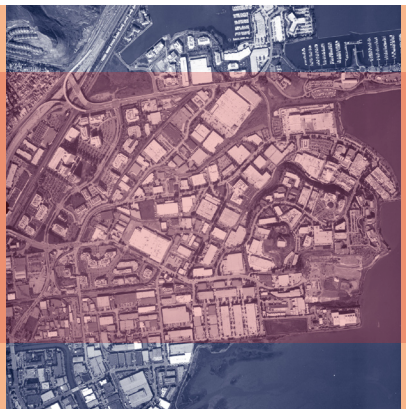

Genentech

Facilities Ten-Year Plan

Master Plan

South San Francisco

Adopted April 28, 2007

Genentech

Facilities Ten-Year Plan

Master Plan

South San Francisco

Adopted April 28, 2007

DYETT & BHATIA
Urban and Regional Planners

with assistance from

AEI
Fehr & Peers
Mintier & Associates
MPA Design
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T•Y•Lin/CSS
Wilsey Ham

RESOLUTION NO. 19-2007

CITY COUNCIL, CITY OF SOUTH SAN FRANCISCO STATE OF CALIFORNIA

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SOUTH SAN FRANCISCO APPROVING THE GENENTECH FACILITIES TEN YEAR MASTER PLAN UPDATE, MP05-0001, AND APPROVING THE GENENTECH RESEARCH & DEVELOPMENT OVERLAY DISTRICT TRANSPORTATION DEMAND MANAGEMENT PLAN, TDM06-0003.

WHEREAS, Genentech, Inc. has submitted a request to the City of South San Francisco to approve the "Genentech Facilities Ten Year Master Plan" update ("Master Plan Update"), as further described in Exhibit A, and which includes an Implementation Program, as further described in Exhibit B; and,

WHEREAS, Genentech, Inc. has submitted a request to the City of South San Francisco to approve the Genentech Facilities Ten Year Master Plan Transportation Demand Management (TDM) Plan, as further described in Exhibit C; and,

WHEREAS, approval of the Master Plan Update, including the Implementation Program, and approval of the TDM Plan will not change the land use classification, approved uses or increase the approved density in the East of 101 Area over that analyzed in the South San Francisco General Plan Environmental Impact Report; and,

WHEREAS, THE CITY OF SOUTH SAN FRANCISCO PLANNING COMMISSION HELD DULY NOTICED STUDY SESSIONS ON SEPTEMBER 7, 2006, SEPTEMBER 21, 2006, OCTOBER 5, 2006, AND OCTOBER 19, 2006; AND,

WHEREAS, the City of South San Francisco Planning Commission held duly noticed public hearings on February 1, 2007, February 15, 2007, and March 1, 2007; and,

WHEREAS, on February 15, 2007, the Planning Commission found that the Master Plan Update and TDM Plan will maintain internal consistency in the General Plan; and,

WHEREAS, a Final Master Environmental Impact Report (FMEIR), including the Draft Master Environmental Impact Report and Partially Revised Draft Master Environmental Impact Report for the Genentech Corporate Facilities Research & Development Overlay District Expansion and Master Plan Update was prepared in accordance with the provisions of the California Environmental Quality Act (CEQA) (Pub. Resources Code §§ 21000, et seq.), and was properly circulated for public review; and,

WHEREAS, Conditions of Approval for the project have been proposed, attached to this Resolution as Exhibit D, and incorporated herein by reference; and,

WHEREAS, the findings and determinations contained herein constitute the independent judgment and analysis of the City Council and are supported by substantial evidence in the entire record, which includes, without limitation, the City of South San Francisco General Plan adopted in 1999 and environmental documents supporting the General Plan; the Genentech Master Plan Update initial study and Master Plan Update environmental impact report, including the recirculated Chapter 4.7; comments received on the draft environmental impact report; all proposed site plans, floor plans and elevations submitted in connection with the Genentech Master Plan Update; the Design Review Board meeting of October 17, 2006; Planning Commission meetings, including minutes, staff reports, and consultant reports, of February 1, 2007, February 15, 2007, and March 1, 2007; City Council meeting, including minutes, staff reports and consultant reports, of March 14, 2007:

NOW THEREFORE, BE IT RESOLVED that the foregoing recitals are true and correct and made a part of this resolution, and the City Council of the City of South San Francisco hereby adopts the following findings, based on the entire record for the Genentech Master Plan, which includes, without limitation, the City of South San Francisco General Plan adopted in 1999 and environmental documents supporting the General Plan; the Genentech Master Plan Update initial study and Master Plan Update environmental impact report, including the recirculated Chapter 4.7; comments received on the draft environmental impact report; all proposed site plans, floor plans and elevations submitted in connection with the Genentech Master Plan Update; the Design Review Board meeting of October 17, 2006; Planning Commission meetings, including minutes, staff reports, and consultant reports, of February 1, 2007, February 15, 2007, and March 1, 2007; City Council meeting, including minutes, staff reports and consultant reports, of March 14, 2007:

I. General Findings

1. Documents and other material constituting the record of the proceedings upon which the City's decision and its findings are based, are located at the Planning Division of the City of South San Francisco, in the custody of Chief Planner, Susy Kalkin.

2. The proposed project is consistent and compatible with all elements in the City of South San Francisco General Plan. The 1999 General Plan includes policies and programs that are designed to encourage the development of high technology campuses in the East of 101 Area, allow for employee-serving vendor services, preparation of a TDM plan and traffic improvement plan to reduce congestion impacts, and provision of a framework for requiring future circulation system improvements as they are needed to prevent deficient levels of service from being reached.

II. Genentech Facilities Ten Year Master Plan Update

As required by the "Research and Development Overlay District Regulations" (SSFMC Section 20.39.040(b)(4)), the following findings are made in support of approval of the Genentech Facility Ten Year Master Plan Update, based on the entire record for the Genentech Master Plan, which includes, without limitation, the City of South San Francisco General Plan adopted in 1999 and environmental documents supporting the General Plan; the Genentech Master Plan Update initial study and Master Plan Update environmental impact report, including the recirculated Chapter 4.7; comments received on the draft environmental impact report; all proposed site plans, floor plans and elevations submitted in connection with the Genentech Master Plan Update; the Design Review Board meeting of October 17, 2006; Planning Commission meetings, including minutes, staff reports, and consultant reports, of February 1, 2007, February 15, 2007, and March 1, 2007; City Council meeting, including minutes, staff reports and consultant reports, of March 14, 2007:

1. The Facilities Master Plan Update, including and incorporating the Implementation Program, demonstrates the existence of sufficient roadway, intersection and infrastructure capacity to accommodate facility development proposed by the Facility Master Plan Update.

2. Proposed modifications to the standards and regulations of the underlying zoning proposed by reclassification to the R&D Overlay District are supported by information contained in the Facility Master Plan Update and related documents.

3. The proposed project is consistent with the City's General Plan which designates this site for Business and Technology Park Use. The proposed Facility Master Plan governs facility wide parking standards, development standards, design guidelines, and uses on all parcels located in the Genentech Research & Development Overlay District.

III. TDM Plan

As required by the "Transportation Demand Management" (SSFMC Section 20.120.070(b)), the following findings are made in support of approval of the Genentech Facility Ten Year Master Plan Transportation Demand Management Plan (TDM) (TDM06-0003), based on the entire record for the Genentech Master Plan, which includes, without limitation, the City of South San Francisco General Plan adopted in 1999 and environmental documents supporting the General Plan; the Genentech Master Plan Update initial study and Master Plan Update environmental impact report, including the recirculated Chapter 4.7; comments received on the draft environmental impact report; all proposed site plans, floor plans and elevations submitted in connection with the Genentech Master Plan Update; the Design Review Board meeting of October 17, 2006; Planning Commission meetings, including minutes, staff reports, and consultant reports, of February 1, 2007, February 15, 2007, and March 1, 2007; City Council meeting, including minutes, staff reports and consultant reports, of March 14, 2007:

1. The proposed project's TDM measures are feasible and appropriate for the project, considering the proposed mix of uses and the project's location, size, and hours of operation. The TDM Plan is designed to take advantage of and promote the use of public transit. The Plan also provides incentives for employees to use alternative modes of transportation, promotes parking cash-out incentives, and uses a lower parking ratio to increase ridership on BART and the East of 101 shuttle service, as well as constructing pedestrian walkways linking the Project to the adjacent shuttle stops and bikepaths.

2. The proposed project's TDM Plan contains performance guarantees that will ensure that the target alternative mode use established for the project by this chapter will be achieved and maintained. The project includes an Annual Report, which will review the campus-wide parking ratio and survey mode uses, an annual survey, and a triennial report that documents the effectiveness of the TDM Plan in achieving the alternative mode use.

NOW, THEREFORE BE IT FURTHER RESOLVED that subject to those Conditions of Approval contained in Exhibit D, and incorporated herein, the City Council for the City of South San Francisco, does hereby:

1. Approve the Genentech Ten Year Facilities Master Plan Update, as further described in Exhibit A to this Resolution and incorporated herein by reference, which includes and incorporates the Implementation Program for the project, attached to this Resolution as Exhibit B and incorporated herein by reference.

2. Approve the TDM Plan for the Genentech Research & Development Overlay District, as further described in Exhibit C to this Resolution and incorporated herein by reference.

I hereby certify that the foregoing resolution was adopted by the City Council of the City of South Francisco at a regular meeting of the City Council held the 14th day of March 2007 by the following vote:

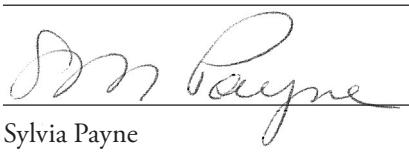
AYES: Councilmembers Mark N. Addiego, Joseph A. Fernekes and Karyl Mastsumoto,

Vice Mayor Pedro Gonzalez and Mayor Richard A. Garbarino

NOES: None

ABSTAIN: None

ABSENT: None

ATTEST: 

Sylvia Payne

City Clerk

City of South San Francisco

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EXECUTIVE SUMMARY

Genentech's South San Francisco's Central Campus is the birthplace of biotechnology. Since the company's start in 1976, it has found its South San Francisco location able to meet and respond to support the rapid changes and growth of the biotech industry. In 1995 Genentech worked with the City of South San Francisco to prepare a Master Plan to guide the company's growth. The Master Plan is updated to guide the growth and development of the Central Campus anticipated in the next ten years. The Central Campus is in addition to and separate from property that Genentech leases or will lease in South San Francisco and to development of other Genentech-owned properties that are not adjacent to the Central Campus.

The Master Plan outlines a potential expansion that would allow the Central Campus to grow to approximately six million square feet during the ten-year planning period. This expansion represents a 100 percent increase in space compared with the current Central Campus development. The Master Plan indicates that Genentech will meet its potential space requirements by both the redevelopment of buildings that Genentech currently owns and occupies and by the redevelopment of expansion property that Genentech has recently acquired or may acquire in the ten-year planning period.

Master Plan Key Features

- Genentech is proud to maintain and expand its headquarters in South San Francisco while creating a safe and inspiring work environment.
- The Master Plan allows for growth of up to six million square feet, and a total Campus area growth of up to 200 acres.
- Growth at the South San Francisco Central Campus will emphasize office and research and development uses.
- Overall building intensity will remain similar to current (2005) densities.
- Genentech will continue to rely on leased facilities, such as the Gateway and Britannia East Grand Campuses.
- Future growth will be consistent with goals and policies of the East of 101 Plan and the South San Francisco General Plan, which encourage development and expansion of biotechnology research and development in the East of 101 Area.
- Genentech will assure that adequate parking for employees, contractors, and visitors will be provided, understanding the balance between encouraging non-auto travel and accommodation of known parking demand.
- Genentech will fund its proportionate share of infrastructure improvements necessary to accommodate the Central Campus growth and development.

Genentech looks forward to a continued partnership with the City as Genentech expands to meet its growing demand for new research and product development.

Summary of Goals and Strategies

Land Use and Structure

The goals and strategies for organization and distribution of uses in the campus focus on maintaining a high level of accessibility and connectivity between neighborhoods and specific campus functions. Neighborhoods are emphasized as the key organizing element of various functions, open space, and pedestrian connections. Additionally, the campus pedestrian network and overall structure maintains key public and employee access to the Bay Trail and public parks. This pedestrian accessibility is supported by reduced traffic within the campus, with enhanced pedestrian and shuttle connections, and an overall parking strategy that distributes parking throughout the campus and intensifies parking at campus entries.

Urban Design

Urban Design goals and strategies focus upon establishing a consistent character and design palette for the campus. Specific architectural, landscape, and site design guidelines ensure flexibility for development needs over a long-term horizon as well as responsiveness to the campus environment and setting. As such, pedestrian connectivity, open spaces, and a human scale are emphasized as key design tools. Likewise, views to the San Francisco Bay, San Bruno Mountain, and other scenic features are maintained as integral elements of the campus setting and design aesthetic. Attention to quality design and a unified, cohesive campus is also emphasized through consistency in building and site materials, as well as site elements such as lighting, bus shelters, and furnishings.

Transportation and Parking

Just as design and development goals for the campus focus on flexibility and responsiveness to change, transportation goals and strategies emphasize strengthening and expanding Genentech's programs to assist employees in transit to and from work. The resulting flexible structure is designed to meet or exceed the standards of the South San Francisco Congestion Management Plan and the City's Transportation Demand Management (TDM) Ordinance. Genentech will continue to be a regional leader and committed to a comprehensive TDM program to promote employees using modes of transportation other than single-occupant vehicles.

Working in tandem with the TDM program, the parking supply and implementation plan is also a key strategy within the Master Plan, allowing Genentech to respond to development and parking demand needs as they evolve. The Master Plan focuses on minimizing intracampus traffic with a parking strategy that distributes parking throughout the campus and intensifies parking at campus entries. This is also accomplished through the streamlining of campus circulation and connectivity for shuttles, service vehicles, and goods movement.

Utilities

The Master Plan goals for utilities and support infrastructure focus on two key development concepts. Utilities will meet required performance standards and necessary service requirements as the campus expands; and Genentech will coordinate with the City and utility providers to maintain and improve infrastructure. Specific improvements to existing infrastructure will be implemented as demand from new development and service requirements arise.

1 INTRODUCTION

View looking south at Genentech's Hilltop campus on San Bruno Hill from Gull Road and Forbes Boulevard.

1.1 Scope and Purpose

Genentech—the world's first biotechnology company—was founded in 1976 and is headquartered in South San Francisco. A fully integrated biotechnology company, Genentech employs a wide range of functions at its campus, including research and development, manufacturing and distribution, and marketing and administration. In recent years, Genentech's activity in the biotherapeutic industry has increased exponentially with multiple new discoveries and products.

The Genentech Facilities Ten-Year Master Plan primarily focuses on the properties within the Genentech Research and Development Overlay District (Central Campus) in South San Francisco. The Master Plan also addresses other Genentech locations in South San Francisco as it relates to transportation and parking. The Master Plan, once adopted by the South San Francisco City Council, serves several purposes. The Master Plan:

- Articulates vision and policies that will serve as a general guide for the placement and design of individual buildings and other campus elements, as well as an overall development program to provide the basis for future approvals.
- Fosters development of a campus befitting its setting on the city's eastern bayshore, that capitalizes on views and access to the waterfront.
- Promotes alternatives to automobile transportation to further the City's transportation objectives by emphasizing shuttles, linkages, transportation demand management, and pedestrian access and ease of movement between buildings.
- Establishes the basis for the zoning provisions to be contained in an amended Genentech R&D Overlay District.
- Provides design guidelines that will be enacted after adoption of this plan and that will serve as a basis for design review and approval for development in the Master Plan area.

Because of the long-range nature of the Master Plan, flexibility during implementation is essential. Therefore, the Master Plan does not establish the location, size, or design of individual buildings, which will follow over the course of the next ten years. The emphasis in the Master Plan is on policies that will achieve the purposes described above.

Project Background

In 1995, the City of South San Francisco adopted the Genentech Corporate Facilities Master Plan (1995 Plan) to provide an integrated framework for development of Genentech-owned properties at the city's eastern bayshore into a corporate campus. Adopted concurrently with the 1995 Plan, the South San Francisco Municipal Code Chapters 20.39 and 20.40 implement the Master Plan and the Genentech Research & Development Overlay District. The Overlay District specifies Floor Area Ratio (FAR), parking ratio, and other standards, and review and approval procedures for development within the district.

The 1995 Plan has provided a framework for campus building; however, the Plan is nearing its horizon and useful life. Additionally, Genentech now owns a sizably greater area than it did in 1995. This greater size necessitates a unified campus environment, with clear wayfinding, pedestrian connections, and established relationships between uses and neighborhoods.

Like many other high-tech industries, the biotech industry is moving toward a more diversified and efficient environment where manufacturing and related functions, research and development, and office space are located on the same campus. This configuration allows greater efficiencies by bringing technical and professional environments and staff together. Likewise, the mixed-use campus environment allows corporations to accommodate growth in a flexible manner, while providing an attractive setting for the work force. Emphasis is placed upon flexibility in space and occupation, as well as the employee experience—from the provision of amenities to a secure, well-landscaped, and walkable campus.

This ten-year Master Plan responds to the needs of a more diversified corporate campus environment as well as to Genentech's projected growth needs, creating an overall framework for campus development through the year 2016.

1.2 Location and Context

Regional Location

The City of South San Francisco is located on the west shore of the San Francisco Bay, in northern San Mateo County. Built upon the Bay plain and the northern foothills of the Coastal Range, South San Francisco is strategically located along major transportation corridors and hubs, including US 101, Interstates I-280 and I-380, BART and Caltrain, the Union Pacific Railroad (formerly owned by the Southern Pacific Railroad) main line, and the San Francisco International Airport. The regional location of the City and the existing (2005) Overlay District is shown in Figure 1.2-1.

Project Location and Planning Area

The Genentech Campus, built on and around San Bruno Hill—the highest point in the East of 101 Area—is visible from downtown South San Francisco and has views overlooking San Francisco Bay and many major landmarks in the Bay Area. Advantageously located along the San Francisco Bay shoreline and between two major interchanges along US 101, the campus is easily accessible via Oyster Point Boulevard and Grand Avenue. Multiple public transit services access the site as well, including Caltrain, BART, and the future Oyster Point Ferry.

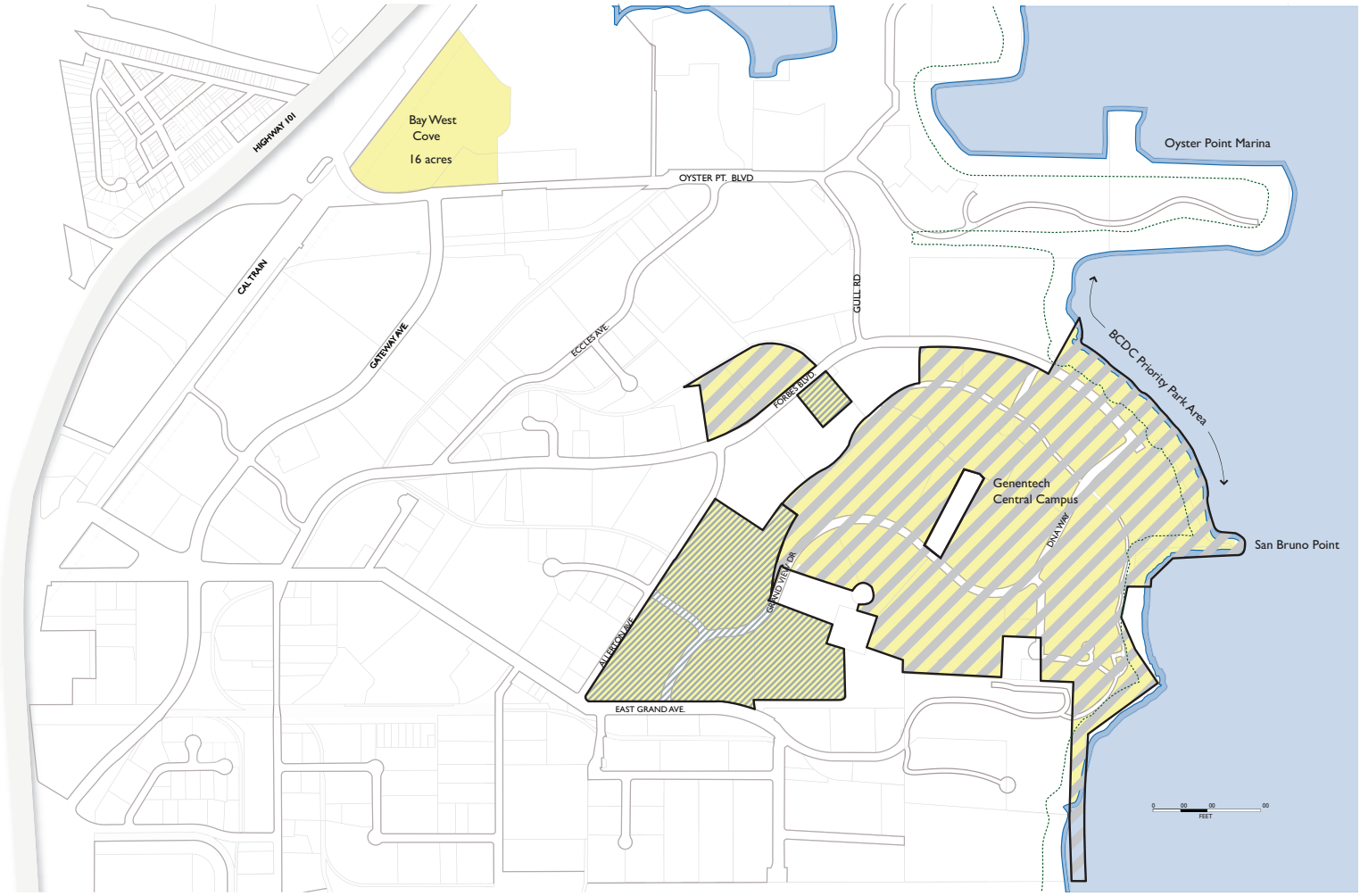
The Master Plan Planning Area encompasses approximately 200 acres in the South San Francisco East of 101 Area. In 1995, the Master Plan and Genentech R&D Overlay District included 72 acres, which has since been expanded to 125 acres. Figure 1.2-2 shows the Genentech R&D Overlay, expansion of the Genentech R&D Overlay, and Genentech-owned properties included as part of the Master Plan Planning Area. This figure also identifies Genentech ownership of 16 acres referred to as the Bay West Cove property. Although Genentech owns this site, the Bay West Cove has its own approved development under a separate Owner's Participation Agreement and will not be included in this Master Plan.

Figure 1.2-1: Regional Context

In addition to the City of South San Francisco, the Planning Area is within the jurisdiction of other agencies. Along the campus shoreline, the Bay Trail, which connects the Genentech Campus to the San Francisco Bay regional park system, is located within the Bay Conservation and Development Commission (BCDC) jurisdiction. The entire Planning Area is subject to Federal Aviation Administration (FAA) height limits for the San Francisco International Airport. (See Chapter 3: Urban Design for details).

Development Context

Over the past 30 years, the Genentech Campus has continued to evolve through the replacement and conversion of existing buildings and exterior spaces formerly designed for individual industrial and business park facilities. Like the rest of the East of 101 Area, the original ownership and land use pattern of the campus included steel production and other heavy industries. The resulting physical environment comprised wide roadways, limited sidewalks, and minimal site improvements. Additionally, the area lacked both amenities and connections to the shoreline. Since 1995, the Master Plan has focused upon providing connections to the Bay and between facilities, as well as distributing amenities throughout the campus for the employees. The Master Plan has also facilitated greater pedestrian accessibility and access to transit, both within the campus and to major public transit alternatives.



Genentech R&D Overlay, approximately 125 acres

Approved Expansion of Genentech R&D Overlay, approximately 37 acres

Genentech Owned

Figure 1.2-2: Genentech R&D Overlay Area

1.3 Plan Organization and Relationship to Other Documents

Plan Organization

The Master Plan is consistent with the Guiding Policies of the General Plan, which call for "campus style biotechnology, research, and research and development uses" in the East of 101 Area. Specific implementing provisions consistent with the General Plan and this Master Plan are established in the South San Francisco Municipal Code Chapter 20.39, which establishes the Research and Development Overlay District (R&D Overlay District) Regulations, and Chapter 20.40, which establishes the Genentech Research and Development Overlay District. This overlay district was originally adopted pursuant to the 1995 Plan, and will be amended and expanded by this new Master Plan.

Addressing facility-wide design and development standards, the Master Plan is divided into five chapters and covers concepts regarding overall land use and development intensity; urban design issues of massing, scale, and views; transportation and parking; and utilities. Design guidelines and other supporting data are included in the appendix. Following the introduction, the Master Plan concepts are presented in four chapters:

- Chapter 2: Land Use and Structure. Land use and overall campus concepts are followed by a more detailed discussion of growth projections and strategies including parking, security, and public access. Neighborhood specific land use policies for Lower, Upper, Mid, and West Campuses follow.
- Chapter 3: Urban Design. Concepts address specific urban design issues that relate to all development and improvements within the Genentech Campus. Guidelines outline development, as well as urban design concepts for connections, views, open space, and building massing.
- Chapter 4: Transportation and Parking. Transportation and circulation strategies focus on Transportation Demand Management (TDM) programs, improved shuttle, vehicle, and freight access, and parking requirements. Parking requirements and recommendations are discussed and presented, and include cost-benefit analyses of alternative TDM programs.
- Chapter 5: Utilities. Assessments of required infrastructure, such as water usage and wastewater treatment needs, are discussed in terms of future impacts of Genentech growth on the broader East of 101 Area.
- Design Guidelines. In addition to policies contained in the Master Plan, development at the campus will be guided by Design Guidelines, included as an Appendix to the Master Plan document. The guidelines convey intent on how architectural design and development can help shape the built environment and contribute to the campus's vitality and sense of place, and will serve as a basis for design review.

Each chapter begins with a summary of major concepts, followed by more detailed discussion. Sections requiring specific design or implementation strategies are followed by a two-tier system of goals and strategies where:

- *Goals* express intent or establish broad direction, and
- *Strategies* describe specific programs or standards that could be used to reach the goals.

Relationship To Other Documents

General Plan (adopted 1999)

The City of South San Francisco General Plan describes goals and policies for future growth and development throughout the City. The General Plan governs the amount and intensity of development within the East of 101 Area, including the Genentech facilities. The General Plan's projected FAR for the East of 101 Area at buildout is 1.0, which reflects an increase in building area of 50 percent and doubling of employment in the East of 101 Area between 1997 and 2020. The Master Plan is consistent with this provision. The General Plan also establishes policies for research and development uses and employee amenities as well as a requirement for a Transportation Demand Management (TDM) Plan. The new Master Plan is consistent with the General Plan.

East of 101 Area Plan (adopted 1994)

The East of 101 Area Plan provides direction for the area for aspects not otherwise covered in the General Plan or other City plans, and the Master Plan is consistent with the East of 101 Area Plan to the extent it applies. When the same topic—such as Urban Design and Design Guidelines—is covered in both the East of 101 Area Plan and this Master Plan, the more localized goals and strategies outlined in this Master Plan shall apply.

Zoning Ordinance

The City of South San Francisco Municipal Code designates the areas in which the Genentech Campus and facilities are located as Planned Industrial (P-I). The P-I zoning district (Chapter 20.32) establishes permitted uses, height, bulk, and space standards for all land designated P-I. The P-I zone is applied to land intended for research and development uses. The provisions of the Master Plan are designed to be consistent with the P-I zoning district.

In addition, the Genentech Research & Development Overlay District is governed by Chapters 20.39, 20.40, and the Transportation Demand Management Ordinance. The current Master Plan update includes amendments to the Municipal Code.

Zoning Ordinance: Genentech Research and Development Overlay District

The City of South San Francisco Municipal Code also provides that the Genentech Campus is governed by the Genentech Research and Development Overlay District (Chapter 20.40). This designation is in addition to the P-I designation. The purpose of the Genentech Research and Development Overlay District is to implement the Master Plan by:

- Establishing a facility-wide architectural character, a system of open space elements, and a pedestrian and vehicular circulation plan;
- Increasing the flexibility of the City's land use regulations and speed of review procedures to reflect the rapidly changing needs of Genentech growth and development;
- Establishing facility-wide development standards and design guidelines; and
- Defining a baseline of existing conditions for all land classified in the Genentech Research and Development Overlay District.

The Genentech R&D Overlay District must be consistent with the General Plan and the Master Plan.

Environmental Impact Report

In accordance with the California Environmental Quality Act (CEQA), a Master Environmental Impact Report (EIR) has been prepared to assess the potential environmental impacts of Master Plan implementation. The Draft Master Plan may be modified at the time of adoption by the City Council to reduce or mitigate impacts identified in the EIR. The EIR will then serve as the environmental impact analysis for future Genentech buildings and development consistent with the Master Plan, for such time and to the extent permitted by state law.

1.4 Plan Implementation

As the dominant employer in the area, Genentech has a vital stake in helping achieve the City's objectives of development of the East of 101 Area into an attractive hub of industry and research and development. As a corporate citizen, Genentech will contribute its fair share of improvements to ensure that traffic in the area flows smoothly, that streets and buildings are well designed, infrastructure is upgraded, and that impacts on the environment are minimized. These factors will guide Master Plan implementation, which will occur through a variety of tools and processes:

- Buildings: Development will comply with the standards of the South San Francisco Municipal Code chapters 20.39 (.050) and 20.40 (.050, .060, and .070), which specify the types and sizes of projects subject to Design Review, Minor Use Permits, and Use Permit processes as approved by South San Francisco City Council on March 14, 2007.
- Transportation and TDM: Genentech will comply with the provisions of South San Francisco Municipal Code Chapter 20.120 Transportation Demand Management, which specifies performance objectives and mitigation measures that will reduce Single Occupancy Vehicles (SOV) trips during peak hours. The final Genentech TDM Plan is attached as Appendix D. The EIR includes specific mitigation measures to reduce traffic impacts, including payment of East of 101 traffic impact fees, installation of new traffic signals, road widening, lane re-striping, and signal timing modification.
- Utilities: Genentech will comply with City ordinances regarding sewer, water, and other utility infrastructure. Genentech will also cooperate with the City to develop best practices for future recycling programs. The EIR includes specific mitigation measures to reduce utility impacts, including water conservation measures, storm water pollution prevention, and verification of adequate fire protection water flows.
- Environmental Review: In accordance with the California Environmental Quality Act (CEQA), an Environmental Impact Report (EIR) has been prepared for the Master Plan and the facilities and improvements contemplated by it, and certified before approval of the Master Plan. Consistent with CEQA, it is anticipated that for at least a five-year period after certification of an the EIR for the Master Plan and the facilities and improvements contemplated by it, no additional environmental review will be necessary for projects that are fully consistent with the Master Plan.

Subsequently, additional environmental review may be required to supplement or update the analysis in the EIR; the necessity and nature of any such subsequent review will depend on the nature of the project or amendment to the Master Plan, and the applicable requirements of CEQA.

Monitoring and Reporting

On a yearly basis, Genentech will report on both development and TDM progress, as described below.

- As required in the South San Francisco Municipal Code Chapter 20.39, Genentech will prepare an Annual Report on Master Plan implementation progress. This will detail progress of Master Plan implementation in the previous year, and impending projects and campus-wide improvements for the upcoming year.
- As required in South San Francisco Municipal Code Chapter 20.120 and the Genentech TDM Plan, Genentech will conduct an annual TDM survey. This survey will monitor compliance with the City's TDM performance objectives.
- The City of South San Francisco has approved an Implementation Program, which includes benchmarks and projected completion dates for specific improvements and public amenities. The Implementation Plan is attached to this Master Plan as Appendix C.

Supplemental to these annual activities, Genentech will continue to host campus walkthroughs with the City Planning Commission. These walkthroughs will highlight new development on the campus, acquainting commissioners with new buildings and infrastructure and their relationship to the overall campus environment.

Subsequent Project Review Process

One of the principal benefits of the Master Plan and the Design Guidelines (included as an Appendix to the Master Plan) is to establish a clear agreed-upon vision for the campus, with expedited development approval for actions and projects consistent with the Master Plan and the Design Guidelines. Furthermore, the EIR fully addresses the potential significant environmental impacts of all projects included in the Master Plan. No additional environmental review will be required for projects submitted to the City for approval that are consistent with the Master Plan.

1.5 Summary of Master Plan Concepts, Goals, and Strategies

The following section compiles the Master Plan concepts, goals, and strategies of Land Use and Structure, Urban Design, Transportation and Parking, and Utilities. These items are discussed in greater detail in subsequent chapters.

Land Use and Structure Concept

1 Fostering development of distinct yet inter-connected "neighborhoods," to ensure a sense of community, and to support R&D, manufacturing, and office activities;

2 Maintaining and creating balance between open and built environments;

3 Maximizing use of views by careful siting and massing of buildings;

4 Fostering a safe, secure pedestrian environment by carefully distributing parking throughout the campus while emphasizing greater concentrations of parking at campus entries;

5 Creating a network of pedestrian and campus shuttle connections to facilitate movement between buildings and neighborhoods, and to reduce intracampus traffic;

6 Establishing a hierarchy of pedestrian walkways and connections that comprise "Central Spines" and secondary walkways;

7 Fostering the Campus Spines concept to connect employee amenities and activity centers, such as cafeterias and meeting spaces; and

8 Ensuring public access to the Bay Trail and public parks.

Lower Campus Land Use Goals

- Develop the Lower Campus as the northern gateway to the Genentech Campus, in concert with its strategic location off of Gull Road and Forbes Boulevard.
- Create a strong neighborhood center at the Central Spine that provides a focus for building entries, pedestrian circulation, and employee gatherings, as shown in Figure 2.4-1.
- Promote streamlined movement within the Lower Campus, emphasizing efficiency of pedestrian circulation and connections and allowing direct service and delivery access to manufacturing, utility, and distribution uses.
- Maintain hill and Bay views and access to the Bay Trail.
- Maximize ease of access and prioritize pedestrian movement within the neighborhood.

Lower Campus Land Use Strategies

- Maintain the primary function of the Lower Campus as the hub for manufacturing, warehousing, and development laboratories.
- Reinforce Genentech's parking strategy by concentrating parking at the perimeter of campus. See Appendix A for design guidelines for parking structures and interim parking lots.
- Maintain the centralized utility plant located along the Lower Campus hillside to support manufacturing and laboratory uses.

Mid Campus Land Use Goals

- Foster research and development environment with opportunities for small, informal employee gatherings.
- Create open spaces, small plazas, and landscaped pathways that will serve existing and new development.
- Integrate the Mid Campus into the overall campus pedestrian network through connections to the campus loop and Bay Trail.
- Maintain connectivity to Lower, South, and Upper campuses.

Mid Campus Land Use Strategies

- Maintain research and development uses as the major land use of the Mid Campus, with supportive functions as secondary functions.
- Distribute structured parking in Mid Campus as it relates to the campus-wide parking strategy. Transition interim surface parking on future building sites into consolidated campus parking structures. See Appendix A for design guidelines for parking structures and interim parking lots.
- As may be required for new development, potentially provide a centralized utility plant to support growth of research and development uses within the Mid Campus.

Upper Campus Land Use Goals

- Expand upon research and development lab uses within the Lower Campus, focusing on adjacencies to existing facilities and the Mid Campus.
- Establish a strong Genentech identity and skyline with new development along San Bruno Hill.
- Create neighborhood and campus-wide amenities as anchors to the Upper Campus Central Spine, as shown in Figure 2.4-3.
- Promote pedestrian movement within the Upper Campus through continuous pathways, well-marked crossings along Grandview Drive, and view corridors to nearby amenities.
- Improve accessibility to adjoining campuses by expanding primary and secondary pedestrian connections (see Figure 2.4-3).
- Provide for shared pedestrian and service circulation along the Upper Campus Central Spine.

Upper Campus Land Use Strategies

- Continue development of office and administrative uses as the main Upper Campus function.
- Distribute structured parking in Upper Campus as it relates to the campus-wide parking strategy. Transition interim surface parking on future building sites into consolidated campus parking structures. See Appendix A for design guidelines for parking structures and interim parking lots.

West Campus Land Use Goals

- Develop West Campus as the major southern and western gateway into the Genentech Campus.
- Emphasize connections to the Upper Campus loop extension at the base of San Bruno Hill, and along Grandview Drive to Upper Campus.
- Intensify development and maintain views where available.
- Ensure that views from adjoining campuses are not compromised by higher development intensities and heights in West Campus.
- Maintain connectivity to Lower, South, and Upper campuses.

West Campus Land Use Strategies

- Develop administrative and office uses as the main West Campus function.
- Reinforce Genentech's parking strategy by concentrating parking at the campus entry (East Grand Avenue/Grandview Drive). See Appendix A for design guidelines for parking structures and interim parking lots.

Urban Design Concepts

1 Maximizing the waterfront and hilltop setting of the Genentech Campus;

2 Facilitating pedestrian connections and accessibility along major campus corridors;

3 Fostering vital and active pedestrian-oriented Central Spines within each neighborhood;

4 Ensuring that development capitalizes on view corridors and fosters a human campus scale;

5 Promoting flexibility to respond to long-term horizon and ensuring that the campus' development potential is realized; and

6 Providing the basis for specific architectural, landscape, and site design guidelines.

Streetscape Goals

- Retain streetscape experience with consistent planting approach, providing sense of enclosure, and protection from wind, sun, and vehicles.
- Create sense of campus entry at East Grand Avenue and Grandview Drive as well as the Forbes Boulevard entry to campus.
- Retain Forbes Boulevard and Grandview Drive corridors as key access routes through the Genentech Campus.
- Foster a pedestrian-friendly environment with special emphasis on pedestrian crossings and continuous sidewalks.
- Locate stops to minimize impact to traffic patterns on streets.
- Provide safe and highly visible crossings along public streets.

Streetscape Strategies

- Support the City's efforts for any necessary modifications to the campus public streets.
- Implement traffic calming measures on Forbes Boulevard, DNA Way, and Grandview Drive.
- Develop cohesive facility streetscape with consistent site elements including lighting, signage, site furnishing, and bus shelters.
- Use landscape to create a distinct campus identity, including landscape strips, consistent street tree spacing, and repetitive planting elements. Landscape elements should be consistent with East of 101 Area plan Policy DE-56.
- Enhance sidewalks by separating pedestrian and vehicular movements.
- Refer to Figure 3.1-5 for typical design and the Implementation Plan for design guidelines regarding the relationship between shuttle stops, sidewalks, and the street.
- Design shuttle shelters to meet guidelines described in Appendix A.2: Vehicle and Pedestrian Accessibility.
- Extend sidewalks to complete a continuous network of on-street pedestrian pathways on both sides of campus streets. Implement sidewalk and crosswalk improvements as related sites are developed.
- Ensure adequate night-time lighting levels along campus street network.
- Ensure adequate street lighting per City of South San Francisco guidelines.

Crosswalks

- Strategically locate crosswalks at high-traffic walkways and along the Campus Loop to enhance pedestrian connectivity within the campus.
- Provide striping at all Type I crosswalk locations , as indicated in Figure 3.1-6.
- Provide striping and flashers at Type II crosswalks. Utilize pedestrian-operated signalization where necessary.
- Develop crosswalks in conjunction with campus redevelopment.

Campus Entries Goals

- Enhance the Genentech Campus' unique identity by emphasizing entry points.
- Establish clear wayfinding tools and directions for visitors to follow.
- Provide Visitor Stations at campus entries to assist visitors and public.

Campus Entries Strategies

- Enhance the sense of arrival at key entry points to the campus through landscape, signage, and other design elements (shown in Figure 3.1-1).
- Provide for visitor assistance areas at campus entry points.
- Maintain and enhance the campus signage program for wayfinding.

Security and Public Access Goals

- Maintain public access to the Bay Trail, public amenities and Wind Harp Park.
- Ensure accessible and convenient visitor parking.
- Allow for access control for vehicular entry to neighborhood Central Spines.
- Monitor safety and security of employees and visitors.

Security and Public Access Strategies

Public Access

- Provide access to the Bay Trail and public amenities, Wind Harp Park, and approved allocated public parking.
- Provide "visitor stations" at campus entries to assist visitors: Integrate into building and site design.
- Provide visitor parking for each neighborhood for convenience and ease of access.

Security

- Provide controlled access to each building lobby including:
  - Card reader at all entries to buildings.
  - Reception stations at main building entries.
- Utilize a significant degree of transparency at building lobbies to assist security. For example, use of clear glass is preferred.
- Provide adequate lighting at building entries and all exterior areas for safety and security during nighttime use.
- Integrate locations of security cameras with buildings to permit clear, unrestricted sight lines.
- Provide emergency phones throughout the campus.
- Follow guidelines described in A.5-5: Screening and Fencing for any required security fencing.
- Allow for access control at all parking structures, parking lots, and visitor parking areas.

Primary Walkways Goals

- Create a safe and accessible pedestrian environment for high-pedestrian traffic connections.
- Create a continuous, cohesive off-street pedestrian connection that links the Lower, Upper, Mid, and West Campuses.
- Minimize future conflicts between service and goods movement and pedestrian walkways.

Primary Walkways Strategies

- Support pedestrian movement with frequent circuits of the shuttle bus and well-placed and designed shuttle shelters and crosswalks. (Refer to Section 3.1 for shelter placement and design.)
- Use consistent lighting design and light levels along campus pedestrian walkways, using appropriately-spaced 15-foot high fixtures. See Appendix A: Lighting, for design guidelines.
- Design walkways with a minimum width of five feet, with higher-use walkways as 6-8 feet wide, depending on volume of traffic.
- Use materials outlined in Appendix A: Hardscape Materials and Textures.
- Provide site furnishing along Central Spines, including seating elements for views, next to entries, and areas for quiet contemplation.
- Use site elements such as landscaping, site furnishings, and changes in paving materials to accommodate both pedestrian and vehicular traffic where access is shared.
- Develop primary walkways in conjunction with campus redevelopment.

Secondary Walkways Goals

- Create an alternative campus trail network that emphasizes the natural environment.
- Foster physical and visual linkages between neighborhoods and site amenities, using landscaping to enhance campus walkability.
- Use landscaping to enhance pedestrian pathways, providing visual interest and variety, as well as moderate wind protection.

Secondary Walkways Strategies

- Enhance pedestrian accessibility through the use of ramps and stairs as vertical circulation options between neighborhoods.
- Use view corridors and sight lines along walkways to visually connect neighborhoods, open spaces, and amenities.
- Align paths and stairs to views of the mountains, the bay, and distant open spaces, when possible.
- Create an informal landscape design aesthetic for secondary walkways throughout the campus, incorporating site furnishings and signage where appropriate.
- Use consistently-spaced 15-foot high light fixtures, with appropriate light levels. See Appendix A: Lighting, for design guidelines.
- Design walkways with a minimum width of five feet and allow combination of walkway with fire lanes and/or low-traffic vehicular access.
- Use materials outlined in Appendix A: Hardscape Materials and Textures for paving.
- Develop secondary walkways in conjunction with campus redevelopment.

Views Goals

- Maintain views of San Francisco, the San Francisco Bay, San Bruno Mountain, and Mt. Diablo with appropriate development standards.
- Capture views of San Bruno Mountain and the Bay as Upper Campus sites are redeveloped.

Views Strategies

- Maintain view corridors to the Bay, San Francisco, Mt. Diablo, and San Bruno Mountain.
- Discourage construction of bridges in view corridors.
- Ensure that streetscape design in the designated corridors has appropriate planting for preservation of views.
- Align buildings and orient outdoor spaces to view opportunities (as shown in Figure 3.5-1).

Open Space Goals

- Create a rich landscape palette combining formal and informal open spaces and plantings.
- Provide open space within each neighborhood.
- Develop a network of connective open spaces between neighborhoods and campus amenities.
- Maintain accessibility to recreational opportunities along the shoreline and at the Wind Harp Park.

Open Space Strategies

- Maintain a California coastal aesthetic along the shoreline, combining California native and Mediterranean species.
- Balance informal planting groups throughout the campus, with formal trees and hedging demarcating important pedestrian walkways and open spaces.
- Use physical or visual connections to link open spaces between neighborhoods.
- Provide well-defined, landscaped open space and pedestrian connections to waterfront and Wind Harp Park.
- Provide more formal planting along Grandview Drive and at campus entries.
- Create pathways along hillsides and bluffs to increase and diversify open space access and experiences within the campus.

Central Spine Goals

- Establish distinct Central Spines as the major organizing element within each campus neighborhood.
- Promote walkability by locating amenities and open spaces along the Spine.
- Emphasize pedestrian environment by restricting vehicular access within Central Spines.

Central Spine Strategies

- Develop Central Spines in tandem with neighborhood redevelopment.
- Locate buildings facing the Central Spines where possible.
- Ensure that Central Spines are attractive destinations, offering pedestrian comfort, maximizing sun access and views, and creating wind barriers for large open spaces through a variety of implementing mechanisms, including:
  - Site landscape and design elements;
  - Strategic height limitations and building massing;
  - Locate building entrances and amenities with direct access to Central Spine;
  - Maximized window openings at pedestrian level.

Building Massing & Scale Goals

- Ensure that building heights and massing maintain key views to the Bay and San Bruno Mountain.
- Maximize Genentech skyline (within FAA height regulations) along San Bruno Hill to establish a strong visual identity for the campus from US-101 and the East of 101 Area.
- Take advantage of building massing to provide sun access and articulation to wind-sheltered pedestrian spaces, courtyards, and entrances.

Building Massing & Scale Strategies

- Articulate larger-floorplate structures to break down the scale and massing of the building and to allow visual and physical porosity of the campus.
- Require horizontal building articulation along Central Spines and major pathways to create Human Scale.
- Maximize sunlight on pathways and open spaces in Central Spines and courtyards through building stepbacks.

Sustainability Goals

- Create a campus environment that enhances human health, comfort, and performance.
- Minimize resource consumption and enhance environmental quality of the campus.
- Maximize productive life of new facilities through durable, flexible, and high-quality spaces.

Sustainability Strategies

- Utilize a comprehensive approach to design that relates site planning, building design, and landscape design to the natural campus environment, respecting the integrity and biodiversity of natural systems throughout the campus.
- Incorporate the analysis of sustainable design solutions into the development process, considering sustainable principles that minimize resource consumption and maximize on-site conservation.
- Employ architectural design methods that include such aspects as the use of solar shading devices and white roofing materials control solar gain.
- Utilize high recycle-content building materials, when appropriate.
- Integrate energy- and water-conserving electrical and mechanical systems throughout campus buildings and neighborhoods.
- Minimize impervious surfaces such as large surface parking lots and unplanted plazas.
- Coordinate development with programs and strategies that support public and alternative transit modes.
- Continue participation in the PG&E Savings by Design Program, maintaining successful strategies that improve facility performance in excess of a 10 percent savings above Title 24 requirements.

Transportation Concepts

1. Strengthening and expanding Genentech's comprehensive transportation demand management (TDM) program to minimize single-occupancy vehicles traveling to campus throughout the day, and to meet or exceed the South San Francisco Congestion Management Plan, the City's TDM Ordinance, which targets for a 30 percent employee participation (see Section 4.3);
2. Streamlining campus circulation and connectivity of all neighborhoods in the East of 101 Area for shuttles, service vehicles, and goods movement;
3. Minimizing intracampus auto traffic by strategically concentrating parking areas within each neighborhood;
4. Creating a flexible parking supply infrastructure and implementation plan that responds to development and parking demand needs (see Section 4.4);
5. Accommodating multiple modes of transportation on the existing campus street network; and
6. Complying with the city's transportation objectives for the entire East of 101 Area as well as the regional objectives.

Transit and Shuttle Goals

- Enhance participation in alternative transportation modes to minimize commuter traffic and parking requirements through expanded transit and TDM programs.
- Improve the quality of shuttle services, connections, and amenities to enhance transportation efficiency and campus environment.

Transit and Shuttle Strategies

- Improve information, accessibility and branding of shuttle vehicles and stops.
- Expand Genenbus program to serve areas with large employee residential concentrations as may be warranted by sufficient potential ridership.
- Expand the intracampus shuttle system to other South San Francisco campus locations as they are developed to reduce local traffic.

TDM Goals

- Achieve an enhanced reduction of single occupancy vehicles (SOV) used by Genentech employees of up to 70 percent of peak hour commute trips.

TDM Strategies

- Increase TDM staff to maintain, coordinate, and implement the Genentech TDM program.
- Expand existing programs such as existing car and vanpool programs. See the Genentech TDM Plan for greater detail.
- Monitor results through an annual survey of employees and triennial program audits, periodically updating the program as necessary.

Parking Goals

- Provide adequate parking supply to accommodate growing employment needs while avoiding excessive supplies that will undermine TDM strategies.
- Meet parking demand with sufficient off-street parking facilities.
- Foster a safe and pedestrian-oriented campus environment by concentrating parking structures to reduce vehicle traffic on the site, avoid pedestrian-vehicle conflicts, and minimize traffic noise.
- Retain the parking spaces reserved for general public shoreline access in accordance with prior agreements with the Bay Conservation and Development Commission.

Parking Strategies

- Utilize functional parking ratios of 2.75 spaces/1,000 gsf for office uses; 1.4 spaces/1,000 gsf for laboratory uses; 0.9 spaces/1,000 gsf for manufacturing uses, and 0.5 spaces/1,000 gsf for warehousing uses.
- Provide adequate parking supply on-campus to meet campus-wide demand.
- Coordinate TDM programs with parking supply and demand by developing new transit services that access regional shuttle transit hubs, improved carpool and vanpool programs, and buses that access neighborhoods with high employee concentrations. (See Section 4.3).
- Incorporate parking requirements reflective of the effects of TDM strategies on parking demand at Genentech as part of the Genentech R&D Overlay District.
- Locate parking structures adjacent to major streets for easy and direct access.
- Distribute parking throughout the campus to maximize pedestrian access to buildings from parking structures, and identify intensifying parking at campus entries to foster a pedestrian orientation to the campus.

- Restrict employee parking at reserved public parking spaces.
- Remove on-street parking along Grandview Drive.

Service, Goods, and Freight Movement Goals

- Maintain efficient freight mobility to serve Genentech's manufacturing and service needs.

Service, Goods, and Freight Movement Strategies

- Locate access driveways to loading docks, wherever applicable, along the perimeter or rear of buildings where interference with building entrances, pedestrian flows, and parking maneuvers is minimized.
- Where needed, re-orient or relocate loading docks to match revised truck access pattern and minimize conflicts with vehicles, pedestrians, and bicyclists.
- Maintain reliable access to service and goods hubs so that vehicles can load and unload in a timely and efficient manner.

Bicycle Movement Goals

- Work with the City and Caltrain to improve bicycle connections between the campus and the rest of the city, including to transit stations.

Bicycle Movement Strategies

- Add shared bicycle vehicle lanes where possible (see Figure 4.6-1).
- Provide bicycle facilities such as racks and bicycle lockers in new development areas.
- Support bicycle accessibility along the campus primary pedestrian network. (Refer to Figure 3.4-1 for primary network.)
- Preserve public access to the Bay Trail.
- Promote connections between transit centers and the Bay.

Utilities Concepts

1 Meeting required performance standards and necessary service requirements as the campus expands; and

2 Coordinating with the City and utility providers to maintain and improve infrastructure.

Utilities Goals

- Identify and plan for future Genentech utility needs to assure uninterrupted campus growth and expansion.
- Maintain and expand all essential utilities to meet required performance standards and necessary service requirements.

Utilities Strategies

- Maintain and continue to expand the existing domestic water and fire protection systems to meet fire safety and insurance standards.
- Upgrade and expand the wastewater collection and treatment system to assure long term operational capacity and quality standards.
- Assist the city of South San Francisco in updating the City's Sewer Master Plan for the area East of 101.
- Work with utility service providers to identify long term service needs.
- Plan and maintain effective, comprehensive data and emergency communications systems between all Genentech operations.
- Continue to investigate and evaluate the potential for centralized utilities on campus.
- Comply with all State and Federal standards and practices with the storage, use, and disposal of hazardous materials and wastes.

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2 LAND USE AND STRUCTURE

The Genentech campus occupies an area that was designed and built to Industrial Park standards. As such, the original structure of the campus comprised tilt-up buildings, surface parking lots, wide roadways, and limited sidewalks. Genentech has replaced many of these industrial buildings, and has begun to establish a corporate identity throughout the campus. However, the existing site configuration and challenging topography limit opportunities for potential build-out and connectivity. The street grid is especially limited by the steep changes in topography—resulting in only one main street that bisects the campus. In addition, the campus area includes lands within the Bay Conservation and Development Commission (BCDC) jurisdiction along the Bay shoreline—including a Priority Park designation at San Bruno Point under the BCDC Plan, both of which require public access and parking on Genentech-owned property.

Further restrictions on the extent and timing of development in the Genentech Campus include the FAA Part 77 Height Limits due to the proximity of the San Francisco International Airport, and City and State requirements for project review. These requirements directly affect the overall intensity and heights within the campus, as well as Genentech's flexibility and responsiveness to industry needs and fluctuations.

The goal of this Master Plan is to create a structure that can guide growth, while providing the necessary flexibility for a long-term planning horizon. Thus, the Master Plan focuses on specific organizing themes that lay a foundation for built form, connections, and locations of open spaces and amenities, rather than defining precise building locations, shapes, or forms. The Land Use and Structure chapter of the Master Plan presents these themes through campus-wide concepts and neighborhood-specific goals and strategies.

Land Use and Structure Concepts

The Ten-Year Master Plan focuses upon several key design and development concepts:

1. **Fostering development of distinct yet inter-connected "neighborhoods," to ensure a sense of community, and to support R&D, manufacturing, and office activities;**
2. **Maintaining and creating balance between open and built environments;**
3. **Maximizing use of views by careful siting and massing of buildings;**
4. **Fostering a safe, secure pedestrian environment by carefully distributing parking throughout the campus while emphasizing greater concentrations of parking at campus entries;**
5. **Creating a network of pedestrian and campus shuttle connections to facilitate movement between buildings and neighborhoods, and to reduce intracampus traffic;**
6. **Establishing a hierarchy of pedestrian walkways and connections that comprise "Central Spines" and secondary walkways;**
7. **Fostering the Campus Spines concept to connect employee amenities and activity centers, such as cafeterias and meeting spaces; and**
8. **Ensuring public access to the Bay Trail and public parks.**

2.1 Campus Structure

The Genentech campus structure is comprised of three basic elements: built space, open space, and circulation elements. Campus buildings and outdoor spaces—including plazas, landscaped courtyards, and the bay shoreline—are organized into campus neighborhoods. These neighborhoods, buildings, and open spaces are further organized and connected by a multi-tiered, multi-modal circulation system. Streets, pedestrian walkways, and the crosswalks that connect them, comprise this connective structure. This section describes the basic structure and organization of the campus through the introduction of campus neighborhoods and the campus connective networks. Further description of the design of these elements is included in Chapter 3: Urban Design.

Neighborhoods

The concept of neighborhoods was a major guiding theme of the 1995 Plan, and is an established feature of Genentech Campus planning. The formation of neighborhoods provides a sense of scale to the campus, both in terms of walkability and navigation of the various functions and uses within the campus. The resulting size of each neighborhood reflects this emphasis upon scale and place, with each neighborhood generally no more than a five- to ten-minute walk from end to end (as illustrated in Figure 2.1-1).

Although geographically defined, each neighborhood serves a specific role, with emphasis upon research and development, manufacturing, or administration. This overarching organization of the campus is reflected within each neighborhood, where functional adjacencies between buildings—and at a larger scale, between neighborhoods—streamline communication and circulation.

The neighborhood structure also provides a basis for the location and distribution of employee amenities, ensuring proximity and access to parking, cafeterias, open space, and other amenities for all employees. These amenities are organized off of pedestrian-oriented Central Spines within each neighborhood, which together form the primary internal pedestrian walkway throughout the campus, called the Campus Loop.

Neighborhood Organization

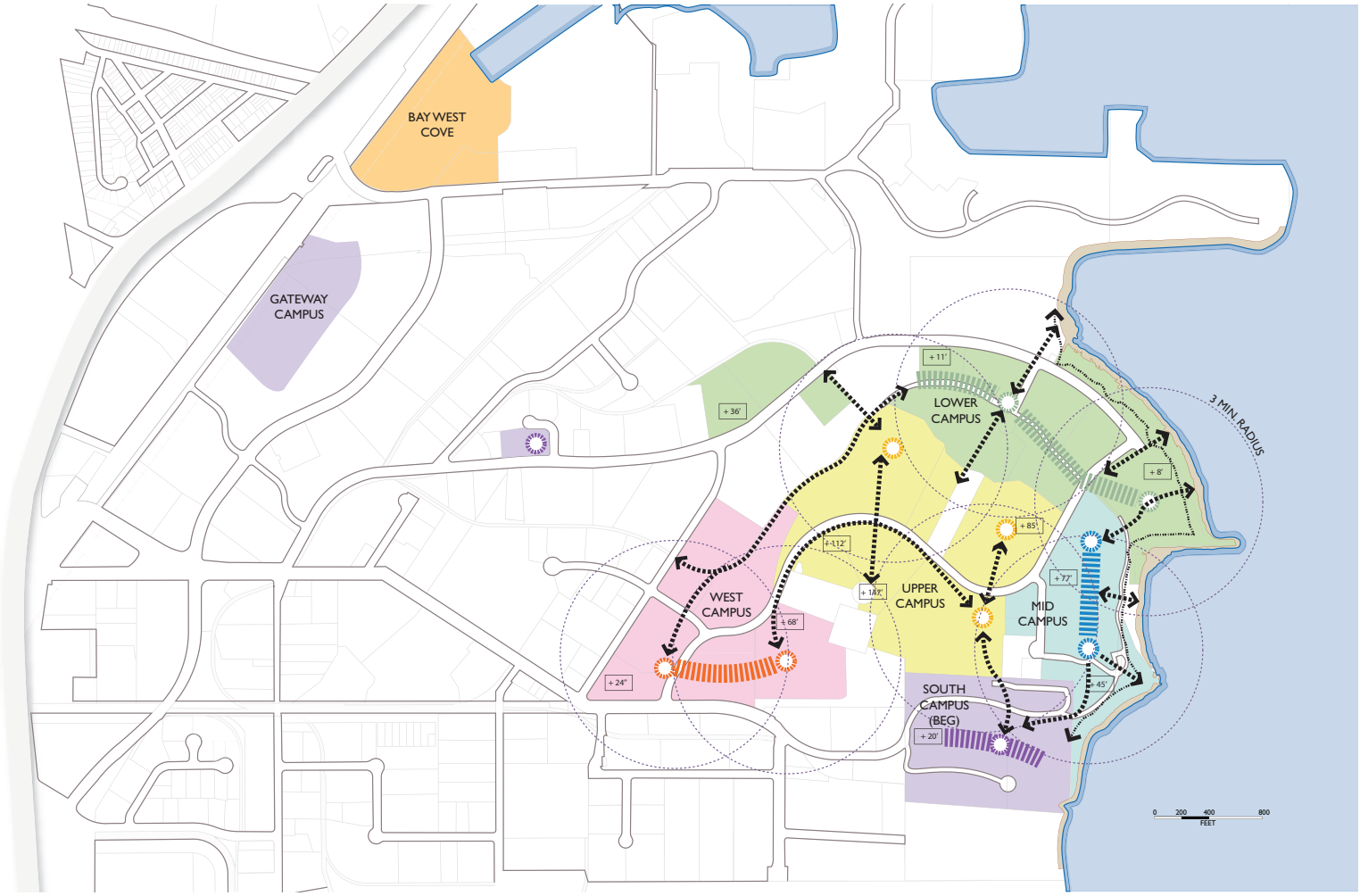
The Master Plan adds an additional neigh-borhood to the original Genentech Campus, which was comprised of the Lower Campus, Upper Campus, and Mid Campus. These three original campuses, and the new West Campus, are addressed under this plan. Each neighborhood plays a distinct role in the overall function of the Genentech Campus:

- *Lower Campus* will continue to act as the primary product development and manufacturing/warehousing center, but will expand uses to accommodate growth of research laboratory buildings.
- *Mid Campus* houses the Founder's Research Center (FRC), which provides space for research and development facilities. These functions will be expanded upon, with emphasis remaining primarily with R&D uses.
- *Upper Campus* will continue to grow as the Campus' main administrative and office center.
- Finally, the new *West Campus* will provide the Genentech Campus with a flexible space for expansion. Although more topographically separated, this neighborhood will link to both the Upper and Lower campuses, setting the stage for the development of uses that are functionally compatible with office and R&D uses.

The Master Plan also incorporates access to employee amenities and parking as a major organizational element within each neighborhood. Based on convenience and accessibility, amenities and open spaces are distributed throughout each neighborhood and the entire campus within a three- to five-minute walking distance of all employees. Amenities such as cafeterias and major employee gathering spaces are shown as they relate to the major campus connections in Figure 2.1-1.

Likewise, parking facilities will be similarly distributed, with emphasis maintaining a safe and pedestrian-oriented campus environment. This strategy is outlined in the following section.

As described in Section 2.2 of this Master Plan, the South Campus, Gateway Campus, and Bay West Cove are owned or occupied by Genentech, and are depicted in the figures in this Master Plan for reference, but are not included within the Planning Area or the Genentech R&D Overlay District.



Central Spine Element
Proposed Connection
Amenity or Open Space
+ 11 Elevation Above Sea-level
Bay Trail
Proposed Pedestrian Connection

Figure 2.1-1: Neighborhoods Concept

Neighborhood Structure

Neighborhood uses, activities, and amenities are structured around Central Spines, the primary organizing element of each neighborhood. Building upon the original Campus Spine concept from the 1995 Plan, which was designed as a single connective element that ran between Lower Campus and Mid Campus, the Central Spine concept of this Master Plan redefines the Spine as a neighborhood-specific circulation and activity hub. As the primary circulation path through each neighborhood, the spines act as a pedestrian street. Building entrances, courtyards, plazas, and amenities are all located off of the central spine, thus defining it as the main activity hub within each neighborhood.

Designed to access primary uses and activity flows, each Central Spine is distinctive and reflects specific neighborhood characters and uses. For instance, the multi-functional Central Spine in Lower Campus facilitates both pedestrian and service vehicle circulation, responding to the joint need for functional interactions of staff as well as service access and delivery needs of production and manufacturing. Consequently, the combined walkway and driveway of the Lower Campus Central Spine is currently designed to accommodate safe pedestrian flow along the vehicular path with specific material changes, crosswalk delineation, and landscape boundaries. As the Lower Campus evolves in use and character, the Central Spine will become more pedestrian-oriented, with service areas and access minimized to allow for greater pedestrian amenities and comfort.

Central Spines in other neighborhoods will be created in tandem with new development, and will be designed with a pedestrian orientation in response to the synergistic relationship between R&D labs and administrative uses. Pedestrian walkways and open spaces will cater to the specific needs that arise in these neighborhoods, such as the intimate courtyards and gathering spaces along the Mid-Campus Central Spine that complement the sharing of ideas and meetings that occur in the research-oriented FRC environment.

Campus Connectivity

The connective network of the campus is comprised of streets, pathways, and open space. Together, these elements provide a multi-layered circulation network that accommodates automobile, shuttle, bicycle, and pedestrian traffic within and around the campus.

Street Network

As the primary element of circulation, the campus street network provides an overarching structure for the boundaries and extent of campus neighborhoods. However, this network is limited by the steep slopes, bluffs, and hillsides of the campus area—with only the DNA Way/Grandview Drive alignment traversing the full extent of the campus. Forbes Boulevard, Allerton Avenue, and East Grand Avenue provide access to the campus along the periphery. A second tier of street circulation exists along private rights-of-way—however, access is restricted to only service and emergency vehicles. As such, the overall street network, including public and private roads, has limited ability to facilitate an extended pedestrian network within the campus. Thus, alternative connections between neighborhoods, buildings, and open space rely primarily on a layer of pedestrian pathways and connections throughout the campus.

Pedestrian Network

The second layer of campus circulation is therefore comprised of a multi-tiered pedestrian network. This network is defined by a distinct hierarchy of connection typologies that are based upon use and location. The extent of traffic along these connections defines their role within the campus—those walkways that are used with the greatest frequency are identified as primary walkways and those that are used less often are secondary walkways. The major primary walkway of the campus is the Campus Loop. The Loop is a continuous, highly-frequented network of connections between campus neighborhoods, and is thus comprised of Central Spines and the pathways and crosswalks that connect them. A diagram of the Campus Loop is shown in Figure 2.1-2, showing the relationship of neighborhood Central Spines to the primary walkway network.

Secondary walkways are more informal, less-traveled circulation paths between and within buildings and neighborhoods. They include walkways between neighborhoods outside of the Campus Loop or connections to the campus street network. They often pass between or within open spaces and building clusters or traverse challenging topography. The secondary walkway network also includes connections between neighborhoods and major nodes or public open spaces including the shoreline and existing parks, campus amenities, and major parking garages. Both the primary and secondary walkway networks are illustrated and discussed in greater detail in Chapter 3: Urban Design.

Open Space Network

The final element of the campus framework is the open space network. Comprised of large landscaped gathering spaces, or outdoor rooms, connective courtyards and plazas between buildings, as well as public open space such as the Bay Trail along the Genentech shoreline, this network provides a physical organization to the campus and each of its neighborhoods.

Genentech's distinct natural setting is a major defining feature of the campus. With the San Francisco Bay shoreline and Wind Harp Park within the Master Plan area, the campus houses multiple opportunities for recreation and open space connections. Views and access to the dramatic physical environment are important tools in organizing and guiding new development, and will be discussed in further detail in Chapter 3: Urban Design. As campus facilities are added, open space will be a key element of design, especially along neighborhood Central Spines.

Four open space typologies exist within the Genentech Campus, providing the opportunity to create a second-tiered pedestrian network with pathways and destinations along hillsides, bluffs, and the shoreline:

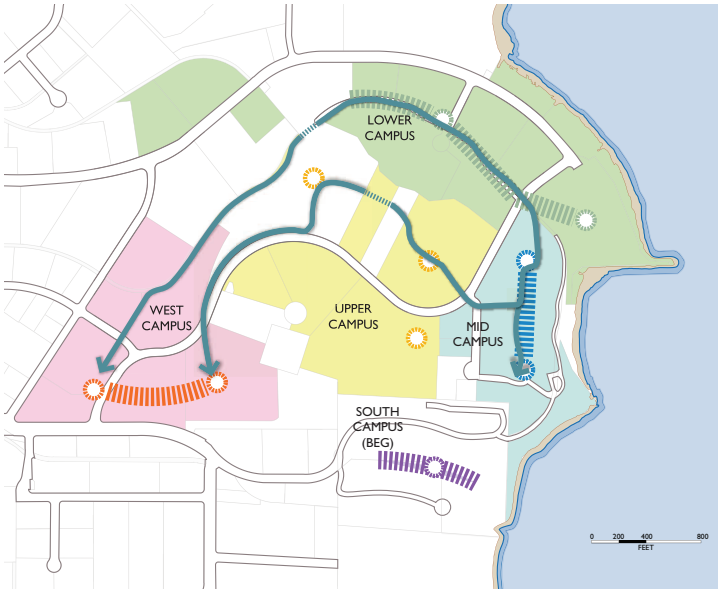


Figure 2.1-2: Campus Loop Primary Walkway

- Connective: Open space that connects major nodes and circulation elements to natural or public open space elements;
- Neighborhood-oriented: Open space located along neighborhood Central Spines in the form of outdoor rooms including plazas, greens, or courtyards;
- Passive: Non-programmed open space and non-developable bluffs and hillsides occupiable only along man-made pathways; and
- Public: The Bay Shoreline and Wind Harp Park.

2.2 Existing Land Use and Development

Genentech's South San Francisco campus is expanding, both in terms of population and building space. New property acquisitions have created a foundation for redevelopment and additions to existing facilities. Company-wide Genentech has approximately 9,900 employees as of September 2005, of which approximately 6,500 are located in South San Francisco. Growing demand for further research and pro-ducts in the biotechnology field sets the stage for continued growth in Genentech's future.

As a company that is expanding and adjusting to new demands, the Campus is continually in a state of change, with multiple development projects underway or planned for the near future. This Master Plan follows the goals and objectives of the 1995 Plan to help guide the expansion of the Campus as well as strengthen the character of existing neighborhoods.

Planning Area and R&D Overlay

The Master Plan addresses an area of approximately 200 acres as the planning area. This includes the Genentech Central Campus and future properties as yet unidentified. As shown in Figure 2.2-1 and described in Table 2.2-1, the Genentech Central Campus (in 2005) extends over 160 acres; of which, approximately 125 acres are currently in the Genentech R&D Overlay of the South San Francisco Municipal Code, and approximately 37 acres that comprise the expansion of the overlay .This Master Plan focuses on the Central Campus within the Planning Area.

Genentech-owned Properties Outside the Planning Area

In addition to the Planning Area, Genentech currently has significant leased space at the Gateway Business Park and Britannia East Grand development which is currently under construction.

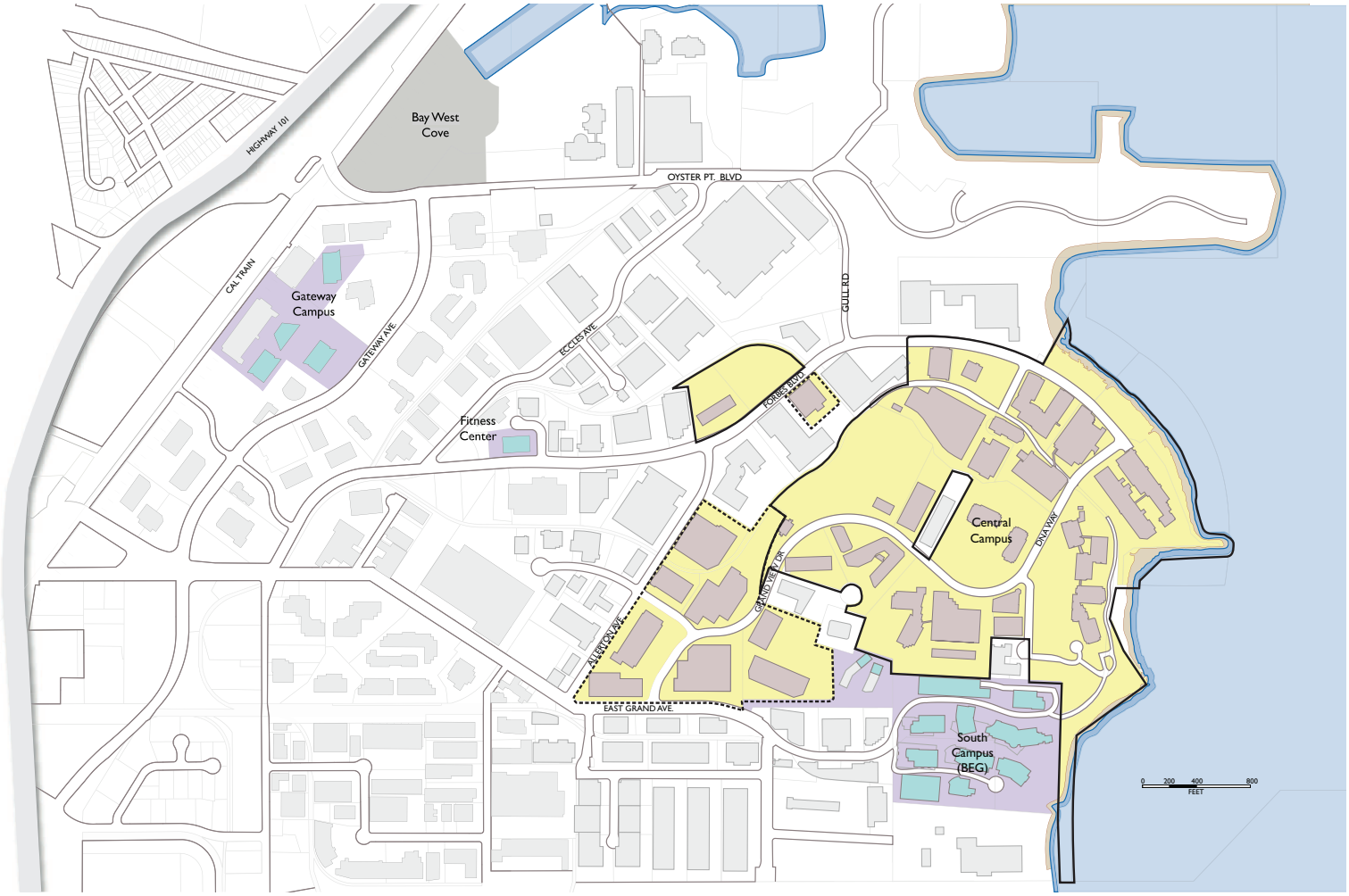
Also shown in Figure 2.2-1, Genentech owns 16 acres referred to as the Bay West Cove property. This property already had approval for development of 623,000 square feet when Genentech purchased the property.

Like the Bay West Cove, the Gateway and South campuses are not included in the Planning Area. However, they are addressed as they relate to transportation and connectivity issues.

Table 2.2-1: Master Plan Planning Area

Genentech-owned Properties	*Acres*
Pre-Expansion Genentech R&D Overlay District	125.3
R&D Overlay	36.9
Genentech Central Campus Area	162.2
Expansion	37.8
Total Planning Area	**200.0**

Source: Genentech, October, 2005.



Development
- Genentech-owned Building
- Genentech-Leased Building

Property
- Genentech-owned Property
- Genentech-Leased Property
- Other Genentech-owned Property
- Pre-Expansion Genentech R&D Overlay District
- Proposed Expansion of R&D Overlay

Figure 2.2-1: 2005 Existing Development

Existing Development and Opportunity Sites

Existing Development

The current Genentech Central Campus consists of 3.5 million square feet of building area, of which roughly 2.8 million square feet are within the pre-expansion Genentech R&D Overlay District. The remaining properties have tenants with varying lease terms. Table 2.2-2 shows existing (2005) building area by neighborhood—Lower, Mid, Upper, and West; and Tables 2.2-3 and 2.2-4 show the distribution of building uses within each neighborhood.

As shown in the tables, uses within the Genentech campus are diverse and include a range of functions from initial product development to marketing and production. These uses include:

- *Office.* Administrative and business support services.
- *Lab.* Research and development laboratories with supporting functions.
- *Manufacturing/Warehouse.* Manufacturing, fill/finish, warehousing, and distribution.
- *Amenities.* Consistent with the South San Francisco General Plan, Genentech provides amenities for employees to support overall campus function. These include: cafeteria and food services; fitness, childcare, and meeting/event facilities; and other miscellaneous employee support spaces. In addition, adjacent to the Bay Trail along Forbes Boulevard, Genentech will provide a food concession and public restroom facility with an eating area and activity space for public use.
- Employee amenities not included in the square footage in Table 2.3-3 include parking, bike lockers, and vendor services. While these amenities—such as employee car wash, oil changes, dental services, and others—are provided outside of Genentech campus buildings, they are subject to City administrative review.

Land Constraints

Genentech maintains a detailed inventory of existing land use and development. Opportunity sites for redevelopment and new facilities are defined according to forecasted needs and site availability. Aside from existing and newly-developed properties that are targeted to be redeveloped, many natural and regulatory constraints help guide Genentech in its redevelopment efforts:

- Geological limitations, including San Bruno Hill ridges, the shoreline and bluffs, and shoreline land fill;
- Height limitations, as regulated by the Federal Aviation Agency, or FAA (see Chapter 3: Urban Design, Building Massing and Scale);
- City of South San Francisco General Plan requirement for public access to San Francisco Bay and public parks; and
- Views to the shoreline and across San Francisco Bay, Mt. Diablo, San Bruno Mountain, and the Wind Harp Park.

Opportunity Sites

Of the approximately 160 acres currently owned by Genentech in the Planning Area (R&D Overlay District), roughly 40 percent are developed and assumed to remain, and 60 percent are planned for redevelopment. Figure 2.2-2 shows the opportunity sites on campus. The majority of opportunity sites are newly-acquired properties along the western edge of the campus. However, several properties are located in the Lower and Upper campuses with buildings that may no longer be useful or efficient within the planning period.

Table 2.2-2: Existing 2005 Genentech Central Campus Development

	Building Area (Square Feet)	
Neighborhood	*R&D Overlay*	*Genentech Central Campus*
Lower	1,353,000	1,395,000
Mid	600,000	600,000
Upper	862,000	862,000
Subtotal	*2,815,000*	*2,857,000*
West	0	660,000
Total	**2,815,000**	**3,517,000**

Source: Genentech, October, 2005.

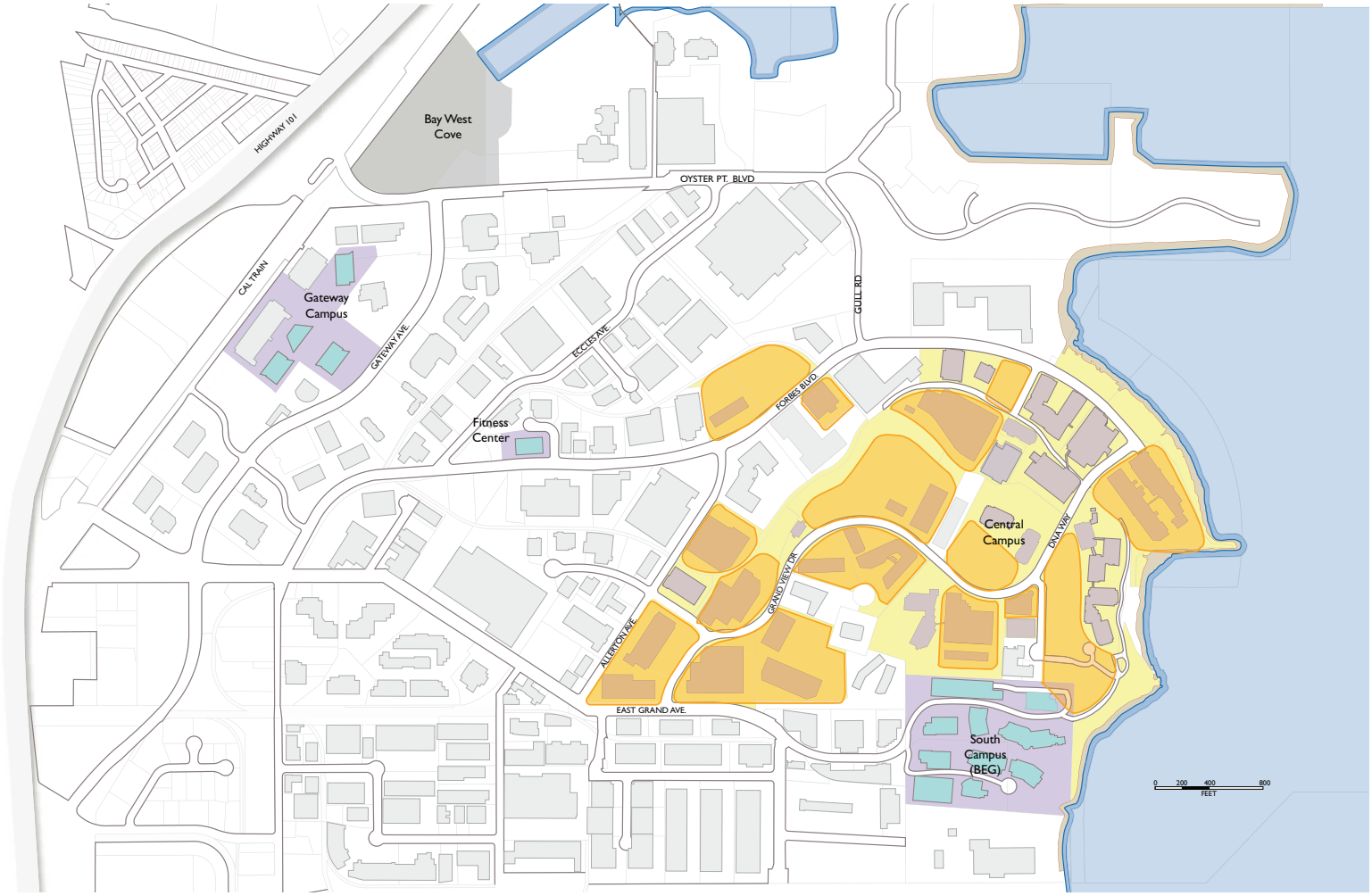
Table 2.2-3: Existing 2005 Building Use Distribution on Genentech R&D Overlay

		Existing Building Area (Square Feet)					
Neighborhood	*Land Area (acres)*	*Office*	*Lab*	*Manufacturing/ Warehouse*	*Amenity*	*Total Building Area*	*FAR*
Lower	55.1	328,000	415,000	601,000	9,000	1,353,000	0.56
Mid	23.8	159,000	441,000	0	0	600,000	0.58
Upper	46.4	522,000	151,000	123,000	66,000	862,000	0.43
Total R&D Overlay	**125.3**	**1,009,000**	**1,007,000**	**724,000**	**75,000**	**2,815,000**	**0.52**

Source: Genentech, October, 2005.

Table 2.2-4: Existing 2005 Building Use Distribution by Neighborhood in the R&D Overlay

	Distribution of Building Use			
Neighborhood	*Office*	*Lab*	*Manufacturing/ Warehouse*	*Amenity*
Lower	24%	31%	44%	1%
Mid	26%	73%	0%	0%
Upper	61%	18%	14%	8%



Development
- Genentech-owned Building
- Genentech-Leased Building

Property
- Genentech-owned Property
- Genentech-Leased Property
- Other Genentech-owned Property
- Genentech-owned Potential Opportunity Site

Figure 2.2-2: Opportunity Sites

2.3 Land Use Development Program

Development Projections

At buildout, Genentech expects to almost double its 2006 building area from 3.5 million to approximately six million square feet of building space. This development will occur on the Master Plan planning area of up to 200 acres. All these projections are subject to many factors that will affect whether the potential development is in fact realized, and, if so, when various aspects of such development may be constructed.

As the distribution of uses evolves towards a greater percentage of office and laboratory buildings, the campus will incorporate greater population densities. Table 2.3-1 compares the expected 2016 distribution of uses with the existing 2005 distribution.

Growth Strategy and Development Intensities

The expected growth of the campus to 6 million square feet of building space on 200 acres would result in an overall R&D Overlay District FAR of 0.69. Within the campus, development intensity will vary in each neighborhood in response to availability of developable land, turnover of existing development, the Master Plan growth strategy, and natural constraints. Maximum FARs of each neighborhood will not exceed 1.0, with an overall R&D Overlay maximum FAR of 1.0. Building heights and typology within each neighborhood will further dictate the development intensities throughout the campus. Tables 2.3-2 and 2.3-3 describe the projected 2016 distribution of uses and building area within each neighborhood and the remaining expansion area of the Master Plan.

Table 2.3-1: Comparison of Development Distribution within the R&D Overlay

	Distribution of Building Use			
	Office	*Lab*	*Manufacturing/ Warehouse*	*Amenity*
Existing 2005	36%	36%	26%	3%
Projected 2016	47%	33%	13%	7%

Table 2.3-2: Projected 10 Year Building Use Distribution by Neighborhood

	Distribution of Building Use			
Neighborhood	*Office*	*Lab*	*Manufacturing/ Warehouse*	*Amenity*
Lower	18%	54%	24%	4%
Mid	15%	75%	0%	10%
Upper	96%	0%	0%	4%
West	58%	0%	27%	15%
Campus-wide	**47%**	**33%**	**13%**	**7%**

Neighborhood Growth Strategy

The Master Plan growth strategy calls for new expansion and redevelopment throughout the campus, concentrating more intense administrative and office development in the Upper and West campuses. Research will continue to expand in the Mid and Lower campuses. Lower Campus will also support product development, laboratory buildings, and related functions. Amenities will continue to be distributed throughout the neighborhoods and satellite campuses. The overall distribution of development by neighborhood is shown in Table 2.3-3. These numbers reflect the net new growth discussed in the following strategies for each neighborhood.

The strategies described below are based upon existing uses and development as of (December 2005) and future redevelopment. The net new square footage is set forth below; however, the summaries also describe existing building square footage that may be removed as part of the redevelopment. The projects described are those that currently are anticipated; changes in the precise mix of project types and uses may occur in response to changing business conditions and corporate strategies adopted by Genentech.

Lower Campus

The Lower Campus, which was part of the 1995 Plan, is located on the northern edge of the Planning Area adjacent to the San Francisco Bay. The existing (December 2005) development within the Lower Campus includes 415,000 square feet of laboratory space, 601,000 square feet of manufacturing/warehouse space, 328,000 square feet of office space, and 9,000 square feet of amenities. Up to 145,000 square feet of office space, 70,000 square feet of laboratory space, 310,000 square feet of manufacturing/warehouse space, and 4,000 square feet of amenity space may be redeveloped. Developments in 2006 include Building 51, a 35,700 square foot manufacturing building, and a 20,000 square foot manufacturing expansion of Building 3. Future developments that currently are anticipated within the Lower Campus include:

- A new laboratory building adjacent to Building 7 of approximately 165,000 square feet, with 140,000 square feet of laboratory and support space and 25,000 square feet of office uses;
- Approximately 180,000 square feet of additional office space,

Table 2.3-3: Total Projected 2016 Distribution of Development by Neighborhood

		Building Area (Square Feet)					
Neighborhood	*Land Area (acres)*	*Office*	*Lab*	*Manufacturing/ Warehouse*	*Amenity*	*Total Building Area*	*FAR*
Lower	55.1	290,000	880,000	395,000	60,000	1,625,000	0.68
Mid	23.8	135,000	680,000	0	95,000	910,000	0.88
Upper	46.4	1,327,000	0	0	60,000	1,387,000	0.69
West	36.9	430,000	0	200,000	107,000	737,000	0.46
Subtotal	**162.2**	**2,182,000**	**1,560,000**	**595,000**	**322,000**	**4,659,000**	
Expansion	37.8	450,000	440,000	451,000	0	1,341,000	
Master Plan Tota[1]	**200.0**	**2,632,000**	**2,000,000**	**1,046,000**	**322,000**	**6,000,000**	**0.69**

[1] *Expansion space is distributed in different neighborhoods.*

- Approximately 570,000 square feet of additional laboratory space;
- Approximately 215,000 square feet of additional manufacturing/warehouse space;
- Approximately 60,000 square feet of amenities; and
- Structured parking.

Mid Campus

The Mid Campus, which was also part of the 1995 Plan, is located south of the Lower Campus, adjacent to the San Francisco Bay. The existing (December 2005) development within the Mid Campus includes 159,000 square feet of office space and 441,000 square feet of laboratory space. Approximately 26,000 square feet of office space may be redeveloped. Future Mid Campus projects that currently are anticipated include:

- Approximately 300,000 square feet of laboratory space; and
- Approximately 95,000 square feet of amenities.

Upper Campus

The Upper Campus, which was part of the 1995 Plan as well, is located along the top of the ridge at the center of the Planning Area, dropping sharply to the north and west. The existing (December 2005) development within the Upper Campus includes 522,000 square feet of office space, 151,000 square feet of laboratory space, 123,000 square feet of manufacturing/warehouse space, and 66,000 square feet of amenities. It is anticipated that up to 120,000 square feet of office space, 150,000 square feet of laboratory space, 125,000 square feet of manufacturing/warehouse space, and 25,000 square feet of amenity space may be redeveloped. Future Upper Campus projects that currently are anticipated include:

- Building 31, an approximately 151,000 square foot office building adjacent to Buildings 32 and 33;
- Approximately 775,000 square feet of additional office space;
- Approximately 20,000 square feet of amenity space; and
- Structured parking.

West Campus

The West Campus, the newest addition to the Genentech Campus, is west of the Upper Campus and is bordered by East Grand Avenue, Allerton Street, and San Bruno Hill. The West Campus serves as a major point of entry to the Project. Although not a part of the original or past updates to the Genentech R&D Overlay District, the West Campus is added to the Genentech R&D Overlay District as a part of this Master Plan. The existing (December 2005) development within the West Campus includes 660,000 square feet of manufacturing/warehouse space. Genentech anticipates that up to 510,000 square feet of this space may be redeveloped. Future West Campus projects that currently are anticipated include:

- A new child care facility of approximately 52,000 square feet for approximately 500 children at 444 Allerton;
- Three new office buildings (B61, B62, and B63) totaling approximately 450,000 square feet of office space;
- A new parking structure to support approximately 1,200 cars;
- Approximately 330,000 square feet of additional office space;
- Approximately 200,000 square feet of laboratory space;
- Approximately 250,000 square feet of manufacturing/warehouse space;
- Approximately 55,000 square feet of additional amenities space; and
- Additional structured parking.

Parking Strategy

Complementing the neighborhood growth strategy, parking will be distributed within each neighborhood with emphasis on parking at campus entries. This strategy will reduce the need for vehicular trips within the campus, and will enhance walkability and pedestrian and bicycle safety. For a more detailed description of the campus Parking Strategy, including discussion of overall demand and supply, refer to Section 4.4 in Chapter 4: Transportation and Parking 2.4.

2.4 Neighborhood Character and Use

Lower Campus

The Lower Campus neighborhood has direct access to the Bay Trail and views across the bay. One of two major gateways into the campus, the Lower Campus neighborhood comprises the northern edge of the Genentech Campus along Forbes Boulevard, from west of Gull Road to the northeastern shoreline. To the south, the neighborhood is bordered by the San Bruno Hill ridge and the Upper Campus above. The Lower Campus Central Spine runs through the middle of the neighborhood, parallel to Forbes Boulevard, and serves as a pedestrian pathway and the service vehicle route for manufacturing and distribution uses.

Character and Use

Lower Campus houses offices, laboratory, manufacturing, and warehouse buildings, and has direct access to natural amenities such as the Bay Trail and San Bruno Point. As the land use structure of the entire Genentech Campus evolves with changing needs and activity focuses, the more industrial nature of the Lower Campus will change in emphasis and form.

Redevelopment of multiple opportunity sites within this neighborhood, both along the Central Spine and along the Bay shoreline, will redefine the neighborhood as a multi-use research, development, and manufacturing core of the campus. With its key location off of Gull Road and Forbes Boulevard, the Lower Campus will command a strong role within the overall campus and mark the main entry node to the Central Spine and Campus Loop. These functions and related design elements of the Central Spine and Lower Campus are described in Chapter 3: Urban Design and in Appendix A: Design Guidelines.

Lower Campus Land Use Goals

- **Develop the Lower Campus as the northern gateway to the Genentech Campus, in concert with its strategic location off of Gull Road and Forbes Boulevard.**
- **Create a strong neighborhood center at the Central Spine that provides a focus for building entries, pedestrian circulation, and employee gatherings, as shown in Figure 2.4-1.**
- **Promote streamlined movement within the Lower Campus, emphasizing efficiency of pedestrian circulation and connections and allowing direct service and delivery access to manufacturing, utility, and distribution uses.**
- **Maintain hill and Bay views and access to the Bay Trail.**
- **Maximize ease of access and prioritize pedestrian movement within the neighborhood.**

Lower Campus Land Use Strategies

- **Maintain the primary function of the Lower Campus as the hub for manufacturing, warehousing, and development laboratories.**
- **Reinforce Genentech's parking strategy by concentrating parking at the perimeter of campus. See Appendix A for design guidelines for parking structures and interim parking lots.**
- **Maintain the centralized utility plant located along the Lower Campus hillside to support manufacturing and laboratory uses.**

- Existing Building to Remain
- Proposed Building
- Existing Open Space
- Hillside
- Central Spine Element
- Genentech Opportunity Site
- Major Campus Entry
- Primary View
- Primary On-street Pedestrian Path
- Secondary Pedestrian Paths
- Primary Off-street Pedestrian Path (Campus Loop)
- Open Space Connection
- Future Open Space or Activity Node
- Bay Trail & Public Open Space
- Central Utility Plant

Figure 2.4-1: Lower Campus Concept

Mid Campus

Advantageously located along the San Francisco Bay shoreline and bluffs, Mid Campus has unobstructed views across the bay. The Bay Trail continues through the neighborhood and provides views and open space at San Bruno Knoll. The Mid Campus is somewhat isolated geographically from the rest of the campus. Like the Upper Campus, the area is separated topographically from the neighboring Lower and South campuses.

Character and Use

Housing primarily research lab facilities, Mid Campus buildings are grouped into multiple building clusters. The close-knit, interactive environment, fostered by the existing con-figuration of buildings, sets the foundation for a more integrated Central Spine Element within the center of the neighborhood. Refocusing the Spine in to the center, new development will reinforce existing connections and create smaller, informal gathering and open spaces. The neighborhood will capitalize upon its unique setting by siting new buildings and amenities to connect to existing connections and open spaces.

Mid Campus Land Use Goals

- **Foster research and development environment with opportunities for small, informal employee gatherings.**
- **Create open spaces, small plazas, and landscaped pathways that will serve existing and new development.**
- **Integrate the Mid Campus into the overall campus pedestrian network through connections to the campus loop and Bay Trail.**
- **Maintain connectivity to Lower, South, and Upper campuses.**

Mid Campus Land Use Strategies

- **Maintain research and development uses as the major land use of the Mid Campus, with supportive functions as secondary functions.**
- **Distribute structured parking in Mid Campus as it relates to the campus-wide parking strategy. Transition interim surface parking on future building sites into consolidated campus parking structures. See Appendix A for design guidelines for parking structures and interim parking lots.**
- **As may be required for new development, potentially provide a centralized utility plant to support growth of research and development uses within the Mid Campus.**

Figure 2.4-2: Mid Campus Concept

Upper Campus

The Upper Campus has emerged as the geographic center of the Genentech Campus. The Upper Campus neighborhood occupies the highest point of development on San Bruno Hill and is visible from US 101 and much of the East of 101 Area. The campus' high vantage point provides expansive views to the San Francisco Bay and beyond, including San Francisco and Mt. Diablo on clear days, as well as San Bruno Mountain and Sign Hill to the west. Of the neighborhoods directly abutting the Upper Campus, the Mid and West campuses are most accessible while the Lower and South campuses are separated by steep topography. Although the Upper Campus is land-locked, there are tremendous bay views to the north and south along the hillside. The neighborhood also possesses a significant connection to the Wind Harp Park. Located at the top of San Bruno Hill, the Wind Harp Park are connected to the Upper Campus by a pedestrian pathway off of Grandview Drive.

Character and Use

The Upper Campus will serve as center of the campus with primarily administrative offices. Redevelopment will focus upon external place-making, views, and internal campus amenities, providing the foundation for an active Central Spine in Upper Campus. In addition, the Upper Campus will serve as the primary population center for the campus, with the greatest amount of intensity focused along the hillside to both capture views and define the Genentech Campus with a strong identity and skyline.

Upper Campus Land Use Goals

- **Expand upon research and development lab uses within the Lower Campus, focusing on adjacencies to existing facilities and the Mid Campus.**
- **Establish a strong Genentech identity and skyline with new development along San Bruno Hill.**
- **Create neighborhood and campus-wide amenities as anchors to the Upper Campus Central Spine, as shown in Figure 2.4-3.**
- **Promote pedestrian movement within the Upper Campus through continuous pathways, well-marked crossings along Grandview Drive, and view corridors to nearby amenities.**
- **Improve accessibility to adjoining campuses by expanding primary and secondary pedestrian connections (see Figure 2.4-3).**
- **Provide for shared pedestrian and service circulation along the Upper Campus Central Spine.**

Campus Land Use Strategies

- **Continue development of office and administrative uses as the main Upper Campus function.**
- **Distribute structured parking in Upper Campus as it relates to the campus-wide parking strategy. Transition interim surface parking on future building sites into consolidated campus parking structures. See Appendix A for design guidelines for parking structures and interim parking lots.**

Figure 2.4-3: Upper Campus Concept

West Campus

The West Campus is a new addition to the Genentech Campus, with much of the property acquired in 2004 and 2005. Bordered by East Grand Avenue to the south, Allerton Street to the west, and by San Bruno Hill to the east, this neighborhood's only direct adjacency to other parts of the campus is to the Upper Campus along a relatively steep ascent on Grandview Drive. The Campus Loop on the western base of San Bruno Hill connects the West Campus to Lower campus. As a result of its limited connectivity, West Campus is relatively isolated from the rest of the neighborhoods, though it will serve as a major gateway to the campus from East Grand Avenue.

Character and Use

This separation from the rest of the Genentech Campus necessitates a more independent role for West Campus in terms of use and campus activities. Connections to the rest of campus will be along Grandview Drive and the Campus Loop (Figure 2.4-4). With its strategic location at the busy intersection of Grandview and East Grand, West Campus will serve as a major point of entry. Landscape, open space, signage, and building alignments along Grandview will emphasize this entry point.

The West Campus geography and location define the intensity of development possible within the neighborhood. Greater FARs and building heights are possible along the western edge of the neighborhood, where lower elevations are substantially below those of the adjacent Upper Campus. The higher elevations within the neighborhood are both limited by Federal Aviation Administration regulations and the need to maintain a view corridor to the Wind Harp Park.

West Campus Land Use Goals

- **Develop West Campus as the major southern and western gateway into the Genentech Campus.**
- **Emphasize connections to the Upper Campus loop extension at the base of San Bruno Hill, and along Grandview Drive to Upper Campus.**
- **Intensify development and maintain views where available.**
- **Ensure that views from adjoining campuses are not compromised by higher development intensities and heights in West Campus.**

West Campus Land Use Strategies

- **Develop administrative and office uses as the main West Campus function.**
- **Reinforce Genentech's parking strategy by concentrating parking at the campus entry (East Grand Avenue/Grandview Drive). See Appendix A for design guidelines for parking structures and interim parking lots.**

- Existing Building to Remain
- Proposed Building
- Existing Open Space
- Hillside
- Central Spine Element
- Genentech Opportunity Site
- Major Campus Entry
- Primary View
- Primary On-street Pedestrian Path
- Secondary Pedestrian Paths
- Primary Off-street Pedestrian Path (Campus Loop)
- Open Space Connection
- Future Open Space or Activity Node
- Bay Trail & Public Open Space

Figure 2.4-4: West Campus Concept

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3 URBAN DESIGN

Genentech's unique setting and spectacular views of the San Francisco Bay and the region define the campus as a major focal point within the East of 101 Area. The Master Plan capitalizes on natural and recreational assets of the site, using topography and views to create distinctive connections, gathering spaces, and campus identity. However, campus continuity and accessibility are challenged by steep terrain and high winds that accompany its hilltop and bayshore location.

In response to this unique setting, the overall design objective is to create a walkable, pedestrian-oriented campus within the context of a clear, cohesive campus identity. Thus, urban design themes in this chapter focus on connectivity, views, character, and pedestrian experience. These themes are expressed in terms of materiality, signage, lighting, and site furnishings; as well as the provision and definition of walkways and open space throughout the campus. In turn, the overall organization and hierarchy of these elements define campus neighborhoods, primary circulation paths, and areas for recreation and contemplation throughout the campus.

This chapter presents urban design concepts as they relate to specific elements of the campus, and includes discussion of public streets, sidewalks, and shuttle stops; campus entries; security and public access; pedestrian walkways; open space and views; and building massing and scale. Each section provides goals and strategies that will guide future development within the campus, which are further augmented by campus-wide design guidelines in Appendix A.

Urban Design Concepts

The following provide direction for developing the overall campus structure described in the previous chapter:

1. **Maximizing the waterfront and hilltop setting of the Genentech Campus;**
2. **Facilitating pedestrian connections and accessibility along major campus corridors;**
3. **Fostering vital and active pedestrian-oriented Central Spines within each neighborhood;**
4. **Ensuring that development capitalizes on view corridors and fosters a human campus scale;**
5. **Promoting flexibility to respond to long-term horizon and ensuring that the campus' development potential is realized; and**
6. **Providing the basis for specific architectural, landscape, and site design guidelines.**

Courtyard at Founders Research Center (FRC) with views to San Bruno Mountain.

3.1 Streets

Street Network

The Genentech Campus is comprised of two major street networks: The primary street network includes major connections to the East of 101 Area and through streets within the campus; and the secondary, more informal street network that includes access and private roads that serve employee, shuttle, and service vehicles. These networks, along with changes to streets in the broader East of 101 Area, are shown in Figure 3.1-1.

Like the rest of the East of 101 Area, the Genentech Campus street pattern evolved from natural topography and landfill development. Characterized by circuitous, irregular connections, the resulting system of streets provides limited connectivity both within and to the Genentech Campus.

Within the campus, circulation is focused along four major streets—Forbes Boulevard, DNA Way, East Grand Avenue, and Grandview Drive. Both Forbes Boulevard and East Grand Avenue serve as the main conduits to the Master Plan Area from US-101 and other parts of the city, while DNA Way and Grandview Drive provides the only through connection within the main campus. Planned and implemented traffic improvements to the Oyster Point Boulevard and East Grand Avenue interchanges with US-101 further underscore the primacy of Forbes Boulevard and East Grand Avenue as major connections to campus. A potential future extension of Railroad Avenue by the City of South San Francisco would create a direct connection to the Genentech Campus at East Grand Avenue and Allerton Avenue.

In addition to the major streets within the campus, a secondary street network including internal private streets plays an important role for service and freight movement. Some of these streets—like Point San Bruno Boulevard—are informal in nature and are shared by pedestrians, service and delivery vehicles, shuttles, and automobiles. The Master Plan addresses new connections between neighborhoods and provides direction for design of additional pedestrian crosswalks. These changes include:

- Designating the Lower Campus Spine as a pedestrian-oriented street with limited allowance for service, delivery, and emergency vehicles;
- Connecting Point San Bruno Boulevard to South Campus via a future private road connection for service, shuttle, and emergency vehicles; and
- Providing pedestrian crossings to improve safety as the campus grows.

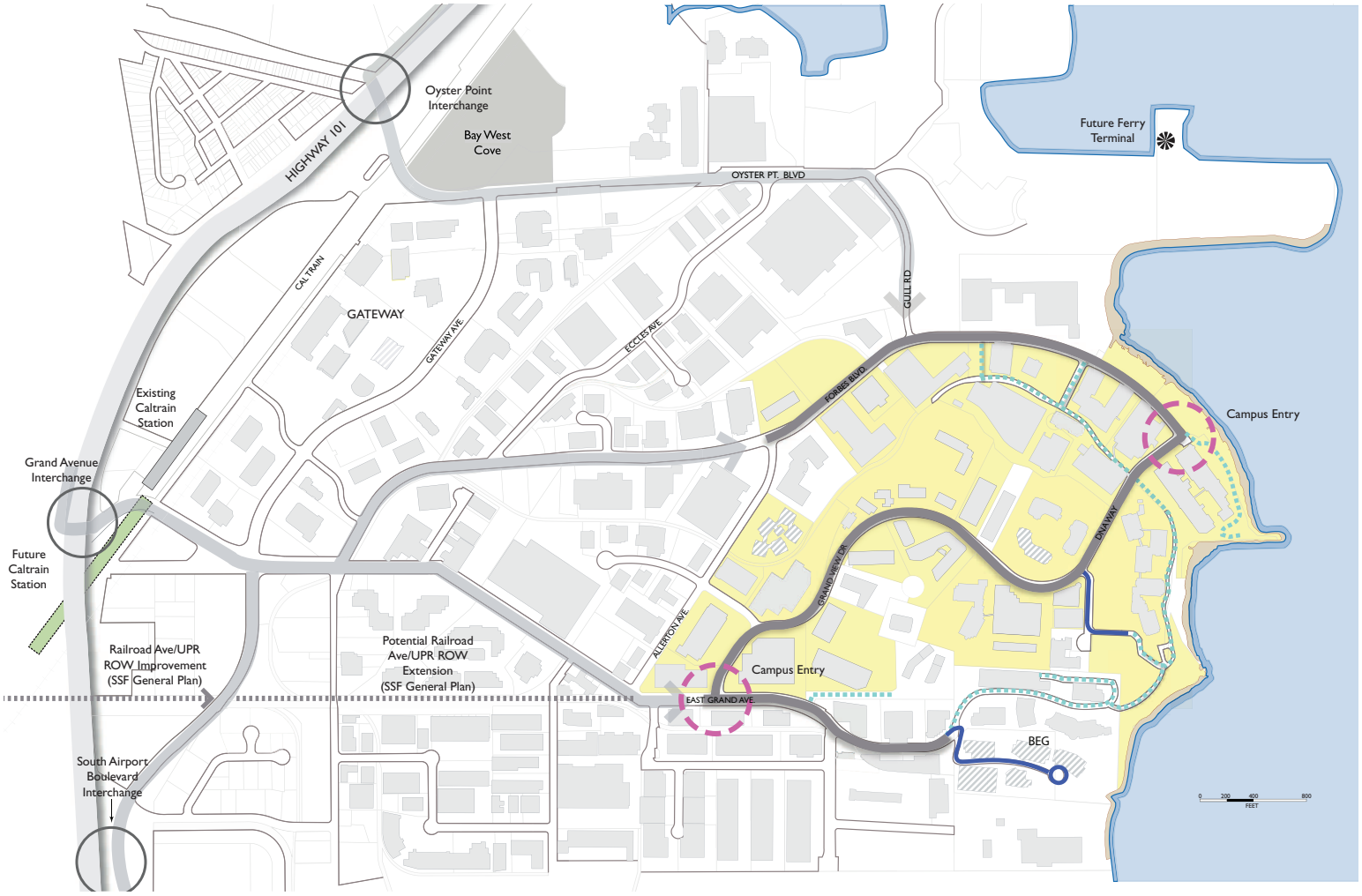


Figure 3.1-1: Street Network

Streetscape and Character

Streets are essential to campus identity, movement, and pedestrian safety and comfort. Street design includes a wide variety of elements, such as sidewalks, medians, landscaping, site furnishings, lighting, and pavement. Themes to consider in creating an effective street design include enclosure, continuity, character, relationship between pedestrians and traffic, shade, wind, and light.

Streets in the East of 101 Area are largely designed to facilitate automobile and truck movement. As Forbes Boulevard and Grandview Drive transition into the Genentech Campus, the higher speeds and limited visability counter pedestrian and bicycle accessibility.

By 2016, the Genentech Campus is projected to double in size, substantially increasing the number of employees and visitors to campus. Geographic expansion, increased development intensity and increase in the number of people using the campus will necessitate neighborhood connectivity by bicycles, pedestrian paths, and shuttles. Easy movement between neighborhoods and buildings is key in fostering efficient collaboration and productivity for employees.

Streetscape design and character will need to reflect the desired multi-modal campus circulation system, with greater accessibility for pedestrians between campuses as well as neighboring businesses. Public streets will accommodate traffic, bicyclists, and shuttle stops, as shown in Figure 3.1-2 and the potential cross-section of Forbes Boulevard in Figure 3.1-3. Likewise, along Grandview Drive and DNA Way, bicyclists and campus shuttles will be accommodated with bike lanes and pull outs (Figure 3.1-4). Sidewalks and pedestrian crossings along Grandview Drive and DNA Way are recommended to foster pedestrian comfort and safety—as illustrated in Figure 3.1-4—while maps and signage will help orientation.

Landscape elements and responsiveness to setting are also key issues in street design and character. A unified landscape palette will knit the campus together: consistent unified tree planting and street treatments along public streets will promote continuity, distinction, and identity for the Genentech Campus. Continuity along Grandview Drive is especially important, as the street is the main connection through the campus. As such, approximately 25 percent of the landscape along Grandview Drive will be improved to foster and enhance campus identity. Landscape elements along Grandview and throughout the campus will be consistent with East of 101 Area Plan Guidelines for street trees and landscape buffers.

In addition, a unified lighting concept throughout the campus will also enforce Genentech's identity thus, improvements to lighting along public streets will be consistent with lighting within the campus at pedestrian walkways and parking lot areas. These will provide adequate lighting and will be reviewed and approved by the City.

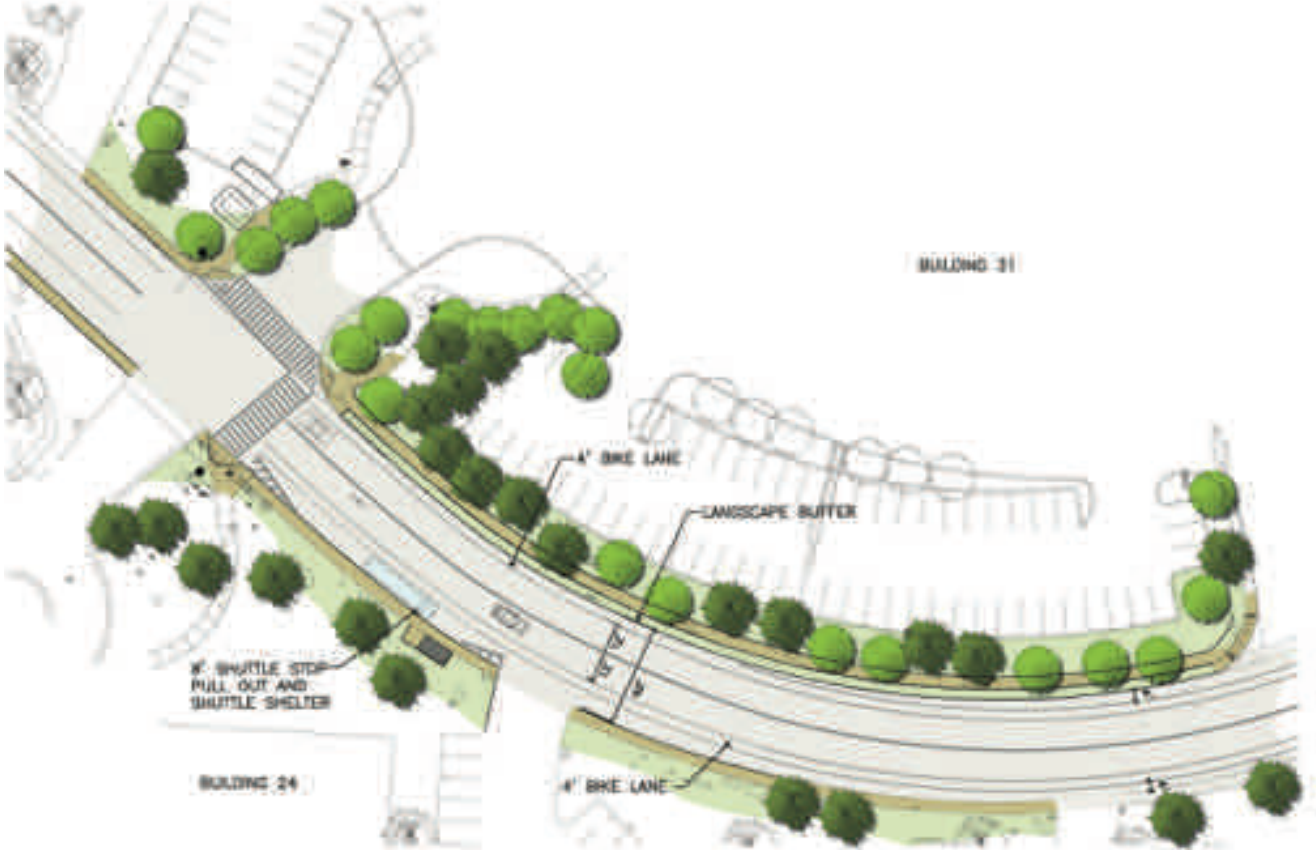
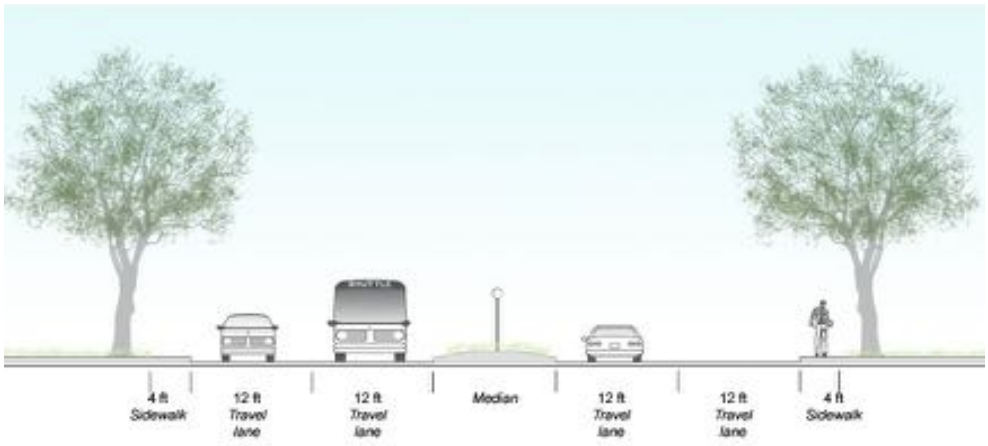
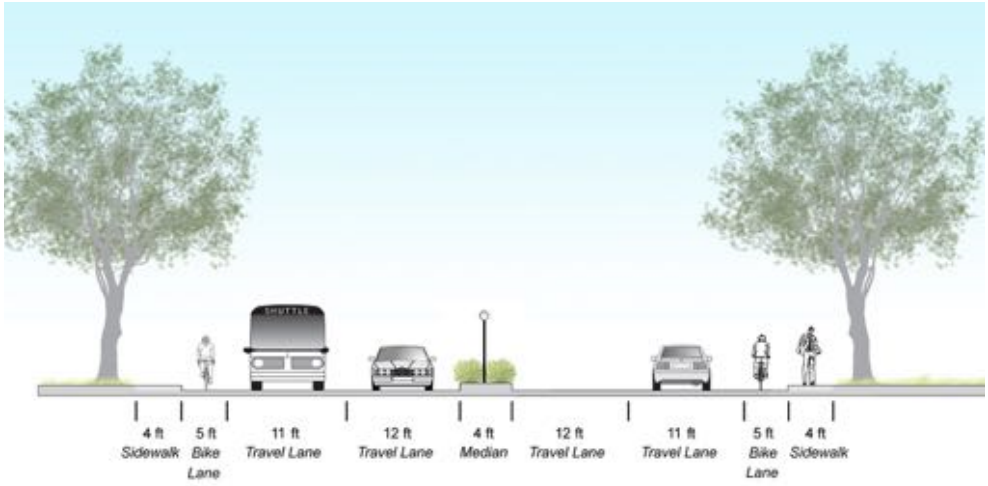


Figure 3.1-2: Shuttle Stop and Streetscape Concept at Grandview Drive



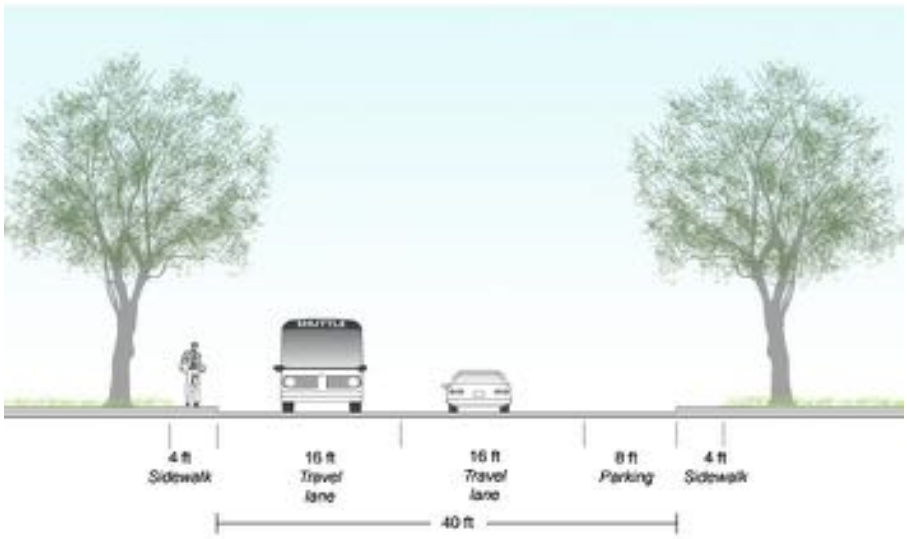
Existing



Future

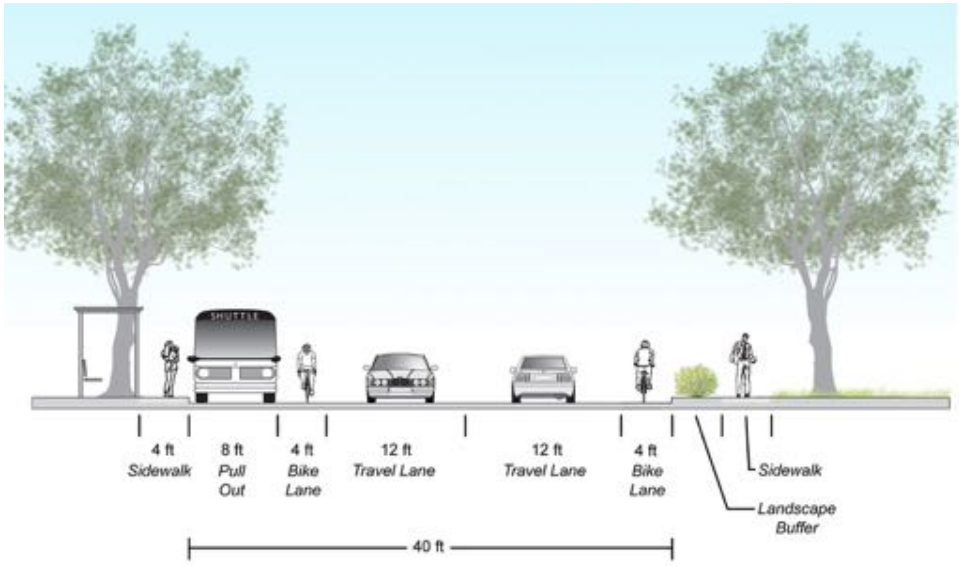
Figure 3.1-3: Existing and Future Sections of Forbes Boulevard

Existing streetscape along Forbes Boulevard near Gull Drive.



Existing

Similar to Grandview Drive, wide travel lanes, street parking, and narrow sidewalks characterize the northern end of DNA Way.



Proposed

Figure 3.1-4: Existing and Future Sections at Grandview Drive

Shuttle Stops

Shuttle circulation is an integral element of the Genentech Campus—thus, the design and location of shuttle stops play an important role in the campus streetscape. The relationship of shuttle stops to public streets is demonstrated in a future plan and DNA Way in Figure 3.1-5. Utilizing the existing width of the street, shuttle stops will be located along the edge of the right-of-way. Bus bays will be utilized at campus stops on Cabot Road and the Grandview Drive stop near the East Grandview Avenue intersection.

Street landscape will also play an important role in shuttle stop design. Landscape buffers between the sidewalk and street edge will control and define opportunities for pedestrian crossings. Likewise, plantings adjacent to shuttle stops will create a distinct, identifiable setting and boundary for the shuttle stop areas, as well as sun and weather protection. Landscape and site design strategies will include:

- Site appropriate landscaping for weather and sun protection, and to define shuttle stop area;
- Exterior waiting area adjacent to shelter and sidewalk;
- Sidewalk access meeting ADA accessibility standards; and
- Concrete platform.

For Shuttle Shelter design guidelines, see Appendix A.

Landscaped buffers along the sidewalk edge define shuttle stop and crosswalk locations.

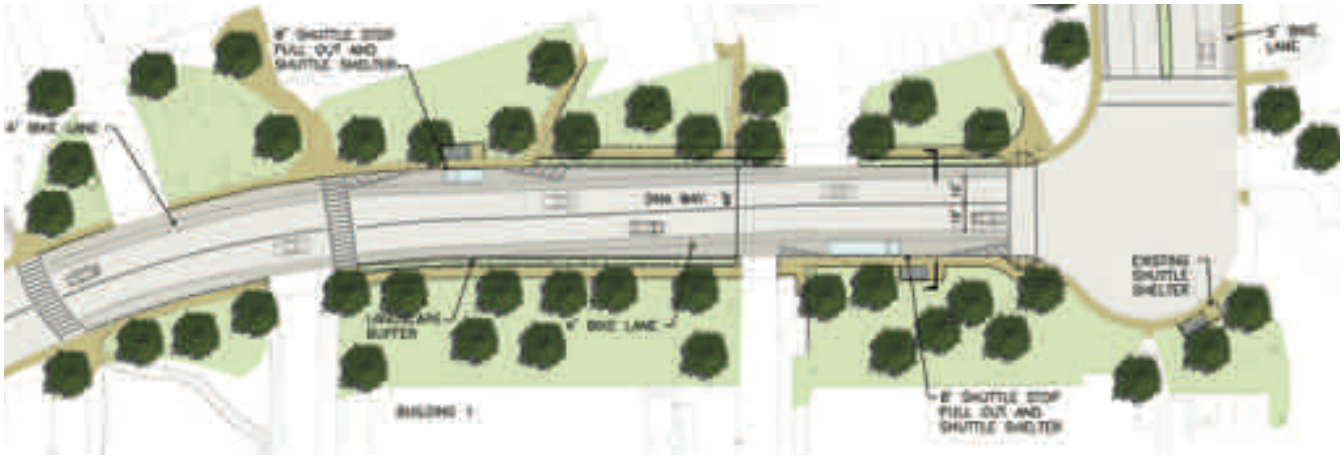


Figure 3.1-5: Shuttle Stop and Streets are Concept at DNA Way

Crosswalks

Complementing streetscape and shuttle stop design and location, campus crosswalk design focuses on safe and efficient circulation between campus buildings, alternative transit modes, and parking areas.

Campus crosswalks are comprised of two different typologies, the design of which are related to location and traffic flow along public streets. Type I crosswalks are used at locations where vehicles are brought to a controlled and uncontrolled stop, and thus comprise painted striping. Type II crosswalks are used at crossings where vehicles are not brought to a controlled stop and where there is potential for high pedestrian traffic (e.g. mid-block crossings). Thus, these crosswalks are designed to be conspicuous for drivers, and include a more visible striping pattern as well as flashers and/ or pedestrian-activated signalization. Specific design details for each crosswalk type are delineated in Guideline A.2-4, in Appendix A to this Master Plan.

View of Typical Type I Crosswalk at controlled stop.

View of Typical Type I Crosswalk at uncontrolled stop. Typical Type II Crosswalks will have similar striping with in-ground flashers.

Streetscape Goals

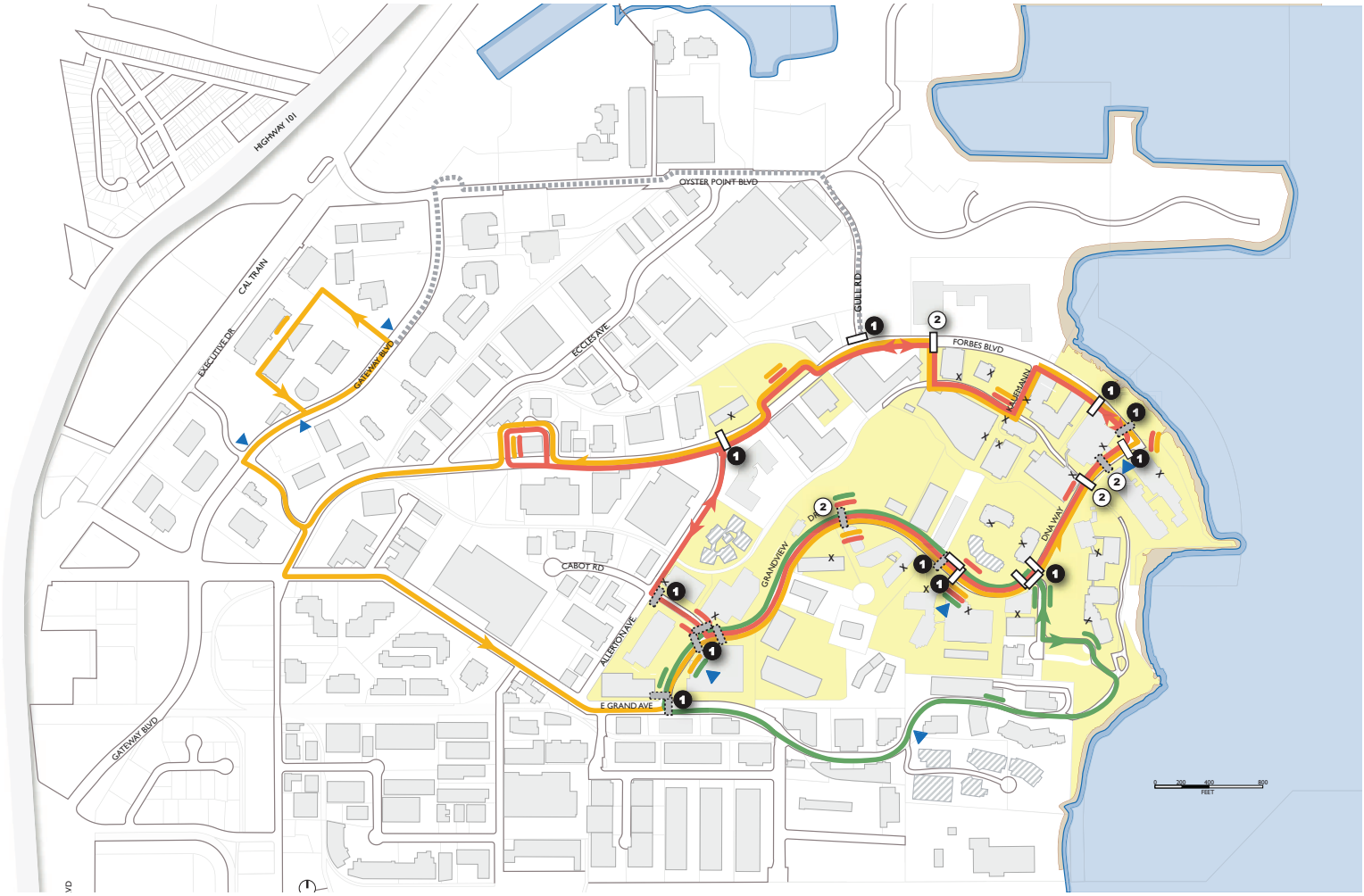
- **Retain streetscape experience with consistent planting approach, providing sense of enclosure, and protection from wind, sun, and vehicles.**
- **Create sense of campus entry at East Grand Avenue and Grandview Drive as well as the Forbes Boulevard entry to campus.**
- **Retain Forbes Boulevard and Grandview Drive corridors as key access routes through the Genentech Campus.**
- **Foster a pedestrian-friendly environment with special emphasis on pedestrian crossings and continuous sidewalks.**
- **Locate stops to minimize impact to traffic patterns on streets.**
- **Provide safe and highly visible crossings along public streets.**

Streetscape Strategies

- Support the City's efforts for any necessary modifications to the campus public streets.
- Implement traffic calming measures on Forbes Boulevard, DNA Way, and Grandview Drive.
- Develop cohesive facility streetscape with consistent site elements including lighting, signage, site furnishing, and bus shelters.
- Use landscape to create a distinct campus identity, including landscape strips, consistent street tree spacing, and repetitive planting elements. Landscape elements should be consistent with East of 101 Area plan Policy DE-56.
- Enhance sidewalks by separating pedestrian and vehicular movements.
- Refer to Figure 3.1-5 for typical design and the Implementation Plan for design guidelines regarding the relationship between shuttle stops, sidewalks, and the street.
- Design shuttle shelters to meet guidelines described in Appendix A.2: Vehicle and Pedestrian Accessibility.
- Extend sidewalks to complete a continuous network of on-street pedestrian pathways on both sides of campus streets. Implement sidewalk and crosswalk improvements as related sites are developed.
- Ensure adequate night-time lighting levels along campus street network.
- Ensure adequate street lighting per City of South San Francisco guidelines.

Crosswalks

- Strategically locate crosswalks at high-traffic walkways and along the Campus Loop to enhance pedestrian connectivity within the campus.
- Provide striping at all Type I crosswalk locations , as indicated in Figure 3.1-6.
- Provide striping and flashers at Type II crosswalks. Utilize pedestrian-operated signalization where necessary.
- Develop crosswalks in conjunction with campus redevelopment.



- Type I Crosswalk
- Type II Crosswalk
- Existing Crosswalk
- Future Crosswalk Locations
- Caltrain/BART/GenenBus Shuttle Stops
- Proposed Route Stops
- Gateway Express Shuttle
- DNA Shuttle (Bi-directional)
- South Campus Shuttle (Bi-directional)
- Future Extension to Bay West Cove
- X Main Building Entrance
- Existing Building
- Future Building

Figure 3.1-6: Future Crosswalk Locations at Genentech Campus

3.2 Campus Entries

Campus entries provide a significant visual and physical demarcation of campus identity and perimeter. Designed to welcome both employees and visitors, campus entries are not intended to limit access on public streets or hinder public access to the Bay Trail. Rather, emphasized by a combination of streetscape, landscape, and signage elements, these entries serve as wayfinding tools for campus visitors and the public.

The Genentech Campus has two major entrances into the campus—the intersection of Grandview Drive at East Grand Avenue in West Campus and Forbes Boulevard at DNA Way in Lower Campus (as identified in Figure 3.1-1 and the Implementation Plan in Appendix C). With Genentech-owned parcels on both sides of Grandview Drive at East Grand Avenue, the West Campus entry will become the primary entrance for employees and visitors. This entry will be further emphasized once the Railroad Avenue/East Grand Avenue road extension is fully realized. (See Figure 4.1-1 for future road improvements in the East of 101 Area.)

As redevelopment occurs in sites adjacent to these campus gateways, distinctively-designed streetscape, landscape, and signage elements will establish these areas as important transitions into the campus environment. Campus entry design may incorporate several elements:

- Landscape elements such as trees, colorful foliage and flowers, earth berms, and low walls;
- Changes in hardscape materials, through differences in texture and color;
- Special lighting elements, with emphasis upon design and placement;
- Monument signage, incorporated into landscape and hardscape design; and
- Signature public artwork such as sculpture elements.

Public Art

As used in this Master Plan, "Public Art" means works of art conceived and executed in any discipline or medium, including visual, media, and temporary works. These works of art will be located at campus entries and strategic locations on campus where they will be visually accessible to the public from public streets or public parks. The installation, movement, or replacement of Public Art required in this Master Plan shall be subject to approval by the Community Development Director with respect to the quality of artwork, but not the subject matter, media, or discipline.

Campus Entries Goals

- **Enhance the Genentech Campus' unique identity by emphasizing entry points.**
- **Establish clear wayfinding tools and directions for visitors to follow.**
- **Provide Visitor Stations at campus entries to assist visitors and public.**

Campus Entries Strategies

- **Enhance the sense of arrival at key entry points to the campus through landscape, signage, and other design elements (shown in Figure 3.1-1).**
- **Provide for visitor assistance areas at campus entry points.**
- **Maintain and enhance the campus signage program for wayfinding.**

3.3 Security and Public Access

Public access, safety, and security are important issues to address in an open campus environment like the Genentech Campus. With the Bay Trail and Wind Harp Park located within the campus Planning Area, incorporating both employee and public access to these areas is essential to maintaining an open, well-integrated campus environment and experience. As such, in support of an open, accessible environment, the campus perimeter will only be defined by landscaping and earth berms.

In addition to accessibility, the security and safety of Genentech employees and visitors also affect the campus quality of life. As such, the Master Plan focuses on methods to ensure ease of access and parking for visitors, as well as on-campus employee safety. Assistance to visitors and employees will be available at campus "visitor stations," where visitors will be greeted by Genentech staff and receive badges, maps, and directional assistance. Building lobby reception areas will also provide assistance to visitors as needed. Specific goals and measures to ensure campus access and security are listed in the following goals and strategies.

Security and Public Access Goals

- Maintain public access to the Bay Trail, public amenities and Wind Harp Park.
- Ensure accessible and convenient visitor parking.
- Allow for access control for vehicular entry to neighborhood Central Spines.
- Monitor safety and security of employees and visitors.

Security and Public Access Strate

Public Access

- Provide access to the Bay Trail and public amenities, Wind Harp Park, and approved allocated public parking.
- Provide "visitor stations" at campus entries to assist visitors: Integrate into building and site design.
- Provide visitor parking for each neighborhood for convenience and ease of access.

Security

- Provide controlled access to each building lobby including:
  - Card reader at all entries to buildings.
  - Reception stations at main building entries.
- Utilize a significant degree of transparency at building lobbies to assist security. For example, use of clear glass is preferred.
- Provide adequate lighting at building entries and all exterior areas for safety and security during nighttime use.
- Integrate locations of security cameras with buildings to permit clear, unrestricted sight lines.
- Provide emergency phones throughout the campus.
- Follow guidelines described in A.5-5: Screening and Fencing for any required security fencing.
- Allow for access control at all parking structures, parking lots, and visitor parking areas.

3.4 Pedestrian Connections

A strong pedestrian network is essential to ensure an integrated and walkable campus. The coordination of pedestrian movement with shuttle bus stops will enhance neighborhood and campus connectivity. Likewise, clear and well-designed pathways, signage, and design of buildings can increase the coherence of the campus. Site elements such as trees, paving, and seating/benches can further define the character and role of pathways.

While campus-wide and neighborhood connections are more efficient and direct in nature, pathways can also be designed to be contemplative or to enable jogging/running, and can help promote connections to the bayfront and the Point San Bruno Park. These different typologies form a rich, multi-layered circulation network, offering multiple choices for movement and experiencing the campus.

As described in Section 2.1: Campus Structure, campus circulation occurs at several levels. Like the varied street network on campus, the pedestrian environment is a system of pedestrian walkways (illustrated in Figure 3.4-1). In the Master Plan, the primary layer comprises the Central Spine elements within each neighborhood and the major connective elements between them. The neighborhoods are further connected to each other and the rest of the campus by a secondary network of walkways.

Primary Walkways

The primary pedestrian network helps facilitate the movement of people throughout the campus and connect transit stops and parking facilities with other campus destinations. These walkways include campus Central Spines and the major crosswalks and walkways that connect them. This overall high-traffic pedestrian system comprises the Campus Loop. Shown in Figure 3.4-1, the Campus Loop walkways will be identified through distinctive design of paving, landscaping, site furnishings, and lighting. These elements will be consistent within each neighborhood.

However, variations in design will occur to accommodate specific uses and character of different neighborhoods. For instance, the Lower Campus Central Spine has limited vehicular access, thus creating a shared use condition between pedestrians and vehicles. As a result, specific design measures that facilitate vehicular movement while ensuring pedestrian safety will create a unique Central Spine environment for the Lower Campus. Design guidelines that pertain to this Central Spine condition are listed in Appendix A.2: Vehicular and Pedestrian Accessibility. Further discussion of Central Spine design and development is included in Section 3.7 Central Spines.

The remaining Campus Loop walkways and Central Spines are designated as primarily pedestrian circulation paths. These paths will be demarcated by the use of specific paving and landscape materials, and will incorporate site furnishings for seating areas that access views, building entries, and quiet areas for contemplation.

Primary Walkways Goals

- Create a safe and accessible pedestrian environment for high-pedestrian traffic connections.
- Create a continuous, cohesive off-street pedestrian connection that links the Lower, Upper, Mid, and West Campuses.
- Minimize future conflicts between service and goods movement and pedestrian walkways.

Primary Walkways Strategies

- Support pedestrian movement with frequent circuits of the shuttle bus and well-placed and designed shuttle shelters and crosswalks. (Refer to Section 3.1 for shelter placement and design.)
- Use consistent lighting design and light levels along campus pedestrian walkways, using appropriately-spaced 15-foot high fixtures. See Appendix A: Lighting, for design guidelines.
- Design walkways with a minimum width of five feet, with higher-use walkways as 6-8 feet wide, depending on volume of traffic.
- Use materials outlined in Appendix A: Hardscape Materials and Textures.
- Provide site furnishing along Central Spines, including seating elements for views, next to entries, and areas for quiet contemplation.
- Use site elements such as landscaping, site furnishings, and changes in paving materials to accommodate both pedestrian and vehicular traffic where access is shared.
- Develop primary walkways in conjunction with campus redevelopment.

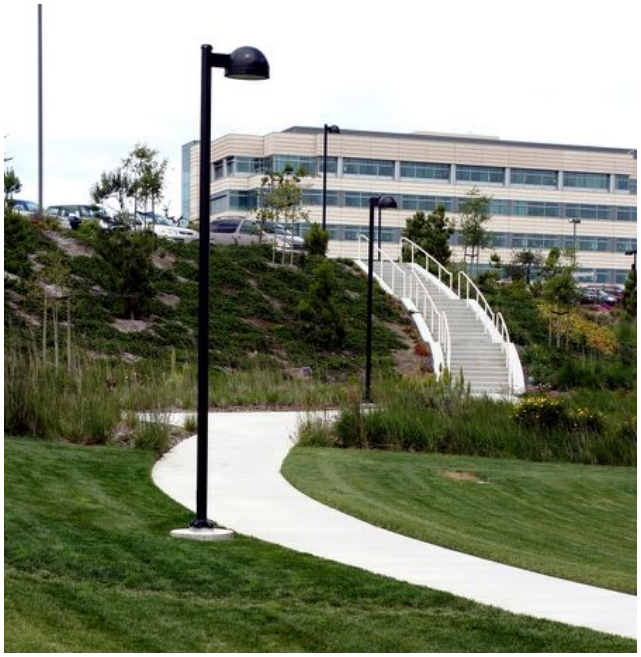
Varied plant material and use of natural topography adds visual variety to the Mid Campus.

Detail of special paving on primary walkways and landscaping along campus walkways in Lower Campus.

Secondary Walkways

These off-street walkways traverse hillsides or streets to make direct connections between neighborhoods and to major site elements such as the Bay Trail and the Wind Harp Park (see Figure 3.4-1). This second tier also includes walkways that are more recreational in nature, connecting to the Campus Loop, neighborhoods, and natural assets via a network of less-direct pathways along hillsides and bluffs. This recreational element of the pedestrian network offers an additional realm of experience to the campus, serving as an asset for employees and accentuating the natural setting and environment.

New connections in the Master Plan provide a combination of physical and visual linkages to help pedestrians navigate between neighborhoods. They include stairs and ramps to traverse often formidable elevation changes; enhanced site and pavement elements for connections along the Campus Loop, Forbes Boulevard, and Grandview Drive; and Central Spine or walkways within each neighborhood. With increased connectivity and accessibility, employees will be able to cross to neighboring campuses and amenities easily and efficiently.



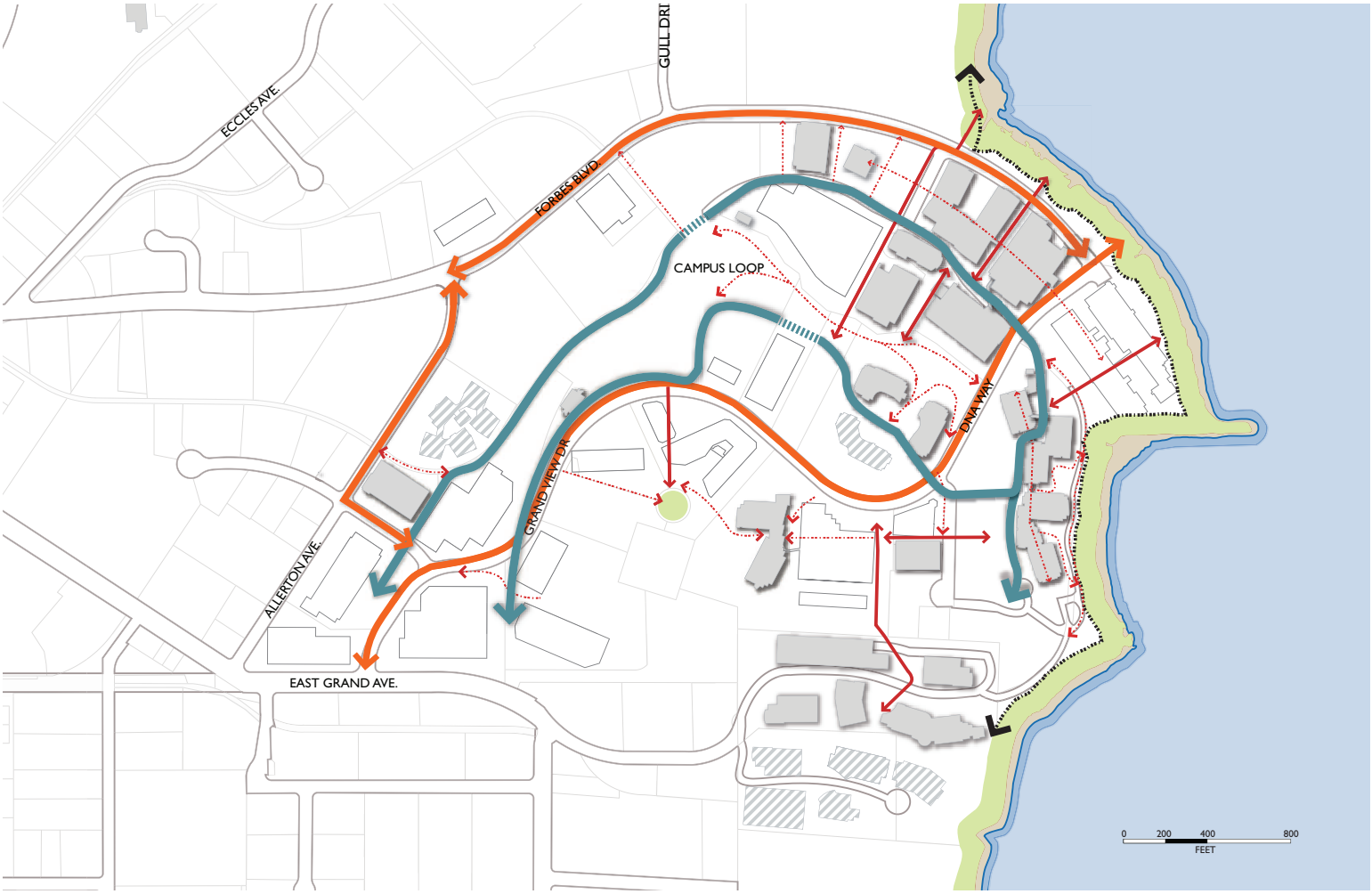
Potential connection from Campus Loop between Lower and West campuses. The quality of design could be similar to that of the secondary pathway in Mid Campus shown at bottom.

Secondary Walkways Goals

- Create an alternative campus trail network that emphasizes the natural environment.
- Foster physical and visual linkages between neighborhoods and site amenities, using landscaping to enhance campus walkability.
- Use landscaping to enhance pedestrian pathways, providing visual interest and variety, as well as moderate wind protection.

Secondary Walkways Strategies

- Enhance pedestrian accessibility through the use of ramps and stairs as vertical circulation options between neighborhoods.
- Use view corridors and sight lines along walkways to visually connect neighborhoods, open spaces, and amenities.
- Align paths and stairs to views of the mountains, the bay, and distant open spaces, when possible.
- Create an informal landscape design aesthetic for secondary walkways throughout the campus, incorporating site furnishings and signage where appropriate.
- Use consistently-spaced 15-foot high light fixtures, with appropriate light levels. See Appendix A: Lighting, for design guidelines.
- Design walkways with a minimum width of five feet and allow combination of walkway with fire lanes and/or low-traffic vehicular access.
- Use materials outlined in Appendix A: Hardscape Materials and Textures for paving.
- Develop secondary walkways in conjunction with campus redevelopment.



Primary Walkway
- On-Street
- Campus Loop
- Non-Genentech-owned Campus Loop Connection

Secondary Walkway
- Neighborhood Connector
- Informal Path
- Public Space and Bay Trail

- Genentech Owned Building - Existing to Remain
- Genentech-owned Building with Potential for Redevelopment
- Future Building

Figure 3.4-1: Pedestrian Network

3.5 Views

Views of San Bruno Mountain, San Francisco, the San Francisco Bay, and Mt. Diablo are significant assets to the Genentech Campus. Distant views and a sense of expansiveness are critical to balance the circuitousness of pedestrian and vehicular circulation, as well as the varied topography and limited sight lines within the campus. The Master Plan supports preserving and reinforcing existing views through the development of view corridors along the Campus Loop.

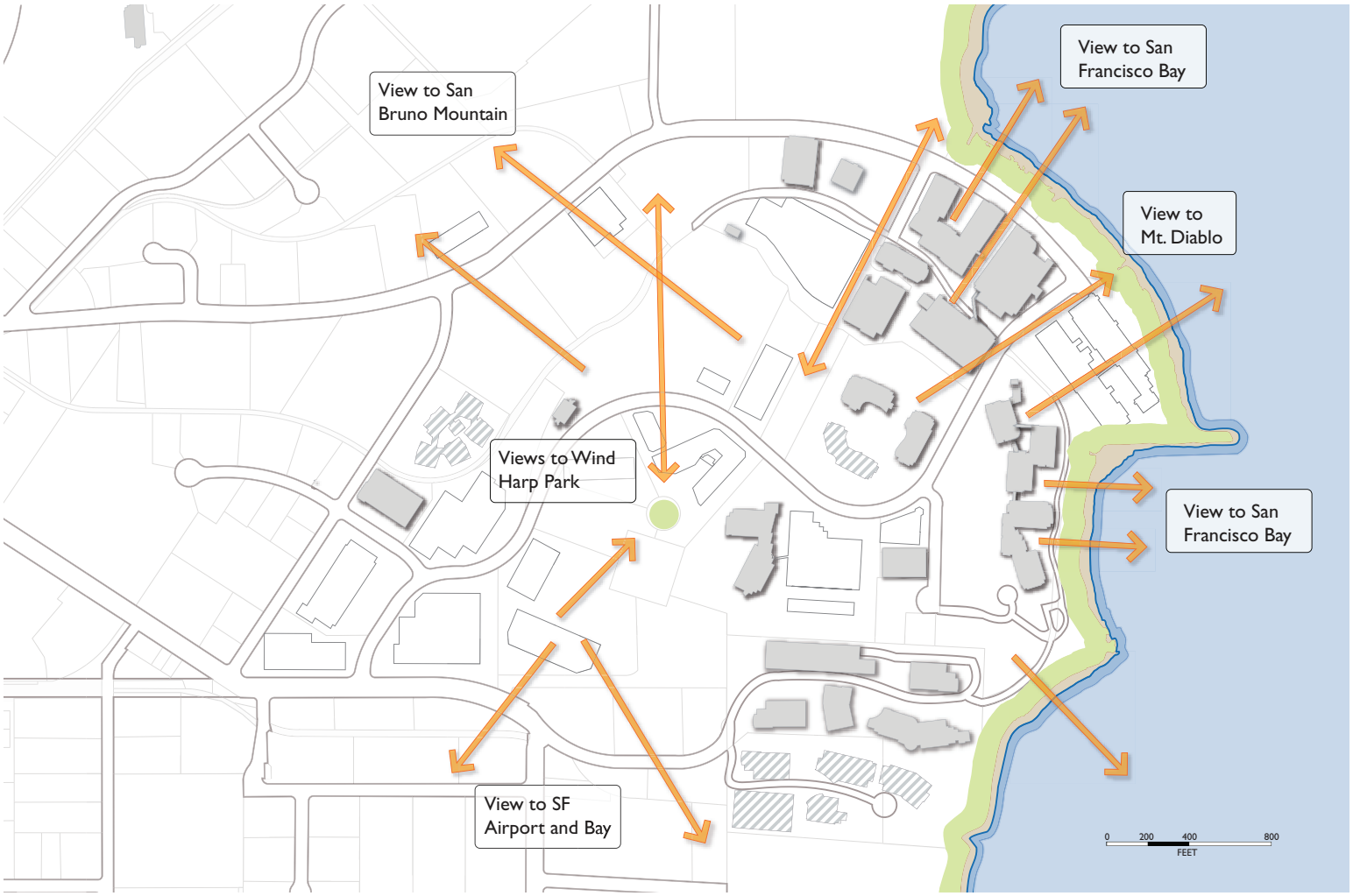
View of the Bay as seen from Founders Research Center.

Views Goals

- **Maintain views of San Francisco, the San Francisco Bay, San Bruno Mountain, and Mt. Diablo with appropriate development standards.**
- **Capture views of San Bruno Mountain and the Bay as Upper Campus sites are redeveloped.**

Views Strategies

- **Maintain view corridors to the Bay, San Francisco, Mt. Diablo, and San Bruno Mountain.**
- **Discourage construction of bridges in view corridors.**
- **Ensure that streetscape design in the designated corridors has appropriate planting for preservation of views.**
- **Align buildings and orient outdoor spaces to view opportunities (as shown in Figure 3.5-1).**



View Opportunity
Genentech Owned Building - Existing to Remain
Genentech Owned Building with Potential for Redevelopment
Future Building

Figure 3.5-1: Views

3.6 Open Space

Campus landscape design provides a framework for an overall Genentech identity. Within this framework, each neighborhood is developed with its own unique character, utilizing variations in plant type, variety, and design.

Open Space Network

The Genentech Campus open space network, as first defined in Chapter 2: Land Use and Structure, consists of multiple open space designations: public (such as the Bay Trail), passive (non-developable bluffs), connective (landscaped pedestrian connections between major open spaces), and neighborhood-oriented ("outdoor rooms" like plazas, courtyards, lawns, etc.). These spaces are interwoven throughout the campus and play an important role in how neighborhoods and the overall campus are structured. Whether they are formal lawns, informal courtyards or plazas, or shoreline bluffs and park areas, open space and views throughout the campus provide a basic organizing element for buildings, streets, and walkways.

Figure 3.6-1 shows the overall extent of open space throughout the campus. As current surface parking areas are filled in with development—both built and landscaped—the campus built environment will intensify. New development will be focused around key open spaces that either are structured along a neighborhood Central Spine, or focused on connectivity between major natural elements like the Bay shoreline, views, or hillside bluffs. These open spaces—which are comprised of courtyards, lawns, walkways, and plazas—are shown in relation to the built environment and major connective spaces, as well as hillside and shoreline areas in Figure 3.6-1.

The following sections describe the campus open space network in greater detail, and include discussion of public open space such as the Bay Trail and Wind Harp Park; passive and connective spaces such as the bluffs and walkways through the campus; and neighborhood-oriented space that directly relates to the built environment. Landscape design is also discussed, in relation to the concept of formal and informal landscapes and their relationship to the natural environment and architecture of the campus.

Passive Open Space
Connective Open Space
Genentech "Outdoor Rooms" (Courtyards and Plazas)
Public Open Space
Neighborhood Oriented Open Space

Figure 3.6-1: Open Space Network

Public Open Space

Public open space adjacent to the Genentech Central Campus is part of a regional network of parks and trails including the BCDC Bay Trail. This waterfront area is the "front porch" of the campus, with vistas across the Bay to Mt. Diablo, San Francisco, and the San Francisco International Airport. With a dramatic landscape of bluffs and points, the waterfront is an area for sitting, walking, jogging, and bicycling along the water's edge. These activities will be enhanced by public amenities provided by Genentech, including a food concession and public restroom facility, recreational space and campus entry plaza along Forbes Boulevard. Public parking will be provided in Lower Campus (21 spaces) and Mid Campus (five spaces) adjacent to the Bay Trail. In addition, expanded parking availability in Genentech employee parking lots adjacent to the Bay Trail on weekends and evenings (from sunrise to sunset) will also support use and access to public open space. Figure 3.6-2 provides an overview of these open space public facilities.

The Wind Harp Park is located in the center of the Genentech campus, at the top of San Bruno Hill, more of a visual icon within the campus. Like the waterfront area, providing public access to the park will also be essential in creating a varied and well-connected open space network within the campus.

View of San Bruno Point along Bay Trail.

Figure 3.6-2: Bay Trail and Shoreline Amenities

Passive and Connective Open Space

Additional passive spaces within the campus include the bluffs and ridges along San Bruno Hill. Part of the network of shoreline bluffs that extends through the campus, these steep slopes act as both dramatic backdrops and foregrounds for the Lower, Mid, and Upper campuses. Although these spaces are limited in terms of occupation, the Master Plan establishes key pathways and connections between neighborhoods that allow employees and visitors to experience the open space through circulation and pathways.

More defined connective open spaces link major open spaces to public amenities and primary circulation paths through visual and physical means. (See Figure 3.6-1) Planned new green connections include:

- Lower Campus to Upper Campus hillside stair and landscaped pathway; and
- Open space promenade from the Lower Campus Spine to the Bay.

Neighborhood-Oriented Open Space

Within the campus, a series of "outdoor rooms", including courtyards, plazas, and central greens, define the Central Spines of each campus neighborhood. Located in the heart of each neighborhood and forming the nodes of the Campus Loop, they are the most visible elements of the open space network within the campus. (See Figure 3.6-1) A series of open space transitions, courtyards, and promenades, these spaces will be active and open in response to their settings, capitalizing on vistas and view corridors, as well as proximity to amenities.

Landscape Design

Campus landscape design starts at the edge of the San Francisco Bay and the Bay Conservation and Development Commission's (BCDC) Bay Trail. The planting palette is a carefully designed balance between California native and Mediterranean plants, creating a California coastal aesthetic. When planted in natural flowing patterns, an informal design character for the perimeter surrounds the neighborhoods and extends to meet many of the pedestrian spines.

More formalized landscape design exists within the neighborhoods and along major pedestrian and open space connections. Key opportunities for distinctive design features in the Master Plan include neighborhood Central Spines, campus entries, and open spaces. The campus open space network also includes 4,200 linear feet of natural bluffs and steep slopes that provide opportunities for views, pedestrian circulation, and passive recreation. Design guidelines for how both formal and informal landscape design is integrated into natural and built environments of the campus are included in Appendix A.

Open Space Goals

- Create a rich landscape palette combining formal and informal open spaces and plantings.
- Provide open space within each neighborhood.
- Develop a network of connective open spaces between neighborhoods and campus amenities.
- Maintain accessibility to recreational opportunities along the shoreline and at the Wind Harp Park.

Open Space Strategies

- Maintain a California coastal aesthetic along the shoreline, combining California native and Mediterranean species.
- Balance informal planting groups throughout the campus, with formal trees and hedging demarcating important pedestrian walkways and open spaces.
- Use physical or visual connections to link open spaces between neighborhoods.
- Provide well-defined, landscaped open space and pedestrian connections to waterfront and Wind Harp Park.
- Provide more formal planting along Grandview Drive and at campus entries.
- Create pathways along hillsides and bluffs to increase and diversify open space access and experiences within the campus.

3.7 Central Spines

Developed as a singular element that would connect the Lower Campus and Mid Campus facilities in the original 1995 Plan, the Central Spine concept was envisioned as a linear composite of circulation routes and open spaces that would accommodate employees, material movement, and service and emergency vehicles. The spine would also "encourage interaction between Genentech employees by providing gathering places and amenity spaces along the spine." This concept of the Central Spine as a neighborhood asset and circulation path has been refined and expanded on in the Master Plan.

Central Spines, as defined within this Master Plan, establish the primary structure of each campus neighborhood. Rather than a single element through the entire campus, each Central Spine responds to the specific character, setting, and topography of each neighborhood. The Central Spines function as the primary circulation and organizational element of each campus neighborhood: Spaces for employee gatherings, services, and amenities are located off of the Central Spine. Pedestrian circulation and activities are the primary functions of each spine, with vehicular traffic restricted to emergency access.

Neighborhood open spaces will complement and connect to the Central Spines. These open spaces (courtyards, lawns, plazas, etc.) will be oriented to views and access to the waterfront and the surrounding areas.

The existing Central Spine within the Lower Campus will transform as the development character of the neighborhood changes. As the neighborhood transitions into more office and laboratory uses, the internal function of the neighborhood will change, allowing for a more pedestrian-oriented Central Spine. Design of this spine will focus on pedestrian-specific site elements such as special paving and landscape buffering that place priority on pedestrian movement and safety. Open space and pedestrian amenities will be developed in tandem with new infill development within the campus and the replacement of existing building functions and typologies.

Likewise, the development of the other neighborhood Central Spines will occur as each neighborhood is developed. Special emphasis will be placed upon designing buildings and open space that are oriented along the Central Spines, providing entries and connections to internal building functions and amenities.

Mid Campus Central Spine.

Lower Campus Central Spine, as seen from Building 5.

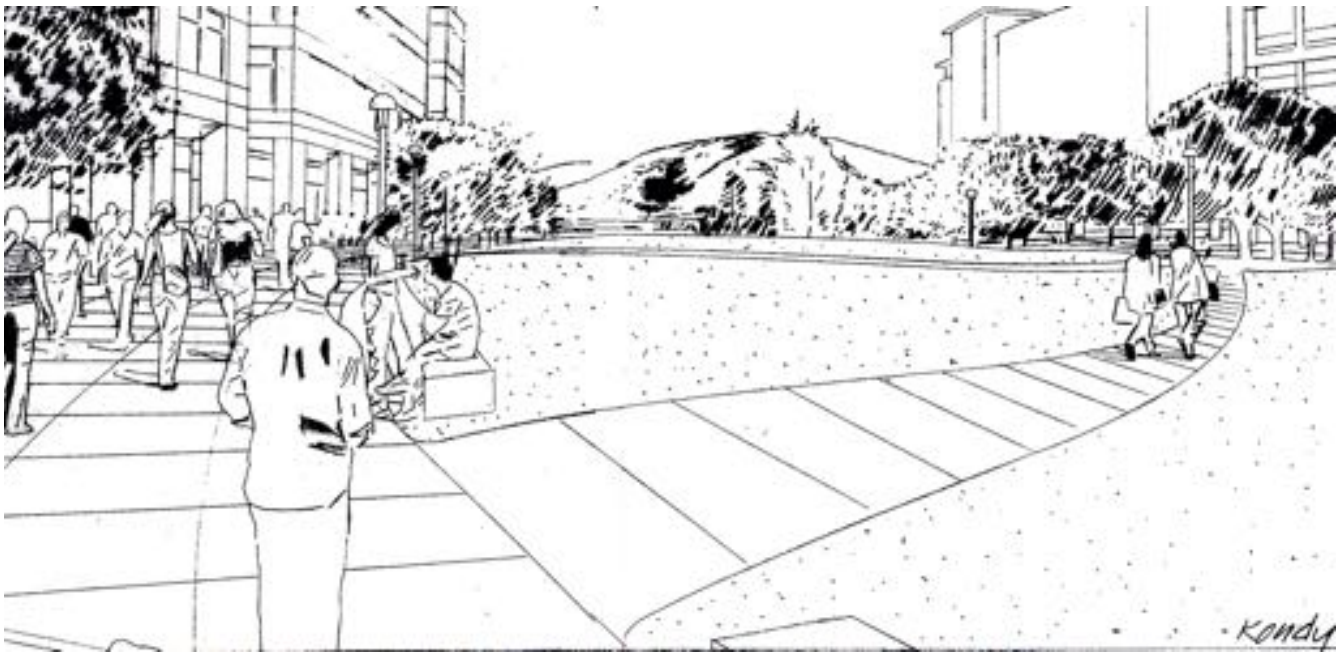


Figure 3.7-1: Upper Campus Central Spine Concept

Central Spine Goals

- Establish distinct Central Spines as the major organizing element within each campus neighborhood.
- Promote walkability by locating amenities and open spaces along the Spine.
- Emphasize pedestrian environment by restricting vehicular access within Central Spines.

Central Spine Strategies

- Develop Central Spines in tandem with neighborhood redevelopment.
- Locate buildings facing the Central Spines where possible.
- Ensure that Central Spines are attractive destinations, offering pedestrian comfort, maximizing sun access and views, and creating wind barriers for large open spaces through a variety of implementing mechanisms, including:
  - Site landscape and design elements;
  - Strategic height limitations and building massing;
  - Locate building entrances and amenities with direct access to Central Spine;
  - Maximized window openings at pedestrian level.

3.8 Building Orientation, Massing, and Scale

For discussion of Floor Area Ratio, see Section 2.3: Land Use and Development Program.

This section addresses the overall scale and form of development within the Genentech Campus in terms of orientation, building heights, articulation, and development scale. These elements of design directly affect the overall campus environment and identity, and will vary across the campus. Accommodating differences in topography, location, intensity, and land uses, the overall massing structure of the campus addresses two major development concepts:

1. Development scale throughout the campus will support pedestrian-oriented environment along major circulation routes; and
2. Development will follow the principle of "stepping down" to the waterfront to allow buildings on the bluffs to maintain view corridors.

This development structure is expressed in terms of specific building and massing concepts, including building heights, articulation, and development scale.

Orientation and Relationship to Street

Orienting campus buildings and entries to major public streets will continue to be a guiding design principle for new campus development. This direct relationship of building activity to the street is accomplished by the placement of building entries and fenestration along the street edge. Building massing and design will also support this orientation through articulation of entries and the street wall. Likewise, building placement within the site will focus on establishing a clear and distinct edge and identity along the street.

Articulation

Variations in building massing, height, and streetwall are essential factors of a pedestrian-oriented campus environment. An intimate scale of development can be achieved through horizontal and vertical articulation—varied building heights within neighborhoods or building clusters, recesses and projections, window articulation and treatments, and roof forms contribute to overall campus texture and character. Building articulation and visual interest are especially important for large floorplate structures such as those needed for R&D and manufacturing facilities with significant massing along the street or Central Spine level.

Pedestrian scale can be achieved with street-level entrances and fenestration, canopies, contrasts in wall treatment, horizontal articulation, and varied landscaping. Articulating and stepping back higher floors of taller buildings allows greater sun exposure and views and minimizes overall building mass at the ground level. Detailed standards for massing are given in the Urban Design Guidelines in Chapter 6.

Building Scale and Setbacks

In addition to FAA standards, the Master Plan keeps a maximum building height limitation of 150 feet above ground level on buildings within the campus. (Figure 3.8-1 shows FAA height and noise standards, as well as the 60db noise contour.)

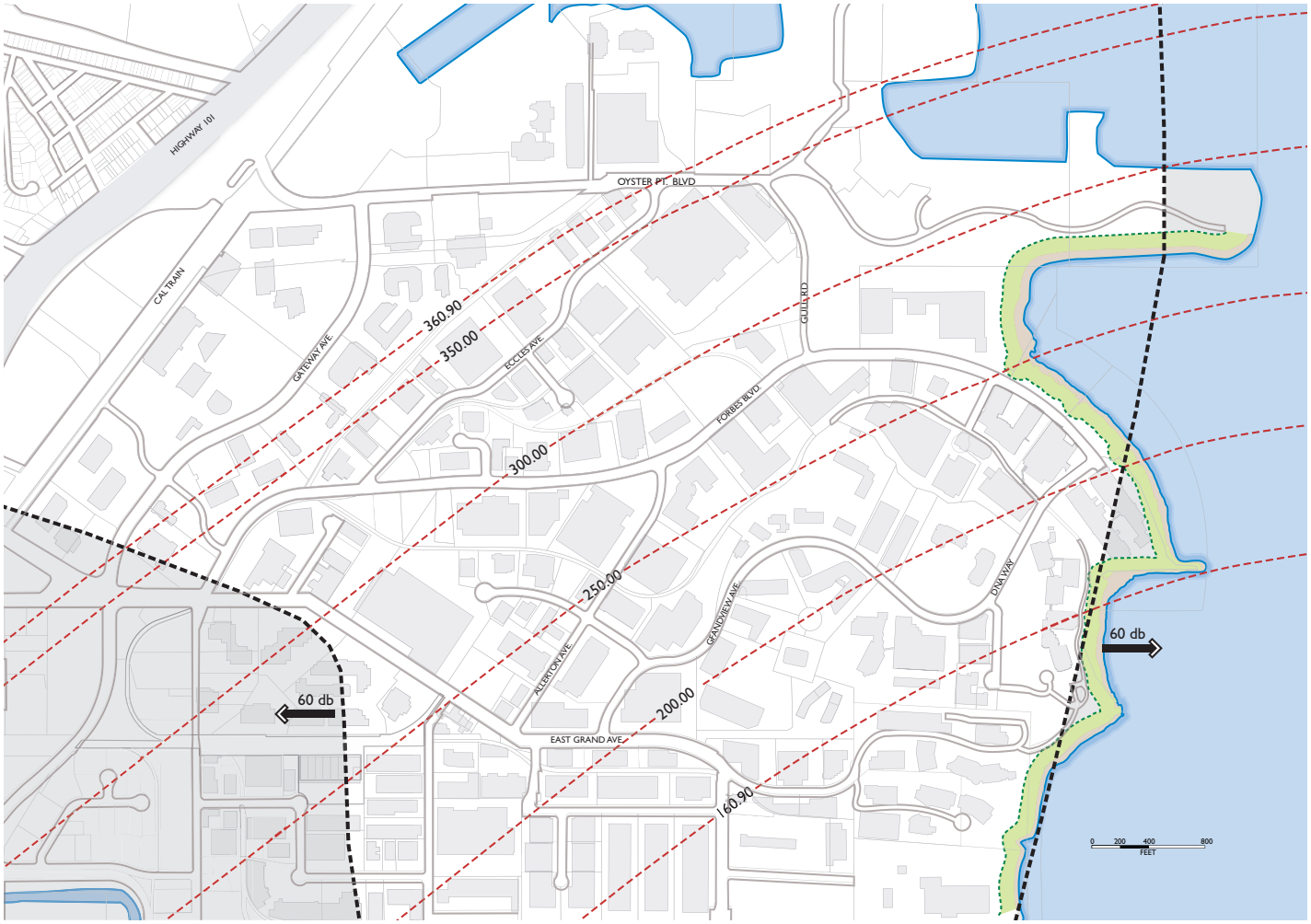
Strong consideration of views and access to natural light will be given in the size and locating of new buildings. Additionally, building placement and site configuration will maximize and consolidate occupiable open space with a maximum lot coverage of 60 percent. Likewise, consistent building setbacks will strengthen the identifiable street edge, establishing a rhythm and repetition with adjacent buildings. However, modulation of the building edge with courtyards and building articulation will be key in providing visual interest. A more detailed discussion of building scale and placement is provided in architectural guidelines in Appendix A and the South San Francisco Municipal Code, Chapter 20.39 and 20.40.

Building Massing & Scale Goals

- **Ensure that building heights and massing maintain key views to the Bay and San Bruno Mountain.**
- **Maximize Genentech skyline (within FAA height regulations) along San Bruno Hill to establish a strong visual identity for the campus from US-101 and the East of 101 Area.**
- **Take advantage of building massing to provide sun access and articulation to wind-sheltered pedestrian spaces, courtyards, and entrances.**

Building Massing & Scale Strategies

- **Articulate larger-floorplate structures to break down the scale and massing of the building and to allow visual and physical porosity of the campus.**
- **Require horizontal building articulation along Central Spines and major pathways to create Human Scale.**
- **Maximize sunlight on pathways and open spaces in Central Spines and courtyards through building stepbacks.**



Height Contours

Noise Contour

200.00 Feet Above Sea-level

Note: Height contours represent a sloped conical surface above sea level from 160.9 to 360.90 feet.

Source: San Mateo County Airport Land Use Commission, 2000.

Figure 3.8-1: FAA Height and Noise Contours

Wind

The windy and often cool San Francisco Bay climate plays an important role in defining the character and design of the Genentech Campus. Situated at the eastern end of the San Bruno Gap between the San Bruno Mountain range and the Coastal Range, the East of 101 Area experiences strong winds during the spring and summer months, as illustrated in Figure 3.8-2. Afternoon winds can typically reach 25 knots, and combined with the cool bay air, often create harsh and uncomfortable walking conditions within the Genentech Campus. While intracampus shuttles offer pedestrians alternatives to walking, shorter and more direct pedestrian paths could expand the overall walkability of the campus. To foster this pedestrian movement, wind breaks and sheltered areas will be key elements of landscape, building, and site design. Building design will also consider entry conditions to buildings using landscape, revolving doors, or any other architectural solutions.

Seasonal Variability

Winds are strongest during the late spring, summer, and early fall. Fall, winter and spring mornings are usually calm, with light bay breezes from the east and northeast. By early afternoon, the wind fills in from the west and increases in speed, decreasing again by early evening. Summer winds are almost always from the west, and can regularly gust to 30 knots. Figure 3.8-3 shows the general direction of wind throughout the year.

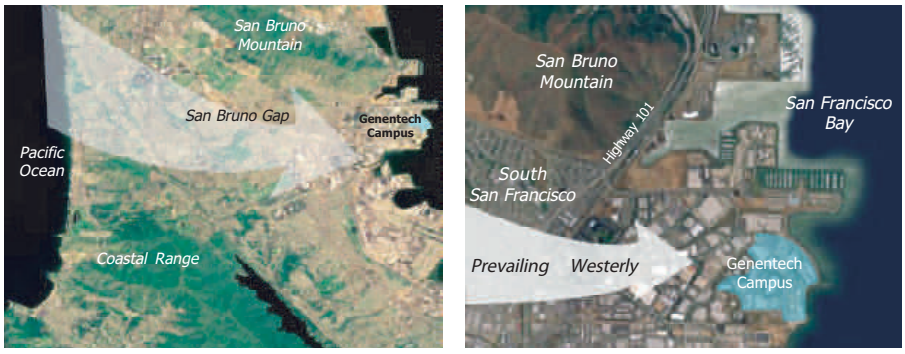


Figure 3.8-2: Westerly winds funnel through the San Bruno Gap, bringing cool ocean air to the Genentech Campus.

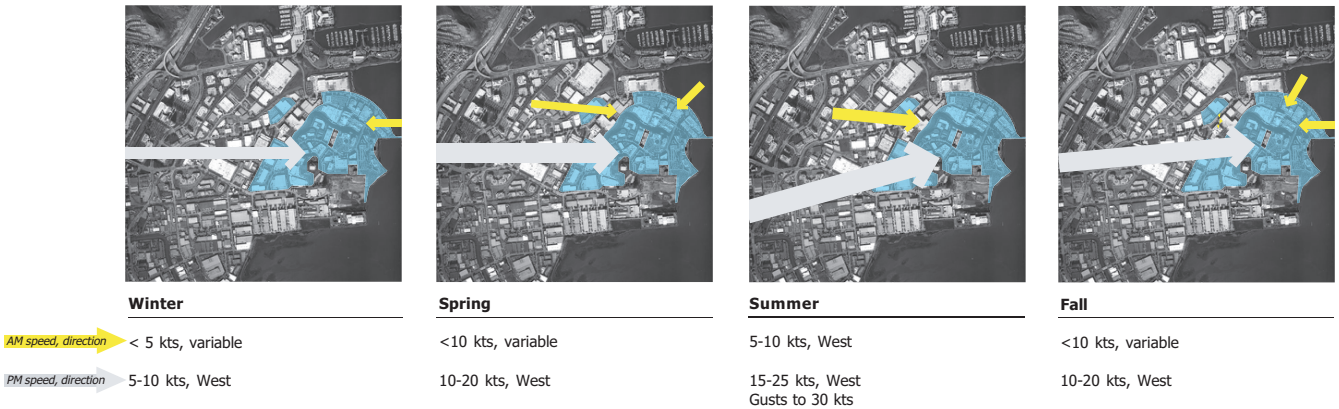


Figure 3.8-3: Seasonal Wind Variability

3.9 Sustainable Design

The creation of a campus environment that embodies a commitment to physical and social well-being is an important element of the Master Plan. Several strategies are directed toward sustainable growth and design, including land use that emphasizes infill development and structured parking, as well as transportation programs that encourage the use of alternative transit to and from the campus. These strategies directly or indirectly promote sustainable development patterns for future growth. They also contribute to the City of South San Francisco's goals of protecting, conserving, and enhancing the city and regional environmental resources.

Sustainable site planning practices, such as those that decrease run-off or the need for water for irrigation, are especially critical for the Genentech campus because of the area's proximity to the bay shoreline and habitat. Design strategies that enhance the environmental quality of the Genentech campus include habitat-appropriate landscape design with low water consumption planting, as well as increased permeable surfaces through infill development and green space over existing surface parking areas.

Working in tandem with resource conservation, campus building and infrastructure design is focused on minimizing energy and water consumption, while maximizing the use of renewable resources. Genentech has identified specific goals and strategies to promote sustainable and environmentally appropriate site planning practices and facility design for future development.

Sustainability Goals

- Create a campus environment that enhances human health, comfort, and performance.
- Minimize resource consumption and enhance environmental quality of the campus.
- Maximize productive life of new facilities through durable, flexible, and high-quality spaces.

Sustainability Strategies

- Utilize a comprehensive approach to design that relates site planning, building design, and landscape design to the natural campus environment, respecting the integrity and biodiversity of natural systems throughout the campus.
- Incorporate the analysis of sustainable design solutions into the development process, considering sustainable principles that minimize resource consumption and maximize on-site conservation.
- Employ architectural design methods that include such aspects as the use of solar shading devices and white roofing materials control solar gain.
- Utilize high recycle-content building materials, when appropriate.
- Integrate energy- and water-conserving electrical and mechanical systems throughout campus buildings and neighborhoods.
- Minimize impervious surfaces such as large surface parking lots and unplanted plazas.
- Coordinate development with programs and strategies that support public and alternative transit modes.
- Continue participation in the PG&E Savings by Design Program, maintaining successful strategies that improve facility performance in excess of a 10 percent savings above Title 24 requirements.

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4 TRANSPORTATION AND PARKING

The growth of the Genentech Campus will increase the volume of people that come to campus. The Master Plan includes projects to support the projected traffic volumes and programs to encourage the use of alternative modes of transportation. The Master Plan includes guidelines to ensure adequate parking for visitors and employees, as well as convenient and efficient movement between different campuses and neighborhoods. A key element of accommodating these transportation needs will be an effective combination of transit connectivity, Transportation and Demand Management (TDM) Programs, and parking efficiency.

This chapter outlines several initiatives that: promote traffic reduction and alternatives to automobile use; expand and improve the shuttle program; improve parking; streamline goods and service movement; and integrate the Genentech Campus with the surrounding area using a variety of modes. Each transportation and parking issue presents existing conditions and issues and develops goals and strategies for future change.

Located near the San Francisco International Airport (SFO), Genentech is connected to regional transportation facilities primarily through surface arterial streets and shuttle vehicles. Figure 4-1 illustrates the campus location in the context of the San Francisco regional transit system. US-101, located less than one mile west of the Central Campus, provides a crucial linkage. The South San Francisco Caltrain station is located less than one mile away from the campus as well, and will be relocated to enable shuttle pick-ups directly from the East of 101 Area. The South San Francisco BART station—also connected to the campus by shuttles—is located at Mission Road and McLellan Drive.

A vast majority of Genentech South San Francisco employees live on the San Francisco Peninsula, as shown in Figure 4-21. The expansion of current transit focuses upon these key areas of high employee concentration.

[1] Based upon an Employee residence survey completed in 2007.

Transportation Concepts

The following concepts are further refined in goals and policies for each transportation and parking issue:

1. **Strengthening and expanding Genentech's comprehensive transportation demand management (TDM) program to minimize single-occupancy vehicles traveling to campus throughout the day, and to meet or exceed the South San Francisco Congestion Management Plan, the City's TDM Ordinance, which targets for a 30 percent employee participation (see Section 4.3);**
2. **Streamlining campus circulation and connectivity of all neighborhoods in the East of 101 Area for shuttles, service vehicles, and goods movement;**
3. **Minimizing intercampus auto traffic by strategically concentrating parking areas within each neighborhood;**
4. **Creating a flexible parking supply infrastructure and implementation plan that responds to development and parking demand needs (see Section 4.4);**
5. **Accommodating multiple modes of transportation on the existing campus street network; and**
6. **Complying with the city's transportation objectives for the entire East of 101 Area as well as the regional objectives.**

Figure 4-1: Regional Transportation and East of 101 Area

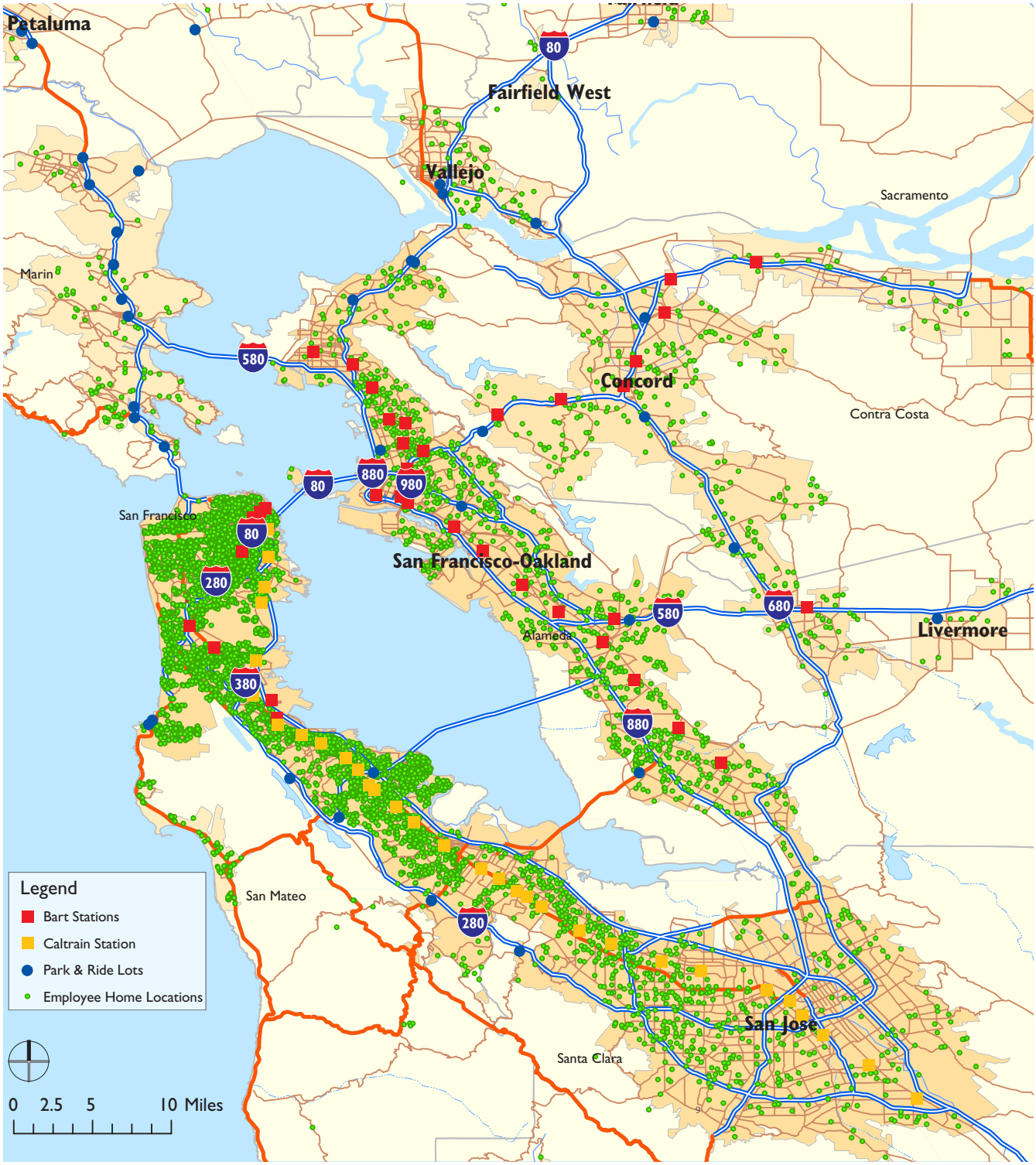


Figure 4-2: Genentech South San Francisco 2007 Employee Residence Locations

4.1 Automobile Circulation

Given the Genentech Campus' regional location, automobiles will likely remain as the primary form of access to the campus in the foreseeable future. As part of the Master Plan preparation, a comprehensive analysis of traffic operations in the East of 101 Area was conducted.

Subsequently, an additional traffic analysis was conducted as a part of the Master Environmental Impact Report (MEIR) prepared for the Master Plan. Potential automobile traffic impacts and street improvements are detailed in that document.

This section describes the street and highway system serving the Genentech Master Plan area.

Regional Access

The South San Francisco Genentech Campus is connected to the surrounding community and greater Bay Area through several arterial streets. East Grand Avenue is a primary, east-west arterial street that accesses Downtown South San Francisco and US-101. Gateway Boulevard is a major north-south arterial street that connects Oyster Point Boulevard to Grand Avenue. Oyster Point Boulevard is another east-west arterial street that accesses the north end of South San Francisco, Bayshore Boulevard, and the freeway.

The freeway system is made up of US-101 (Bayshore Freeway), a primary roadway that connects San Francisco with I-80 and the East Bay to the north, and San Jose and the Peninsula to the south. This freeway is accessible through the Oyster Point interchange and the Grand Avenue and South Airport Boulevard interchanges to the west of Genentech's main campus. Freeway speeds and capacities are often slower during commute or peak periods due to traffic congestion.

Local Street System

Figure 4.1-1 illustrates the street system serving the Genentech Campus and identifies roadway classifications. This classification system includes:

- Major and Minor Arterials. Arterials are major streets that primarily serve through traffic and provide access to abutting properties as a secondary function. Arterials are generally designed with four to six travel lanes and major intersections are signalized. In South San Francisco, there are two types of arterials: major arterials and minor arterials. Major arterials are typically divided (have raised medians), have more travel lanes, and carry more traffic than minor arterials.
- Collectors. Collectors connect arterials with local streets, and provide access and circulation within neighborhoods. Collectors are typically designed with two travel lanes, parking lanes, planter strips, and sidewalks.
- Local Streets. Local streets provide direct access to abutting properties as their primary functions. Local streets have no more than two travel lanes.

Implementation of Street Improvements

The Master Plan Implementation Program and MEIR Mitigation Monitoring and Reporting Programs describe specific street improvements necessary to support projected campus growth. These programs also detail the schedule for street improvements.

Automobiles on the Genentech Campus share the street space with shuttle vehicles, bicycles, and pedestrians.

Figure 4.1-1: Master Plan Area Street Classifications

4.2 Transit and Shuttle Services

Genentech is not served directly by rail or bus transit services. The nearest stations or stops are several miles from the campus and East of 101 Area. Pedestrian accessibility to these stops or stations, especially across US-101, is poor and inconvenient. Therefore, Genentech must rely on supplementary shuttle services to connect employees on campus with transit stops or stations off-campus.

This section presents existing and future services that access key regional and local transit systems, including Caltrain, BART, SamTrans, the Genentech shuttle system, and the future Ferry system. In combination with Genentech Transportation and Demand (TDM) programs and parking strategies, these services will provide incentive for alternative modes of transit to the Genentech Campus.

Caltrain and BART

Caltrain and BART provide rail transportation services to a variety of regional destinations such as San Francisco, Oakland, and San Jose. Service frequencies average about once every 15 minutes for BART and every hour for Caltrain in each direction during the AM and PM commute hours. Off-peak service is less frequent. Shuttle service to off-campus locations is directed towards serving these rail stations.

The current Caltrain Station is located underneath the intersection of East Grand Avenue and US-101. Only local and some limited (skip-stop) trains stop at this station, approximately every hour to half hour. There are no plans to have express (Baby Bullet) service stops at this station now or in the future. It is most probable that Caltrain will continue to decrease the number of local trains and increase the number of limited and express trains. This strategy could result in less service to the South San Francisco station, though it would produce higher ridership overall. Genentech will partner with the City of South San Francisco to ensure that service to the South San Francisco station is not significantly decreased over time and that express service is added. Meanwhile, shuttle services to the closest Caltrain Baby Bullet stop at the Millbrae Station should be explored to encourage more employees to use Caltrain, as illustrated in Figure 4.2-1.

In the near future, the Joint Powers Authority that runs Caltrain and the City of South San Francisco are planning to move the South San Francisco Caltrain station several hundred feet to the south to greatly improve pedestrian, bike, transit/shuttle accessibility, as well as passenger waiting area and platform amenities.

In addition to Caltrain, Genentech employees have access to BART, a regional rail rapid transit service. In 2003, BART completed the San Francisco International Airport (SFO) extension and opened its new station in South San Francisco near El Camino Real and the Kaiser Permanente Medical Facility on the west side of the City. The San Bruno station, also near Genentech, is located between South San Francisco and SFO at the intersection of I-380 and near El Camino Real. Direct service to the Caltrain station at Millbrae, San Francisco, and many East Bay locations is provided throughout the day. BART has reduced service on the Millbrae/SFO extension and runs trains only from the Dublin/Pleasanton line. As a result, Genentech has shifted some of its shuttle service back to the Glen Park station, which offers a faster, cheaper trip for commuters and provides service to all BART trains. Limited connections from the South San Francisco Station and the Gateway area will continue to be provided. (See Figure 4.2-2 for BART shuttle routes).

The existing Caltrain station will be relocated to the south side of Grand Avenue and will provide better connections to local destinations.

Figure 4.2-1: Regional Caltrain Service

Bus (SamTrans)

The San Mateo County Transit District (SamTrans) provides bus and paratransit service within San Mateo County. SamTrans provides local and regional bus service in South San Francisco—however the only bus service in the East of 101 area is along South Airport Boulevard south of Mitchell Avenue (approximately one and a half miles from the Genentech campus). SamTrans also operates several express buses to downtown San Francisco along US 101. However, these buses do not currently stop in South San Francisco and thus do not benefit Genentech employees.

Off-Campus Shuttle

Adding private bus service in areas of high employee residential concentrations could encourage transit ridership to Genentech. These potential regional shuttle routes are discussed in the following section.

Genentech provides several campus shuttle services. Off-campus shuttles access South San Francisco BART station, Glen Park BART Station, South San Francisco Caltrain Station, as well as Genentech Campuses in Vacaville and Redwood City. Shuttles connecting Genentech's campus with the Caltrain and BART stations in South San Francisco are provided by Genentech.

In addition to local shuttle service, the Genentech Transit and Shuttle Implementation Plan includes potential implementation of dedicated shuttle services to off-campus destinations of high employee population such as San Francisco. Genentech will investigate demand for dedicated regional shuttle services. The following TDM section (Section 4.3) describes the essential components of the Genentech Shuttle and Transit Implementation Plan.

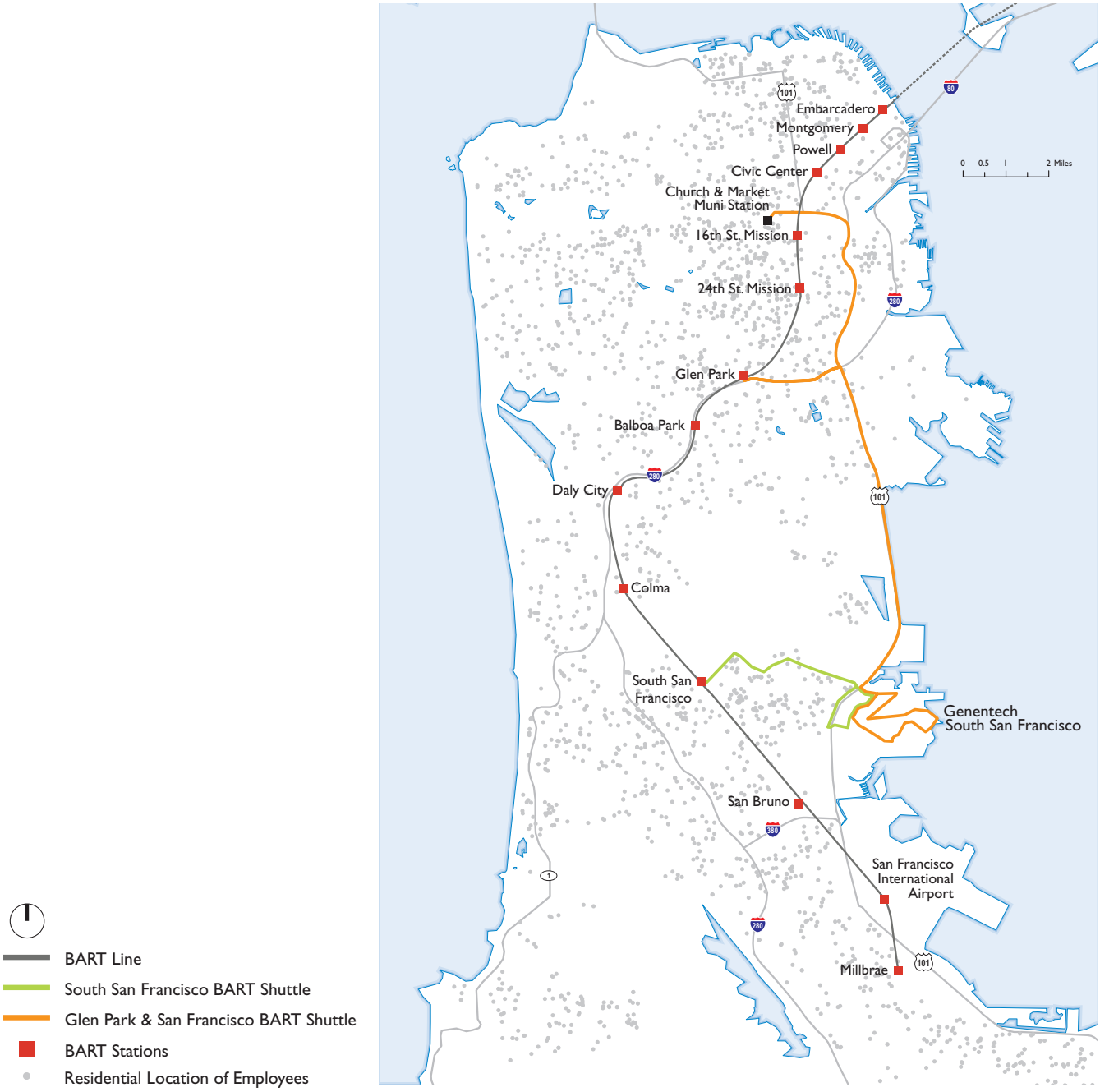


Figure 4.2-2: Genenbus and Glen Park BART Service

Intracampus Shuttle

The shuttle system also provides high frequency service between Central Campus neighborhoods and the Gateway Campus. This intracampus shuttle service will expand to other significant leased or owned properties once they are developed.

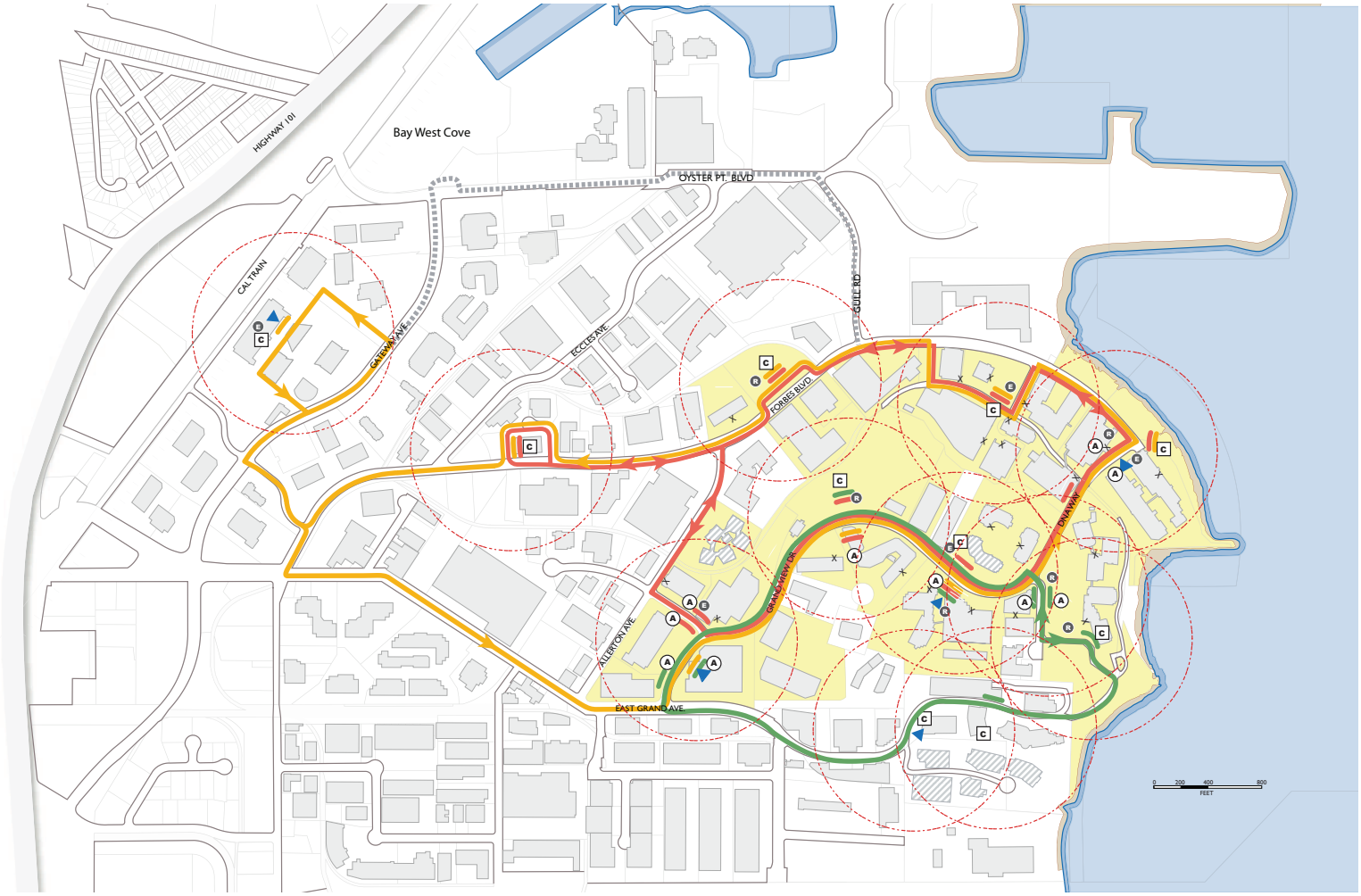
The Genentech Transit and Shuttle Plan for 2006-2016 addresses the need for a streamlined shuttle system that improves rider productivity. Illustrated in Figure 4.2-3, the plan shows changes to the existing system that include combined routes, revised stop locations to improve travel time, and expanded service to the future South Campus (Britannia East Grand). Existing shuttle services are rerouted along the main roadway where they can travel most rapidly and avoid conflicts with autos, pedestrians, and trucks. The Transit and Shuttle Plan therefore allows for faster, more frequent, and more reliable shuttle services that are easy to understand and access within a three minute walk of all buildings and parking spaces on campus.

In conjunction with these shuttle changes, upgraded shuttle stop amenities such as information, signage, route branding, pedestrian crosswalks, and ADA accessibility will improve the quality and accessibility of shuttle services.

Table 4.2-1: Shuttle Service Span and Frequency

Shuttle Route / Service	*Hours of Operation*	*Service Frequency*
DNA Route	7:00 AM - 7:00 PM	10 minutes
Gateway Route	5:45 AM - 7:30 PM	7-15 minutes
BART Glen Park Shuttle	6:10 AM - 10:24 AM, 3:10 PM - 7:38 PM	=20 minutes
BART South San Francisco Shuttle	6:10 AM - 10:00 AM, 3:48 PM - 7:57 PM	15 minutes
Caltrain Shuttle	7:07 - 9:39 AM, 3:07 PM - 7:00 PM	30 minutes
Redwood City Shuttle	7:00 AM - 5:20 PM	90 minutes
Vacaville Shuttles	5:30 AM & 4:00 PM Tues/Wed/Thurs only	1 morning from Vacaville, 1 evening from SSF

Note: Schedule as of March 14, 2007. This schedule is subject to change by service providers.



Genentech Shuttle Stops 2006 – 2015

- (A) On-Street Bus Bays (pull-outs)
- [C] Off-Street Stop
- (E) Existing Stop with Enhancements
- Gateway Express Shuttle
- DNA Shuttle (Bi-directional)
- Three-minute walking radius
- (R) Relocated Stop
- Proposed Route Stops
- Caltrain/BART/GenenBus Stops
- X Main Building Entrance
- South Campus Shuttle (Bi-directional)
- Future Extension to Bay West Cove

Figure 4.2-3: Genentech Shuttle Routes

Ferry

The San Francisco Bay Area Water Transit Authority (WTA) has proposed a new ferry dock and service for the City of South San Francisco. This consists of new ferry service that accesses Downtown San Francisco (Ferry Building) and the East Bay (Alameda). According to the WTA, the service will be provided every 30 minutes during peak periods and travel times to San Francisco and the East Bay destinations will also be 30 minutes. It is anticipated that the service would commence sometime around January 2008. (See Figure 4.2-4). The ferry terminal is more than a half mile from the center of the Genentech Campus, and will be connected to campuses through shuttle service.

Figure 4.2-4: Future Ferry Routes

Transit and Shuttle Goals

- Enhance participation in alternative transportation modes to minimize commuter traffic and parking requirements through expanded transit and TDM programs.
- Improve the quality of shuttle services, connections, and amenities to enhance transportation efficiency and campus environment.

Transit and Shuttle Strategies

- Improve information, accessibility and branding of shuttle vehicles and stops.
- Expand Genenbus program to serve areas with large employee residential concentrations as may be warranted by sufficient potential ridership.
- Expand the intracampus shuttle system to other South San Francisco campus locations as they are developed to reduce local traffic.

4.3 Transportation Demand Management

City of South San Francisco Transportation Demand Management

The City of South San Francisco adopted Chapter 20.120 Transportation Demand Management (TDM) of the Municipal Code to maximize use of the City's existing transportation resources and roadway infrastructure. The ordinance requires that all nonresidential development projects expected to generate more than 100 average daily auto trips, or projects seeking a FAR bonus, implement TDM measures to reduce vehicle traffic. The specific purposes of the TDM ordinance are to:

- Implement a program designed to reduce the amount of traffic generated by new non-residential development, or the expansion of existing nonresidential development.
- Mitigate expected increases in traffic resulting from employment growth.
- Reduce drive-alone commute trips during peak traffic periods.
- Promote efficient use of existing transportation facilities.
- Ensure that new developments are designed to maximize the potential for alternative transportation use.
- Establish minimum TDM requirements for all new non-residential development.
- Allow reduced parking requirements for projects implementing the requirements of the TDM ordinance.
- Establish an ongoing monitoring and enforcement program to ensure that the measures are implemented.

The Genentech Transportation Demand Management (TDM) Plan describes the major programs and implementation strategies that will meet the City's TDM goals. This section provides a summary of this plan.

Genentech TDM Plan

Named as one of EPA's award-winning "Best Workplaces for Commuters," Genentech offers employees several programs as alternatives to commuting by private automobile. In 2005, Genentech conducted a detailed cordon count that found that approximately 24 percent of South San Francisco Genentech employees commuting during peak hours arrived via carpool, vanpool, transit, bicycle, or means other than driving alone. Genentech estimates that at least an additional 10 percent of employees do not commute during peak hours.

There is potential to boost the proportion of Genentech employees who participate in high occupancy modes through coordination, marketing, and subsidies for dedicated shuttle, vanpool and carpool programs, in conjunction with altered parking operations. Marketing of carpool/vanpool programs can be particularly targeted toward neighborhoods with a high concentration of Genentech employees. Table 4.3-1 describes the current Genentech TDM Program, future additions and improvements.

These TDM programs will be audited through conducting employee commute surveys on an annual basis to check participation. Audits can be completed using cordon counts, which would count entering auto traffic, shuttle riders, bicyclists and pedestrians, or parking occupancy surveys. If participation rates are less than the target for the year, Genentech will consider reassessing its strategies to increase involvement.

Genentech will also submit a triennial report or audit that will state whether the development has achieved the required percent of alternative mode-use. These reports will be subject to the City's Municipal Code and described in greater detail in the TDM Plan.

Table 4.3-1: Comparison of City Requirements and Genentech TDM Program

	Transportation Demand Management Measures	*Included in the Genentech TDM Program*
2001 City Ordinance Required Measures		
A.	Bicycle lockers and racks	yes
B.	Bicycle parking (long and short term)	yes
C.	Car and vanpool ridematching assistance	yes
D.	Designated employer/tenant point of contact/ETC	yes
E.	Direct route to transit (well-lit path or sidewalk to shuttles)	yes
F.	Free parking for car and vanpools	yes
G.	Guaranteed/Emergency Ride Home program	yes
H.	Information boards/Web site	yes
I.	Passenger drop-off and loading zone	yes
J.	Pedestrian connections	yes
K.	10% preferential car and vanpool phased parking (*see note 1)	yes
L.	Promotional programs	yes
M.	Showers and clothes lockers	yes
N.	Shuttle Program	yes
	- Central Campus Caltrain - South San Francisco Station	yes
	- Gateway Caltrain - South San Francisco Station (Gateway)	yes
	- Glen Park BART Station (Central Campus and Gateway)	yes
	- South San Francisco BART Station (Central Campus and Gateway)	yes
	- Utah-Grand BART	yes
	- Utah-Grand Caltrain	yes
	- Commuter San Francisco Dedicated Shuttle (GenenBus)	yes
	- Commuter Vacaville Corridor I-80 Dedicated Shuttle (GenenBus)	yes
	- Dedicated Genentech Main Campus/DNA Site Shuttle	yes
	- Dedicated Genentech South Campus Shuttle	yes
	- Dedicated Genentech Gateway Site Shuttle	yes
O.	Transportation Management Association participation	yes
	Annual Employee Survey (100%) - non response = SOV (*see note 2)	yes
	Annual TDM Report presentation to City Council & Planning Commission and Triennial Report	yes

Note 1: Genentech expects to stripe 5% of preferential parking spaces during the first three years of program implementation. Ongoing stripping will continue, in phases, to meet the needs of car and vanpools as ridership increases.

Note 2: Employee survey response methodology may be subject to change pending a consistency review by the City of South San Francisco. Current methodology requirements are inconsistent with methodologies used by the Peninsula Traffic Congestion Relief Alliance and the Metropolitan Transportation Commission (RIDES Survey).

Table 4.3-1: Comparison of City Requirements and Genentech TDM Program

	Transportation Demand Management Measures	*Included in the Genentech TDM Program*
Additional Measures in TDM Plan		
A.	Alternative Commute Subsidies/transportation allowance program	yes
B.	Bicycle connections	yes
C.	Compressed work week	yes
D.	Flextime	yes
E.	Land dedication for transit facilities/bus shelter	yes
F.	On-site/nearby amenities	yes
	- On-site food and drink vending on every other floor	yes
	- Employee sundry kiosk	yes
	- Campus Automated Teller Machine (ATM)	yes
	- On-site coffee bar on every floor	yes
	- Cafeteria (6:30 am - 2:00 pm)	yes
	- “Grab and Go” Café (multiple)	yes
	- On-site occupational health clinic	yes
	- On-site childcare	yes
	- On-site hair cutting, dental, auto services, recreational paths	yes
	- Nearby recreational (Bay Trails)	yes
	- Nearby Fitness Center w/free shuttle (435 Forbes Ave)	yes
G.	Paid parking at market rates	n/a
H.	Telecommuting	yes
I.	Reduced parking	n/a
Other Measures - Deemed Consistent by Chief Planner		
	- Commuter Choice/WageWorks program	yes
	- Pre-tax payroll deductions	yes
	- Employee Transportation Coordinator (ETC) and staff	yes
	- Contribute funding for Alliance Bike to Work promotion	yes
	- Motorcycle parking	yes
	- Downtown Dasher - free midday services	yes
	- Spare the Air Program participation	yes
	- Include transportation link for future Bay Ferry Service	yes
	- Designated US EPA Best Workplaces for Commuter employer	yes
	- Charter buses for group activities and off-site meetings	yes

TDM Programs

Genentech currently markets its TDM through promotional programs and a comprehensive transportation intranet site. To encourage and assist employees in using alternative transportation, employees utilizing alternative modes are qualified for the Guaranteed Ride Home Program and pre-tax commuter benefits.

Carpool and Vanpool Services

Carpools in the Bay Area consist of three or more people riding in one vehicle for commute purposes. Vanpools provide similar commuting benefits as carpools, although a vanpool consists of seven to 15 passengers, including the driver, and the vehicle is typically leased by a vanpool rental company such as VPSI or Enterprise.

Guaranteed Ride Home Program

Genentech offers a guaranteed ride home to all participants of alternative commute programs. The Guaranteed Ride Home Program provides a ride home in the event of an emergency.

Bicycle Facilities

Genentech provides free bicycle storage lockers and racks at most Genentech buildings, with over 100 private bike lockers that can be reserved by employees. Locker requests can be submitted on the intranet site and are assigned on a first-come, first-served basis. In addition, Genentech provides Bicycle Buddy matching and bicycle maps and resources. Shower facilities and locker rooms will be clustered among the campus neighborhoods to assure maximum availability of facilities.

TDM Goals

- **Achieve an enhanced reduction of single occupancy vehicles (SOV) used by Genentech employees of up to 70 percent of peak hour commute trips.**

TDM Strategies

- **Increase TDM staff to maintain, coordinate, and implement the Genentech TDM program.**
- **Expand existing programs such as existing car and vanpool programs. See the Genentech TDM Plan for greater detail.**
- **Monitor results through an annual survey of employees and triennial program audits, periodically updating the program as necessary.**

4.4 Parking

Availability of parking for employees and visitors is vital to Genentech's operations. However, Genentech needs to balance parking availability at the campus with the need to promote use of alternative transportation modes by employees.

Just as critical as the amount of overall parking provided is how it is distributed across the campus. Larger parking structures are easier to design, build, and operate. However, if parking is too far from place of work, shuttling may be necessary, adding to inconvenience and operational costs and complexity.

Working in combination with an effective campus parking strategy, programs that encourage employees to use alternative modes of transit can reduce overall demands for new spaces. As discussed in Section 4.3: Transportation and Demand Management, Genentech currently has an outstanding TDM program resulting in approximately 24 percent of its peak hour commuters using alternate transportation. During the next decade Genentech has a goal to increase this percentage to at least 30 percent, although it is conceivable to meet or exceed this goal in the next two years.

Parking Demand

Under the Master Plan, the actual parking demand on campus is measured by planned changes in growth and multimodal transportation services. The parking demand response is quantified through standard demand elasticities that are derived from research studies and empirical observations.

The parking requirement established in the 1995 Genentech R&D Overlay District is 1.6 spaces per 1,000 gross square feet (gsf) of building area. All projects completed prior to the 2007 Master Plan are subject to this parking requirement. All future projects are subject to the revised 2007 Master Plan parking ratios and the revised 2007 Genentech R&D Ordinance.

Genentech evaluated actual parking need based on the existing and projected development within the Campus, and proposes utilizing parking ratios for each type of building function. These functionally-based parking ratios are: 2.75 spaces/1,000 gsf for offices uses; 1.4 spaces/1,000 gsf for laboratory uses; 0.9 spaces/1,000 gsf for manufacturing; and 0.5 spaces/1,000 gsf for warehouse uses. These ratios are based on actual parking demand and current TDM participation. As TDM participation increases, the demand for parking will decrease proportionately. After the first triennial report is issued, Genentech will review its TDM and parking programs with the city to establish adjustments to the functional ratios accordingly, and then perform subsequent reviews and adjustments on an annual basis. Table 4.4-1 demonstrates the ratio adjustments that could be expected from increased TDM participation.

Table 4.4-1: Parking Ratios

	Building Type			
	Office	*Lab*	*Mfg/Other*	*Warehouse*
Parking Ratios (based on current 24% TDM) [1]	2.75	1.40	0.90	0.50
Parking Ratios (at 30% TDM)	2.59	1.32	0.85	0.47
Parking Ratios (at 32% TDM)	2.53	1.29	0.83	0.46

[1] *Source: Nelson Nygaard February 2006 Mode Split Survey*

Parking Provision

Future parking supply at 30 percent TDM ratios will exceed the parking demand at full build-out as delineated in the MEIR. Table 4.4-2 shows the projected distribution of parking by neighborhood. Parking will be redistributed with greater concentration at campus entries to minimize on-campus traffic and promote a safe internal pedestrian environment.

Parking structures will be accessible from major entries and streets to provide direct and easy access to campus buildings through clearly delineated pedestrian pathways. This will improve not only the visual appearance of the Central Campus but also largely reduce the need for vehicle circulation on and through the campus itself.

To maximize economic efficiency, the development process will include locating temporary surface parking on future building sites. As these parking lots are converted to buildings, parking will be consolidated into parking structures. Parking in surface lots will be reduced significantly but not eliminated.

Table 4.4-2: Parking Distribution by Neighborhood

	Distribution of Parking	
Neighborhood	*Existing 2006*	*Projected 2016*
Lower	39%	49%
Mid	27%	10%
Upper	31%	16%
West	3%	25%

Sources: Existing- Genentech (September 2006) and Future- Draft Master Plan MEIR (September 2006)

Parking Goals

- Provide adequate parking supply to accommodate growing employment needs while avoiding excessive supplies that will undermine TDM strategies.
- Meet parking demand with sufficient off-street parking facilities.
- Foster a safe and pedestrian-oriented campus environment by concentrating parking structures to reduce vehicle traffic on the site, avoid pedestrian-vehicle conflicts, and minimize traffic noise.
- Retain the parking spaces reserved for general public shoreline access in accordance with prior agreements with the Bay Conservation and Development Commission.

Parking Strategies

- Utilize functional parking ratios of 2.75 spaces/1,000 gsf for office uses; 1.4 spaces/1,000 gsf for laboratory uses; 0.9 spaces/1,000 gsf for manufacturing uses, and 0.5 spaces/1,000 gsf for warehousing uses.
- Provide adequate parking supply on-campus to meet campus-wide demand.
- Coordinate TDM programs with parking supply and demand by developing new transit services that access regional shuttle transit hubs, improved carpool and vanpool programs, and buses that access neighborhoods with high employee concentrations. (See Section 4.3).
- Incorporate parking requirements reflective of the effects of TDM strategies on parking demand at Genentech as part of the Genentech R&D Overlay District.
- Locate parking structures adjacent to major streets for easy and direct access.
- Distribute parking throughout the campus to maximize pedestrian access to buildings from parking structures, and identify intensifying parking at campus entries to foster a pedestrian orientation to the campus.
- Restrict employee parking at reserved public parking spaces.
- Remove on-street parking along Grandview Drive.

4.5 Service, Goods, and Freight Movement

Service, goods, and freight mobility is a vital factor in Genentech's daily operations. It can be especially critical to Genentech's research and manufacturing activities. Using a diverse fleet of vehicles with varying sizes and cargos, service and freight vehicles typically access Genentech's South San Francisco campus from nearby freeway interchanges and local arterial streets such as Oyster Point Boulevard and East Grand Avenue. Items such as hazardous or fragile materials, perishable food products, and office supplies have unique destination points throughout the Genentech Campus.

Freight vehicles generally require special loading docks and are commonly associated with manufacturing buildings. In the 1995 Plan, a freight activity survey indicated that there were approximately two truck trips generated daily for every loading dock. Currently, there are 46 active loading docks on Genentech's Central Campus, corresponding to approximately 90 daily truck trips.[1]

The majority of service, goods, and freight activity takes place at Lower, Upper, and West campus hubs. Table 4.5-1 describes the distribution of these activities at each main hub. The remaining service vehicle activities are generally spread throughout campus neighborhoods. These service vehicles include Genentech vehicles as well as outside contractors who often use light trucks or vans.

Table 4.5-1 and Figure 4.5-1 illustrate service and goods movements at Genentech. The figure highlights existing and future warehouse/distribution facilities and outlines paths of principal service and freight goods movements. Minor and major arterial routes serve as primary access to Genentech for trucks. Service alleys provide access to loading docks.

Table 4.5-1: Current Service and Freight Activity

Building	*Number of Loading Docks*	*Percent of Total Service*	*Percent of Total Freight*
Lower Campus	12	85%	25%
West Campus	19	1%	35%
Upper Campus	15	<1%	40%

Source: Genentech (September 2005)

Future Changes

Master Plan buildout projections estimate the amount of employment and gross floor space at Genentech will double, although manufacturing uses will decrease from approximately 32 percent to 11 percent of Genentech's gross floor area. The change in freight trips to Genentech is expected to be roughly proportional to the change in manufacturing floor space, while the number of service and goods trips is expected to be proportional to the overall building area. Therefore, total freight vehicle trips to and from Genentech will not increase substantially, and will be primarily focused in the Lower and West campuses along Forbes Boulevard, East Grand Avenue, and Allerton Avenue. On the other hand, service and goods trips may experience an increase proportional to overall building area in Lower, West, and Upper campus hubs.

Service, Goods, and Freight Goals

- **Maintain efficient freight mobility to serve Genentech's manufacturing and service needs.**

Service, Goods, and Freight Strategies

- **Locate access driveways to loading docks, wherever applicable, along the perimeter or rear of buildings where interference with building entrances, pedestrian flows, and parking maneuvers is minimized.**
- **Where needed, re-orient or relocate loading docks to match revised truck access pattern and minimize conflicts with vehicles, pedestrians, and bicyclists.**
- **Maintain reliable access to service and goods hubs so that vehicles can load and unload in a timely and efficient manner.**

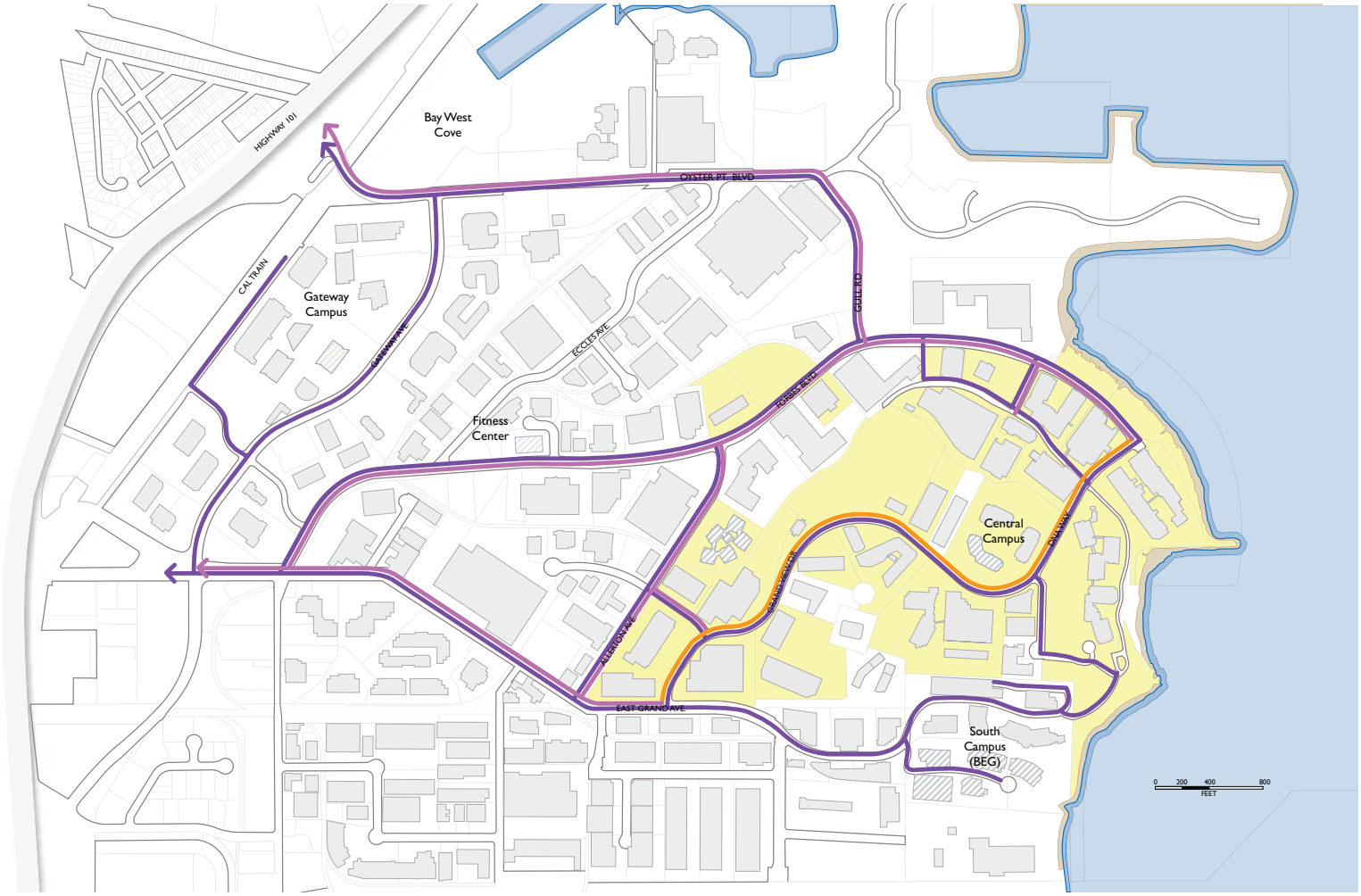


Figure 4.5-1: Service and Goods Movement

4.6 Bicycle Movement

Although TDM measures encourage the use of bicycles on campus, the number of bicycle commuters is relatively low compared to transit riders and automobile commuters. Challenging topography, weather conditions, and difficult access across US-101 and the Caltrain tracks are impediments to bicycle travel to and from the Genentech Campus.

Regional/Local Context

Existing facilities serving bicyclists at the Genentech Campus include bicycle racks and lockers which are distributed throughout the campus.

Several new bicycle facilities have been identified in the City of South San Francisco's General Plan (1999) and other studies. Planned regional and local improvements to the regional bicycle network in South San Francisco include:

- Continuous bike lanes at the Oyster Point Boulevard freeway interchange/crossing;
- Bike path or lanes along Railroad Avenue to downtown South San Francisco;
- East Grand Avenue bicycle lanes; and
- Caltrain trail extension along east side of tracks from Gateway to Bay Cove West (Caltrain Multi-Use Trail Feasibility Study, 1996).

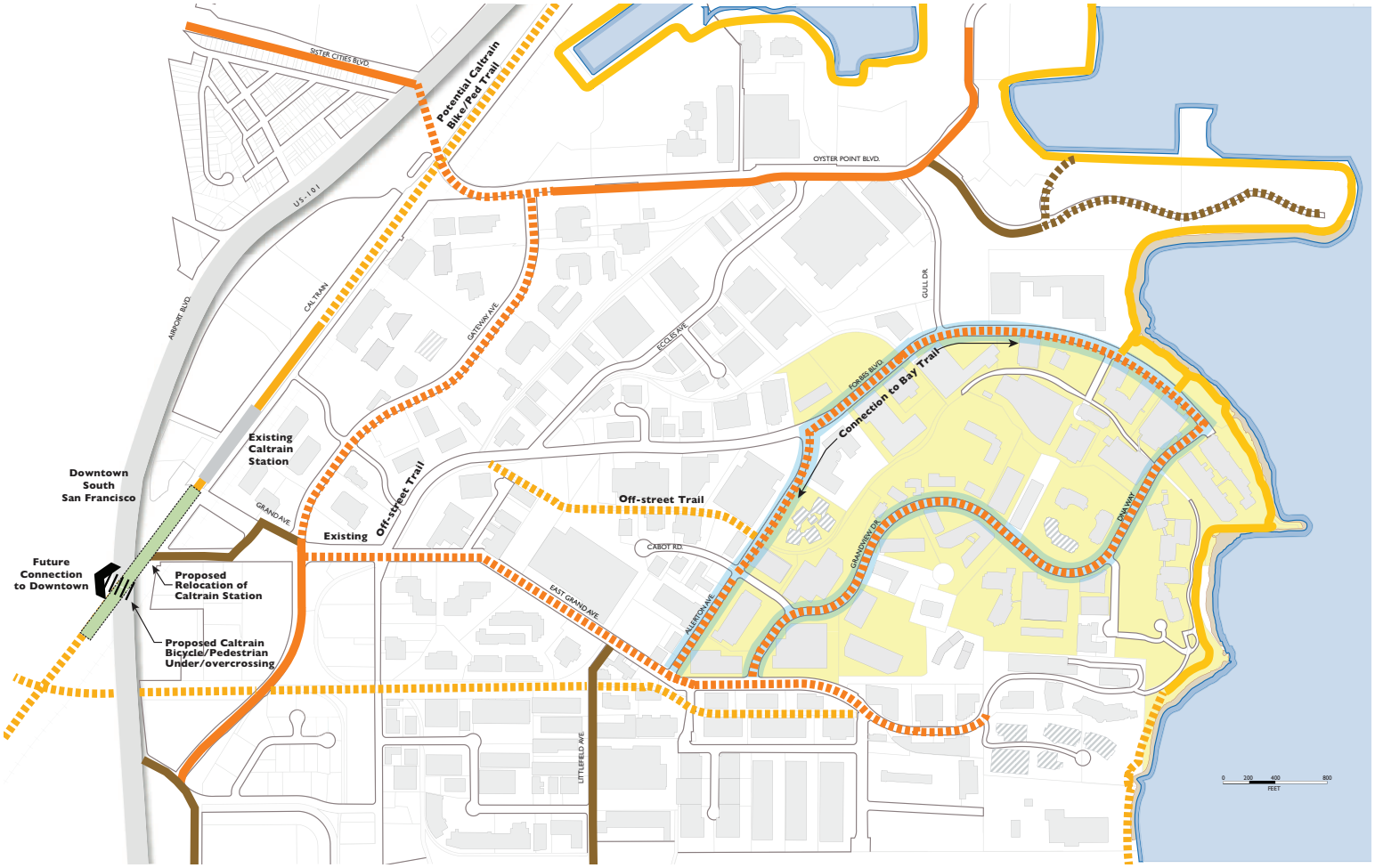
These plans are illustrated in Figure 4.6-1 and are included in plans and sections for Forbes Boulevard and Grandview Drive in Chapter 3, Urban Design. In the future, the City of South San Francisco should investigate bicycle route connections between the Genentech Campus and the regional bicycle network. Connections to the Bay Trail from regional networks, as well as transit centers, will play an important role in promoting access to and use of amenities along the Bay.

Bicycle Movement Goals

- **Work with the City and Caltrain to improve bicycle connections between the campus and the rest of the city, including to transit stations.**

Bicycle Movement Strategies

- **Add shared bicycle vehicle lanes where possible (see Figure 4.6-1).**
- **Provide bicycle facilities such as racks and bicycle lockers in new development areas.**
- **Support bicycle accessibility along the campus primary pedestrian network. (Refer to Figure 3.4-1 for primary network.)**
- **Preserve public access to the Bay Trail.**
- **Promote connections between transit centers and the Bay.**



Existing Bicycle Facilities

- Bike Path/Trail
- Bike Lane
- Bike Route

Potential Future Bike Facilities

- Bike Path/Trail
- Bike Lane
- Bike Route

- Genentech Contribution

Source: 1999 South San Francisco General Plan.

Figure 4.6-1: Existing and Planned Bicycle Network

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5 UTILITIES

This chapter provides a summary of infrastruc-ture and utility needs for buildout of the Genentech Master Plan. A detailed description of utilities is provided in the MEIR, Implementation Plan, and the Mitigation Monitoring and Reporting Plan. As growth occurs at Genentech's South San Francisco Campus, additional utility usage will be required. All current site utilities will experience increased demand. Utility services have been reviewed for expandability in the context of this Master Plan. A summary of each major category is found in this section for the following services or items:

- Domestic Water
- Fire Protection
- Wastewater
- Storm Drainage
- Natural Gas
- Electricity
- Site Communications
  - Telephone
  - Data Communications
  - Emergency Systems
- Campus Stand-Alone and Centralized Utilities
- Co-Generation Facility
- Hazardous Materials and Related Waste

Utilities Concepts

The 2016 Master Plan focuses upon two key development concepts:

1. **Meeting required performance standards and necessary service requirements as the campus expands; and**
2. **Coordinating with the City and utility providers to maintain and improve infrastructure.**

5.1 Domestic Water

California Water Service Company (CWSC) supplies water to the Genentech South San Francisco Campus. The mains entering the Genentech Campus include a 12-inch line in Forbes Boulevard, a 12-inch line in East Grand Avenue, and the new 10-inch high-pressure line in Grandview Drive. These piping systems are fed from the Cal Water 18-inch main supply line located along Highway 101.

The water system at Genentech in the Upper Campus is augmented by a 1.5 million gallon storage reservoir on the top of the hill. The pipe and flow capacity for these pipes in their present condition generally meet the current domestic water flow requirements. The average use factors of water consumption per square foot of occupied buildings are detailed in the MEIR.

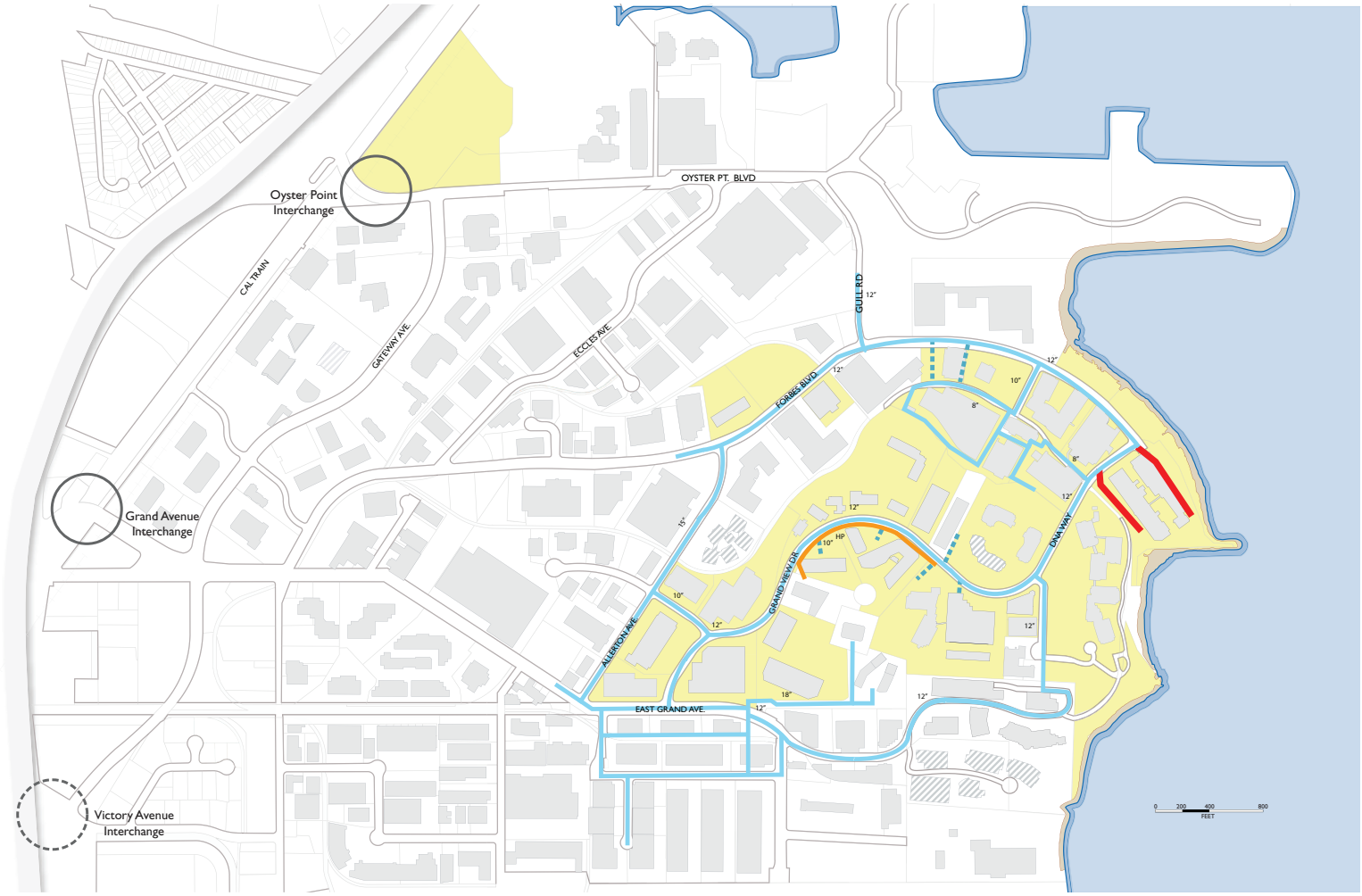
Domestic water use will increase as Genentech expands its campus. Based on Genentech's potential growth, domestic water usage may increase by as much as 30 to 40 percent over the next ten years. CWSC has indicated that it has the capacity to supply Genentech's projected demand.

5.2 Fire Protection

The delivery of water for fire protection to Genentech buildings uses the same network of pipes as the domestic water system. CWSC recently installed a new 10-inch ductile iron high-pressure line in Grandview Drive to improve pressure to the buildings and fire systems for the Upper and Lower campuses. There are several buildings within the Genentech Campus that have water storage tanks and/or fire pumps installed for local pressure control. Tanks and/or pumps are being added for some locations. A new fire main connection will be added.

Fire hydrants in the Genentech area have been tested by the Fire Department for flow and pressure requirements. Based on that fire flow test data, the Fire Department has concluded that all hydrants in the Genentech area meet the fire flow requirements.

Fire requirements will be analyzed for each additional future building based on the size, type of construction and fire sprinkler system associated with the building. The fire flow system requirements will be analyzed specific to each building to determine if the local system can adequately handle the fire flow needs. If the local system is found to be undersized or deteriorating, then the pipelines will be modified by upsizing, new connections, and/or by installing of pumps and tanks to supply the new requirements.



Existing water pipe

Existing high pressure water pipe

Upgrade pipe size

Add new pipe

Figure 5.1-1: Water System

Map by: Wilsey Ham

5.3 Wastewater

The City of South San Francisco provides wastewater collection and treatment for the Genentech Campus. The City owns and maintains the sewer piping system consisting of approximately 13 miles of six inch to 30 inch diameter gravity sewer mains, nine pump stations and associated force mains, and the South San Francisco Water Quality Control Plant (WQCP). The Genentech Campus sewer system is shown in Figure 5.3-1. All of the flows from South San Francisco, including Genentech, and several other cities are collected and treated at the WQCP. Once the flows have been treated, the flows are pumped through a 54 inch force main located along Genentech's Lower Campus and then discharged to the Bay at the end of Forbes Boulevard and DNA Way.

The quantity of sewer discharge is directly related to domestic water use. This analysis assumes that 95 percent of domestic water used is converted to sewage, excluding direct irrigation flows. The exceptions are the boiler plants at the manufacturing buildings which discharge 10 percent of the water to blow-down and the remainder to evaporation. Based on Genentech's potential growth, sewer flows are expected to increase by as much as 45 percent over the next ten years. The wastewater collection system will be upgraded as necessary to accommodate this growth. The potential increase in water usage, and thus sewer flow rates, may also cause several gravity sewer pipes, existing pump stations, and force mains to reach capacity in future years. As a result, new development would be required to provide upgrades to the existing systems to meet the new demands.

Based on the 2002 Carollo Sewer Master Plan for the City's wastewater system, Pump Station #8 (located in the heart of the Genentech manufacturing area in the Lower Campus), with an existing firm capacity of 990 gallons per minute (GPM), currently does not meet the existing peak sewer discharge of 1100 GPM. The City is in the process of updating the Sewer Master Plan for current conditions based on planned development for the East of 101 Area including future Genentech Expansion. An addendum to the 2002 Sewer Master Plan (2006 Sewer Master Plan Addendum) analyzed the sewer system based on projected land use and flows. Although the revised flow estimates were less than previously calculated, necessary system improvements identified in the 2002 Sewer Master Plan are still applicable.

Further development in the East of 101 Area may require that the City undertake extensive improvements to the existing sewer treatment facilities above and beyond those sewer system improvements already budgeted in the Capital Improvement Plan. Although required by increased development in the East of 101 Area, most of the sewer treatment improvements will result in citywide benefits. For this reason, the City has determined that it is appropriate that most of these improvements be financed through the issuance of sewer revenue bonds.

The WQCP capacity has been increased recently to 13 million gallons per day (MGD). The City of South San Francisco currently does not limit the amount of flow or the peak pollutant concentrations that industries can discharge. However, the East of 101 Area Plan requires projects in the East of 101 Area that are likely to generate large quantities of wastewater to lower their treatment needs through recycling, on-site treatment, grey water irrigation, and other programs where feasible. Manufacturing, processing, and research activities in the Genentech Central Campus generate wastewater contaminated with pollutants that the WQCP was not designed to treat. Thus, for such wastewater flows, Genentech will continue to operate its own on-site waste treatment and neutralizations systems in accordance with appropriate permits and regulations. Additionally, Genentech operates its own water purification systems to produce high quality water for use in its manufacturing processes. Onsite utilities are primarily located within buildings and underground.

Genentech will also support and participate in recycled water program utilizing water generated outside the campus (e.g. provided through a City recycle program).

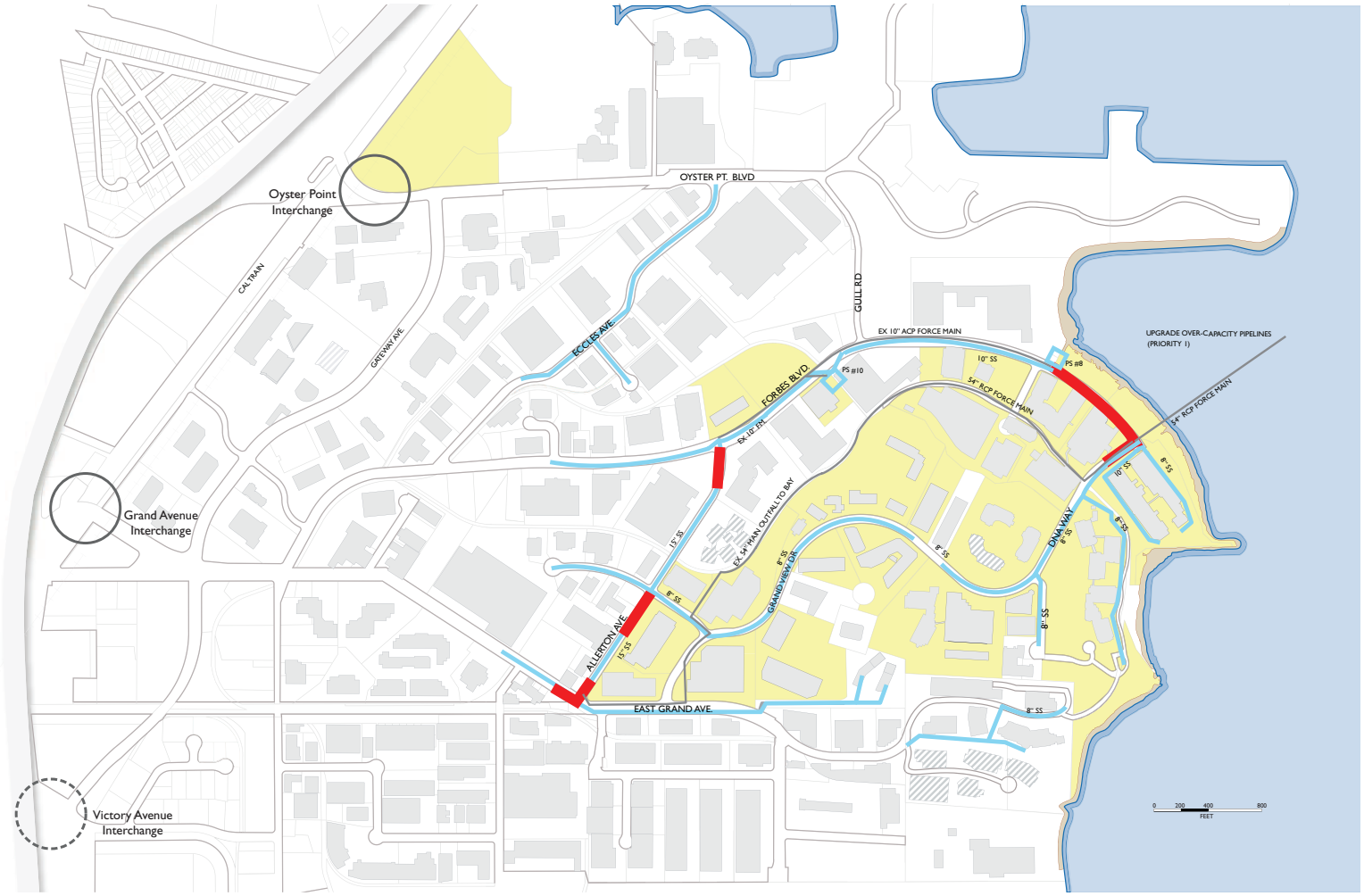


Figure 5.3-1: Sanitary Sewer System

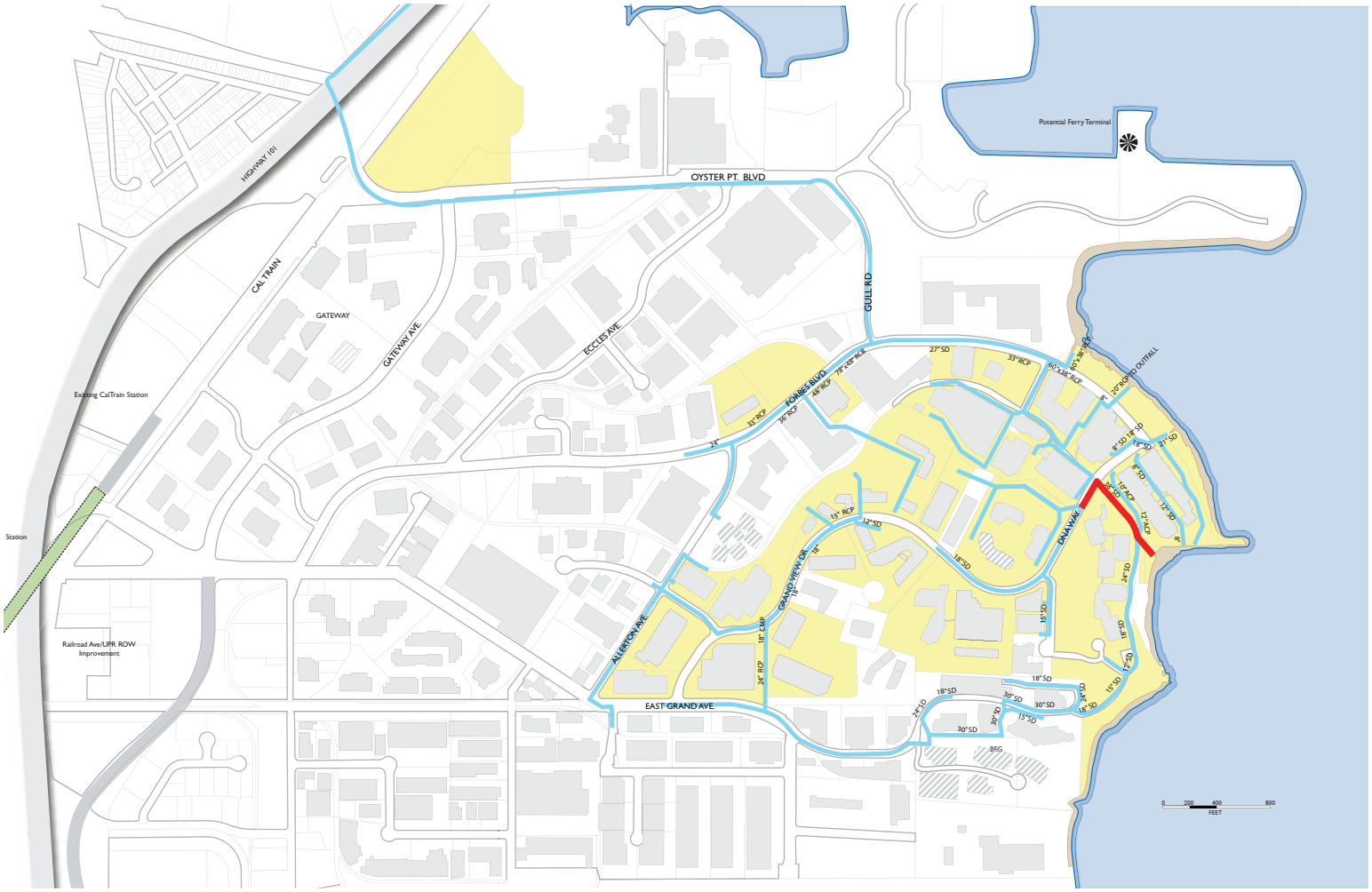
Map by: Wilsey Ham

5.4 Storm Drainage

The Genentech storm drainage system consists of underground pipes and outfalls emptying into the San Francisco Bay at various locations. The pipes are reinforced concrete pipe (RCP) or high-density polyethylene (HDPE). The outfalls to the San Francisco Bay are both above and below the mean high tide water elevation of 3.10 feet. Outfalls below the mean high tide water elevation are likely to experience flooding when a heavy storm event happens during high tide water elevations.

As illustrated in Figure 5-4.1, Genentech's storm drainage system is gravity flow and does not require pumps to transport the flows. The majority of the Genentech Campus consists of developed land, with most of the area covered with impervious surfaces including buildings, and parking lots or structures—all have relatively high run-off coefficients.

The expansion of the Genentech Campus will require new drainage structures and localized on-site storm drain systems. Although it is possible that the overall storm water discharge may increase, this increase would be minimal and could in fact be reduced in many areas due to new storm water regulations. The general trend at the Genentech Campus is the replacement of existing buildings with taller buildings and parking lots replaced with parking garages. Therefore, it has been conservatively assumed that the redevelopment of an existing building with a future building will have a net result of zero new drainage being produced. The development of such additional storm drainage and discharges to the Bay are subject to regulation by the Regional Water Quality Control Board.



Existing Storm Drain Pipe

Upgrade Pipe Size

Figure 5.4-1: Storm Drain System

Map by: Wilsey Ham

5.5 Natural Gas

Pacific Gas & Electric (PG&E) provides natural gas to the Genentech Campus. The high pressure gas distribution system is metered at each building and is configured in a loop system that is served from three interconnected underground pipelines:

- 3 inch Pipeline at Grandview
- 4 inch Pipeline at Forbes Boulevard
- 8 inch Pipeline at East Grand Avenue

The East Grand Avenue line was installed recently to serve the South Campus. This new enhanced service connects to the existing loop through the Point San Bruno Boulevard line that ties into the Grandview Drive line.

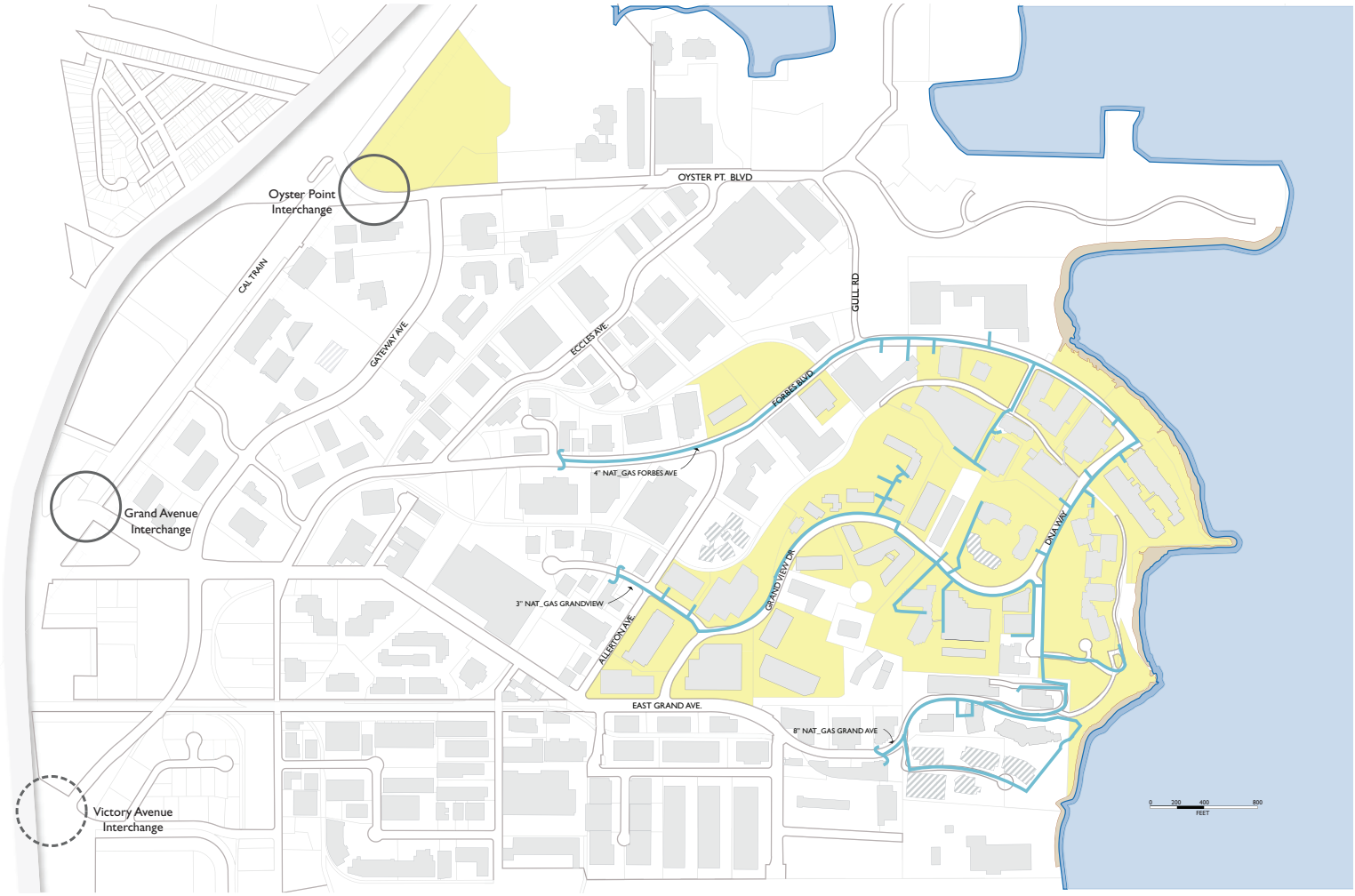
PG&E has recently proposed a change to the gas service on this site by the installation of a new six inch dedicated high pressure gas line (15 PSI) from the north side of the property, called the Gull Drive service, that will serve the high pressure steam boilers. Existing steam boilers that serve the Lower Campus will be decommissioned in 2006. This new service will unload the existing Grandview Drive/Forbes Boulevard loop and frees-up capacity to serve future buildings. Pacific Gas and Electric (PG&E) has confirmed that it has sufficient capacity to accommodate the potential 50 percent increase in natural gas loads that may occur due to Genentech growth through the year 2016. Refer to Figure 5-5.1 for the natural gas distribution site plan.

5.6 Electricity

Pacific Gas & Electric (PG&E) also provides electrical power to the Genentech South San Francisco site. The underground 12.47 kV distribution system that serves the area is configured in a looped network from the East Grand Avenue substation. This enables PG&E some flexibility to continue to provide service to buildings through switching if problems are encountered with cabling.

Each building (or cluster of buildings) is metered at either the primary or secondary rates. Most buildings are metered at the secondary 480 or 208 volt rates.

PG&E has confirmed its ability to provide sufficient capacity to accommodate the potential 83 percent increase in electrical loads that may result from Genentech growth through the year 2016.



Existing Natural Gas Main

Figure 5.5-1: Natural Gas

Map by: Affiliated Engineers

5.7 Site Communications

Telephone

SBC Communications Inc. (SBC) provides telephone service to Genentech. Telephone lines are provided by SBC to each building via SBC telephone network serving the area. Future additional telephone service requirements have been reviewed with SBC. The company has indicated that it will provide sufficient capacity to accommodate Genentech's potential expansion.

Data Communications

The Genentech facility data network consists of a computer network, security system, and fire alarm system. Each building is connected to the data network by an underground duct bank system. Mainframe computers are located in various facilities. Security systems alarms and fire alarms are reported to a central security operations center.

Emergency Systems

All Genentech personnel receive training in relevant emergency workplace procedures and practices. Genentech's EHS team and designated production and research personnel also have additional training in emergency preparedness and response, and serve as first responders for the entire campus. Genentech currently has an Alternate Command Post (ACP) located in the Upper Campus. This ACP is equipped with all necessary emergency gear and equipment to allow a focus of emergency activities in the event of a natural disaster such as a major earthquake. Communications systems at the ACP include appropriate special telephone lines as well as HAM radio systems.

5.8 Campus Stand-alone and Centralized Utilities

The Genentech Campus is designed with centralized distribution of several primary utilities between buildings for optimization of capital investment as well as efficient operation of equipment and related systems. Most areas of the site allow for either underground or "in building" distribution. However, operations within the Lower Campus portion of the site have required, and will continue to require, the need for some above-ground linkage for some primary utilities. This approach reflects the more industrial nature of Genentech's operations within that portion of the Lower Campus. The Mid Campus portion of the site may centralize utilities at a central utility plant.

In Upper and West Campuses, all building utility systems are expected to be directly associated with those buildings served by these utilities. These related utilities will be housed either within the facilities themselves, or in adjacent screened utility yards. Any utilities shared between facilities will be either underground, in secure utility yards, or routed through the facilities themselves. Utilities used on-site include the following:

- Steam boilers and related systems
- Hot and chilled water systems and related systems
- Refrigeration systems
- Purified water systems
- Liquefied and compressed gas systems
- Waste treatment or neutralization systems
- Emergency Power

Central Utility Plants serve the Lower Campus buildings. The plants provide chilled water, steam, and compressed air to the buildings via a combination of underground and above-ground pipe rack systems.

The Mid Campus buildings are currently served by utility systems located within the buildings. With the growth anticipated at the Mid Campus, the current Master Plan anticipates a new central utility plant to be added at the south end of the Mid Campus. Centralized utilities are planned to be chilled water, stream, compressed air, and purified water. Centralizing utilities provides greater energy efficiency, and reduces the number of installed systems while achieving some degree of peak load sharing between interconnected buildings.

5.9 Co-generation Facility

Based on potential facility growth, Genentech is investigating the feasibility of Co-Generation (Co-Gen). The Co-Gen plant would combine primary power and secondary utility generation to support the Mid Campus expansion and conversion of other existing utilities throughout the campus to the new system. Co-Gen could generate power independent of the PG&E during power outages. The facility could also generate power when the cost is lower than PG&E costs and would use waste heat from power generation to produce steam for process and heating loads.

5.10 Hazardous Materials and Related Waste

Genentech's research, development and production activities involve the use of a broad array of equipment, processes, and materials. These activities are also regulated by workplace safety, quality assurance, and environmental laws, and Genentech is subject to inspections and oversight by numerous federal, state and local agencies.

In general, biotechnology companies—like pharmaceutical companies, research universities and many leading hospitals—use chemical, radioactive, biohazardous, and other materials. Wastes generated by these research, development and production processes are also subject to stringent legal requirements, and are managed by Genentech's Environmental Health and Safety (EHS) Department.

Usage and storage of appropriate hazardous materials and related waste will continue into the future with the procurement, use, storage and disposal of these materials carefully controlled. Although further usage is expected to increase, the increase in usage would be roughly proportional to Genentech's growth.

Utilities Goals

- **Identify and plan for future Genentech utility needs to assure uninterrupted campus growth and expansion.**
- **Maintain and expand all essential utilities to meet required performance standards and necessary service requirements.**

Utilities Strategies

- **Maintain and continue to expand the existing domestic water and fire protection systems to meet fire safety and insurance standards.**
- **Upgrade and expand the wastewater collection and treatment system to assure long term operational capacity and quality standards.**
- **Assist the city of South San Francisco in updating the City's Sewer Master Plan for the area East of 101.**
- **Work with utility service providers to identify long term service needs.**
- **Plan and maintain effective, comprehensive data and emergency communications systems between all Genentech operations.**
- **Continue to investigate and evaluate the potential for centralized utilities on campus.**
- **Comply with all State and Federal standards and practices with the storage, use, and disposal of hazardous materials and wastes.**

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Appendix A
DESIGN GUIDELINES

Design Guidelines Concepts

Purpose of Building Exterior, Site, and Landscape Design Guidelines

The purpose of the Design Guidelines is to create a comprehensive set of guidelines that will create a sense of identity and a unified campus. In 1995, Genentech established a set of guidelines and principles that permeate the following design guidelines. This Master Plan remains consistent with these concepts while enhancing the quality and character of future campus design.

Key Design Principles

Campus Unification

A strong and clear visual order is important to foster a coherent campus. Building systems, site elements, and wayfinding tools will be applied consistently throughout the Campus in order to convey a singular and unified corporate campus. New design will reinforce the continuity of Genentech's recently built facilities while optimizing creativity and fostering a high level of efficacy and responsiveness to the market.

Natural Environment

Materials, colors, and composition will be used to create a cohesive, distinctive, and harmonious campus that is sensitive to the natural environment of the site, including topography, landscape, waterscape, sky and distant views of water, hills, and cities. Formal and informal landscape design will continue existing concepts by use of native and drought tolerant plant materials.

Corporate Identity

Materials and design for the campus will foster a built environment that is well-grounded, conveys a sense of solidity, and reflects the diversity of Genentech and its employees. Building systems and site design will enhance employee safety and security within the campus.

The Genentech Campus is also more than a collection of buildings. The physical environment serves an important role in the process of recruiting and retaining key talent. Campus design will provide a motivational physical environment that supports employee creativity and innovation, fosters productivity, and attracts and retains exceptional people.

Functional Expressionism

Building elements (such as stairs and lab spaces) and composition will communicate the honest expression of building function, where interior function meets the exterior envelope in order to provide articulation on exterior facades (with the exception that mechanical equipment and service elements are primarily concealed).

Genentech Corporate Principles

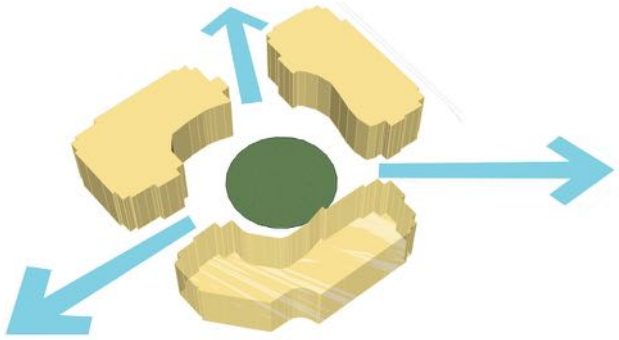
Genentech has established a fundamental set of values which are reflected in the campus as a whole and furthermore within the process of design. The following principles are the backbone of Genentech's corporate philosophy, and subsequently drive the guidelines and standards entailed in the Master Plan:

- Commitment to research as a "science based company".
- Maintain ties to major research universities.
- Support a corporate atmosphere that is conducive to creativity and fosters innovation.
- Maintain a high level of efficiency and responsiveness to changes in research and markets.

A.1 Site Planning & Building Placement

A.1-1 Functional Neighborhoods as Building Clusters

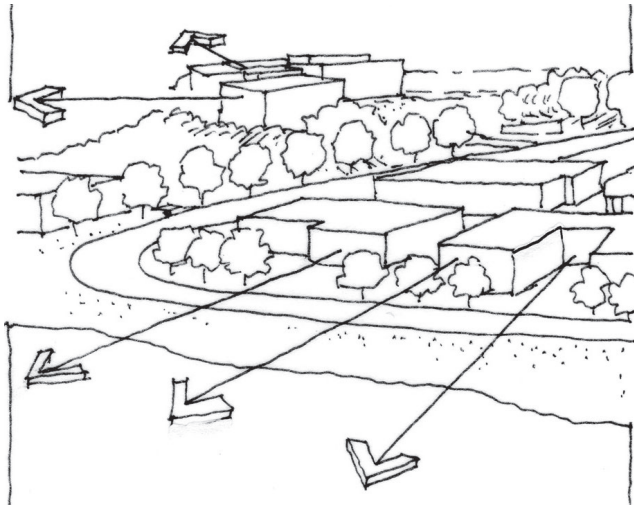
- Develop building clusters according to desired functional adjacencies of operation groups.
- Develop buildings with common architectural features and materials, grouped around protected courtyards, and site features.
- Configure site location, grouping, and building form in response to building function and technical requirements.
- Design buildings and building clusters to allow flexibility for future modifications, additions, and use.



Building cluster with central outdoor space and connectivity to campus.

A.1-2 Environmental Context

- Position building entry, orientation, and footprint in response to immediate environment, other structures, circulation requirements, and the Central Spine elements.
- Utilize site hardscape, landscaping, and site elements (benches, lights, signage) to create smooth transition between adjacent structures and provide continuity.



Position buildings to capitalize on views.

Open space incorporated into existing topography at FRC in Mid Campus.

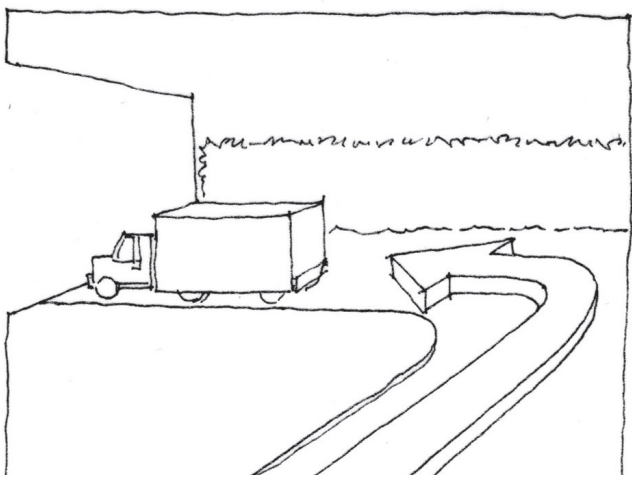
A.1-3 Wind and Sun

- Place buildings to maximize wind protection and to avoid wind tunnel effects. (Refer to Section 3.8 Building Orientation, Massing, and Scale for campus wide wind variability and direction.)
- Provide windbreaks through structural elements and landscaping (A.7 Landscape Design).
- Consider solar orientation to optimize light and warmth in both indoor and outdoor spaces where possible.

A.2 Vehicle and Pedestrian Accessibility

A.2-1 Service Vehicle Access and Routes

- Facilitate the movement of service vehicles to loading, service and storage areas safely and efficiently.
- Screen views of service and delivery areas from major pedestrian gathering areas and public spaces.
- Establish uniform treatment of loading docks.
- Separate service access from Central Spine pedestrian routes and open spaces through grade separation or landscaping, where possible to secure employee safety.
- When multi-use for vehicles and pedestrians, protect those areas designated exclusively for pedestrian use with bollards or other landscape or physical barriers.
- Delineate vehicular routes with proper pavement treatments, bollards, and other site-unifying elements.



Efficient access for service and freight movements.

A.2-2 Fire Lanes

- Provide fire lanes designed to meet all City regulations and Fire Officials requirements.
- Where fire lane and pedestrian walkways are combined, emphasize pedestrian use with a blend of surface materials to break up the scale of the fire lane, as shown in the image below.
- Use materials as defined in Section A.7-3 Hardscape Materials and Textures.

A.2-3 Pedestrian Accessibility

- Design pedestrian pathways, sidewalks and trails to follow all applicable codes.
- Detail pedestrian connections at road crossings and sidewalks at accessible stalls, with ramps sloped per applicable codes to avoid truncated dome panels whenever possible.
- Where sidewalks are required to be ramped due to steeper sloped connections, provide concrete curbed edges integral to sidewalk paving.

Shared fire access and pedestrian pathway behind B32 in Upper Campus.

A.2-4 Crosswalks

- Coordinate with City of South San Francisco Department of Public Works on design specifications of crosswalks.
- Design crosswalks to include the following Type I and II specifications.

Type I

- Provide conspicuous crosswalk delineation (e.g. parallel striping), installed in thermoplastic instead of paint.

Type II

In order to improve the safety of the mid-block crosswalk on DNA Way, the following should be installed with the crosswalk:

- Install new in-pavement lights for the new and existing mid-block crosswalks.
- Install new LED crosswalk pole signs prior to each crosswalk that are electronically connected to the crossings. Install one pole in each direction for each crosswalk.
- Provide a new "Stop for Pedestrians" signs at both sides of the crosswalk and provide four additional signs to the public works maintenance division.
- Provide a high-visibility crosswalk pattern (e.g. ladder striping), installed in thermoplastic instead of paint.

A.2-5 Campus Shuttle Shelters

- Provide for wind and rain protection, security, and visibility, with transparent walls and appropriate lighting at both shuttle stops and pedestrian crossings.
- Maximize ease of use and information access: Incorporate appropriate and visible signage, shuttle route map, and timetable service information at every stop. Use the "Next Bus" Notification system within shelters.
- Maximize comfort and convenience by including a sheltered seating bench and litter unit, interior lighting, and additional seating (for higher ridership sites).
- Provide paved space for exterior waiting area.
- Comply with accessibility requirements for curb cuts at crossings and a stable, firm, and clear landing area.
- Design shuttle shelters to be consistent in style, size, and color throughout the campus, and to be consistent with campus design elements.
  - Use a neutral background color to complement the site furnishings and recede as a part of the overall campus visual.
  - Use materials that are durable and easy to maintain.
- Provide security phones at every shelter per Genentech security standards.
- Incorporate the following elements into the shelter design:
  - "Nextbus" notification system
  - Translucent roof structure
  - Interior lighting
  - Genentech info placard
  - Security Response System
  - Shuttle route maps and schedule
  - "Four sided" wind and rain protection

A.3 Open Space Network

A.3-1 Site Scale, Mass, and Proportion

- Create progression of open spaces through variety of large and small-scale courtyards connected by pedestrian pathways (see A.3.3: Courtyards and Gathering Spaces).
- Moderate scale of open spaces between buildings with pedestrian scale (see A.3-2: Pedestrian Scale): Proportion courtyards to spaces between buildings and utilize trees, plantings, and berming to soften the spaces created between buildings.
- Use berms and curving natural landscape grading to enhance man-made earth cuts and express coastal image.

Landscape berms and varied planting heights mitigate adjacent building massing and scale.

A.3-2 Pedestrian Scale

- Emphasize pedestrian scale design through site elements and plantings.
- Use pedestrian-sized light fixtures (15' max.) and light bollards.

Use of boulders varied planting heights, and mix of paving materials add pedestrian scale to B7 courtyard in Lower Campus.

A.3-3 Courtyards and Gathering Spaces

- Create outdoor settings for Genentech employees to interact, hold informal meetings, or eat lunch.
- Unify courtyards with common site elements such as site furnishings and materials.
- Integrate courtyards with adjacent building spaces such as entryways, cafeterias, and meeting rooms.
- Use building forms to define outdoor gathering spaces that are protected from wind and oriented toward the sun.
- Orient views to expand the visual experience of the courtyard where possible.
- Provide cluster seating in protected microclimate.
- Permit access by emergency vehicles where necessary.

Open space with seating areas for small groups.

A.3-4 Recreational Network

- Allow the campus recreational network to include bluffs, shoreline area, informal courtyards and lawns—moving from natural elements to formalized spaces for recreation.
- Curve and lengthen trails wherever possible to soften the pedestrian experience and to ease grade changes through berms and sloped landscapes.
- Orient stairs and pathways to views of hills, the Bay, distant open space views, and away from buildings, hardscape, and parking lots.
- Design recreational trails with benches spaced periodically for resting, at top and bottom of slopes and where distant views or landscape elements of interest occur.
- Maintain pedestrian access paths to BCDC trail and associated public parking.
- Promote use of shoreline for walking, jogging, and other recreational activities.

The Bay Trail and shoreline within Lower Campus offers multiple recreational opportunities.

Open space in Mid Campus accesses views to the Bay.

A.4 Building Exterior Design and Composition

A.4-1 Building Design Massing

- Reflect building program and interior function in building floorplate and form. For example:
  - Distinguish between lab and office buildings by emphasizing unique building functions like lab spaces and meeting rooms.
  - Modular configuration with repetitive window and structural framing systems,
- For manufacturing buildings, derive building forms from the technical processes, and the mechanical and utility services required for specific production activities.
- Incorporate human-scale references in building forms through expressions of balconies, overhangs, roof terraces, hand rails, and other design features.
- Relate the building's shape and mass to the parcel size and shape, as well as topography.
- Integrate natural setting, design, and topography with building massing and siting.

FRC architecture relates to natural landscape and topography.

A.4-2 Building Heights and Setbacks

- Maintain a maximum building height of 150 feet, to be consistent with Chapter 20-40 of the South San Francisco Municipal Code.
- Comply with height limits set by FAA Height Regulations (See Section 3.8, Figure 3.8-1).
- Design building heights with strong consideration to views from other campus buildings and access to natural light.
- Moderate perception of building height with railings, recessed wall planes, balconies, building step-backs of upper floors, and articulation of other architectural elements.
- Accommodate lobbies, cafeteria, and other large assembly functions with appropriate floor-to-floor heights.
- Use setbacks to create rhythm and repetition with adjacent buildings.
- Strengthen identifiable street edge.
- Provide a minimum setback of 20 feet along street edge and 10 feet along secondary streets.

Building 32 in Upper Campus reflects interior office spaces through building massing and surface materials.

Varied setbacks, projections, and heights create both visual interest and pedestrian scale.

Parapet with open rail edge to reduce perception of building height and mass.

A.4-3 Building Articulation and Composition

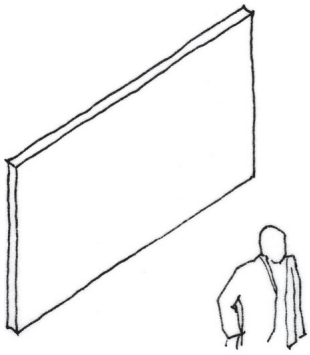
- Convey depth of material through façade composition. Incorporate a hierarchy of framing members within window system.
- Balance the percentage of glass and solid surface.
- Differentiate key functions in interior areas, such as meeting rooms, lobbies, or stairs from general building functional areas.
- In keeping with the existing Campus vocabulary, emphasize a generally horizontal composition of window and solid. Vertical emphasis may be used to accentuate key building features.
- Design buildings with visual variety and complexity, avoiding:
  - Continuous, undifferentiated or singular treatment of windows across entire length of facades;
  - Repetitive punched openings over full length of façades;
  - Vertically oriented window openings should generally be avoided except for special emphasis of unique elements such as lobbies and stairs;
  - Superficial facade treatments such as flat panels set flush with a glazing system.

Building with differentiated heights and balconies.

- Consistent with Policy DE-56 in the East of 101 Area Plan, blank building walls should be no more than 30 feet long.
- Provide parapets or protective railing at roof tops and balconies per building code requirements.Where full height parapets are required, an open rail edge may be considered to reduce apparent building height and increase sky visibility.
- Production spaces are generally equipment intensive: Ensure solid wall enclosure systems meet equipment and security requirements. Where appropriate, use glass to display internal functions.
- Enclose rooftop mechanical equipment with metal screen. Articulate the panel system with seams or reveals to mitigate the overall scale of the surface. Rooftop penthouses should follow similar guidelines.

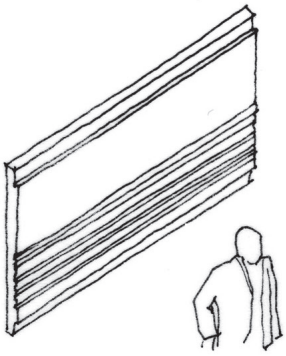
Architectural screen element breaks up the scale of a blank wall in Mid Campus.

Avoid:

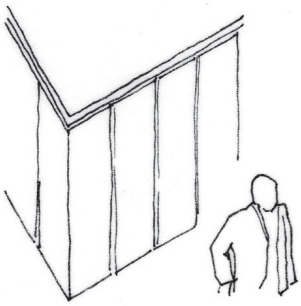


Flat, inarticulated walls are discouraged.

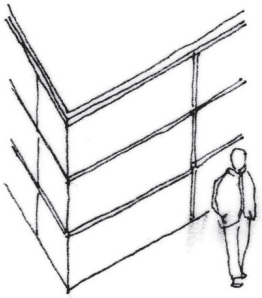
Recommended:



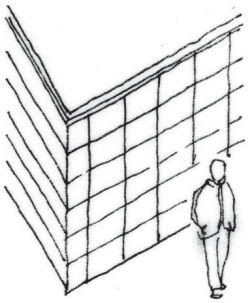
Skin should incorporate patterns, reveals, or textures.



Avoid vertical aspect ratio for panels.



Panels should have a generally horizontal aspect ratio.



Avoid small, grid-like panel patterns.

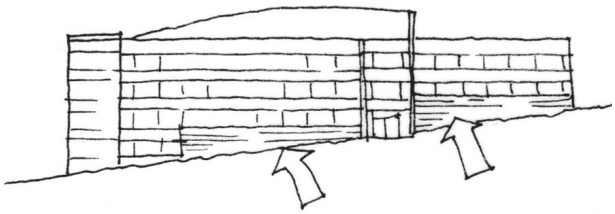
A.4-4 Building Material and Surface Textures

- Select building textures, finishes, and colors to create a consistent and cohesive campus in harmony with the natural environment.
- Refer to Table A.4-12 for specific materials and textures.
- Reinforce the relationship between interior and exterior spaces where appropriate, such as in lobbies, by extending materials between spaces (e.g. flooring, lighting, etc.).
- Express a reference to natural material variations, including a transition from rougher textures or larger panel sizes to more refined textures or panels.

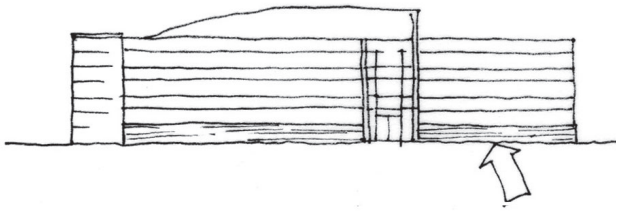
Use of rougly-textured material anchors the building to the surrounding environmental context.

A.4-5 Building Base

- Incorporate rough or deeply textured surfaces at building base, as a transition from natural topography.
- Emphasize horizontal orientation of base walls with formwork ribs in concrete.
- Differentiate base walls from the wall materials above by an offset in plane, a change in texture or pattern, a significant visual reveal, or a combination of the above.
- Maintain a consistent building base height (30 to 36 inch min.) except at lobbies, stairs, and other unique interior functions.
- For sites with varying terrain, follow the general topography of the grade line along the building.



Building base steps down with topography.



Building base interrupted where glass wall systems are extended to grade.

Use of landscaping and formwork ribs in concrete walls to emphasize horizontal orientation of base walls.

A.4-6 Building Color Use

- Utilize color range detailed in the Design Palette in Table A.4-12.
- Emphasize colors related to natural materials, including subtle variations within neutral and earth-tone color ranges.
- Express roof screens/penthouse as a variation of the overall building wall color (see Table A.4-12).
- Use metal architectural trims (such as mullions, railings, etc.):
  - subtle recessive definition of walls (using darker earth tones, bronze or warm grey), or
  - crisp, contrasting definition of edges (using white or light earth tones).

A.4-7 Windows and Natural Light

- Encourage the use of glass systems on Campus that are as transparent and as non-reflective as possible while achieving the requisite performance for energy conservation, internal comfort and glare control. (See Table A.4-12)
- Ensure that sill heights are a minimum of 34" high where offices occur to cover desk-top or bench-top functions, using solid or translucent materials below, but that are low enough to allow views from a seated position.
- Orient work areas to maximize access to natural light.
- Consider the use skylights to bring natural light to the interior spaces of large floor plate structures, where applicable.

Transparent windows provide light, internal comfort, and connections between the indoors and outdoors.

A.4-8 Building Entries

- Clearly indicate building main entry and reception areas by a change of facade treatments, form, and scale, such as an appropriately scaled entry canopy or recess.
- Maintain proper light levels at building entries.
- Encourage transparency and daylight penetration into the building at these locations.
- Open lobbies to more than one story or accommodate lobbies with high first floor height.
- Provide protection from prevailing wind and weather conditions at primary building entries.
- Visually integrate egress/secondary doors into wall systems.

Entry promenade in Upper Campus.

A.4-9 Stairs

- Visually relate building circulation pathways to exterior environments for orientation and visual relief.
- Arrange vertical circulation and elevator lobbies within buildings to incorporate views of the site and natural light where possible.
- Express perimeter stairs through use of design elements and building articulation.

Circulation between buildings in the FRC uses transparency to maintain visibility to sky and campus.

A.4-10 Bridges

- Allow utilization of bridges and arcades between buildings to facilitate pedestrian and material movement.
- Design bridges with a vocabulary of transparency and lightness of structure in sim-ple, linear forms.
- Maintain adequate height clearance for Fire Access and other service vehicles as required.

Mid Campus bridge from the central spine.

A.4-11 Retrofit Strategies for Existing Structures

- Remodel existing buildings and sites within the context of the Master Plan design vocabulary to maintain continuity throughout campus.
- Retrofit buildings adjacent to or in coordination with new development to complete building cluster or neighborhood design aesthetic.
- Use exterior colors consistent with the campus color palette (see A.4-12: Design Palette).

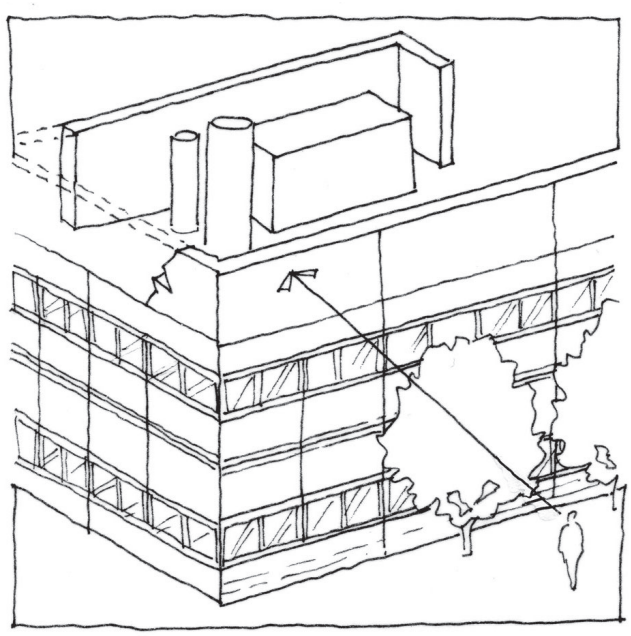
A.4-12: Design Palette

Building Material and Color		
Building Element	*Materials*	*Color*
Building Base, see A.4-5	Board form concrete, concrete masonry units (CMU) or other similar materials to match existing building bases on campus.	Natural concrete tones and hues.
Building Skin and Solid Walls, A.4-4	Pre cast concrete, curtain wall systems, GFRC, metal cladding systems, stone, and other similar materials may be considered. Avoid: Concrete Masonry Units, Brick, EIFS, Raw Concrete, or Wood Siding.	Warm, earth tones, and natural hues to maintain consistency with existing campus buildings.
Windows, Mullions & Trim, A.4-7	Metal framing or curtain wall systems. Aluminum may be clear anodized or coated with Durnar, Kynar or equal.	White, silver metallic or similar neutral coloration, to match existing context.
Glass	Double-glazed and non-reflective vision glass. Specs should meet or exceed all applicable codes.	Vision glass to match existing context (Green or blue tones.)
Rooftop Equipment Screens, A.5-1	Aluminum or other approved metal systems.	Gray-green, or warm earth tones, or to match existing context.
Building Entries, A.4-8	Double-glazed and non-reflective vision glass. Specs should meet or exceed all applicable codes.	Clear glass or match existing context: tinted (Solex), or to match existing context.
Canopies or Framing Members	Projecting canopies should utilize metal trim or other materials that are visually compatible with the building window mullions and other building materials.	White silver metallic or accent color.
Bridges, A.4-10	Metal and glass, or concrete treated with base elements consistent with building bases.	Coordinate with adjacent buildings and context.
Secondary Entries, A.4-8	Painted metal and glass.	
Building Service Enclosures, A.5-2	Concrete, CMUs, metal fencing, or other suitable materials.	Warm, earth tones and natural hues to maintain consistency with existing campus buildings.
Parking Structures, A.6-2	Concrete, CMUs, metal, or other suitable materials.	Warm, earth tones and natural hues to maintain consistency with existing campus buildings.

A.5 Rooftop Equipment and Utility Yards

A.5-1 Rooftop Equipment

- Avoid exposure of mechanical equipment to view.
- Screen or provide mechanical penthouse for rooftop equipment such as HVAC supply.
- Cluster and screen multiple pieces of smaller mechanical equipment.
- Set back rooftop screens and enclosures from the edge of facades unless contributing to the emphasis of special features.
- Appropriately size screens and enclosures to house equipment, with design emphasis towards gently curving or vaulted forms that suggest a reference to the natural surroundings.



Rooftop equipment concealed by roof screen and solid parapet.

Rooftop screens camouflage building equipment in FRC from views in Upper Campus.

A.5-2 Service Enclosures

- Integrate building service areas into building and site for convenient deposit and collection of refuse.
- Isolate trash disposal and service areas away from building entries, prominent pedestrian pathways, and open spaces.
- Provide appropriate visual screening of trash disposal areas located outside the building envelope where possible. Utilize landforms and landscape to blend screening walls into the natural setting.

Utility structure within Lower Campus reflects the use of bridges along the Central Spine.

Landscape plantings provide pedestrian scale and soften the edge of the service enclosure walls.

A.5-3 Utility Racks and Yards

- Screen utility yards and utility structures from public view.
- Consolidate tanks in utility yards, as clusters of cylindrical forms.
- Uniformly color and finish utility elements in public view to blend visually with the adjacent buildings.
- Consolidate utility supply lines into racks.
- Express racks as architectural linkage between structures.
- Where appropriate screen from public with trellis, walls, or planting.

A.5-4 Utility Buildings

- Design facades with materials, colors, and composition to match existing context and meet design guidelines.
- Refer to A.5-2: Service Enclosures and guidelines regarding siting, equipment and window placement, and design.

Existing utility enclosure using materials that blend with surrounding architecture.

A.5-5 Screening and Fencing

Screening and fencing will be provided at utility yards and service/loading areas.

- Design with screen elements appropriate for each neighborhood, in keeping with established Genentech vernacular and East of 101 Plan requirements.
- Soften screen walls and fencing with planting palette.
- Create 'green' walls integrating planting where appropriate.
- Minimize the height of screen walls and fencing by utilizing natural setting (berms) and planting material.
- Limit use of chainlink fences to areas out of public view.
- Provide screen fencing, and walls with materials visually compatible with existing campus screen elements and adjacent architectural detailing.

Screened service area in Lower Campus continues pedestrian scale of open space.

A.6 Parking

A.6-1 General Parking Guidelines

- Provide disabled/ADA parking near buildings as required.
- Design circulation at entrances to minimize vehicular conflicts and disruption to the street system.
- Provide clear and safe pedestrian entrances adjacent to or separate from vehicular entrances.
- Provide access control with use of badge and card keys, and arm gates or similar methods.
- Provide parking areas with emergency phones.

A.6-2 Parking Structures

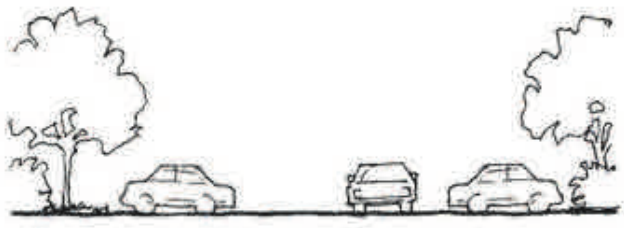
- Use materials, design, and landscape elements to achieve visual compatibility with buildings on campus.
- Express structural systems and connections when possible. Facade treatments and stepping of upper floor that break undifferentiated horizontal panels are encouraged.
- Use landscape and materials to further soften visual impact of structures utilizing topography as a visual buffer where possible.
- Consider night viewing in the design of ceilings and lighting systems.
- Design facade treatments to allow visibility into the garage.
- Design stairwell enclosures with materials that provide visibility into the structure.
- Identify entries from street clearly by use of trellises, signage, or other design features.

Existing Lower Campus parking structure with landscape buffer along façade.

A.6-3 Surface Parking Lots

Surface parking lots will be distributed throughout the campus to provide convenient parking adjacent to buildings. Interim surface lots will be located adjacent to buildings to provide flexibility for potential expansion when needed.

- Screen lot perimeter with landscape elements.
- Provide planting islands with at least one tree for every 12 parking spaces.
- Plant a minimum of five percent of the total parking lot area with shrubs.
- For interim parking lots, install fast growing, expendable tree planting within lot.
- Use construction methodology appropriate for a temporary parking lot; for example, paving sections.
- Maintain appropriate levels of lighting throughout the parking lot. For lighting types see A.8-2 for lighting design guidelines.
- Provide shuttle shelters per Genentech's Transit and Shuttle Plan.



Temporary parking lots with fast-growing landscape elements for shade and screening.

A.7 Landscape Design

A.7-1 Landscape Design Concepts and Guidelines

- Use plant types that are consistent with the existing campus landscape and East of 101 Area Plan Design Element. For plant types, see Appendix B: Genentech Facility Plant Palette.
- Utilize drought-resistant plantings adapted to the South San Francisco micro-climate throughout the campus.
- Design with seasonal color to reflect the dynamic character of Genentech and to provide changing experience for pedestrians and users.
- Design with "clean" plant species to minimize leaf drop, flower and fruit drop, and organic matter contamination at air intake vents and other sensitive areas in response to Genentech's pest control policy.
- Integrate plant barriers with architectural barriers to minimize wind forces at court-yards, building entrances, and where wind tunnels occur.
- Provide dense shrub and ground cover plantings to reduce wind-blown soils and protect micro-climate.
- Soften building massings, extensive parking lots, and utility yards and structures through planting. Lombardy poplars and Afghan Pines planted around tall buildings will moderate their height.
- Respond to site micro-climatic conditions with appropriate plant selection and placement for intended use. Avoid the following plant types:
  - Avoid plants that attract pests in accordance with Genentech's Pest Control Policy. Avoid dense low ground covers at perimeter of manufacturing buildings.
  - Avoid trees with brittle growth that may be subject to breakage.
  - Avoid plants which are known to cause allergic reactions, such as Acacia trees.

A.7-2 Bluffs and Hillsides

- Design with slope stabilizing plants using low output irrigation to minimize sur-charge on slope.
- Stabilize cut slopes and embankments and minimize erosion.
- Plant slopes and bluffs with drought resistant, low-maintenance plantings that enhance vistas and pedestrian experience.
- For non-irrigated slopes, use native wildflower hydro-seed for erosion control and aesthetic quality.

A.7-3 Hardscape Materials, Colors, Textures

- Design with consistent texture for use of board form concrete surfacing and integral pour "V"-shaped horizontal detail—chamfer edges.
  - Utilize paving to enhance courtyards, entrances, and pedestrian crosswalks.
  - Design consistent paving colors, textures, and patterns to identify and enhance pe-destrian pathways and spines in each neighborhood.
- Coordinate exterior paving patterns and materials with interior patterns where adjacency allows.
- Match guardrails and planters to the site context in regard to color, texture, and material.
- Design site elements with the following materials:
  - Sidewalks: concrete
  - Firelanes/Service Roads: asphalt, crushed gravel, or similar materials
  - Primary Crosswalk: concrete or similar material
  - Secondary Crosswalk: painted stripes
  - Primary Walkways: concrete, special paving (tiles, stone, or colored concrete), or similar material
  - Secondary Walkways: concrete or similar material at highly-trafficked paths, open spaces, or landscaped areas; and asphalt, crushed gravel or similar material at minor connections between buildings and along recreational paths.
  - Courtyards and Plazas: concrete, special paving, or similar material

Variegated hardscape materials at pedestrian plaza.

A.7-4 Grading and Drainage Design

- Design grading to be curving with berms and longitudinal pathway runs to move through the landscape. Design earthwork to be softly sculptural.
- Design bioswales where space allows, encouraging recharging of the ground water and providing filtration of sediments out of surface flows to minimize particulates flowing to the Bay.
- Create berms in the landscape to soften the spaces between buildings, to screen utility areas and parking lots, and to tilt the planting to highlight the landscape over the hardscape.
- Provide surface drains where paving is below the adjacent landscape to minimize run-off over paved surfaces.
- Provide sub-surface drainlines where trees are located in impervious soil and where ground water reaches the surface, such as at the visitor parking lot at FRC II.

A.7-5 Irrigation and Control Systems

- Design irrigation systems with state-of-the -art controllers with capability to be con-nected to central control computer.
- Locate controllers out of view of public right of way where possible.
- Provide 40-60 percent of landscaping on low volume irrigation systems. Areas of Ceanothus require emitter type irrigation for health of the plants.
- Where plants spread by rooting from branches such as ice plant and Beach Straw-berry, spray irrigation is required.

A.8 Site Furnishing, Lighting, Signage, and Banners

A.8-1 Site Furnishings

- Provide design continuity and create identity throughout the Genentech Campus through use and placement of site furnishings.
- Provide outdoor seating adjacent to cafeterias and other amenities.
- Provide consistent vocabulary of furnishings and color throughout the campus.
- Utilize furnishings finished to be resistant to salt-spray and compatible with the micro-climatic conditions.
- Provide perforated metal benches and chairs, appropriately finished in black, or approved equal.
- Provide round metal tables appropriately finished with granite-textured top, black base and post, or approved equal.
- Litter Units and Ash Urns: Use consistent models throughout the campus—for example, 24-gallon with side opening and ash lid, appropriately finished in black, or approved equal.
- Litter units should be responsive to pest control.
- Bicycle Storage Units: Use lockable and consistent units throughout the campus.
- Bicycle Racks: Provide where needed, with consistent design and appropriately finished in black.

A.8-2 Lighting

Site and building lighting help to reinforce and highlight the overall character of the campus while enhancing pedestrian orientation, safety, and security. This intent is supported by the following guidelines.

- Maintain appropriate levels of light at building entries and all pedestrian paths and corri-dors throughout the campus.
- Enhance campus character with consistent use of light fixtures, finishes, and colors.
- Minimize glare and night-time light pollution.
- Parking lots:
  - Provide Guardco Form 10 Round fixtures on 22' poles on raised concrete footings (25' final height), appropriately finished in black, or approved equal.
  - Provide a lighting level of 1 foot-candle for parking lot areas.
- Shuttle stops:
  - Provide interior lighting in shuttle stop shelter for night-time visibility (see A.2-4 Shuttle Shelters).
  - Provide 15' high fixtures, appropriately finished in black, or approved equal, with an x-candle light level.
- Pedestrian walkways and plazas:
  - Provide Guardco Form 10 Round hardtop on Post top fixtures on 15' poles, appro-priately finished in black, or approved equal.
  - Provide a lighting level of 1 foot-candle for pedestrian walkways.
- Accent pedestrian lighting:
  - Provide Guardco School Bollard, 42" high, appropriately finished in black, or ap-proved equal.
- Incorporate other fixture types where appropriate, such as special lighting at campus entry features, pedestrian plazas and service areas.

Lighting fixture at parking lot.

Lighting at pedestrian walkway.

A.8-3 Signage

Signage is an important element, contributing to the overall identity of the campus, as well as providing a means of identifying individual buildings. Sign design reinforces Genentech's image within the South San Francisco community and a commitment to a quality environment. In addition, signage serves as a key wayfinding tool for employees and visitors as they move through the campus. Within Genentech, there are two types of signage: Monument signage and wayfinding signage. These typologies are defined and discussed in the following guidelines.

- Monument signage:
  - Highlight building identity with site signage as well as signage on buildings. Signage information should include building numbers and street addresses.
  - Provide monument signage at main vehicle and pedestrian entry to each building.
  - Locate signage in landscaped areas, where possible.
  - Maintain appropriate levels of lighting on all building identification signage.
- Wayfinding signage
  - Indicate direction and/or location of important campus services, access points, and amenities, such as loading docks, lobbies, and ADA access and entries.
- • Use signage as an integral part of the campus fabric to highlight campus entries, pedestrian walkways, building numbers and addresses, and special open spaces.
- Design both monument and wayfinding signage to be uniform in style, font, and color, to lend corporate identity and aesthetically unify the campus.
- See Genentech Signage Standards for further detail.

A.8-4 Displays

Genentech established the patient success story program to support the connection between employees and patient success stories. The program is intended to support the sense of mission to make a difference in the lives of patients and provide a constant reminder of why employees come to work every day. The siting and size of displays will be approved by the Planning Commission.

Example of campus monument signage.

Wayfinding signage at site entry.

Appendix B
PLANTING PALETTE

Table B-1 Genentech Campus Plant Palette

Key	*Botanical Name*
Trees	
ACE SKA	Acer Palmatum ‘Sango Kaku’
ARB MAR	Arbutus Marina
CAR BET	Carpinus Betulas ‘Fastigiata’
CUP MAC	Cupressus Macrocarpa
FIC MIC	Ficus Microcarpa
MAG GRA	Magnolia Grandiflora
MET EXC	Metrosideros Excelsus
PIN ELD	Pinus Elderica
PIN MUR	Pinus Muricata
PIN THU	Pinus Thunbergii
PLA COL	Platanus Acerifolia ‘Columbia’
POP NIGRA	Populas Nigra ‘Italica’
PRU KRA	Prunus ‘Krauter Vesuvious’
PYR CHA	Pyrus Calleryana ‘Chanticleer’
QUE AGR	Quercus Agrifolia
SEQ SEM	Sequoia Sempervuirens
TRI CON	Tristania Conferta
Shrubs	
ARB UNE	Arbutus Unedo
BUX WIN	Buxus Microphylla Japonica ‘Winter Gem’
CAM WDO	Camellia Sasanqua ‘White Doves’
CAM YUL	Camellia Sasanqua ‘Yuletide’
CEA ABA	Ceanothus Gloriosus Horizontalis ‘Anchor Bay’
CER OCC	Cercis Occidentalis
LUP ARB	Lupinus Arboreus
Groundcovers and Perennials	
AGA AME	Agave Americana
ALO ARB	Aloe Arborescens
ALO SAP	Aloe Saponaria
AMA BEL	Amaryllis Belladonna
ARM MAR	Armeria Maritima
DIE BIC	Dietes Bicolor
DRO FLO	30% Drosmanthemum Floribundum
LAM SPE	70% Lampranthus Spectabilis

Genentech Campus Plant Palette (Cont'd)	
ECH FAS	Echium Fastuosum
EUR VIR	Euryops Pectinatus 'Viridis'
FRA CHI	Fragaria Chiloensis
HET ARB	Heteromeles Arbutifolia
HEM VIC	Hemerocallis Hybrids 'Miss Victoria'
IRI DOU	Iris Douglasiana-hybrids
KNI UVA	Kniphofia Uvaria
LAU FLU	Laurentia Fluviatius
LIM PER	Limonium Perezii
LIR MUS	Liriope Muscari
MAH COM	Mahonia Aquifolium 'Compacta'
NAR KAL	Narcissus 'King Alfred'
PHO MMA	Phormium "Maori Maiden'
ROS HUN	Rosmarinus Officinalis 'Huntington Carpet'
RUM ADI	Rumohra Adiantiformis
TRA JAS	Trachelospermum Jasminoides
YUC FIL	Yucca Filamentoja
Grasses And Wildflowers	
CAL KFO	Calamagrostis 'Karl Foerster'
ESC CAL	Eschscholzia Californica
SES AUT	Sesleria Autumnalis
100% TALL FESCUE	
Vines	
DIS BUC	Distictus Buccinatoria
FIC MIN	Ficus Pumila 'Minima'
HAR VIO	Hardenbergia Violacea
PAR TRI	Parthenocissus Tricuspidata
PAS LAV	Passiflora 'Lavendar Lady'
WIS SIN	Wistringia Sinensis

Table B-2 BCDC Plant Palette

Key	*Botanical Name*	*Common Name*
Trees		
CUP MAC	Cupressus Macrocarpa	Monterey Cypress
PIN CON	Pinus Contorta	Shore Pine
PIN ELD	Pinus Elderica	Afghan Pine
PIN MUR	Pinus Muricata	Bishop Pine
MEL QUI	Melaleuca Leucadendra 'Quinquenervia'	Cajeput Tree
Shrubs		
ARB UNE	Arbutus Unedo	Strawberry Tree
ERI GLA	Erigeron Glaucus 'Arthur Menzies'	Fleabane
GRI STR	Grindelia Stricta	Coastal Gum Plant
LUP ARB	Lupinus Arboreus	Bush Lupine
KNI UVA	Kniphofia Uvaria	Red Hot Poker
LIM PER	Limonium Perezii	Sea Lavendar
Groundcovers And Perennials		
AM	Armeria Maritima	Sea Thrift
ARC MON	Arctostaphylos Hookeri 'Monterey Carpet'	Monterey Manzanita
CEA ABA	Ceanothus Gloriosus Horizontalis 'Anchor Bay'	
FC	Fragreria Chiloensis	Sand Strawberry
Grasses And Wildflowers		
CAL NUT	Calamagrostis Nutkaensis	Pacific Reed Grass
ESC CAL	Eschscholzia Californica	California Poppy
Salt Tolerant		
ATR CAL	Atriplex Californica	Saltbush
BAC DOU	Baccharis Douglasii	Salt Marsh Baccharis
DIS SPI	Distichlis Spicata	Salt Grass
JAU CAR	Jaumeacarnosa	Fleshy Jaumea
JUN EFF	Juncus Effusus	Rush
LIM CAL	Limonium Californicum	Marsh Rosemary
MON LIT	Monathochloe Littoralis	Bushy Shoregrass
SAL VIR	Salicornia Virginica	Pickleweed
SPA FOL	Spartina Foliosa	Pacific Cordgrass
Turf		
100% Tall Fescue		

Table B-3 BCDC Seed Mix Palette		
Botanical Name	*Common Name*	*Lbs./acre*
Perennial Mix		
75 percent of the following Perennials:		
Eriophyllum Confertiflorum	Golden Yarrow	1
Eschscholzia Californica	California Poppy	3
Gilia Capita	Globe Gilia	2
Gilia Tricolor	Bird's Eyes	2
Iris Douglasiana	Douglas Iris	3
Linum Lewisii	Blue Flax	5
Lotus Scoparius	Deerweed	12
Lupinus Formosus	Summer Lupine	4
Mimulus Aurantiacus	Sticky Monkey Flower	0.5
Nemophila Menziesii	Baby Blue Eyes	3
Penstemon Cheiranthifolia	Penstemon	3
Sisyrinchium Bellum	Blue-eyed Grass	3
25 percent of the Following Grasses:		
Nassella Pulchra	Purple Needle Grass	16
Nassella Lepida	Foothill Needle Grass	9
Shrub Mix		
50 percent The Following Shrubs:		
Eriogonum Arborescens	Island Buckwheat	8
Eriogonum Fasciculatum	California Buckwheat	6
Salvia Leucophylla	Purple Sage	4
Salvia Mellifera	Black Sage	4
25 percent of the Following Perennials:		
Achillea Millefolium	White Yarrow	1
Collinsia Heterophylla	Chinese Houses	2
Clarkia Amoena	Farewell-to-spring	3
Gilia Tricolor	Bird's Eyes	2
Lupinus Formosus	Summer Lupine	4
25 percent of the Following Grasses:		
Elymus Multsetus	Big Squirreltail	12
Festuca Rubra Molate	Red Fescue Molate	24
Grass Mix		
50 percent of the Following Grasses:		
Melica Imperfecta	Coast Range Melic	6
Vulpia Microstachys	Small Fescue	16

BCDC Seed Mix Palette (Cont'd)		
Botanical Name	*Common Name*	*Lbs./acre*
Grass Mix		
50 percent of the following Grasses:		
Melica Imperfecta	Coast Range Melic	6
Vulpia Microstachys	Small Fescue	16
Grass Mix		
25 percent of the following Perennials:		
Eschscholzia Californica	California Poppy	3
Iris Douglasiana	Douglas Iris	3
Layia Platyglossa	Tidy Tips	1.5
Lotus Scoparius	Deerweed	12
Mimulus Aurantiacus	Sticky Monkey Flower	0.5
Nemophila Menziesii	Baby Blue Eyes	3
Penstemon Cheiranthifolia	Penstemon	3
50 percent of the following Shrubs:		
Baccharis Pilularis	Chaparral Broom	0.5
Ceanothus Cuneatus	Buckbrush	8
Vegetated Swale Mix		
100 percent of the Following Grasses:		
Melica Imperfecta	Coast Range Melic	6
Vulpia Microstachys	Small Fescue	16

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Appendix C
IMPLEMENTATION PLAN

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FINAL

April 28, 2007

GENENTECH MASTER FACILITIES PLAN
2007-2017

IMPLEMENTATION PROGRAM

The Genentech campus is organized into neighborhoods to provide a sense of scale and support Genentech's diverse functional requirements. These neighborhoods are geographically defined as Lower, Mid, Upper, & West campuses in Section 2.1 of the Master Plan. This Implementation Plan sets forth the improvements required by the proposed Master Plan, and those that have been proposed as Conditions of Approval by the Planning Commission, and the City Planning Staff in each neighborhood, but does not include improvements identified by the MEIR in the MMRP.

FINAL

April 28, 2007

IMPLEMENTATION PROGRAM

This Implementation Plan sets forth the specific improvements, and public amenities to be provided on the Genentech, Inc. Campus in conjunction with the entire Genentech Facilities Ten Year Master Plan, and the triggers for implementation of those improvements and amenities. These improvements and amenities are provided for in the Master Plan, and/or have been imposed as Conditions of Approval by the Planning Commission; however, this Implementation Plan does not include improvements or amenities identified by the MEIR in the MMRP

All future development projects will require separate approval by the Planning Division or Planning Commission. Such future development projects may be subject to project-specific Conditions of Approval that have not been anticipated in the Implementation Program. Failure to comply with the Implementation Program or Implementation Program triggers identified in this document may result in the Planning Commission adding the improvement and trigger as a Condition of Approval for a future development project.

The Implementation Program is part of the Master Plan. Any proposed amendment to the improvements or triggers shall be submitted to the City with the Annual Review or separately between Annual Reviews. Any proposed modification that materially alters the Implementation Program, including the identified improvements or triggers, shall be subject to approval by the City Council, upon a recommendation from the Planning Commission.

GENENTECH MASTER FACILITIES PLAN
LOWER CAMPUS
2007-2017

	IMPROVEMENT	IMPLEMENTATION TRIGGER
Land Use And Structure		
Public Amenities & Bay Trail	Complete designation of existing employee shoreline parking lots for public use on evening and weekends as described in Attachment A.	Complete within 4 months following the effective date of adoption of the Genentech Facilities Ten Year Master Plan Update.
	Install Bay Trail directional signage from intersection of Forbes & Allerton, Oyster Point & Gull Drive, and East Grand & Grandview Drive to the Bay Trail access points as described in attachment B.	Complete within 4 months following the effective date of adoption of the Genentech Facilities Ten Year Master Plan Update.

	Provide Improvements consisting of constructing a food concession facility and public restrooms (approximately 3000 SF) and a recreational field and associated public parking on approximately .8 acres for public use along Forbes Blvd. as described in Attachment A	Specific design concepts shall be submitted for Planning Commission review within 6 months following the effective date of adoption of the Genentech Facilities Ten Year Master Plan Update. Pursuant to this review, the Planning Commission shall determine and approve design, phasing, and implementation aspects of the improvement(s). An aggressive implementation schedule will be pursued.
	Construct a History Hall for public use.	Construct prior to the issuance of a C of O of the first building at the B4 redevelopment site.
	Enhance landscaping adjacent to the Bay Trail by expanding the green space along the Lower Campus parking lot (adjacent to UPS facilities) through reducing the number of cars and re-striping the parking lot as described in attachment A.	Specific design concepts shall be submitted for Planning Commission review within 6 months following the effective date of adoption of the Genentech Facilities Ten Year Master Plan Update. Pursuant to this review, the Planning Commission shall determine and approve design, phasing, and implementation aspects of the improvement(s). An aggressive implementation schedule will be pursued.
	Enhance existing cross walk on DNA Way at B3 from type one (stripe only) to type two (controlled) as identified in Section 3.1 of the Master Plan.	December 31, 2007
	Add cross walk type two (controlled) on DNA Way at B5 entry in proximity to the shuttle stops as identified in Section 3.1 of the Master Plan.	December 31, 2007

	Public shoreline parking	Specific design concepts shall be submitted for Planning Commission review within 6 months following the effective date of adoption of the Genentech Facilities Ten Year Master Plan Update. Pursuant to this review, the Planning Commission shall determine the appropriate number and location of dedicated public parking spaces and approve phasing, and implementation aspects of the improvement(s). An aggressive implementation schedule will be pursued.
Urban Design		
Pedestrian & Bike paths	Add class II bike lanes along Forbes Blvd., from the intersection of Forbes and Allerton to terminus of Forbes Blvd. by striping a 5 foot bike path on both sides of the street, adjusting the street median to 4 feet, and adjusting the outside traffic lane to 11 feet as described in Attachment D (the traffic lane adjustment requires and is pending City Council approval). Alternate option: In the event the City Council does not approve the above-referenced lane adjustment, the City Council may elect to instead add a class III bike route along Forbes Blvd. from the intersection of Forbes and Allerton to terminus of Forbes Blvd by striping a 4 foot fog line on both sides of the street and adjusting the street median to 4 feet, as identified in Section 3.1 & figure 4.6-1 of the Master Plan.	Complete by the earlier of (i) completion of the City's planned sewer improvements along Forbes Blvd., or (ii) December 30, 2009. Genentech shall coordinate implementation & timing of this improvement with the City Engineer.
	Add bike lanes along DNA Way/ Grandview Drive, from intersection of Forbes and DNA Way to intersection of Grandview Drive and East Grand Blvd by striping a 4 foot bike lane on both sides of the street as described in Attachment D.	Complete by the earlier of (i) completion of the City's planned sewer improvements along DNA Way and Grandview Drive, or (ii) December 30, 2009. Genentech shall coordinate implementation & timing of this improvement with the City Engineer.

	Enhance landscape and pedestrian connectivity along the Lower Campus central spine from the parking structure to Building 6.	The location and design of the improvements on the north side of the central spine shall be submitted for Planning Commission review within 3 months following the effective date of adoption of the Genentech Facilities Ten Year Master Plan Update. Improvements on the north side of the Central Spine between Building 7 and PS1 shall be completed prior to issuance of a C of O for Building 50. Improvements along the south side of the Central Spine between Building 6 and PS1 shall be completed by the earlier of (i) prior to issuance of a C of O for the redevelopment at Building 9, or (ii) six years following the effective date of adoption of the Genentech Facilities Ten Year Master Plan Update. (This six year timeline may be extended by the Planning Commission, in its sole discretion, as part of the Annual Review in the event that Building 9 still exists four years after the effective date of adoption of the Genentech Facilities Ten Year Master Plan Update.)
	Connect the Lower and West Campuses by developing a pedestrian path/ service road from the Lower Campus Central Spine to B29 at Allerton as identified in Section 3.4 of the Master Plan.	Complete prior to issuance of a C of O for redevelopment of West Campus parcels at 301 East Grand and 342 Allerton (pending acquisition of remaining easement rights)

Campus Entries	Create Campus entry at Forbes Boulevard and DNA Way, (approximately 8000 SF) as identified in Section 3.2 of the Master Plan and described in Attachment A.	Design concepts shall be submitted for Planning Commission review within 6 months following the effective date of adoption of the Genentech Facilities Ten Year Master Plan Update. Pursuant to this review, the Planning Commission shall determine and approve design, phasing, and implementation aspects of the improvement(s).
Public Art	Provide public art throughout the Overlay District area at locations that are visible from the public parks and streets, at $1.00/SF of gross new development as identified in Section 3.2 of the Master Plan	Schedule of phased installation to be submitted to Economic and Community Development (ECD) for approval, within 3 months following the effective date of adoption of the Genentech Facilities Ten Year Master Plan, and shall be reviewed in the first Annual Report
Transportation And Parking		
	Remove on-street parking along DNA Way, Grand View Drive, and Point San Bruno.	Complete within 6 months following the effective date of adoption of the Genentech Facilities Ten Year Master Plan Update.
	Enhance street lighting along DNA Way, Grandview Drive and Point San Bruno (on both sides of the street as described in Attachment C).	Schedule of phased implementation shall be coordinated with and submitted to the City Engineering Division for approval within 3 months following the effective date of adoption of the Master Plan Update, shall be reviewed in the first Annual Report. Improvement shall be completed no later than December 31, 2009.
	Install new shuttle shelters (up to 2) with associated landscaping enhancement, and replace existing shuttle shelter along DNA Way as identified in Section 3.1 of the Master Plan and figure 4.2-4 of the Master Plan.	December 31, 2007

GENENTECH MASTER FACILITIES PLAN
MID CAMPUS
2007-2017

	IMPROVEMENT	IMPLEMENTATION TRIGGER
Land Use And Structure		
Bay Trail	Complete Bay Trail Phase II improvements.	Complete by March 2007
Urban Design		
Pedestrian Walkways	Create secondary pedestrian connection from Upper Campus to the Mid and South Campuses as identified in section 3.4 of the Master Plan.	Prior to issuance of C of O for the first new building on Mid Campus
Public Art	Provide public art throughout the Overlay District area at locations that are visible from the public parks and streets, at $1.00/SF of gross new development as identified in Section 3.2 of the Master Plan.	Schedule of phased installation to be submitted to ECD for approval, within 3 months following the effective date of adoption of the Genentech Facilities Ten Year Master Plan Update, and shall be reviewed in the first Annual Report
Transportation And Parking		
Street Improvement	Install shuttle shelters along Point San Bruno (up to 2) as identified in Section 3.1 and figure 4.2-4 of the Master Plan.	Prior to issuance of C of O for the first new building on Mid Campus. Final design and location of improvements shall be subject to review and approval by City Engineer.
	Street lighting enhancement.	(Refer to Lower Campus section)

GENENTECH MASTER FACILITIES PLAN
UPPER CAMPUS
2007-2017

	IMPROVEMENT	IMPLEMENTATION TRIGGER
Land Use And Structure		
Crosswalks & Sidewalks	Add type-one (striping only) cross walk on Grandview Dr. at B31 (one location), as identified in section 3.1 of the Master Plan.	Complete by the earlier of (i) completion of the City's planned sewer improvements along DNA Way and Grandview Drive, or (ii) December 30, 2009. Genentech shall coordinate implementation & timing of this improvement with the City Engineer.
	Add type-two (controlled) cross walk at B21/Hilltop Parking lot (one location), as identified in section 3.1 of the Master Plan.	Complete by the earlier of (i) completion of the City's planned sewer improvements along DNA Way and Grandview Drive, or (ii) December 30, 2009. Genentech shall coordinate implementation & timing of this improvement with the City Engineer.
Urban Design		
	Add sidewalk on north side of Grandview Dr. from B2 to B39 to enhance Upper Campus pedestrian connectivity, as identified in Section 3.4 of the Master Plan and described in Attachment C, sidewalk a.	Complete by the earlier of (i) completion of the City's planned sewer improvements along DNA Way and Grandview Drive, or (ii) December 30, 2009. Genentech shall coordinate implementation & timing of this improvement with the City Engineer.
Public Art	Provide public art throughout the Overlay District area at locations that are visible from the public parks and streets, at $1.00/SF of gross new development as identified in Section 3.2 of the Master Plan.	Schedule of phased installation to be submitted to ECD for approval, within 3 months following the effective date of adoption of the Genentech Facilities Ten Year Master Plan Update, and shall be reviewed in the first Annual Report

Transportation And Parking		
	Street lighting enhancement.	(Refer to Lower Campus section)
	Removal of on street parking.	(Refer to Lower Campus section)
	Install shuttle shelters on Grandview Dr. at B24 & B21 (two locations), and enhance the associated landscaping as identified in Section 3.1 and figure 4.2-4 of the Master Plan.	Prior to issuance of C of O for the first new building on Upper Campus. Final design and location of improvements shall be subject to review and approval by City Engineer.

GENENTECH MASTER FACILITIES PLAN
WEST CAMPUS
2007-2017

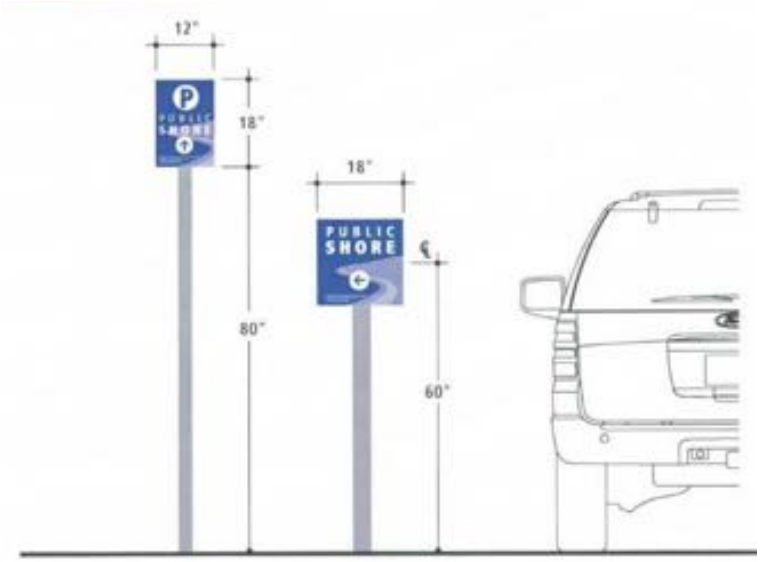
	IMPROVEMENT	IMPLEMENTATION TRIGGER
Urban Design		
Campus Entries	Construct a Campus entry at East Grand Avenue and Grandview Drive as identified in Section 3.2 of the Master Plan.	Design concepts shall be submitted for Planning Commission review within 6 months following the effective date of adoption of the Genentech Facilities Ten Year Master Plan Update. Pursuant to this review, the Planning Commission shall determine and approve design, phasing, and implementation aspects of the improvement(s).
Public Art	Provide public art throughout the Overlay District area at locations that are visible from the public parks and streets, at $1.00/SF of gross new development as identified in Section 3.2 of the Master Plan.	Schedule of phased installation to be submitted to ECD for approval, within 3 months following the effective date of adoption of the Genentech Facilities Ten Year Master Plan Update, and shall be reviewed in the first Annual Report
Transportation and Parking		
Street Improvements	Install shuttle shelters (up to 2) on Grandview Dr. at West Campus, as identified in Section 3.1 and figure 4.2-4 of the Master Plan.	Install prior to issuance of C of O for first new building on West Campus. Final design and location of improvements shall be subject to review and approval by City Engineer.
	Install shuttle shelters (up to 2) on Cabot Road, as identified in Section 3.1 and figure 4.2-4 of the Master Plan.	Install prior to issuance of C of O for the first new building on West Campus. Final design and location of improvements shall be subject to review and approval by City Engineer.
	Street lighting enhancement.	(Refer to Lower Campus section)

Bike paths	Add class II bike lane along Allerton Avenue by striping a Bike path on both sides of the street as identified in Section 3.1 and figure 4.6-1 of the Master Plan & described in Attachment D	Complete by the earlier of (i) completion of the City's planned sewer improvements along Allerton, or (ii) December 30, 2009. Genentech shall coordinate implementation & timing of this improvement with the City Engineer.

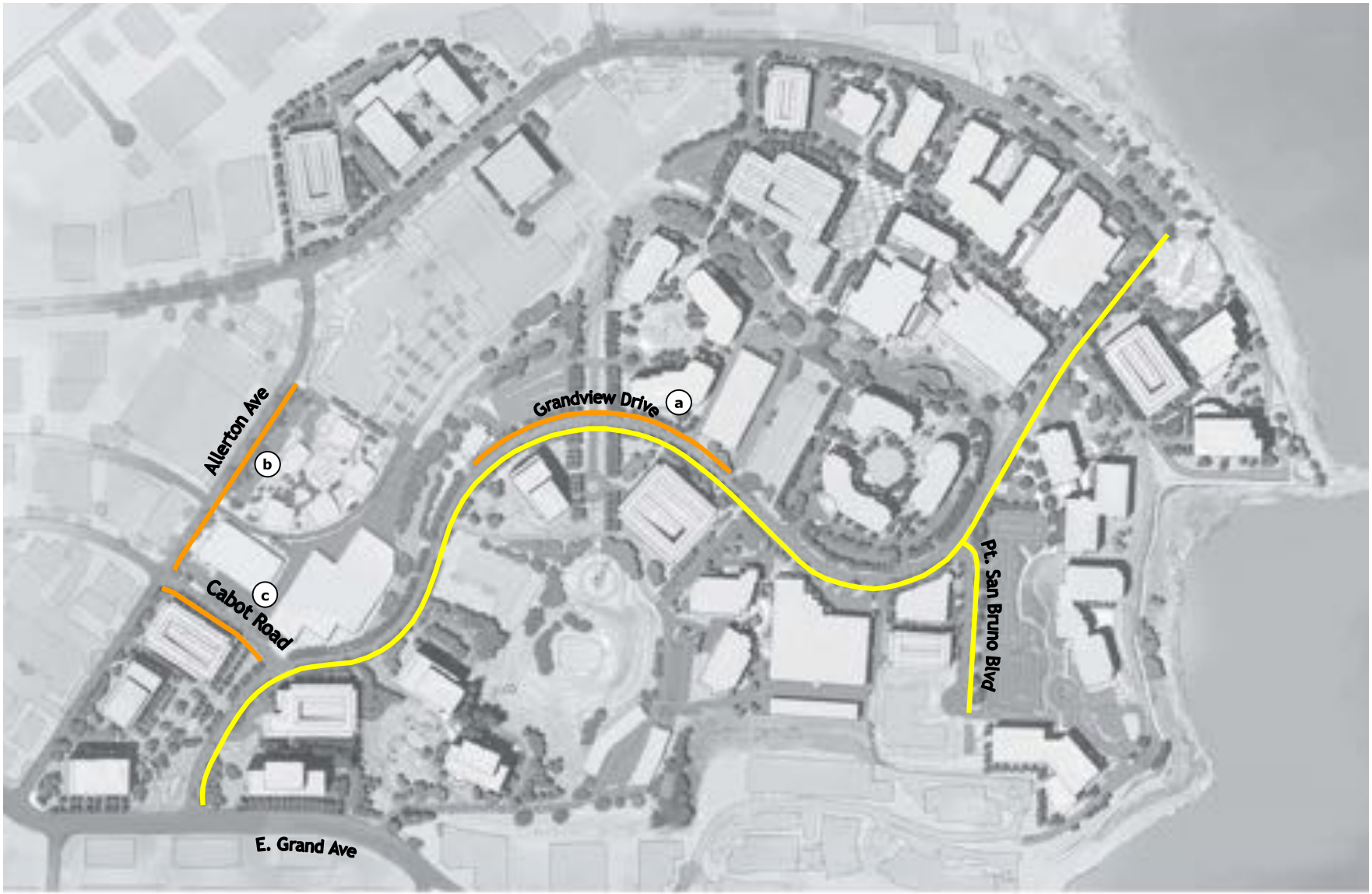

Attachment A:
Public Open Spaces and Amenities

Attachment B:
Bay Trail Directional Signage

Proposed Signs



Attachment C:
New Sidewalks and Street Lighting



New Sidewalks

Street Lighting

Attachment D:
New Bike Lanes and Campus Enteries

Appendix D
TDM PLAN

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GENENTECH TRANSPORTATION DEMAND MANAGEMENT MASTER PLAN

PREPARED FOR

Genentech
IN BUSINESS FOR LIFE

PREPARED BY

The Hoyt Company

with contributions by Fehr & Peers
Transportation Consultants

Adopted March 14, 2007

TABLE OF CONTENTS

ATTACHMENTS:
Downtown Dasher - Mid-day Taxi Service
Sample Bicycle and Pedestrian Safety Program
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Carpool Incentive Program Flyer
Rideshare Reward$ Flyer
Vanpool Program Flyer
Try Transit Program Flyer
Guaranteed Ride Home Program

EXECUTIVE SUMMARY

Reducing traffic congestion and air pollution are critical to maintaining a healthy economy and lifestyle within the city of South San Francisco. Traffic congestion results in time lost to residents and commuters and increased demand on City fiscal resources for roadway construction and maintenance. Mobile sources, such as automobiles, account for 50% of all air pollution within South San Francisco.

As part of their 10-year 2016 Master Plan, Genentech prepared a Transportation Demand Management (TDM) Master Plan in September 2006. This plan is developed to achieve a minimum 30% alternative mode-use rate to address both traffic and air quality concerns in South San Francisco. The plan assumed occupancy based on a speculative, future six million square-foot campus and a floor area ratio (FAR) of 0.69.

This comprehensive plan includes City ordinance-required and extra measures, annual survey monitoring and triennial reporting. The plan has a variety of infrastructure and incentive-based measures that encourage all forms of alternative mode-use such as car and vanpool, transit and shuttles, bicycling, walking, and telecommuting.

Other measures include an expansive commuter and internal shuttle program, daily commute allowance/subsidy program, Guaranteed Ride Home (GRH) program, preferential carpool parking, showers and bicycle facilities, commuter incentives and an extraordinary number of on-site amenities designed to support car-free employees. An important feature, although not a formal TDM plan measure, is the modest parking availability planned to discourage single occupancy vehicle (SOV) use.

This plan is performance-based with the TDM Master Plan goal of achieving a 30% alternative mode-use by Genentech employees. The mode-use will be monitored annually with the first employee commute survey to be conducted two years after approval of the Master Plan. An alternative mode-use summary report will be submitted to the City's Chief Planner after the first employee commute survey has been conducted. Every three years thereafter, a triennial report will be made to the City to document the employee mode-use rate. Efforts to reduce drive-alone commuting and expand the mode options available to commuters may take several years to develop and mature.

The elements contained in this TDM Master Plan are consistent with other South San Francisco employee commute programs and meet the measures required by the City and the 30% alternative mode-use goal. A summary of city-required and corresponding Genentech measures is provided on the following page.

SUMMARY OF GENENTECH TDM MASTER PLAN MEASURES

	Transportation Demand Management Measures	Genentech TDM Program
	2001 City Ordinance Required Measures	
A.	Bicycle lockers and racks	yes
B.	Bicycle parking (long and short term)	yes
C.	Car and vanpool ridematching assistance	yes
D.	Designated employer/tenant point of contact/ETC	yes
E.	Direct route to transit (well-lit path or sidewalk to shuttles)	yes
F.	Free parking for car and vanpools	yes
G.	Guaranteed/Emergency Ride Home program	yes
H.	Information boards/Web site	yes
I.	Passenger drop-off and loading zone	yes
J.	Pedestrian connections	yes
K.	10% preferential car and vanpool parking	yes
L.	Promotional programs	yes
M.	Showers and clothes lockers	yes
N.	Shuttle Program	yes
	- Central Campus **Caltrain** - South San Francisco Station	yes
	- Gateway **Caltrain** - South San Francisco Station (Gateway)	yes
	- Glen Park **BART** Station (Central Campus and Gateway)	yes
	- South San Francisco **BART** Station (Central Campus and Gateway)	yes
	- Utah-Grand BART	yes
	- Utah-Grand Caltrain	yes
	- **Commuter** San Francisco Dedicated Shuttle (GenenBus)	yes
	- **Commuter** Vacaville Corridor I-80 Dedicated Shuttle (GenenBus)	yes
	- Dedicated Genentech Main Campus/DNA Site Shuttle	yes
	- Dedicated Genentech South Campus Shuttle	yes
	- Dedicated Genentech Gateway Site Shuttle	yes
O.	Transportation Management Association participation	yes
	Annual Employee Survey (100%) - non response = SOV (*see note 1)	yes
	Annual TDM Report presentation to City Council & Planning Commission and Triennial Report	yes

**Note 1: Employee survey response methodology may be subject to change pending a consistency review by the City of South San Francisco. Current methodology requirements are inconsistent with methodologies used by the Peninsula Traffic Congestion Relief Alliance and the Metropolitan Transportation Commission (RIDES Survey).*

SUMMARY OF GENENTECH TDM MASTER PLAN MEASURES – CONTINUED

	Additional Measures in TDM Plan	
A.	Alternative Commute Subsidies/gRide Rewards program	yes
B.	Bicycle connections	yes
C.	Compressed work week	yes
D.	Flextime	yes
E.	Land dedication for transit facilities/bus shelter	yes
F.	On-site/nearby amenities	yes
	- On-site food and drink vending on every other floor	yes
	- Employee sundry kiosk	yes
	- Campus Automated Teller Machine (ATM)	yes
	- On-site coffee bar on every floor	yes
	- Cafeteria (6:30 am - 2:00 pm)	yes
	- "Grab and Go" Café (multiple)	yes
	- On-site occupational health clinic	yes
	- On-site childcare	yes
	- On-site hair cutting, dental, auto services, recreational paths	yes
	- Nearby recreational (Bay Trails)	yes
	- Nearby Fitness Center w/free shuttle (435 Forbes Ave)	yes
G.	Paid parking at market rates (*see note 2)	n/a
H.	Telecommuting	yes
I.	Reduced parking (*see note 2)	n/a
J.	**Other Measures - Deemed Consistent by Chief Planner**	
	Reduced parking	yes
	Commuter Choice/WageWorks program	yes
	Pre-tax payroll deductions	yes
	On-site Employee Transportation Coordinator (ETC) and staff	yes
	Contribute funding for Alliance Bike to Work promotion	yes
	Motorcycle parking	yes
	Downtown Dasher - free midday services	yes
	Spare the Air Program participation	yes
	Include transportation link for future Bay Ferry Service	yes
	Designated US EPA Best Workplaces for Commuter employer	yes
	Charter buses for group activities and off-site meetings	yes

**Note 2: This city TDM ordinance measure was not approved as part of the final 2001 ordinance.*

1.0 INTRODUCTION AND PURPOSE

Genentech, Inc., one of the world's leading biotech companies, is a drug development company that delivers innovative medicines to patients with serious or life-threatening medical conditions. Their corporate headquarters and manufacturing facility are both located at 1 DNA Way in South San Francisco, California, as shown in Figure 1. Genentech currently has 7,500 employees based at the South San Francisco central campus and has plans to expand substantially over the next 10 years.

In order to facilitate expansion, Genentech has updated its Master Plan, originally created in 1995, to guide the company's growth and development of the central campus. The central campus is anticipated to grow to approximately six million-square feet during the 10-year planning period. This expansion represents a 100% increase in space compared with the current central campus development. The Master Plan envisions Genentech meeting its potential space requirements by both the re-development of buildings that Genentech currently owns and occupies, and by the re-development of expansion property that Genentech has recently acquired or may acquire during the 10-year planning period.

Report Purpose

This report presents the Transportation Demand Management (TDM) Master Plan to accompany the updated Genentech Master Plan and discusses how the plan satisfies the City of South San Francisco's TDM ordinance. A TDM Plan is a set of strategies, measures and incentives designed to encourage employees to walk, bicycle, carpool, use public transportation, or use other alternatives to driving alone in private automobiles. TDM measures increase mobility while using existing transportation systems and boost the economic efficiency of the current transportation infrastructure. These measures are also designed to improve air quality, save energy and reduce traffic congestion.

Convenience, reduce travel times, and cost are the primary factors affecting transportation mode choice. Options must be considered on a case-by-case basis as some measures that work well for some people or types of businesses do not work as well for others. An effective TDM Plan provides multiple options and incentives and is flexible enough to allow customization to meet the varied needs of individual employees.

Genentech is committed to being a good corporate citizen and neighbor within the community and understands the importance of minimizing environmental impacts as it expands. As demonstrated by their mission statement, Genentech embraces a philosophy that the promotion of wellness and high standards contributes to the health of the whole community. The mission statement addresses the wellness goals for employees and the community:

> *Genentech's mission is to be the leading biotechnology company, using human genetic information to develop novel medicines for serious and life-threatening diseases. We commit ourselves to high standards of integrity in contributing to the best interests of patients, the medical profession, our employees, our communities and our stockholders.*[1]

As a developer and provider of medicines for serious and life-threatening diseases, Genentech's philosophical approach for improving the state of human health is also demonstrated by their environmental programs designed to investigate the "immeasurable connections between human health and the environment… with the two so closely linked, we see environmental protection as one more way that Genentech can help enhance and extend lives". The Genentech Master Plan improves and expands the campus facilities for the next 10-year period to accommodate future increases in research and development demands. As part of this planning process, Genentech embraces the air quality and wellness benefits to be gained by the development and implementation of the TDM Master Plan.

As indicated in the Master Plan, Genentech seeks to offer an attractive, creative, productive, and comfortable environment for its employees. Genentech's current and future TDM programs focus on reductions in congestion and pollution by promoting extensive and innovative alternative methods of commuting. These comprehensive programs include a wide variety of benefits, services and programs designed to make it easier and more convenient for employees to manage the quality-of-life issues juggled between work and everyday life.

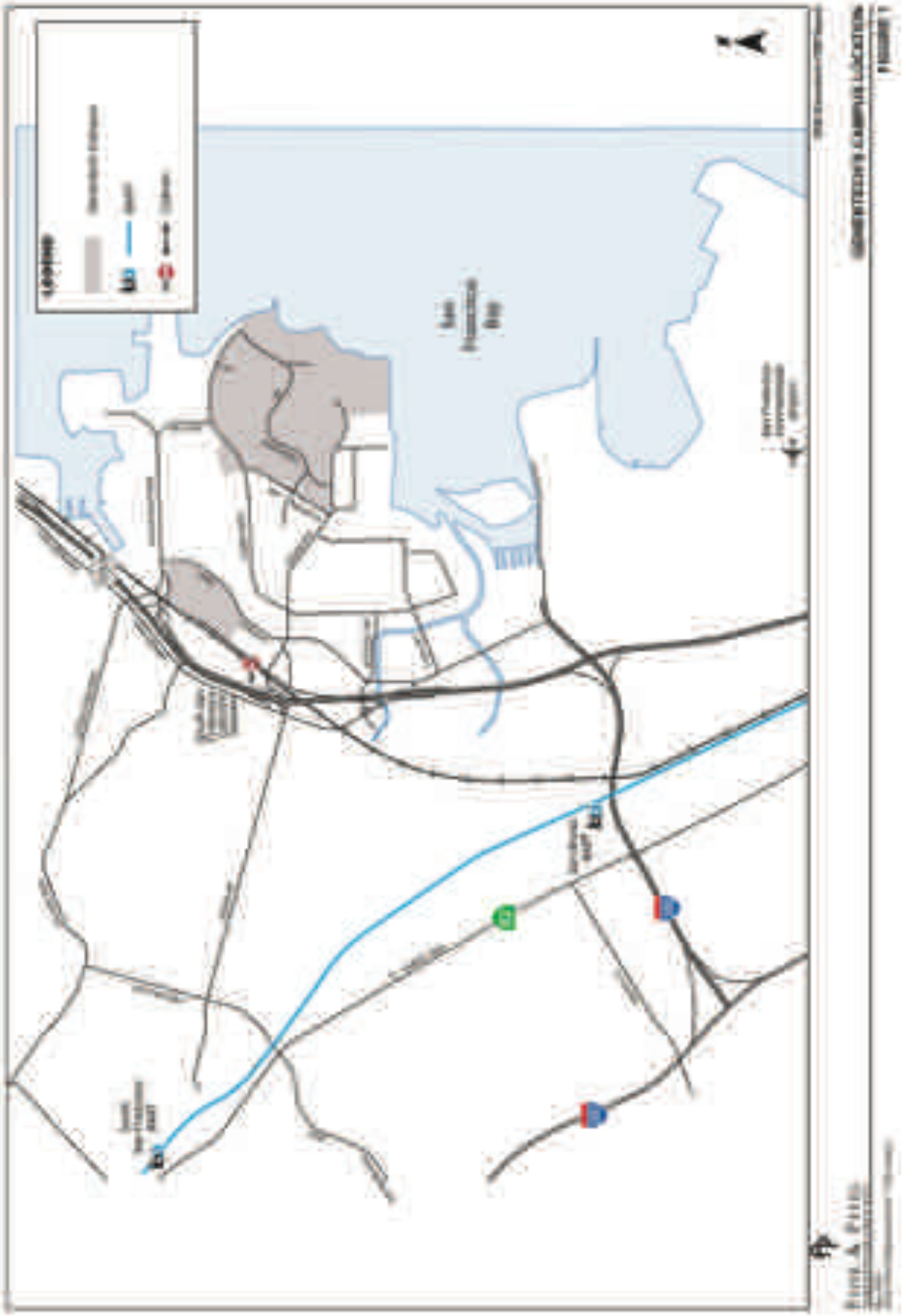
Genentech TDM Master Plan Goals

Genentech strongly supports the City of South San Francisco's policy of focusing clustered development along major transportation corridors. Genentech campus sites are strategically located near to, and are served by U.S. Highway 101 and Interstate 280, several Caltrain stations, and a BART station.

The comprehensive trip-reduction measures identified in this report are essential to realizing Genentech's trip-reduction potential in South San Francisco. The combination of these critical factors will provide the momentum to maintain a 30% alternative mode-use rate for existing and future campus facilities.

Through monitoring efforts such as the annual survey of employees to determine transportation mode split - Genentech will be better able to focus transportation coordination efforts and encourage tenant employees to use alternative transportation. The first official mode-use survey report will be submitted to the City of South San Francisco two years after approval of the Genentech Master Plan.

[1] http://www.gene.com/gene/index.jsp



Regulatory Setting

Chapter 20.120 of the Municipal Code outlines the TDM objectives for the City of South San Francisco. The specific purposes of Chapter 20.120 are to:

- Implement a program designed to reduce the amount of traffic generated by new non-residential development, and the expansion of existing non-residential development, pursuant to the City's police power and necessary in order to protect the public health, safety and welfare.
- Ensure that expected increases in traffic resulting from growth in employment opportunities in the City of South San Francisco will be adequately mitigated.
- Reduce drive-alone commute trips during peak traffic periods by using a combination of services, incentives, and facilities.
- Promote the more efficient utilization of existing transportation facilities and ensure that new developments are designed to maximize the potential for alternative transportation usage.
- Establish minimum TDM requirements for all new non-residential development.
- Establish an ongoing monitoring and enforcement program to ensure that measures are implemented.

The TDM requirements apply to all non-residential developments located on lands within the jurisdiction of the City of South San Francisco expected to generate 100 or more average daily trips. The base required alternative mode-use for all projects is 28%. Additionally, developments with a floor area ratio (FAR) above minimum are subject to further the alternative mode-use requirements. Genentech's central campus, classified as "Genentech R&D Overlay" under the City of South San Francisco's General Plan land use classification, currently has a FAR of 0.52. The Master Plan calls for expansion that will result in an ultimate FAR of 0.69, which is subject to a 30% alternative mode-use requirement.

2.0 TRANSPORTATION DEMAND MANAGEMENT GOALS

The basic premise of TDM is the maximum utilization of existing transportation resources. The City of South San Francisco, as is typical of other urban areas in the United States, has hundreds of millions of dollars invested in roadway infrastructure and public transit infrastructure. The goal of TDM is to more efficiently and economically take advantage of these major capital investments.

The following are three basic goals that can be achieved through effective utilization of TDM measures:

1) Convert trips to an alternative mode of transportation (e.g., transit, carpools or vanpools, bicycling, walking)
2) Provide technological solutions (e.g., compressed natural gas, electric/hybrid vehicles, or other zero-emission vehicles)
3) Eliminate trips (e.g., compressed work weeks, telecommute or telework)

Until recently within the United States, the answer to relieving congestion on roads and in parking structures, was to build more roads and parking structures (similar in concept to building another manufacturing plant to expand productivity on levels). Current economics and limited resources affect the ability to build and maintain more roads or parking structures. This reality necessitates better utilization of the existing transportation infrastructure (similar to adding a second shift at an existing plant). To this end, TDM measures support the transition to a greater use of existing alternative transportation options.

The measures and programs outlined in this plan support and meet the 30% trip reduction goal as identified by the City of South San Francisco's TDM Ordinance 1300-2001.

Current Genentech TDM Program

Genentech operates a comprehensive and successful TDM program aimed at reducing the use of single-occupancy private vehicles by their employees. The program addresses daily commute-to-work trips as well as business-related travel during the day between the various campuses and downtown South San Francisco. The current program elements emphasize measures that are transit-oriented, include on-site amenities that support the use of alternative modes of travel, offer flexible hours and telecommuting as alternatives to traveling during peak periods, and promote ridesharing. Extensive convenience services are provided on campus – such as ATMs, credit union, barber shop, dental facility, video rentals, film developing, and dry cleaning – to minimize off-campus trips. Cafeterias, a childcare facility and a fitness center are also available to Genentech employees and contribute to reduced single-occupancy vehicle usage

Using the City of South San Francisco's TDM Ordinance guidelines as an example target, the estimated number of trips needed to meet a 30% reduction for the current 2006 number of employees estimated to work at Genentech would be 2,250.

Estimated Total Employees	7,500
Trip Reduction Requirement	30%
Total Number of Peak Trips Required	**2,250**

This TDM Master Plan also meets many requirements of the *Revised C/CAG Guidelines for the Implementation of the Land Use Program* approved by the City/County Association of Governments (C/CAG) of San Mateo County in September 2004.

Future Genentech TDM Program

As noted above, the purpose of this TDM Plan is to identify measures that will facilitate Genentech's Master Plan, which outlines potential expansion of the central campus to approximately six million square-feet during the 10-year planning period. This

expansion represents a 100% increase in space compared with the current central campus development.

In order to minimize the traffic associated with new development identified in the Master Plan and the costs of building new parking structures, Genentech is currently exploring several new TDM strategies. Many of these strategies will be implemented by the end of 2006 but will continue to be refined and expanded over the duration of the Master Plan. The goal of the future TDM program is to continue to reduce the use of single-occupancy private cars by Genentech employees while providing efficient, price competitive, safe and attractive alternative modes of transportation.

3.0 EMPLOYEE MODE SPLIT EAST OF HIGHWAY 101

According to the Commute Profile 2005 Regional Report, prepared by RIDES for Bay Area Commuters, the San Mateo County alternative mode-use rate is approximately 29% with the Bay Area regional rate comprising approximately 34% alternative modes. The larger Bay Area alternative mode-use rate is largely a result of the proliferation of paid parking in the more urbanized core areas, whereas parking is free, or much less expensive, in many areas of San Mateo County (e.g. the City of South San Francisco).

The 2005 Employee Transportation Survey conducted by the Alliance identified the San Mateo County alternative mode-use rate at 29.9%. The overall alternative mode-use rate for the City of South San Francisco was identified at 30.2%.

In Fall 2005, an employee commute survey was conducted at a similar biotech employment center at Britannia Oyster Point in South San Francisco. Results from the survey indicated an alternative-commute mode rate of 35%. Table 1 shows the comparison of alternative mode-use rates for the Bay Area region, county of San Mateo, city of South San Francisco and a similar employment site.

Table 1
Comparable Transportation Mode-Use Rates

Survey Locations	Commute Profile 2005 Regional Report - RIDES	2005 Employee Transporation Survey - Alliance	2005 Transportation Survey TDM Report - The Hoyt Company
San Mateo County	29.0%	29.9%	
Bay Area Region	34.0%		
City of South San Francisco		30.2%	
South San Francisco - Britannia Oyster Point Campus			35.0%

Based on current and historical alternative mode-use data for the South San Francisco and East of Highway 101 business areas, a 30% alternative mode-use distribution was estimated for the current number of Genentech employees. This sample scenario reflects the TDM measures described in this plan. Table 2 shows a possible distribution example of various alternative transportation modes estimated for life science employees commuting to South San Francisco.

Table 2
Sample Alternative Transportation Modes

Typical Transportation Modes	Percent Use	Employees
Drive alone to work site	58.50%	4,387.5
Carpool	12.95%	971.3
Transit (public and commuter shuttles)	12.00%	900.0
Other (motorcycle, telecommute)	1.97%	147.8
Bicycle	1.33%	100.0
Vanpool	1.60%	120.0
Walk	0.15%	11.3
Non-commuting (sick, vacation, business travel)	10.00%	750.0
Total	98.50%	7,500
Alternative Mode-Use Rate	**30.00%**	**2,250**

The implementation of TDM measures identified in this plan will result in an estimated alternative mode-use rate of more than 30% – representing approximately 2,250 employees from a total of 7,500 (using 2006 numbers). This sample scenario provides a distribution example of employee alternative transportation choices depicting a typical workweek day. The actual distribution of transportation modes could vary and will be identified in future survey results.

4.0 PROJECT DESCRIPTION

During the next 10 years, the Genentech corporate headquarters may expand to approximately six million square-feet. Located south of the U.S. Highway 101 in South San Francisco, Genentech's central campus is located in an area known as the birthplace of the biotechnology industry.

The Genentech TDM Master Plan is designed to maximize opportunities for pedestrian, bicycle, carpool, transit and shuttle connectivity. These opportunities include:

- A daily commute allowance program that subsidizes employee use of alternative transportation participation
- Ten percent (10%) of car and vanpool parking (phased stripping) at full build-out
- Free Class I (long-term) and Class II (short-term) bicycle facilities at campus sites for bicycle commuters

- Showers and lockers for bicyclists, pedestrians and other alternative commuters
- Free shuttle services to BART and Caltrain stations are conveniently offered throughout the campus in addition to dedicated commuter shuttles
- On-site food service
- A substantial number of on-site employee amenities
- Bay Trails access for bicyclists help to create a self-sufficient development reducing the number of employee trips made daily to and from the project

The 10-year master planned FAR is 0.69. This increased or bonus FAR requires more stringent annual employee surveys and triennial reporting (auditing) to the City.

Parking will be provided at a reduced ratio. Parking supply is a key factor for employees choosing how to travel to work. Reduced parking helps to encourage using alternative commute modes. Table 3 shows a summary of Genentech's 10-year Master Plan expansion changes.

Table 3
Summary of 10-Year Expansion Changes

Expansion Information	2006	2016	Increase
R&D Use	100%	100%	none
Employees	7,500	13,000	5,500
Square Feet	2,815,000	6,000,000	3,185,000
Floor Area Ratio	0.52	0.69	0.17
TDM Requirement	28%	30%	2%
Employee Alternative Mode-Use	2,100	3,900	1,800

5.0 PARKING MANAGEMENT

5.1 Parking Supply

Planned parking is expected to accommodate employees, visitors, vendors and service vehicles.

The ability and willingness to rideshare is directly linked to parking availability. By not providing an overabundance of parking spaces at full build-out, the project will lay the groundwork for successful promotion of alternative transportation. Preferential parking spaces in garages and within 100 feet of building entrances are excellent incentives that send a clear message to employees and the community that alternative transportation is important.

Genentech proposes modest blended parking ratios to reflect the evolving development during the next 10 years. As higher TDM alternative mode rates are achieved and the commute allowance/subsidy program becomes more integrated, parking demand is

expected to decrease. As parking demand is decreased, parking ratios will also be decreased accordingly.

5.2 Free Parking for Car and Vanpools and Clean-Fuel Vehicles

Parking will be free for all carpool, vanpool and clean-fuel vehicle participants.

5.3 Preferential Car and Vanpool Parking

One effective means of encouraging employees to rideshare and/or use clean-fuel vehicles is to reserve the most preferred parking spaces for the exclusive use of car and vanpools. At total build-out, a minimum of 10% of employee parking will be designated for carpool, vanpool, and clean-fuel vehicles. Genentech will provide car and vanpool parking spaces in premium, convenient locations (i.e., close to buildings, in the shade, etc.) within 100 feet of the building entrance. These preferential parking spaces will be specially signed and/or striped and may require employee registration and permitting.

Designated carpool and vanpool parking spaces will be available until 9 a.m. for vehicles displaying Genentech carpool placards, at which time unused spaces will be open to all Genentech employees. These future preferential parking spots will create a benefit for current users while also providing a visible incentive for employees that do not participate in the carpool or vanpool programs.

5.4 Passenger Loading Zones

In order to facilitate the disembarking and embarking of rideshare passengers, passenger loading/unloading areas are provided in each neighborhood. Passenger loading zones for carpool and vanpool drop-off are located in the main entrances of various building sites.

5.5 Motorcycle Parking

Areas are provided for motorcycle parking. Motorcycles produce less air pollution and occupy less space than automobiles. For these reasons, motorcycles may use carpool lanes, and are exempt from charges to cross toll bridges during commute hours.

6.0 BAY AREA CARPOOL AND VANPOOL RIDEMATCHING SERVICE

Carpools in the Bay Area consist of two or more people riding in one vehicle for commute purposes (access to carpool lanes, free tolls, etc.). Genentech only requires two people or more to qualify for commuter benefits (daily commuter allowance/subsidy, preferential parking, etc.). The Genentech intranet site provides a Web portal to the 511 Rideshare Web site to access free ride-matching services. Employees carpooling to BART may apply for a "Carpool to BART" parking permit through the 511 transportation intranet site. Vanpools provide similar commuting benefits to carpool. A vanpool consists of between seven and 15 passengers, including the driver. The vehicle is owned either by one of the vanpoolers or leased from a rental company. The

intranet site offers a list of available vanpools providing service between the Genentech campus and various points in the east and south Bay Area.

In order to increase participation in the carpool and vanpool programs, Genentech is working with 511.org to set up a Genentech-specific Rideshare Web site that will lead employees to the regional Rideshare Web site if no matches are found among the registered Genentech employees. This Genentech-specific ride-matching service will be publicized through email announcements, informational kiosks, and Genentech's internal intranet site.

The Regional Rideshare 511 Program's Ridematch Service provides free car and vanpool matching services. On-site Genentech employee transportation coordinators (ETCs) promote the on-line 511 service directly to employees on a regular basis and allow the Alliance to solicit carpool sign-up at on-site employer events such as annual Transportation Fairs, Wellness or Benefits events, etc.

Car and vanpooling is strongly encouraged throughout the campus. Employee transportation and shuttle flyers promote the free personalized matching assistance through the 511 Rideshare program. This car and vanpool ridematching service provides individuals with a computerized list of other commuters near their employment or residential ZIP code, along with the closest cross street, phone number, and hours of availability. Individuals are then able to select and contact others with whom they wish to car or vanpool. They will also be given a list of existing car and vanpools in their residential area that they may be able to join.

The 511 system gives commuters information they need to make informed choices when planning trips. By calling in or logging on, commuters can get up-to-the-minute information about traffic conditions, public transportation options, ridesharing, and bicycling anytime, anywhere throughout the greater Bay Area region and northern California.

The 511 system offers one-stop shopping for regional traffic, transit, rideshare and bicycle information. The nine-county system is the first 511 service to go online in California. It provides links to 511 systems in Sacramento, Oregon and Nevada and is available via any phone, provided the carrier supports 511. Most counties in the region have wireless and landline access to the service through major carriers.

7.0 TRANSIT

Caltrain, Bay Area Rapid Transit (BART) and SamTrans provide transit service to South San Francisco in proximity to Genentech campus sites. An expansive Genentech operated shuttle system, providing 111 daily trips, connects transit riders throughout the campus. Genentech provides substantial funding, operations and support for BART, Caltrain, commuter, intra and inter-campus shuttles serving South San Francisco.

Employees can access the Nextbus link to estimate arrival times for the campus shuttle. To further enhance commuter connectivity, bicycle racks are provided on all Genentech shuttles.

7.1 Direct Route to Transit

Well-lit pedestrian paths are provided from buildings, utilizing the most direct route, to the nearest shuttle stop.

7.2 Genentech BART and Caltrain Shuttle Services

Genentech operates a comprehensive shuttle system serving the South San Francisco Caltrain station and two BART stations. Employee shuttle services are provided throughout the campus.

- Glen Park BART Shuttle – travels directly from the Glen Park BART station to the Genentech campus. The shuttle stops at buildings B4, B24, and B83 traveling in opposite directions for morning (6:00 a.m. – 10:00 a.m.) and evening (3:30 p.m. – 7:30 p.m.) runs, every 15 minutes.

- South San Francisco BART Shuttle – travels directly from the South San Francisco BART station to the Genentech campus. The shuttle travels in opposite directions for morning (6:00 a.m. – 10:00 a.m.) and evening (3:00 p.m. – 7:00 p.m.) runs, every 30 minutes.

- Main Campus Caltrain Shuttle – provides service between the South San Francisco Caltrain station and the Genentech Campus every 30 minutes in the morning (6:00 a.m. – 10:00 a.m.) and every hour in the evening (3:00 p.m. – 7:00 p.m.).

- Gateway Area Caltrain Shuttle – provides service between the South San Francisco Caltrain station and the Gateway area office buildings every 30 minutes in the morning (6:00 a.m. – 10:00 a.m.) and every hour in the evening (3:00 p.m. – 7:00 p.m.).

The Utah-Grand Area Caltrain and a BART shuttles operated by the Alliance will also serve Genentech sites located in the south campus area. The daily Utah-Grand shuttle system adds 35 additional trips for Genentech employee.

- The Utah-Grand Area BART shuttle serves the South San Francisco BART station at 15, 30 and 45-minute frequencies. There are currently a total of 18 peak-hour BART shuttle trips.

- The Utah-Grand Area Caltrain shuttle serves the South San Francisco Caltrain Station during the morning and evening peaks at 20, and 35-minute frequencies. Seventeen (17) Caltrain shuttle trips provide connecting service to and from the project site.

Table 4 shows the number of shuttle trips provided for Genentech employees connecting with Glen Park BART, South San Francisco BART and South San Francisco Caltrain stations.

7.3 Dedicated Commuter Services - GenenBus

Dedicated commuter Genenbus shuttles provide employee service between San Francisco and Vacaville. These employee coach buses offer luxury seating, WiFi connections and bicycle accommodations. The 2006 services include:

- Church and Market (San Francisco) - the San Francisco GenenBus is a free shuttle with non-stop service from Church and Market Streets to the Genentech Campus. The shuttle makes three trips each morning and three return trips each evening at peak commute times.

- Vacaville/I-80 Genenbus - the Wi-Fi equipped Vacaville/I-80 Genenbus picks up at Vacaville B10 at 5:30 a.m., Fairfield Park & Ride at 5:50 a.m., Richmond Parkway Transit Center 6:20 a.m. arriving at B83 at 7:25 a.m. and B5 at 7:30 a.m. The evening commute departs from B5 at 4:00 p.m. and B83 at 4:05 p.m. arriving Richmond Parkway Transit Center at 5:00 p.m., Fairfield Park & Ride at 5:40 p.m., and Vacaville B10 at 6:00 p.m.

A comprehensive accounting of all shuttle trips, including BART, Caltrain, intra and inter shuttles and commuter services is provided in Table 4.

Table 4
Shuttles Serving the Genentech Campus

Genentech Employee Shuttle Services	Morning Trips	Afternoon Trips	Total Trips
Glen Park BART Shuttle	13	13	26
South San Francisco BART Shuttle	7	7	14
Main Campus Caltrain Shuttle	7	7	14
Gateway Area Caltrain Shuttle	7	7	14
Utah-Grand Area Caltrain Shuttle	8	9	17
Utah-Grand Area BART Shuttle	9	9	18
GenenBus San Francisco Commuter	3	3	6
GenenBus Vacaville/I-80 Commuter	1	1	2
Total Employee Shuttle Trips	**55**	**56**	**111**

7.4 Intra-Campus Shuttle Service

Genentech operates intra-campus shuttle routes to provide circulation between buildings and parking facilities in and around the main campus, as shown in Figure 2. Intra-campus shuttles include:

- DNA Shuttle – runs continuously through the main campus, every 5-10 minutes, between 7:00 a.m. and 7:00 p.m. The shuttle stops at the following buildings: B4, Forbes parking lot, B9, B5, B3, B12/B36, B32, B24, B29, B24, and B12 Downhill. The bi-directional route is designed to be useful to employees in the West Campus, Upper Campus, and Lower Campus areas.

- Gateway Shuttle – connects the main campus to the Gateway campus (building 83) and Gateway parking structure via a continuous loop, every 6-10 minutes, between 5:45 a.m. and 7:00 p.m. The shuttle stops at the following buildings: B4, B9, B24, Forbes parking lot, B83 and B25.

- South Campus Shuttle – service is approved and initiated.

The Genentech Fitness Center (Club Genentech) is served by the Gateway and DNA shuttles.

7.5 Inter-Campus Shuttle Service

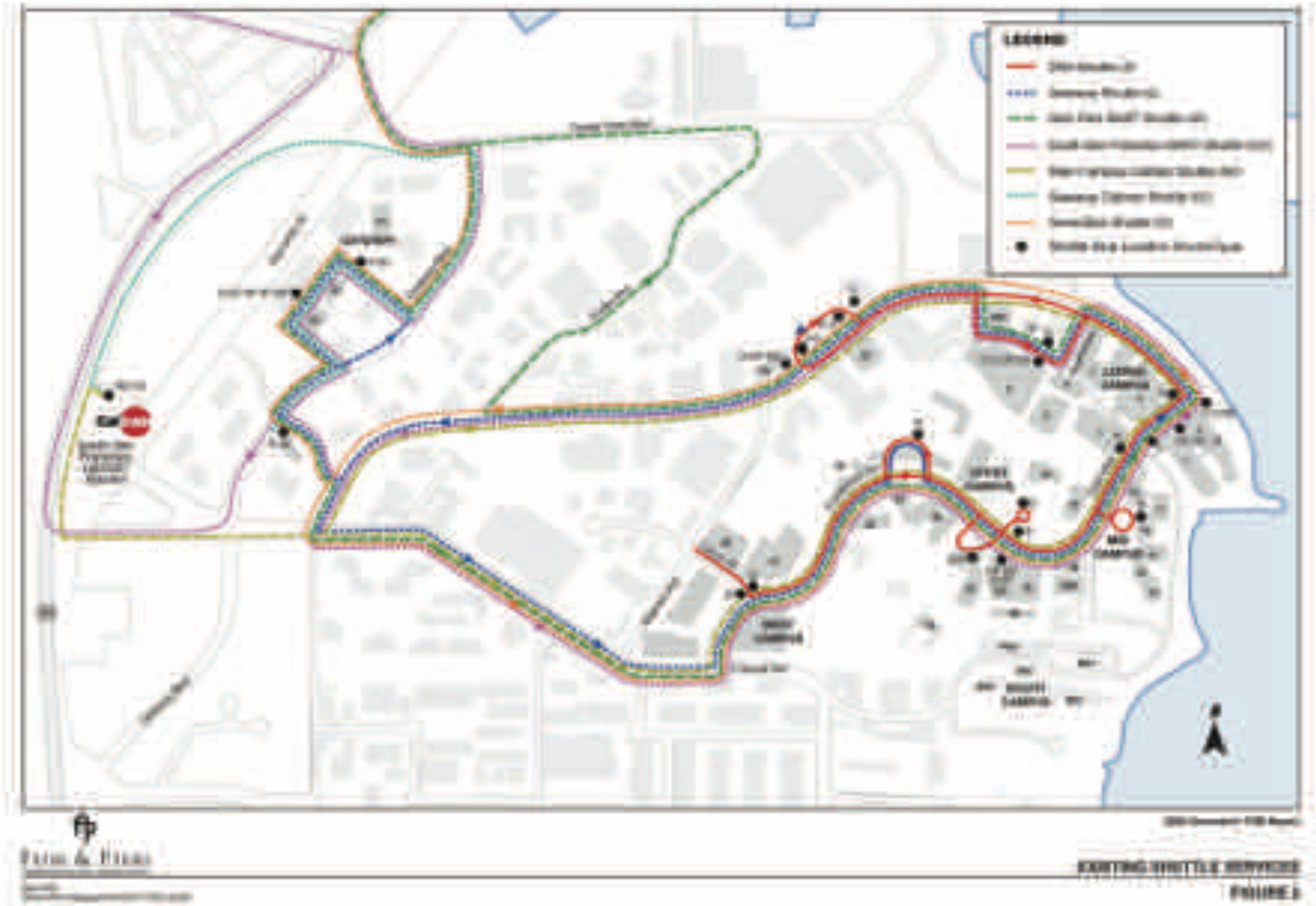
Genentech operates one inter-campus shuttle route to provide connections between the main campus and the Redwood City Campus.

- Redwood City Shuttle – connects the South San Francisco and Gateway buildings with Genentech's Redwood City campus. The shuttle stops at B4, B82, and B90 on the Main Campus every 90 minutes, between 6:55 a.m. and 5:20 p.m.

Genentech also encourages chartering of buses for group activities and off-site meetings. Services include booking, group discounts, invoicing, and special services, as needed.

7.6 Shuttle/Bus Stops

Multiple shuttle drop-off and pick-up locations for commuter service, BART and Caltrain are located throughout the Genentech campus. Figure 2 shows the existing shuttle services and a comprehensive shuttle map of routes and stops.



7.7 Caltrain

Caltrain operates a frequent fixed-route commuter rail service seven days a week between San Francisco and San Jose, and a limited service to and from Gilroy on weekdays. Caltrain operates on 15 to 30-minute frequencies during the morning and evening peak periods. Midday service operates approximately every hour with service less frequent during weekends, and holidays.

Caltrain service is available approximately 1.22 miles from the Genentech campus at the South San Francisco station at 590 Dubuque Avenue and Grand Avenue.

Caltrain services were enhanced in 2004 to add express trains during peak hours. However, this new service does not provide an express stop to the South San Francisco Caltrain Station and hence does not benefit Genentech employees.

7.8 Bay Area Rapid Transit (BART)

BART is a 92.7-mile, 43-station automated rapid transit system on five lines of double track. Trains traveling up to 80 mph connect San Francisco to Colma and other East Bay communities - north to Richmond, east to Pittsburg/Bay Point, west to Dublin/Pleasanton, and south to Fremont. Service is scheduled every 15 minutes during peak periods. Service during holidays, and weekends are modified.

BART-to-the-Airport expanded the system by 8.7 miles along the peninsula from Colma to a new intermodal station in Millbrae. Four new stations were created including the South San Francisco Station located between El Camino Real and Mission Road to the south of Hickey Boulevard. The Genentech campus is approximately 3.39 miles from the South San Francisco BART Station, and 8.85 miles from the Glen Park Station.

7.9 SamTrans

SamTrans provides bus service throughout San Mateo County with connections to the Colma, Daly City, and South San Francisco BART stations, San Francisco International Airport, peninsula Caltrain stations and downtown San Francisco.

The system connects with San Francisco Muni, AC Transit and Golden Gate Transit at San Francisco's Transbay Terminal, with the Dumbarton Express and the Santa Clara Valley Transportation Authority in Menlo Park and Palo Alto.

There is no direct SamTrans service east of Highway 101. SamTrans service does connect at the South San Francisco BART Station and, subsequently, the Utah-Grand Area Shuttle. SamTrans does not provide a direct connection to the South San Francisco Caltrain Station, however; Routes 130, 292, 133, and 132 are within approximately 1/4-mile walking distance from this station and the connecting shuttle services for Genentech employees.

7.10 Downtown Dasher Taxi Service

This free taxi service provides an 11:00 a.m. to 2:00 p.m. pick-up service throughout the East Highway 101 business parks in South San Francisco. Using existing stops, taxis drop off riders at locations in the downtown retail area. The Downtown Dasher, operated by the Peninsula Yellow Cab of South San Francisco and managed by the Alliance, requires employer-provided vouchers and trip reservation before 10:00 a.m. This midday service is currently free to participating employers and is actively promoted by Genentech. A detailed Downtown Dasher flyer is provided as an attachment.

7.11 Ferry Service

Currently, no scheduled water transit service exists in the South San Francisco area. Water transit service to South San Francisco is anticipated to begin by September 2009. Prior to this service becoming operational, Genentech employees will be given a link to this resource.

8.0 BICYCLE AND PEDESTRIAN AMENITIES

Pedestrian facilities comprise pedestrian paths, sidewalks, crosswalks, and pedestrian signals. There are numerous pedestrian paths throughout Genentech's campus.

Bicycle facilities include bicycle paths (Class I), bicycle lanes (Class II), and bicycle routes (Class III). Bicycle paths are paved trails separated from roadways. Bicycle lanes are lanes on roadways designated by striping, pavement legends, and signs for use by bicyclists. Bicycle routes are roadways designated for bicycle use by signs only and may or may not include additional pavement width for bicyclists.

The San Francisco Bay Trail, a public pedestrian and bicycle trail accessible to Genentech employees, is part of a planned 400-mile system of trails encircling the Bay. It is located along the eastern edge of the Genentech campus. The section of Bay Trail adjacent to the campus provides amenities such as seating and lighting. It also provides good recreational opportunities for Genentech employees as well as access to the Oyster Point Marina. However, there are gaps in the trail to the north, above Brisbane, just south of the Genentech Campus and at the airport.

8.1 Pedestrian Connections

Currently, crosswalks connect Genentech buildings on both sides of Grandview Avenue and DNA Way. Sidewalks are located on both sides of Grandview Drive, DNA Way, and the north side of Forbes Boulevard in the vicinity of the central campus. A segment of the San Francisco Bay Trail runs immediately adjacent to the Genentech campus on the north and east sides, hugging the Bay shoreline.

Safe, convenient and well-lit pedestrian paths are provided, utilizing the most direct route, to the nearest shuttle stop close to Genentech campus sites. Lighting, landscaping and building orientation is designed to enhance pedestrian safety.

8.2 Bicycle Parking - Long-Term and Short-Term

Genentech provides free bicycle storage lockers and racks at most Genentech buildings to help promote cycling as an alternative commute option. The bicycle lockers can be reserved, on a first-come, first-served basis, by employees through the internal TDM Web site. Secure, covered, bicycle parking facilities, i.e. bicycle lockers and locked, controlled-access areas, will be provided for all new buildings within 75 feet of the building entrance. Bicycle lockers will be placed within campus neighborhoods in locations that will maximize use and visibility. The Class I (long-term) and Class II (short-term) bicycle parking facilities will be provided on-site at the follow level:

- Commercial, R&D, and office uses: one bicycle space for every 50 vehicle spaces required.

Table 5 shows the recommended and total number of bicycle facilities for the proposed expansion. Currently, Genentech provides 100 Class I lockers in excess of current requirements. All 100 lockers are utilize and there is a waiting list for 30 more facilities.

Table 5
Bicycle Parking Recommendation

	2006	2016
Parking Spaces **(estimated)**	5,099	10,800
Bicycle Parking Ratio	1:50	1:50
Bicycle Parking Needed	102	216
Bicycle Parking Distribution		
Class I - long-term	71	151
Class II - short-term	31	65
Total Bicycle Parking	**102**	**216**

All bicycle-parking facilities will be located in convenient, safe and well-lit areas with maximum space for the ingress and egress of bicycles.

Note: The Peninsula Traffic Congestion Relief Alliance provides a 50% match for the costs of purchasing and installing any bicycle parking, from basic racks to high security lockers, up to a maximum of $500 per unit.

8.3 Bicycle Connections

In the vicinity of Genentech, a bicycle path is provided on Forbes Boulevard to DNA Way with bicycle lanes provided on East Grand Avenue and Oyster Point Boulevard.

The Genentech sites also connect directly with regional bicycle facilities and the San Francisco Bay Trail. The Bay Trail is a network of multi-use pathways circling San Francisco and San Pablo Bays. The ultimate route is planned to be a 400-mile route

through nine Bay Area counties and 42 shoreline cities. The trail provides commuters an excellent route to bicycle or walk to work in the South San Francisco Area. A map of surrounding existing bicycle facilities is provided on page 20. Bicycle accommodations are also available on all Genentech-operated commuter shuttles.

8.4 Bicycle Resources

Free Bicycle Buddy matching, bicycle maps and resources are provided via the 511 system. Bicycle commuters looking to find a riding partner can log-on to bicycling.511.org for more information.

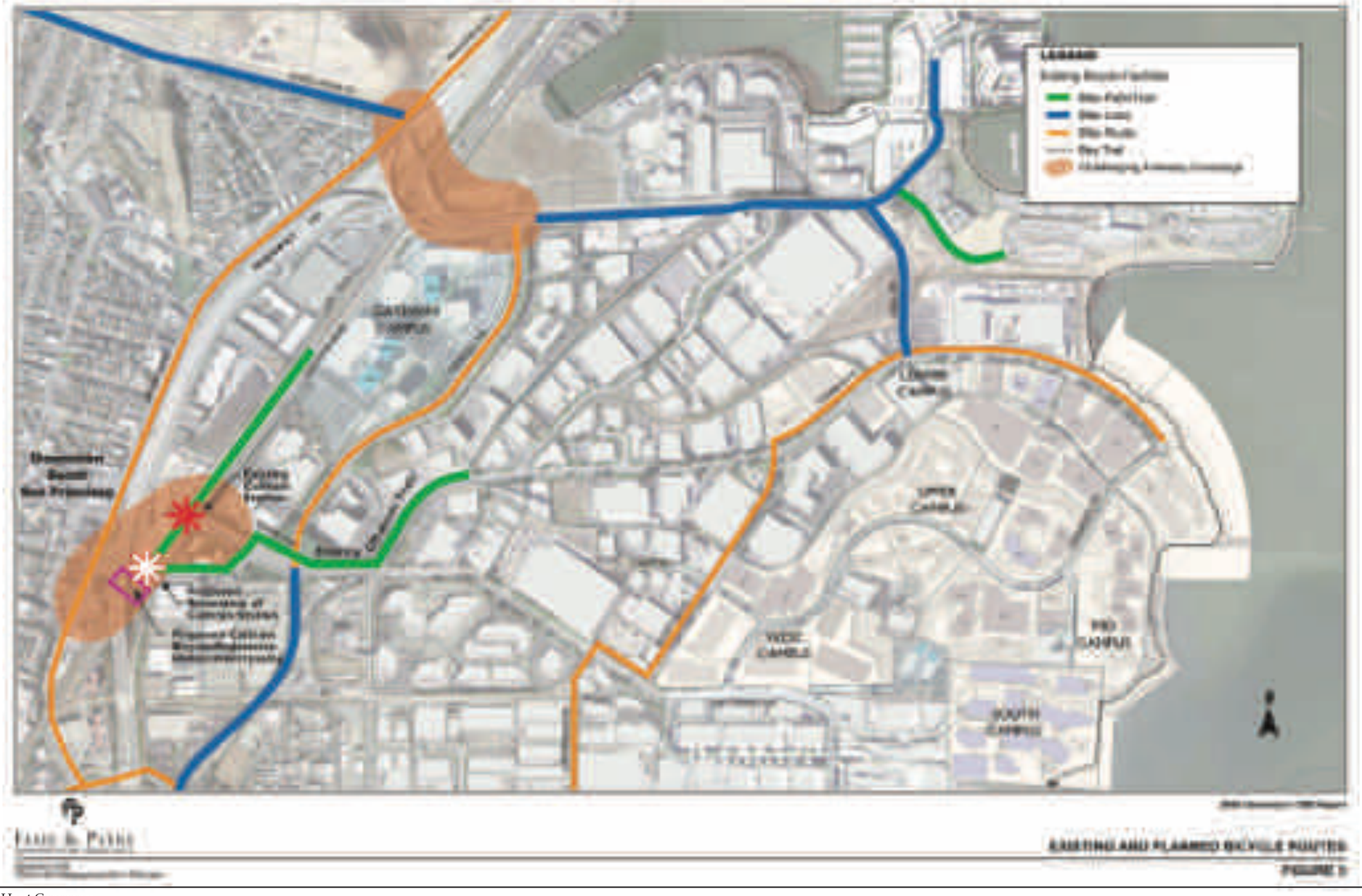
The Alliance provides a free one-hour, on-site Bicycle and Pedestrian Safety Program for employees. This workshop informs commuters about bicycling and walking as safe, stress relieving commute modes; traffic laws for bicyclists and pedestrians; and bicycle maintenance tips. A program flyer is provided as an attachment.

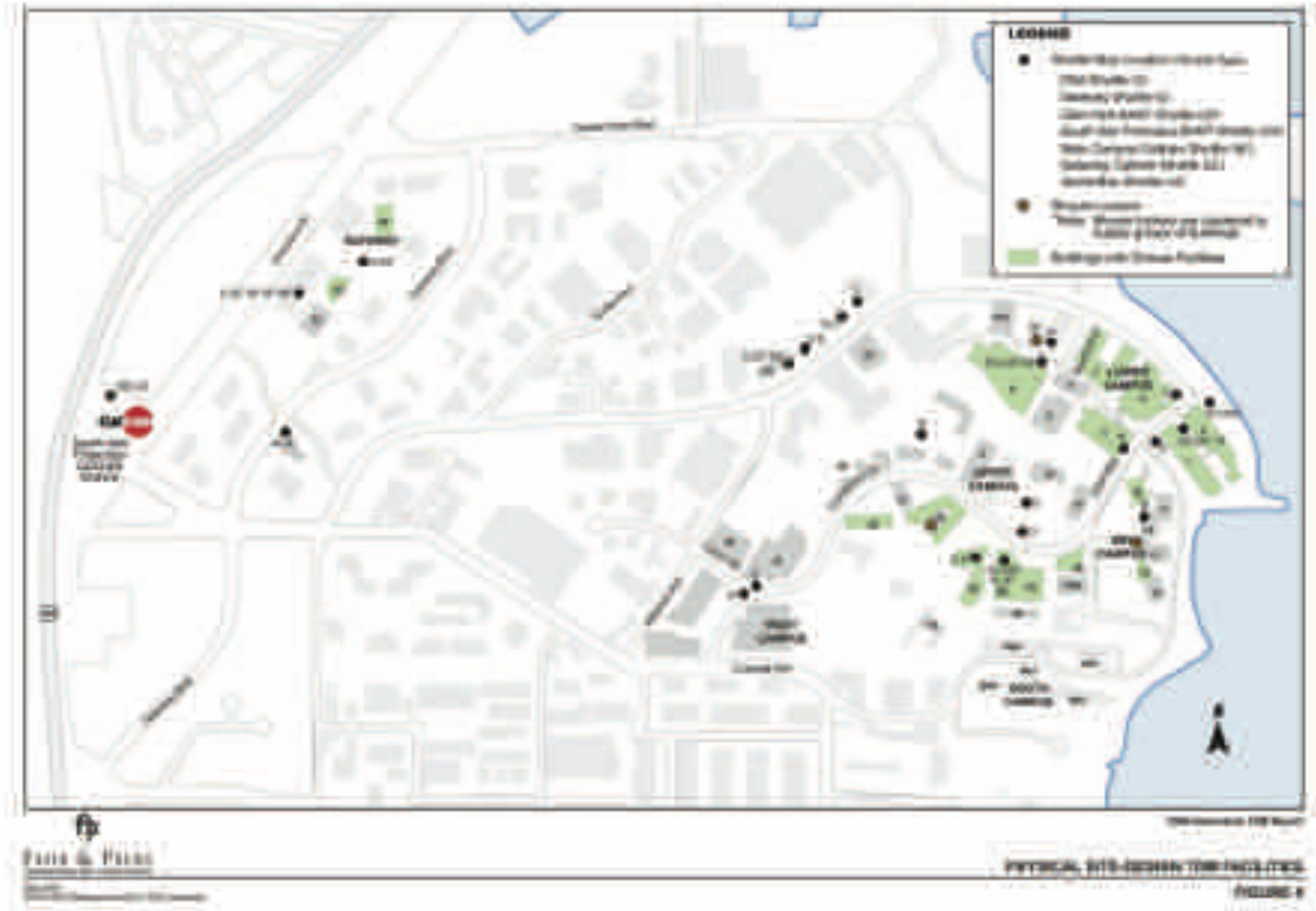
8.5 Shower and Clothes Lockers

Genentech provides shower and locker facilities within each campus neighborhood to help promote cycling as an alternative commute option. Currently there are 36 showers and associated clothes locker facilities spread out over 13 buildings on the Central campus.

Future site plans provide one shower stall for men and one shower stall for women and locker facilities per 500-600 additional employees. New shower and changing room facilities will be clustered among the different campus neighborhoods to assure maximum availability of facilities while minimizing employee waits.

Figure 3 shows the existing bicycle facilities and Figure 4 shows physical site design and TDM facilities for shuttle stops and buildings with shower facilities.





9.0 EMPLOYEE TRANSPORTATION COORDINATOR

The Genentech Transportation Department is staffed by a commute services manager and an operations/shuttle manager and several additional full-time staff. The commute services manager is also the ETC and has primary responsibility for implementing this Plan. The ETC provides employee commute program assistance to all Genentech employees, produces on-site transportation fairs and promotional events, collaborates with the Alliance and 511 to maximize resources, conducts the annual survey and produces the triennial report. TDM industry data supports that having an ETC has a very positive impact on increasing alternative mode-use. This position is filled by:

Name: Nathan Byerly
Employee Transportation Programs Manager
Genentech Transportation Department

Address: 1 DNA Way
South San Francisco, CA 94080-4990

Phone: (650) 225-8285

The ETC provides the following services:

- Promotes trip reduction, gRide Rewards and air quality strategies to employees.
- Main point of contact for employees wanting to commute using an alternative.
- Conducts annual employee surveys and provide reports to the City of South San Francisco, which will include commute patterns, mode splits, and TDM program success (process includes: annual surveying of employees, tabulation of data, and provision of results in report format).
- Evaluates survey results for alternative transportation potential and/or changes to current program.
- Catalogs all existing incentives that encourage employees to utilize alternative transportation programs.
- Works with local agencies such as Caltrain, SamTrans, BART, the Alliance, 511 and the Bay Area Air Quality Management District (BAAQMD) and posts informational materials on the transportation kiosks in employee common areas, as well as disperses alternative program information to employees via posters, flyers, banners, campus newsletters, new employee orientation, etc.
- Participates in BAAQMD Spare the Air program. Spare the Air day notices are forwarded to employees to encourage not driving to work alone.

- Coordinates and manages various aspects of the plan that require periodic updating or monitoring, such as the GRH program, car and vanpool registration, parking enforcement, locker assignment and enforcement.

9.1 Designated Employer Contact at Leased Sites

Leased campus sites require a designated contact to be identified. The designated employer contact at leased sites will be the Genentech ETC. The ETC will maintain on-site TDM programs and employee outreach, administrate the annual surveys and provide information continuity for the developer/landlord and the City of South San Francisco.

9.2 Promotional Programs

Genentech's current promotional programs include new employee orientation packets, flyers, posters, email notices, transportation fairs, trip-planning assistance, Green Genes program, and an emergency ride home program. Genentech offers an orientation program to new employees to explain the importance of trip-reduction methods and their benefits to the community. The orientation addresses Genentech's TDM mission statement and alternative-commute options, describes on-site amenities, provides transit schedules, maps, and offers free ride-matching services.

Genentech employees are encouraged to participate in the BAAQMD "Spare the Air" program during unhealthy weather conditions by not driving to work alone, and seeking other methods of commuting. Enrollment is via the BAAQMD Web page, and a "Spare the Air Day" notification is sent via email. Genentech also sponsors the annual "Bicycle to Work Day" with promotions and on-campus activities.

Other events and promotions on-site at the project may include Caltrain Day, Rideshare Thursday's or a comprehensive transportation/commute fair. Various transit and rideshare organizations may be invited to set up a marketing booth during lunchtime at a central location in the building during the year to promote alternative commute options. Free trial transit passes will be available for first time riders. Periodic on-site tabling is also conducted throughout the year.

10.0 EMPLOYEE INCENTIVES

Genentech employees are offered a variety of incentives to use alternative commute options. Incentives include a pre-tax, payroll deduction (Commuter Choice) for transit and vanpool users and a daily commute allowance/subsidy program for employees who use transit, carpool, vanpool, bicycle or walk to work.

The federal Commuter Choice option is a tax-free payroll deduction for vanpool and rail transit pass fares. An employee can deduct up to $1,260 a year from their salary as a pretax payroll deduction. This program encourages non-drive alone commute trips.

Transit or commute subsidies can be set dollar amounts or a percentage of the monthly costs of transportation. Employment sites that offer transit or commute subsidies

generally tend to have higher levels of alternative mode-use. Subsidies can be provided in tandem with the pre-tax option.

Other carpool, vanpool and transit incentives are made available to encourage employees to use alternative transportation options (e.g. Try Transit, You Pool-We Pay, etc.).

10.1 Commute Allowance/Subsidy Program

To better utilize land as Genentech adds employees, Genentech provides alternative mode commuters with a daily commute allowance/subsidy in order to reduce parking demand on campus. Genentech views parking as an employee benefit and, as of late 2006, offers employees a daily incentive for not parking onsite. Those who choose to participate in the program are compensated for each day they do not drive alone to the main campus. Employees who choose to continue to drive will continue to receive their parking benefit.

Genentech employees report their monthly commute activity and are paid accordingly. This parking benefit strategy and incentive significantly will reduce drive-alone trips to the campus.

10.2 Pre-Tax/Commuter Choice Transit Passes

Genentech employees receive transit passes through WageWorks, a Commuter Choice service that mails transit passes directly to participants. Employees are eligible to purchase passes through pre-tax deductions that are deposited into their WageWorks account. This option also allows employees to use their commute allowance/subsidy towards their transit passes.

10.3 Carpool Incentive Program

Genentech employees can participate in the "You Pool, We Pay!" program offered by the Alliance. Employees who are currently driving alone, and are commuting to, from or through San Mateo County, are encouraged to carpool. When employees form a new carpool with two or more people over the age of 18, or add a new member to an existing car pool, all participants will receive a $60 gas card incentive.[2] A carpool program flyer is provided as an attachment.

10.4 Vanpool Incentives

As an incentive for vanpooling, the Alliance will pay half the cost for the first three months of vanpooling, up to $80 per month. Drivers of new vanpools, on the road for at least 6 months, can receive $500. This one-time incentive is provided for those who join a new vanpool in the last six months who have not vanpooled for a three-month period before joining a new vanpool. A program flyer is provided as an attachment.

[2] http://www.commute.org/programs.htm#carpool

10.5 Try Transit Program

The Alliance offers a Try Transit Program that provides free transit tickets to people who are interested in trying public transit to get to work. These free tickets are meant for people who are new to transit. Commuters requesting tickets must work, live in or drive through San Mateo County. A copy of the Try Transit Program is provided as an attachment.
Transit ticket options include:

- One BART ticket
- 3 round-trip Caltrain tickets
- 6 one-way SamTrans tickets,
- 6 Dumbarton tickets
- 3 round-trip VTA tickets.

11.0 GUARANTEED RIDE HOME PROGRAM

Genentech offers its employees a Guaranteed Ride Home (GRH) program, which allows employees who utilize alternative forms of commuting a free ride home for emergencies up to four times per year via taxicabs or rental cars.

The program may not be utilized for doctor's appointments, meetings, shopping trips or other scheduled purposes. To qualify for the program, participants must fill out a registration form located on the transportation intranet site and must commute by an alternative mode.

The GRH program is managed by the Alliance. The Alliance covers 75% of the cost for GRH services. Genentech pays the remaining 25% cost. A sample Alliance GRH program flyer is provided as an attachment.

All employees who commute to work using transit, bicycle, or by carpool or vanpool, will be guaranteed a ride home in the case of a personal emergency, or when they unexpectedly have to work late thereby missing the last bus, or their normal carpool home. The GRH program has proven very successful as it removes one of the major objections employees have to giving up their private automobile, especially those with young families.

The GRH program provides employees with a security blanket, a feeling of reassurance that if a child becomes ill or injured during the day the employee can get to them quickly. If employees need to work late and miss their bus or carpool, or if their vanpool breaks down, they will be guaranteed a ride home.

12.0 FLEXTIME

In order to use alternative modes of transportation, employees may need special consideration regarding start and end times of work. For example, the workplace may open at 8:00 a.m., the carpool drops the employee off at 7:45 a.m., leaving them to wait

until the building is open. Many employees would drive alone given those conditions. Flextime allows the employer to adjust opening and closing times to facilitate the use of alternative commute modes. Genentech provides flextime to employees wishing to commute via alternative transportation rather than SOV. Campus buildings are open and accessible in the early morning and evening hours to support an active flextime program.

13.0 TELECOMMUTING

Telecommuting is a viable option for Genentech employees. Telecommuting involves the use of telephones and computers to enable an employee to work off-site or outside of the traditional work place. It can mean working at home or at a telecenter. Many employers look at telecommuting as a way to reduce work-space demand.

Telecommuting, used as a tool to reduce the cost of doing business and employee commute trips, has proven to be very effective. The secondary and related benefits include recruitment and retention value, reduced sick time and absenteeism, improved productivity and morale, and reduced stress. The benefits mentioned above focus on employers and employees, but telecommuting will also reduce energy consumption related to commuting, vehicle miles traveled, and mobile source emissions.

14.0 INFORMATION BOARD/KIOSK

Genentech's TDM Coordinator has transportation kiosk boards located within the lobbies of major buildings. These displays include shuttle maps and schedules, transit maps and schedules, bicycle facility maps, information regarding car and vanpool matching services, and information regarding alternative commute subsidies provided by Genentech. Flyers for "Ride Your Bicycle to Work Week" and "Spare the Air" programs are also posted.

Genentech's TDM Program information is also available electronically through Genentech's internal Web site. The site also links directly to the BART Web site that provides Caltrain train and fare schedules, and offers schedules for each of the shuttle lines. Employees may also access the Nextbus link through the site to estimate the arrival time of a campus shuttle. Ride matching services are also offered through the Web site for those interested in carpooling or vanpooling via the regional 511 Rideshare Web site.

15.0 ON-SITE AND NEARBY PROJECT AMENITIES

On-site amenities provide employees with a full-service environment. Eliminating the need for an automobile to make midday trips increases non-drive alone rates. Many times, employees regard themselves as dependent upon the drive-alone mode because of errands and activities that must be carried out in different locations. By reducing this dependence through the provision of services and facilities at the work site, an increase in alternative mode usage for commute-based trips should be realized.

The on-site amenities currently provided promote the use of alternative modes by reducing employee reliance on the single-occupant vehicle. Genentech's extensive list of on-site and nearby amenities and services include:

- On-site food and drink vending on every other floor
- On-site employee sundry convenience kiosk
- On-site campus automated teller machine (ATM)
- On-site credit union
- On-site coffee bar on every floor
- On-site cafeteria (6:30 am - 2:00 pm)
- On-site "Grab and Go" Café (multiple)
- On-site childcare
- On-site occupational health clinic
- On-site hair cut, barber shop, dental, vehicle services, etc.
- Nearby recreational (Bay Trails)
- Nearby Fitness Center w/free shuttle (435 Forbes Ave)
- On-site video rentals
- On-site film developing
- On-site dry cleaning
- On-site concierge service, also available to employees, includes party planning, running errands, buying gifts, etc. for a nominal charge.

16.0 KICK-OFF MARKETING CAMPAIGN

Prior to occupancy of any new facility, Genentech will host a targeted employee commute marketing campaign. Regional transportation service providers, Genentech shuttles, commute allowance/subsidy program, guaranteed ride home information and other program benefits will be highlighted for employees relocating to a new site. This outreach process will continue to promote alternative commute opportunities and the unique benefits available to employees at Genentech and any special amenities at the new site.

17.0 TRANSPORTATION MANAGEMENT ASSOCIATION

Transportation Management Associations (TMAs) are usually private, non-profit organizations run by a voluntary Board of Directors with typically a small staff. They help businesses, developers, building owners, local government representatives and others work together to collectively establish policies, programs and services to address local transportation problems. The key to a successful TMA lies in the synergism of multiple groups banding together to address and accomplish more than any single employer, building operator, developer, or resident could do alone.

In South San Francisco, the Peninsula Traffic Congestion Relief Alliance operates as a TMA organization. The Alliance provides:

- Shuttle programs
- Information on local issues
- Transit advocacy
- Newsletter

- Parking management programs
- Trial transit passes
- Emergency ride home programs
- Bicycle facilities
- Car and vanpool incentives
- Bicycle training program
- Training
- Marketing programs
- Promotional assistance

Genentech participates in Alliance programs and utilizes their services. They are also registered in the Alliance GRH program for their employees. The Alliance is a clearing-house for information about alternative commute programs, incentives, and transportation projects affecting San Mateo County businesses.

18.0 COMPLIANCE MONITORING AND ENFORCEMENT

The intent of the City of South San Francisco's TDM Ordinance is to reduce SOV trips and, in doing so, lessen the resulting traffic congestion and mobile source related air pollution. It is important to ensure TDM measures are actually implemented and effective. Therefore, a monitoring and enforcement program is necessary for each application. Because the City's TDM Program is performance-based (i.e. project requires percentage alternative mode usage and corresponding trip reduction at 30%), an annual evaluation program will allow Genentech and the City to assess the effectiveness of the unique program designed for the campus, and to make adjustments as necessary to meet requirements.

Genentech will establish and maintain a 30% trip reduction program subject to annual monitoring. Annual monitoring and penalty programs are consistent with previously approved methodologies implemented by the City of South San Francisco at other project sites in the east of Highway 101 area.

18.1 Annual Employee Commute Survey

An employee commute survey will be a critically important part of the monitoring process to determine the success or failure of TDM measures. This report, via results from an employee survey distributed and collected by the ETC, will provide quantitative data (e.g., mode split) and qualitative data (e.g., employee perception of the alternative transportation programs). Employees who do not participate in the commute survey will be counted as drive-alone or SOV commuters by default.

Given the size and multiple locations of campus work-sites, Genentech proposes to conduct employee commute surveys at selected buildings to sample the success of the TDM program. Data collection will monitor the activities of all employees of the selected building or group of buildings to be representative of the company as a whole. Information from the Genentech rideshare database and commute allowance/subsidy program will augment the survey data.

Survey data may then be used to focus TDM marketing and the efforts of the ETC. The TDM program could be re-tooled, if necessary, to maintain the project's 30% peak-hour alternative mode-use rates and commitment at the site. A summary report based on

results from the annual employee commute survey will be submitted to the City of South San Francisco and presented to the Planning Commission and City Council.

18.2 Annual Summary Report

Each year, Genentech employee survey data, will be used to prepare an annual TDM summary report. This report will be submitted to the City to document the effectiveness of the TDM Plan in achieving the goal of the alternative mode usage and 30% trip reduction by employees throughout the campus. The TDM summary report will be prepared by an independent consultant or TMA who will work in concert with Genentech. The TDM summary report will main a historical employee commute record to be used in all future reports.

If the trip-reduction rates have not been achieved, the report will explain how and why the goal was not reached and specify additional measures and activities that will be implemented in the coming year to improve the mode-use rate.

The initial TDM summary report for Genentech will be submitted within two (2) years after approval of the Master Plan and each year thereafter. The survey reporting is targeted for the 4th quarter of each year.

18.3 Triennial Report

For projects with increased FAR, a triennial report will be performed by the City. Modifications from the Genentech expansion have increased the FAR and require the project to conduct a triennial report. This report or audit will state whether the development has or has not achieved the required percent alternative mode-use. If the development does not achieved the required mode-use, the applicant will:

- Explain how and why the goals have not been reached
- Describe additional measures that will be adopted in the coming year to attain the required mode-use rate
- Provide an implementation schedule by month of additional measures

The triennial report will also include a comparison of responses to historical surveys, identify any significant mode share changes, and describe why the mode share changed. The Chief Planner will review reports. Reports that indicate failure will be submitted to City Council.

18.4 Penalty for Noncompliance

If the subsequent triennial report indicates that, in spite of the changes in TDM programs, the required alternative mode-use is still not being achieved, or if Genentech fails to submit an annual report, the City may assess a penalty. The penalty shall be established by City Council resolution on the basis of the project size and actual

percentage alternative mode-use as compared to the percentage alternative mode-use required or established in the TDM Plan.[3]

In determining whether a financial penalty is appropriate, the City may take into account the more than $10 million dollar annual investment currently invested and consider whether Genentech has made a good faith effort to meet the TDM goals.

If the City determines that Genentech has made a good faith effort to meet the TDM goal, but a penalty is still imposed, and such penalty is imposed within the first four (4) years of the TDM plan (commencing with the first year in which a penalty could be imposed), such penalty sums, in the City's sole discretion, may be used by Genentech toward the implementation of the TDM plan instead of being paid to the City. If the penalty is used to augment the TDM Plan, an Implementation Plan shall be reviewed and approved by the City prior to expending any penalty funds. The City may assess Genentech a penalty in an amount no more than $50,000 per year for each percentage point (compounded at $25,000 increments) below the minimum 30% alternative mode-usage goal as determined by survey methodology used by the Alliance or other methodology agreed to with the city.

19.0 CONCLUSION

The report identifies TDM measures that proactively encourage employees to use alternative commute modes and will, at a minimum, support for a 30% alternative mode-use program according to South San Francisco guidelines over the next 10 years. This Plan meets the 30% minimum alternative mode-use required of Genentech under the City of South San Francisco's Municipal Code.

As outlined in this document, Genentech is committed to providing an aggressive, comprehensive TDM plan to its employees to promote the use of alternative modes. Genentech is already exceeding program requirements (e.g. shuttle services, commute allowance, on-site amenities, etc.) and continues to expand and enhance its robust TDM program. Through internal dedication and partnerships with local agencies and organizations, Genentech is poised to be a model company in terms of TDM.

In order to be part of the transportation solution, this project contains the density and critical mass necessary to encourage the use of all alternative modes of transportation including bicycling, carpooling, vanpooling, and public transit.

By balancing air quality with economic growth, Genentech will help South San Francisco thrive as a community and contribute to South San Francisco's future livelihood.

[3] Ordinance No. 1300-2001, Chapter 20.120, Transportation Demand Management, South San Francisco Municipal Code, October 2001.

ATTACHMENTS

Downtown Dasher - Mid-day Taxi Service
Bicycle and Pedestrian Safety Program
Employee Transportation Flyer
Carpool Incentive Program Flyer
Rideshare Reward$ Flyer
Vanpool Program Flyer
Try Transit Program Flyer
Guaranteed Ride Home Program

FREE
Mid-day Taxi Service
DOWNTOWN *DASHER*

Is your job located in an East of Highway 101 business park in South San Francisco? Do you utilize public transportation or have limited options for travel to Downtown South San Francisco during the lunch hour? Why not try the "Downtown Dasher" taxi service?

This FREE service picks you up between the hours of 11a.m. and 2 p.m. from your workplace, and drops you off at one of two drop-off locations in the downtown area of South San Francisco.

All that is required to take advantage of this service is a "Downtown Dasher" taxi voucher and a trip reservation. Contact the ALLIANCE at 650-588-8170 or shuttles@commute.org to get your vouchers. Once you receive the voucher, call 650-588-2131 by 10 a.m. the morning of the trip to make a reservation. A return reservation is made as well. Once the taxi arrives, the driver collects the appropriate portion of the voucher and you're off. Just sit back and enjoy the ride. It's that simple.

Leave your cars behind. Visit Downtown South San Francisco to enjoy numerous restaurants and shops with your friends and co-workers.

Peninsula Yellow Cab:
650-588-2131

Peninsula Traffic Congestion Relief Alliance:
650-588-8170

PENINSULA TRAFFIC CONGESTION RELIEF ALLIANCE

1150 Bayhill Dr., Suite 107
San Bruno, CA 94066

www.commute.org

Voucher Number 10[illegible]

Trip Value $5

VOID

Downtown South San Francisco
DOWNTOWN *DASHER*

One-Way Ride

Please give this to your taxi driver at the time of pick up

From Employer

Voucher Number 10[illegible]

Trip Value $5

VOID

Downtown South San Francisco
DOWNTOWN *DASHER*

One-Way Ride

Please give this to your taxi driver at the time of pick up

From Downtown South San Francisco

To help improve this new transportation service, tell us which merchant(s) you visited on this trip
www.commute.org

Downtown South San Francisco

DOWNTOWN DASHER

Free Trip Downtown

This voucher good for a one-way taxi ride to designated drop-off locations on Grand @ Linden and 733 Airport Blvd. during the hours of 11:00 am to 2:00 pm.

VOID

Just call Peninsula Yellow Cab
(before 10:00 am) to book your ride.
(650) 588-2131

Downtown South San Francisco

DOWNTOWN DASHER

Free Trip Downtown

This voucher good for a one-way taxi ride from designated drop-off locations on Grand @ Linden and 733 Airport Blvd. during the hours of 11:00 am to 2:00 pm.

VOID

Just call Peninsula Yellow Cab
(before 10:00 am) to book your ride.
(650) 588-2131

TAXI DROP-OFFS

- GRAND AVE. & LINDEN AVE.
- 733 AIRPORT AVE.

This program is sponsored by the City of South San Francisco and is managed by the Peninsula Traffic Congestion Relief Alliance.

Commute.org Working Together to Improve Your San Mateo County Commute

Bicycle and Pedestrian Safety Program

Attention Bicycle Commuters
Get A Free One Hour Bike And Pedestrian Safety Workshop At Your Jobsite

This Fun, Energizing Workshop Includes:

- Tips on including Bicycling as a safe, stress relieving commute mode
- Coverage of Traffic Laws for Bicyclists, Pedestrians, and Motorists around Bicyclists and Pedestrians
- Basic Bicycle Maintenance Tips
- Free bicycle related Door Prizes

Ask Your Employer To Give Us A Call, And The ALLIANCE Will Do The Rest!!!

If you would like more information on the Bicycle and Pedestrian Safety Program, please call The ALLIANCE at 650-588-8170, visit our website at www.commute.org , or e-mail us at ALLIANCE@commute.org

Rev 2

PENINSULA TRAFFIC CONGESTION RELIEF ALLIANCE

1150 Bayhill Drive
San Bruno, CA
94066

P: 650-588-8170
F: 650-588-8171

carpool

Carpooling is a flexible and convenient way to get where you need to go, and if you commute over a Bay Area bridge, your can cross for free! You can carpool as frequently as you want, and you don't have to carpool both ways. All you need is one or two other people to make it work so carpool with your friends from work or use the 511 Regional Rideshare Program's Ridematch Tool to instantly find people who you can commute with.

motorcycle

Some people ride motorcycles to feel the wind in their hair, others for the feeling of freedom. Still others ride motorcycles to work to be a part of gRide, which allows riders to park in preferred parking spots all around campus while also qualifying for gRide Rewards. When was the last time you were paid to feel so good?

bike

Biking is the most effective way to get to work for those who want a great cardio workout and emit the least amount of fuel emissions on the way. With bike lockers available on campus and the ability to take your bike on all public transportation and on the Genentech shuttles, you have no excuse to not ride your bike and get the best views on the way to campus.

walk

Whether you walk the entire way to work or only portions of it, this commute option is the original and still one of the best. As your healthy dose daily exercise and therapeutic alone time to think, daydream or enjoy the outdoors, walking should be a part of everyone's commute.

CalTrain

CalTrain is a commuter rail line on the San Francisco Peninsula and the Santa Clara Valley. Linking together San Francisco with Gilroy and many Peninsula communities in between. With hourly train service is provided year-round, and more frequent service provided during normal weekdays commute hours, CalTrain is the perfect commute option for Genentech's employees up and down the Peninsula.

BART
(Bay Area Rapid Transit)

The San Francisco Bay Area Rapid Transit District (BART) is a public rapid-transit system that serves parts of the San Francisco Bay Area, from Bay Point and Pleasanton to Richmond and Fremont. With stations on Millbrae and San Bruno and free shuttle from those stations to Genentech, BART is one of your best commuting tools.

GenenBus

GenenBus is a pilot program that operates free buses for Genentech employees to and from key locations in the Bay Area where more commuter options are most needed. Currently there are X buses in operation including X that depart from the Castro District in San Francisco every morning. To learn more about all the current GenenBus routes and to keep informed about all the new routes and services that we are adding everyday, to meet your growing commuting demands, visit the gWiz transportation pages.

vanpool

Vanpools are a scheduled group of riders who meet at convenient, pre-determined locations all around the Bay Area.to commute to and from Genentech together. Each Vanpool can take up to 15 riders, and so you get the opportunity to chat with new friends, catch up on your reading or even take a nap. You can use your pre-tax money of commuter checks to pay for your vanpool expense or earn some money by starting your own.

gRide Rewards
get green

Earning rewards is as easy as:

1. **Ride** *gRide your way*
2. **Remit** *your Commuter Update*
3. **Receive** *your reward in your paycheck*

By utilizing one of gRide's approved commuting options to commute to work, employees can earn $4 a day or up to $88 a month directly into their paychecks.

Registering only takes a couple minutes and is easily accessed at gWiz/gRideRewards.com. That's it.

Get Onboard with gRide Rewards and get green.

gRide Rewards
get green

we'll pay you $4 a day to ride gRide your way

Go to gWiz/gRide Rewards.com to collect your reward

Genentech

Genentech

welcome to gRide
GET ON BOARD

Getting to work can be safe, quick and easy.

Through our gRide commuter program, Genentech strives to provide its employees with flexible and comprehensive transportation options to help ease your commute. With options for every lifestyle and every community in the Bay Area, gRide is designed with you in mind.

By participating in gRIde, you are helping to support Genentech's sustainable growth, allowing the company to grow wisely towards its Horizon 2010 goals. Additionally, you are curbing emissions, easing congestion, and reducing parking demands, all of which reduces your individual footprint and our collective footprint on our campus, our community and our planet.

What would you do with an extra $88 a month?

gRide
GET ON BOARD

GenenBus —
We provide you with a free ride home

Church and Market just outside of Safeway Or The Glen Park area at ...

gRide resources

- ***Transportation's Website on gWiz*** —
  - ***Transportation Options by Area*** — Wherever you live in the Bay Area, we've made it easy to view all the commute options for your area.
  - ***Campus Services*** — an extensive list of Campus Services is at your disposal.
  - ***Nextbus*** — A quick look on the site and it will tell you in real time when the next bus or shuttle will arrive outside your building
  - ***Downtown Dasher*** — We will provide you with a free voucher for a cab to take you to downtown SSF — to have lunch or run an errand, you choose.
  - ***Pre-Tax Commute Program*** — Deduct up to $105 per month from your paycheck pre-tax to put towards transit and vanpool expenses. If you park at BART or Caltrain, get up to $205 additionally every month.
  - ***GenenBus*** — Find out where the GenenBus goes – you can also submit a request for a new bus stop
- ***Park and Ride Lots*** — There are over 150 free, convenient Park and Ride Lots across the Bay Area. Use them to catch a carpool or vanpool. For more information visit 511.org on the gRide website
- ***Rideshare Matchlist*** — Think it's difficult to find someone near you that you can commute with? With this service, get names, phones numbers and commute schedules of co-workers and neighbors that want to commute with you. For more information visit 511.org on the gRide website

Legend
- CalTrain Stations
- CalTrain line
- BART Stations
- BART Line
- Park & Ride Lots
- GenenBus Pick-up
- Vanpool Area

best reasons to Ride

- ***Guaranteed Ride Home Program*** — We never want you to worry about not having a ride home in an emergency. If you need to get home we will provide you with a free ride home by taxi, rental car, or whatever it takes. For more information, visit the gRide website.
- ***Government Incentives*** — The county you live in may offer even more money to commute. Receive up to $1000 a year in cash incentives above and beyond gRide Rewards for commuting. For more information visit 511.org on the gRide website.
- ***We'll Give You a Van*** — Create a group from any area and set up a vanpool, we'll supply you with a way to work, a van. No need to put wear and tear on your car, and you get to have a set schedule every day. You can make new friends and make money at the same time. Earn up to $900 a year in gas cards to help pay for commuting. For more information visit gRide on gWiz.
- ***Saves You Time*** — By commuting with additional people in your car, you qualify to use Diamond Lanes, which can not only save you money at the tolls but also valuable minutes stuck in traffic.
- ***Preferred Parking*** — You get the parking closest to the door throughout campus. As of January 2007 carpool and vanpools participants get Preferred Parking throughout campus before 9AM.
- ***WiFi Access*** — Check your email, finish a report, search the internet and even do your shopping on the way home. By the time you get home, you are all caught up or have had some fun — so you have more time for your family when you arrive. We have it on all GenenBus's and shuttles!

Carpools
Use the Rideshare Match tool—

Matches you with other employees who live near you Best way to meet a new friend, and to share the commute. If you need flexibility, we have a guaranteed ride home program and others to support you

Vanpools
Arrange for a group in your area to ride together and we'll supply you with a van This is a great way to get a large group to campus — and support Genentech's sustainable growth

BART and CalTrain
We provide a shuttle every day, all morning and at the end of day, to make your commute easy and fast. You can use the website XXXXXX to calculate the cost of the commute and use the 511.org link on our website to plan the best route for you

other great reasons:

Stay fit by walking to BART or riding a bike to work.

Create an audio book club with your carpool or vanpool

Help the planet – this is your way to contribute.

Daydream — enjoy a moment to yourself, reflect...just pause.

Meet new people to discuss politics, news, or sports

To collect your rewards go to gWiz/gRideRewards.com

QuickLinks

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FREE Transit Tickets

Get an Emergency Ride Home

Rebates for new vanpool participants

Carpool Incentive Program

Bike Parking at Half Cost

Develop A Shuttle Program

The Bike and Pedestrian Safety Program

brought to you by:

PENINSULA TRAFFIC CONGESTION RELIEF ALLIANCE

San Mateo County Carpool Incentive Program Appl

You Pool, We Pay!

If you currently drive alone, and you commute to, from or through San Mateo Coun carpooling to work.

The Peninsula Traffic Congestion Relief Alliance is offering:

- **gas cards worth $60.00** for commuters with standard cars
- **gas cards worth $80.00** for commuters with hybrid cars (Clean Air Vehicle de
- **gift cards worth $80.00** for commuters with clean air vehicles (Clean Air Vehic

to commuters who pledge to carpool to work a minimum of two days per week, for of driving alone. **Each member of the carpool** is eligible for this offer!

To find out if your vehicle qualifies for the Clean Air Vehicle decal, please visit the ((ARB) website at: www.arb.ca.gov

Visit the www.dmv.ca.gov to find out how to apply for Clean Air Vehicle decal. Plea FasTrak requirement carefully.

If you need a carpool partner or want to find a new member for an existing carpool, website.

Commute by carpool ... and we'll buy the gas

Now is the time to try carpooling! The Peninsula Traffic Congestion Relief Alliance i **gas card** incentive to help you.

Start here:

- Form a NEW carpool with two or more people over the age of 18 **or**
- Add a NEW member to an existing two-person carpool.
- Then, register yourself (the carpool coordinator) and the names and emails of
- The carpool coordinator is the only person required to complete this form to st completing the carpools partners' information accurately on this one form.
- Select the type of vehicle from the drop-down box at the top of the applicatior
- Special requirements state that Hybrid and CAV carpoolers must drive through
- Hybrid or CAV incentive applicants will need to mail or fax us a copy of the Cle

Once your application is received and accepted, your carpool partners will receive a must follow to fill out their information. The incentives are currently a one time only Acceptance of this application is subject to the Alliance's approval.

(All questions are required.)

Type of Carpool	Standard
Carpool Coordinator's Salutation	Mr
Carpool Coordinator's First Name	
Carpool Coordinator's Last Name	

511 RideMatch Service
Commute Rewards
Carpooling
Vanpooling
Downloads
Carpool (HOV) Lanes and Lots
Employers
Real Stories
Commute Calculator
En Español
Skip Navigation

What is "skip navigation"?

SEARCH RIDESHARE:

GO

About 511 Rideshare
Newsroom
Suggestions | Tell a Friend Rideshare Site Directory
Spanish Version
Disclaimer

Brought to you by MTC and Bay Area Transportation Partners

Privacy | Accessibility

About Rideshare Rewards

Welcome carpoolers! Rideshare Rewards is dedicated to you. Earn rewards and enjoy time with friends and colleagues as you beat the rush hour blues. Carpooling saves you money on gas and car wear and tear—**now win prizes!**

New Carpoolers: FREE Gas and Safeway Gift Cards

Listen up solo commuters! If you switch to carpooling and work in the nine-county Bay Area you can win FREE gas or **Safeway** gift cards.

Earn $10 for every five days you carpool within a 90-day period, up to $100. And one lucky commuter wins $1,000 in gift cards in a grand prize drawing.

Rideshare Rewards runs from March 1 through October 31, 2007, or until funds are depleted. It's first come, first serve, so sign up now!

Need to find a carpool partner? Sign up for our FREE online RideMatch Service.

Who is Eligible

Drive-alone commuters who switch to carpooling and work in the nine-county Bay Area. This is for NEW carpoolers only. Read eligibility guidelines

Get started

Step one: Find a carpool partner! Sign up in our free online RideMatch Service to find potential matches, or recruit co-workers, friends and family.

Step two: Register online. Log carpool days in your online Commute Diary.

Step three: Receive your Safeway or gas gift card!

Spin the Wheel Prizes

Rideshare Rewards 2006 and Spring 2007 carpoolers can spin the wheel weekly for prizes. A gas gift card! A brand new bicycle! Coffee drinks! Spin the wheel and see what you can win, as long as you carpool at least

Commute.org Working Together to Improve Your San Mateo County Commute

Vanpool Program

Want To Save Money On A Long Commute And Get Paid For Doing It?

Then vanpooling may be right for you.

Picture this….

You meet your van in the morning at a prearranged place and time. Then, you settle into a comfortable seat for a relaxing ride. What a perfect time to read, snooze, or even catch up on some work, while around you, thousands fight traffic.

And We'll Pay You To Try It…

As an incentive to help you get started in a vanpool, the ALLIANCE will pay you half of the cost for your first 3 months of vanpooling, up to **$80 per month**. If you decide to be a driver for a new vanpool for at least 6 months, you can receive **$500.00**. This one time incentive is provided for those who have joined a new vanpool in the last six months and have not vanpooled for a three-month period before joining their new van.

How Can I Get Involved In A Vanpool?

If you would like us to contact your employer, give us a call at 650-588-8170, or e-mail us at ALLIANCE@commute.org or visit our website at www.commute.org

To Receive Your Rebate…

If you are a new vanpool rider or driver, or are planning to be one, download and fill out the reimbursement form in the vanpool section at www.commute.org

Rev 2

PENINSULA TRAFFIC CONGESTION RELIEF ALLIANCE

1150 Bayhill Drive
San Bruno, CA
94066

P: 650-588-8170
F: 650-588-8171

QuickLinks

Alliance Programs

FREE Transit Tickets

Get an Emergency Ride Home

Rebates for new vanpool participants

Carpool Incentive Program

Bike Parking at Half Cost

Develop A Shuttle Program

The Bike and Pedestrian Safety Program

brought to you by:

PENINSULA TRAFFIC CONGESTION RELIEF ALLIANCE

Free Transit Ticket Distribution Program

Tired and frustrated with driving alone on your long commute to work every day?

Interested in public transportation options, but never taken the time to try it?

If you're over 18, live or work in San Mateo County and have not used public transportation to commute to work, you could be eligible for a free ticket on BART, SamTrans, Caltrain, VTA, Dumbarton Express or M Line. Just complete the questionaire below and we'll mail you a free ticket from the transit agency of your choice.

Despite what you might think, public transit is very convenient. When you try public transportation you can:

- **Save hundreds of dollars a year** in auto expenses (gas, insurance, maintenance, tolls, etc.)
- Work or relax during your commute and **reduce the amount of stress** you feel
- Use the new found time you have to read, talk with friends, or get ahead at work
- **Get to work and get home on time** regardless of the weather, traffic accidents, breakdowns, etc.
- Help **reduce environmental pollution** and overcrowded roads
- **Use pre-tax dollars** to pay for your public transportation expenses

Be one of the first to complete the questionnaire below and we'll mail you free transit tickets from the transit agency of your choice as mentioned below. Please note that this offer is for one ticket request, per person, one time only.

Try Transit Free Tickets Order Form

First Name:	
Last Name:	
Home Address:	
City:	
State:	
Zip:	
Phone number:	

Commute.org Working Together to Improve Your San Mateo County Commute

EMERGENCY RIDE HOME PROGRAM

Don't Get Stranded At Work!

Do you want to bike, walk, carpool, vanpool, or take public transit; but are worried about becoming stranded if an emergency arises while you are at work? The Emergency Ride Home gives you the peace of mind necessary to get out of traffic and save money, time and stress.

When your Employer signs up for The Emergency Ride Home program, you have a reliable way to get home quickly in the event of an emergency.
Most people choose to drive their own personal vehicle to work because they don't want to be faced with a dilemma should an emergency arise. Be certain that, in the case of an emergency, your employer will support you with a free taxi ride or a 24-hour car rental. **You have the freedom to carpool, vanpool, bus, bike or walk to work without the fear of becoming stranded in an emergency**.

How do I get my employer involved?

You can provide your employer with information about the program by printing out the Emergency Ride Home section of this website at www.commute.org

Otherwise, send us a contact name, number and address to alliance@commute.org or call us at 650-588-8170 and we'll be happy to contact them for you.

PENINSULA TRAFFIC CONGESTION RELIEF ALLIANCE

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