

March 2012

MISSION|ROCK

Seawall Lot 337 & Pier 48

DESIGN + DEVELOPMENT REVISED PROPOSAL

San Francisco Giants with **The Cordish Companies**

in association with Perkins+Will | Hargreaves Associates | Ateller Ten



March 15, 2012

Doreen Woo Ho, President
Kimberly Brandon, Vice-President
Francis X. Crowley, Commissioner
Leslie Katz, Commissioner
Ann Lazarus, Commissioner
Monique Moyer, Executive Director

We are pleased to submit the enclosed Revised Proposal for the Seawall Lot 337 / Pier 48 development project. The Mission Rock team has been advancing this project since we entered into the Exclusive Negotiation Agreement with the Port of San Francisco in September, 2010, and we are excited to launch the next Phase of development. Over the last year, we have achieved the milestones laid out in the ENA, and have established a solid foundation for a comprehensive development program, one that meets our shared design and economic goals. In March, 2011 Seawall Lot 337 Associates, LLC submitted a Revised Proposal Concept to the Port, and we have worked diligently in the months since to assemble the enclosed Revised Proposal.

Throughout this process, we have coordinated numerous meetings with community stakeholders, local residents, nearby businesses and institutions, City and State officials. The initial responses to our revised concepts have been overwhelmingly positive, as the community shares our vision for a vibrant waterfront neighborhood that links downtown San Francisco with the emerging Mission Bay area.

We continued to refine and improve upon our initial program and plan, gaining a better understanding of design opportunities and constraints, underlying site conditions, the evolving broader economic and financial environment, and neighborhood goals for this unique parcel of land. The Revised Proposal presented in this submittal takes into consideration all of these elements and more, and represents a comprehensive strategy for creating a world class waterfront on the San Francisco Bay. The accompanying book describes the foundations upon which this Design Book and the land use planning principles of our Revised Proposal are based.

We believe in urban design as the ultimate public good, and our team understands how space and the built environment shape the human experience. In the pages of this Revised Proposal, we have developed a design strategy for Seawall Lot 337 and Pier 48 that will enhance the fabric of the city for generations to come. We are excited about the progress that we have made, and look forward to continuing to work together towards building an iconic waterfront neighborhood on the Port of San Francisco.

Sincerely,

Mission | Rock Development
Seawall Lot 337 Associates, LLC

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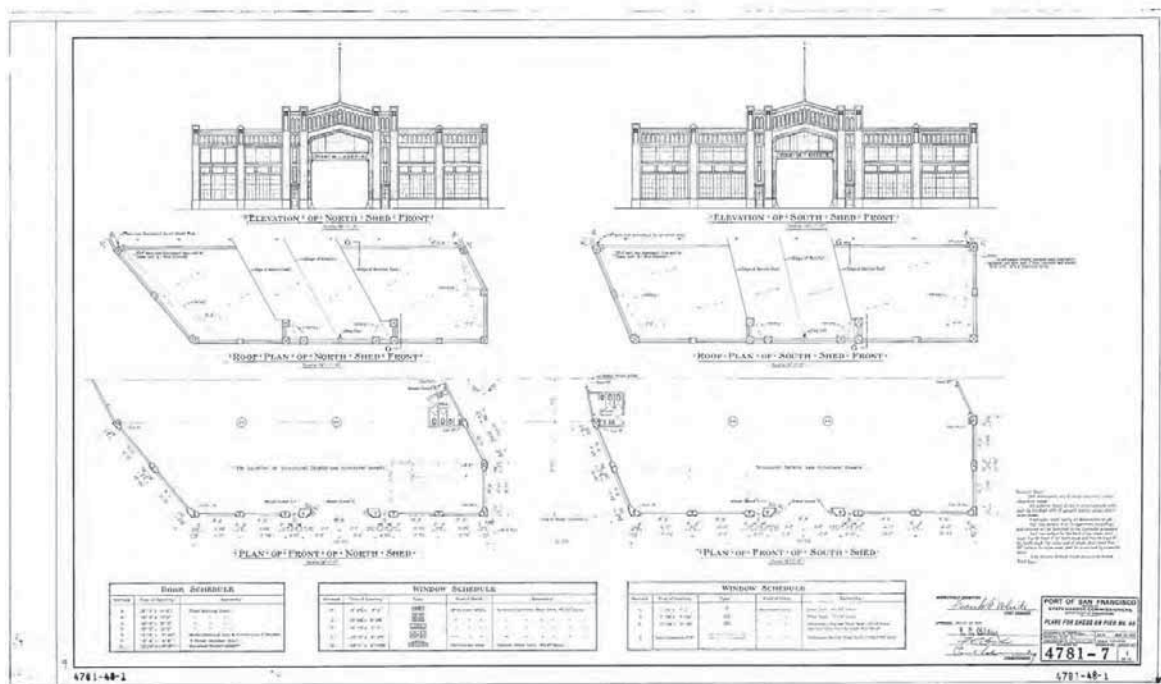
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EXECUTIVE SUMMARY

01



01

EXECUTIVE SUMMARY

During the Design and Development Concept Refinement phase, over the last eighteen months the team has performed design, technical, and feasibility due diligence analysis in order to inform the future of the Mission Rock development. Included herein is a detailed analysis of the Mission Rock context, land use program, urban plan, open space strategy, and sustainability elements, and the design refinements and advancements that such analysis has made possible. Following a successful term sheet negotiation, the next step towards furthering this project will be a Design for Development framework that shapes the planning and architecture that will ultimately define this unique addition to San Francisco's neighborhoods.

Throughout this period of development planning, one commitment has remained central to the plan: the commitment to respect this site as an exceptional public resource and reflect that respect in an extensive network of links and open space destinations that invite all users to the waterfront. We have maintained the grand scale of Mission Rock Park on the northern end of the site, directly across China Basin from AT&T Ballpark. From the Junior Giants field to the Great Lawn gathering space, Mission Rock Park will be a year round facility for the greater San Francisco and Bay Area community. Coupled with a rehabilitated Pier 48 that offers maritime and recreational uses, the Park will connect the Blue Greenway to the Embarcadero, establishing uninterrupted public waterfront access from Fisherman's Wharf to Hunter's Point. The centrally located Mission Rock Square will be a focal point of the neighborhood, serving residents, businesses, and visitors, and celebrating East-West view corridors of the Bay. The small scale of street blocks will mirror the transitional fabric of this neighborhood, linking larger parcels in Mission Bay to the more intimate scale of downtown San Francisco.

The Mission Rock development program reflects a current perspective of highest and best use of the Port's land to generate sustainable financial returns, yet it is flexible enough to respond to future market conditions. This approach achieves our shared goal of preserving flexibility for individual development sites, while simultaneously creating a land use framework within which the program will evolve.

Executive Summary **3**

DEVELOPMENT PROCESS

Outlined below are the major milestones for the development process to date. That process extends from the earliest concepts submitted with team qualifications to the elaboration of those concepts in response to the Port's RFP, and into the refinements of the current ENA phase. This Revised Proposal will form the basis for the Entitlement Phase including the Environmental Impact Report and the Design for Development documentation.

This submittal provides the Design Foundations portion of the Revised Proposal: Phase 3, Part B as highlighted below.

| | | |
|--|--|-----------------------|
| PHASE 1 | Response to request for Developer Qualifications / Concept | February 2008 |
| PHASE 2 | Response to request for Developer Proposal / Design + Development Concept Document | January 2009 |
| PHASE 3 | Exclusive Negotiation Agreement / Design + Development Concept Refinement | September 2010 |
| PART A : REVISED PROPOSAL CONCEPTS | | March 2011 |
| PART B: REVISED PROPOSAL SUBMISSION | | |
| Design Foundations: Public Realm Plan and Land Use Program | | March 2012 |
| PHASE 4 | Entitlements / EIR and Design for Development Documents to commence after approval of the Term Sheet by the Board of Supervisors | |

FOUNDATIONAL DESIGN PRINCIPLES

We have built our design process on the following three foundational principles:

WATERFRONT MEETS NEIGHBORHOOD

Assure the transformation of this once thriving urban industrial zone into a neighborhood informed by and steeped in its history. The richness of the waterfront setting is still alive with maritime activity, and is ready to welcome the technologies and medical advancements of our future. The gateway to the southern waterfront will once again be alive with industry and activity. Mission Rock will be the final link between Mission Bay and the northern waterfront.

MIXED-USE DIVERSITY, VIBRANCY, AND EXCITEMENT

Create a welcoming, public-spirited place with a hometown neighborhood character that maximizes public-trust uses while generating significant income to help support the Port's historic preservation, infrastructure and waterfront open space needs. A vibrant mixed-use community stands as the vision for Mission Rock and the foundation of a design that will appeal to residents, workers and visitors by providing the right combination of uses to keep the neighborhood active and safe. That design foundation begins with a celebration of views, parks and open space that feature its waterfront location. We will create a welcoming public-spirited community respectful of its history and vibrant with life days, nights, and weekends. Mission Rock seeks to learn from the rich and colorful neighborhoods of the City, while providing opportunities for our new industries to grow and thrive. The community will serve millions of loyal Giants fans at AT&T Park 6 months of the year, and will welcome visitors to San Francisco's waterfront year round.

INNOVATIVE SUSTAINABILITY LEADERSHIP

Incorporate sustainable technologies and practices, both human and physical in Mission Rock's design, construction and operations. Setting high standards and furthering best practices for sustainability have long been cornerstones of our team's San Francisco initiatives and Mission Rock will take that leadership to new levels of civic responsibility. It will be a model community, incorporating green technologies and sustainable practices to reduce energy consumption, vehicle emissions and the community's overall carbon footprint, while creating a sustainable infrastructure foundation for future developments with early integration of environmental design.

GOALS FOR DESIGN REFINEMENT

During the current project phase, we have followed established design goals that have guided our refinement of the original proposal. They have informed the Revised Proposal presented in this book, in which we have tested the parameters and feasibility of these goals.

TEST PARAMETERS OF ORIGINAL CONCEPT DESIGN

Connection to the waterfront

Links to surrounding neighborhood

Internal street grid to favor pedestrians, transit and bicycles

Feasible development parcel sizes for variety of uses

Program flexibility overall and by site

Creation of a strong neighborhood identity

Creation of significant public open space areas

Addressing ballpark needs and synergies

Vehicle management to serve both neighborhood and ballpark needs

Sustainability leadership

TEST FEASIBILITY/CONSISTENCY WITH MARKET, PHASING AND CONSTRUCTION NEEDS

Create development pattern to enhance the public realm, views and connectivity

Create development parcels that respond to market and construction criteria

Establish framework for market sensitive development flexibility

Phasing and infrastructure implementation

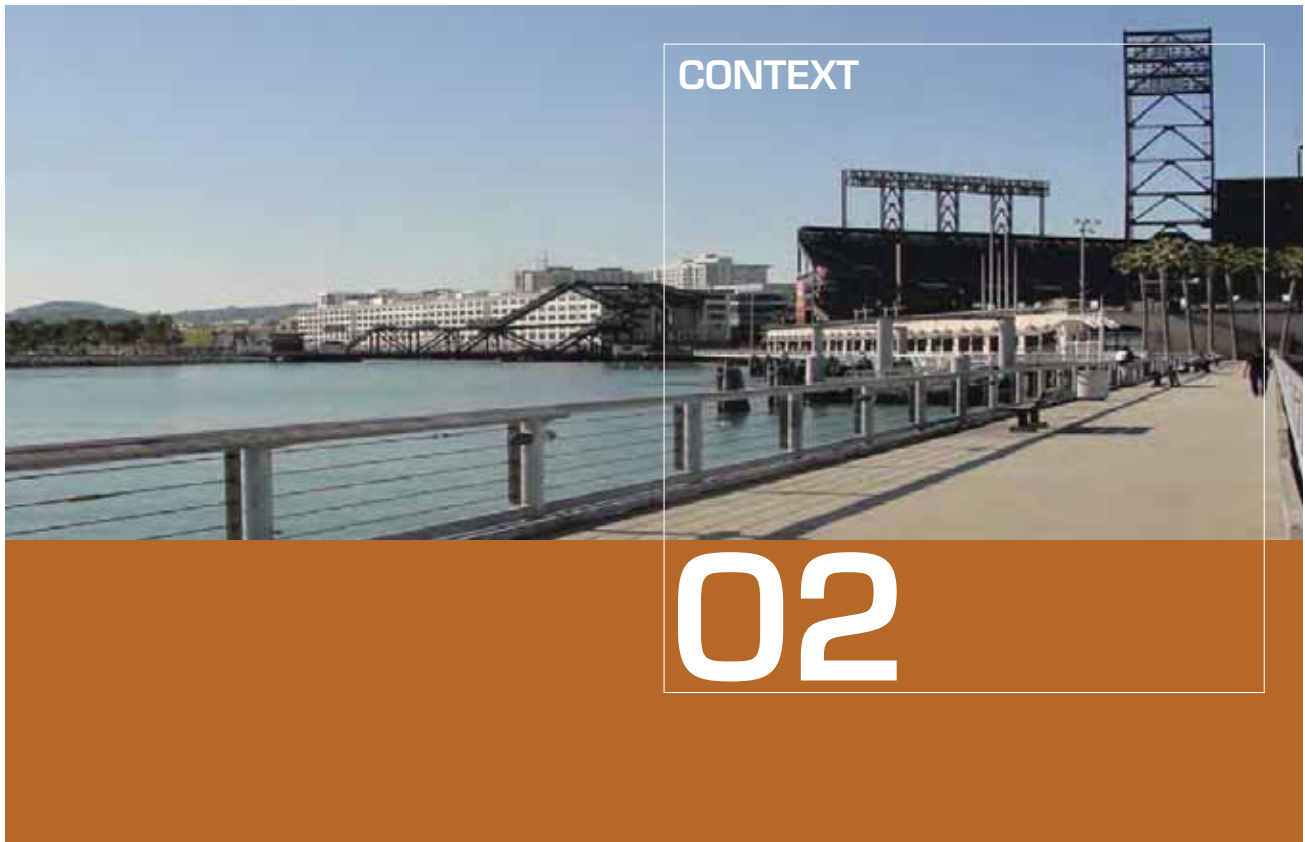
FRAME APPROACH TO ENTITLEMENT DOCUMENTS

Term Sheet

Environmental Impact Report (EIR)

Design for Development Standards & Guidelines (D4D)

Disposition and Development Documentation



02

CONTEXT



There are a myriad of ways in which the context for Seawall Lot 337 has influenced our development strategy and design concept. The context is steeped in the history of the waterfront land forms, the site's evolving role in commerce and trade, the legacy of a distinguished historic Pier structure, and multiple layers of transportation and port uses. Recent decades have once again put this area of the City in a position of innovation and leadership with the successful transformation of Mission Bay into an international center for medical research and service, technology and communications and mixed-use living. With nearly all of the office, research, and housing sites fully committed at Mission Bay, the neighborhood is well on its way to realizing the originally established target of over 30,000 jobs and 10,000 new residents.

At the same time, the success of AT&T Park as a thriving urban sports and entertainment destination has put this area on the map for fans across the region, nation and world. An essential component of this success has been the ability of the city to deliver a positive experience for both ballpark patrons and local residents and workers. This proposal retains that value for the neighborhood, protecting and enhancing the design and value of San Francisco's central waterfront.

Currently a large parking lot, the re-envisioned Seawall Lot 337 will create a truly mixed-use waterfront destination that opens its arms -- its streets, its lively parks and squares, its blue greenway linkages, and its exhibit, retail and restaurant spaces -- to public use and enjoyment unique to this site in the City. Seawall Lot 337 and Pier 48 occupy a critical and highly visible corner of San Francisco's waterfront. As such this Phase 3 Design Concept refinement is fundamentally based on a deep respect for its context as a waterfront property, a part of the Mission Bay community, and a neighbor to the ballpark.

Context 9

UNIQUE CHARACTER

While the site will complement the surrounding neighborhood, it should also have a unique character. In this spirit we have chosen to refer to Seawall Lot 337 and Pier 48 by a single name, Mission Rock, honoring the rock outcropping now buried beneath the foundations of Pier 50. The Mission Rock district is strategically positioned between two powerful economic engines, the ballpark to the north and Mission Bay to the south and west. This strategic central location gives it the potential to be a distinct and diverse destination neighborhood within the Mission Bay area and the city as a whole. Mission Rock's street grid fabric, flexible blocks and program development, and range of heights and building styles will all contribute to its unique character as the link between existing and emerging San Francisco. Public trust findings for the ballpark predicted that the waterfront properties along access routes to the ballpark would be stimulated by the peak activity generated by ballpark events. Likewise, Mission Rock's proximity to SOMA, Mission Bay, the UCSF campus and Benioff hospital provides an everyday market for the retail, office and residential components of the Mission Rock district, allowing for the capitalization of the economic opportunities created by these synergies.



REVITALIZATION OF THE WATERFRONT

We have carefully considered the comments made by Port staff and members of the public throughout the three year process. Much of the feedback we received indicated a desire to avoid a uniform or artificially constrained built environment, be open and welcoming to all San Francisco residents, ensure a vibrant public realm, maintain a strong connection with the waterfront, and continue the open space and public access systems currently seen at the existing Mission Creek and Mission Bay waterfronts.

We appreciate and understand the Port's ambitious vision and diverse goals for this site and are diligently collaborating with the Port as team members to realize our shared goals. We are both neighbors and stakeholders who want this site to be developed thoughtfully, with an insistence on quality and excellence.



RESPONSE TO CONTEXT

Located on a pivotal site within the City, Mission Rock will serve as the gateway to the central and southern waterfronts. It will be highly visible, seen from many of the seating areas within AT&T Park and showcased on nationally broadcast baseball telecasts.

Mission Rock is designed to complement the greater Mission Bay community, and connect with and expand on Mission Bay's wonderful extensive open space network. Mission Rock Park will continue the shoreline improvements along Mission Creek to the west. The waterfront promenade will become an important part of the Blue Greenway. The north-south pedestrian shared public way will draw pedestrians through the site to Mission Rock Square. The intimate, urban, pedestrian-friendly streets will connect to the network of streets and open space in adjoining Mission Bay.

Mission Rock Park will invite people to play, picnic, relax, kayak and enjoy cultural and civic events and festivals, while allowing others to enjoy the spectacular views of the Bay, the City skyline and Bay Bridge. The Mission Rock district will be a place for everyone: welcoming, interesting, and beautiful.

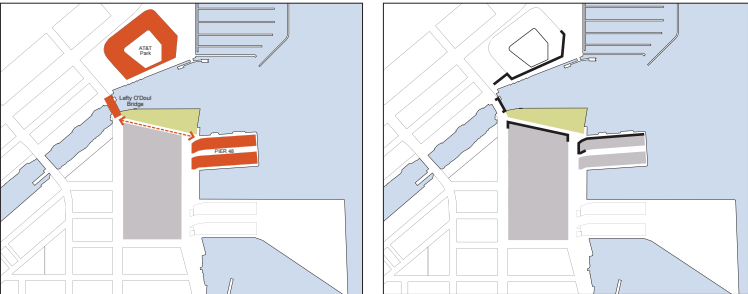
The variety of uses from offices and bio-tech space, to apartments and ground floor retail will build on the mixed-use program in neighboring SOMA and Mission Bay, and will reflect the urban nature of this centrally located San Francisco neighborhood.

PLACE

Mission Rock will create a place unlike any other in San Francisco. The stage is set for a bold urban design strategy that will spotlight McCovey Cove as a great open "public room," framed by the iconic, landmark features of the ballpark, Lefty O'Doul Bridge, and Pier 48. The linking of the bridge and Pier 48 across a great new public park enhances the public character and memorable quality of this urban waterfront destination.

FRAME

The urban design character of this new "public room" in the City will be reinforced by the design of the buildings that line the edges of Mission Rock Park, embrace the waterway and historic structures, and animate the open-spaces. The frame begins with the ballpark itself, opening up to the Bay and framing the Port Walk experience with a gracious arcade. At Mission Rock the southern framework will be created by placement and scale of buildings that assure sunlight, and animate the site through its responsive architecture and its vibrant homegrown retail program. With its lively public areas and rehabilitated apron walkway, Pier 48 will then extend the southern frame out into the Bay.



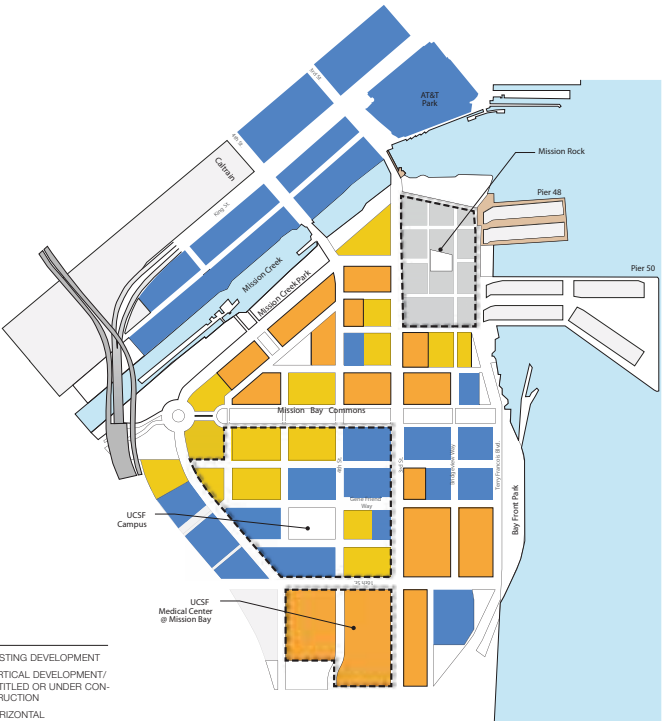
Context 11

CONTEXT:

MISSION BAY EXISTING, UNDER CONSTRUCTION & ENTITLED DEVELOPMENT

All non-residential development parcels of Mission Bay have been purchased and are either complete, under construction, or entitled. Although scattered residential parcels remain to be developed north and west of the UCSF campus, the only large development parcel remaining within the Mission Bay neighborhood is Seawall Lot 337. At this stage in its development it is possible to see the amazing potential for a number of distinct South-of-Channel sub-neighborhoods to evolve such as the UCSF campus, its related Medical Center, the waterfront commercial campus, the residential neighborhood bordered by Mission Bay Commons and Mission Creek Park, and the Mission Rock development on Seawall Lot 337. Through their individual programs and distinctive architectural character, each of these will add variety of scale, activities, and environments to the overall Mission Bay neighborhood.

Computer image of Mission Bay at build-out.



CONTEXT:

MISSION BAY OPEN SPACE & PEDESTRIAN CONNECTIONS

Mission Rock will include a network of interconnected, varied open spaces that link to Mission Bay's open spaces and extend the City's emerging waterfront public realm. The plan continues the Bay Trail across Lefty O'Doul Bridge, east and south along the Mission Rock Park esplanade to Pier 48, connecting to and becoming part of the Blue Greenway experience, linking up with the Mission Bay Commons and the Bayfront Park beyond. In addition, the plan recognizes the need for a strong east-west connection realized in the sequence of spaces extending from the proposed Channel Plaza located on the waterfront between Piers 48 and 50, west through a pedestrianized Channel Street to Mission Rock Square and from there through Channel Street to the Mission Creek Park to the west.



CONTEXT:

MISSION BAY RETAIL

South-of-Channel, Mission Bay retail will be largely concentrated along Fourth Street between Channel Street and Mission Bay Commons, with additional retail on Gene Friend Way and on Third Street between Mission Bay Boulevard South and South Way. The proposed retail at Mission Rock is planned to complement rather than compete with the Fourth Street retail located only two blocks away. With ground level retail in nearly every building, the retail will not only serve the needs of the Mission Rock development, but will also serve the greater population of Mission Bay and the rest of San Francisco. Whereas the retail surrounding Mission Rock Square will open to a quiet and wind-sheltered oasis, the retail fronting onto Mission Rock Park, Channel Street and Third Street will engage vibrantly with the surrounding neighborhood and city.







03



03

LAND USE PROGRAM

The Mission Rock District combines a variety of mixed uses to ensure the shoreline and street scene will be lively and inviting throughout the day and into the evening, creating a vibrant, dynamic, innovative place. In addition, the district celebrates the waterfront and access to the Bay and highlights its history by incorporating Pier 48 with its historic bulkhead and pier sheds. Recognizing that this district will be constructed over a period of time, the land use program seeks to maintain a flexible and balanced approach, whereby individual blocks may be developed in response to market demand. This flexibility exists within the framework of an overall development plan that responds to Public Trust consistent uses as well as the principles and goals envisioned throughout this document.

Land Use 19

PUBLIC TRUST CONSISTENT USES

We envision many Public Trust-consistent uses, including the following elements:

MISSION ROCK PARK

- Grand waterfront park
- Shoreline promenade with benches
- Great lawn for picnics and public gatherings
- Water access for kayakers and other small watercraft
- Public art
- Native habitat
- Youth athletic facilities

PIER 48

- Restored apron to allow public access on all three bay sides
- Berthing opportunities for ferries, water-taxis, maritime operations, and public access
- Public assembly and exhibition space for regional trade shows and festivals
- Interim parking for ballpark events

MISSION ROCK SQUARE

- Wind-protected public open space in the heart of the District, one block from the waterfront.
- A haven for residents, workers and visitors.
- Public café and food kiosk
- Open lawn and shady grove
- The north-south pedestrian shared public way
- Connects Mission Rock Park with the Mission Rock Square
- A pedestrian-only, tree-lined thoroughfare fronted by shops and cafes

WATERFRONT ACCESS NETWORK

- Network to bring people to the Bay -- from City and Region
- Channel Street corridor linking Mission Creek Park, Third Street and the Bay
- All streets leading to the water
- View corridors framed and aligned with public space

PROPOSED CHANNEL PLAZA

- Open plaza at the end of Channel Street between Piers 48 and 50
- A vista point along the Blue Greenway



THE FLEXIBLE MIXED-USE CONCEPT

PROGRAM OF USES

The mixed-use program is a balance of residential, office, retail, exhibition and parking programs distributed over a network of fine-grained city blocks. The combination of uses will evolve as this project moves forward to meet market demands and reflect community and regulatory concerns; however, the total square footage will remain the same at 3,500,000 gross square feet across the entire site. Minimum requirements of residential, commercial, and retail uses will be met in order to ensure mixed-use diversity.

Reflecting the need for program flexibility, the project's program is currently being studied for the following:

- Residential:** Between 650–1000 units of apartments and townhouse-style units
- Office:** Between 1,300,000–1,700,000 gross square feet of office space, traditional or biotech
- Retail:** Approximately 125,000 square feet of retail
- Exhibit / Event Space:** Up to 180,000 square feet of exhibit/event space located in Pier 48
- Open Space:** 7 acres of public open space (Mission Rock Park, Mission Rock Square, Channel Plaza)
- Parking:** 2,690 off-street parking spaces

LIVELY GROUND FLOOR SPACES

To create a lively sidewalk experience, many of the ground floor spaces will contain shops, restaurants and welcoming building lobbies. Upper levels will contain residential, office and possibly some retail in special second floor viewpoints overlooking Mission Rock Park.

HOUSING

Most of the housing, consisting predominantly of one and two bedroom apartments, will be located at the northern end of the site. With the flexibility to be located on Blocks A, G, I, J, and K, the residential buildings will ascend in height to form a crescent, starting with the lower waterfront structure on Block K and climbing to the tallest tower on Block A at Mission Rock's city gateway.

OFFICES

Office space will be located along the western, eastern and southern boundaries of the site, lining at least three sides of Mission Rock Square. It is anticipated that many of the office users would be innovative bio-tech or high-tech firms, harnessing the energy and creativity of the adjacent UCSF campus and South-of-Market neighborhood.

PARKING

Given its development program and the need for ballpark parking resources, Mission Rock will have a responsible number of parking spaces, as detailed in the Transportation Demand Management Plan in the accompanying Technical Book. Several of the blocks will contain parking, designed where feasible to minimize its aesthetic impact on the surrounding neighborhood streets and public realm.

The land use scenarios illustrated at right are three of a number of land use distribution options possible at Mission Rock, allowing for consistency in public realm improvements along with flexibility to respond to market conditions within a set range of uses.

LEGEND

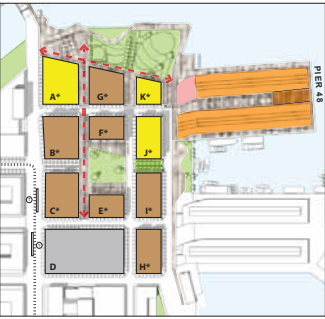
- RESIDENTIAL
- COMMERCIAL / OFFICE
- RETAIL
- EVENT / EXHIBIT / BANQUET / PARKING
- PARKING STRUCTURE
- OPEN SPACE
- PLAZA & SHARED PUBLIC
- MUNI
- MUNI STREET CAR STOPS
- FLEXIBLE BLOCKS



Option A, 1.7 m sf of Office, 650 Residential Units



Option B, 1.3 m sf of Office, 1000 Residential Units



Option C, 1.7 m sf of Office, 650 Residential Units

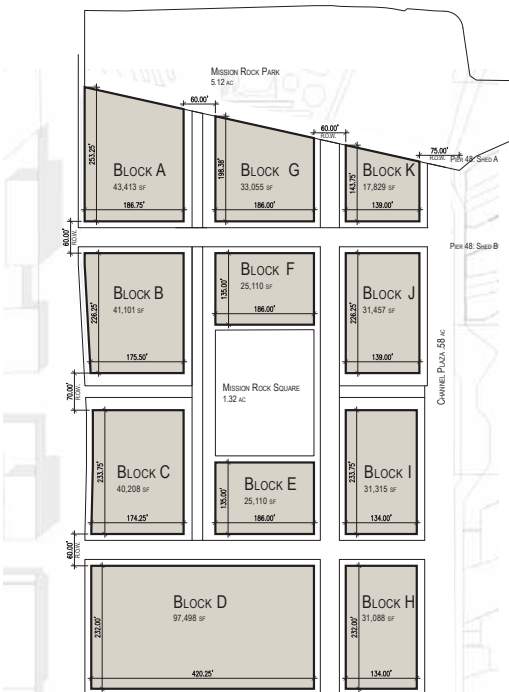
PARCEL PLAN

The Mission Rock development parcel dimensions are generated by both external and land-use factors. The external factors include the need within Mission Rock for certain streets, such as Channel and Vara Streets Rock to align with their neighboring Mission Bay Streets. Land-use factors include the need to dimension certain parcels for their anticipated or potential uses. The parcel program maintains flexibility for many uses, with varying widths of parcels to accommodate potential bio-tech users, a range of floor plate sizes to reflect market needs, and a minimum depth of parcels to allow for efficient parking layouts. Finally, a critical driver in the Parcel Plan was the desire to create more human scaled blocks and buildings than those in the neighboring Mission Bay and SOMA neighborhoods.

DEVELOPMENT PARCEL SUMMARY

| BLOCK | BLOCK AREA (sf) | ACRES (acres) |
|------------------------------|-----------------|---------------|
| BLOCK A | 43,413 | 0.99 |
| BLOCK B | 41,101 | 0.94 |
| BLOCK C | 40,208 | 0.92 |
| BLOCK D | 97,498 | 2.24 |
| BLOCK E | 25,110 | 0.58 |
| BLOCK F | 25,110 | 0.58 |
| BLOCK G | 33,055 | 0.76 |
| BLOCK H | 31,088 | 0.71 |
| BLOCK I | 31,315 | 0.72 |
| BLOCK J | 31,457 | 0.72 |
| BLOCK K | 17,829 | 0.41 |
| SUBTOTAL | 417,184 | 9.57 |
| PIER 48 | 261,700 | 6.01 |
| SUBTOTAL | 678,884 | 15.58 |
| MISSION ROCK PARK | 223,182 | 5.12 |
| MISSION ROCK SQUARE | 57,626 | 1.32 |
| CHANNEL PLAZA | 25,193 | 0.58 |
| SUBTOTAL | 306,001 | 7.02 |
| INTERIOR STREETS (INCL. TRF) | 230,866 | 5.30 |
| TOTALS | 1,215,751 sf | 27.90 |

*Note: At Blocks B & C, widths shown are an average reflecting the Third Street property line.







URBAN DESIGN APPROACH

04



04

URBAN DESIGN

MISSION ROCK WILL BE A PLACE FOR EVERYONE: WELCOMING, INTERESTING AND BEAUTIFUL.

Illustrative Birds' Eye View: Focus on the Public Realm



- 1 MISSION ROCK PARK**
Active pedestrian link to Pier 48
Waterfront park entry
Active retail and restaurants overlooking park
Great lawn Event spaces and moveable stage
Waterfront promenade
Perched wetlands
Jr. Giants Field
Kayak launch
- 2 HISTORIC PIER 48**
Exhibits, conferences and events
Port history walk
Outdoor seating & viewing
- 3 MISSION ROCK SQUARE**
Mixed-use Green Streets
Neighborhood Square
Retail shops
- 4 PROPOSED CHANNEL PLAZA**
New waterfront plaza
Active Marine Uses

Urban Design Approach **27**

DESIGN CONCEPTS & STRATEGIES

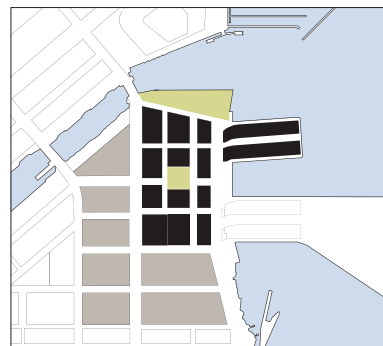
FROM THE FERRY BUILDING TO THE BALLPARK, THE BAY SHORELINE HAS WELCOMED A STRING OF NEW PUBLIC AMENITIES. OUR VISION FOR SEAWALL LOT 337 EXTENDS THAT PUBLIC REALM SOUTH, PAST CHINA BASIN AND ACROSS THE LEFTY O'DOUL BRIDGE TO MISSION ROCK, SAN FRANCISCO'S NEWEST NEIGHBORHOOD

FABRIC

Having established place and frame in the previous land use strategy, the following urban design strategy establishes a pattern of blocks and uses for Mission Rock. The Mission Bay streets will extend into the site and then, as they approach the Bay, break into a pattern of more easily walkable blocks. Echoing the manner in which buildings step down to the Bay in height, the blocks at Mission Rock acquire a finer grain toward the water to add view corridors and pedestrian ways.

In addition to improving the pedestrian experience, Mission Rock's small scale blocks will also serve to maintain view corridors to the Bay from various neighborhoods in the City. Slender, elegant buildings will rise from the narrow street grid to frame waterviews from the many hills of San Francisco.

Referred to as a figure/ground diagram, the map shown here illustrates this fine-grained urban pattern, reminiscent of the pattern of age-old successful cities with walkable blocks and a human oriented urban scale.

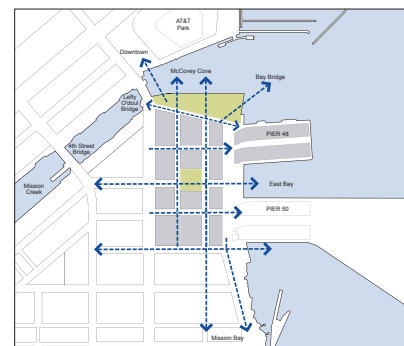


ORIENTATION & LANDMARKS

The corner of Mission Creek and San Francisco Bay. The Gateway to the Central and Southern Waterfront. A major new destination in Mission Bay and on the San Francisco Waterfront. Mission Rock offers all this and more, promising to be a magnificent site for regional orientation and active Bay access. The design foundation of all Mission Rock strategies is to spotlight this orientation with physical and visual access to the Bay and surrounding landmarks, reinforced by a pattern of development that lays multiple, irresistible paths through the new district to the water.

The water's edge is treated as a dynamic promenade specifically responding to and interacting with direct views toward landmarks such as the Bay Bridge, the Oakland container cranes, the ballpark, the downtown skyline, and the Lefty O'Doul Bridge. The promenade is then linked into the Pier 48 apron where we envision water taxis, ferries, excursion boats, and other maritime uses will enliven the northern edge and invite visitors to walk to the far end of the pier for a full bay panorama.

City and regional landmarks will be apparent at Mission Rock with the location, scale and orientation of buildings framing and enabling these views. Highlighted views include those of the bay, the downtown skyline, the Bay Bridge, Oakland, and the working waterfront. The broad areas of park, streets and pedestrian ways will enable views throughout Mission Rock and from the surrounding Mission Bay neighborhood. In addition to pedestrian-level views, the vistas from upper levels of buildings both on- and off-site are an important part of the urban design strategy.



NETWORK

Mission Rock's urban design strategies include a network of interconnected, varied open spaces that link Mission Bay's open space fabric with the City's larger vision of its emerging waterfront public realm. The plan continues the Bay Trail across Lefty O'Doul Bridge, east and south along the Mission Rock Park promenade to Pier 48, connecting to and becoming part of the Blue Greenway, and to Mission Bay Commons and the new Bayfront Park beyond. In addition to this north-south connection the plan recognizes the need for a strong east-west connection realized in the sequence of spaces extending from the proposed Channel Plaza located on the waterfront between Piers 48 and 50, west through a pedestrianized Channel Street to Mission Rock Square and from there through Channel Street to the Mission Creek Park to the west. Within the Mission Rock district is a north-south pedestrian oriented shared public way, linking the parking structure and Mission Rock Square along a retail-lined street to Mission Rock Park, McCovey Cove and the ballpark beyond.

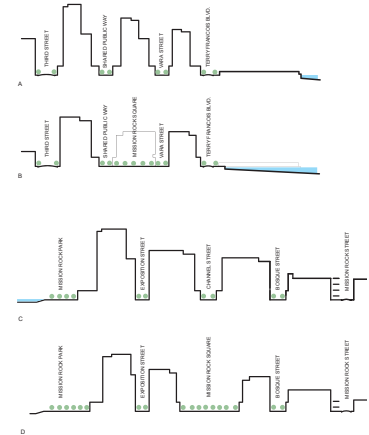
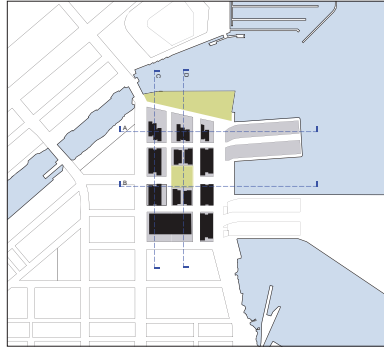
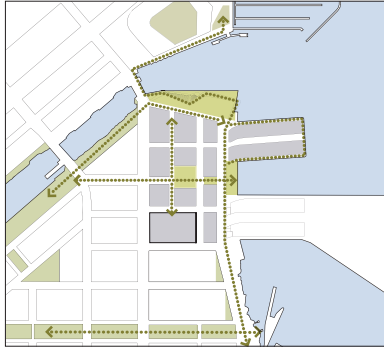
FORM

The varied urban form of the Mission Rock neighborhood – composed of towers and mid-rise buildings, a mix of retail, housing, offices, civic uses, vibrant ground-floor spaces, and visually identifiable green features – will define the relationship among the public, semi-public, and private realms. The north-south orientation of the blocks, inspired by the rail yards that once occupied the land, is clearly established by the block pattern and encouraged by design guidance for future buildings. This pattern and the careful placement of buildings on each block will ensure that sunlight bathes Mission Rock's public spaces year round, and that views, light and air are preserved both for buildings and within the public realm.

PROFILES

An essential companion to the discussion of form is the consideration of building profiles that array across the eleven blocks of Mission Rock, their relationship one to the other, and their relationship to the Bay edge and adjacent neighborhoods. Broadly, the Mission Rock buildings, whatever their final mix of uses, will demonstrate a respect for their waterfront setting through a stepped profile in relation to each other and in relation to the waterfront. In every case, lower floors of buildings will serve to enliven and beautifully frame the public realm, while the upper floors will retain a form and profile that works with Mission Rock and the renowned San Francisco cityscape as a whole.

As the gateway to Mission Rock and Mission Bay, the northern edge of Mission Rock Park will be defined by a series of buildings stepping down in height from the west towards the water's edge at the east. From there, the general development profile will reflect this stepping to the water whereby building heights will step down from west to east and from north to south.

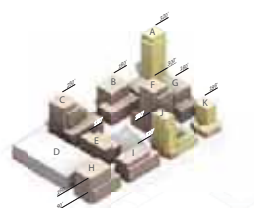


Urban Design Approach 29

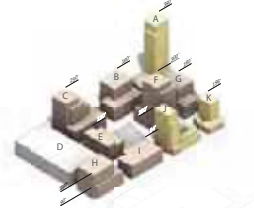
MASSING AND HEIGHT CONCEPTS

Three potential massing concepts are shown at right which explore the potential array of buildings across Mission Rock's eleven city blocks, their relationship to one another, the adjacent Mission Bay Development, the downtown skyline, and the water's edge.

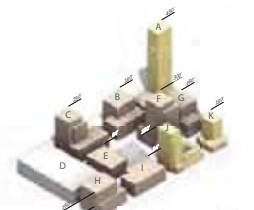
Consistent with the flexible zoning approach outlined in the Land Use section, the proposed height ranges reflect various building uses. In order to create a vibrant and economically sustainable neighborhood across the 1,215,571 square foot site, a minimum total density of 3,500,000 built square feet must be achieved, resulting in a perceived FAR similar to Mission Bay and the surrounding neighborhoods. While there are many distinct ways to achieve this massing on site, the diagrams at right exhibit three possibilities that illustrate how square footage can shift from parcel to parcel while maintaining overall programmatic density. The goals of preserving view corridors, maximizing sunlight, minimizing wind impacts and respecting the existing urban form will constrain and inform the ultimate height and massing, which will be responsive to community input and market direction.



Option A: One potential land use program reflecting 3.5 million gross square feet.



Option B: A variation that moves massing around within the site footprint.



Option C: Third option for land use program site footprint.



View of Option A massing in urban context, as seen from Potrero Hill



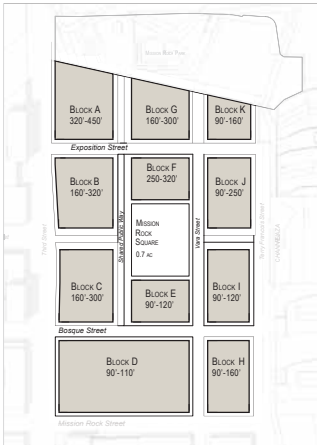
View of Option B massing in urban context, as seen from Potrero Hill



View of Option C massing in urban context, as seen from Potrero Hill

SAN FRANCISCO WATERFRONT SKYLINE

Mission Rock's development has been considered within the context of the overall iconic San Francisco waterfront skyline extending from Telegraph Hill at the north to Mission Bay and Pier 70 to the south. Its location creates the opportunity for unique punctuation in the skyline that will identify Mission Rock within the context of the overall waterfront skyline. The overall effect will be to step down to the base heights of Mission Bay to the south, and transition toward much greater heights to the north in Rincon Hill and downtown. The adjacency of the low rise Mission Bay buildings to the south and west, and the water's edge to the east will inform the ultimate height of the development, which, when viewed from the Bay will not break the plane of the urban skyline.



FROM PRINCIPALS TO DESIGN CONCEPTS

As discussed, the analysis and findings that have informed the preparation of this Revised Proposal also suggest an early design framework for the placement, orientation, scale and relationship of buildings and spaces within the Mission Rock site. Underlying design principles set the scene; characteristics of site and setting provide a clear guide to the capture of sunlight, view and shelter from the wind; public realm design is given priority; and aspirations for building form are thereby established.

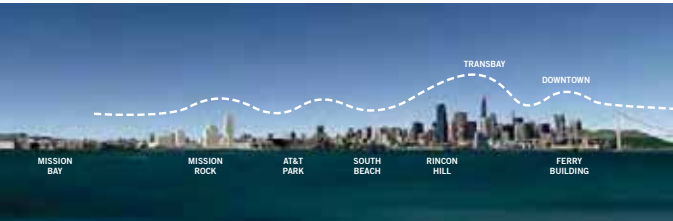
CONTRIBUTION TO URBAN FORM:

Beyond priority design, attention to climate conditions, orientation and enhancement of the public realm, there are numerous aspirations for buildings at Mission Rock. As such additional design guidance will spring from the urban form of Mission Rock in its neighborhood, the context of broader City views and as a contributory focal point in sculpting the City's holistic urban form.

AMONG THE INTENTIONS AND ASPIRATIONS FOR BUILDINGS AT MISSION ROCK ARE:

- Priority attention to views: Address important views to and through the Mission Rock site from Potrero Hill, key City vantage points, the Bay Bridge, and open views from Mission Rock to downtown and the Bay.
- Placement and shaping of higher buildings to achieve appropriate separation that optimize distant views and foster elegance with the Mission Rock skyline.
- Contribution to City efforts to sculpt an overall urban form that signals key districts, transit destinations and important corridors.
- Attention to retaining positive sunlight conditions and reducing wind impacts for Mission Rock Square and Mission Rock Park.

SKYLINE CONCEPT DIAGRAM



Skyline concept diagrams typically illustrate the distinct profiles created by Telegraph Hill, the "Downtown Mound" and Rincon Hill. Our study looks at the continuation of this profile south to include the mid-rise buildings of South Beach, the distinctive profile of AT&T Park and the Mission Bay neighborhood. Together, the "Downtown Mound," Transbay Terminal, and Rincon Hill create a distinctly raised profile, which gradually steps down across South Beach to AT&T Park.

DESIGN AND DEVELOPMENT CONCEPT REFINEMENT

The Design and Development Concept for Mission Rock has advanced in many ways during the Exclusive Negotiating period. Refinements include further definition of a public realm plan that will establish the memorable public experience of Mission Rock and a particular focus on land use plan refinement in order to deliver a successful, market-ready new neighborhood of vibrant and feasible mixed-use buildings. The result is a firm commitment to a network of public realm, recreational, trail, water use, stormwater management and diverse programmatic elements. These are accompanied by a program of uses for the buildings that targets the most viable mix of residential, office, biotech, retail/entertainment, exhibition and parking uses, demanding an entrepreneurial flexibility that invites the best mix of uses to any one of the Mission Rock development blocks.

The Revised Proposal delivers an advanced plan for streets, parks, trails, bikeways, view corridors and shared public ways accompanied by a range of program potentials across the site. To understand the implications of this approach on the mixed use private development parcels of Mission Rock, the design concept examples illustrated here indicate a selected program scenario.

We begin with one of the most likely scenarios envisaging the northern part of Mission Rock facing onto the Park being residential, situated in three towers that vary in height and step down from west to east, with the tallest tower on Block A at Third Street serving as an iconic landmark for the Mission Rock district. The shortest residential tower would be on Block K facing Mission Rock Park and Pier 48 near the water's edge. These finely-scaled towers will contain housing situated above ground-floor retail uses opening onto Mission Rock Park and the

adjoining streets. These buildings would have a north-south orientation, defining the Third Street corridor and allowing for ample sunshine to penetrate the blocks onto terraces, gardens, and the north-south public open spaces below.

With residential uses on the northern blocks, we envision the remainder of the site being office and/or bio-tech space, with ground-floor retail on the pedestrian shared public way and facing onto Mission Rock Square. As illustrated, whatever the land use program decision, Mission Rock Square will be the centerpiece of this part of the neighborhood, providing a common sheltered open space for each of the southern blocks to face onto and providing a neighborhood gathering space similar in both area and function to South Park, located a few blocks north on Third Street.

As in the rest of the Mission Rock district the north-south axis dominates, reinforcing the site's historical form and providing for sunny north-south streets, and light-filled public spaces. With street widths and block sizes more similar to the Financial District than to the South-of-Market area or to the adjoining Mission Bay, the Mission Rock district will have a finer-grained urban character that will set it apart as a distinct neighborhood within the overall Mission Bay district, thus providing variety to the public realm.



MISSION ROCK IS A VARIED NEIGHBORHOOD COMPOSED OF
TOWERS AND MID-RISE BUILDINGS WITH A MIX OF RETAIL, HOUSING
AND OFFICE USES WITH VIBRANT GROUND-FLOOR ACTIVITIES.



RELATIONSHIP OF BUILDINGS & PEDESTRIAN CHARACTER/ PUBLIC REALM

The pedestrian realm and the ground floors of all Mission Rock buildings will be enlivened by storefronts, restaurants, cafés, lobbies and building entrance plazas. Of particular focus will be the retail storefronts that have the most powerful and consistent impact on the lively character of the pedestrian experience. It is intended that a variety of retail spaces of varying sizes will line many of the blocks within Mission Rock. Retail along the pedestrian shared public way, on the edge of Mission Rock Park, surrounding Mission Rock Square and along Channel Street, both at Third Street and at Terry Francois Boulevard, will be as diverse in their design and program as possible. Creating a sense of transparency at the pedestrian level ensures that the shops, cafes, restaurants, building lobbies and other amenities will activate the district's public realm, putting "eyes-on-the-street" and making Mission Rock a safe and vibrant place in which to live, work and shop. The inclusion of housing and public spaces will ensure that Mission Rock is an active neighborhood, with the urban choreography of coming and going that characterizes vibrant cosmopolitan streets.



Urban Design Approach 33

LIVELY GROUND FLOOR SPACES

To create a lively sidewalk experience, many of the ground floor spaces will contain shops, restaurants and welcoming building lobbies. Upper levels will contain residential, office and possibly some retail in special locations such as overlooking Mission Rock Park.

HOUSING

Most of the housing will be located on Mission Rock Park at the north and eastern edges of the site. Located on Blocks A, G & K for the 650-unit development range, and expanding onto Blocks I & J for the 1000-unit development range, the residential buildings will offer restaurants, cafes and services for the over 1,000 anticipated residents of the Mission Rock neighborhood.

OFFICES

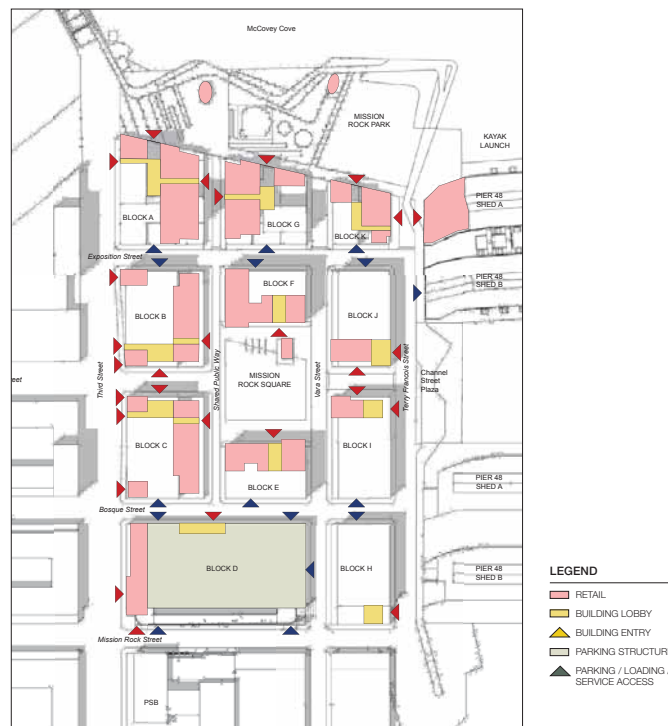
Office space will be located along the western, eastern and southern boundaries of the site, lining at least three sides of Mission Rock Square. It is anticipated that many of the office users would be innovative bio-tech or high-tech firms, capitalizing on the energy and creativity of the adjacent UCSF campus and SOMA neighborhood.

RETAIL

In order to activate streets and create lively pedestrian environments, retail uses will be permitted at all ground floor locations throughout the project. Actual locations for retail use will be determined in the future by market conditions and specific building uses. The diagram on this page is illustrative of one potential option for retail locations.

PARKING

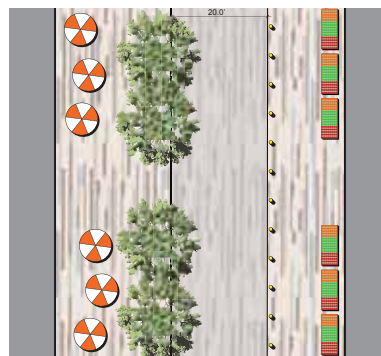
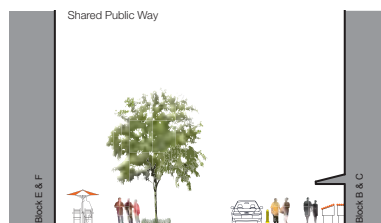
Given its development program and the need for ballpark parking resources, Mission Rock will have a responsible number of parking spaces. Several of the blocks will contain in-building parking, designed where feasible to minimize its aesthetic impact on the surrounding neighborhood streets and public realm.



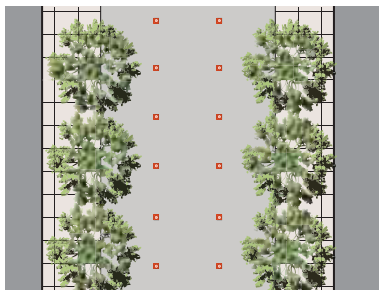
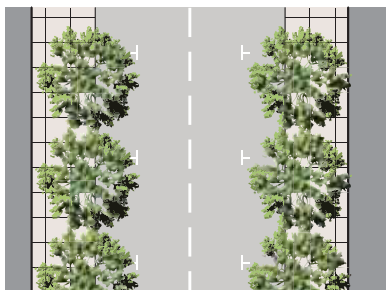
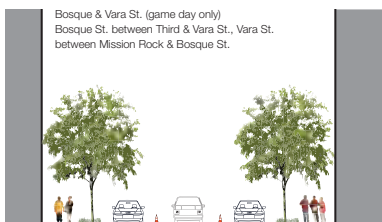


SHARED PUBLIC WAY

The shared public way is a newly adopted street typology in San Francisco which gives priority to the pedestrian over the automobile. Following traditional street planning patterns in Europe and other pedestrian friendly urban centers, it is a single shared paved surface with no curbs or gutters. Automobiles access it from the adjoining streets by a curb-cut similar to a typical driveway. Once in the shared public way the driver, through the use of street furniture and planting, is aware that the pedestrian has right-of-way within this environment. The proposed shared-public-way would allow for retail or restaurants to spill out onto the street with vehicular access being primarily for deliveries or drop-off / pick-up. On days when the ballpark has games or other major events it is anticipated that this street would be restricted to emergency vehicles only. The nearby Vara Street between China Basin Street and Mission Bay Boulevard North (between the Radiance/Block 10A and Madrone/Block 10) is an example within Mission Bay of a shared-public-way.



NEIGHBORHOOD STREETS



The neighborhood street is designed as a slow-traffic street with 10-foot travel lanes in each direction, parallel parking on each side of the street and minimum 12-foot wide sidewalks. At intersections the sidewalks will have bulb-outs, reducing street crossing distances, calming traffic, and creating the opportunity for storm water treatment planters. All streets within the Mission Rock development will comply with the City of San Francisco's Better Streets Plan standards and guidelines.

On days when the ballpark has games or other major events it is anticipated that the on-street parking on Bosque Street and the southern portions of Vara Street would be restricted to allow for additional vehicle travel lanes similar to the traffic management plan currently in use on streets adjoining parking Lot A.

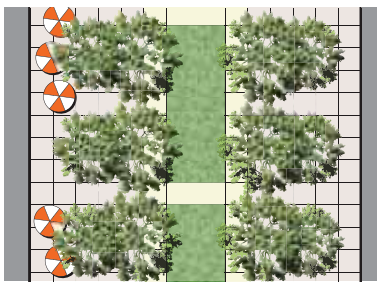
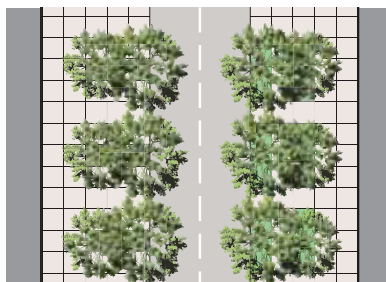
CHANNEL STREET

Channel Street has two distinct segments within Mission Rock; the western portion linking Third Street to the shared-public-way and the eastern portion linking Vara Street to Terry Francois Boulevard.

The western portion serving the shared-public-way is anticipated as a low-traffic volume street with 11-foot travel lanes in each direction, no on-street parking and 24-foot wide sidewalks. The intent is to have this portion of Channel Street act as a leafy green pedestrian link between Third Street and Mission Rock Square

similar in effect to the connections that currently exist between Second and Third Streets and South Park.

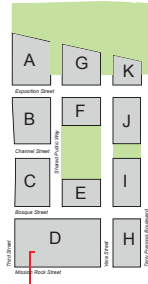
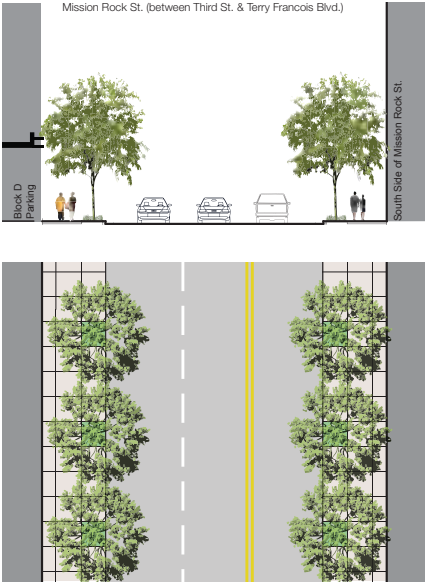
The eastern portion linking Vara Street to Terry Francois Boulevard is a pedestrian way connecting Mission Rock Square to the proposed Channel Plaza, with space for adjoining retail and restaurants to spill out and animate this portion of the open space network.



MISSION ROCK STREET

Mission Rock Street forms the southern boundary of the Mission Rock property and is designed to handle traffic serving the adjoining Mission Bay neighborhood, and address the particular needs related to the adjacent Public Safety Building. With two travel lanes heading west and one travel lane heading east, Mission Rock Street has 12-foot wide sidewalks on both sides.

The Mission Rock garage will be located on Mission Rock Street, and will have coordinated ingress/egress with the Public Safety Building. Speed ramps located on the southern side of the garage will be designed to be as minimally invasive as possible, following recent innovative garage design concepts as shown below. On days when the ballpark has games or other major events occur in the area, it is anticipated that traffic management plans will be implemented.

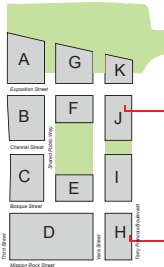
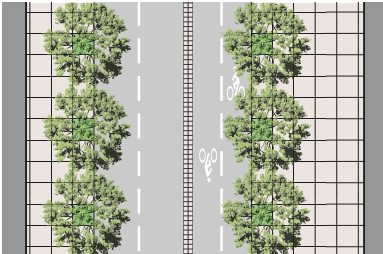
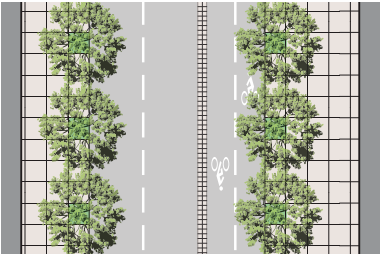


TERRY FRANCOIS BOULEVARD

Terry Francois Boulevard has two separate design segments within the Mission Rock development; the southern portion linking Mission Rock Street north to Bosque Street serving the entrance to Pier 50 and the northern portion from Bosque Street to Exposition Street at Pier 48.

The southern portion is designed to accommodate truck movements into and out of the adjoining Pier 50 with 12-foot travel lanes in each direction as well as a bi-directional bike path separated from the vehicle travel lanes. No on-street parking is permitted along this portion of Terry Francois Boulevard. 15-foot wide sidewalks are provided along the western side of the street with a minimum sidewalk width of 21-feet provided in front of Pier 50.

The northern portion reflects the reduced traffic demand between Bosque Street and Pier 48 and as such has 10-foot travel lanes in each direction as well as a bi-directional bike path separated from the vehicle travel lanes with bollards. On-street parking could be permitted along the eastern side between Piers 48 and 50 (adjacent to Channel Plaza). 15-foot wide sidewalks are provided along the western side of the street with a minimum sidewalk width of 25-feet in front of Pier 48. The area in front of Pier 48 Shed A is a shared-public-way with access limited to service and emergency vehicles.

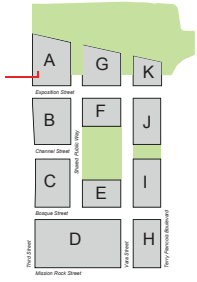
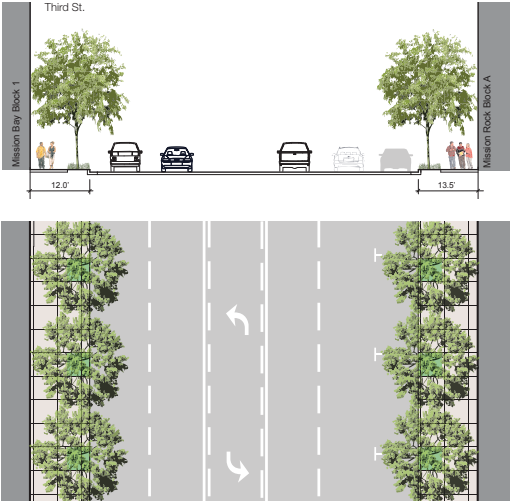


THIRD STREET

For the segment of Third Street between Channel Street and the Lefty O'Doul Bridge, where replacement sidewalks, curbs and gutters will be required on both sides, it is proposed that the street be restriped to allow for two 11-foot travel lanes in each direction, as well as an 11-foot left-turn lane in the center, with parallel parking on the east side of the street only. A 13.5-foot wide sidewalk would be provided on the eastern side of the street with a 12-foot minimum wide sidewalk on the west side. It is felt that the addition of parallel parking will act as

a buffer for pedestrians, enhancing the sidewalk experience for people walking along the Third Street edge of Mission Rock.

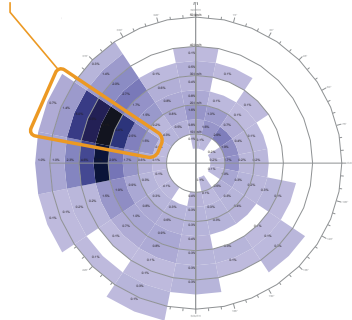
South of Channel Street, due to the presence of the MUNI light-rail tracks, no opportunity exists for the restriping of Third Street or providing a parallel parking buffer for sidewalk users. The replacement sidewalk will however be 12-foot wide minimum.



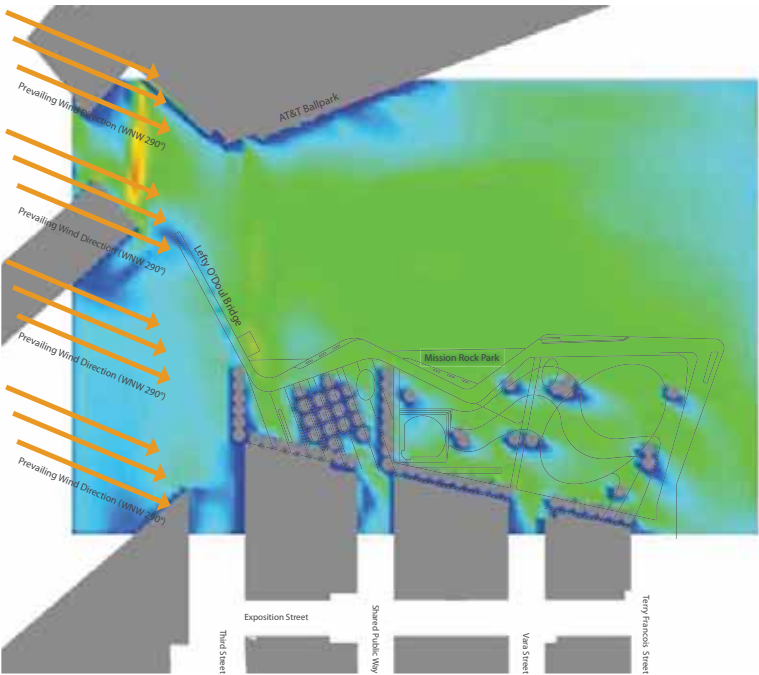
MICRO-CLIMATE STUDIES:

MISSION ROCK PARK WIND EXPOSURE

Annual Prevailing Winds
During the midday period, the prevailing wind direction ranges from WNW 250° - WNW 310° 30% of the time
Most frequent wind speed = 18.6 mph (W cl. +30°)

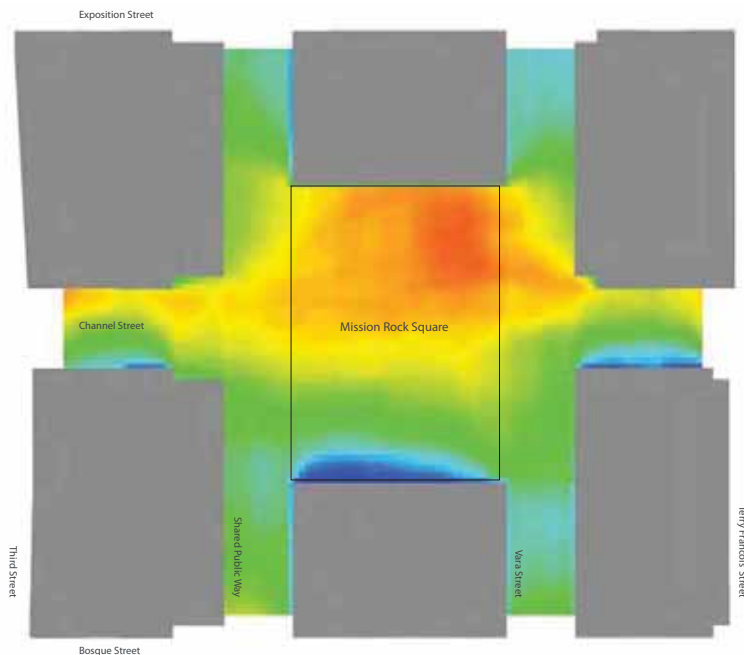


Comfort Scale for Wind Exposure



Annual prevailing winds in Mission Rock Park at 10'-elevation

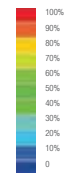
MISSION ROCK PARK
SOLAR EXPOSURE STUDY



Solar Exposure: Percentage of exposure time for an annual cumulative range between the hours of 8am & 6pm.

MICRO-CLIMATE STUDIES:

MISSION ROCK SQUARE SOLAR EXPOSURE STUDY





OPEN SPACE

05



05

OPEN SPACE

MISSION ROCK EMBRACES THE OPPORTUNITY TO PROVIDE SAN FRANCISCO AND THE REGION WITH A NEW, SIGNIFICANT WATERFRONT PARK SYSTEM.

Open Space 49

WATERFRONT CONTEXT

The Mission Rock open space system will be an integral component of a series of larger open space networks operating at the scale of the neighborhood, city, and bay area. At the largest scale, Mission Rock will contribute to the Bay Trail System, a waterfront network of trails, boardwalks and access ways with a shared goal of reconnecting Bayfront communities with the Bay. Many of the public open spaces located along the Bay Trail extend inland from the Bay, bringing waterfront access to cities and neighborhoods. A local example of this valuable pattern is Mission Creek Park, which begins at McCovey Cove and extends west, past Interstate 280, bringing waterfront access and open space deep into the surrounding neighborhoods.



MISSION ROCK OPEN SPACE SYSTEM WILL BE AN INTEGRAL COMPONENT OF A SERIES OF LARGER OPEN SPACE NETWORKS OPERATING AT THE SCALE OF THE NEIGHBORHOOD, CITY, AND BAY AREA.



Bay Trail and Waterfront Park System

BLUE GREENWAY

Along the Central Waterfront of San Francisco, the Bay Trail is locally referred to as the Blue Greenway, a multi-modal waterfront connector currently under design by the Port of San Francisco. The Blue Greenway is envisioned to provide a cohesive identity through the use of a tool-kit of options for pedestrian and bicycle circulation from Lefty O'Doul Bridge south to Candlestick Park. Mission Rock is located at the northern start of the Blue Greenway, and as such will play an instrumental role in the establishment of the identity and character of this important connector. The Mission Rock open space system, in particular Channel Street and the waterfront Mission Rock Park embody the Port's vision of reconnecting people to the water through water-oriented design and programming.



EMBODY THE PORT'S VISION OF RECONNECTING PEOPLE TO THE WATER THROUGH WATER-ORIENTED DESIGN AND PROGRAMMING.



MISSION BAY CONTEXT

Mission Bay is one of the largest urban developments initiated by San Francisco in recent history. Upon completion, Mission Bay will become home to a wide range of residential, academic and commercial properties. The Mission Bay Park System has been planned to respond to this variety of land use types through open spaces of varying types, scales, and uses. At the neighborhood scale, the Mission Rock open space system will contribute to the success of the surrounding Mission Bay area through the extension of existing parks, strategic circulation connections, and park programming.

Mission Rock Park, located to the north of the development, will extend the Mission Creek Park System eastward to McCovey Cove and the Bay beyond. Once complete, park visitors will be able to circulate along both sides of Mission Creek from McCovey Cove to the creek's end, west of Interstate-280. To the south, Mission Rock Square and Channel Street will create a new east-west oriented open space network that will connect the Mission Creek Park System to Piers 48 and 50, the Blue Greenway, and the Bayfront. This collection of parks will extend Mission Bay's pattern of open space programming through public environments of varying scales, types and orientations to maximize long term use and sustainability.



MISSION CREEK PARK SYSTEM

FERRY TERMINAL
BOAT LAUNCH
RECREATION GREAT LAWN
POOLS
FUTURE PARK
RECREATION LAUNDS
GARDENS
PROBABLE BOAT LAUNCH
RECREATION
SPORTS COURTS
HOURS BOAT
SOD PARK

RESTORED BRIDGES
PARK ROAD

Bottom Right: Mission Rock Park System: The Mission Rock Park System and integration with context and the Mission Bay Parks Plan.



An aerial photograph of Mission Rock Park in San Francisco. The park features a large, vibrant green lawn with scattered trees and people walking. A curved, paved promenade runs along the edge of the park, leading to a circular paved area with a green center. In the background, the San Francisco skyline is visible across the water, with the Golden Gate Bridge spanning the horizon. The sky is blue with some clouds.



DESIGNED
TO CONNECT
WITH THE
SURROUNDING
NEIGHBORHOOD,
PROMOTE
PROGRAMMATIC
VARIETY,
AND ENHANCE
THE VALUE AND
NATURAL BEAUTY
OF THIS RARE
BAYFRONT SITE.



Mission Rock Overall Site Plan

Open Space 55

MISSION ROCK PARK

OVERVIEW

Mission Rock Park – bound by the Bay, Lefty O'Doul Bridge, Pier 48 and the new retail esplanade – is destined to become a regional landmark. Located across the China Basin Channel from AT&T Park, Mission Rock Park will make a significant contribution to the waterfront by connecting the northern waterfront open space network with the emerging central waterfronts of Mission Bay, Pier 70, Hunter's Point and Candlestick Point to the south. This dual responsibility of a destination park and a contributor to the larger open space network will make this space a vital component of San Francisco's eastern edge.

Locally, Mission Rock Park will afford the Mission Bay neighborhood numerous outdoor programming opportunities, in concert with the park programming already planned for Mission Bay. As this area of the city emerges and the number

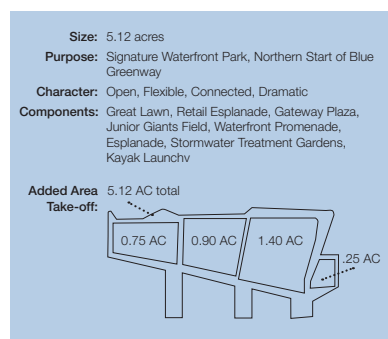
of people who live, recreate, work and study here grows, Mission Rock Park will have tremendous value as a large waterfront park, capable of accommodating many types and scales of gatherings and uses. The park will offer a range of environments that will appeal to office workers, local residents, and visitors from the region and beyond.

The centerpiece of Mission Rock Park will be the Great Lawn, an open green that gently slopes toward the water that will offer residents, workers, neighbors and visitors opportunities to enjoy a variety of activities in a dramatic waterfront setting. The Great Lawn will be an ideal location for a family outing, a picnic in the park, kite flying, and light recreational uses such as volleyball, frisbee or Tai Chi classes. During festivals, holidays and celebrations, the Great Lawn will provide setting for major gatherings at the scale of the city.



Mission Rock Park and Pier 48 Plaza

56 MISSION ROCK



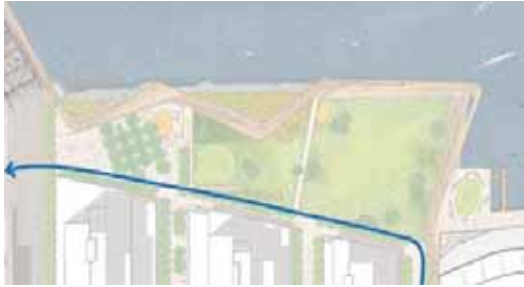
PROGRAMMING



Waterfront Views



Programming Opportunities



Bicycle Route



Stormwater Treatment & Coastal Gardens

Open Space 57

MISSION ROCK PARK: PROMENADE



Pier 48 Plaza



Mission Rock Park, Promenade

THE UNDULATION OF THE PROMENADE CREATES A VARIETY OF EXPERIENCES WITH THE WATER. ALONG ITS COURSE ONE MAY BE ADJACENT WATERFRONT PLANTINGS, DIRECTLY ADJACENT THE SHORELINE OR OUT OVER THE WATER.

Complementing the Great Lawn will be other features such as Willie McCovey Plaza, with its statue of the Giants' great first baseman, a waterfront café with outdoor seating, the Junior Giants Field for children's dreams of the big leagues; The esplanade, a linear plaza connecting Lefty O'Doul Bridge to Pier 48, and coastal native gardens for enjoyment and education about native flora. This versatility and diversity of use will ensure that the park is in constant use, day and evening, throughout the year. This emphasis on active and diverse programming will promote a safe and enjoyable environment for generations to come.

At the Bay's edge, a dynamic and actively programmed promenade will offer memorable views of the Bay Bridge West Span and East Span, Lefty O'Doul Bridge, AT&T Park, the Bay and East Bay hills beyond. The undulation of the promenade creates a variety of ways to experience the water. Along its course, one may be adjacent to waterfront plantings, directly at the shoreline or out over the water. Each of these conditions creates a unique set of water-oriented uses, including bayfront habitat gardens, overlooks, boardwalks, fishing areas, waterfront picnic grounds, and much more. At its northeastern tip, the promenade swings out over the Bay with dramatic views in all directions. As the promenade extends south, it returns to land and meets with the Pier 48 apron at the historic building's plaza.

The promenade will connect Mission Rock Park to the Pier 48 apron where a personal watercraft floating dock will be located, in the shelter created between the pier and park. The Pier 48 apron will be renovated to provide pedestrian access and boat mooring capabilities for possibly water taxis or excursion vessels. This water transportation activity will bring new life to Mission Rock and Mission Bay and provide a water approach to the site, anchoring this historic pier as a key element in the transformation of the central waterfront.

To the south of Mission Rock Park, north-south oriented streets and pedestrian connections will culminate at the esplanade, bringing pedestrians and service vehicles to the park and Pier 48. Each corridor will be designed to maximize daylight and mitigate winds to create a functional street scene that fosters café, restaurant and retail spill out. Pier 48 will enjoy a new plaza that will allow park and recreational drop offs to facilitate park and water-oriented pier access and use.



Mission Rock Park, Event

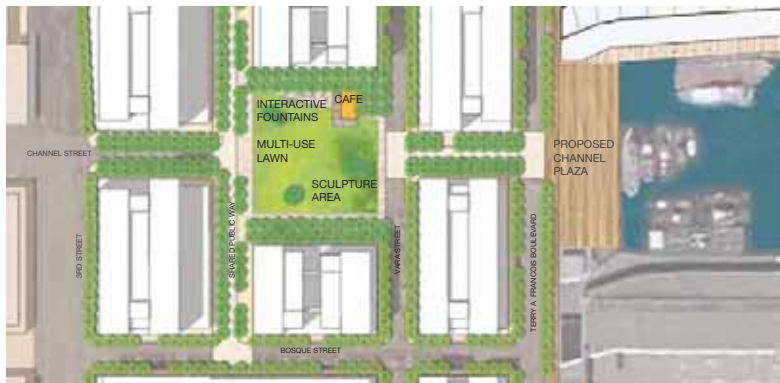
MISSION ROCK SQUARE

OVERVIEW

At the heart of the district will be Mission Rock Square. This neighborhood park will be an urban green, framed by mixed-use buildings and streetscapes. The surrounding land use mix, and in particular the ground-floor retail around the park, will ensure that the square is an active environment seven days a week – morning, noon and night. A plaza will occupy the sunny northern edge of the square and include gardens, a child friendly interactive water feature, and a café pavilion. The café pavilion will offer a destination for light dining, Saturday morning coffee, an evening ice cream, or simply a warm spot for people-watching and taking in the surrounding neighborhood activities. The large lawn framed by trees will be a green outdoor living room for the neighborhood and will provide a flexible setting for a diverse set of experiences that, while only one block from the Bay, will be protected from Mission Bay's dominant North-South winds. The more intimate tree lined southern end of the Square will provide a quiet corner for visitors, workers, and residents of the Mission Rock neighborhood.

To the east and west of Mission Rock Square will be pedestrian oriented connections along Channel Street that will preserve views to the water and promote access between the neighborhood and Bay. Between Vara Street and Terry Francois Boulevard, Channel Street will be closed to traffic to further promote safe and inviting pedestrian connections to the waterfront. Continuing east is Channel Plaza, the terminus of the Channel Street connection to Mission Bay's P2 and China Basin Park. Situated between Piers 48 and 50, the one-half acre plaza will be set upon a functioning wharf, and will celebrate San Francisco's working industrial waterfront with views of active maritime vessels, marine uses at the Pier 50, the Bay, and shipping cranes in the distance. This plaza will be a truly unique destination for local residents, lunchtime for office workers, and a waypoint for explorers of the Blue Greenway trail system.

Size: Mission Rock Square 1.32 acres (Channel Plaza 0.58 acres)
Purpose: Urban Neighborhood Park
Character: Urban Green, Relaxing, Comfortable, Sheltered
Components: Multi-use lawn, Plaza with Interactive 'Spray Ground', Café Pavilion, Bosque with Retail Kiosks, Arts Program Site



Site Plan, Mission Rock Square, Channel Plaza and Channel Corridor

THE LARGE LAWN FRAMED BY TREES WILL BE A GREEN OUTDOOR LIVING ROOM FOR THE NEIGHBORHOOD AND WILL PROVIDE A FLEXIBLE SETTING FOR A DIVERSE SET OF EXPERIENCES.



Mission Rock Square Zones



Mission Rock Square Plaza and Lawn



Mission Rock Square Programming Opportunities





SUSTAINABILITY

06



SUSTAINABILITY

The vision for a new neighborhood at Mission Rock has been formed on core principles of livability, affordability and sustainability. This gateway development links and integrates wider Mission Bay redevelopment into the city fabric, and offers opportunities for living, working and leisure in a magnificent waterfront location. Vibrant public open spaces, parks and pedestrian priority streets will be created; offering new assets to the people of San Francisco whilst enabling the restoration and enhancement of essential ecological processes and natural habitat on the site.

This section of the book handles the horizontal masterplan elements, including infrastructure and planning, that will enable the delivery of sustainable vertical development, through individual parcel development.

Sustainable water management is a priority for Mission Rock: responding to a growing awareness of water related issues in San Francisco, combined with the site's proximity to the Bay. The development will treat water as a valuable and limited resource, using several primary strategies to manage water on-site: low-flow fixtures to conserve potable water, potential graywater reuse to maximize water resources, and natural filtration of stormwater to release clean water into the Bay. Stormwater run-off will be managed through a combination of natural landscaping measures in combination with building-based strategies.

The mixed use nature of Mission Rock's land use program, its rich transit options, and proximity to San Francisco's resources and services ensure that single-occupancy vehicle trips will be reduced. Market-based pricing strategies for parking will be supported by innovative programs to reduce automobile dependence, and promote the use of public transit. The transportation strategy at Mission Rock is based on reducing vehicle miles traveled by fostering multiple modes of sustainable transportation, emphasizing pedestrian, bicycle, and public transit options.

Multiple sustainable site strategies will be considered from the outset of horizontal development, to create a 'LEED ready' site that will enable the vertical development design proposals to go beyond code compliance and achieve the highest ambitions for integrated sustainable design and low carbon communities.

SUSTAINABILITY TARGETS & OPTIONS MATRIX

SUSTAINABILITY APPROACH

The horizontal development of the Seawall Lot 337 and Pier 48 considers zoning, ground clearance, utilities provision and public spaces, and will enable sustainable 'vertical' building development. The adjacent matrix summarizes the sustainable design requirements and opportunities that are being considered for both horizontal and vertical development.

CODE COMPLIANCE

While we plan to provide vertical development with opportunities to go above requirements, at a minimum the horizontal development of the site must meet the energy and sustainability codes relevant in San Francisco at the time of permit. Currently, for the overall development this includes minimum LEED Gold certification for all commercial buildings and minimum LEED Silver certification for residential development, as set out in the San Francisco Green Building Ordinance (SFGBO) and other city codes. City wide sustainability, water and energy standards are expected to increase in performance requirements over time, and so, 'future-proofing' has been considered in the design of the horizontal development. The code requirements are summarized according to sustainability topic. Design responses for horizontal and vertical development are listed according to the topic.

LEED READY

By considering sustainable site-based measures early in horizontal development, the development will go beyond code compliance and create a 'LEED ready' site. This will ensure the achievement of standards for horizontal development, and enable greater ambitions for integrated sustainable design of vertical development. For example, horizontal site measures include transportation strategies to centralize car-pool and low-emissions vehicles; a pedestrian only tree-lined public way; provide public open space for recreation and a neighborhood square; with native/adapted vegetation, natural landscape interventions to effectively manage stormwater on-site;

| SUSTAINABILITY TOPIC | CODE REQUIREMENTS (Starting 2012) | HORIZONTAL DEVELOPMENT POTENTIAL DESIGN STRATEGIES | VERTICAL DEVELOPMENT POTENTIAL DESIGN STRATEGIES |
|---|--|---|--|
| ENERGY SAVINGS Commercial buildings | <ul style="list-style-type: none"> 15% reduction compared to Title 24-2008 (measured in TDU, excl. plug loads & ext. lighting) (SFGBO) CR 10% reduction compared to ASHRAE 90.1-2007 (measured in energy cost, including all end uses) (SFGBO) Also, generate 1% of energy on-site with renewables. CR purchase renewable power. CR achieve an additional 10% beyond Title 24-2008 (SFGBO) | <ul style="list-style-type: none"> No central energy infrastructure required to meet current targets A central plant could assist with meeting potential targets in 2020 for biotech buildings | <ul style="list-style-type: none"> High performance building envelope High performance conditioning and energy systems Energy efficient lighting and controls Renewable strategies, such as photovoltaic (PV), ground-source or water-source heat pumps will be considered on a building basis and/or through a potential central plant Pier roofs could be used for centralized renewables (e.g. PV), to meet the 1% on-site requirement for commercial buildings |
| ENERGY SAVINGS Residential high-rise buildings | <ul style="list-style-type: none"> 15% reduction compared to Title 24-2008 (measured in TDU, excluding plug loads & ext. lighting) (SFGBO) CR 10% reduction compared to ASHRAE 90.1-2007 (measured in energy cost, including all end uses) (SFGBO) | <ul style="list-style-type: none"> No central energy infrastructure required to meet current targets A central plant could assist with meeting potential targets in 2020 for residential buildings | <ul style="list-style-type: none"> High performance building envelope High performance conditioning and energy systems Energy efficient lighting and controls Renewable strategies, such as photovoltaic (PV), solar thermal hot water and combined heat and power plants, will be considered on a building basis and/or through a potential central plant |
| DOMESTIC WATER SAVINGS | <ul style="list-style-type: none"> 30% domestic water savings & reduce wastewater by 20% compared to LEED-CALGreen baseline (SFGBO) Install water meters in buildings >50,000 ft² (CALGreen) Separate sub-meters for buildings or individual tenant spaces consuming more than 100 gal/day (CALGreen) Residential: Multiple showerheads in any single shower equal the max. flow rate of single showerhead (CALGreen) Install 'purple pipe' for future municipal recycled water (Planting code) | <ul style="list-style-type: none"> No central water infrastructure required to meet current targets | <ul style="list-style-type: none"> Low-flow fixtures for lavatories, urinals, sinks and showers to meet 30% domestic water savings Commercial: Achieve 20% wastewater reduction with low-flow fixtures Residential: Reuse may be needed to reach 20% wastewater reduction. Graywater reuse is recommended for toilet flushing All buildings: Install required water meters and 'purple pipe' Process water is not addressed in any regulations, but will be considered through water-efficient HVAC, kitchens, and labs |
| IRRIGATION WATER SAVINGS | <ul style="list-style-type: none"> Meet SF Water Efficient Irrigation Ordinance Tier Two (>200 ft² & over 6,000 ft² must install separate irrigation service (SFWEIO) Requires automatic irrigation controllers with rain sensors CALGreen: Sub-meter landscaping separately where landscaping covers 1,000-5,000 ft² and use weather or soil moisture based controllers | <ul style="list-style-type: none"> Public green spaces will most likely require native/adapted plantings & drip irrigation (70%+ efficient systems) to meet the SFWEIO, and irrigation control sensors and hydro zones are mandatory Water reuse from buildings for irrigation may be needed to meet the Maximum Applied Water Allowance (MAWA) (due to the amount of turf) Graywater reuse is recommended for subsurface applications and will need to be coordinated with the adjacent buildings | <ul style="list-style-type: none"> Private green spaces will most likely require native plantings, drip irrigation (70%+ efficient systems) to meet the SFWEIO Water reuse may also be needed for irrigation depending on landscape design; graywater is recommended for subsurface applications On residential buildings, graywater for irrigation and toilets can be combined into a single system |
| STORMWATER MANAGEMENT | <ul style="list-style-type: none"> Meet LEED SSx5.2 (Rer 80% TSS from average annual rainfall) (SFGBO) Implement a Stormwater Control Plan meeting SFSDG Implement specific source control measures as specified in Attachment 4 of the Phase II General Permit No requirement for stormwater volume reduction because there are separate storm & sewer utilities in Mission Bay | <ul style="list-style-type: none"> Stormwater filtration for public areas must be managed through horizontal development. Low impact development (LID) methods will be used (e.g. vegetated buffer strips, porous landscapes, flow-through planters, vegetation infiltration, bio-retention) Each phase will comply with the SFSDG without relying on future phases | <ul style="list-style-type: none"> Individual parcels will filter stormwater on site. Stormwater will be filtered through LID methods (e.g., vegetated buffer strips, flow-through planters, and bio-retention). Mechanical filtration will be used only if LID strategies are not feasible |

SUSTAINABILITY TARGETS & OPTIONS MATRIX

VERTICAL DEVELOPMENT OPPORTUNITIES

Horizontal site measures have been developed with potential vertical development in mind. Potential design opportunities have been identified for vertical development and have informed the proposals demonstrated in this submission. Vertical design opportunities include buildings with high performance envelopes; energy efficient lighting and controls; high performance conditioning (where needed), and energy systems; potential contribution of renewable energy supply; bicycle parking; effective stormwater management and water reuse; and sustainable materials and waste management.

SUSTAINABLE DESIGN GUIDELINES

Those vertical design opportunities identified will be further developed following this publication, and will be enforced through design guidelines that identify the most suitable strategies for the delivery of sustainable buildings on the Seawall Lot 337 and Pier 48 site.

| SUSTAINABILITY TOPIC | CODE REQUIREMENTS (Starting 2012) | HORIZONTAL DEVELOPMENT POTENTIAL DESIGN STRATEGIES | VERTICAL DEVELOPMENT POTENTIAL DESIGN STRATEGIES |
|-----------------------|--|---|--|
| SUSTAINABLE MATERIALS | <ul style="list-style-type: none">Construction waste recycling (75%; MRc2.2 [SFGBC])Low-emitting materials (EQc4.1-4) [CALGreen] | <ul style="list-style-type: none">Parking lot demolition will meet construction waste recycling requirementsAll other requirements to be met through vertical developmentRe-use of Pier 48 historic sheds | <ul style="list-style-type: none">Recycle construction wasteSpecify low-emitting materialsSpecify low embodied carbon materialsSpecify low toxicity of materials |
| TRANSPORTATION | <ul style="list-style-type: none">Commercial: Provide short term and long-term bicycle parking for 5% of total motorized parking capacity each, or meet San Francisco Planning Code Sec. 155, whichever is greater. [CALGreen]Residential high-rise: Meet SF planning code.Commercial & Residential high-rise: Mark 6% of total parking stalls for low-emitting, fuel efficient, and carpool/van pool vehicles. [CALGreen] | <ul style="list-style-type: none">Transportation Demand Management Plan will address parking for low-emitting vehicles and carpool/vanpoolsPreferred parking will be provided in the central garageBicycle parking may be handled in individual buildings and/or centrally, deconcentrated bicycle parking will be more convenient for cyclists | <ul style="list-style-type: none">Bicycle parking will be provided through vertical development |
| LEED Certification | <ul style="list-style-type: none">Commercial: LEED Gold version 2009 (SFGBC) Specific credits require: SSp1, SSd4.2, SSd5.2, WEc3 (30%), EAc3, EA-c4, MRc2 (75%), EQc3.1, EQc4.1-4Residential high-rise: LEED Silver version 2009 (SFGBC) Specific credits require: SSp1, SSd5.2, WEc3 (30%), MRc2 (75%), UAp1 | <ul style="list-style-type: none">Commercial: LEED Gold target is achievable without horizontal improvements, beyond those noted above. Required credits SSp1, SSd4.2 will be part of horizontal development. SSd5.2 can be handled jointly by horizontal and vertical developmentResidential: LEED Silver target is achievable without horizontal improvements, beyond those noted above. Required credit SSp1 will be part of horizontal development. SSd5.2 can be handled jointly by horizontal and vertical developmentOther credits that could be targeted in horizontal development are: SSd2 (development density, SSd3 (brownfield redevelopment), SSd4.1 (public transportation access), SSd5.2 (maximize open space), and SSd7.1 (heat island, non-roof). Most of these targeted based on the nature of the project and the current landscape design | <ul style="list-style-type: none">Commercial: LEED Gold target is achievable without horizontal improvements, beyond those noted at left. WEc3 (30%), EA-c3, EA-c4, MRc2 (75%), EQc3.1, EQ-c4.1-4, will be part of vertical developmentResidential: LEED Silver target is achievable without horizontal improvements, beyond those noted at left. WEc3 (30%), MRc2 (75%), EA-c1 will be part of vertical developmentAll other credits needed to meet the required LEED rating will be part of vertical development |
| CALGreen Code | <ul style="list-style-type: none">CALGreen includes several requirements that are less strict, but related to, LEED creditsCommercial: SSd4.3-4 (alternative transportation), SSd8 (light pollution), water sub-meters, reduce wastewater by 20%, EQc2 (ETS), EQc1 (indoor air monitoring)Residential high-rise: SSd4.3-4 (alternative transportation), EQc5 (indoor pollution control) | <ul style="list-style-type: none">Commercial & residential: CALGreen requirements are achievable without horizontal improvements, beyond those noted above. Required equivalencies for SSd4.3-4 will be part of horizontal development | <ul style="list-style-type: none">Commercial: CALGreen requirements are achievable without horizontal improvements, beyond those noted above. Required equivalencies for SSd8, water sub-meters, wastewater reduction (20%), EQc2, EQc1 will be part of vertical developmentResidential: CALGreen requirements are achievable without horizontal improvements, beyond those noted above. Required equivalency EQc5 will be part of vertical development |
| | ACRONYMS SFGBC: San Francisco Building Ordinance SFGSDG: San Francisco Stormwater Design Guidelines CALGreen: California Green Building Code (Title 24 Chapter 13) SFWEO: San Francisco Water Efficient Irrigation Ordinance MAWA: Maximum Applied Water Allowance or "Water Budget" | | |

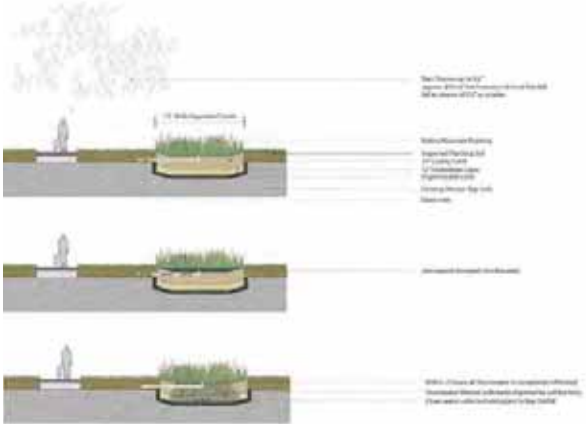
WATER & LANDSCAPE

Mission Rock lies within the area of San Francisco with separate sewer and stormwater infrastructure. Reducing stormwater volume is not so critical in this area due to this infrastructure, although it can be beneficial, particularly at dealing with localized problem areas. In addition, as stormwater runoff flows directly into the bay, stormwater filtration is an important aspect of sustainable site management. Local regulation supports this approach; the San Francisco Stormwater Design Guidelines require stormwater filtration that is equivalent to the LEED requirements for filtration (Sustainable Sites credit 6.2).

Mission Rock's goal is to provide stormwater management that also supports vibrant public spaces, wildlife habitat for native species, and education about sustainable water systems. Stormwater quality will be managed through both horizontal and vertical development. The horizontal development will manage runoff from the public realm, including streets, sidewalks, public plazas, and public green space. This runoff will be filtered using low-impact development strategies, which are the San Francisco Public Utilities Commission's preferred approach. Wherever possible, pervious paving and ground-level planting will be used to reduce stormwater volume, and thereby reduce the amount of water that must be filtered. The remaining water will be filtered through mechanisms like filter strips in pedestrian areas, flow-through planters, and bioswales. These strategies will be integrated into the streetscape, plazas, and the park design, with the majority of filtration located in the north section of the park. Construction of stormwater filtration will be phased so that each phase of Mission Rock can meet the San Francisco Stormwater Design Guidelines without reliance on future phases.

Stormwater on vertical parcels will be managed on those properties. Though not yet designed, these projects will also use low-impact development strategies wherever possible. Green roofs and flow-through planters are under consideration. Mechanical filtration may be used where low-impact development strategies are not feasible.

Stormwater treatment rain garden locations



Overland Flow, Vegetated swale character



Vegetated swale character



SUSTAINABLE TRANSPORTATION



The environmental impact of the Mission Rock District is not limited to the site alone but extends into the larger context of the urban environment. The ways in which residents, workers, shoppers, and Ballpark fans get to and from the site play a huge role in the sustainability of the site. The transportation strategy of Mission Rock is based on reducing vehicle miles travelled by fostering multiple modes of sustainable transportation, emphasizing pedestrian, bicycle and public transit options.

The mixed use nature of Mission Rock's land use program, its rich transit options, and proximity to services ensure that single occupancy vehicle trips will be reduced. Slow speed limits and dense development will ensure safe, pedestrian-friendly streets. The rental of parking spaces in the development will be decoupled from residential units.

On-site car share and carpool schemes, facilitated by a District transportation coordinator, ensure automobiles are used as efficiently as possible. A District Bicycle Program could include maps, signage, shower and changing facility locations, and secure parking to encourage and support cycling in the city.

The combination of sustainable transportation strategies used in the Mission Rock District contribute towards the project's goal of a 25% reduction in auto trips and a 40% increase in public transit use. More information is available in the Transportation Demand Management Plan, provided in the Technical Book. The strategies will be combined to target approximately 25% reduction in carbon emissions from transportation, compared to a typical San Francisco development.

APPENDIX

07



07

PRECEDENTS

MARINA GREEN

TORONTO WATERFRONT WAVE DECK

HIGHLINE

WASHINGTON SQUARE PARK

YERBA BUENA PARK

BRYANT PARK

MADISON SQUARE

PIERS 14 & 35

Note: For each precedent, a plan of a comparable Mission Rock park area is shown at the same scale as an aerial photo of the precedent under study.

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PRECEDENTS: MARINA GREEN



San Francisco, CA

Marina Green is the quintessential northern waterfront green in San Francisco. The average width of Mission Rock Park is comparable to the width of the Marina Green lawn and approximately one-third its length. Marina Green is of comparable scale and character as a precedent for the Great Lawn, and illustrates the power, flexibility of use, and need for large waterfront greens.



TORONTO WATERFRONT 'WAVE DECK'



Toronto, Canada

The Toronto Waterfront Program has recently completed a new leg of the downtown waterfront commonly referred to as the 'Wave Deck'. This feature has drawn international acclaim due to its unique design, creating a destination in and of itself as well as a new identity for the adjacent neighborhoods. As such, this waterfront feature is an excellent precedent of the Mission Rock promenade.

HIGHLINE



New York City, NY

The Highline Park is a recently completed linear park that rests atop a historic elevated train viaduct located along the lower west side of Manhattan. Along the course of this long and narrow park are nodes where activities such as dining, sun bathing, and event gatherings may occur. This linear park is an excellent precedent for the Mission Rock promenade illustrating how program may be inserted strategically in to an otherwise narrow connective feature.

WASHINGTON SQUARE PARK



San Francisco, CA

Washington Square Park is a local scale and programming precedent for Mission Rock Square. The lawn of Washington Square Park is nearly the same area as that proposed for Mission Rock Square, illustrating the dual potential of the lawn for daily and event use. Mission Rock Square is envisioned to share similar uses to that of Washington Square Park, providing setting for daily passive uses and intermittent setting for events and gatherings.



YERBA BUENA PARK



San Francisco, CA

Located at the heart of South of Market District, Yerba Buena Park serves as a relevant precedent for the scale of the Mission Rock Park event space and a scale and character precedent for Mission Rock Square. At nearly one-acre in area, the Yerba Buena lawn serves daily as an urban green for families, tourists, and office workers, and at certain times as a robust event lawn for holidays, celebrations, and concerts.



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BRYANT PARK



New York City, NY

Bryant Park serves as a scale and programming precedent for Mission Rock Square. The central lawn of Bryant Park plays host to a diverse set of structured events throughout the year including festivals, civic holiday celebrations, fund raiser events and the well known NYC Fashion Week. As such, Bryant Park illustrates how a simple green, framed by trees can become a neighborhood and city asset for urban activities and events.



MADISON SQUARE



New York City, NY

Madison Square exhibits many of the qualities envisioned for Mission Rock Square including a flexible-use lawn, café and café seating plaza. Madison Square sets the urban park character precedent for Mission Rock Square through its frame of trees around the main lawn that creates a sense of oasis within the city, yet with all the adjacencies and infrastructure to provide setting for small and medium scale neighborhood events.



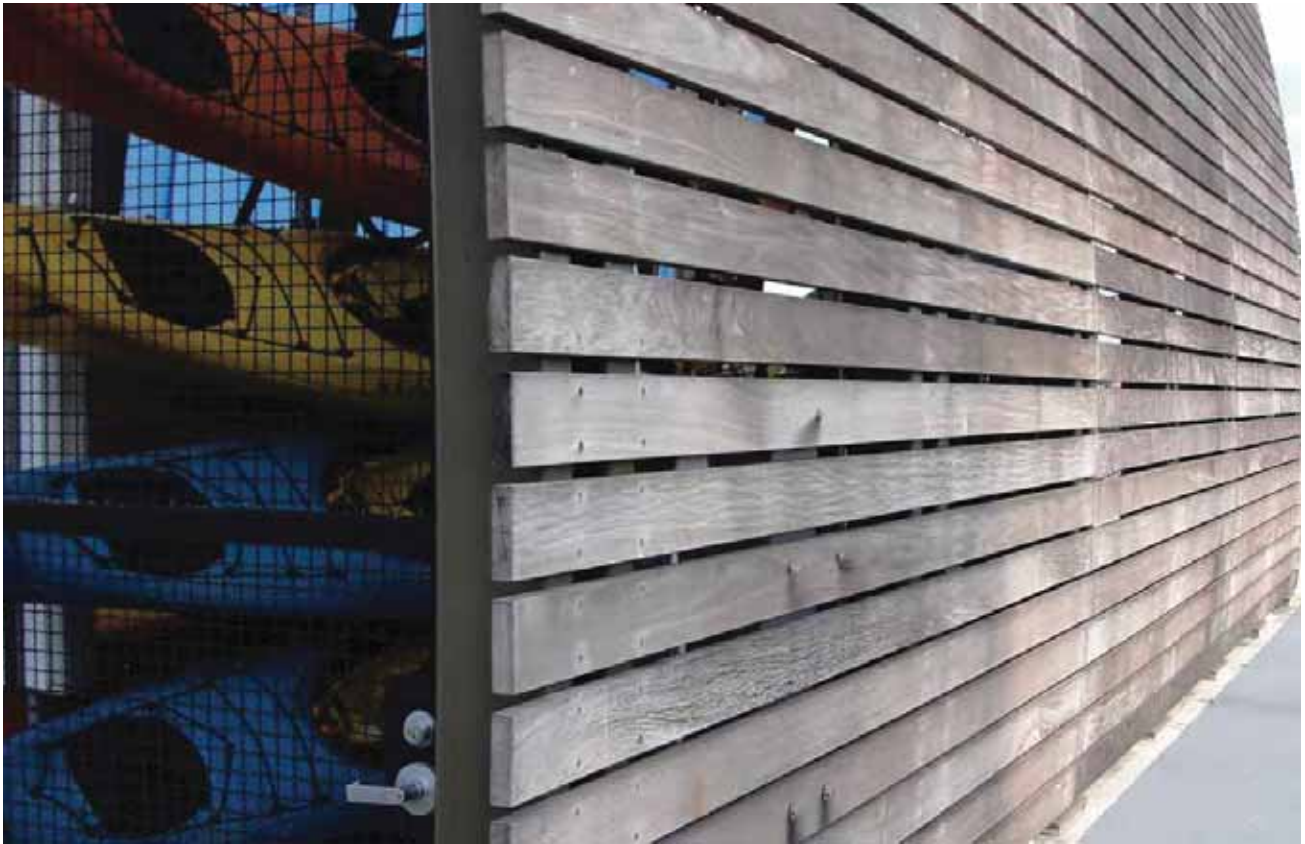
PIERS 14 & 35



San Francisco, CA

Piers 14 & 35 are waterfront plazas and wharves that offer relevant scale comparisons to a proposed Channel Plaza. These flexible plazas offer setting for passive uses such as individual and group seating for the enjoyment of broad waterfront views. Pier 14 includes an area for rotating public art installations; a similar program may be considered for Channel Plaza.





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DESIGN + DEVELOPMENT REVISED PROPOSAL

PERKINS + WILL
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ATELIER TEN

FINANCIAL SUMMARY

ECONOMIC & PLANNING SYSTEMS
CENTURY URBAN

01

MISSION ROCK REVISED PROPOSAL
FINANCIAL STRUCTURE

MISSION ROCK REVISED PROPOSAL
FINANCIAL STRUCTURE SUMMARY

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INTRODUCTION

Development of Seawall Lot 337 (SWL 337) and the adjoining Pier 48 represents an opportunity to complete an important component of the revitalization of the San Francisco waterfront, bringing a vital mix of uses that will support business, residential, retail, and recreational activities in an area now characterized by surface parking lots and an underutilized pier desperately in need of renovation. The redevelopment of SWL 337 and improvement of Pier 48 will generate benefits for the City and community in the form of urban revitalization, employment and living opportunities, preservation of historic maritime facilities and structures, and City-wide fiscal benefits. The project will generate substantial revenues for the Port and City via long-term ground leases with the Port, and incremental property tax revenues generated by vertical development. These tax increment revenues will initially be captured through an Infrastructure Financing District (IFD) which has been established to fund Port wide infrastructure needs and deferred maintenance.

These benefits are dependent on crafting a development and financing program that will produce sufficient public/private economic and public benefit returns to make the project feasible. As is typical of public/private developments in San Francisco and the region, our proposal will combine public land and financing mechanisms with private equity funding in order to generate appropriate security and financial returns to both the public and private sectors. Concurrently, the public sector will benefit from increased economic activity, short and long term jobs, affordable housing funds, transportation fees and related public tax revenues.

Despite their excellent location along the San Francisco waterfront between Mission Bay and AT&T Park, SWL 337 and Pier 48 present significant challenges to successful development. SWL 337 sits atop some of the deepest bay mud in the Mission Bay area, requiring vertical development to be supported by pilings as deep as 270 feet. The SWL 337 site has historically been a center of maritime/industrial activity and therefore suffers from a complete lack of urban infrastructure. As such, the site will require substantial new infrastructure including streets, sewer, water and drainage systems, electrical and data utilities, shoreline stabilization improvements, parks and landscaping, as well as structured parking to replace existing surface parking which serves SWL 337 and AT&T Park. Pier 48 is costly to reuse, requiring seismic upgrades and varying degrees of improvements to the substructure, perimeter aprons, and pier sheds depending on likely future occupancies. In addition to funding these extraordinary infrastructure costs, the Project must also replace existing Port revenues derived from SWL 337 and Pier 48 which are largely generated by Giants ballpark parking, storage and special events currently held on both sites.

While there has been significant recovery in San Francisco real estate markets since the national crash and subsequent "Great Recession," current market conditions generally do not yet support speculative new vertical high-rise construction. Feasible new development will require some additional recovery in commercial and residential rents. After material dislocation, capital markets

are recovering, but generally only providing equity and debt financing for existing asset purchases or for the development of new low risk projects in very strong markets. In addition to significant private equity funding for horizontal development costs, feasible horizontal development will require the long term commitment of public financing mechanisms, which will provide the lower cost financing mechanisms necessary for the long term stability of the public improvements. Our proposal offers structural mechanisms to address these challenges while providing an appropriate balancing of risk and reward to invested long term capital.

The purpose of this financial proposal is to set forth a plan and transaction structure consistent with the Port's financial and negotiating principles that will:

- Address evolving market demand
- Fund the sites' particular infrastructure challenges
- Deliver appropriately timed public realm benefits
- Optimize economic benefits to the Port, City, and broader stakeholder community
- Provide market acceptable returns to private investment capital
- Establish a toolbox of financial mechanisms which can accommodate fluid market demand in the most cost efficient manner possible

These features and how they address the concerns of the Port and other parties of interest are further described in the following sections.

FRAMEWORK FOR FINANCIAL STRUCTURE

The proposed structure for SWL 337 and Pier 48 seeks to meet the objectives and parameters first established by the Port in 2008, and supported throughout the ensuing public process. The financing plan has been definitively shaped by the financial and negotiating principles set forth in the ENA, and by other factors described below:

- Objectives of the parties at interest (the Port, City/County of San Francisco, and the Master Developer)
- The structural approach to bifurcated horizontal and vertical development of the site
- Values and phasing of the flexible development program
- Cost and phasing of the infrastructure, parks, structured parking and other land and infrastructure improvements needed to support vertical development
- Financing resources that can be used to fund the improvements

Each of these shaping factors is described in more detail below.

OBJECTIVES OF THE PARTIES AT INTEREST

Port of San Francisco

SWL 337 and Pier 48 represent important real estate assets to the Port of San Francisco, with the potential to add vitality and economic activity to the waterfront, maintain and promote maritime activity, and generate near and long-term revenues for the Port to fund much needed capital improvements throughout its jurisdiction. The Port outlined many of its key objectives and parameters for the SWL 337/Pier 48 transaction in Exhibit B to the Exclusive Negotiation Agreement, entitled Financial and Negotiating Principles. Key objectives set forth in that document are summarized briefly below.

- **Balance Financial Risk and Reward.** "Development of SWL 337 should balance the Port's risk related to bonding capacity and balance sheet with revenue associated with ground rent and IFD increment." The Port indicates a willingness to examine a full range of financing options, providing that the use of any public debt instruments, including IFD and CFD bonds, will best achieve the Port's interests. The Port further states that the substantial revenues generated by current uses on the site should be retained until they are replaced by higher revenue generating uses. Our financing plan meets these objectives by minimizing Port balance sheet investments, and providing significant overall returns to balance the limited investments made by the Port. In addition, the financing plan retains and enhances current site generated revenues through the base ground rent structure.

- **Financial Transaction Structure.** "Development of SWL 337 will be a public/private partnership where both parties act to preserve and enhance the value of the asset, with risk, reward and return distributed equitably." The Port calls for transparency in the distribution of risks and rewards, and indicates that financial returns to both parties should be parallel (not necessarily equivalent). These Financial and Negotiating Principles further state that the Port should participate in "upsides," particularly with regard to future increases in revenue available to support ground rent and infrastructure payments over time. Our financing plan meets these objectives by providing the Port a sharing of potential "upside" and the creation of substantial IFD revenues beyond that required by SWL 337 and Pier 48 improvements.

We believe that the proposed structure substantially mitigates financial risk to the Port and the planned just in time delivery of horizontal improvements optimizes the project's exposure to market cycles. As such, the use of certain public financing mechanisms, e.g., Port Revenue and IFD bonds will be structured to efficiently provide the Port with appropriate asset security backing the various financing mechanisms. Our goal has been to limit short and long term exposure to the Port's balance sheet while optimizing current revenues and net tax increment proceeds.

The Port will not only benefit from enhancement of its current rent stream, but will also share in proceeds that exceed the minimum equity return requirements required for development feasibility. In addition, future increases in property tax increment above the amount required for the Project will provide funding for additional Port-wide infrastructure improvements.

The ability to access certain public financing mechanisms early in the Project will allow the Port to incentivize the Developer to undertake significant and costly entitlement risk, while also creating an additional incentive to expedite development by obligating the Developer for the corresponding debt service on such financing for a defined period of time. A phased "just in time" development approach will increase the probability that development financing and required returns can be obtained for each project area. Because public benefits including infrastructure, parks and open space are distributed amongst the development phases, the Port will be assured that these benefits will be completed concurrent with each Project Area delivery.

City and County of San Francisco

Successful development of SWL 337 and Pier 48 is a key objective for the City in its efforts to revitalize and link the northern and southern waterfronts along San Francisco Bay. This development will fill the void between Mission Bay and AT&T Park, and add much needed housing and growth capacity to the burgeoning tech-driven employment base of the City. Mission Rock Park and Square along with Channel Plaza will provide major public open space amenities to the southern waterfront and bring a 24/7 environment of a vibrant mixed use community activated with neighborhood serving retail. The City stands to reap substantial fiscal, economic and other public benefits from the Mission Rock development, including significant jobs and fees through construction activity, a material increase in long term jobs and taxable expenditures, and affordable housing funding.

Master Horizontal Developer

The Master Developer, the San Francisco Giants with The Cordish Company, is seeking a successful real estate endeavor that will accommodate a viable and flexible mix of market-driven uses, complementing the Mission Bay neighborhood and AT&T Park's sports and entertainment activities. To achieve this outcome the Master Developer must plan and execute a development and financing program that meets appropriate public policy objectives of the Port and City; appeals to residents, commercial tenants, merchants, vendors, and visitors; and yields appropriate market rate returns to equity and debt capital necessary to finance the development.

Currently, little to no institutional capital is pursuing new large scale speculative land developments in the region but indications from parties with significant experience in such projects indicate a foundational shift in return expectations for the foreseeable future. Funds dedicated to the development and construction of horizontal improvements typically mandate returns to invested capital of a minimum unlevered IRR. However, industry-wide lessons learned from the associated fallout of the Great Recession have led investors to add an additional "multiple" benchmark to gauge

their return expectations. The equity multiple has been added to balance the allocation of capital distributions with associated timing and gross dollar contributions measured against risk profile. In large scale land developments like Mission Rock, the projected timing and phasing of the project result in an anomalous IRR which may not appropriately reflect a magnitude of return on investment acceptable to equity investors in speculative land development.

Structure of Horizontal and Vertical Development

The financial proposal set forth herein comprises two distinct but inter-related components of the development of SWL 337 and Pier 48: horizontal (land) development, and vertical (building) development. Each of these components has its own financial underwriting characteristics, sources of financing, risk profile and associated return requirements. The public/private partnership involving the commitment of land proceeds and public financing is limited to the land development process, while vertical development will rely on private equity and debt financing.

Land development will require the entitlement of site improvements through appropriate regulatory agencies and the construction of infrastructure normally provided by the municipality. The infrastructure work will include roadways, utilities, land stabilization, parks and open spaces and preparation of buildable parcels for vertical development. This component of the development process is considered the riskiest due to the uncertain outcome and high cost of entitlements coupled with the significant equity capital outlays required to fund infrastructure. As discussed more thoroughly below, repayment to the Master Developer for the funds dedicated to the cost of infrastructure is complicated by the Port's long term ground lease of the property.

Vertical development involves construction of buildings for end-users either on a build-to-suit or speculative basis. Risk can be mitigated by acquiring tenants or users in advance of construction, providing completion guarantees to lenders, and securing loans with the improvements. Vertical developer return requirements, utilizing private equity and debt financing, are less than those required for horizontal development.

To reiterate, these two development components are distinct but intrinsically inter-related. Horizontal development is only viable to the extent market demand exists for the vertical end product and that demand is willing to pay an appropriate price for the total vertical development costs which must include a "residual land value". Residual land value is derived from the value of the end vertical product, less all development costs (including a return to invested capital). This residual land value then must support the development of infrastructure and public benefits.

In the case of SWL 337 and Pier 48, that challenge is amplified by the fact the underlying land will not be transferred to the Master Developer as fee simple property (as was done in Mission Bay and other former redevelopment areas), but rather will be subject to a long-term ground lease with the Port. In our proposal, payment of the land residual is "split" between long term ground lease payments to the Port, accounting for about 75 percent of residual land value, and sale of vertical

development rights, accounting for about 25 percent of the residual land value. The Port realizes the majority of the residual land value in the form of ground lease payments, while the remaining residual land value is used as an investment in the project that reduces overall financing costs. This structure contributes to project feasibility and the generation of IFD tax increment and justifies an upside participation for the Port. Given the above structure, the amount remaining to fund horizontal development is quite limited and cannot support the repayment of or return on Master Developer's invested equity in horizontal infrastructure. To make the most efficient use of each Public dollar, this situation calls for a cost effective public financing mechanism which can "refinance" Master Developer's equity at long term debt rates.

DEVELOPMENT PROGRAM SUMMARY

A key element of the proposed financing strategy is the establishment of IFD Project Areas within the site. The site is broken down into four separate Project Areas which correspond to development phases. Each of the Project Areas require sustainable financing mechanisms that can stand on their own, with separate "time clocks" for the 45 year duration of the IFD financing, and the ability to be underwritten and financed by separate equity and debt providers, as the market dictates. The four IFD Project Areas are composed of following blocks:

- **Project Area 1.** Blocks A, B, C, and D.
- **Project Area 2.** Blocks G, K, and Mission Rock Park.
- **Project Area 3.** Blocks E, F, and Mission Rock Square.
- **Project Area 4.** Blocks H, I, J and Pier 48 improvements.

Within an overall envelope of 3.5 million gross square feet, there will be a range of potential office and residential uses to provide for Flexibility in the land use program to respond to market conditions dictating a different mix of uses. This flexibility is essential to assure financial feasibility and provide incentives to complete the Project and generate value to the Port. One potential land use program for SWL 337 and Pier 48 is shown below. Please refer to the accompanying Design Book for a more detailed description of the land use and design plan.



Horizontal Project Development Costs to be Financed

Investment in horizontal development is necessary to provide the infrastructure, parking, parks and open space, and building sites necessary for vertical building construction, which creates land value and generates property tax increment to fund infrastructure improvements.

Much of the horizontal infrastructure costs will be incurred in advance of the availability of public financing. These costs will be funded by private capital which will incur costs necessary to compensate the capital source for the risk-adjusted cost of capital. At the horizontal project development stage, private capital can be costly due to the market and development risks inherent in advance of building construction and occupancy. As less costly public sources of funding become available, the private equity will be reimbursed and replaced with public funding. This proposal reduces overall costs, improves project feasibility and increases the potential for Port returns by minimizing the amount of outstanding private capital to the maximum extent possible. The use of Port revenue bonds, CFD Mello-Roos bonds, and IFD bonds will help to achieve these financing objectives.

FINANCING SOURCES

The project will utilize a variety of financing sources to attain entitlements and complete the horizontal land improvements and infrastructure. The principal sources of revenue and financing in rough chronological order of use are as follows:

1. *Developer Equity*
2. *Port Revenue Bonds*
3. *Vertical Development Rights*
4. *CFD Mello-Roos Bonds*
5. *Infrastructure Financing District Bonds*
6. *Potential Port Equity Investment*

These sources are described briefly below.

- *Developer Equity.* The Master Developer will be responsible for securing required equity investment, either internally or through third party investors, for all horizontal development costs. These costs include all planning, environmental review and associated legal documentation to obtain certified regulatory approvals as well as costs necessary to design/construct all site and horizontal infrastructure facilities and improvements. Return of and on, up to a maximum project area threshold return, invested equity will be repaid through fees generated from the transfer of vertical development rights. Port equity investments (if needed, see below), and CFD/IFD bond proceeds. Should funds be generated in excess of the maximum threshold returns those funds will be held in trust to support subsequent project areas. This concept assures alignment of interest amongst the project areas and the corresponding equity and debt investments therein.

1. *Port Revenue Bonds.* The Port has made clear its intent to assiduously safeguard against material impacts to its balance sheet. We have carefully considered limitations associated with the issuance of Port Revenue Bonds, and consequently reduced the use of Port Revenue Bonds to only the amount necessary for reimbursement of Master Developer's costs for project entitlement. No other bonding of Port revenue is proposed. It should be noted that once entitled, the property's base value will likely be significantly enhanced, a benefit inuring solely to the Port. The use of this debt mechanism early in the projects development cycle alleviates the negative financial impact of carrying these entitlement costs, with expensive third party equity, for a protracted period. The corresponding benefits include an increased probability of development, since it will be easier to achieve the threshold hurdle rate that will be required by equity investors for each phase. As discussed, entitlement of the property will increase its value, and development of the first phase can occur shortly thereafter, offsetting any potential impacts on the Port's balance sheet and debt capacity. In

addition, the developer will guarantee debt service on these bonds for a period of time after issuance to incent development to proceed in a timely fashion for the Port to realize this land value increase.

2. **Vertical Development Rights.** Under the proposed structure the Master Developer may transfer long term development rights to vertical development affiliates, end users or third party developers. These vertical development parties will pay market rate value for the development rights through the combination of a 75 year ground lease with the Port and upfront payment of a development rights transfer fee for each respective development parcel. The value of the vertical development rights fee represents a minority portion of the overall residual land value, with the remainder being paid as monthly rent to the Port under a long term ground lease. As structured, Port rent represents about 75 percent of the total residual land value attributable to vertical development, leaving 25 percent for vertical development rights. Thus the value of development rights fees on SWL 337 do not compare to comparable market valuations for land in the area. Proceeds from the transfer of development rights are applied to project costs.

3. **CFD Mello-Roos Bonds.** CFD bonds will be used as a source of "bridge" financing. CFD district(s) will be established for each project area, special tax levied against each project area's vertical development parcels which will support the issuance of bonds monetizing the value of each project area's special tax stream. Ultimately, CFD bonds will be retired with tax increment revenues after vertical development is complete and its assessed value generates appropriate tax increment. The CFD has limited utility as a long term source of financing because vertical developers/end users will most likely discount the land price by the amount of the CFD obligation if it remains for the life of the vertical development.

4. **Infrastructure Financing District (IFD).** IFD property tax increment and bonds supported by same will be the principal source of long-term financing for the development of horizontal infrastructure. IFDs allow for the capture of incremental property tax revenues for a period up to 45 years for the purposes of financing infrastructure improvements in areas not previously considered under the jurisdiction of redevelopment agencies. The Port is currently pursuing the establishment of an IFD District that could encompass much of the Port's waterfront holdings. Under current IFD statute, separate Project Areas can be established for specific development areas within an overall IFD. Revenues from each or all of the Project Areas can be used throughout the IFD for legislatively specified purposes. Our plan considers that SWL 337 and Pier 48 will be divided into four separate Project Areas corresponding to development phases. Each Project Area will have its own IFD financing plan, allowing each to operate on its own 45-year "time clock," maximizing the duration of the IFD and therefore the amount of increment captured by the Port. Following the expiration

of the Port's IFD clock, all increment will be redirected to the City and County of San Francisco.

5. **Potential Port Equity Investment:** Notwithstanding Master Developer and Port's best efforts, in the event that a Project Area(s) within the Mission Rock development is projected to not achieve required levels of return, but the Master Developer and Port determine that it is in parties' best interest to move forward, the Port may invest equity capital, up to specified maximum to support such desired development. Repayment of this investment, plus an appropriate return, would be made on a priority basis following completion of the last phase of the project and realization of minimum returns to previously invested equity capital.

SUMMARY OF PROPOSED FINANCING STRUCTURE

The proposed financing plan and transaction structure are predicated on the efficient timing of horizontal and vertical development and the judicious use of capital resources resulting in the optimization of financial benefits to the public/private partnership. Key elements of the proposed financing and transaction structure are summarized below:

- Entitlements and infrastructure improvements will be funded with equity from the Master Developer and/or third party equity sources. Equity will be replaced with Port Revenue Bonds, CFD Bonds supported by a special tax, and an IFD tax increment financing district which will issue bonds as increment becomes available.
- A single Port Revenue Bond issuance will repay entitlement costs upon regulatory certification.
- CFD bonds will be used on a limited basis as a source of bridge financing during construction. These bonds will ultimately be serviced by IFD tax increment following completion of the buildings.
- IFD bonds will be issued upon increased property value assessment of vertical development in each phase (estimated at approximately 24 months after completion) to reimburse equity contributions to the construction of infrastructure improvements.
- Transfer of vertical development rights will occur and long term ground lease payments to the Port will commence prior to construction of the corresponding Project Area infrastructure phase. All development rights fees earned will be held in trust by Master Developer and utilized to fund project costs as incurred. Initial long-term base ground lease levels will exceed current interim rents. Horizontal development of each phase may overlap with vertical development, as the two will be timed for simultaneous completion.
- Vertical development of residential parcels is assumed to be speculative, whereas development of commercial space will be tenant-driven.

*MISSION ROCK REVISED PROPOSAL
FINANCIAL STRUCTURE SUMMARY*

- Depending on market conditions and overall development program, the Port may be called to fund an equity contribution to the project.
- All equity and priority return thereon will be reimbursed during development and/or at completion of each Project Area.
- During project area horizontal development funds generated in excess of maximum threshold returns will be retained for investment in subsequent Project Area(s) through completion of all four Project Areas.
- At completion of Project Area IV, a Port participation waterfall will be triggered if horizontal development returns, measured across all four Project Areas, exceed established minimum returns.

CONTEMPLATED
PROJECT AREA
DIAGRAM

02



TRANSPORTATION DEMAND MANAGEMENT PROGRAM

BOB HARRISON
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03

Mission Rock District TDMP

Introduction

The Mission Rock District Transportation Demand Management Plan (TDMP) is a working document intended to outline a comprehensive strategy to manage the transportation demands created by the Mission Rock District project. The plan incorporates smart and sustainable transportation planning principles which address the transportation needs of the Mission Rock District. The project and this TDMP are consistent with the City of San Francisco Transit First, Better Streets, Climate Action and Transportation Sustainability Plans and Policies.

The Mission Rock District TDMP outlines a series of implementation strategies intended to effectively manage the transportation demands created by the Project. These strategies seek to minimize the Project's dependence on the automobile and to optimize the inclusion of non-auto travel modes providing access to the Project.

The Mission Rock District TDMP has been prepared by Robert L. Harrison Transportation Planning and José I. Farrán of Advant Consulting

Transit

The proposed Mission Rock District will be located within an area already well-served by public transportation. The San Francisco Municipal Railway (Muni) T-Third light rail line operates in the median of Third Street directly adjacent to the site. The T-Third connects downtown with the southeastern part of the city and operates daily with weekday headways of 8 to 10 minutes. Muni's N-Judah light rail line operates on The Embarcadero between downtown and the Caltrain Depot at King & Fourth Street with a stop at the ballpark at King & Second Street. The N-Judah operates at 7- to 10- minute intervals on weekdays.

Both the T-Third and the N-Judah provide connections to regional transit providers to the North Bay (Golden Gate Transit) and the East Bay (AC Transit, BART) located near the temporary Transbay Terminal and at the Ferry Building. Direct regional transit access to and from the South Bay is provided by Caltrain, with its terminal station located less than half a mile from the project site. Caltrain currently operates 86 trains at 10- to 60- minute headways on weekdays.

Local transit connections are provided by Muni coach routes 10-Townsend (to Pacific Heights via downtown), 30-Stockton and 45-Union/Stockton (to the Marina via downtown) and 47-Van Ness (to Fisherman's Wharf via the Civic Center). In addition, express service is provided from the Caltrain Depot to downtown via the 80X, 81X and 82X motor coach lines.

Parking

The San Francisco Municipal Transportation Agency (SFMTA) is currently developing a comprehensive parking management program for Mission Bay and the surrounding area,

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including the Mission Rock District. The draft Mission Bay Parking Management Plan indicates as a goal the management of parking resources to improve access for visitors and residents, and to ensure a variety of parking options are available for those who choose to drive. In addition, the SFMTA Plan would encourage the use of transit, walking and biking by providing funding to support these alternatives to the automobile.

A parking survey of the subject project area, including the Mission Bay parking shed, conducted by the SFMTA in July and August 2010 found some of the existing on-street parking heavily used for much of the day and other areas where the existing parking was little used. Where the streets have no parking management, on-street spaces do not become available, while on those streets with two-hour time limits parking is underutilized. This inefficiency means that drivers tend to double park or frequently circle to find longer term parking.

As noted in the SFMTA Plan, there are currently almost 10,000 total parking spaces in Mission Bay while at full build-out (expected to occur after 2035) there would be more than 17,000 spaces. Although most of these spaces will be within walking distance of the Mission Rock project site, it is expected that their utilization by Mission Bay users will be substantial and there will not be any excess parking available near Mission Rock during the weekday peak demand period, typically from 11 a.m. to 2 p.m.

Parking occupancies during ballpark events vary depending on the game and the time period, but regularly reach practical capacity (above 90 percent) on weekday afternoon games.

Auto Access

The main streets serving the Mission Rock project site operate with minimal delay and congestion at most times. Two exceptions are the intersections of King & Third Streets and King & Fourth Streets that typically experience peak hour congestion during the morning and evening commute periods. In addition, for several minutes following SF Giants games at AT&T Park, many streets in the immediate area experience congestion as fans leave the ballpark and SFMTA implements temporary streets closures as part of the after-game traffic management plan.

Project Description

The Mission Rock District is envisioned as a mixed-use urban neighborhood with convenient access to multiple forms of public transportation. Within an overall development of approximately 3.5 million gross square feet, two development programs are studied: the office campus and residential emphasis alternatives. Both alternatives include office, retail, restaurant and residential land uses. The office campus would provide approximately 1.7 million gross square feet of office and 650 housing units while the residential emphasis alternative would include approximately 1.3 million gross square feet of office and up to 1,000 housing units. The alternatives would each provide approximately 125,000 square feet of neighborhood serving retail and restaurant uses.

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As previously described, the project site is very accessible to public transportation. Currently, the T-Third line stops along Third Street immediately adjacent to the site. The T-Third line stops at Mission Rock Street, while the N-Judah line stops just across the Lefty O'Doul Bridge at AT&T Park. Caltrain is a short walk northwest of the site. Ferries dock at the ballpark during events and could join water taxis, excursion boats and other watercraft at renovated berths on Pier 48.

Pedestrian-oriented paths and streets within the project continue and connect with existing infrastructure north, west and south of the site. The design of the Mission Rock District has been planned to be inviting to pedestrians and attractive to bicyclists. Locations for bicycle parking and bicycle sharing facilities will be planned in buildings, and along the waterfront at Mission Rock Park & Pier 48.

Parking will be located throughout the Project, with the primary parking facility located in a structured garage at the southwest corner of the project. The Mission Rock District will provide parking at ratios consistent with adjacent Mission Bay developments. The parking program is intended to provide a responsible number of spaces given the nature of the development, the adjacent ballpark, and alternative transportation networks. The supply contemplates project demand and reasonably predicted use by ballpark patrons. Office parking would be provided at one space per 1,000 square feet, retail would be provided at two spaces per 1,000 square feet, restaurant at 5 spaces per 1,000 square feet, and residential parking at one space per unit.

As is the case for other developments in the Mission Bay area, the project, being transit and pedestrian friendly, will not supply sufficient number of spaces to meet the theoretical weekday peak parking demand on-site, as estimated using the SF Planning Guidelines. To this end, the TDMP, described in the following sections of this document, is intended to reduce the excess demand for parking by encouraging use of non-auto modes of travel such as public transit, bicycles and walking.

Description of the Mission Rock District TDMP

The Mission Rock District TDMP aims to optimize the efficiency of the Mission Rock transportation system by encouraging sustainable travel modes such as walking, bicycling, and transit, and discouraging solo drivers and use of the automobile in general. TDMP programs maximize returns on public and private infrastructure investments and are an important component of an enhanced and sustainable quality of life. Modified transportation behavior results in lower traffic congestion, fewer emissions, improved public health and safety, and lower dependence on fossil fuels.

The Mission Rock District TDMP presents a series of transportation measures and strategies which will achieve the following:

- Change travel patterns in a flexible manner within a given time frame
- Minimize auto trips, reduce trip lengths and shift trips out of peak commute periods

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- Maximize personal mobility choices through the use of technology by informing individuals about their travel options and how to use them.

Approach

The Mission Rock District TDMP is based on sustainable development and creates incentives for travel by walking, bicycling and transit. It provides disincentives to those who choose to travel by the use of a single occupant private car. The measures and strategies are proposed by the developer in support of pedestrian, bicycling and transit infrastructure and services, and include pricing mechanisms and financial incentives to minimize auto use and encourage sustainable transit modes.

The description of the TDMP for the Mission Rock District is based on the following six elements:

- Reduction in project-generated single-occupancy motor vehicle trips.
- Reduction in project's parking demand.
- Increase in the share of trips made by alternative modes of transportation.
- Incorporation of smart transportation strategies into the design.
- Integration of the project TDMP with nearby programs.
- Regular monitoring and adjustment of the TDMP measures.

Reduction in Project-Generated Single Occupancy Motor Vehicle Trips

The Mission Rock District TDMP includes several programs aimed at reducing the use of the private auto and single-occupant vehicles trips:

- Appointment of a Transportation Coordinator.
- Creation of a TDMP Website.
- Implementation of carpool and vanpool programs.
- Adoption of a carshare system.

Transportation Coordinator

A Transportation Coordinator will be appointed to manage the transportation needs of the project residents, visitors and employees and to educate the public about the transportation system serving the new development. The Transportation Coordinator will provide residents, employers, employees and visitors with all the information they need to make the best use of the opportunities available to them. The Transportation Coordinator will implement and administer various TDMP elements and will coordinate with the City, the transit agencies (e.g. Muni, Caltrain, BART, Golden Gate Transit), and other nearby developments (e.g. Mission Bay, UCSF, China Basin). The Transportation Coordinator will also be responsible for managing and coordinating the transportation

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needs for on-site special events to reduce dependency on the single occupant vehicle trip. Other responsibilities of the Transportation Coordinator include:

1. Provide educational materials to project residents, employees and employers informing them about travel incentives or changes to travel options.
2. Register development residents and employees.
3. Sell transit passes.
4. Promote use and register users of carpool/vanpool/carshare services.
5. Encourage bicycle use and manage bicycle facilities.
6. Conduct surveys of residents, employees and visitors at regular intervals to determine mode of travel and relevant demographic information.
7. Manage the development's TDMP website.

The Mission Rock District Transportation Coordinator will also establish partnerships between the residential, retail and commercial projects within the District to maximize the efficiency of shuttle, carpool and carshare programs. The growth of the Mission Rock District will also provide opportunities to coordinate with adjacent developments to expand shuttle, carpools and carshare services in a sustainable and cost effective manner.

TDMP Website

A website specific to the Mission Rock District will be created to provide project residents, employees and visitors with real time centralized information about their travel choices as well as the various aspects of the project TDMP. The website will be managed by the Transportation Coordinator and will be used for:

1. Dissemination of information about non-auto travel options.
2. Obtaining current information about transit operation conditions in the area (arrivals, departures, delays).
3. Registering for carshare services, as well as obtaining information about characteristics and locations of available vehicles.
4. Obtaining information about the bike sharing facilities and vehicle availability.

Car Sharing System

The Transportation Coordinator will work with local certified carsharing organizations to provide a network of carshare vehicles located in the District. Information about the types of carsharing vehicles available will be shown in real-time via the TDMP website, and short-term parking will be reserved for visiting carsharing vehicles at clearly defined locations. In addition, the car sharing system will include the following elements:

1. All carshare parking spaces will be clearly identified and directional signage

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will be provided, and real-time availability of carshare vehicles will be provided on the project's website supplementing the information on the carshare operators' websites.

2. Long-term agreements with carshare operators will be established to provide continuity and minimize program disruption.
3. The availability of carsharing information on the various carshare operators will be included in the TDMP website.
4. Free off-street parking spaces will be reserved for short-term inbound carshare vehicles.
5. Carsharing spaces will be provided at specific locations identified throughout the project.
6. Carsharing stations will include electric charging equipment in anticipation of future implementation of all-electric vehicle operation.

Reduction in Project's Parking Demand

The parking program proposed for the Mission Rock District is designed to minimize the need for parking on-site through pricing, limited supply, new technology, and effective monitoring measures, to be applied to the residential, commercial, and on-street parking areas. The proposed parking measures described in this section will be used to manage on-site parking and minimize unmet parking demand that could spill into the adjacent residential and commercial areas.

Residential Parking Program

Residential parking would be "unbundled" from the units, meaning each parking space would be leased separately from individual units. Residential parking rates would be set equivalent to fair market value. The masterplan design contemplates that one parking space will be provided for every unit. The residential parking program will include:

1. Parking spaces will be "unbundled" from the units, physically and legally:
 - a. Rental of residential units will not include a parking space; each space will be leased separately.
 - b. A portion of the residential parking spaces may be located in a different building than the unit.
2. Residential parking spaces will be leased at fair market value.
3. The total amount of off-street residential parking will not exceed one space per total number of units.
4. Off-street parking will not be designated for use by residential guests.

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Retail and Office Parking Programs

Retail and office parking will be built to standards reflecting the transit-oriented nature of the development. Parking will be designed to serve multiple users such that retail/ office spaces can be used to serve ballpark and event needs. All off-street parking will be paid parking set at fair market value. The commercial parking program will include the following elements:

1. A parking supply to be provided at a maximum of:
 - a. Two spaces per 1,000 square feet of retail space
 - b. One space per 1,000 square feet of office space
2. Except as noted, off-street parking will be paid parking. Parking rates will be set equivalent to fair market value.
3. Fee structure will reflect monetary and environmental costs of parking:
4. Additional fees will be charged to monthly parkers for parking on ballpark event days
5. All on-street spaces will be paid (metered) parking.
6. Parking spaces will be reserved for carpool/vanpool/canshare vehicles in appropriate areas.
7. Intelligent, low energy, multi-space parking meter technology will be installed that allow for implementation of a progressive parking rate structure and a variety of payment methods.

Ballpark Event Parking Program

Parking for game day and special events at the ballpark or Pier 48 will be coordinated by the parking structure manager and the Transportation Coordinator. There is no parking currently contemplated in the master plan for the exclusive use of the ballpark or event spaces.

The number of dedicated parking spaces provided in the immediate neighborhood surrounding the ballpark has been steadily declining since the ballpark's opening. More than 5,000 spaces were available on-site in 2000 when AT&T Park first opened. This amount has been reduced substantially with about 3,500 spaces currently provided at Lot A, C, D and Pier 48. With Lots C and D entitled for development, 2,200 surface spaces will be left for ballpark parking.

On game or special event days, parking facilities will be managed to so that the approximately 2,000 spaces planned on-site will be able to serve the ballpark requirements.

Management strategies for the on-site parking spaces on game and special event days will include:

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- Rate structure that provides disincentives to office and commercial parking.
- Design of parking facilities for standard as well as attendant-based operation.
- Implementation of extensive attendant-based parking that allows full use of parking facilities, including tandem and ramp parking.
- Special events on Pier 48 will be discouraged from occurring at the same time as an event at the ballpark.

The level of intensity of the parking management strategies will depend on the type of event (e.g. trade shows, conventions, meetings, and baseball games), its expected demand, the day (weekday vs. weekend) and starting and ending time (midday vs. evening) of the event. It is expected that these parking management strategies will meet the ballpark parking needs as is currently done, and will avoid impacts on adjacent residential and commercial areas.

Alternative Modes of Transportation

In addition to the program measures to reduce travel by single-occupant autos and to minimize the need for on-site parking, additional programs are also proposed to encourage travel by modes other than the private auto, which include:

- Implementation of additional new transit infrastructure and services.
- Enhancement of existing transit opportunities, including water transit.
- Implementation of a comprehensive bicycle program including capacity to integrate into the proposed City's bicycle share program.
- Establishment of a guaranteed ride home program.
- Enhancement of the pedestrian realm, sidewalks, and streetscapes to promote walking.

Additional Transit Infrastructure and Services

Additional transit services and infrastructure will be implemented by the Mission Rock District to supplement the existing services, including:

1. A transit center will be located on site near the Mission Rock streetcar station that will provide transit maps, schedules, fare, and other rider information. The center will also sell monthly passes and discount tickets, as appropriate, for Muni, BART, SanTrans, Golden Gate Transit, AC Transit, and Caltrain (plus other operators if requested).
2. We are exploring the viability of a fan-oriented free shuttle bus service that could be established between the ballpark and the existing and proposed nearby garages located beyond a reasonable walking distance to absorb excess parking demand during midday games. These could include existing facilities such as the Concourse garage at 650 Townsend and other neighboring facilities.

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Enhancement of Existing Transit Opportunities

Several programs will be created to take advantage of the existing transit services already located at or near the Mission Rock District, among them:

1. Residents and employees will be able to purchase a Muni monthly fastpass or similar discounted multi-ride tickets for other transit systems, such as BART, SanTrams, Golden Gate Transit, AC Transit ferry service, or Caltrain at an on-site central location managed by the Transportation Coordinator.
2. Employers will be encouraged to offer commuter checks to eligible employees.
3. Transit maps, schedules, on-line passes, real-time arrival information, and internet links will be provided on the TDMP website for all nearby transit operators.
4. Transit features and services (existing and proposed) will be advertised when leasing residential units.

Bicycle Program

The Mission Rock District will include a comprehensive bicycle program for residents, workers, and visitors:

1. Safe and secure bicycle parking will be provided within each commercial parking facility, residential garage, or within each residential building. Supplemental bicycle parking racks will be provided at key locations to serve recreational spaces within the project.
2. Off-site expansion of bicycle valet parking for ballpark events/bicycle valet parking for music venue events.
3. Showers and locker facilities will be provided within each new commercial building. The San Francisco Planning Code requirements will be the minimum facilities provided.
4. Access to Terry Francois Boulevard (Bike Route 5 and San Francisco Bay Trail) will be identified within the project by means of directional signage.
5. A bicycle map, highlighting all nearby bike routes and bicycle parking spaces within the project, will be included on the project's website and at the transit center.
6. Locations for future bicycle stations will be identified and developed for future implementation as part of the City's bicycle share program.

Transportation Planning Strategies Incorporated in Urban Design

In addition to the transportation demand measures directed at residents, visitors and employees of the Mission Rock District, the TDMP also contains multiple physical design elements that encourage the use of alternative modes of travel. These include encouragement of walking trips, small scale, fine grained city blocks, and traffic calmed,

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low speed streets.

1. Residential areas are designed with high densities to support transit.
2. All housing units and commercial/office uses are located within a five-minute walk of a rail transit stop.
3. All housing units and commercial/office uses are located within a two-minute walk of neighborhood-serving retail.
4. Sidewalks with comfortable pedestrian widths are provided on all streets and pedestrian walkways.
5. Sidewalk lighting for safe pedestrian circulation is provided.
6. Walking paths and sidewalks connect to San Francisco Bay Trail and Blue Greenway.
7. View corridors and vistas to the waterfront are provided.
8. No new multilane streets are included as part of the project.
9. Streets have pedestrian bulb-outs at crosswalks to minimize crossing distance.
10. Urban, pedestrian scaled development blocks.
11. All streets can be two-way and are designed for a travel speed of 25 mph or less.
12. All streets have been designed to respect and promote bicycle use.
13. Some off-street bicycle parking spaces will be sheltered.
14. Locations for future car and bike sharing stations will be identified and provided.

Integration of the Mission Rock TDMP with Nearby Programs

The TDMP for the Mission Rock District will be coordinated with and supplement other TDMP and services being offered by nearby developments in the area, such as Mission Bay and the University of California San Francisco.

Mission Bay Development Parking

The Mission Bay development plan has entitlements for a number of parking garage structures to be built in the area in support of the R&D, office, hotel and commercial uses to be provided. In addition, UCSF will provide parking in support of their Mission Bay campus and Medical Center uses.

Even though the Mission Bay development takes into account the mixed-use nature of the project and encourages the sharing of parking spaces among non-simultaneous peak uses (e.g., retail and hotel uses, or retail and hospital uses), it is likely that additional opportunities for shared parking may occur, particularly in the early stages of individual developments when the garage facilities might be built ahead of full occupancy of the project.

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To this end, the project sponsor will discuss with Mission Bay developers, and particularly with UCSF, coordination of parking with the Mission Rock District, including ballpark fans and event attendees, at their existing facilities such as the Third Street garage (740 spaces) and UCSF Community Center (530 spaces), as well as their planned garages on campus (1,200 spaces) and at the Medical Center (1,800 spaces).

Mission Bay Transportation Management Association (MBTMA)

The MBTMA formed several years ago, in conformance with mitigation measures identified in the Mission Bay redevelopment project's SEIR. The MBTMA is financed with annual fees collected from commercial and residential owners.

The MBTMA assists members in the residential areas of Mission Bay with identifying parking options within the immediate area, the use of a carsharing program, and provision of a discounted transit pass program. The MBTMA also assists commercial tenants and employees with rideshare and carpool matching programs, shuttle service to public transit and transit access guides distributed within their workplace. The MBTMA currently provides two shuttle route services (east and west) between Powell BART Station, Caltrain, and Mission Bay. While both routes operate along the Fourth St. / Fifth St. corridor north of Berry Street, the west route serves Seventh and Owens Streets, while the east route serves Third Street and Terry Francois Boulevard; the East route also serves the China Basin Landing buildings at 185 Berry Street. Each route operates at 15-minute intervals and is free of charge and open to all employees, residents, and visitors to Mission Bay and China Basin Landing.

The MBTMA also carries out outreach campaigns to residents to promote Muni and Caltrain connections, with a target on solo drivers who work within 10 miles of Mission Bay, by use of a "trial" transit pass. In the future the MBTMA will be looking into establishing casual carpools at specific locations within Mission Bay. The MBTMA regularly surveys Mission Bay employees to coordinate with RIDES for zip code maps and act as a liaison with property managers and business managers to promote the ongoing services.

University of California San Francisco (UCSF)

UCSF has an aggressive TDMP in place that encourages employees and visitors to use modes other than single-occupancy vehicles to travel to UCSF sites. Monthly transit passes are sold at a variety of UCSF locations and UCSF is active in facilitating ridesharing use including carpools, vanpools and club buses. In addition, UCSF operates a system of shuttle buses between campus sites to reduce inter-site trips in single-occupancy vehicles.

- Carpool Program. UCSF provides an in-house carpool rider-matching service and cooperates with the regional RIDES program which provides matching lists for

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potential carpools based on commute times of people who live and work nearby one another. In addition, UCSF's Poolcar Commuter Program provides UCSF cars to groups of three or more riders who commute from close proximity to UCSF. Fares are calculated to offset projected operating costs of the cars used as commute vehicles.

- Vanpool Program. A vanpool is organized when ten individuals are identified who live in the same general area and have similar work schedules. A principal driver and one or more co-drivers are designated for each vanpool. The UCSF Vanpool program is a self-supporting operation, and fares are based on the total amount of fixed costs plus a mileage fee.
- Shuttle Bus Program. UCSF provides free shuttle bus services to transport UCSF faculty, staff, students, patients and visitors between primary campus sites and some secondary campus locations. The shuttle system is primarily designed to facilitate work-related travel between UCSF locations and reduce single-occupancy inter-campus trips during the day, but it also offers linkages to major transit service providers such as BART and Caltrain. The buses operate on a regular schedule Monday through Friday approximately between 7 a.m. and 8 p.m. throughout the year, excluding campus holidays. Some shuttles pick up after hours and on weekends. UCSF's Green shuttle bus service connects the Mission Bay Campus, with a stop near Fourth and Sixteenth Streets, with the China Basin Landing buildings and the Caltrain Depot between 6:30 a.m. and 7 p.m., approximately every 15 minutes. The Red shuttle bus connects the Mission Bay campus with the 16th Street BART Station between 6 a.m. and 8 p.m., approximately every 15 minutes.

Monitoring of the TDMP

The Mission Rock District TDMP will be in operation in the early phases of development and specific implementation of the measures and services will be developed as the definition of the project is further refined. In order for the TDMP to be successful, it will need to include implementation targets and monitoring the performance of its measures will be required. Thus the monitoring of the TDMP to establish performance against objective becomes a key component of its successful implementation. The monitoring of the effectiveness of the different measures included in the TDMP for the Mission Rock District will be based on the following three elements:

- Performance targets
- Monitoring
- Revision mechanisms

Set Performance Targets

Standardized performance targets for the TDMP will be established once the project is fully defined. Performance targets are typically defined in the form of mode share, number of single-occupant vehicles, number of registered carpools or carshare users,

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parking demand, etc. These targets can be established for the average day or for the commute period only, and are typically adjusted according to the size of the project during each development phase. Specific performance targets cannot be established at this time. As an example, tentative goals have been estimated for the reduction in vehicle trips attracted or generated by the Mission Rock District based on the current project definition and best practices similar to the proposed TDMP. The goals are summarized below by major category.

Transportation management ~ 2% to 5% reduction

- Transportation Coordinator
- Individualized Travel Planning
- Online carshare service
- TDMP Website

Better transit options ~ 5% to 10% reduction

- Extension of E-Embarcadero line streetcar from Fisherman's Wharf to Mission Bay area
- Central Subway extended to Chinatown
- Transit Enhancement Project
- Transit Stops Improvements
- Improved waiting areas
- Better pedestrian access to stops

Improved Walking ~ 1% to 3% reduction

- Improved signage and more direct paths to destinations
- Low vehicular speeds on site
- Enhanced lighting and security
- ADA compliance
- Active building frontages

Improved Bicycling ~ 1% to 3% reduction

- New bicycle links
- On-site valet bicycle parking
- Added bicycle parking
- Bicycle share program

The overall goal in reducing the number of vehicle trips attracted or generated by the Mission Rock District that could be expected by the combined implementation of all of the above measures would be from 10 to 20 percent.

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Perform Regular Monitoring

The Mission Rock District TDM program will be monitored regularly against the targets to establish trends, identify modal shifts and determine success of the measures. The monitoring of the TDM Program will be done by means of:

- Conducting surveys of residents, employers and employees on an annual basis to document their awareness of the options to use transit, assess their opinions on other actions that could be taken to improve the program, identify their typical means of travel, and gather any relevant demographic characteristics.
- Collecting traffic and parking data, such as traffic counts, parking demand, etc. on a daily and peak commute period basis twice a year.
- Monitoring the use the TDMP website on a monthly basis.
- Developing a customer feedback database to track comments, complaints, and compliments via the TDMP website on a weekly basis.
- Tracking the number of residents, employers and employees who are registered as carshare members through the TDMP website on a monthly basis.
- Collecting bicycle utilization data by means of bicyclist counts and bicycle parking utilization counts twice a year.
- Monitoring of special or large events on-site twice a year to identify potential opportunities for applying TDMP measures or other mechanisms that would encourage the use of non-auto modes.

Establish Revision Mechanisms

It is expected that the TDMP will have to be modified as the Mission Rock District grows and matures through time in order to better adapt to the changing transportation conditions while still meeting the objectives of the program. These modifications will take the form of revisions of the standards, changes to the original procedures, extensions or reductions of their period of operation, and development of additional program measures. These revisions will be made taking into account the following elements:

- Key objectives of the TDMP.
- Best TDMP practices at the time.
- Travel trends resulting from the regular monitoring efforts.
- Customer feedback.

Conclusion

The guidelines established in the above TDMP will allow Mission Rock to become a transit oriented, walkable neighborhood and will encourage exploration of various transportation modes. As sustainable transportation evolves, the TDMP will do so as well, continuing to provide solutions for residents, workers, and visitors to the Mission Rock site.