

## 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 SFGHMC would not require any change in the number of housing units in the neighborhood. All construction associated with the helipad would occur on the SFGHMC 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 SFGHMC helipad and required to be transported by ground ambulance to other hospitals in the City. This volume is considered nominal on a daily basis.

**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 SFGHMC.

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. SFGHMC 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.

The impact of helicopter noise on the character of the neighborhood has not yet been determined, and a more detailed analysis is being prepared under separate environmental review.



**Fig. 6-2**

Bus stop along Potrero Avenue in front of SFGHMC's main entrance gate.

#### *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 SFGHMC campus, and would not require removal of any housing units at any time.

**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.



**Fig. 6-3**  
Parking Structure adjacent to SFGHMC

**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 SFGHMC.

**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 SFGHMC would not require any change in the number of housing units in the neighborhood. All construction associated with the New Acute Care Hospital would occur on the SFGHMC campus, and would not require removal of any housing units.

**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 SFGHMC as a result of the development of the New Acute Care Hospital have not yet been determined. A more detailed analysis of the development plan will be prepared under separate environmental review.

The anticipated changes in traffic levels and circulation patterns in and around SFGHMC as a result of the future use of the existing main hospital building have not yet been determined.

**Transit Demand and Parking Availability** The anticipated change in transit demand and parking availability in and around SFGHMC as a result of the development of the New Acute Care Hospital has not yet been determined. A more detailed analysis of the development plan will be prepared under separate environmental review.

**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.

## IDENTIFICATION OF ANY ALTERNATIVES TO LESSEN OR AVOID ADVERSE IMPACTS UPON THE SURROUNDING NEIGHBORHOOD

### MEDICAL HELIPAD

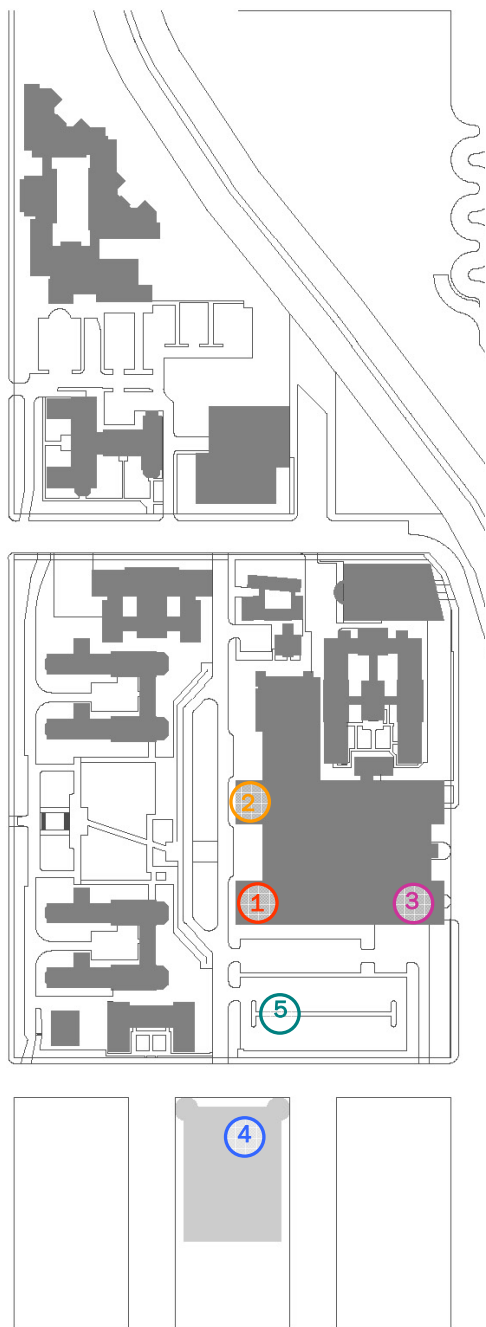
**Overview** Various alternatives to the current helipad proposal have been considered. The 2003 Air Medical Access Needs & Feasibility Report prepared by Gerson/Overstreet<sup>1</sup> identified several helipad location alternatives, which are summarized below:

**Site Alternative 1: SFGHMC 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.

**Site Alternative 2: SFGHMC 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: SFGHMC 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: SFGHMC Parking Garage** This proposal would site the helipad atop the SFGHMC 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



**Fig. 6-4**

Site alternatives considered for the proposed helipad.

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 SFGHMC 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.

**No Project Alternative** If the proposed medical helipad is not constructed at SFGHMC, emergency medical transportation to and from the Main Hospital would be limited to ground ambulance via surface 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 SFGHMC could be exceeded, and there would be no rapid method to transport critically injured patients to other trauma centers in the region.

While SFGHMC 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*

**Overview** 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 alternatives to lessen adverse impacts by the new Acute Care Hospital development the remodel of the existing Main Hospital building have not yet been determined.

**IDENTIFICATION OF MITIGATING ACTIONS TO LESSEN ADVERSE IMPACTS ON THE SURROUNDING NEIGHBORHOOD***MEDICAL HELIPAD*

**Fig. 6-5**

MedEvac helicopter landing on rooftop helipad at University Hospitals of Cleveland

**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.

*NEW EMERGENCY GENERATOR CAPACITY*

**Overview** The identification of mitigating actions to lessen adverse impacts on the surrounding neighborhood by the New Emergency Generator Capacity project has not yet been determined.

*NEW ACUTE CARE HOSPITAL*

**Overview** Mitigating actions to lessen adverse impacts on the surrounding neighborhood by the New Acute Care Hospital development and the remodel of the existing Main Hospital building have not yet been determined.

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<sup>1</sup> Gerson/Overstreet Architects, "San Francisco General Hospital Medical Center Air Medical Access Needs and Feasibility Study," March 4, 2003.