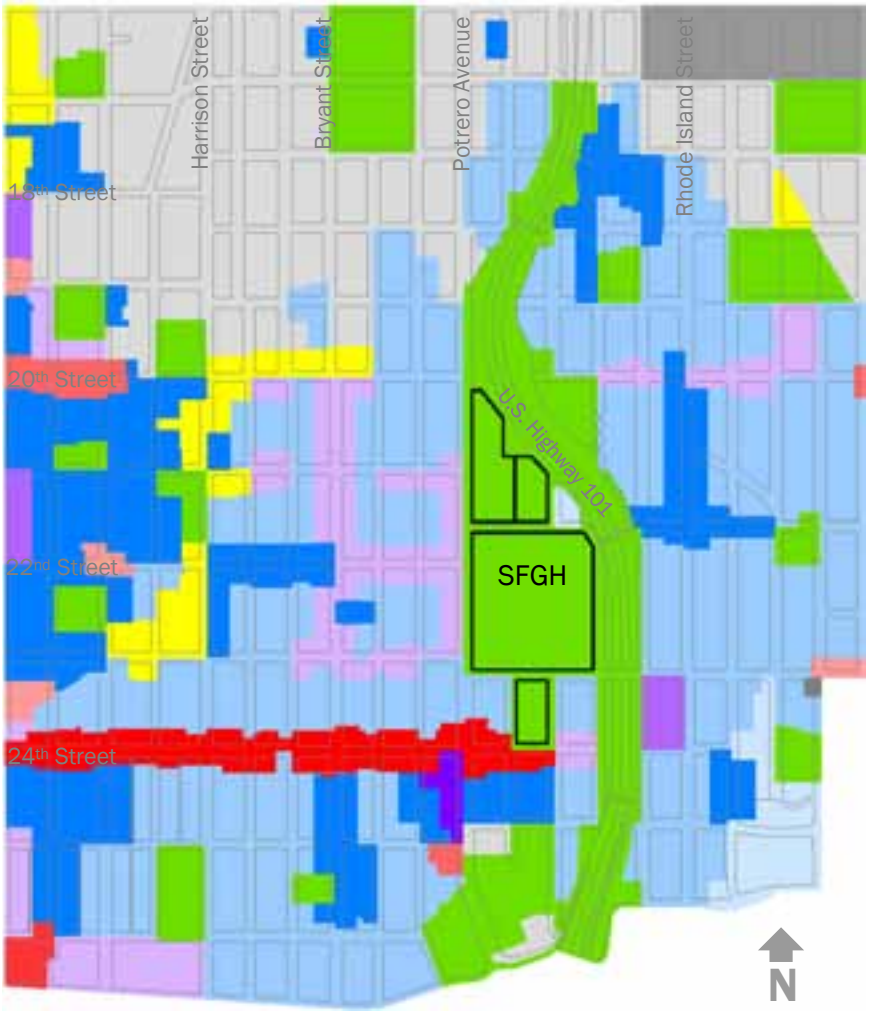


Fig. 3-6
Zoning map

P Districts: Public Principal uses permitted in P Districts: Public structures and uses of the City and County of San Francisco, and of other governmental agencies that are subject to regulation by this Code, including accessory nonpublic uses, when in conformity with the Master Plan and the provisions of other applicable codes, laws, ordinances and regulations.[4]
Neighborhoods encircling the hospital campus are primarily zoned RH-2 and RH-3.

RH-2 Districts: Two-Family These districts are devoted to one-family and two-family houses, with the latter commonly consisting of two large flats, one occupied by the owner and the other available for rental. Structures are finely scaled and usually do not exceed 25 feet in width or 40 feet in height. Building styles are often more varied than in single-family areas, but certain streets and tracts are quite uniform. Considerable ground-level open space is available, and it frequently is private for each unit. The districts have easy access to shopping facilities and transit lines. In some cases, group housing and institutions are found in these areas. Non-residential uses tend to be quite limited.

RH-3 Districts: Three-Family These districts have many similarities to RH-2 Districts, but structures with three units are common in addition to one-family and two-family houses. The predominant form is large flats rather than apartments, with lots 25 feet wide, a fine or moderate scale and separate entrances for each unit. Building styles tend to be varied but complementary to one another. Outdoor space is available at ground level and also on decks and balconies for individual units. Non-residential uses are more common in these areas than in RH-2 Districts, and are typically on the ground floor.

RM-1 Districts: Low Density These districts contain a mixture of the dwelling types found in RH Districts, but in addition have a significant number of apartment buildings that broaden the range of unit sizes and the variety of structures. The pattern of 25-foot to 35-foot building widths is retained, however, and structures rarely exceed 40 feet in height. The overall density of units remains low, buildings are moderately scaled and segmented, and units or groups of units have separate entrances. Outdoor space tends to be available at ground and upper levels regardless of the age and form of structures. Shopping facilities and transit lines may be found within a short distance of these districts. Non-residential uses are often present to provide for the needs of residents, and are typically on the ground floor.

The 24th St.—Mission Neighborhood Commercial District is situated in the Inner Mission District on 24th Street between Bartlett Street and San Bruno Avenue. This mixed-use district provides convenience goods to its immediate neighborhood as well as comparison shopping goods and services to a wider trade area. The street has a great number of Latin American restaurants, grocery stores, and bakeries

as well as gift and secondhand stores. Most commercial businesses are open during the day while the district's bars, restaurants, and movie theater are active in the evening. Dwelling units are frequently located above the ground-story commercial uses.[5]

Demographics of surrounding neighborhoods Population density is greatest in the area immediately to the west of the hospital campus. Moving north of **SFGH&TC**, the population decreases as residential neighborhoods give way to industrial areas. Demographically, the neighborhoods adjacent to **SFGH&TC** are composed mostly of young families and unmarried individuals.

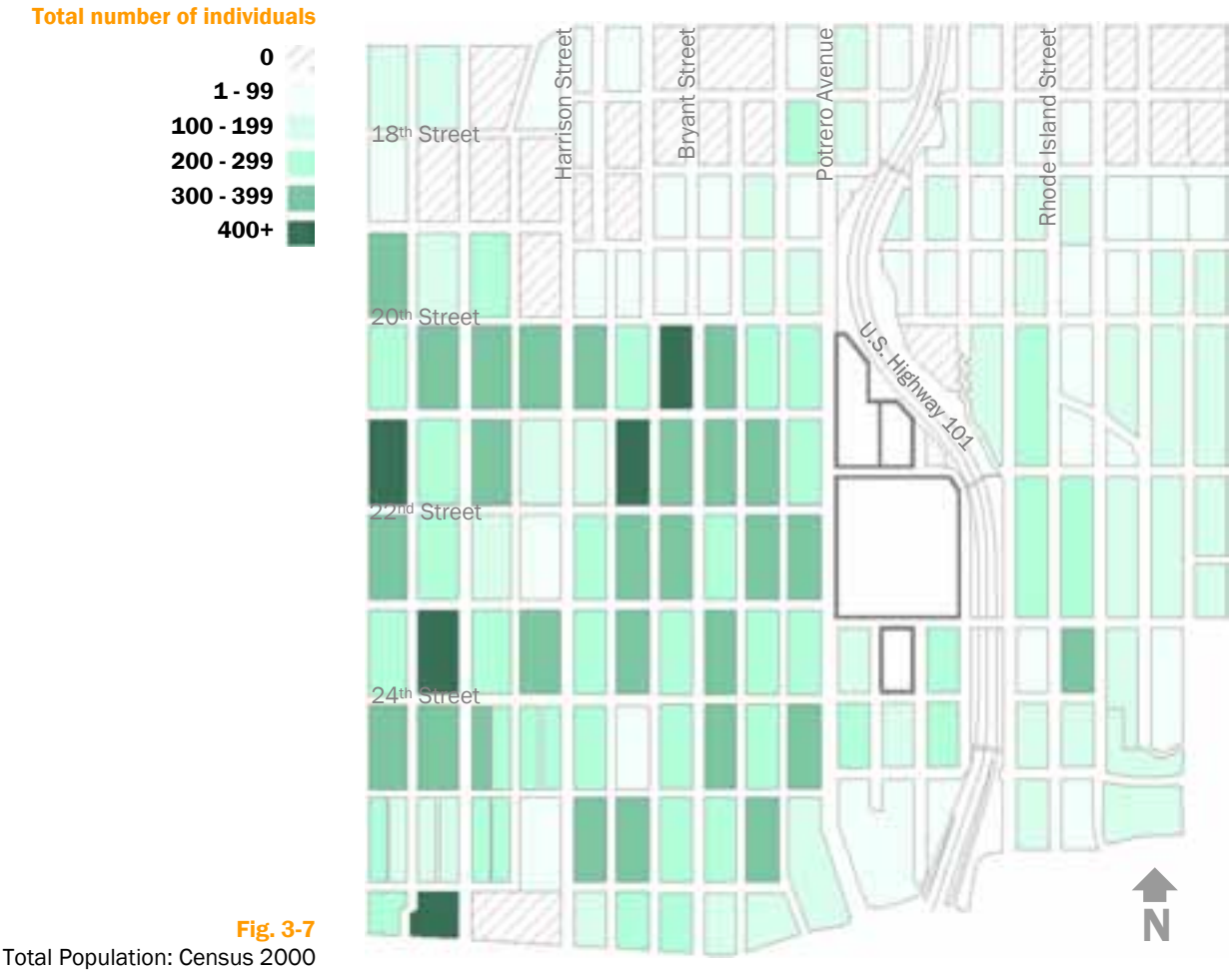


Fig. 3-7
Total Population: Census 2000

In the areas immediately east and west of the hospital campus, slightly more than half of the population resides in family households, and slightly less than half in nonfamily households. The population of the Mission District is generally younger than that of Potrero Hill. The majority of residents to the west of **SFGH&TC** are between the ages of 20 and 44, while to the east the majority of residents are between the ages of 25 and 54.

Housing stock The housing stock in the neighborhoods surrounding SFGH&TC is varied. Among the occupied units in the vicinity of the campus, there are numerous single-unit buildings and two- to four-unit buildings, with a smaller number of structures having between five and ten units, and very few having more than ten. Much of the housing in this area is old. In the part of the Mission District adjacent to SFGH&TC, 64 percent of occupied housing units were built in 1939 or earlier. In Potrero Hill, 46 percent of the housing was built before 1940, and another 24 percent was built between 1940 and 1959.[6]

The following map indicates the number of housing units in each block in the neighborhoods near SFGH&TC.

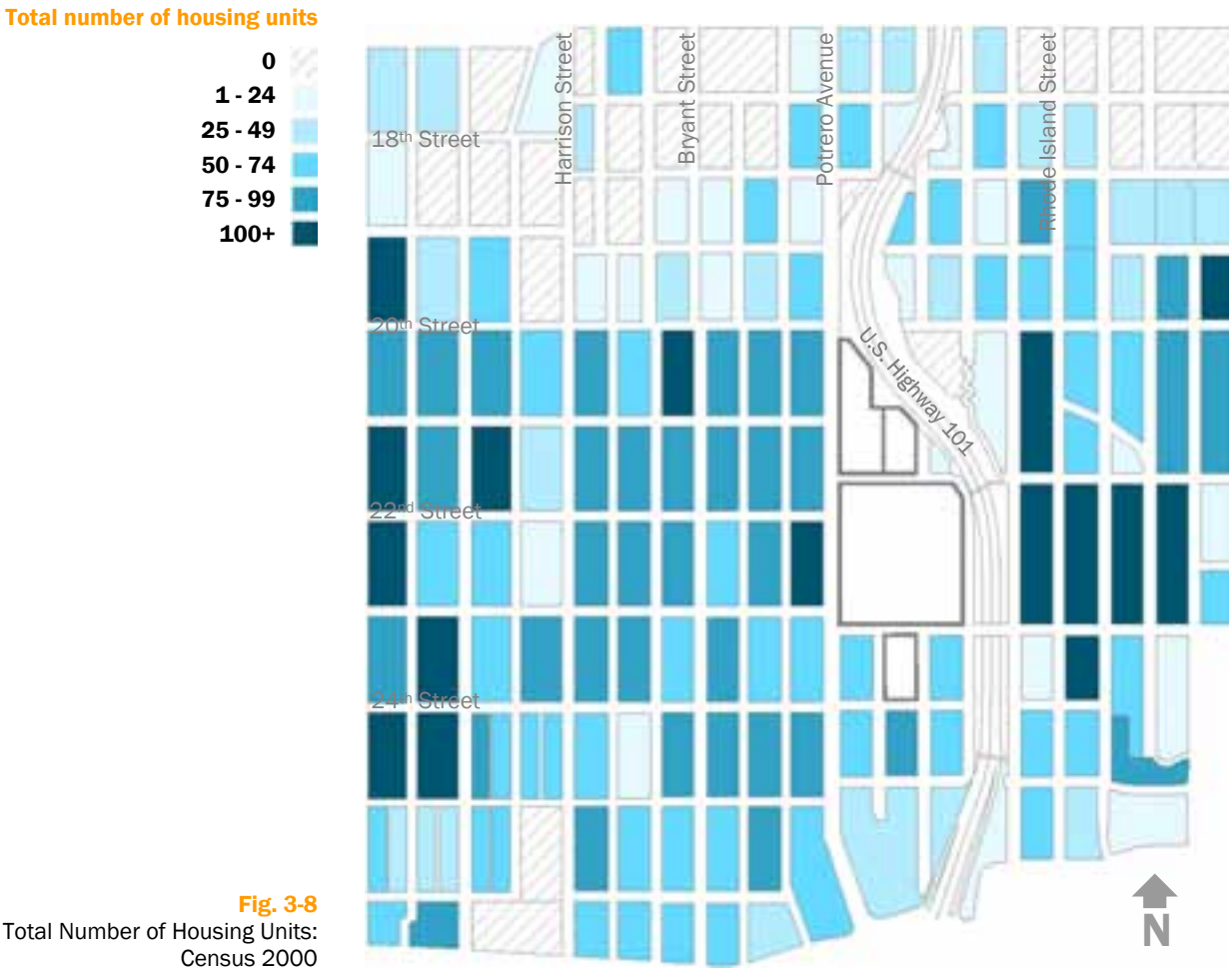


Fig. 3-8
Total Number of Housing Units: Census 2000

Neighborhood green spaces Open space and greenery in urban areas provide critical social, environmental, and economic benefits. Trees and other vegetation in green spaces contribute to the community through:

- more pleasant streetscapes
- reduced air and noise pollution

- better water quality
- reduced building energy consumption
- improved physical and psychological health of residents
- habitats for birds and other wildlife
- aesthetic value
- increased property values

Many of the beneficial effects of the urban forest have been quantified in studies. Preservation of existing green spaces and creation of new ones have measurable value for the city.[7]

Existing green spaces in the area of SFGH&TC include those located on the campus itself, landscaping along the U.S. Highway 101 corridor, McKinley Square, Potrero del Sol Park, and the Potrero Hill Playground and Recreation Center, along with trees planted along streets and on private property.

The San Francisco Department of Public Works (DPW) maintains street trees on some major city streets. In the neighborhoods around the SFGH&TC campus, DPW maintains trees on the following streets:

- Potrero Ave. from Division St. to 25th St. (both sides)
- 24th St. from Potrero Ave. to Osage St. (both sides)
- Bryant St. from 20th St. to Cesar Chavez St. (both sides)
- Cesar Chavez St. from Illinois St. to Douglas St. (both sides)

TRANSPORTATION CONDITIONS

Overview While SFGH&TC does not yet have a formal Transportation Demand Management (TDM) program, it has for some time adopted a variety of strategies designed to discourage travel by single occupant automobiles and promote other modes of transportation. These strategies include charging employees and patients parking fees, providing free van pool parking, providing free bicycle lockers and promoting the use of free shuttle services to and from UCSF campuses and BART and Caltrain stations. SFGH&TC also participated in the development of a residential permit parking program, in essence to ensure the effectiveness of the above strategies and to afford residents with reasonable access to parking spaces near their residences.

Fig. 3-9
Bus Stop at Main Campus Gate

Patients, visitors, and staff at SFGH&TC use a wide variety of modes of transportation to arrive at the hospital campus. In addition to private automobiles, transportation options range from regional systems, such as Caltrain and BART, to local systems like Muni and a growing network of bicycle routes. Transportation challenges include:

- Congestion on adjacent streets
- Limited availability of both on-campus parking and street parking in the neighborhoods surrounding SFGH&TC
- Facilitating alternative modes of transportation

Managing transportation demand at SFGH&TC is an especially critical project in the face of growing geographic dispersion of employees, combined with the need to minimize reliance on private automobiles.

Although the number of full-time employees has changed little over the past two decades, fewer of today's employees are San Francisco residents. In 1987, 60% of full-time employees lived in San Francisco. Currently, that number has dropped to about 45%. This means that there are today approximately 750 more employees commuting from outside the city than in 1987. Many are commuting from increasingly distant areas, especially in the South Bay.

TRAFFIC

Streets bordering the SFGH&TC campus The street network surrounding **SFGH&TC** is limited by its location adjacent to U.S. Highway 101. Potrero Ave. and 23rd St. border the campus on the west and south, respectively. Two streets, 22nd St. and Vermont St., handle traffic within the campus.

	Orientation	Lanes	Lane Type
Potrero Ave.	N-S	3/3	Marked
Vermont St.	N-S	1/1	Unmarked
22nd St.	E-W	1/1	Unmarked
23rd St.	E-W	1/1	Marked

Surrounding street traffic Street traffic in the immediate vicinity of the **SFGH&TC** campus is centered primarily on the major north-south thoroughfare of Potrero Avenue, which runs along the western edge of the campus. Potrero Avenue is a high-volume artery connected to U.S. Highway 101 in both the northbound and southbound directions via the Cesar Chavez Street exit.

There are two vehicular accesses to the campus from Potrero Avenue, located the intersections of Potrero and 21st Street, and of Potrero and 23rd Street. In the east-west direction, 23rd Street provides the only means, via an overpass, of crossing Highway 101 between Cesar Chavez and 17th Streets. There is a campus access point on 23rd St. directly across from the parking structure. West of Potrero Avenue, 24th Street provides access to the Mission District and Noe Valley. It is the main locus of commercial activity in the area surrounding **SFGH&TC**.

Observed traffic volumes on thoroughfares intersecting at the **SFGH&TC** campus are shown in the following table.[8]

LOS Categories

- **A** Free flow with no delays. Users are virtually unaffected by others in the traffic stream.
- **B** Stable traffic. Traffic flows smoothly with few delays.
- **C** Stable flow but the operation of individual users becomes affected by other vehicles. Modest delays.
- **D** Delay becomes more noticeable.
- **E** Traffic volumes are at or close to capacity, resulting in significant delays and average speeds which are no more than about one-third the uncongested speed.
- **F** Traffic demand exceeds available capacity with very slow speeds, long delays and standing queues at signalized intersections.

Potrero Ave.	Cross St.	Dir.	Date	Volume	AM/PM Peak
	22nd St.	N	8/12/03	13514	1525/1125
	22nd St.	N	3/4/03	12074	1536/827
	22nd St.	S	3/4/03	16704	1563/1487
	20th St.	N	10/9/02	15561	1849/1394

23rd St.	Cross St.	Dir.	Date	Volume
	San Bruno	W	10/8/96	3028
	San Bruno	E	10/8/96	3174

24th St.	Cross St.	Dir.	Date	Volume	AM/PM Peak
	Potrero	W	6/2/05	2685	158/284
	Potrero	E	6/2/05	2865	277/195
	Potrero	W	6/1/05	2559	173/218
	Potrero	E	6/1/05	4317	342/306

Level of service (LOS) monitoring conducted under the auspices of the San Francisco County Transportation Authority provides congestion data for city streets. For the segment of Potrero Avenue adjacent to the SFGH&TC campus, the most recent LOS monitoring results, from 1999, are shown below.[9]

Potrero Ave.	Segment	Dir.	Hour	Avg. Speed	LOS
	21st St./C. Chavez	S	AM	13.5 mph	C
	C. Chavez/21st St.	N	AM	15.5 mph	C
	21st St./C. Chavez	S	PM	19.1 mph	B
	C. Chavez/21st St.	N	PM	14.5 mph	C

Previous data from 1993 indicate a decline in overall LOS for this portion of Potrero Avenue over the course of the last decade.

Circulation Traffic circulation on the **SFGH&TC** campus is shown on the plan below. In general, public vehicle access is from Potrero Ave. and 23rd St., while 22nd St. and Vermont St. are typically used by staff and service vehicles.

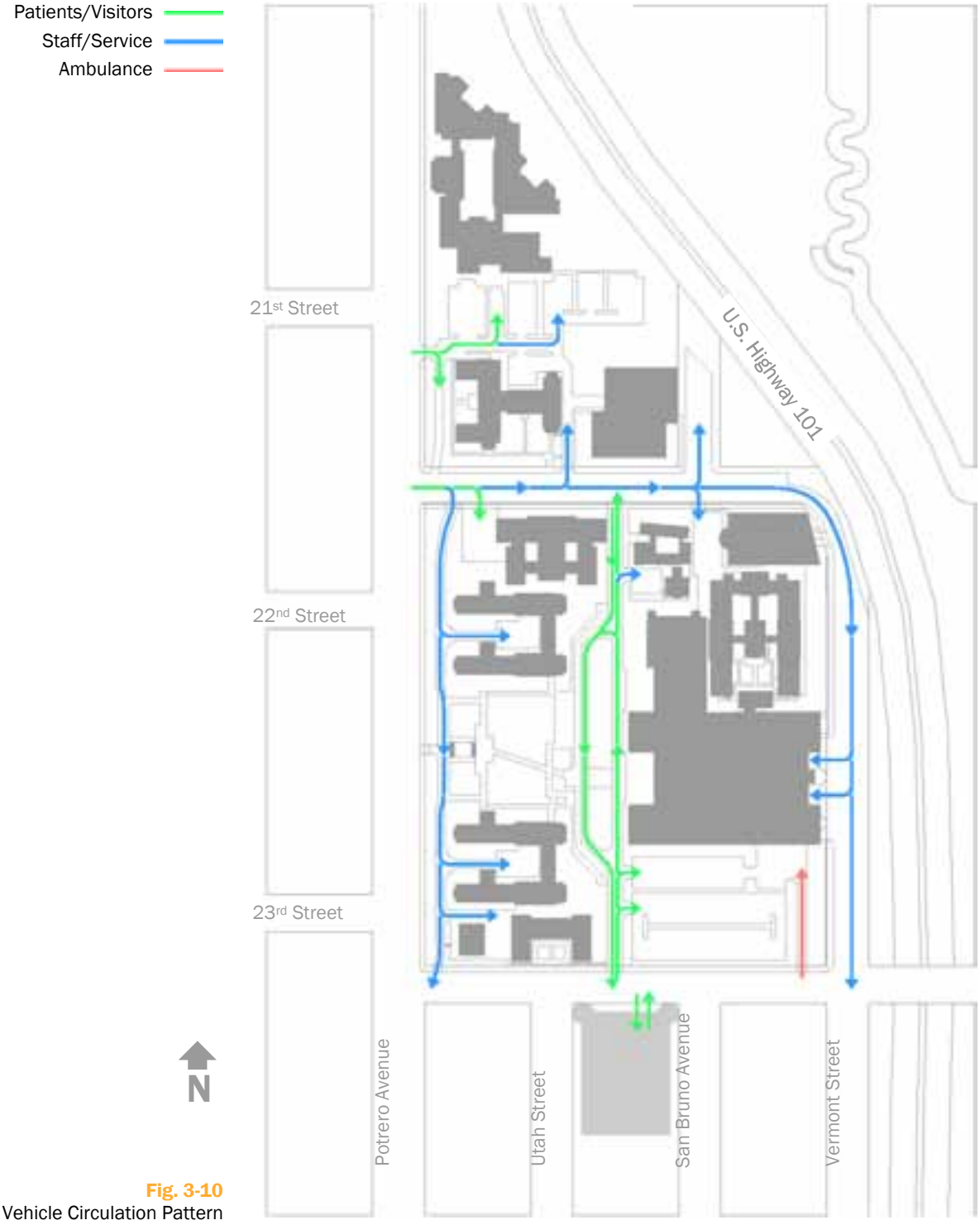


Fig. 3-10
Vehicle Circulation Pattern

PARKING

The following map shows the locations of patient, visitor, staff, and utility parking at **SFGH&TC**.

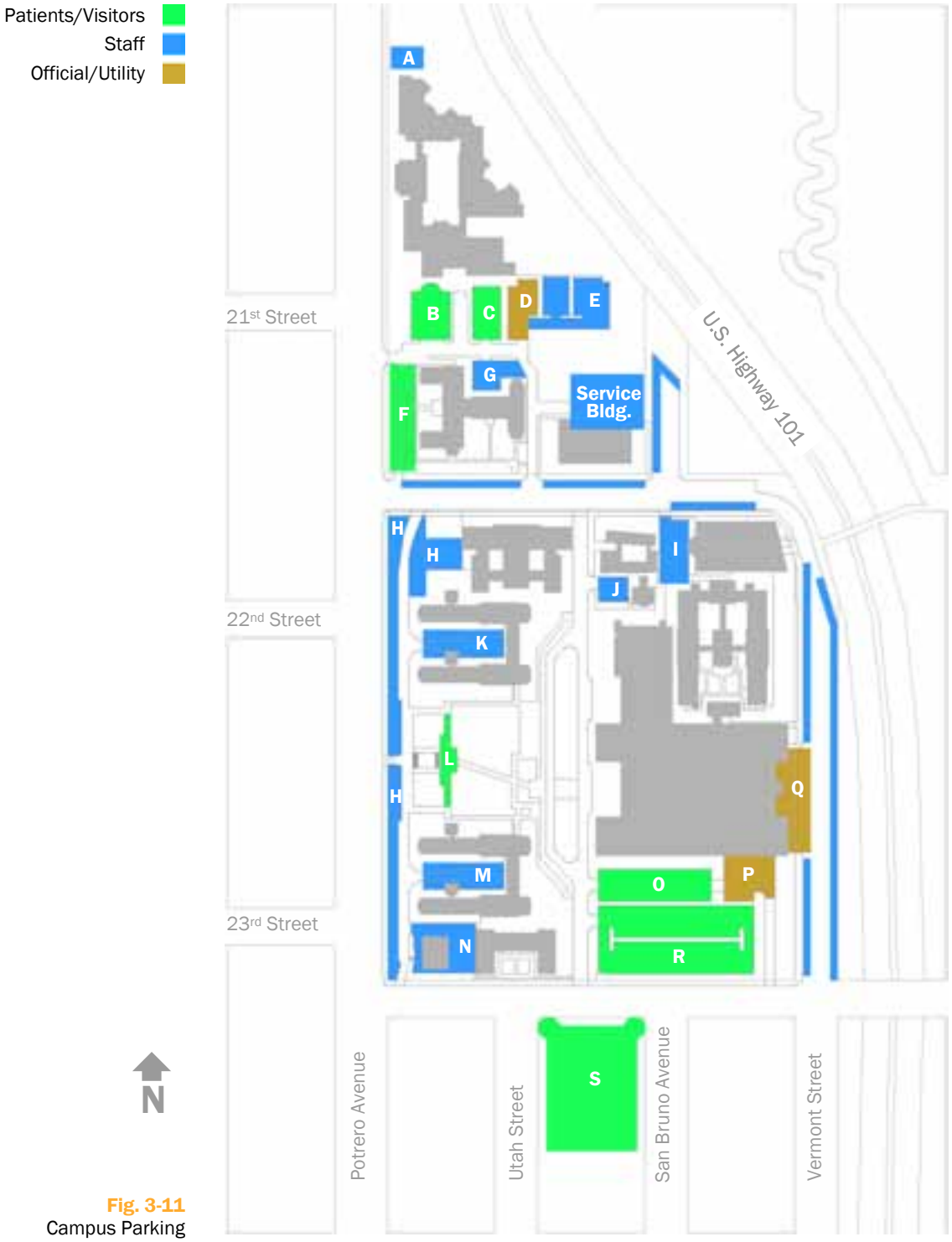


Fig. 3-11
Campus Parking

Off-Street Surface Parking

Lot A	12	Staff
Lot B	20 (2 ♿)	Visitor (metered)
	2	Staff
Lot C	19	Visitor (metered)
	4	Court Official
Lot D	9 (1 ♿)	Service
	10	City Official
Lot E	41	Staff (valet)
Lot F	24	Visitor
	8	Social Services
Lot G	13 (6 ♿)	Staff
Lot H	103	Staff
Lot I	20 (2 ♿)	Staff (reserved)
Lot J	6	Staff
Lot K	35	Staff
Lot L	10 ♿	Visitor
Lot M	24	Staff
Lot N	6 (1 ♿)	Staff
Lot O	7	Staff
	14 ♿	Visitor
Lot P	7	Emergency
Lot Q	15	Service
Lot R1	22	Visitor
Lot R2	23	Visitor
Lot R3	19	Visitor
Lot R4	18	Visitor
Lot R5	31	Visitor
Lot R6	12	Visitor
Service Bldg.	55	Staff
Total	**589 (36 ♿)**	

Off-Street Structured Parking

Total	**811 (21 ♿)**

On-Street Parking

Vermont	41	Staff
	72	Staff Carpool
San Bruno	32	Staff
22nd Street	56	Staff
Total	**201**	

Total Available Parking

Off-Street Surface Parking	589
Off-Street Structured Parking	811
On-Street Parking	201
Total	**1601 (57 ♿)**

The 1987 Institutional Master Plan identified 584 marked parking spaces on the SFGH&TC campus, and assessed a need for a total of approximately 1,500 spaces. With the construction of a dedicated parking structure in 1995, total parking availability at the campus increased to over 1,600 spaces. This figure does not include on-street parking spaces in the surrounding neighborhoods, which are often used by hospital staff and visitors. In a number of parking lots on the campus, stalls are not marked, which occasionally results in an inefficient arrangement of parked vehicles. Actual parking availability in these lots thus varies.

Transit First parking policies According to the City's Transit First policy, "public transit, including taxis and vanpools, is an economically and environmentally sound alternative to transportation by individual automobiles.... Parking policies for areas well served by public transit shall be designed to encourage travel by public transit and alternative transportation."[10]

In accordance with this policy, SFGH&TC and DPT have designated a carpool parking area on the east side of Vermont Street. Carpool vehicles with at least three people are eligible for carpool parking permits. At present, there are 46 issued carpool permits.

Additionally, there are two City CarShare vehicle parking spaces located at the north entrance to Building 1. City CarShare is a nonprofit organization that provides shared access to cars, for an hourly fee, in an effort to reduce individual car ownership in the Bay Area.

Parking breakdown, permits and fees Of the total number of off-street parking spaces provided on the SFGH&TC campus, over half are reserved for hospital staff. However, of the total number of all parking spaces at the campus, nearly two thirds are available to patients and visitors.

	Off-Street	Structured	On-Street	**Total**
Staff	324	-	201	525
Patient/Visitor	212	811	-	1023
Service/Official	53	-	-	53

Parking permits for off-street lots and designated on-street areas are issued by the SFGH&TC Parking Office.

		Permits in use	Cost
SFGH&TC Campus	Daytime	490	$ 105
	Night	9	40
	Motorcycle	0	45
Garage	Daytime	964	80
	Night	115	40
	Motorcycle	0	45

Hourly parking fees in Lot R and in the parking structure are shown in the table below.

Hours	0 - 1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 6	6 - 7	7 – 24
Fee	$ 1.25	2.50	3.75	4.50	6.00	7.50	9.00	11.00

Metered parking on campus costs $1.00 per 24 minutes, or $2.50 per hour, up to three hours.

Off-street parking spaces required by law Zoning requirements governing the number of parking spaces available at the **SFGH&TC** campus are as follows, according to the San Francisco Planning Code, Section 151, amended November 2005:

- Hospital or other inpatient medical institution: One for every 16 guest excluding bassinets or for every 2,400 square feet of gross floor area devoted to sleeping rooms, whichever results in the greater requirement.
- Medical/Dental Office and Ambulatory Care Clinic: One space for every 300 SF of occupied floor area, where the occupied floor area exceeds 5,000 SF.
- Mental Hospital: One space for every 16 beds or for every 2,400 GSF devoted to sleeping rooms, whichever is greater.
- Office Building: One space for every 500 square feet of occupied floor area, where the occupied floor area exceeds 5,000 square feet.
- Service Building: One space for every 1,000 square feet of occupied floor area, where the occupied floor area exceeds 5,000 square feet.

Disabled parking For every 25 off-street parking spaces provided, one space shall be designed and designated for disabled persons.

Analysis of required parking spaces The total number of licensed beds at **SFGH&TC** is 639, including 403 general acute care beds, 106 acute psychiatric, and 130 skilled nursing. This yields a minimum parking requirement, based on number of beds, of 40 spaces.

Clinical and ambulatory care facilities, excluding the main hospital building, have an estimated occupied floor area of 105,000 square feet, and require 350 parking spaces.

The total occupied floor area of office buildings is approximately 460,000 square feet, requiring 920 parking spaces.The total estimated number of spaces required by code is therefore 1,310.
Given a current total of 589 off-street parking spaces, **SFGH&TC**

faces a deficit of over 700 spaces, although this calculation does not take into account the public parking garage and available street parking.

Based on the number of parking spaces currently provided, the hospital falls only a few disabled spaces short of the required 61. However, 92 disabled spaces would be needed if the total number of spaces required by code were provided.

Residential Permit Parking In an effort to preserve the integrity of neighborhoods in San Francisco and to encourage use of public transportation in place of private automobiles, DPT established a preferential residential parking system in 1976. The program's chief goal is "to provide more parking spaces for residents by discouraging long-term parking by people who do not live in the area."[11]

The following map indicates the boundaries of residential permit parking zones around **SFGH&TC**. The hospital does not make residential parking permits available to its faculty and staff.

Fig. 3-12
Residential Parking Permit Zones

TRANSIT

Systems serving SFGH&TC Public transportation provides various means of access to **SFGH&TC** on an interurban as well as a local scale. The San Francisco Municipal Railway (Muni) is the chief transit service provider via bus. San Mateo County Transit (SamTrans) provides service via buses running between downtown San Francisco and the Peninsula. The Bay Area Rapid Transit District (BART) provides service via light rail on its Daly City-bound line beneath Mission Street. Finally, the UC San Francisco shuttle bus service links **SFGH&TC** with the UCSF campus in Parnassus Heights.

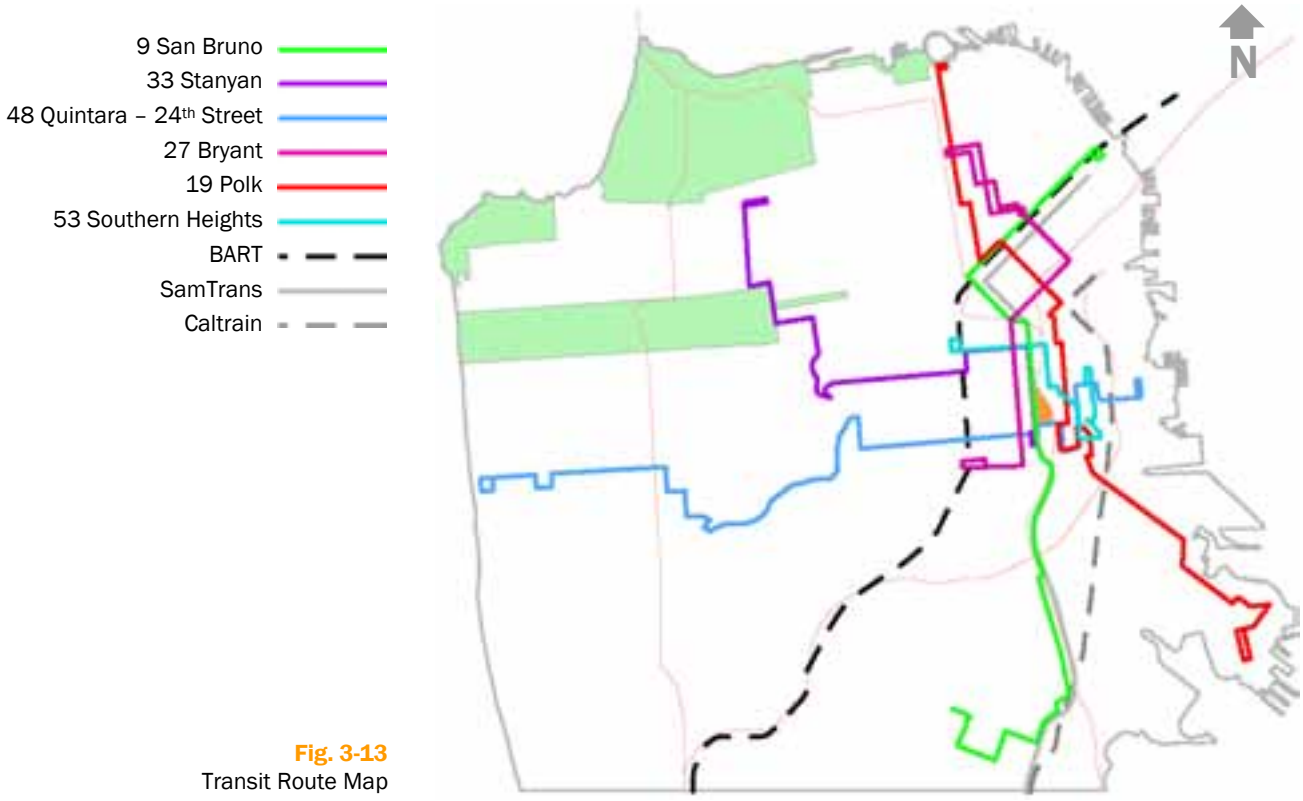


Fig. 3-13
Transit Route Map

Muni Six Muni bus transit lines pass within a four-block radius of the **SFGH&TC** campus.

9 San Bruno This is a downtown route that serves Downtown, the Mission, SOMA, and Southeast San Francisco, originating at the junction of Sunnydale Avenue and Santos Street in Visitacion Valley. Its downtown terminal is located at Mission Street and Main Street. On weekdays its frequency is 10 minutes during the day and 8 minutes during the evening commute. On weekends its frequency is 12 minutes. This line is wheelchair accessible and equipped with bicycle racks.

In recent years, the 9 San Bruno line has faced reductions in the frequency of weekday trips. These reductions were rejected due to the use of this line for trips to SFGH&TC.

33 Stanyan This crosstown trolley bus route serves Northwest and Central San Francisco, the Mission, and SOMA. It runs from California Pacific Medical Center at Arguello Blvd. and California St. to Potrero Ave. and 25th St. It runs at 15-minute intervals throughout the day on weekdays, and at 20-minute intervals on weekends. The line is accessible and has bicycle racks.

48 Quintara-24th Street This is a crosstown bus route that originates on weekday mornings and afternoons at Ulloa St. and West Portal Ave., and on weekends at Great Highway and Rivera St. in the Sunset District. It terminates at 20th St. and Illinois St. Frequency is 12 minutes on weekdays, and 15 to 20 minutes on weekends. Buses on this line are accessible and have bicycle racks.

27 Bryant Serving Northern San Francisco, downtown, SOMA, and the Mission District, this line begins at Mission St. and Cesar Chavez St., and ends at the intersection of Jackson St. and Van Ness Ave. in the Polk Gulch/Russian Hill area, passing through downtown via 5th St. and the Tenderloin District. It runs at intervals of 12 minutes throughout the day except weekends, when the time between buses is 15 to 20 minutes. It is an accessible route with bicycle racks on vehicles.

19 Polk During commute hours, this crosstown bus line originates at Manseau St. and Hussy St. in Hunter's Point, and terminates in front of the National Maritime Museum at Beach St. and Polk St. The southern terminus of the route on weekends and during weekday evenings is the U.S. Post Office on Evans Ave. The frequency of service during commute hours is 10 minutes. Vehicles on this route are accessible and equipped with bicycle racks.

53 Southern Heights This is a community service bus line serving Potrero Hill, the Mission District, and SOMA that originates at Connecticut St. at 18th St., and terminates at 16th St. and Mission St. Since it is not a commuter route, its frequency is 30 minutes during weekdays and 20 minutes during the day on weekends, and there is no evening service. It provides access to SFGHMC via the pedestrian bridge at 22nd St.

BART The BART system provides access to the SFGH&TC campus via underground rail beneath Mission St. Both northbound and southbound trains run frequently throughout the day. The BART station nearest to SFGH&TC is located at 24th St. and Mission St. This station is accessible to the disabled via two elevators.

SamTrans The SamTrans bus system links **SFGH&TC** with the Peninsula via its Route 292, serving San Mateo, Burlingame, San Francisco International Airport, South San Francisco, Brisbane, and San Francisco. This line runs daily at approximately half-hour intervals.

Caltrain Rail service provided by Caltrain connects San Francisco with the Peninsula and South Bay regions. The 22nd Street station, located at the intersection of 22nd St. and Pennsylvania Ave., is eleven blocks from the **SFGH&TC** campus.

UCSF Shuttle Bus The UCSF shuttle bus service connects the Parnassus, Mission Bay and Mt. Zion campuses of the University with **SFGH&TC** via the Gold and Blue lines. In addition, the Green line runs between SFGHMC and the BART station at 24th St. and Mission St. UCSF Shuttle ridership is available to **SFGH&TC** faculty and staff.

In May 2006, the UCSF shuttle bus routing system was revised to better serve the major campuses of UCSF and **SFGH&TC**. These are the endpoints of 80 percent of trips taken on the shuttle bus system, which serves about 2 million passengers annually.

Regularly scheduled shuttles run Monday through Friday between 7:00 am and 8:00 pm. The BART shuttle to **SFGH&TC** runs on a morning and afternoon schedule. Shuttles depart from the 24th St. station every 15 minutes from 6:00 am to 9:20 am, and depart from the SFGH Outpatient Entrance every 20 minutes from 2:40 pm to 7:10 pm.

UCSF shuttle buses are equipped with front bicycle racks.

Blue/Gold Line Stops

UCSF Parnassus Campus
- Library *530 Parnassus Ave.*
- Langley Porter *401 Parnassus Ave.*

UCSF Mt. Zion Campus.
- Sutter St. between Divisadero and Scott Sts.

UCSF Mission Bay Campus
- Along 14th St.

Mission Bay Campus: Community Center *1675 Owens St.*
- Roundabout

- **SFGH&TC**
- Clinic Lobby Entrance

PEDESTRIAN CONDITIONS

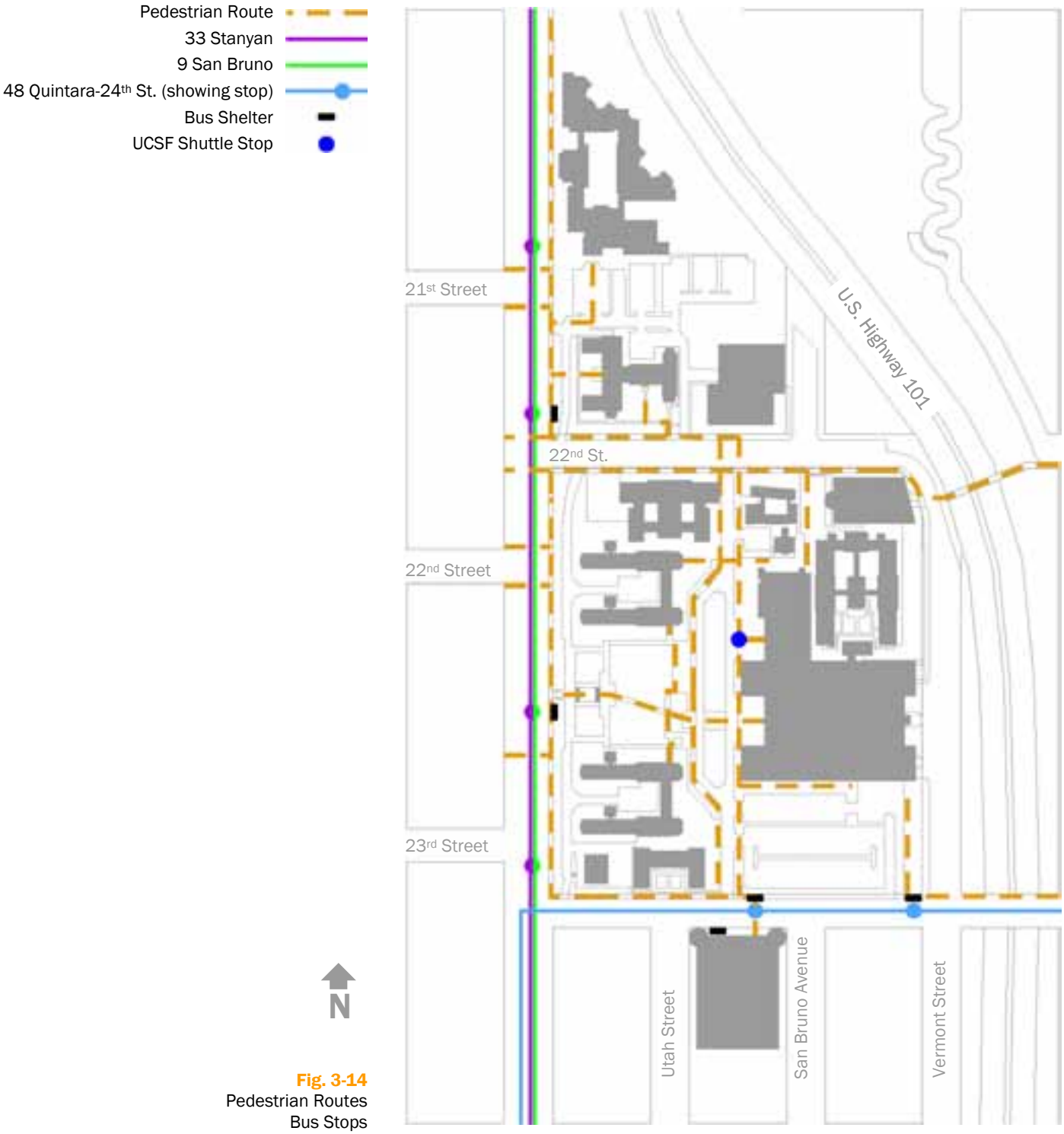


Fig. 3-14
Pedestrian Routes
Bus Stops

Fig. 3-15
Midblock crossing on Potrero Avenue

Pedestrian access Pedestrians have a variety of options for entering the SFGH&TC campus. In addition to the vehicular access points, there are pedestrian gates along Potrero Avenue, both at the main gate and west of Building 80. There is also a pedestrian overpass crossing Highway 101 at 22nd Street.

Crosswalks at 21st and 22nd Streets and a midblock crossing immediately to the south of the main gate allow pedestrians to safely cross Potrero Avenue. Signals at intersections and a dedicated pedestrian signal at the midblock crossing allow 27 seconds for crossing. These signals feature 20-second visual countdown timers as well as auditory alerts. The midblock crossing has three pedestrian buttons, including one in the center island, while the crosswalks at intersections do not have buttons. The typical wait time at all crossings of Potrero Avenue is one minute.

Planning for pedestrians The San Francisco Municipal Transportation Agency Planning Division is currently preparing a Pedestrian Master Plan for the City. Its goals are to:

- Provide a framework for improving the walking environment
- Consider the needs of all pedestrians, especially children, seniors, and people with disabilities
- Focus and attract funding for physical improvements, education, outreach and enforcement efforts
- Incorporate San Francisco's "Transit First" policy, considering the needs of all travel modes
- Coordinate all city agencies that work in the pedestrian realm

By working closely with the MTA Planning Division, SFGH&TC can ensure that pedestrian travel to and from its campus will become an increasingly viable and attractive option.

Potrero Avenue is one locus of the Livable Streets Corridor Project initiated by DPT in 2004. This project includes numerous enhancements to Potrero Avenue for pedestrians, cyclists, and public transportation users. Among them are:

- Raised median islands
- 5'-wide bicycle lanes in both directions
- Longer Muni bus stops
- Bulb out bus stop in front of SFGH&TC campus
- Midblock pedestrian crossing to SFGH&TC between 22nd and 23rd Streets
- Left turn prohibitions to improve traffic flow and pedestrian safety

BICYCLE CONDITIONS

A growing network of bicycle lanes on San Francisco streets provides greater safety for cyclists, pedestrians, and drivers, and facilitates an increase in cycling as a means of commuting. The map below shows bicycle lanes linked to the **SFGH&TC** campus.

Fig. 3-16
Bicycle Route Map

Bicycle parking requirements Per zoning requirements, one bicycle parking space must be provided for every 20 off-street automobile parking spaces.

The estimated total number of required off-street automobile parking spaces at **SFGH&TC** is 1,310. A total of 65 bicycle parking spaces are thus necessary to comply with the planning code.

Bicycles and Transit First The City's Transit First policy states that "bicycling shall be promoted by encouraging safe streets for riding, convenient access to transit, bicycle lanes, and secure bicycle parking." **SFGH&TC** works to support this policy by encouraging staff to commute by bicycle, improving signage and traffic markings for cyclists on the campus, and upgrading bicycle parking facilities.

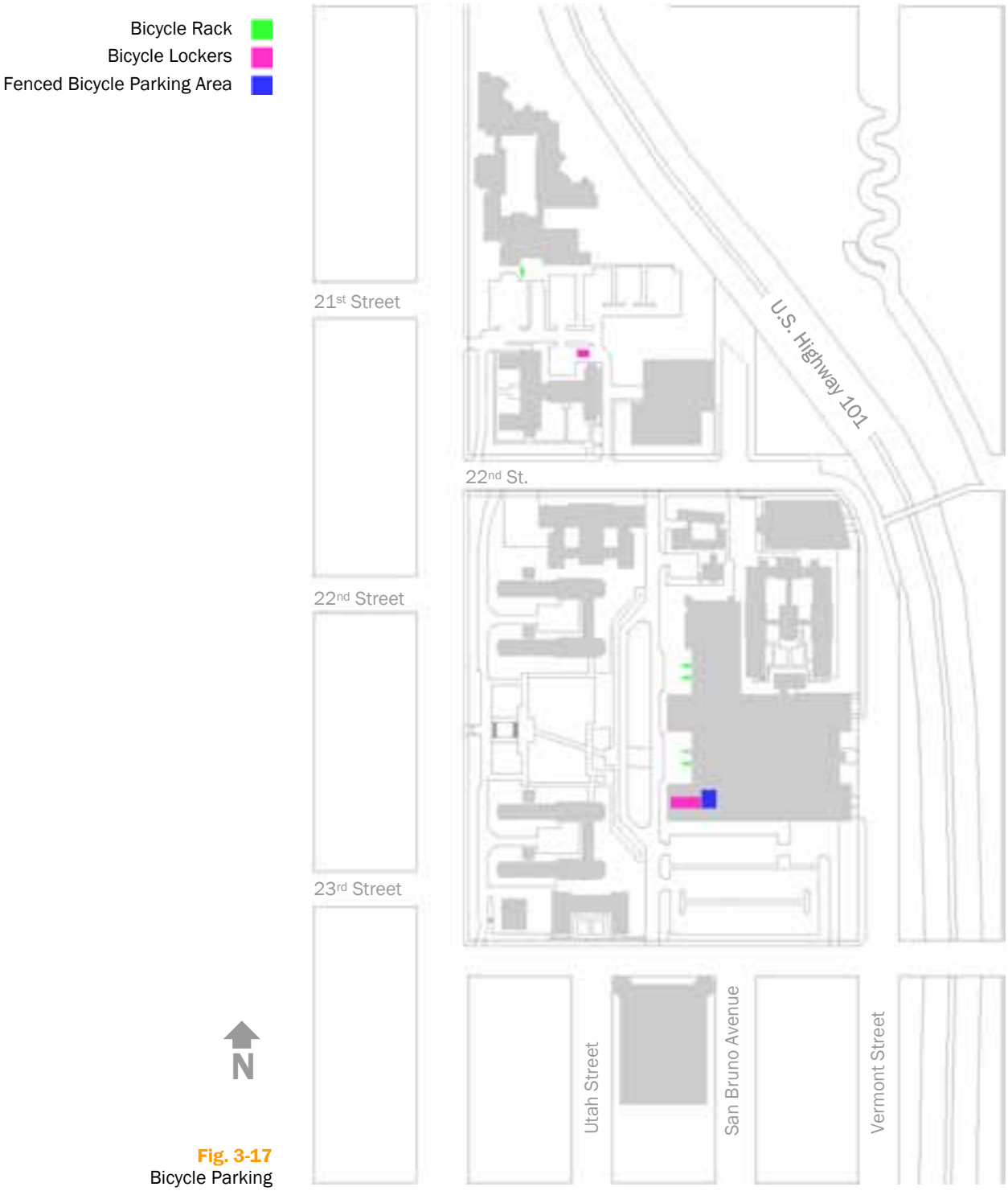


Fig. 3-17
Bicycle Parking

Bicycle parking The total bicycle parking capacity of the SFGH&TC campus is shown on the following table.

Building	Rack	Locker	Fenced Parking
Behavioral Health Rehab	8	-	-
Building 90	-	6	-
Main Hospital Building	32	14	34
Total (94)	**40**	**20**	**34**

Numerous bicycles are also found locked to fences, barriers, and poles around the SFGH&TC campus.

The hospital allows employees to park their bicycles in office areas, where appropriate and where space allows. Many employees take advantage of this opportunity.

DPT provided the bicycle lockers on the campus and maintained them until 2001. SFGH&TC will be applying for grant funds to expand the number of available lockers in an effort to comply with the planning code.

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[1] San Francisco Planning Code Section 270.a
[2] Planning Code Section 271.a.1-2
[3] Planning Code Section 290
[4] Planning Code Section 231.1.b
[5] Planning Code Section 727.1
[6] 2000 U.S. Census
[7] United States Department of Agriculture, *Assessing Urban Forest Effects and Values: San Francisco's Urban Forest*, 2004
[8] SF Municipal Transportation Agency/Department of Parking & Traffic
[9] San Francisco County Transportation Authority, *Congestion Management Program: Spring 2004 Level of Service Monitoring Final Report*, 2004
[10] SF City Charter, Section 16.102
[11] SF Department of Parking & Traffic

Section 4 Development Objectives

Fig. 4-1
Current Potrero Campus boundaries

Overview San Francisco General Hospital **& Trauma Center (SFGH&TC)** does not foresee the need for future land acquisitions or to expand the Potrero Campus beyond its current boundaries. **SFGH&TC** does have plans however to enhance the emergency generator power capacity, to construct and operate a medical helipad on the rooftop of the existing Main Hospital building and to build a new acute care hospital in compliance with California Senate Bill 1953 inside the Potrero Campus and remodel the existing Main Hospital building. These three development plans are described in detail below.

MEDICAL HELIPAD

BACKGROUND

SFGH&TC has proposed to construct and operate a medical helipad on the roof of San Francisco General Hospital & Trauma Center **(SFGH&TC)** in order to mitigate patient care and transport vulnerabilities identified in The City and County of San Francisco Trauma Care System Plan (2001).[1] The medical helipad would be licensed by the California Department of transportation Division of Aeronautics and its airspace use approved by the Federal Aviation Administration (FAA). **SFGH&TC** will not own or operate a medical helicopter service nor will it base a medical helicopter or its crew at the Medical Center.

In August 2001, the San Francisco Health Commission approved the City and County of San Francisco Trauma Care System Plan. Upon approval of the Trauma Plan, The San Francisco Health Commission requested that **SFGH&TC** conduct a through and objective evaluation of the need for and feasibility of consistently available air access to San Francisco General Hospital. The **SFGH&TC** Air Medical Access Needs and Feasibility Study [2] were approved by the Health Commission on March 4, 2003. This report documents the medical need for helicopter access to the City and County of San Francisco and to its only Trauma Center. The report also concluded that it is structurally feasible to construct a medical helipad on the roof of the main hospital building on the **SFGH&TC** Campus located at 1001 Potrero.

The California EMS Authority approval of the City and County of San Francisco Trauma Care System Plan was also required. In November 2001, the Authority approved the Plan while commenting that “San Francisco may also wish to expedite its designation of a helipad so

Level I Trauma Center with helipad H
Santa Clara Valley Medical Center
Stanford Medical Center

Level I Trauma Center without helipad
San Francisco General Hospital

Level II Trauma Center with helipad H
Eden Medical Center
John Muir Medical Center
San Jose Medical Center
Oakland Children's Hospital

Level II Trauma Center without helipad
Highland General Hospital

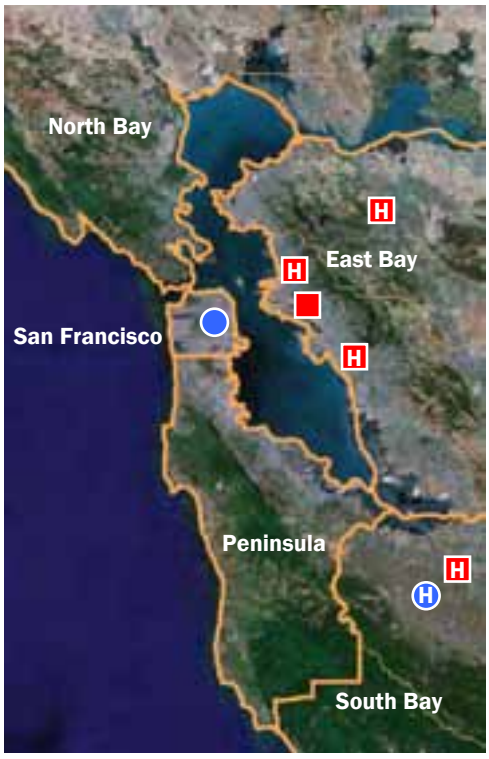


Fig. 4-2
Regional map locating Level I & II Trauma Centers

that patients may be expeditiously transported to an appropriate facility".[3]
Neighborhood concerns over noise, safety, and commercial helicopter utilization have been recorded since emergency medical use of helicopters was first studied in San Francisco in 1983. The need for and feasibility of air medical access within the City and County of San Francisco has been addressed by at least four commissioned reports in the past twenty-three years.[4] All of these reports supported the emergency medical use of helicopters and concluded that there was, in fact, a need for this crucial service.

Emergency medical transportation to and from **SFGH&TC** is currently limited to ground ambulance via surface streets and bridges. This creates vulnerability in the City's trauma care system.

The ability to provide timely access to Trauma Center care is compromised by lack of air access. Ground access routes are subject to significant delays due to traffic congestion on surface streets and freeways. Transfers of patients to and from other regional facilities would be limited by delays from bridge traffic, and could be accommodated only under unpredictable timeframes.

In the event of multiple casualties, the trauma capacity of **SFGH&TC** might be exceeded, and there would be no reasonably acceptable method to transport critically injured patients to other trauma centers in the region.

San Francisco is the only major city in the United States that lacks direct air medical access. The American College of Surgeons Committee on Trauma cited **SFGH&TC** lack of a helipad as a facility "weakness" and recommended in their site survey report the development of air medical access in order to allow tertiary care to critically injured patients. [5]

PROJECT DESCRIPTION

Overview The San Francisco Department of Public Health proposes to construct and operate a medical helipad on the rooftop of the existing Main Hospital building at the **SFGH&TC** campus, located at 1001 Potrero Avenue. The helipad will consist of an approximately 3,000 square foot helipad platform installed over the existing roof of the C wing of the Main Hospital (southwestern wing). Other improvements will necessary to include helipad lighting, fire suppression system, installation of wind sock, construction of a ramp from helipad to roof surface and improvements to east elevator bank allowing two elevators to access the roof for rapid patient transportation to the ICU, OR and Emergency Department.

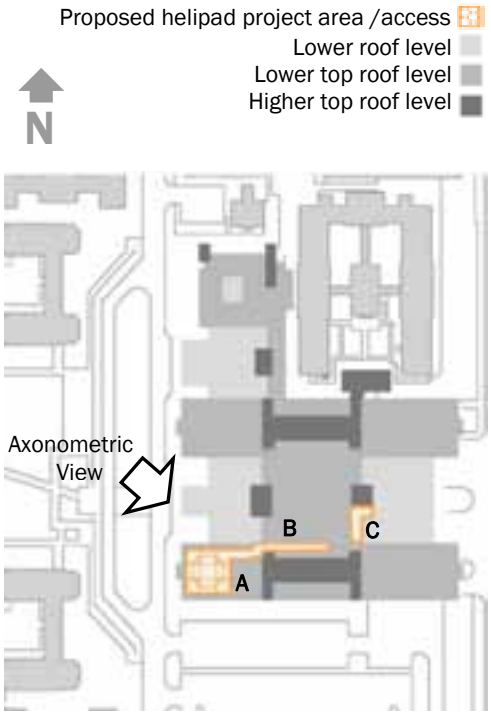


Fig. 4-3

Above: Roof plan of proposed helipad platform (A), walkway (B) & elevator access (C)

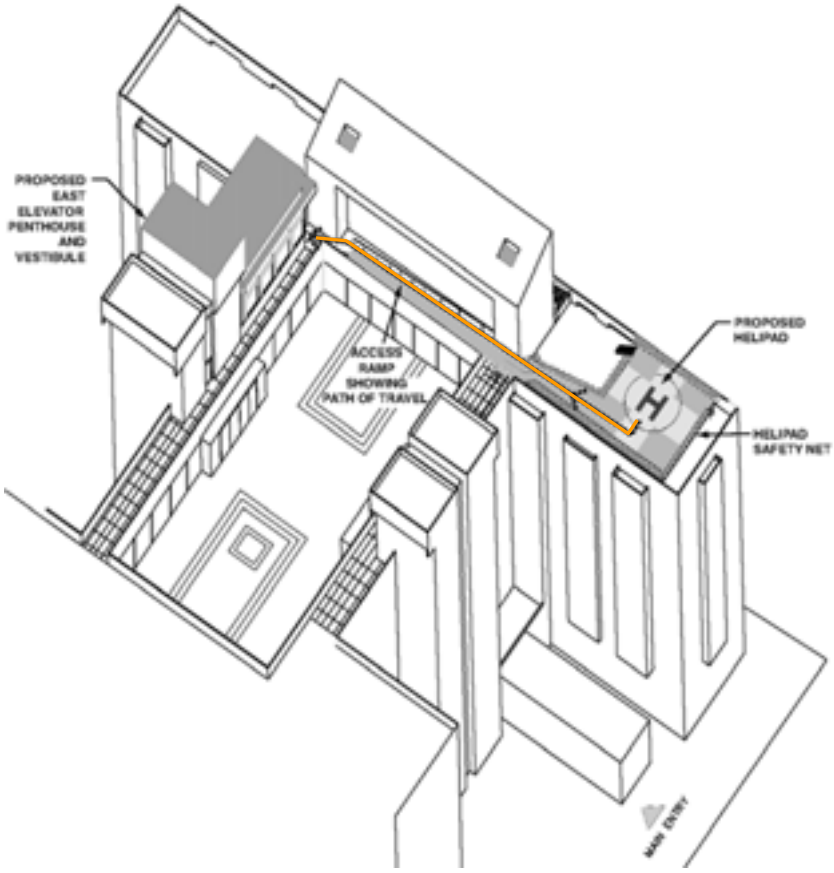


Fig. 4-4

Left: Axonometric view of proposed helipad platform on roof of existing building 5 (Main Hospital Building)

Project Objectives The objectives for the proposed SFGH&TC medical helipad project are as follows:

- Mitigate vulnerabilities identified in the City & County of San Francisco Trauma Care System Plan by ensuring that everyone who lives, works and travels to San Francisco will have consistent access to rapid life-saving trauma care at all times because the SFGH&TC Trauma Center will be accessible by both ground and air ambulances

- Participate in a regional trauma care system in the event of a large scale multiple injury incident or disaster by providing rapid transfer of severely injured people either into SFGH&TC from other parts of the Bay Area or transfer from SFGH&TC if the hospital was at patient care capacity

- Provide for the rapid transfer by air transport for a limited number of very young injured children [infants, toddlers, young children to a pediatric trauma center

- Provide expertise in trauma care to lower level trauma centers and community hospitals in the west and north bay areas for patients

meeting **Trauma Center (Level 1)** transport criteria

- Add **SFGH&TC** to the Bay Area emergency medical services air catchment region in order to save critical time for patients who are now flown away from **SFGH&TC** to other regional centers even though **SFGH&TC** is the closest Trauma Center

Project Schedule A detail project schedule for this plan development has yet to be developed, the following however is a preliminary summary schedule identifying all major milestones:

- Planning and Programming Phase: **1 year**
- Design, EIR and Construction Documents, State Agency Approvals (Office of Statewide Health Planning and Development), Bidding and Negotiations: **2 years**
- Construction and Operational Startup : **1 year**

NEW EMERGENCY GENERATOR CAPACITY

BACKGROUND

Fig. 4-5
View looking northeast from 22nd Avenue towards the Service Building currently housing the existing steam turbine driven generators.

The driving factors for this work are twofold; (1) the immediate need to replace the steam turbine driven generators due to their reliability concerns and (2) a need to develop a multiyear infrastructure replacement funding strategy. The **SFGH&TC** Central Plant has experienced a number of catastrophic failures of these generators. It is critical that reliable emergency power is available to **SFGH&TC** when the normal power system is down to maintain the operation of patient care and critical services.

PROJECT DESCRIPTION

Overview The San Francisco Department of Public Health proposes to enhance the emergency power capacity available for the Potrero Campus. The new generators would serve as the required backup to the existing hospital's power supply, providing emergency power during loss of commercial electrical power from the utility power grid. This project would involve the installation of two new 2 megawatt (MW) diesel generators in the basement level of the Service Building. The new emergency generator capacity project is still in its initial planning phase, and, before it could be implemented, would entail project review and approval by the Office of Statewide Health Planning and Development (OSHPD). Construction phasing would include the reconfiguration of fuel distribution systems, installation of equipment and replacement of boilers. To facilitate this project and achieve compliance with State seismic requirements, the Service Building is undergoing a seismic upgrade, which is anticipated for completion in the summer 2008.

Project Schedule A detailed project schedule for this project has yet to be developed, the following however is a preliminary summary schedule identifying all major milestones:

- Development of Design Criteria: **10 months**
- Design-Build, State Agency Approvals (Office of Statewide Health Planning and Development), Bidding and Negotiations: **6 months**
- Construction and Operational Startup : **1 year**

NEW ACUTE CARE HOSPITAL

BACKGROUND

Fig. 4-6
View looking south towards the Main Hospital building

Overview In 1996, California Senate Bill (SB) 1953 was passed as an amendment to and furtherance of the Alfred E. Alquist Hospital Seismic Safety Act (Alquist Act) enacted in 1973. The intent of the original act was to ensure that acute care hospitals remain functional after a major earthquake. The Alquist Act requires all general acute care hospital buildings to meet explicit seismic safety standards by either retrofitting existing buildings or electing the option, provided by SB 1801 (Speier) adopted in 2000, to rebuild a new hospital building by 2013. If hospitals fail to comply with these regulations, they will have to close their acute care facilities after 2008.

In 2000, the San Francisco Department of Public Health (SFDPH) commissioned a seismic evaluation study which concluded that the Main Hospital building at SFGH&TC has significant seismic deficiencies and that it may not be capable of providing health care services to the public after a major seismic event.[6] The SFGH&TC Main Building was categorized as a Structural Performance Category 1 (SPC-1). Buildings categorized as a SPC-1 pose a significant risk of partial or total collapse and a danger to the public.

In 2001 the San Francisco Health Commission adopted resolution 1-01 supporting the construction of a new general acute care hospital by 2013.

In May 2005, Mayor Gavin Newsom and Public Health Director Mitch Katz established a Blue Ribbon Committee to study San Francisco General Hospital's Future Location. In October 2005 the Blue Ribbon Committee issued a report to Mayor Newsom recommending rebuilding the new hospital on the existing Potrero Campus instead of at the new UCSF Mission Bay Campus as had been suggested.[7] The Blue Ribbon Committee found that the Mission Bay Campus was not feasible from a cost, long-term financing or site acquisition perspective. In addition, the Committee found that coordinating care between the Mission Bay Campus and the Potrero Campus would create operational challenges not readily overcome.

PROJECT DESCRIPTION

Fig. 4-7
View from Potrero Avenue of the proposed conceptual building design

Proposed Project The proposed new hospital site is located on the SFGH Campus (Campus) at 1001 Potrero Avenue in San Francisco (Assessor's Block 4154, Lot 1). The 24-acre Campus is located between the Mission District and Showplace Square/Potrero Hill neighborhoods and is bounded to the west by Potrero Avenue, to the south by 23rd and 24th Streets, to the east by Vermont Street and U.S. Highway 101, and to the north by U.S. Highway 101 and 20th Street.

The proposed new hospital site is an approximately 72,100-square foot area, which includes the west lawn of the Campus, the main stairs flanked by rectangular landscape beds that connect the Potrero Avenue Campus entrance to the west lawn, and portions of West Drive (an internal north-south access road). The west lawn is an approximately 45,000-square foot grass area with landscaping and paths, located west of the existing Main Hospital (Building 5) and immediately south of Building 20 and north of Building 30. Primary access to the Campus is provided from Potrero Avenue. Generally, public vehicle access is from Potrero Avenue via 23rd Street while staff and service vehicle access is from Potrero Avenue via 22nd Street and Vermont Street. Ambulance access to the southeast corner of the Main Hospital is provided along 23rd Street, between Vermont Street and Parking Lot R.

The proposed new acute care hospital would be nine stories, including seven to eight stories above grade and one to two basement levels (as a result of the sloping topography of the site). The proposed building design would have an approximately 28-foot tall rectangular podium base with an approximately 96-foot tall circular tower above and would be approximately 124 feet tall (not including the approximately 16-foot tall mechanical penthouse). The proposed building would be seven stories when viewed from the primary entrance located at the southeast corner of the building, near the primary entrance for the existing Main Hospital building. The new hospital would connect to the existing Main Hospital building at the basement level (Basement 1) and at the second floor.

All of the approximately 133,000 department gross square feet (dgsf) of acute care services currently located in the existing Main Hospital would be relocated to the proposed new hospital. Non-acute care uses that are not subject to the SB 1953 requirements for seismic compliance would remain in the existing Main Hospital building and these would include Outpatient Services, Support Services, and a few components of Inpatient Services, Psychiatric Diagnostic and Treatment Services, and Emergency Services.

In addition to the construction of a new acute care hospital and the relocation of acute care services from the existing Main Hospital to the proposed new hospital, the proposed project would include the

Fig. 4-8
Aerial View from Potrero Avenue of the proposed conceptual building design

expansion of existing Campus uses and relocation of these uses into vacated areas of the existing Main Hospital building, as well as the phasing out of certain uses on the Campus.

The proposed project would require the reworking of utility alignments on the Campus. An existing service tunnel that distributes utilities from the Service Building to other Campus buildings would be truncated to allow for construction of the proposed new hospital building on the west lawn area. A replacement utility trench with a different alignment than the existing service tunnel would be constructed to deliver utilities from the Service Building to the new acute care hospital and adjacent buildings on the Campus south of the proposed new hospital site. The proposed project would also require installation of emergency power generators to provide backup power to the new hospital. These emergency generators are part of the proposed project and are separate from the proposed emergency generator capacity project to serve the entire Campus that is part of the SFGH Institutional Master Plan Update.

The building façade would include primarily brick and glass elements, similar the adjacent brick masonry buildings (Buildings 20 and 30). The podium and the rectangular vertical form would be primarily brick while the circular tower element would be primarily glass curtain wall with vertical brick columnar elements connected by horizontal sunshades at each floor.

The proposed project differs in some aspects from the project described in the Notice of Preparation (NOP) published on August 2, 2007. As described in detail in Chapter I, Introduction and Background, the updated building design for the proposed hospital would consist of a circular six-story tower above a two- to three-story podium, whereas the previous building design described in the NOP was a rectangular, box-like building. The current design would also allow the proposed building to have additional setbacks from Potrero Avenue at the higher floors (second and seventh floors), compared to the previously proposed hospital design. The proposed hospital would be taller (by one story or approximately 19 feet) than the 105-foot-tall building design described in the NOP and would have a larger square footage (by about 3,074 gross square feet). The NOP also discussed the possibility that the medical helipad, proposed as part of the IMP Update for the C Wing of the existing Main Hospital, may be relocated from the rooftop of the existing Main Hospital building to the rooftop of the proposed new acute care hospital, if the medical helipad were to be approved and constructed. However, no longer includes the potential future relocation of the helipad from the existing Main Hospital building to the proposed new acute care hospital.

The physical design of a new code compliant acute care hospital building is examined in the Space Program and subsequently refined as described below.

- **Basement 2** is the lowest level and is located one story below grade along Potrero Avenue but two stories below grade along West Drive. The following departments have been preliminarily programmed in Basement 2:
  - Imaging,
  - Diagnostic Cardiology,
  - Sterile Processing,
  - Material Management, and
  - Mechanical/Electrical Services.

  Basement 2 would not have direct access to grade.

- **Basement 1** is located at grade along Potrero Avenue but one story below grade along West Drive. The following departments have been preliminarily programmed for Basement 1:
  - Perioperative Services,
  - Gastroenterology, and
  - Patient Intake and Recovery.

  Basement 1 would be connected to the Main Hospital by an underground tunnel. It would include a service entry on the north side for mortuary services and a public entrance area on the south side, both near Potrero Avenue.

- **First Floor** is located one story above grade along Potrero Avenue and at grade along West Drive. Departments programmed to the first floor are:
  - The Emergency Department, and
  - Admitting

  The first floor has a grade level public entrance on the south side and main lobby and an emergency services entrance on the north side.

- **Second** The following departments have been preliminarily programmed for the second floor:
  - Obstetrics,
  - Pediatrics, and
  - NICU.

  The second floor would be connected to the Main Hospital, as shown in Figure III-8.

- **Third** The following department has been preliminarily programmed for the third floor:
  - Critical Care.

- **Fourth Floor** The following department has been preliminarily programmed for the fourth floor:

- Step-Down/Critical Care Units.

- **Fifth and Sixth Floors** The following department has been preliminarily programmed for both fifth and sixth floors:
  - Medical/Surgical Units.

- **Seventh Floor** An open-air rooftop garden is proposed on the western (Potrero Avenue side) portion of the floor, The seventh floor and has been preliminarily programmed for:
  - Medical/Surgical Units,
  - Medical/ Surgical Forensics and the
  - Pharmacy

Fig. 4-9
Site Plan View of the proposed conceptual building design

USUES TO REMAIN IN THE MAIN HOSPITAL
As described above, approximately 142,855 dgsf of acute care services would be relocated from the Main Hospital to the new acute care hospital. Approximately 356,970 dgsf of uses that are not subject to the SB 1953 requirements would remain in the Main Hospital. Uses that are currently provided in the Main Hospital and would continue to be provided in the Main Hospital include:

- The existing Outpatient Services (Clinical Care, Women's and Children's Services, Behavioral Health, and the Dental Clinic);
- The majority of the Support Services, including administration and public areas, the departmental and academic offices, and auxiliary support;
- All Research uses; and
- A few components of Inpatient Services (psychiatric and psychiatric-forensic), Diagnostic and Treatment Services (Nuclear

Medicine and Rehabilitative Services) and Emergency Services (psychiatric care).

BACKFILL OF VACANT SPACE AND REALLOCATION OF SPACE

In addition to the construction of a new acute care hospital and relocation of acute care services from the Main Hospital to the new hospital, the proposed project would include the expansion of existing uses and relocation of uses into vacated areas in the Main Hospital as well as the phasing out of certain uses on the Campus, which would begin in approximately 2015 and be completed by approximately 2021.

As part of the relocation of uses on the SFGH Campus related to the proposed project, services to be phased out by 2008 include: Infant - Parent in Building 9 and Child and Adolescent Support Advocacy and Resource (CASARC) and Community Primary Care (CPC) in Building 80. The Building 9 Trailer may be reused as a construction office by 2009.

Approximately 142,855 dgsf would be available for reuse in the Main Hospital after the relocation of uses to the new hospital. The vacated space in the Main Hospital would be backfilled by expanded existing uses and the relocation of other uses on Campus by approximately 2021. This decompression of existing uses would create more space for these uses but would generally not increase services provided or staffing. Uses to be expanded in the Main Hospital would include: Inpatient Services (Psychiatric-Forensic), Diagnostic and Treatment Services (Clinical Laboratory), and Outpatient Services (Dental Clinic). Relocated uses from other Campus buildings to the Main Hospital would include: Clinical Labs from Building 100, Anatomic Pathology from Building 3, Family Practice from Building 90 and Outpatient Services (Adult Medicine, Family Medicine and AIDS Services) from Building 80.

Approximately 30,000 square feet of the Main Hospital space would require small to moderate size interior remodels that would be completed as funding is identified.1 For the purposes of the analysis in this EIR, it is assumed that this space would be backfilled with medical office use. It is assumed that this backfilling would occur by approximately 2021.

Seismic Safety Regulations in California In retrospect, the enforcement of strict seismic regulations in the past 35 years has made California buildings; in particular, first receiver buildings such as hospitals, better able to withstand seismic events than buildings elsewhere in the world. The first major piece of legislation the state passed was the Alquist Act in response to the San Fernando Earthquake in 1971. The strong ground motions of the San Fernando earthquake severely damaged four major hospital campuses including the UCLA Olive View Hospital which was only a few weeks old and was built in accordance with then current seismic codes. In approving the Act, the Legislature noted that:

> "hospitals, that house patients who have less than the capacity of normally healthy persons to protect themselves, and that must be reasonably capable of providing services to the public after a disaster, shall be designed and constructed to resist, insofar as practical, the forces generated by earthquakes, gravity and winds."[8]

When the Alquist Act was enacted legislators anticipated that, based on the regular and timely replacement of aging hospital facilities, the majority of hospital buildings would be in compliance with the Act's standards within 25 years and thus retrofit provisions were not necessary. In reality hospital buildings were not being replaced at that anticipated rate. In fact, the great majority of the State's urgent care facilities are now more than 40 years old.[9]

Fig. 410

Top Left: Photo showing an ambulance crushed during an earthquake

Fig. 4-11

Bottom Left: The un-reinforced masonry hospital building of the Agnew State Hospital collapsed during the 1906 earthquake killing 100 patients

Fig. 4-12

Right: The Hospital in Sylmar, north of Los Angeles, had to be demolished after the 1971 magnitude 6.7 San Fernando Earthquake.

In 1994, a magnitude 6.7 Earthquake struck the community of Northridge just north of Los Angeles causing $3 billion in hospital-related damage and evacuations. This earthquake exposed significant flaws with the current California seismic safety practices because not only did twelve aging hospital facilities sustained significant structural

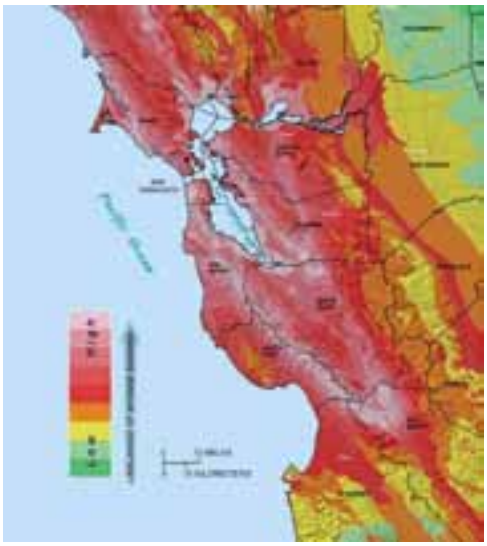


Fig. 4-13
Earthquake areas in the bay area.

damage, hospital buildings built after 1973 sustained significant non structural damage, such as pipes bursting and ceilings collapsing that rendered them incapable of providing emergency services to the public. Evacuations of acute care patients between the compromised hospitals posed a logistical nightmare at the time.

After the Northridge earthquake the general accepted opinion was that even though the Alquist Act was successful in creating standards that made new hospital buildings more resistant to structural damage, the act did not adequately address the need to minimize non-structural damage. In addition the Northridge earthquake highlighted the slow rate in which hospital buildings were being replaced to meet upgraded seismic standards.

In 1994, shortly after the Northridge earthquake, SB 1953 was enacted as an amendment to and furtherance of the 1973 Alquist Act. Under SB 1953, all existing hospitals are required, as of January 1, 2008, to survive earthquakes without collapsing or posing the threat of significant loss of life. By 2030 all existing hospitals are required to be reasonably capable of providing services to the public after a significant seismic event.

In 2000, SB 1801 (Speier) was enacted authorizing the Office of Statewide Health Planning and Development (OSHPD) to grant a delay in meeting the SB 1953 January 1, 2008 deadline if a

> " Hospital owner demonstrates that compliance will result in a loss of health care capacity that may not be provided by other general acute care hospitals within a reasonable proximity. This bill would authorize the office to extend the January 1, 2008, deadline if the hospital agrees that, on or before January 1, 2013, designated services shall be provided by moving into an existing conforming building, relocating to a newly-built building, or continuing in the building as retrofitted where the buildings are in compliance with designated structural and nonstructural performance categories." [10]

Fig. 4-14
Looking south to east from Bush and Jones Streets, April 18, 1906 earthquake in San Francisco

The mandate set by SB 1953 required the Department of Public Health to address the following important question; Why should the City and County of San Francisco invest in rebuilding a new acute care hospital?

The **SFGH&TC** Trauma Center was first designated in 1972, and since that time has operated the County's only trauma center. **SFGH&TC** is San Francisco's "safety net" hospital providing care to anyone who is in need. The decision to maintain a Level I Trauma Center in San Francisco and to continue to provide services for the most vulnerable segment of San Francisco's population are two of the most significant issues driving the effort to rebuild a new acute care facility.

Fig. 4-15
SFGH&TC's trauma center

A Level I trauma center as defined by the American College of Surgeons has a full range of specialists and equipment available 24-hours a day and admits a minimum required annual volume of severely injured patients.[11] Additionally, a **Trauma Center (Level 1)** has a program of research, is a leader in trauma education and injury prevention, and serves as a resource and referral central for communities in neighboring regions in the care of patients with complex critical injuries. Given that one in three Americans will experience a traumatic injury at least once in their lives, **SFGH&TC** 's Trauma Center is a service that anyone who lives, works or travels to San Francisco depend upon in the event of a life-threatening injury. 14,000 ambulance trips per year (an average of 38 ambulance trips per day) arrive annually the **SFGH&TC** Emergency Department, the highest 911 receiving hospital in the County. The Trauma Center's clinical expertise and availability of specialties ensures high quality services for adults and children with serious injuries. **SFGH&TC** is a crucial city and regional resource for responding to significant injuries, life threatening emergencies, large scale multiple injury events and disasters.

At **SFGH&TC**, approximately 85% of the patient population either received health care services subsidized by government programs such as Medicare or Medi-Cal or was uninsured. If **SFGH&TC** does not rebuild, it will cease to provide acute health care services to San Francisco's less affluent population, making it increasingly more difficult for this segment of the population to find proper care.
In 2001 the San Francisco Health Commission unanimously adopted resolution 1-01, titled "Supporting the Rebuilding of San Francisco General Hospital." The adoption of this resolution led the way to the formation of the San Francisco General Hospital Rebuild Planning Committee responsible for making programmatic, technical and financial recommendations on the rebuilding of a new conforming general acute care hospital by 2013, consistent with SB 1801.

The existing main hospital building would be renovated to accommodate non acute care services, once construction of the new acute care hospital is completed.

Fig. 4-16
View of existing Main Hospital building

Project Alternatives The following objectives were examined to inform the evaluation of alternatives:

- Relocate the existing acute care hospital functions into a seismically compliant structure in compliance with SB 1953
- Provide approximately 422,000 GSF of space for the new acute care hospital
- Construct a new acute care hospital with minimal disruption to the community and existing hospital operations
- Continue to serve as the Trauma Center (Level 1) facility for the City and County of San Francisco and northern San Mateo County
- Design a project that ensures efficient operation of hospital in a cost effective manner
- Design a project that provides State of the art energy efficiency
- Design a project that provides an environment that promotes patient-centered care and safety
- Design a project that honors the history of the Campus and adjacent buildings
- Respect the material context and visual context of surrounding buildings
- Provide direct connections at multiple floors to the Main Hospital, including a connection on the basement level.

Project alternatives where the above criteria were discussed included the 'No Project Alternative', the 'Retrofit Alternative' and the 'South Parking Lot Alternative'.

- No Project Alternative - The No Project Alternative assumes that a new seismically compliant acute care hospital would not be constructed on the SFGH&TC Campus by 2015. As a result, the existing acute care services in the Main Hospital would be phased out by January 1, 2013. The west lawn would remain as it currently exists and none of the impacts associated with the proposed project would occur. However, the No Project Alternative would generally not achieve the project objectives. With the termination of acute care services on the SFGH&TC Campus. SFGH&TC would not be able to continue to provide the only Trauma Center (Level 1) in the City and County of San Francisco. As described previously SFGH&TC currently is the primary receiving facility for mass casualty events and is the busiest Emergency Department in the City. These acute care services would be delivered by other providers under contract or would be eliminated.

- Retrofit Alternative - The Main Hospital was categorized in the worst seismic rating category (SPC-1) when it was evaluated for compliance with State legislation SB 1953 in the year 2000. The Retrofit Alternative would result in fewer impacts than the proposed project and would achieve many of

the project objectives. This alternative would allow the continued provision of acute care services on the SFGH&TC Campus in a seismically safe structure, in compliance with SB 1953, and would allow SFGH&TC to continue to provide Trauma Center (Level 1) services to San Francisco. It could allow for a project that meets the project design, energy efficiency and operation efficiency objectives and a project that could honor the history of the Campus and adjacent buildings. However, this alternative would not achieve all of the project objectives as it would result in the disruption of existing hospital operations and services during the retrofit of the Main Hospital. It is important to note that this alternative would increase the costs of compliance with SB 1953 by approximately 150-200%. The prolonged construction schedule for the retrofit would also likely lead to higher probability of delay resulting in schedule overruns.

- **South Parking Lot Alternative** - The South Parking Lot Alternative would result in generally similar impacts to the proposed project. All potential impacts from this alternative would be mitigated to less-than-significant levels, with incorporation of the required mitigation measures. The South Parking Lot Alternative would achieve the majority of the project objectives. Acute care services would be relocated to a seismically safe structure in compliance with SB 1953 and Trauma Center (Level 1) services would continue to be provided in San Francisco. This alternative would generally achieve project objectives to honor the history of the Campus and adjacent buildings and respect the material context and visual context of the site; however, it would require removal of the historic fountain and guard house on the site. The proposed building design would achieve the project objectives. However the South Parking Lot Alternative would not achieve the objectives of minimally disrupting existing hospital operations because construction of the building would disrupt essential operations.

Fig. 4-17
Preliminary Massing Study View of South Parking Lot Alternative

Project Site As previously mentioned the Blue Ribbon Committee's primary goal was to make a recommendation on whether the new acute care facility should be rebuilt on the existing campus along Potrero Avenue or at Mission Bay collocating with UCSF.

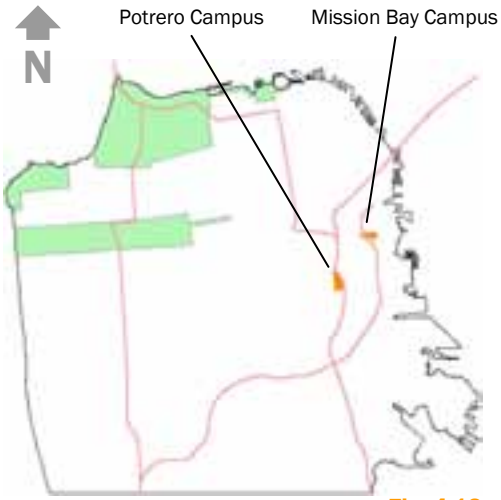


Fig. 4-18

Above: Map of San Francisco depicting the geographic locations of Potrero Campus and Mission Bay Campus

Fig. 4-19

Right: Aerial view highlighting Potrero and Mission Bay campuses

"In order to evaluate the two potential locations, the Committee developed a set of criteria for assessing both options. The criteria were in the following categories:

- ***Access and Service Issues:*** This criteria examines the impact of each location with respect to access to services (ambulatory, inpatient, specialty and emergency), care coordination and quality of care.
- ***Cost and Financing Issues:*** This criteria examines the impact of each location with respect to the costs and financing mechanisms
- ***Program Issues:*** This criteria examines the impact of each location with respect to faculty retention and recruitment, research facility needs, and future space planning needs of each hospital system.
- ***Neighborhood and Staff Issues:*** This criteria examines the impact of each location with respect to potential disruption arising for construction of a new hospital."[12]

The Committee concluded that each location presented itself with several advantages and disadvantages. However, the Committee highlighted the fact that the Mission Bay Campus site posed several significant obstacles that could not be entirely overcome or easily mitigated, such as:

- Insufficient land available for purchase
- Mission Bay area is not currently zoned for hospital use
- Split campus would require higher operating costs
- Coordinating care between both campus would be challenging

After much deliberation the Committee's consensus recommendation was to construct the San Francisco General Hospital at the existing Potrero Campus. **The Mission Bay location was determined to be not feasible**.

In the final Blue Ribbon report issued to Mayor Gavin Newson, two locations within the Potrero Campus were acknowledged as potential viable sites to build the new acute care hospital. One option was to locate the new acute care hospital to the north and abutting the existing hospital **(North Option),** the other option was to locate the new acute care hospital west of the existing hospital in between two existing masonry buildings, the site of a former hospital building demolished in 1972 **(West Option).**

The Blue Ribbon Committee recognized that the option to build to the north would require the demolition of Building 100 and M-wing which currently houses the majority of the ambulatory services and the clinical lab. The option to build to the west would have significantly less overall impact on the existing acute care hospital and would not likely require the demolition of existing structures.

Even though the Blue Ribbon Committee did not consider where on Potrero Campus the new acute care hospital should be built, it suggested that the west option should be "further examined as a potential alternative to the more disruptive North option". [13]

Fig. 4-20
Main Hospital's M-wing shown highlighted, which would have to be demolished if north option would have been selected.

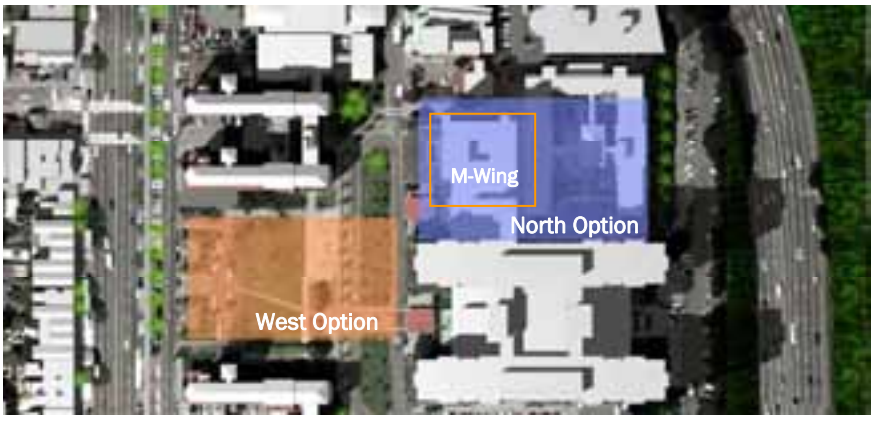


Fig. 4-21
Main Hospital's M-wing, West Option & North Option sites shown highlighted

Proposed site for **west option**
Proposed site for **north option***
Proposed site for **south parking lot**

* North option requires demolition of Bldg100 and M-wing.

Fig. 4-22
SFGHMC Site Plan showing proposed west option, north option and south parking lot building sites

Subsequent to the recommendations from the Blue Ribbon Committee, the San Francisco Department of Public Health (DPH) determined the west option to be the most viable solution and commissioned Fong & Chan Architects (FCA) to develop the Institutional Master Plan and Space Program based on the west

option. Though the west option was initially selected, a separate Environmental Impact Report (EIR) analyzing the impacts the new acute care hospital development will have on alternative sites in addition to the preferred site **has been** developed**. The preliminary draft of the EIR for this project has been completed and submitted for review.**

Fig. 4-23
Above: Looking southwest towards proposed west option building site, framed by building No. 20 to the right and existing Main Hospital building to the left

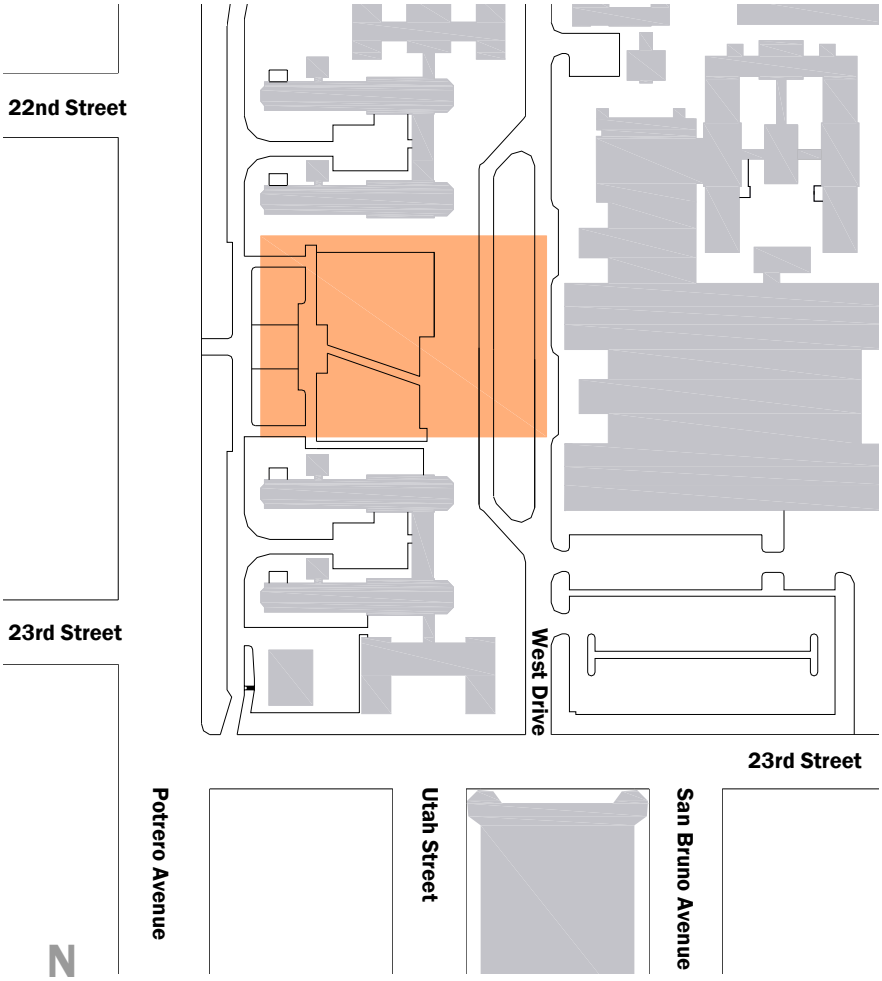


Fig. 4-24
Left: Site Plan showing west option building site

Height and Bulk The SFGH&TC campus is zoned as 105 E, this zoning designation reveals building height and bulk limits.
The maximum height to which the proposed building will extend, as measured from curb at Potrero Avenue, is 124 feet. The height of the proposed building as measured from West Drive or other westward points is significantly less. The height limit for the new acute care hospital has the following exemptions:

- Mechanical equipment and appurtenances necessary to the operation of the building itself, together with visual screening, limited to the top 16 feet of any such features.

- Elevator, stair, and mechanical penthouses, fire towers, and

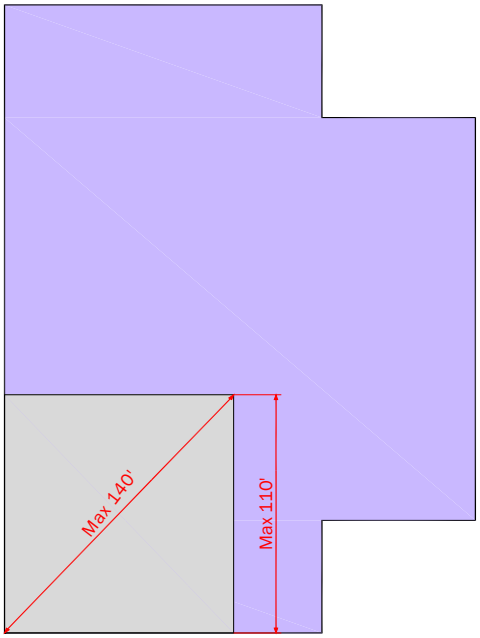


Fig. 4-23
Floor plan showing "E" district bulk limits

skylights, limited to the top 16 feet of such features. Further exemptions for elevator penthouses may be granted if necessary to meet state or federal laws or regulation.

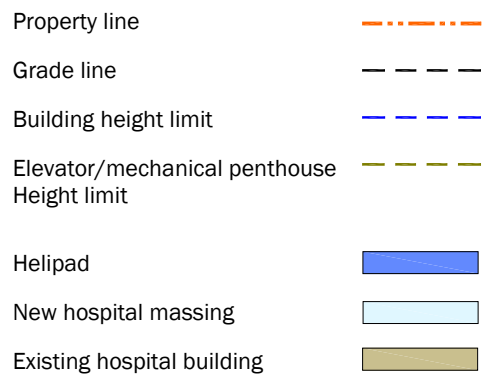
- Unroofed recreation facilities with open fencing, including tennis and basketball courts at roof level, swimming pools with a maximum height of four feet and play equipment with a maximum height of 10 feet.

The "E" Bulk district designation limits the bulk of the new acute care hospital above 65 feet in elevation to a maximum plan dimension of 110 feet in length and a maximum diagonal dimension of 140 feet in length. Exemptions from the prescribed bulk requirements may be granted via a conditional use application under the following conditions:

- Achievement of a distinctly better design, in both a public and a private sense, than would be possible with strict adherence to the bulk limits, avoiding an unnecessary prescription of building form while carrying out the intent of the bulk limits and the principles and policies of the Master Plan.

- Development of a building or structure with widespread public service benefits and significance to the community at large, where compelling functional requirements of the specific building or structure make necessary such a deviation.

The suggested new acute care hospital massing exceeds the prescribed bulk limit, however a Conditional Use authorization appears to be merited based on the criteria above. The proposed design and massing for the new hospital has also changed since publication of NOP. The NOP depicted preliminary sketches of a box-like. The design of the currently proposed building depicts a circular six-story tower above a 3 story rectangular podium.



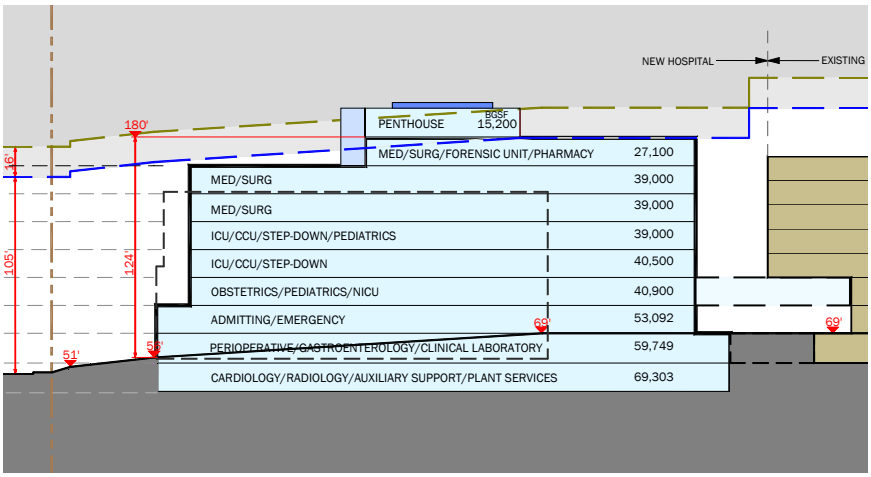


Fig. 4-25
Section showing height of new acute care hospital massing and existing hospital building

Project Schedule A detailed project schedule for this plan development has been developed, the following is a summary schedule identifying all major milestones:

- Planning and Programming Phase: **October 2006 – May 2007**
- Design Phase: June 2007 – December 2009
- State Agency Approvals (Office of Statewide Health Planning and Development), Bidding and Negotiations: **December 2009- April 2011**
- Construction: June 2011 – July 2014
- Commissioning and Building Fit-Out: **July 2014 – January 2015**

Campus Master Plan Preplanning In June 2007, Fong & Chan Architects began a parallel effort of developing a pre-planning document for SFGH&TC to address allocation of departments and program space throughout the SFGH Campus after the completion of the new Acute Care Hospital Building. The Campus Master Plan is a space pre-planning document for internal use by SFGH administrators which provides San Francisco General Hospital & Trauma Center (SFGH&TC) and the San Francisco Department of Public Health (DPH) with a framework to facilitate decision making concerning the Campus as SFGH&TC proceeds with the development and construction of a new Acute Care Hospital Building to meet the requirements of California Senate Bill (SB) 1953. The primary objectives of this Campus Master Plan Document is as follows:

- To develop a planning document for SFGH&TC to address allocation of departments and program space throughout the SFGH Campus after the completion of the new Acute Care Hospital Building
- To address the requirements of the required seismic retrofit work for the existing campus buildings.
- To develop an implementation schedule that integrates the various phasing constraints on campus development.

Following are the goals of the Campus Master Plan:

ADDRESS

- SFGH&TC Needs
- Consolidation of Clinic Spaces
- Expansion of Departments
- Added Program Space
- Upgrading Program Spaces

PLAN

- Seismic Retrofit of Brick Buildings to take place after completion of Building 25

- Upgrading Program Spaces

RELOCATE
- Off-Site DPH Leased Programs into SFGH&TC Campus
- Public Health Laboratory – 101 Grove
- Other Programs are to be identified

The SFGH&TC Campus Master Plan will be completed in July 2008

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[1] San Francisco Emergency Medical Services Agency, August 7 2001. Accessed on the web www.sanfranciscoems.org/EMSTheTraumaPlan3113.pdf
[2] Gerson/Overstreet Architects, "San Francisco General Hospital Medical Center Air Medical Access Needs and Feasibility Study," March 4, 2003.
[3] California EMS Authority letter dated November 5, 2001 to Michael Petrie, SF EMS Agency Administrator; signed Richard E. Watson, Interim Director
[4] Swartzell, A. Timeline of Events: A historical perspective on helicopter use in San Francisco, 2001.
[5] American College of Surgeons Consultation Survey of San Francisco General Hospital's Trauma Program, November 2001
[6] Degenkolb Engineers/ Structus Inc., SB1953 Seismic Evaluation Report, December 2000
[7] Blue Ribbon Committee on San Francisco General Hospital's Future Location, October, 2005
[8] Health and Safety Code Section 129680
[9] RAND Corporation, "Estimating the Compliance Cost for California SB 1953", April 2002
[10] Senate Bill No. 1801,September 2000
[11] American College of Surgeons, Optimal Care of Injured Patients, 1999
[12] Blue Ribbon Committee on San Francisco General Hospital's Future Location, October, 2005
[13] Blue Ribbon Committee on San Francisco General Hospital's Future Location, October, 2005
[14] Environmental Impact Report (EIR) for the San Francisco General Hospital Seismic Compliance, Hospital Replacement Program, March, 2008

Section 5 General Plan Conformity

Overview Pursuant to Sec. 304.5 of the San Francisco Planning Code, institutions should analyze their plan developments for consistency with the current San Francisco General Plan. SFGH&TC's plan developments as described in Section 4 generally support San Francisco's General Plan objectives and policies.

PLAN DEVELOPMENT CONFORMITY WITH GENERAL PLAN ELEMENTS

BACKGROUND

Fig. 5-1
Aerial view of downtown San Francisco

San Francisco is a vibrant and diverse city constantly adapting to changing political, social and economical trends.

> "The City's General Plan serves to guide these changes to ensure that the qualities that make San Francisco unique are preserved and enhanced. In short, the General Plan is the embodiment of the community's vision for the future of San Francisco.
>
> The San Francisco General Plan is designed as a guide to the attainment of the following general goals:
>
> - Protection, preservation, and enhancement of the economic, social, cultural, and esthetic values that establish the desirable quality and unique character of the city.
>
> - Improvement of the city as a place for living, by aiding in making it more healthful, safe, pleasant, and satisfying, with housing representing good standards for all residents and by providing adequate open spaces and appropriate community facilities.
>
> - Improvement of the city as a place for commerce and industry by making it more efficient, orderly, and satisfactory for the production, exchange and distribution of goods and services, with adequate space for each type of economic activity and improved facilities for the loading and movement of goods.
>
> - Coordination of the varied pattern of land use with public and semi-public service facilities required for

efficient functioning of the city, and for the convenience and well-being of its residents, workers, and visitors.

- Coordination of the varied pattern of land use with circulation routes and facilities required for the efficient movement of people and goods within the city, and to and from the city.

- Coordination of the growth and development of the city with the growth and development of adjoining cities and counties and of the San Francisco Bay Region."[1]

The manner in which the general goals are to be attained is set forth through a statement of objectives and policies in a series of elements, each one dealing with a particular topic, which applies citywide. The General Plan currently contains the following elements:

- Air Quality
- Arts
- Commerce and Industry
- Community Facilities
- Community Safety
- Environmental Protection
- Recreation and Open Space
- Housing
- Transportation
- Urban Design

The General Plan also contains the following area plans which cover their respective geographic areas of the city:

- Downtown
- Civic Center
- Western Shoreline
- Northeastern Waterfront
- Central Waterfront
- South Bayshore
- Rincon Hill
- Chinatown
- Van Ness Avenue
- South of Market

Fig. 5-2
Geographic locations of San Francisco area plans

In the area plans the more general policies in the General Plan elements are made more precise as they relate to specific parts of the city, but because **SFGH&TC** is located outside these geographic areas, only the objectives and policies in the General Plan elements apply.

DESCRIPTION OF GENERAL PLAN ELEMENTS

The objectives and description of each General Plan element is discussed below.

Air Quality The Air Quality Element of the General Plan supports the goal of clean air through air quality regulations and policies encouraging the location of land uses adjacent to transit **services.**

- **Policy 3.7:** Exercise air quality modeling in building design for sensitive land uses such as residential developments that are located near the sources of pollution such as freeways and industries.

- **Policy 3.9:** Encourage and require planting of trees in conjunction with new development to enhance pedestrian environment and elect species of trees that optimize achievement of air quality goals.

- **Policy 11.3:** Encourage development that efficiently coordinates land use with transit service, requiring that developers address transit concerns as well as mitigate traffic problems.

- **Objective 4:** Improve air quality by increasing public awareness regarding the negative health effects of pollutants generated by stationary and mobile sources.
  - **Policy 4.3**: Minimize exposure of San Francisco's population, especially children and the elderly, to air pollutants.

- **Objective 5**: Minimize particulate matter emissions from road and construction sites.
  - **Policy 5.1:** Continue policies to minimize particulate matter emissions during road and building construction and demolition.
  - **Policy 5.2:** Encourage the use of building and other construction materials and methods which generate minimum amounts of particulate matter during construction as well as demolition.

- **Objective 6:** Link the positive effects of energy conservation and waste management to emission reductions.
  - **Policy 6.1:** Encourage emission reduction through energy conservation to improve air quality
  - **Policy 6.2:** Encourage recycling to reduce emissions from manufacturing of new materials in San Francisco and the region.
  - **Policy 6.3:** Encourage energy conservation through retrofit of existing facilities.

- **Objective 12:** Establish the city and county of San Francisco as a model for energy management.
  - **Policy 12.1**: Incorporate energy management practices into building, facility, and fleet maintenance and operations.
  - **Policy 12.3:** Investigate and implement techniques to reduce municipal energy requirements.

Arts To support and nurture the arts through city leadership. The Arts Element of the General Plan recognizes the arts as a major economic force in San Francisco, integral to the health and vitality of the City.

Commerce and Industry The three goals of the Commerce and Industry Element of the General Plan relate to continued economic vitality, social equity, and environmental quality.

- **Policy 1.1:** Encourage development which provides substantial net benefits and minimizes undesirable consequences. Discourage development which has substantial undesirable consequences that cannot be mitigated.

Community Facilities The Community Facilities Element of the General Plan establishes polices related to community facilities, education, police, fire, and waste management and governs their location, distribution and design. The SFGH Campus is designated as a public health center within the General Plan.

Public Health Centers

- **Objective 7:** Distribution throughout the City of District public health centers to make the educational and preventative services of the Department of Public Health convenient to the people, thereby helping to achieve the goals of the public health program in San Francisco.

- **Objective 9**: Assure that institutional uses are located in a manner that will enhance their efficient and effective use.
  - **Policy 9.1:** Locate institutional uses according to the Institutional Facilities Plan.

Fig. 5-3
SFGH&TC main entrance gate from Potrero Avenue

Community Safety Community Safety Element provides policies to ensure that the community is resilient to natural disasters**.**

Hazard Mitigation

- **Objective 2**: Reduce structural and non-structural hazards to life safety, minimize property damage and resulting social, cultural and economic dislocations resulting from future disasters.
  - **Policy 2.1:** Assure that new construction meets current structural and life safety standards.

Environmental Protection The Environmental Protection Element provides policies to address the consumption of resources, production of hazardous wastes, and transportation noise and energy use.

Air

- **Policy 4.1:** Support and comply with objectives, policies, and air quality standards of the Bay Area Air Quality Management District.

Transportation Noise

- **Policy 10.1:** Promote site planning, building orientation and design, and interior layout that will lessen noise intrusion.
- **Policy 10.2:** Promote the incorporation of noise insulation materials in new construction.
- **Objective 11**: Promote land uses that are compatible with various transportation noise levels.
  - **Policy 11.1:** Discourage new uses in areas in which the noise level exceeds the noise compatibility guidelines for that use.
  - **Policy 11.3:** Locate new noise-generating development so that the noise impact is reduced.

Energy

- **Policy 12.1:** Incorporate energy management practices into building, facility, and fleet maintenance and operations.

Recreation and Open Space The San Francisco General Plan divides usable parkland within the City into four categories: City-serving open spaces, district-serving, neighborhood-serving, and sub-neighborhood-serving. City-serving open spaces are the City's largest parks, an example of which is Golden Gate Park. The General Plan states that a residents living within ½ mile (10-minute walk) from a City-serving park are considered to be within its service area. District-serving open spaces are typically more than ten acres in size. Residents living within three-eighths of a mile (7.5-minute walk) from a district-serving park are considered to be within its service area. Neighborhood-serving open spaces are typically one to ten acres in size. Residents living within one quarter-mile (5-minute walk) from a neighborhood-serving park are considered to be within its service area. Sub-neighborhood-serving open spaces are typically less than one acre in size, and are intended to serve residents living or working in their immediate vicinity, or within one eighth-mile (2.5-minute walk).

Open Space Distribution

- **Policy 2.2:** Preserve existing public open space.

  San Francisco's public open space system is fairly extensive. It ranges from large parks to undeveloped street rights-of-way. Much of the system is park land and other public open space under the jurisdiction of the Recreation and Park Department. In addition to this land, a significant portion of the public open space in San Francisco is only informally part of the city's park and recreation system. This open space is held by a number of public agencies and is also either used for recreation or appreciated for its natural qualities, but is neither a public park nor a playground. Open Spaces in this second category includes certain shoreline areas under the jurisdiction of the Port of San

certain reservoirs, grounds of public institutions, forts, land for slope and view protection, roadway landscaping, alleys, dedicated public walkways and undeveloped street rights-of-way. Open spaces such as these are a very important part of the city's open space system. They supplement playgrounds and parks and are a major visual asset.

Housing The Housing Element of the General Plan provides policies that promote and direct the development of housing in appropriate locations in a manner that enhances existing neighborhood character.

Housing Density, Design and Quality of Life

- **Policy 11.4**: Avoid or minimize disruption caused by expansion of institutions, large-scale uses and auto-oriented development into residential areas.

Transportation The Transportation Element of the General Plan provides policies and objectives related to transportation, congestion management, circulation, and transit, alternative modes of transit (bicycles and walking), parking and movement of goods.

Transportation Performance Measures

- **Policy 10.4:** Consider the transportation system performance measurements in all decisions for projects that affect the transportation system.

Transportation Demand Management

- **Objective 12:** Develop and implement programs in the public and private sectors, which will support congestion management and air quality objectives, maintain mobility and enhance business vitality at minimum cost.
  - **Policy 12.1:** Develop and implement strategies which provide incentives for individuals to use public transit, ridesharing, bicycling and walking to the best advantage, thereby reducing the number of single occupant auto trips.
  - **Policy 12.3:** Implement private and public sector TDM programs which support each other and explore opportunities for private-public responsibility in program implementation.

Parking Management

- **Objective 16**: Develop and implement programs that will efficiently manage the supply of parking at employment centers throughout the City so as to discourage single-occupant ridership and encourage ridesharing, transit and other alternatives to the single-occupant automobile.
  - **1Policy 16.1:** Reduce parking demand through the provision of comprehensive information that encourages the use of

alternatives modes of transportation.

- **Policy 16.2:** Reduce parking demand where parking is subsidized by employers with "cash-out" programs in which the equivalency of the cost of subsidized parking is offered to those employees who do not use the parking facilities
- **Policy 16.3:** To address demand through the provision of incentives for the use of carpools and vanpools at new and existing parking facilities throughout the City
- **Policy 16.4:** Manage parking demand through appropriate pricing policies including the use of premium rates near employment centers well-served by transit, walking and bicycling, and progressive rate structures to encourage turnover and the efficient use of parking
- **Policy 16.5:** Reduce parking demand through limiting the absolute amount of spaces and prioritizing the spaces for short-term and ride-share uses
- **Policy 16.6:** Encourage alternatives to the private automobile by locating public transit access and ride-share vehicle and bicycle parking at more close-in and convenient location on-site, and by locating parking facilities for single-occupant vehicles more remotely

Pedestrian

- **Objective 24:** Improve the ambience of the pedestrian environment
  - **Policy 24.1:** Preserve existing historic features such as streetlights and encourage the incorporation of such historic elements in all future streetscape projects.

- **Objective 26:** Consider the sidewalks are as an important element in the citywide open space system.

Bicycles

- **Objective 28**: Provide secure and convenient parking facilities for bicycles.
  - **Policy 28.2**: Provide secure bicycle parking as existing City buildings and facilities and encourage it in existing commercial and residential buildings.

Citywide Parking

- **Objective 31**: Establish parking rates and off-street parking fare structures to reflect the full costs, monetary and environmental, of parking in the city.
  - **Policy 31.1**: Set rates to encourage short-term automobile parking.
  - **Policy 31.2**: Where off-street parking near institutions and in commercial areas outside downtown is in short supply, set parking rates to encourage higher turnover and more efficient use of the parking supply.

- **Policy 31.3:** Encourage equity between drivers and non-drivers by offering transit fare validations and/or cash-out parking programs where off-street parking is validated or subsidized.

- **Objective 33:** Contain and lesson the traffic and parking impact of institutions on surrounding residential areas.
  - **Policy 33.1**: Limit the provision of long-term automobile parking facilities at institutions and encourage such institutions to regulate existing facilities to assure use by short-term clients and visitors.
  - **Policy 33.2**: Protect residential neighborhoods from parking impacts of nearby traffic generators.

Urban Goods Movement

- **Policy 40.1:** Provide off-street facilities for freight loading and service vehicles on the site of new buildings sufficient to meet the demands generated by the intended uses. Seek opportunities to create new off-street loading facilities for existing buildings.
- **Policy 40.5:** Loading docks and freight elevators should be located conveniently and sized sufficiently to minimize the efficiency of loading and unloading activity and to discourage deliveries into lobbies or ground floor locations except at freight-loading facilities.
- **Policy 40.9:** Where possible, mitigate the undesirable effects of noise, vibration and emission by limiting late evening and early hour loading and unloading in retail, institutional, and industrial facilities abutting residential neighborhoods.

Transit First Policy

The City of San Francisco's Transit First policy, adopted by the Board of Supervisors in 1973, was developed in response to the damaging impacts over previous decades of freeways on the city's urban character. The policy is aimed at restoring balance to a transportation system long dominated by the automobile, and improving overall mobility for residents and visitors whose reliance chiefly on the automobile would result in severe transportation deficiencies. It encourages multi-modalism, the use of transit and other alternatives to the single-occupant vehicle as modes of transportation, and gives priority to the maintenance and expansion of the local transit system and the improvement of regional transit coordination. The following ten principles constitute the City's Transit First policy:

1. To ensure quality of life and economic health in San Francisco, the primary objective of the transportation system must be the safe and efficient movement of people and goods.

2. Public transit, including taxis and vanpools, is an economically and environmentally sound alternative to transportation by individual automobiles. Within San Francisco, travel by public transit, by bicycle and on foot must be an attractive alternative to

travel by private automobile.

3. Decisions regarding the use of limited public street and sidewalk space shall encourage the use of public rights of way by pedestrians, bicyclists, and public transit, and shall strive to reduce and improve public health and safety.

4. Transit policy improvements, such as designated transit lanes and streets and improved signalization, shall be made to expedite the movement of public transit vehicles (including taxis and vanpools) and to improve public safety.

5. Pedestrian areas shall be enhanced wherever possible to improve the safety and comfort of pedestrians and to encourage travel by foot.

6. Bicycling shall be promoted by encouraging safe streets for riding, convenient access to transit, bicycle lanes, and secure bicycle parking.

7. Parking policies for areas well served by public transit shall be designed to encourage travel by public transit and alternative transportation.

8. New transportation investment should be allocated to meet the demand for public transit generated by new public and private commercial and residential developments.

9. The ability of the City and County of San Francisco to reduce traffic congestion depends on the adequacy of regional public transportation. The City and County shall promote the use of regional mass transit and the continued development of an integrated, reliable, regional public transportation system.

10. The City and County shall encourage innovative solutions to meet public transportation needs wherever possible and where the provision of such service will not adversely affect the service provided by the Municipal Railway. (Added November 1999.)

Urban Design The Urban Design Element of the General Plan focuses upon the physical character and environment of the City as modified by preservation and development. Urban design policies require proposed projects to take into account the surrounding urban context through building design and placement. Policies strive for the integration of proposed buildings with existing buildings by designing building height and bulk that respects adjacent buildings, establishing and protecting visual relationships and transitions and respecting older structures. Policies emphasize visual amenities including landscaping and pedestrian areas that are human scale.

Image and Character

- **Policy 1.3:** Recognize that buildings, when seen together, produce a total effect that characterizes the City and its districts.

Organization and Sense of Purpose

- **Policy 1.7**: Recognize the natural boundaries of districts, and promote connections between districts.

Richness of Past Development

- **Policy 2.4:** Preserve notable landmarks and areas of historic, architectural or aesthetic value, and promote the preservation of other buildings and features that provide continuity with past development.
- **Policy 2.6:** Respect the character of older development nearby in the design of new buildings.
- **Policy 2.7:** Recognize and protect outstanding and unique areas that contribute in extraordinary degree to San Francisco's visual form and character.

Visual Harmony

- **Policy 3.1:** Promote harmony in the visual relationships and transitions between new and older buildings.

Height and Bulk

- **Policy 3.5:** Relate the height of buildings to important attributes of the City pattern and to the height and character of existing development.
- **Policy 3.6:** Relate the bulk of buildings to the prevailing scale of development to avoid an overwhelming or dominating appearance in new construction.

Visual Amenity

- **Policy 4.12:** Install, promote and maintain landscaping in public and private areas.
- **Policy 4.13:** Improve pedestrian areas by providing human scale and interest.

MEDICAL HELIPAD

Air Quality The emissions from the Medical Helipad use will be in compliance with Federal Aviation Administration (FAA) and Environmental Protection Agency (EPA) requirements.

If the hospital helipad is constructed and operated, the hospital would not be exposed to significant additional air quality impacts. Any proposed project that would individually have a significant impact on any of the criteria air pollutants would also be considered to contribute significantly to cumulative regional air pollutant impacts. The proposed project would generate potentially significant PM

Fig. 5-4
Traffic congestion on Bay Bridge

emissions due to vehicle trips associated with the proposed project. Therefore the project would also be considered to have a significant contribution to cumulative PM impacts as well.

Arts This General Plan Element is not applicable.

Commerce and Industry This General Plan Element is not applicable.

Community Facilities This General Plan Element is not applicable.

Community Safety The following policies relate to the function and planning for a medical helipad at SFGH&TC.

- Objective 3: Ensure the protection of life and property from disasters through effective emergency response. Provide public education and training about earthquakes and other natural disasters and how individuals, businesses and communities can reduce the impacts of disasters.

- Objective 3, policy 3.2: Provide on-going disaster preparedness and hazard awareness training to all City employees.

- Objective 3, policy 3.7: Establish a system of emergency access routes for both emergency operations and evacuation.

The helipad being proposed is an integral extension of the Trauma Center services at SFGH&TC. In August 2001, the San Francisco Health Commission approved the City and County of San Francisco Trauma Care System Plan, which revealed vulnerabilities of geographic isolation, seismic instability, traffic congestion, population density, a large urban area with only a single trauma center, and no dedicated pediatric trauma center. The Plan identified that these vulnerabilities cannot be addressed without consideration of air transport to and from the Trauma Center at SFGH&TC. A medical helipad needs and feasibility study was requested by the SF Health Commission and completed in March 2003.[2] The Study documented the medical need for helicopter access to the City and County of San Francisco and to its only Trauma Center. It also concluded that is structurally feasible to construct a medical helipad on the roof of the main hospital building on the SFGH&TC Campus located at 1001 Potrero.

As an extension of the City's emergency preparedness plan, as well as the mission of the Trauma Center function of SFGH&TC, the medical services to be provided through helipad access will conform to the objectives and policies of the Community Safety element.

Environmental Protection The following policies relate to the function and planning for a medical helipad at SFGH&TC.

- **Objective 10:** Minimize the impact of noise on affected areas.
- **Objective 10, Policy 10.1:** Promote site planning, building orientation and design, and interior layout that will lessen noise intrusion.
- **Objective 11, Policy 11.1:** Discourage new uses in areas in which the noise level exceeds the noise compatibility guidelines for that use.
- **Objective 11, Policy 11.3:** Locate new noise-generating development so that the noise impact is reduced.

The site and location of the medical helipad is intended to minimize the noise that will propagate from the site to surrounding areas. Additional features of the helipad facility will include controls over fuel spill contamination, as well as fire safety systems. The specific impacts and mitigations will be discussed in a separate environmental impact report for the medical helipad project. It is the intention of SFGH&TC to meet these objectives and policies regarding Environmental Protection.

Fig. 5-5
View of SFGH&TC from McKinley Park at 20th and Vermont Street

Recreation and Open Space This General Plan Element is not applicable. The rooftop where the medical helipad is to be located is not used as open space for SFGH&TC. The medical helipad does not cast significant shadows over any existing open space or recreation area, and does not otherwise impact these uses.

Housing The development of the Medical Helipad at SFGH&TC does not induce any change in the number or location of housing units in the neighborhood. Construction associated with the helipad will occur entirely on the SFGH&TC Campus, and will not require removal of any housing units.

Fig. 5-6
View of residential neighborhood along Potrero Avenue between 22nd Street and 23rd Street

Transportation The following policy relate to the function and planning for a medical helipad at **SFGH&TC**.

- Objective 1, Policy 1.9: Develop a multi-modal emergency transportation plan for the City and encourage the development of complementary plans in the private and public sector, to provide movement to and from emergency and health facilities from all areas of the City, and to and from the City and other Bay Area communities.

The proposed medical helipad is a key component to meeting this policy.

Fig. 5-7
Above: Helicopter medical emergency operations at an outdoor accident

Fig. 5-8
Right: Helicopter medical emergency operations at a highway accident

Urban Design Due to the intermittent nature of medical helipad operations, it is unlikely the helipad will engender any enduring changes in the character and scale of developments in the surrounding neighborhood. **SFGH&TC** as an institution has not in over 130 years fed the development of any off-campus developments related to the healthcare mission. The addition of the helipad will not induce any other development.

EMERGENCY GENERATOR CAPACITY

Air Quality The new emergency generator capacity project is still in its initial planning phase, and, before it could be implemented, would entail project review and approval by the Office of Statewide Health Planning and Development (OSHPD). Potential impacts from toxic air contaminants resulting from operation of these generators would be studied as part of that projects environmental review process. If it would result in potential significant impacts related to Toxic Air Contaminants, they may be mitigated to less-than significant levels, before project approvals.

The New Emergency Generator Capacity plan development would not result in the addition of new employees and consequently result in no significant addition of new vehicular automobiles in and around the Potrero Hill Campus.

Arts This General Plan Element is not applicable.

Commerce and Industry This General Plan Element is not applicable.

Fig. 5-9
View from 22nd Street of Existing Service Building

Community Facilities This plan development would enhance the reliability of the current emergency electrical power delivery system powering essential services to all SFGH&TC facilities in the event electrical power from the utility company is interrupted. The increased reliability of the emergency electrical power delivery system would lessen the likelihood critical and life safety services at SFGH&TC would be interrupted; as such, this plan development would support the objectives and policies of the Community Facility element.

Community Safety This plan development would enhance the reliability of the current emergency electrical power delivery system powering essential services to all SFGH&TC facilities in the event electrical power from the utility company is interrupted. Providing reliable emergency power to all SFGH&TC facilities is consistent with the objectives and policies of the Community Safety element.

Environmental Protection The new diesel generators would emit air pollutants but in compliance with Tier II Air Quality requirements and the Air Toxics Control Measure (ATCM) for Stationary Diesel Engines as administered and regulated by the Bay Area Air Quality Management District (BAAQMD). Overall the energy efficiency of the emergency power systems for the Campus would be significantly improved when compared to the existing conditions.

The three diesel-powered generators proposed to be installed within the existing central plant building as part of this project emit un-housed, isolated exhaust noise levels. At a distance of 7 meters from

Fig. 5-10
Top: Corten steel sculpture by Sacramento artist Gerald Walburg

Fig. 5-11
Middle: Red granite and mosaic sculpture by local San Francisco artist Beniamino Bufano

Fig. 5-12
Bottom: Painted fiberglass heart by local San Francisco artist Marrianne Fay

the corner of the unit when producing 2000 kW of electricity and operating at 60 Hz, 240V. These generators would be run for testing purposes (just as the existing generators are tested now: every Wednesday at 6:30am for 30 minutes) and in the event of an emergency. However, standard design features (e.g., installation within an enclosure) are available to ensure that such equipment does not have a significant noise effect. Therefore, with implementation of the stationary noise mitigation measures requiring incorporation of such design features, this impact would be reduced to a less-than-significant level.

Recreation and Open Space This General Plan Element is not applicable.

Housing The New Emergency Generator Capacity plan development at **SFGH&TC** does not require any change in the number of housing units in the neighborhood. All construction associated with the New Emergency Generator Capacity project will occur on the **SFGH&TC** campus, and will not require removal of any housing units at any time.

Transportation As such the New Emergency Generator Capacity plan development would not result in a significant addition of new employees and consequently result in no significant addition of new vehicular automobiles in and around the Potrero Hill Campus.

Urban Design This plan development will be consistent with the urban fabric of the surrounding neighborhood and campus environments.

NEW ACUTE CARE HOSPITAL

Air Quality The development of the proposed acute care facility on the existing SFGH Campus, which is already served by transit and is located along a transit corridor, represents an efficient location of the new land use and development on the Campus would reduce the number of personal vehicle trips and related vehicle emissions when compared with other locations that are less well served. While the new acute care facility would locate sensitive land uses near U.S. Highway 101, which is a source of air pollution, the potential air quality impacts associated with the freeway could be mitigated. The proposed project would also include the planting of trees and landscaping, which could help off-set potential air quality effects and would have a beneficial effect on air quality.
Construction activities associated with this plan development would generate dust during excavation and grading activities, and emissions from tailpipes of heavy equipment would emit air pollutants. BAAQMD however requires implementation of dust and

other pollutants control measures for construction activities that would be included as part of this project. As such construction air quality impacts would be less than significant.

Arts This plan development would support the arts in San Francisco through participation in the 'Art Enrichment Program' administered by the San Francisco Arts Commission.

While the proposed project would not directly relate to the arts, it would be a publicly-owned building and therefore, subject to high expectations for design. The new hospital would be owned and operated by the DPH and would be subject to the review of the Arts Commission during the project approval process. In addition to the various reviews of the project design by the Planning Department, the Arts Commission review would help ensure that the proposed project is consistent with the Arts Element of the General Plan.

Commerce and Industry This plan development would ensure the ability of SFGH&TC to continue to provide community heath services in San Francisco.

Development of the proposed project would help to further the economic vitality of the San Francisco General Hospital and the City, by ensuring the continued provision of acute care medical services on the SFGH Campus. The new acute care hospital would enable SFGH to continue to operate the only Trauma Center (Level 1) serving San Francisco and northern San Mateo counties. As one of two acute care hospitals serving the southeast section of San Francisco and as a primary provider of health care for uninsured patients and the homeless population, the continued provision of acute care services at the SFGH Campus would help support the social equity goals of the Commerce and Industry Element.

Community Facilities This plan development would ensure the ability of SFGH&TC to continue to provide community facilities for use by San Francisco.

The proposed project would support the objective of the Community Facilities Element to make the services of the DPH convenient to the people and would help support the goals of the public health program in San Francisco by ensuring the continued provision of acute care services at the SFGH Campus.

Community Safety In 2000, the San Francisco Department of Public Health (SFDPH) commissioned a seismic evaluation study, which concluded that the Main Hospital building at SFGH&TC has significant seismic deficiencies and that it may not be capable of providing health care services to the public after a major seismic event. SFGH&TC Main Building was categorized as a Structural Performance Category 1 (SPC-1). Buildings categorized as a SPC-1 pose a significant risk of partial or total collapse and are danger to the public.

This plan development would address the seismic safety concerns of the acute care facility at SFGH&TC.

SFGH&TC has also developed a comprehensive emergency management program to provide for the care of casualties from either internal or external disasters based on the State of California mandated Hospital Emergency Incident Command System. In accordance with the City Charter, SFGH&TC staff will function as disaster workers in the event of a disaster declaration in the City of San Francisco.

SFGH&TC staff would benefit from the modernization of the acute care facility by ensuring the necessary conditions are available to effectively function as disaster workers as mandated by the City Charter.

The proposed project would be consistent with the applicable objective and policy of the Community Safety Element as it would construct a seismically compliant hospital that would meet State standards for acute care facilities.

Environmental Protection The proposed project would be generally consistent with applicable policies. The proposed project would comply with the City's Green Building Ordinance and is required to achieve a LEED Silver rating. Energy management practices would be integrated into the building design to help achieve this rating. The proposed project would comply with the standards of the Bay Area Air Quality District (BAAQMD), and would comply with transportation noise policies.

Fig. 5-13
Dolores Park, west of SFGH&TC campus

Recreation and Open Space SFGH&TC will look to balance the desire for recreational and open green spaces within its campus with the need to modernize their facilities and address current and future needs. Implementation of the proposed project would result in the development of the new acute care hospital on the west lawn, currently a primary open space area for the Campus. The proposed project would be located on the largest single open space area on the SFGH&TC Campus, the approximately 45,000 square foot west lawn. While the proposed project would result in the loss of the west lawn, the project would provide new landscaped areas adjacent to the new hospital, as well as create a publicly accessible rooftop garden.

Housing While housing is not part of the proposed project, Policy 11.4 is applicable to the proposed project. This policy requires that institutional expansions avoid disrupting residential areas. The proposed project would not expand into the surrounding residential area, as the project site is located on the existing SFGH Campus.

Transportation The proposed project would include a TDM (Transportation Demand Management) program with parking

management strategies. Bicycle facilities would be provided on the SFGH Campus and walkways and pedestrian linkages as well as loading and service areas would be designed to be consistent with the policies of the Transportation Element of the Transportation, Circulation and Parking section in the EIR.

Fig. 5-14
Muni bus '9 San Bruno' stops at several bus stops along Potrero venue adjacent to SFGH&TC

Urban Design The proposed project is generally consistent with applicable urban design policies, which are particularly relevant to the proposed project as buildings on the SFGH Campus appear to be eligible for listing on the National Historic Register as a district, although they are not currently listed. The setbacks between the proposed building and Buildings 20 and 30 would help to respect the character and design of the SFGH Campus and provide continuity with the older buildings. While the proposed design exceeds the height and bulk limits of the 105-E zoning district, the additional height would allow the circular tower element of the building to be stepped back from the podium façade, thus creating a bulk and design that is more consistent with the character of the SFGH Campus. The proposed building materials (brick and glass) would help to integrate the proposed building into the existing fabric of the Campus and create a unified campus character. In addition, the proposed building design of the podium and setting back of the circular tower would help to create a more human scale for the pedestrian area along Potrero Avenue. Landscaping on the building terraces (floors two and seven) would help soften the building façade and publicly usable open space would be provided on the seventh floor rooftop garden.

Fig. 5-14
View of proposed project looking from the west

Fig. 5-15
Above: Three-story bay window at the west end of Building 10, 20, 30 & 40 clad with glazed terracotta panels and with double-hung wood sash units incorporated into each of the three-sided bay

Fig. 5-16
Right: View from the open space in front of the Main Hospital of the south brick wall of Building 20 constructed in the Second Renaissance Revival Style

PLAN DEVELOPMENT CONFORMITY WITH EIGHT PRIORITY POLICIES

Overview The plan developments described in Section 4 generally support the eight priority policies listed in the City's General Plan.

See previous Section titled "Plan Development Conformity with General Plan Elements" describing how each plan development is generally supportive of the policies and objectives described in the General Plan.

[1] City and County of San Francisco, Planning Department, General Plan.
[2] Gerson/Overstreet Architects, "San Francisco General Hospital Medical Center Air Medical Access Needs and Feasibility Study," March 4, 2003.

Section 6 Environmental Conditions

Overview Pursuant to Sec. 304.5 of the San Francisco Planning Code, institutions should identify the anticipated impact of any proposed development on the surrounding neighborhood, identify any alternatives which might avoid, or lessen adverse impacts upon the surrounding neighborhood and propose mitigating actions to lessen adverse impacts on the surrounding neighborhood.

In addition Institutions need to identify the anticipated projection of related services and physical development by others, which may occur as a result of the implementation of the institution's master plan.

Fig. 6-1
Helicopter flying above San Francisco's skyline.

ANTICIPATED IMPACTS ON THE SURROUNDING NEIGHBORHOODS

MEDICAL HELIPAD

Existing Housing in the Neighborhood The development of the Medical Helipad at SFGH&TC would not require any change in the number of housing units in the neighborhood. All construction associated with the helipad would occur on the SFGH&TC campus, and would not require removal of any housing units at any time.

Flight operations over adjacent residential areas would not directly change land uses, including housing. A noise study is being conducted as part of the medical helipad Environmental Impact Report which is being developed at the present time by Turnstone Consulting under the direction of the San Francisco Department of Planning.

Relocation of Housing Occupants or Commercial or Industrial Tenants Relocation of housing occupants and/or commercial or industrial tenants due to activities relating to the development of the Medical Helipad is not anticipated.

Changes in Traffic Levels and Circulation Patterns The development of the Medical Helipad is not anticipated to change overall circulation levels or patterns of vehicular traffic in and around the medical center complex. Potentially 240 patients per year may be received at the SFGH&TC helipad and required to be transported by ground ambulance to other hospitals in the City. This volume is considered nominal on a daily basis.

Fig. 6-2
Bus stop along Potrero Avenue in front of SFGH&TC's main entrance gate

Transit Demand and Parking Availability The development of the Medical Helipad is not anticipated to change demand on transit, or affect the parking demand at SFGH&TC.

The total volume of 693 patients per year at program maturity would not change the profile on transit systems or parking. The volume in routine Emergency Department visits, fifty-three thousand patients per year, plus the daily travel patterns of four thousand, are what define the transit demand and parking availability

The Character and Scale of Developments in the Surrounding Neighborhood Due to the intermittent nature of Medical Helipad operations, it is unlikely the helipad will engender any enduring changes in the character and scale of developments in the surrounding neighborhood. SFGH&TC as an institution has not in over 130 years fed the development of any off-campus developments related to the healthcare mission. The addition of the helipad will not induce any other development.

SFGH&TC is proposing a medical helipad on the roof-top of the existing Main Building. This project is undergoing separate environmental review. Therefore, for the purposes of this project's analysis, the proposed helipad is conservatively considered a reasonably foreseeable future development on the Campus, even though the project has not yet been approved or constructed. In the event that the helipad is constructed and operated in the future, it could expose persons within the proposed new acute care hospital to much higher aircraft-related noise levels.

Preliminary noise analysis indicates that addition of the helipad would increase the CNEL (Community Noise Equivalent Level) in the project vicinity by 0.0 dBA to 0.1 dBA, depending upon the location of receptors from noise the noise source. This noise level change is substantially less than 3 dBA and therefore would not be considered a substantial impact. Furthermore, addition of a helipad would not result in a CNEL above 65 dBA for the project area as a whole. However, the single-event noise created by helicopter landings and and take-offs may result in exposure of new hospital users to short-term exceedances of noise levels within the hospital, including during typical sleeping hours. Based on the Single Event Noise Exposure Levels (SENEL) contours produced in the preliminary analysis, these noise levels could result in sleep disturbances, annoyance, and other health effects for occupants of the new acute care hospital, with operation of the helipad on Campus sometime in the future.

These short-term-exceedances of noise levels within the new acute care hospital would result in a potentially significant effect on sensitive receptors within the proposed new acute care hospital. However, because SFGH&TC would implement the Aircraft Noise Mitigation Measure, unless the design of the project incorporates appropriate noise insulation features, this impact would be reduced to a less-than-significant level.
The noise effects of the helipad are being analyzed as part of its EIR and that EIR will address broader noise effects of the helipad and mitigation applicable to its effects.

NEW EMERGENCY GENERATOR CAPACITY

Existing Housing in the Neighborhood The New Emergency Generator Capacity project would not require any change in housing units in the neighborhood. All construction associated with New Emergency Generator Capacity would occur on the SFGH&TC campus, and would not require removal of any housing units at any time.

Fig. 6-3
Parking Structure adjacent to SFGH&TC

Relocation of Housing Occupants or Commercial or Industrial Tenants Relocation of housing occupants and/or commercial or industrial tenants due to activities relating to the New Emergency Generator Capacity project are not anticipated at this time.

Changes in Traffic Levels and Circulation Patterns The New Emergency Generator Capacity project would replace the service currently provided by the two existing turbine generators. Since the two existing turbine generators would be decommissioned once the new facility is completed, a significant portion of the existing workforce would simply be reassigned to the new facility.
As such the New Emergency Generator Capacity project would not result in a significant addition of new employees and consequently result in no significant addition of new vehicular automobiles in and around the Potrero Hill Campus.

Transit Demand and Parking Availability The development of the New Emergency Generator Capacity project is not anticipated to change demand on transit, nor affect the parking demand at SFGH&TC.

The Character and Scale of Developments in the Surrounding Neighborhood The development of the New Emergency Generator Capacity project is not anticipated to change the character and scale of developments in the surrounding neighborhood.

NEW ACUTE CARE HOSPITAL

Existing Housing in the Neighborhood The development of the New Acute Care Hospital at SFGH&TC would not require any change in the number of housing units in the neighborhood. **While housing is not**

part of the proposed project, Policy 11.4 is applicable to the proposed project. This policy requires that institutional expansions avoid disrupting residential areas. The proposed project would not expand into the surrounding residential area, as the project site is located on the existing SFGH Campus

Relocation of Housing Occupants or Commercial or Industrial Tenants Relocation of housing occupants and/or commercial or industrial tenants due to activities relating to the development of the New Acute Care Hospital is not anticipated.

Changes in Traffic Levels and Circulation Patterns The anticipated changes in traffic levels and circulation patterns in and around SFGH&TC as a result of the development of the New Acute Care Hospital would not result in any significant adverse impacts.

Transit Demand and Parking Availability The anticipated change in transit demand and parking availability in and around SFGH&TC as a result of the development of the New Acute Care Hospital determines a need for additional 400 parking spaces.

Shadow and Wind With the development of the proposed project, the most likely areas to experience increased winds would be the open areas on the north and south sides of the new building, where proximity to existing buildings (Buildings 20 and 30) could result in windier conditions when the wind sis from the west. Any wind accelerations are expected to be moderate because or the project design factors. However the proposed building's 7th floor rooftop healing garden would be elevated and unsheltered, and potentially exposed to high winds and low temperatures.

The Character and Scale of Developments in the Surrounding Neighborhood This development will be consistent with the urban fabric of the surrounding neighborhood and campus environments.

Scenic Views The proposed building would be located on the SFGH Campus and would not substantially alter scenic vistas from public viewpoints. The proposed new acute care hospital would be constructed in an area of the SFGH Campus that is already developed with buildings and would have a similar roofline to the surrounding buildings 20 and 30. The new hospital building would be partially visible from vantage points on Potrero Hill, however due to the topography of Potrero Hill and the project site and the heights of adjacent buildings on Campus the new the proposed project would not substantially diminish scenic vistas from these locations. The proposed project would have a less-than-significant impact on scenic vistas.

Scenic Resources The construction of the proposed project would alter the existing rhythm of buildings and open space area, However, the architectural design and building materials would integrate the proposed building into the existing fabric of the Campus and would retain the feel of the rhythm by setting the circular tower back from

the podium façade. The proposed project would use similar building materials, such as brick to convey a similar feel as the adjacent buildings and better integrate the proposed project into the Campus setting. Street trees would be maintained and landscaping would be planted on the site. Therefore the proposed project would have a less-than significant impact on scenic resources.

Existing Visual Character The proposed new acute care hospital would not alter the visual quality of character of the surrounding area but would alter the visual character of the Campus. The existing Campus character primarily results from the architectural style, design and materials of the buildings on Campus constructed between 1915 and 2004. The building design and materials would visually integrate the new building with the adjacent buildings and respect the character of the older adjacent buildings. The buildings setbacks and transitions in wall planes and circular and rectangular building forms would help to promote the harmony of the visual relationships between the finger wards and the new building. Additional elements of the design, such as increasing the setback between floors and transforming building height and bulk towards the interior of the Camus, enable the building to better relate to the predominate scale of Campus buildings without overwhelming the buildings as well as to present a more appropriate scaled design along Potrero Avenue and reduce impact to the residential neighborhood to the west.
For these reasons, the proposed project would not substantially degrade the existing visual character or quality of the site and its surroundings.

Light and Glare The proposed project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area or which would substantially impact other people of properties. The façade materials would generally not be reflective and would not contribute a substantial amount of glare in the project vicinity. The fist three levels would be primarily brick cladding and the circular tower element would be primarily glass curtain wall with vertical brick columnar elements connected by horizontal sunshades at each floor. These elements would serve to reduce glare from the glass curtain wall. Excessive lighting spillover from the interior to the exterior would not result from the glass curtain wall element because of design features employed to provide privacy for the patient rooms located along the periphery of the tower.

Population, Housing and Employment The proposed project would have less-than significant effects on population, housing, and employment on the Campus, in the surrounding neighborhood, and Citywide. In addition, the project would not have cumulatively considerable impacts on population, housing, and employment. No mitigations would be required.

Cumulative Impacts The proposed project, when combined with other foreseeable development in the vicinity, would not cause

cumulatively considerable impacts to visual quality or urban design. The proposed project and cumulative projects would not have a substantial adverse effect on a scenic vista. The proposed project and projected future development on the Campus and as part of the Eastern Neighborhood Program would result in an intensification of uses but would not significantly modify existing vistas. Although the proposed project would modify the existing scenic resource of the Campus, it would not result in a significant impact to the resource. Similarly, projected development under the cumulative condition would not contribute to damaging a scenic resource. Likewise, modifications to the visual character on Campus would result from the proposed project but would be less than significant. Neither Campus master planning activities nor the planned intensification and shifting of uses under the Eastern Neighborhood Program would contribute to the degradation of visual quality. New sources of light and glare would be reduced through design and would be consistant with existing urban lighting. Therefore, implementation of the proposed project would not result in significant cumulative visual impacts.

IDENTIFICATION OF ANY ALTERNATIVES AND/OR MITIGATIONS TO LESSEN OR AVOID ADVERSE IMPACTS UPON THE SURROUNDING NEIGHBORHOOD

MEDICAL HELIPAD

Overview It is anticipated that the principal issues that will require mitigation for the helipad are helicopter noise and safety. These aspects of the project proposal will be examined in greater detail in a separate environmental impact report for the helipad. To the greatest extent possible, mitigations for both noise and safety of helicopter operations will be incorporated into the project. The adequacy and scope of those mitigations will be characterized in an Environmental Impact Report currently under development.

Various alternatives to the current helipad proposal have been considered. The 2003 Air Medical Access Needs & Feasibility Report prepared by Gerson/Overstreet[1] identified several helipad location alternatives, which are summarized below:

Site Alternative 1: SFGH&TC Main Hospital Wing C This pad location is the preferred location for the medical helipad. Located on the southwestern wing of the existing hospital roof, this location presents the widest range of approach paths for a helicopter, with relatively few vertical obstructions. Approximately 200 degrees of approach are available at this location. Prevailing winds would generally allow a north/northwesterly approach to this pad location. Access to the rooftop via the hospital elevators is feasible, which provides the fastest route of patients from pad to the operating rooms, intensive care unit or the emergency department.

Fig. 6-4
Site alternatives considered for the proposed helipad.

Site Alternative 2: **SFGH&TC Main Hospital Wing A** This pad location is similar in difficulty as for the preferred site over wing C. This site allows approximately 180 degrees of approach, owing to the location and height of the western elevator penthouse of the Main Hospital. Otherwise, the approach and departure paths are very similar, and access to the lower floors would be by the same elevator modifications being proposed for the wing C location. The additional disadvantage this site has is increased exposure to helicopter noise over the main entrance to the hospital.

Site Alternative 3: **SFGH&TC Main Hospital Wing D** This pad location is generally similar to the other two rooftop locations in terms of angle of approach and adjacency requirements. However, it is east of the existing rooftop penthouse structure, and therefore will allow line-of-sight travel of helicopter noise to Potrero Hill. This location would also require a more circuitous configuration of the ramp between the helipad and the elevator, and lengthen transit time of patients.

Site Alternative 4: **SFGH&TC Parking Garage** This proposal would site the helipad atop the SFGH&TC parking structure. The helicopter approaches to this location would be generally similar as for the hospital rooftop locations, except that the lower elevation and the proximity to surrounding residences would make helicopter noise and vibration more objectionable. Trauma patients would still need to be loaded into an ambulance for a trip across the street to the hospital. In violation of trauma care standards the existing parking structure floor heights make access to the roof by a standard City ambulance impossible, therefore requiring a trip through an elevator that is undersized for a standard gurney. For all these reasons, the risk to trauma patients would be too great to consider acceptable.

Site Alternative 5: **Emergency/Visitor Parking Lot** The parking just south of the Emergency Department on the SFGH&TC campus provides very restricted approach and take-off angles, since any helipad structure would be relatively low compared to the existing Main Hospital building. Numerous trees and utility lines form obstructions, and a helipad structure would need to be erected to exceed the height of these obstructions. The proximity of neighboring residences and the numerous conflicts with clear approach make this location infeasible.

Site Alternative 6: Off Campus Locations The significant limitation of any off-campus landing pad location is the distance and travel time from the Main Hospital, as well as the risks associated with changing transport modes with critically ill trauma patients. No off-site location was deemed acceptable for any helipad operations involving trauma patients. At this time, there are no FAA and Caltrans approved helicopter landing sites anywhere in the City and County of San Francisco.

The NOP also discussed the possibility that if the helipad proposed to be located on the rooftop of the existing Main Hospital (Building 5, C Wing) and were to be approved and constructed, SFGH&TC (DHP) may in the future desire to re-locate it from the rooftop of the Main Hospital to the rooftop of the proposed new acute care hospital, if the new acute care hospital project were to be approved and implemented. The potential future relocation of the helipad from the existing to the new hospital building is no longer part of the proposed project.

No Project Alternative If the proposed medical helipad is not constructed at SFGH&TC, emergency medical transportation to and from the Main Hospital would be limited to ground ambulance via surfaces streets, freeways, and bridges. The 'no project alternative' would not solve the problem of patient care vulnerabilities in the City's system of trauma care.

The ability to provide timely access to Trauma Center care is compromised by lack of air access. Ground access routes are subject to significant delays due to traffic congestion on surface streets and freeways. Transfers of patients to and from other regional facilities would be limited by delays from bridge traffic, and could be accommodated only under unpredictable timeframes.

In the event of multiple casualties, such as earthquakes or terrorist attacks, the trauma capacity of SFGH&TC could be exceeded, and there would be no rapid method to transport critically injured patients to other trauma centers in the region.

While SFGH&TC is designed for both adult and pediatric trauma care, it is occasionally necessary to transport very young injured children to the specialized care available in a Pediatric Trauma Center. Oakland Children's Hospital is the closest designated pediatric trauma center in the Bay Area. It can be reached by air in about 8 minutes while a ground ambulance is subject to Bridge closures and the vagaries of traffic congestion on the Bay Bridge and surface streets.

NEW EMERGENCY GENERATOR CAPACITY

The new emergency generator capacity project would replace the existing steam turbine driven generators in order to increase the reliability of emergency power services for the Campus. The new generator would serve as a back up to the hospital's power supply, providing uninterrupted provision of power during emergency.

The impacts upon the surrounding neighborhood and the identification of alternatives to lessen adverse impacts by the New Emergency Generator Capacity project have not yet been determined.

NEW ACUTE CARE HOSPITAL

Overview The impacts upon the surrounding neighborhood and the identification of mitigation measures to lessen adverse impacts by the new Acute Care Hospital project on the surrounding neighborhood have been addressed as part of the Environmental Impact Report and are as follows:

Archaeological Deposits Mitigation Measure Research conducted suggests that the project area may contain significant archaeological deposits and/or features persisting from prehistoric and historical use of the project area, specifically those uses associated with the SFGH&TC District. An appropriate strategy is necessary to specify the appropriate identification strategies. If resources are identified, they will require evaluation to determine if they qualify as legally significant (i.e.., if they are eligible for listing in the California Register). The evaluation shall use the principles contained in the Archaeological Research Design in the EIR.

To achieve the steps outlined above, SFGHT&C shall prepare and implement an Archaeological Research Design, Testing, and Evaluation Plan (ARDTEP) prior to project construction. The ARDTEP will guide fieldwork and help to determine if identified archaeological remains qualify as significant. The ARDTEP shall be prepared by professionals who meet the Secretary of the Interior's Professional Qualifications Standards in historical archaeology, prehistoric archaeology, and history (36 CFR Part 61), and shall be reviewed and approved by the Environmental Review Officer (ERO).

Architectural Resources Mitigation Measure – Documentation. SFGHT&C shall photo-document the SFGH District prior to the commencement of project activities. The purpose of architectural documentation is to archivally preserve a record of the form, spatial organization, and historic fabric of the SFGH District prior to implementing project actions that may adversely impact such qualities.

The photo-documentation shall capture the visual context, important view axes, and contributing landscape elements that will be compromised by project implementation. The photo-documentation shall consist of, at a minimum, photographs of (1) the context of the west lawn area, including several angles yielding prominent views of the contributing landscape elements; (2) the view corridor from Potrero Avenue to the northeast, east, and southeast into the heart of the SFGH District; (3) the north-to-south view corridor through the SFGH District, both north from 23rd Street and south from 22nd Street; (4) the views of Buildings 10/20 and 30/40 from each building toward the other; and (5) an oblique view of the west lawn and its immediate context from the roof of the Main Hospital.

The photo-documentation shall meet the Secretary of the Interior's technical standards for mitigative architectural photography. The photo-documentation shall include the creation of prints and

negatives processed for a several-hundred-year life span; the use of high resolution large format film; the use of view camera perspective corrections; and packaging in archival sleeves with mount cards. A copy of the finalized Historical Resources Evaluation Report for the SFGH District shall accompany the final photosets. The photosets shall be distributed to the Northwest Information Center at Sonoma State University; the San Francisco History Center of the San Francisco Public Library; and the San Francisco Museum and Historical Society.

Implementation of this mitigation measure would offset impacts on architectural resources by photo-documenting those landscape features that would be lost, as well as by capturing the visual relationships of the SFGH District, from both within and without, that would be compromised by the implementation of the project. This mitigation would not, however, be sufficient to reduce potential impacts to the SFGH District to less-than-significant levels.

Architectural Resources Mitigation Measure – Interpretation. SFGH&TC shall create public interpretation opportunities to convey the pre-project baseline conditions and historical significance of the SFGH District. These opportunities shall take the form of an interpretive placard, an interior display and video, and brochures. Each component is described below.

Placard. The placard shall be located at a prominent location on the Campus, preferably near the pedestrian entrance on Potrero Avenue. At a minimum, the placard shall include (1) photos that depict the pre-project conditions of the west lawn, including the concrete stairway, brick walls, gardens, and lawns, as well as the immediate context; and (2) a summary of the historical development of the SFGH, its role in institutional healthcare, and the distinctive nature of its architecture. The placard should allow a visitor to visually compare the historical configuration of the west lawn and its contributing landscape elements with the new acute care hospital.

Interior Display and Video An interior display shall be developed and installed at a prominent interior location in the Campus, preferably the acute care hospital lobby. The interior display shall expand on the content of the placard, but shall also include a video station that will play, on visitor request, a brief (five-to-ten minute) interpretive video on the history of the SFGH District. The video shall incorporate the basic content of the interior display, but shall provide a more visually dynamic representation of the campus, perhaps including reminiscences from former hospital staff, patients, and administrators, historical photographs, and videography of prominent district contributors. The interior display and video shall be developed in consultation with the San Francisco Historical Society and the Preservation Technical Specialists of the San Francisco Planning Department.

Brochures Brochures shall be developed to highlight the

historical significance of the SFGH District. The brochures shall contain a condensed version of the information contained in the interior display, but shall include brief descriptions of contributing buildings to allow visitors to visit and appreciate the SFGH District first-hand as a limited self-guided tour. The brochures shall be provided at the interior display for visitors to take with them as they depart display location, and shall be restocked periodically.

Implementation of this mitigation measure would offset impacts on architectural resources through public historical interpretation. The interpretation would occur in a manner that would afford a wide array of SFGH patients, staff, and visitors the opportunity to experience the history of the campus, and understand the reasons for its historical significance. This mitigation would not, however, be sufficient to reduce project-related historic architectural resources impacts to the potential SFGH District to less-than-significant levels.

Architectural Resources Mitigation Measures – Historic Integrity. SFGHT&C shall strengthen the historical integrity of the SFGH Historic District by attenuating incompatible aspects of past building modifications and improving the conditions of the historic district. All modifications, improvements and restoration activities shall be done in a manner consistent with *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings (Secretary's Standards)*, shall be approved by the Planning Department Preservation staff prior to implementation, and shall be conducted or supervised by a qualified preservation architect. The required actions are described below.

Removal of Incompatible Building Modifications SFGH&TC shall remove the 1950s exterior staircases from Building 10/20, and Building 30/40. If public safety concerns or technical constraints make removal infeasible, the stairs shall be redesigned to bring them into conformance with the *Secretary's Standards* to reduce their discordant visual signature. The redesign shall be done to reduce the severity of the size, scale, color, material, and character of the staircases, in order to make them subordinate to the historic form of the buildings and enhance the overall historic character of the site.

Perimeter Fence Improvements SFGH&TC shall restore or rehabilitate the 1915 perimeter fence of the SFGH Historic District, as well as repair structurally damaged portions of the fence to prevent further deterioration. Elements to be included as part of the work include missing terra cotta escutcheons, medallions, and light standards. This measure shall not be construed as requiring the reconstruction of portions of the fence that have not survived to the present. As part of, and prior to, the repairs, SFGH&TC shall prepare a conditions assessment in consultation with Planning Department Preservation staff, which shall identify those portions of the fence that will be repaired, and will prioritize treatment for those segments most at risk.

Restoration of Landscape Features SFGH&TC shall restore or rehabilitate historic landscape, trees, planting beds, shrubs, walkways and other landscape features along Potrero Avenue to their historic condition based upon physical or photographic evidence dating from the 1920s until 1976 when most historic landscape elements were removed. In consultation with Planning Department Preservation staff, SFGH&TC shall develop and implement a landscape features restoration and rehabilitation plan before any restoration or rehabilitation work commences. The plan shall include a conditions assessment, maintenance plan, implementation schedule, and specific restoration and rehabilitation actions to be addressed. At a minimum the plan shall include the following:

Restoration of landscape areas between:

1. Building 10/20 and Building 30/40
2. Building 9 and Building 30/40
3. Building 1 and Building 10/20

Restoration or rehabilitation of the views to help convey the organized historic plan of the campus and its association with the City Beautiful Movement and Civic Center plan. This work shall include the removal of any non-historic additions or trailers and reinstallation of any missing landscape features and organic elements based on historic photographic and physical evidence. Views to be included in the plan are:

1. Views toward Building 9 when viewed from the intersection of Potrero Avenue and 23rd Street.
2. Views toward Building 1 when viewed from the intersection of Potrero Avenue and 22nd Street.

Restoration and relocation of the historic light standards and flagpole. At one time the campus contained approximately forty ornamental light standards. The existing light standards and the flagpole shall be restored and relocated to an appropriate historic location in relation to the perimeter fence.

Conditions Assessment and Maintenance Program for Historic Structures In consultation with Planning Department Preservation staff, SFGH&TC shall prepare an existing conditions assessment and implement a maintenance program for the SFGH Historic District. Specifically, SFGH&TC shall have a qualified preservation architect undertake a conditions assessment and recommend preservation implementation measures for Buildings 1, 9, 10/20, 30/40, 80/90, and 100, as well as the historic gatehouses and historic fountain. As part of the conditions assessment, the preservation architect shall

conduct a façade inspection and window survey for all structures identified as part of the district. Based on the inspection and survey, the preservation architect shall prepare a report that identifies and prioritizes any repair work that should be undertaken in the next 20 years to ensure the continued preservation of the subject resources. The report shall identify any high priority actions that should be taken as soon as possible and shall recommend projects for completion annually for the next five years and in five year intervals thereafter. The report shall recommend solutions for completing the work in conformity with the *Secretary's Standards.*

SFGH&TC shall have a qualified preservation architect prepare and SFGH&TC shall carry out a maintenance program. The maintenance program shall include an implementation schedule and specific maintenance activities to be undertaken that address such issues as water infiltration and corrosion, façade inspection and repair, window repair and rehabilitation, identification and abatement of organic matter, graffiti management and protection, pest and rodent control, and repair and stabilization from minor seismic events. The maintenance program shall recommend solutions for completing any maintenance work in conformity with the *Secretary's Standards.*

Design Mitigation SFGH&TC shall design the acute care hospital to minimize the impacts to the historic character and integrity of the SFGH Historic District while maintaining a balance with project constraints.

Composition and Massing The overall form of the new hospital shall be shaped and sculpted in a manner that maximizes the visibility and the spatial relationships of Buildings 10/20 and 30/40 to the greatest extent possible and respects the symmetry and order found within the original plan for the SFGH Campus. In the current design, this is best represented in the setback and round form of the 3rd- through 7th -floor patient rooms.

Scale An important aspect of the scale of the SFGH Historic District is that the total façade plane is broken into smaller parts which relate compatibly to the human scale. Coping bands, water tables, fenestration patterns, and textural variation shall all be utilized in order to retain a sense of human scale along the public rights-of-way and relate to the scale of the existing historic buildings.

Materials and Colors A palette of materials and colors referenced from the existing historic buildings shall be used for the new hospital. These materials shall be cast stone and terra cotta with a smooth-finish and brick with a rough-finish. All colors shall be integral to the material and representative of the predominate tones of the historic

structures that make up the SFGH Historic District. Substitute materials, subject to review and approval by Planning Department Preservation staff, may be accepted provided that they closely match the historic materials in color, texture, finish, and profile.

Detailing, Ornamentation, Cladding Systems The new hospital shall relate to its surroundings by incorporating elements that reference the historic character of the SFGH Historic District but are reinterpreted using a modern vernacular. These elements include recessed windows, bays, lintels, arches, window hoods, medallions, colonnettes, friezes, stringcourses, tympanums, coping, cornices, parapet walls, projecting wall planes, decorative bonds, recessed spandrels, and other period. Such details can be utilized to relate the new construction to the district's contributing buildings. New construction shall incorporate prevailing cornice lines, stringcourses, fenestration patterns (windows and entrances), water tables, and rhythms and proportions established by the existing buildings.

Orientation The west lawn historically functioned as the symbolic main entrance to the SFGH Campus and currently functions as a pedestrian entrance. The current and historic orientation of the campus is towards Potrero Avenue. SFGH&TC shall develop the design of the new hospital to provide for a prominent visual orientation facing Potrero Avenue through the introduction of architectural features at the pedestrian level and above. Architectural features along the Potrero Avenue elevation at the first two floors above grade shall direct any foot traffic to continue to use the Potrero Avenue side of the campus as a primary pedestrian entry. Signage shall not be considered an architectural feature and all design features are based on review and approval by Planning Department Preservation staff.

Implementation of the architectural mitigation measure above would not be sufficient to reduce project-related historic architectural resources impacts to the potential SFGH District to less-than-significant levels. The mitigation would, however, offset the adverse impacts in such a manner that the SFGH Historic District would retain its historic significance. The core 1915-1938 buildings would remain in their historic locations and, as a group, would still convey integrity of location, association, design, workmanship, and materials. While the district's setting would be compromised, the concentration of buildings would continue to convey important historic functions and aspects of the hospital, including treatment (patient wards) and administration/ education (nurse's home). The intact design integrity for individual buildings reinforces the historic character of the 1915-1917 core of the district. For these reasons, the impacts to the SFGH Historic District would not compromise the resource to the degree that it would not be eligible for the California Register, provided that

the above mitigation measures are implemented.

Paleontological Resources Mitigation Measure. If paleontological resources are encountered during project subsurface construction in the project area, all work within 25 feet of the discovery shall be redirected and a qualified paleontologist contacted to evaluate the finds and make recommendations. If the find is a significant paleontological resource, the find shall be avoided by project activities, if feasible. If project activities cannot avoid the find, adverse project impacts to the find shall be mitigated. Mitigation may include, but is not limited to, monitoring, data recovery and analysis, and accessioning of all fossil material to a paleontological repository. A final report documenting the methods, findings, and recommendations of the consulting paleontologist shall be prepared and submitted to the University of California Museum of Paleontology.

Implementation of this mitigation measure would reduce impacts on paleontological resources to a less-than-significant level by recovering the scientifically consequential information contained by such resources.

Human Remains Mitigation Measure. If human remains are discovered during implementation of archaeological deposit mitigation measure, or if they are identify during other project activities, any such remains shall be treated in accordance with the provisions of the mitigation measure and the requirements of CCR Title 14(3) §15064.5(e). The procedures contained in CCR Title 14(3) §15064.5(e) are provided below.

1 There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:

A The coroner of the County must be contacted to determine that no investigation of the cause of death is required, and

B If the coroner determines the remains to be Native American:

1. The coroner shall contact the Native American Heritage Commission within 24 hours.

2. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descended from the deceased Native American.

3. The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC §5097.98, or

2 Where the following conditions occur, the landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance.

A The Native American Heritage Commission is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after being notified by the commission;

B The descendent identified fails to make a recommendation; or

C The landowner or his authorized representative rejects the recommendation of the descendent, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.

Compliance with the requirements of CCR Title 14(3) §15064.5(e) shall be coordinated with the Native American community contacts already established for the project (as part of the ARDTEP implementation). If, following the fulfillment of the notification requirements described above, human remains are discovered that are determined to not be of Native American origin, then the SFGH&TC shall consult with the appropriate descendent community regarding means for treating or disposing of the human remains, and any associated items, with appropriate dignity.

Implementation of this mitigation measure would reduce project-related impacts on human remains to a less-than-significant level by treating human remains in accordance with applicable State laws and providing for their ultimate disposition in a respectful manner.

Loading Mitigation Measure. In order to meet the peak loading demand during the peak hour, SFGH shall assess the loading needs at each location or building and develop a plan for either consolidating loading operations at the main loading dock behind the existing hospital or creating additional, appropriately sized and managed loading spaces at the buildings/locations where needed. SFGH shall have its freight management plan and site/street loading plan reviewed by the SFMTA, the San Francisco Fire Department, and the Planning Department prior to submittal of building permit applications to OSHPD.

Implementation of this mitigation measure would reduce project-related loading impacts to a less-than-significant level.

Transit Mitigation Measure. There is one additional transit measure identified beyond the signal improvements DPT made in 2006 along Potrero Avenue between 16th and 25th Streets and the Next Bus sign

recommended as part of the TDM program (see Transportation Demand Management Mitigation Measure below). A shuttle or Muni service is needed to connect the Campus with the 22nd Street Caltrain Station, Mission Bay and the 4th and King Caltrain Station. This was recommended in the TDM program developed by city staff in 1990 and would be needed even more given the larger percentage of employees who now reside in the South Bay and along the Peninsula, and who travel to the Campus from those locations.

Implementation of this mitigation measure would reduce project-related transit impacts to a less-than-significant level.

Cumulative Freeway Mainline and Ramps Mitigation Measure. The southbound U.S. Highway 101 off-ramp to Potrero Avenue and Cesar Chavez Boulevard would deteriorate from LOS D to E from 4:00 p.m. to 5:00 p.m. under the Future (2021) Cumulative conditions. Since the project contribution (10 project inbound trips) would be approximately 11 percent of the future growth in volumes at this ramp, the proposed project would contribute considerably to this significant impact. This ramp would have approximately 1,180 vehicles in 2021, including growth in traffic from both the proposed project (10 vehicles) and background growth (82 vehicles). There is no feasible mitigation measure for increasing capacity at this ramp; some level of mitigation would have to occur by reducing automobile travel rates to/from the Campus (and in the Eastern Neighborhoods generally). However, the freeway ramp impact would remain significant and unavoidable even after implementation of a working TDM program measure at SFGH Campus, as outlined below.

Transportation Demand Management (TDM) Program Mitigation Measure. In addition to the elements in the existing TDM program, SFGH should consider the following additional TDM strategies. The initial task for setting up the TDM program would require the establishment of modal split goals. Because SFGHT&C would not add any additional parking for the proposed project, it is estimated that, by 2021, there would be a need for additional 400 parking spaces. In order to avoid parking spillover into the adjacent neighborhoods, existing single occupant auto share (59 percent drive alone) must be reduced to 45 percent drive. This would require aggressive marketing and financial incentives to shift employees away from driving alone to transit and carpool and vanpools, including the following elements.

Program Coordination

- Designate an overall Transportation Coordinator for the Campus TDM program. This person will be responsible for campus-wide coordination of all services promoting transit, ridesharing and parking management. This effort should start with a 50 percent level commitment and may eventually transition to a full-time staff person). SFGH has agreed to seek additional budget for this position.
- Conduct an annual travel behavior survey. The purpose of the annual survey is to have the most up-to-date data on employee travel behavior. The transportation Coordinator should use this

data to modify its TDM program

Information Dissemination

- Improve SFGH's website to include a Transportation Information Tab on the website home page. SFGH has agreed to this strategy by creating a link on the Department of Public Health's (DPH) website.
- Prepare a package of printed materials that describes the TDM program. SFGH will prepare a package of TDM benefits and include this package in the new employee orientation materials. It should also include TDM-related articles on the SFGH website, in the Parking Services Newsletter, and in the "Our City Within" newsletter. SFGH has agreed to this strategy.
- Develop and disseminate a newsletter regarding updates of transit services and commute alternatives to SFGH and UCSF employees. SFGH has agreed to this strategy by incorporating the materials into the monthly DPH's "Fast Facts"
- Sponsor "Transportation Day" fair event annually. During the fair, there would be on-site rideshare matching, information dissemination of local and regional transit services, bicycle, pedestrian and rideshare. The transportation fair should be attended by organizations such as 511.org, MUNI, BART, Bicycle Coalition, SFGH's employee benefits coordinator (commuter check), car sharing companies (e.g. City CarShare, Zipcar), UCSF shuttle bus service coordinator, and Emergency Ride Home Program coordinator. Food and prizes along with information about commute alternative benefits should be provided during the Fair in order to attract attendance.

Transit Promotion

- Set up a transit kiosk/booth on campus to provide transit schedule and map information. SFGH has agreed to implement this strategy using the information desk in the main hospital lobby.
- Improve transit and transportation information on the SFGH's website, with links to regional rideshare and public transit resources. SFGH&TC has agreed to implement this measure.
- Sell transit passes on site for multiple transit carriers, including BART, Caltrans, SamTrans, and MUNI on campus at a time and location convenient to employees. SFGH&TC has agreed to investigate the viability of this measure.
- Install Next Bus sign at convenient location on the campus to inform MUNI riders on the arrival time of the next bus. SFGH has agreed to request funds through annual City capital project budgeting process.
- Install a display of UCSF shuttle bus schedule at the shuttle bus stop. SFGH has agreed to implement this measure.

Rideshare Promotion

- SFGH should coordinate with 511.org and establish a system to use this organization to promote and coordinate rideshare program for employees working at SFGH, for both CCSF and UCSF employees.
- Increase car sharing parking spaces – SFGH has agreed to this strategy. SFGH has a current arrangement with car sharing companies (City CarShare and Zipcar) to provide one additional space when needed.

Bike Promotion

- SFGH should provide more bicycle lockers near buildings on the campus. The current bicycle parking spaces in the parking garages are not utilized. SFGH has agreed to this strategy.
- SFGH should provide a shower facility on the campus for bicyclists. SFGH has agreed to consider this strategy after the new acute care hospital is completed. They note that the cost for maintenance will have to be evaluated further.

Construction Mitigation Measure. The construction of the proposed project may occur simultaneously with other retrofit/renovation projects on the SFGH campus. Disruptions to traffic, transit, parking, emergency access, and pedestrian circulation could potentially occur. Although construction impacts would be temporary and of relatively short duration, the following measures would reduce construction impacts to less-than significant-levels:

- The TDM program should be operational and in effect by the time building permits are issued by OSHPD. Displacement of Muni and shuttle stops should be kept to a minimum and transit access and emergency access should be maintained to the SFGH Campus.
- During the construction period, construction vehicles would enter and exit from Potrero Avenue between 22nd and 23rd Streets at approximately the location of the existing Muni bus stop, and the Muni bus stop should be relocated to an equally convenient location.
- The SFMTA should be consulted and their advice followed in developing the construction traffic management plan referenced below.
- Barriers and bridges should be constructed over the sidewalks and safe and convenient pedestrian access to bus stops and shuttle stops will be maintained.
- The Contractor should identify an off-site parking facility, not within the immediate neighborhood, for construction worker parking of his employees and all subcontractors and provide a shuttle bus system to transport all workers to the project construction site. Stops for these trips will not be the same as those used for the Muni and UCSF passengers. Shuttle buses used will be stored in legal parking locations at the parking

staging area when not in use.

- The mid section of parking lot H should be dependent upon 22nd Street for access and the southern portion of parking lot H should be dependent upon 23rd Street for access. Emergency vehicles should continue to use 23rd Street for access, and 23rd Street will be kept open at all times as part of the traffic construction management plan.
- The contractor and SFGH will develop a final construction traffic management plan in cooperation with the Department of Parking and Traffic, Department of Public Works, SF Muni, and the Planning Department prior to issuance of building permit applications to OSHPD.

Implementation of this mitigation measure would reduce project-related construction impacts to a less-than-significant level.

Sensitive Receptor Noise Mitigation Measure. Future traffic noise levels (2021) along Potrero Avenue would expose the proposed project to noise levels of up to 65.5 dBA L_{dn}. This is slightly above the City's acceptable noise standard for new hospital developments of 65 dBA L_{dn}. Therefore, mitigation would be required to reduce noise impacts on sensitive receptors within the proposed new acute care hospital to a less-than-significant level. For ambient noise levels that range from 62 dBA L_{dn} to 70 dBA L_{dn}, the City of San Francisco's land use compatibility standards for new hospital development require an analysis of how building design would reduce interior noise to 45 dBA L_{dn}. Based on the EPA's Protective Noise Levels, with a combination of walls, doors, and windows, standard construction for northern California buildings built to residential standards would provide more than 25 dBA in exterior to interior noise reduction with windows closed and 15 dBA or more with windows open. With windows open, rooms within 50 feet of the outermost travel lane of Potrero Avenue would not meet the interior noise standard of 45 dBA L_{dn} for hospital land uses (i.e., 65.5 dBA – 15 dBA = 50.5 dBA). As a result, an alternative form of ventilation, such as air conditioning systems, would be required to ensure that windows could remain closed for a prolonged period of time. With windows closed, the proposed units would reduce traffic noise impacts to meet the 45 dBA L_{dn} interior noise standard (i.e., 65.5 dBA – 25 dBA = 40.5 dBA).

The SFGH&TC shall therefore be required to include an alternative form of ventilation, such as air conditioning systems, for the new acute care hospital to ensure that windows can remain closed for a prolonged period of time.

In addition, the project sponsor shall prepare a detailed final acoustical analysis report with building design noise reduction requirements, once design plans have been finalized, to maintain acceptable interior noise levels, and subsequently include appropriate noise insulation features in the proposed new hospital design. Such features may include the inclusion of alternative ventilation systems, such as air conditioning, to permit windows to

remain closed for prolonged periods of time. With implementation of this mitigation measure, this impact would be reduced to a less-than-significant level. This final acoustical analysis report shall be submitted to DPW prior to issuance of grading permits.

Incorporation of noise insulation features into the design of the proposed new hospital would reduce single-event noise levels associated with use of the proposed helipad to minimize sleep disturbance at the hospital. Incorporation of minimum noise insulation features into the design of the proposed new hospital would also reduce cumulative noise impacts associated with projected growth in the Eastern Neighborhoods vicinity and the potential use of Building 100 and/or Building 40 on the Campus by UCSF.

Implementation of this mitigation measure would reduce project-related noise impacts on future sensitive receptors in the proposed new acute care hospital to a less-than-significant level.

Goundborne Vibration Mitigation Measure. Construction-related groundborne vibration impacts would require implementation of the following mitigation measures.

SFGH&TC shall prepare a vibration impact assessment to determine potential construction-related groundborne vibration impacts to Building 20, Building 30, and the Main Hospital Building. The vibration impact assessment shall be submitted to San Francisco prior to issuance of grading permits. Mitigation measures shall be identified and implemented that would reduce groundborne vibration impacts to below the groundborne vibration damage criteria of 96 VdB for historic structures. Such measures may include restrictions on the number of pieces or types of construction equipment that may operate at a time within 100 feet of sensitive structures.

Implementation of this mitigation measure would reduce construction-related groundborne vibration impacts to a less-than-significant level.

Stationary Noise Mitigation Measure. Project-related stationary noise impacts would require implementation of the following mitigation measures. SFGH&TC shall incorporate standard industrial noise control measures for stationary equipment. Such measures may include enclosing equipment in sound attenuating structures, using buildings to shield these noise sources from sensitive receptors, or mounting equipment on resilient pads to reduce both groundborne and airborne vibration noises. SFGH&TC shall adopt noise performance standards to ensure that operational noise from SFGH sources would not exceed noise guidelines set forth in the San Francisco Police Code for fixed source noise level standards. SFGH&TC shall use standard design features including installation of relatively quiet models, installation of exhaust silencers, orientation or shielding to protect sensitive uses, and installation within enclosures when necessary to reduce stationary, or fixed source,

noise levels to below the established threshold when measured at the property line of the nearest affected sensitive receptor.

In addition, once design plans have been finalized, SFGH&TC shall prepare a detailed final acoustical analysis report with building design noise reduction requirements that would maintain acceptable interior noise levels and that would reduce stationary noise impacts to a less-than-significant level. This report shall be submitted to DPW prior to issuance of grading permits.

Implementation of this mitigation measure would mitigate project-related stationary noise impacts to less-than-significant levels.

Construction Emissions Mitigation Measure. SFGH&TC shall require the contractor(s) to spray the site with water during demolition, excavation, and construction activities; spray unpaved construction areas with water at least twice per day; cover stockpiles of soil, sand, and other material; cover trucks hauling debris, soils, sand or other such material; and sweep surrounding streets during demolition, excavation, and construction at least once per day to reduce particulate emissions. Ordinance 175-91, passed by the Board of Supervisors on May 6, 1991, requires that non-potable water be used for dust control activities. Therefore, SFGH&TC shall require that the contractor(s) obtain reclaimed water from the Clean Water Program for this purpose. SFGH&TCs shall require the project contractor(s) to maintain and operate construction equipment so as to minimize exhaust emissions of particulates and other pollutants, by such means as a prohibition on idling motors when equipment is not in use or when trucks are waiting in queues, and implementation of specific maintenance programs to reduce emissions for equipment that would be in frequent use for much of the construction period.

In addition, because the proposed project is considered a sensitive use the purposes of air quality impacts under CEQA, and the SFGH Campus on which the proposed project is sited is approximately 24 acres in size, Bay Area Air Quality Management District's (BAAQMD) enhanced construction air quality mitigation measures for sites over four acres would be required. Accordingly, additional measures have been added to the mitigation measure in this EIR:

> SFGH&TC shall require the contractor(s) to: hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas and previously graded areas inactive for 10 days or more; enclose, cover, water twice daily or apply (non-toxic) soil binders to exposed stockpiles (dirts, sand etc.); limit traffic speeds on unpaved roads to 15 mph; install sandbags or other erosion control measures to prevent silt runoff to public roadways; and replant vegetation in disturbed areas as quickly as possible.

Implementation of this mitigation measure would mitigate project-related construction air quality impacts to less-than-significant levels.

Unstable Geologic Unit Mitigation Measure. SFGH&TC has submitted

a geotechnical investigation report to the San Francisco Planning Department, which contains a set of recommendations to mitigate potentially significant effects related to geology, soils, and seismicity. The SFGH Campus falls under the jurisdiction of the 1983 Alfred E. Alquist Hospital Facilities Seismic Safety Act (Alquist Act) and Senate Bill 1953 (SB 1953), an amendment of the Alquist Act, passed in 1994. The Alquist Act and subsequent bills require SFGH facilities to comply with seismic safety building standards, as defined by the Office of Statewide Health Planning and Development (OSHPD). OSHPD's Facility Development Division enforces all building standards published in the CBSC relating to the regulation of hospital buildings and the enforcement of other regulations adopted pursuant to the 1983 Alquist Act. The report found the site suitable for development providing that the recommendations included in the report are incorporated into the design and construction of the proposed development. SFGH&TC shall comply with the recommendations contained in the report, which include but are not limited to:

- Recommendations for site preparation, grading and the import and placement of engineered fill as needed to assure a stable environment for structure foundations and construction.
- A building isolation system including shoring walls and a subsurface void to minimize the transference of seismic energy to the building as well as support the surrounding sub-surface materials and foundations of nearby buildings.
- Underground utilities will be constructed with flexible connections to accommodate any post-construction differential settlement as well as seismic densification of fills or Dune sand at the site, as well as account for any lateral movement of the base of the isolated building.
- A mat foundation system designed to resist hydrostatic lift from anticipated groundwater levels in including permanent waterproofing system for subsurface levels. A recommendation is made to retain a waterproofing consultant to assist in developing the most suitable waterproofing system.
- A permanent perimeter wall surrounding the isolating void with permanent tiebacks based on anticipated loads is recommended. A safety factor of 1.5 is recommended. Back-draining of the perimeter wall to minimize the buildup of hydrostatic pressure is required.
- Shoring systems for excavation wall control shall be designed by a civil/structural engineer and shall account for controlling and limiting adjacent structure movement, groundwater management and pile shall be set in drilled holes. Pile driving should not be allowed as it may lead to densification of surrounding Dune sands as well damage to improvements adjacent the project site.

OSHPD would be responsible for reviewing and approving final building plans for the proposed project. In reviewing building plans, OSHPD typically refers to a variety of information sources to

determine existing hazards and assess requirements for mitigation. In OSHPD's review of the proposed project, it shall consult the following sources, at minimum:

- Maps of Special Geologic Study Areas and known landslide areas in San Francisco;
- The building inspectors' working knowledge of areas of special geologic concern; and
- The above-mentioned geotechnical investigation;

In addition, OSHPD could require that additional site specific soils report(s) be prepared in conjunction with permit applications, as needed.

Implementation of this Mitigation Measures would reduce project-related impacts on geology, soils, and seismicity to a less-than-significant level.

Water Quality Operational Period Mitigation Measure. The proponent shall integrate Low Impact Design (LID) elements and Best Management Practices (BMPs), as feasible, into the proposed project final design. The design-level drainage plan shall demonstrate that there is no net increase in off-site flows of stormwater to the combined sewer system. Hydraulic modeling for the project site, prepared by a licensed professional, shall be performed to establish current runoff volume and timing, and the proposed project shall incorporate final design elements such that total and peak runoff from the site will not exceed current conditions. All selected LID and BMP features shall be included in the project drainage plan and/or final development drawings along with analysis quantifying their effects. Specifically, the final design shall include features designed to minimize potential water quality degradation of runoff from all portions of the completed development. The proposed project would also be required to achieve a LEED Silver certification or higher, according to the requirements of Chapter 7 of the San Francisco Environmental Code. As part of its LEED certification, the project could earn points by incorporating LID and BMP features.

Examples of elements recommended by LID include features that direct project runoff to stormwater harvesting systems such as cisterns and other storage facilities for later use, and natural vegetated systems, such as landscaped planters, swales and gardens that filter, reduce and slow stormwater runoff. The final design team for the development project shall review and incorporate as many concepts as practicable from *Start at the Source*, *Design Guidance Manual for Stormwater Quality Protection.*

Passive, low-maintenance BMPs (e.g., grassy swales, porous pavements) are preferred. Higher-maintenance BMPs may only be used if the development of at-grade treatment systems is not possible, or would not adequately treat runoff. Funding for long-term maintenance of all BMPs must be specified (as the City will not

assume maintenance responsibilities for these features). The proponent will establish a (or integrate the new structure into a pre-existing) self-perpetuating drainage system maintenance program that includes annual inspections of any stormwater detention devices (if any), and drainage inlets. Any accumulation of sediment or other debris would be promptly removed. An annual report documenting the inspection and any remedial action conducted shall be submitted to the SFPUC for review.

The SFPUC will conduct project design review, prior to project approval by the City, to ensure that the proposed project fully mitigates their impacts on the combined sewer system.

Implementation of this mitigation measure would reduce operational period water quality impacts of the proposed project to a less-than-significant level.

Serpentine Soils Containing Chrysotile Asbestos Mitigation Measure SFGH&TC shall ensure that the project contractor(s) water the site during excavation activities at least twice daily, or more frequently if necessary to prohibit visible dust emissions (which might indicate emission of non-visible dust), and take other steps to minimize dust generation during excavation, storage, and transport. If serpentine rock is encountered during excavation, it shall be separated from other materials and sampled for asbestos. Excavated materials containing over one percent friable asbestos shall be treated as hazardous waste, require notification to the Bay Area Air Quality Management District (BAAQMD), and shall be transported and disposed of in accordance with applicable State and federal regulations. These procedures are intended to mitigate any potential health risks related to chrysotile asbestos, which may or may not be located on the site.

Implementation of this mitigation measure would reduce the project-related impacts from serpentine soils to a less-than-significant level.

Lead Contaminated Soils Mitigation Measure SFGH&TC shall ensure that the following four steps are completed to ensure compliance with DPH requirements for determination of the presence of lead-contaminated soils and other hazardous materials in soil and/or groundwater prior to site development activities.

SFGH&TC shall hire a consultant to collect soil samples (borings) from areas on the site which would be disturbed. A more detailed subsurface investigation of the west lawn (Phase II ESA) which builds on the preliminary subsurface investigation completed, shall include the collection and analysis of discrete soil samples to the maximum depth proposed for the excavation for the new hospital building. Groundwater sampling shall be conducted in areas where current or past chemical use may have resulted in a release of hazardous substances and/or as directed by DPH. Samples shall be collected by a qualified environmental professional (e.g., Professional Geologist, Professional Engineer) and analyzed for other metals in addition to

lead (Method 6000/7000 series), that may be present at the site based on samples collected analyzed during the preliminary subsurface investigation and consistent with past land uses at the west lawn including: total petroleum hydrocarbons as gasoline, diesel, and motor oil (EPA Method 3630/8015M), volatile organic compounds, (EPA Method 8260), semi-volatile organic compounds (EPA Method 8270), polychlorinated biphenyls, organochlorine pesticides (Method 8080/8081) and herbicides (EPA Method 8151), and asbestos (PLM and California Air Resources Board Method 435) for serpentine or friable (crushable) materials encountered, or as otherwise directed by DPH, by a California-certified laboratory.

Soluble metals analyses shall be performed on all soil samples where the total concentration of a metal is greater than or equal to ten times the respective soluble threshold limit concentration (STLC) using the waste extraction test, and greater than or equal to twenty times the respective toxicity characteristic leaching procedure (TCLP) threshold concentration, consistent with the findings of elevated concentrations of lead, and other metals in soil in the preliminary subsurface investigation.

If volatile organic compounds are present in soil or groundwater as identified in the more detailed subsurface investigation (Phase II ESA), the potential human health risk from vapor intrusion into buildings for the proposed project shall also be evaluated in the Phase II ESA report.

All sampling work shall be completed under the direction of DPH, in accordance with the procedures described above. If DPH determines that the soils on the project site are not contaminated with lead at or above a potentially hazardous level (i.e., below 50 ppm total lead) or other hazardous materials, no further mitigation measures with regard to contaminated soils on the site would be necessary.

In the absence of specific guidance from DPH regarding whether chemicals other than lead are present at potentially hazardous concentrations, the results of the sampling shall be compared by a qualified environmental professional to the most recent Water Board ESLs, CHHSLs, or other appropriate risk-based screening levels for future residential and construction workers and thresholds for hazardous waste. Documentation of the sampling, locations of stockpiled soils from which the consultant collected soil samples, and comparisons of site data to risk-based screening levels and hazardous waste thresholds shall be provided by SFGH&TC to DPH and San Francisco Planning Department (SFPD) as part of the more detailed subsurface investigation (Phase II ESA), and the results of both the preliminary and more detailed subsurface sampling efforts shall be considered in the preparation of a site-specific health and safety plan, described in the Health and Safety Plan Mitigation Measure below.

subsurface testing for the preliminary and detailed subsurface investigation (Phase II ESA), SFGH&TC shall prepare a Site Mitigation Plan (SMP), as required by DPH. The SMP shall include a discussion of the level of lead and other hazardous materials at the project site and mitigation measures for managing contaminated soils on the site, including, but not limited to:

- The alternatives for managing contaminated soils on the site (e.g., encapsulation, partial or complete removal, treatment, recycling for reuse, or a combination);
- The preferred alternative for managing contaminated soils on the site and a brief justification;
- The specific practices to be used to handle, haul, and dispose of contaminated soils on the site;
- Provisions for testing stockpiled soils prior to their disposal; and
- An assessment of health impacts from air emissions associated with soil excavation, identification of any applicable local standards which may be exceeded (including dust levels), risk of upset should there be an accident during the transport of contaminated soil, real-time air monitoring for contaminants of concern and action levels for air contaminants (including corrective actions to be taken in the event the action levels are reached during air monitoring), and emergency response procedures during soil excavation, where soil excavation is proposed.

C **Handling, Hauling, and Disposal of Lead and Other Contaminated Soils** The following practices shall be followed by the contractor(s) during construction of the proposed project.

- **Specific work practices** If based on the results of the soil tests conducted, DPH determines that the soils on the project site are contaminated with lead and/or other hazardous materials at or above potentially hazardous levels, the construction contractor shall be alert for the presence of such soils during excavation and other construction activities on the site (detected through soil odor, color, and texture and results of on-site soil testing), and shall be prepared to handle, profile (i.e., characterize), and dispose of such soils and dewatered groundwater appropriately (i.e., as dictated by local, State, and federal regulations, including Cal/OSHA lead-safe work practices) when such materials are encountered on the site.
- **Dust suppression** Soils exposed during excavation for site preparation and project construction activities shall be kept moist throughout the time they are exposed, both during and after work hours.
- **Surface water runoff control** Where soils are stockpiled, visqueen shall be used to create an impermeable liner, both beneath and on top of the soils, with a berm to contain any

potential surface water runoff from the soil stockpiles during inclement weather.

- **Soils replacement** If necessary, clean fill or other suitable material(s) shall be used to bring portions of the project site, where lead or other contaminated soils have been excavated and removed, up to construction grade.
- **Hauling and disposal** Contaminated soils shall be hauled off the project site by waste hauling trucks appropriately certified with the State of California and adequately covered to prevent dispersion of the soils during transit, and shall be disposed of at a permitted hazardous waste disposal facility registered with the State of California.

D **Preparation of Closure/Certification Report** After excavation and foundation construction activities are completed, SFGH&TC shall prepare and submit a closure/certification report to DPH for review and approval and submit the report to SFPD. The closure/certification report shall include: mitigation measures in the SMP for handling and removing lead and/or other contaminated soils from the project site, a description of whether the construction contractor modified any of these mitigation measures, and how and why the construction contractor modified those mitigation measures (as applicable).

Implementation of this four-point mitigation measure would reduce project-related impacts from lead contaminated soils to a less-than-significant level.

Health and Safety Plan Mitigation Measure. The contactor(s) shall prepare a site-specific Health and Safety Plan (HASP) in accordance with applicable Cal/OSHA requirements to protect construction workers and the general public (including hospital patrons) during earth-working and construction activities. The HASP shall include the dust control measures specified in the Serpentine Soil mitigation measure, characterization of soils and groundwater, site mitigation plan procedures, and contaminated materials handling procedures (as required and as described in the Lead Containing Soils mitigation measure).

In addition, the HASP shall identify the following protocols to be implemented from the time of surface disruption through the completion of earthwork construction. The protocols shall include at a minimum:

- Appropriate site security to prevent unauthorized pedestrian/vehicular entry, such as fencing or other barriers to prevent entry;
- Posting of 'no trespassing' signs;
- Providing on-site meetings with construction workers to inform them about security measures and reporting/contingency procedures;
- Groundwater dewatering management procedures;

- Worker training requirements;
- Encountering previously unidentified hazards (e.g., buried tanks) and procedures for implementing a contingency plan and reporting if unanticipated hazardous are encountered; and Personnel responsible for plan implementation.

The HASP shall be provided to DPH and SFPD prior to earthwork activities on-site.

Implementation of this mitigation measure would reduce project-related public health and safety impacts to construction workers and the general public associated with potential contaminants in soil and/or groundwater to a less-than-significant level.

Section 7 References

Section 1-2

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Section 6

- Gerson/Overstreet Architects, "**San Francisco General Hospital Trauma Center** Air Medical Access Needs and Feasibility Study," March 4, 2003.

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