

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 | Atelier 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

March 2012

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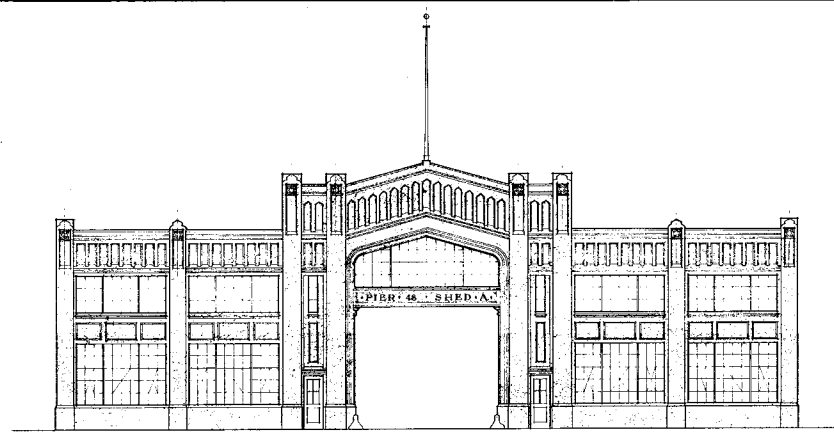
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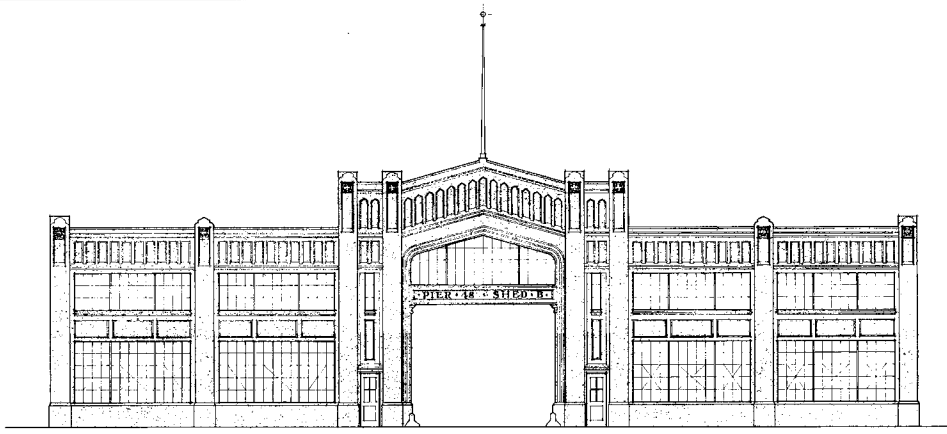
EXECUTIVE SUMMARY



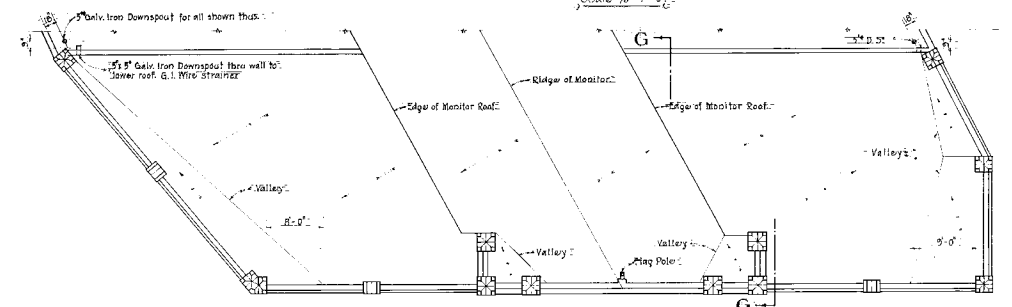
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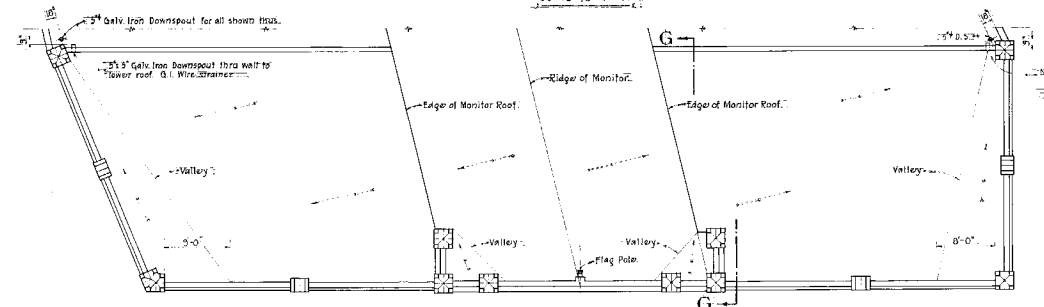
ELEVATION OF NORTH SHED FRONT



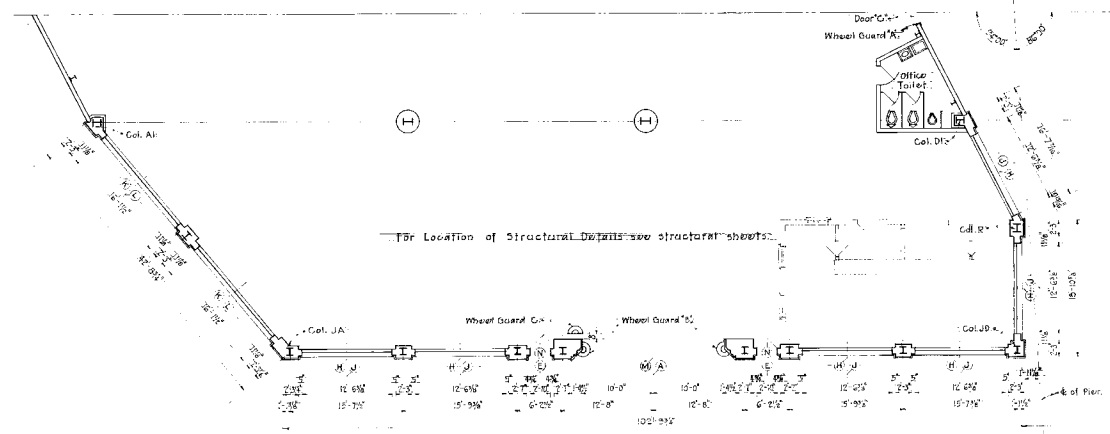
ELEVATION OF SOUTH SHED FRONT



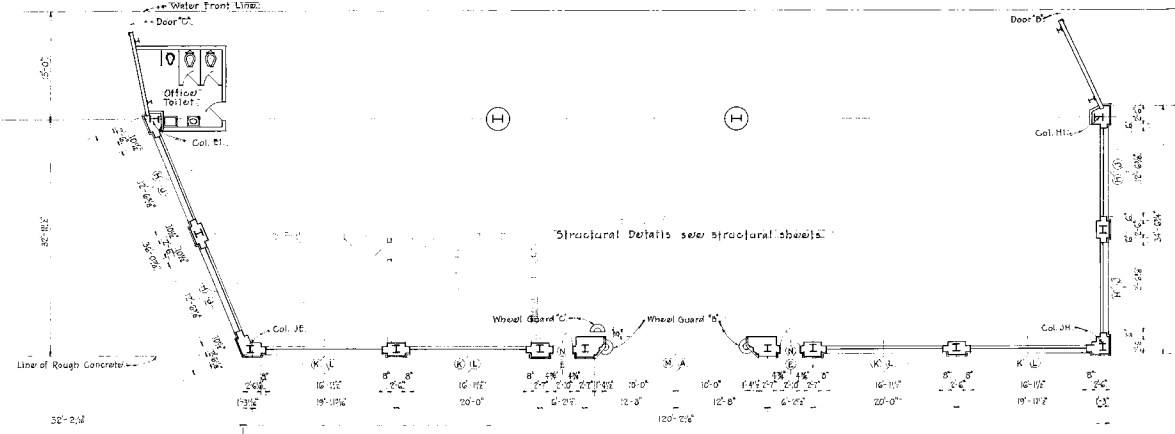
ROOF PLAN OF NORTH SHED FRONT



ROOF PLAN OF SOUTH SHED FRONT



PLAN OF FRONT OF NORTH SHED



PLAN OF FRONT OF SOUTH SHED

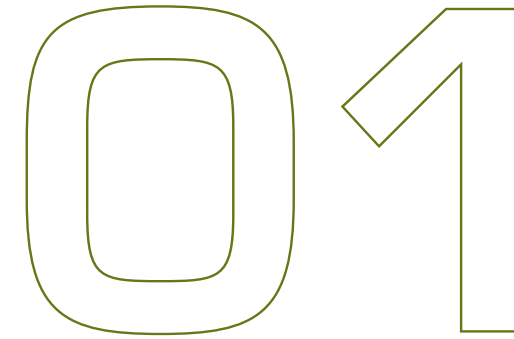
DOOR SCHEDULE		
Marked	Size of Opening	Remarks
A	10'-11" x 17'-5 1/2"	Steel Rolling Door
B	10'-0" x 15'-0"	"
C	10'-0" x 10'-0"	"
D	10'-0" x 10'-0"	"
E	10'-0" x 7'-0"	Metal Covered Door & Trame (Door 2" Thick)
F	10'-0" x 8'-0"	5 Panel Wooden Door
G	10'-0" x 8'-0"	Partially Open Door

WINDOW SCHEDULE				
Marked	Size of Opening	Type	Kind of Glass	Remarks
H	12'-0 1/2" x 5'-2"		24 Oz Clear Glass	Removable Van/Flair Steel Sash, 14" x 20" Glass
J	10'-0 1/2" x 6'-0 1/2"		"	"
K	10'-0 1/2" x 5'-0 1/2"		"	"
L	10'-11" x 6'-0 1/2"		"	"
M	10'-11" x 6'-10 1/2"		Hammered Wire	Special Steel Sash, 14" x 20" Glass

WINDOW SCHEDULE				
Marked	Size of Opening	Type	Kind of Glass	Remarks
N	1'-3 1/2" x 5'-0"		Hammered Wire	Steel Sash, 14" x 20" Glass
O	5'-2 1/2" x 3'-10 1/2"		"	Steel Sash, 12" x 18" Glass
P	5'-2 1/2" x 3'-10 1/2"		"	Horizontally Pivoted Steel Sash, 12" x 18" Glass
Q	Sash Dimension 4'-0"		"	Over Ventilator Sash for each Pipe Toilet
			"	Continuous Monitor Steel Sash, 1'-10 1/2" x 5'-0 1/2" Glass

RESPECTFULLY SUBMITTED:
Frank H. White
 CHIEF ENGINEER
 APPROVED: March 22, 1929
R. G. W. [Signature]
Paul [Signature]
 COMMISSIONERS

PORT OF SAN FRANCISCO
 STATE HARBOR COMMISSIONERS
 DEPARTMENT OF ENGINEERING
PLANS FOR SHEDS ON PIER NO. 48
 IN CHARGE OF DESIGN: [Signature] DATE: MAR. 12, 1929
 MADE BY: [Signature] SCALE: Indicated
 CHECKED BY: [Signature] DRAWING NO: 4781-7
 SHEET NO: 1 OF 10



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.

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



CONTEXT

02



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.



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.

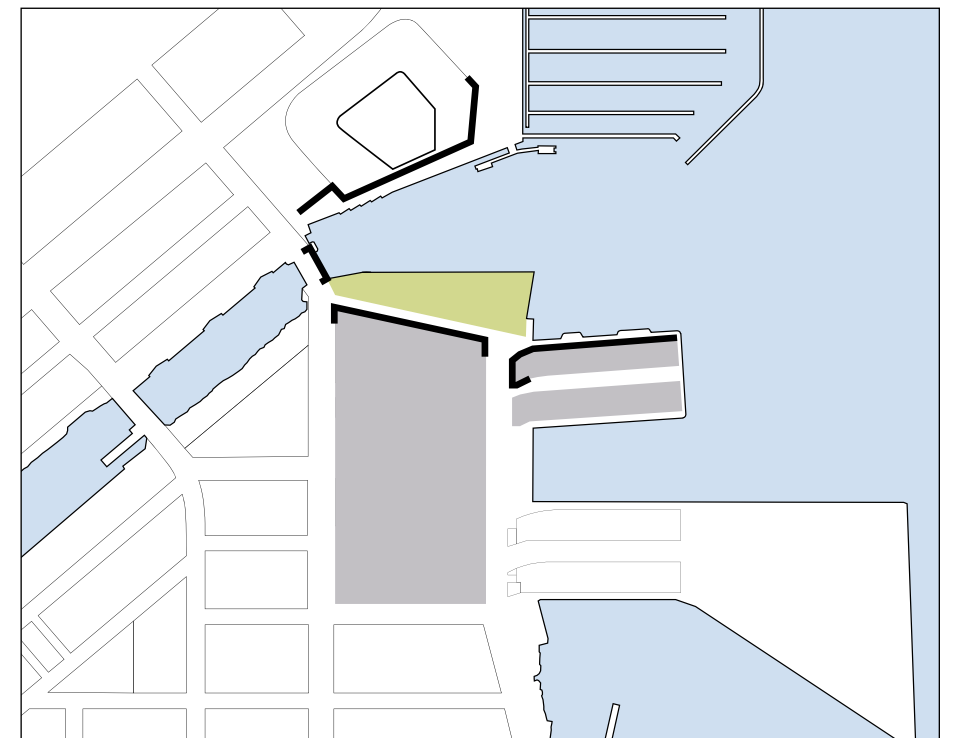
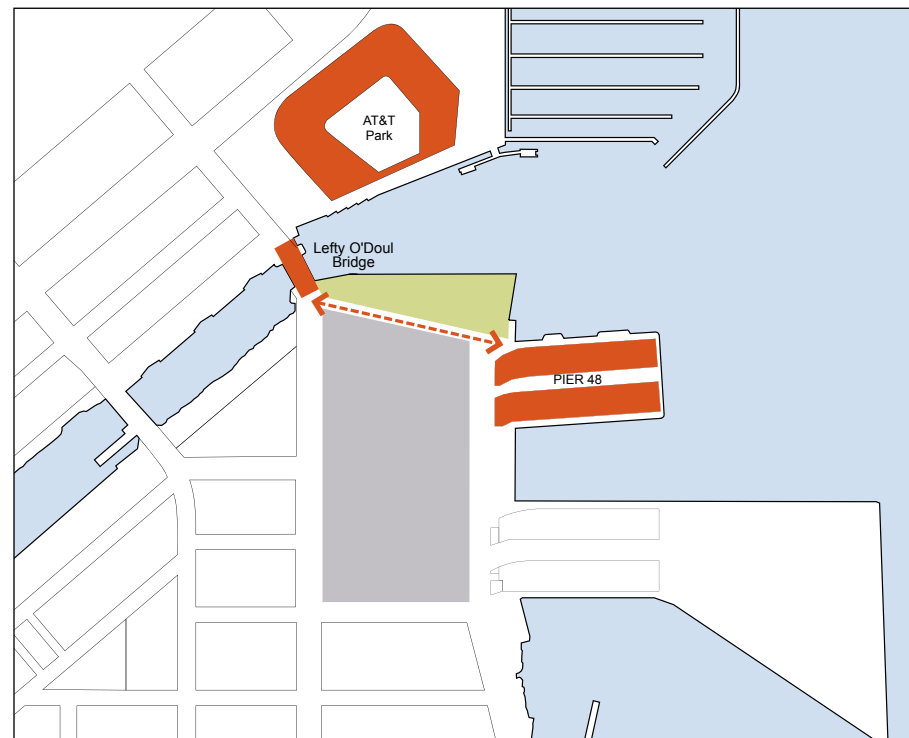
The variety of uses from offices and bio-tech space, to apartments and ground floor retail will build on the mixed-use program in neighboring SOMA and Mission Bay, and will reflect the urban nature of this centrally located San Francisco neighborhood.

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.

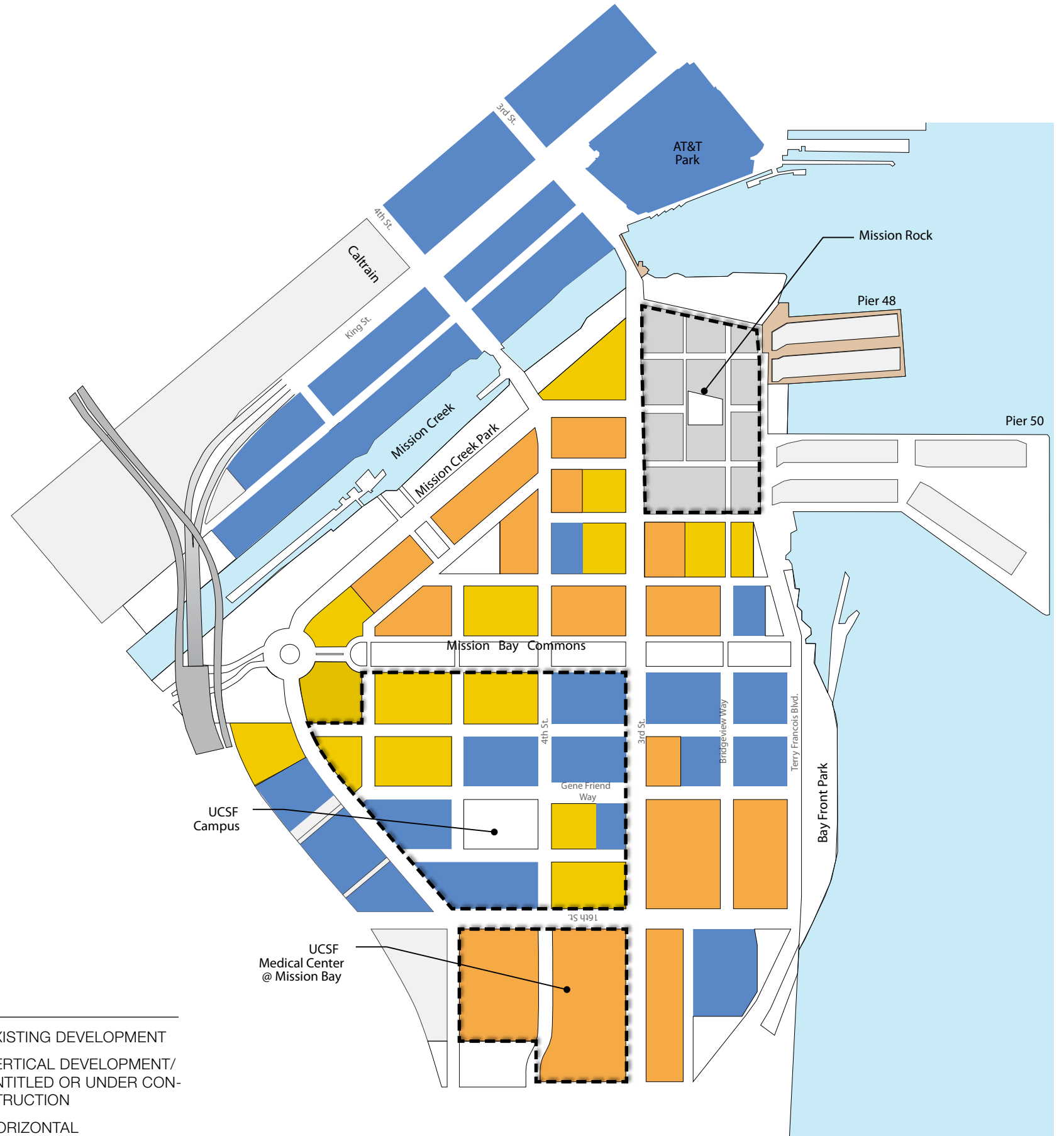


CONTEXT:

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.



LEGEND

- EXISTING DEVELOPMENT
- VERTICAL DEVELOPMENT/ ENTITLED OR UNDER CONSTRUCTION
- HORIZONTAL DEVELOPMENT ENTITLED
















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.



LEGEND

-  PEDESTRIAN STREET / PLAZAS
-  PARKS / OPEN SPACE
-  STRUCTURED PARKING
-  BLUE GREENWAY / WATERFRONT TRAIL
-  OPEN SPACE CONNECTIONS
-  PEDESTRIAN CONNECTIONS
-  MUNI PATH
-  MUNI STOP LOCATION
-  McCovey Cove
Mission Rock Park
-  Channel Plaza (proposed)
-  Mission Rock Square
-  Pier 52 Boat Launch
-  Bay Front Park
-  Aqua Vista Park
-  Kayak Launch















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.



LEGEND

- | | | | |
|---|------------------------------|---|--------------------------------|
|  | EXISTING & PROPOSED RETAIL |  | MUNI STOP LOCATION |
|  | PEDESTRIAN STREET / PLAZAS |  | McCovey Cove Mission Rock Park |
|  | PROPOSED COMMUNITY BUILDINGS |  | Channel Plaza (proposed) |
|  | PARKS / OPEN SPACE |  | Mission Rock Square |
| | |  | Pier 52 Boat Launch |
| | |  | Bay Front Park |
| | |  | Aqua Vista Park |
| | |  | Kayak Launch |







LAND USE

03



CARNIVAL SPLENDOR

CARNIVAL SPLENDOR

A23

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.

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

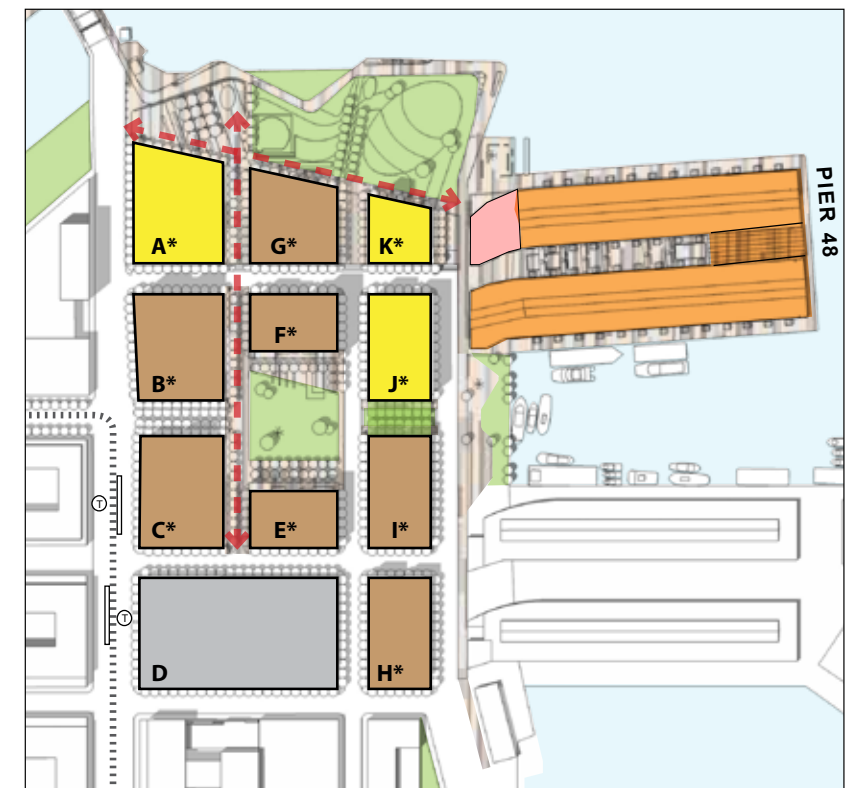
- RESIDENTIAL
- COMMERCIAL / OFFICE
- RETAIL
- EVENT / EXHIBIT / BANQUET / PARKING
- PARKING STRUCTURE
- OPEN SPACE
- PLAZA & SHARED PUBLIC
- MUNI
- MUNI STREET CAR STOPS
- FLEXIBLE BLOCKS



Option A. 1.7 m sf Office, 650 Residential Units



Option B. 1.3 m sf Office, 1000 Residential Units



Option C. 1.7 m sf Office, 650 Residential Units

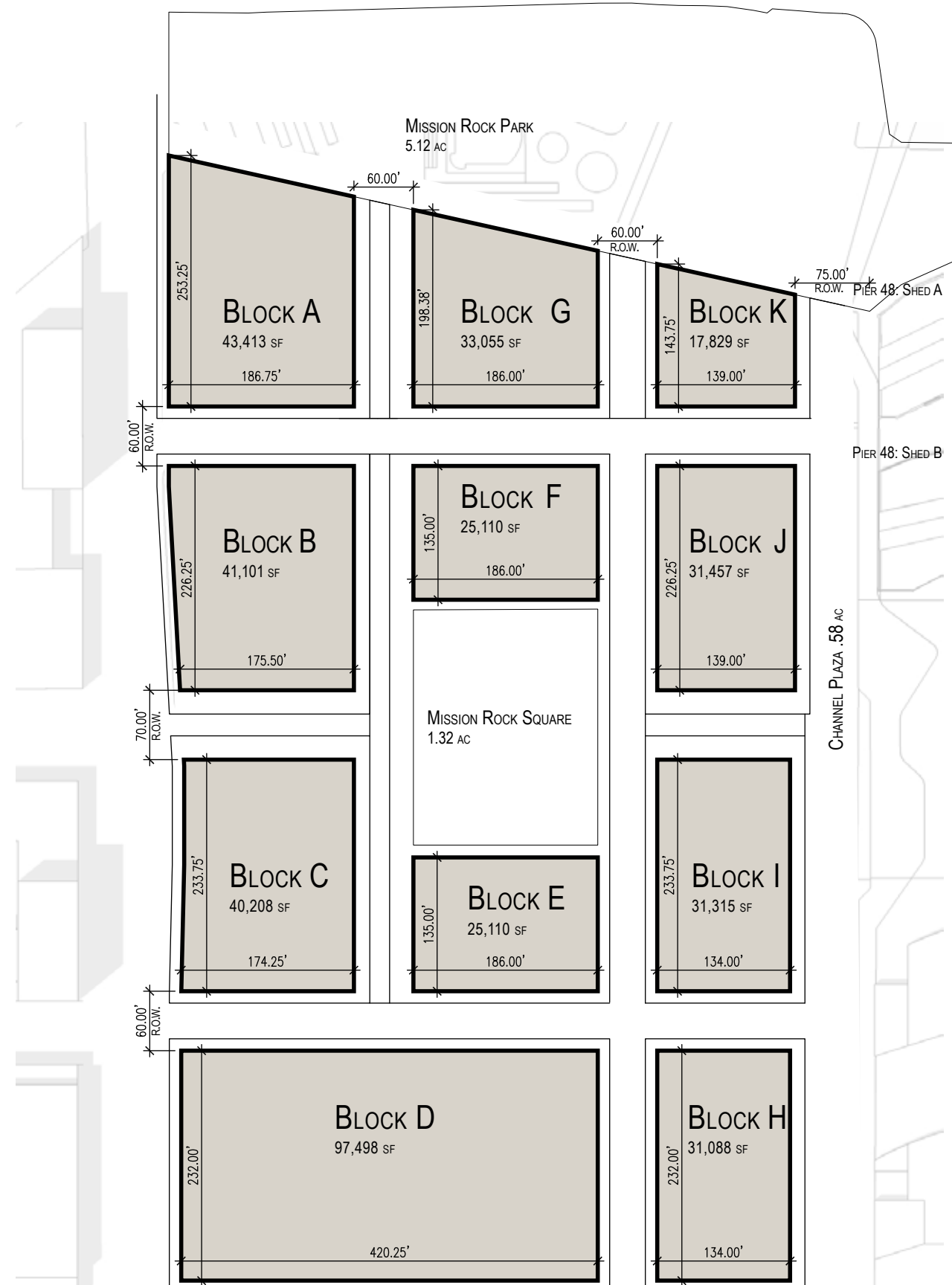
PARCEL PLAN

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. TFB)	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.





A photograph of an urban waterfront area. In the foreground, there are curved concrete steps leading down to a grassy area. To the right, a bronze statue of a person in motion stands on a stone pedestal with an inscription. In the background, there is a body of water, a large industrial structure (possibly a bridge or pier), and several multi-story buildings under a clear blue sky.

URBAN DESIGN APPROACH

04



NO BLINK



ACT



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

DESIGN CONCEPTS & STRATEGIES

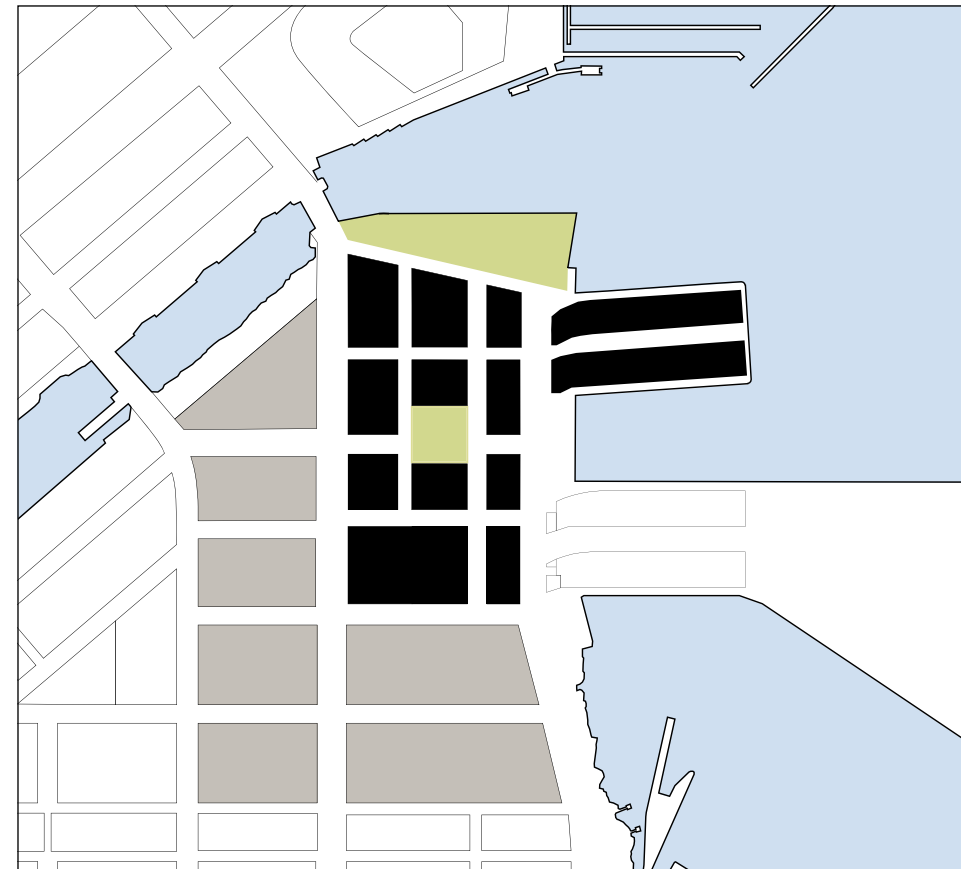
FROM THE FERRY BUILDING TO THE BALLPARK, THE BAY SHORELINE HAS WELCOMED A STRING OF NEW PUBLIC AMENITIES. OUR VISION FOR SEAWALL LOT 337 EXTENDS THAT PUBLIC REALM SOUTH, PAST CHINA BASIN AND ACROSS THE LEFTY O'DOUL BRIDGE TO MISSION ROCK, SAN FRANCISCO'S NEWEST NEIGHBORHOOD

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.

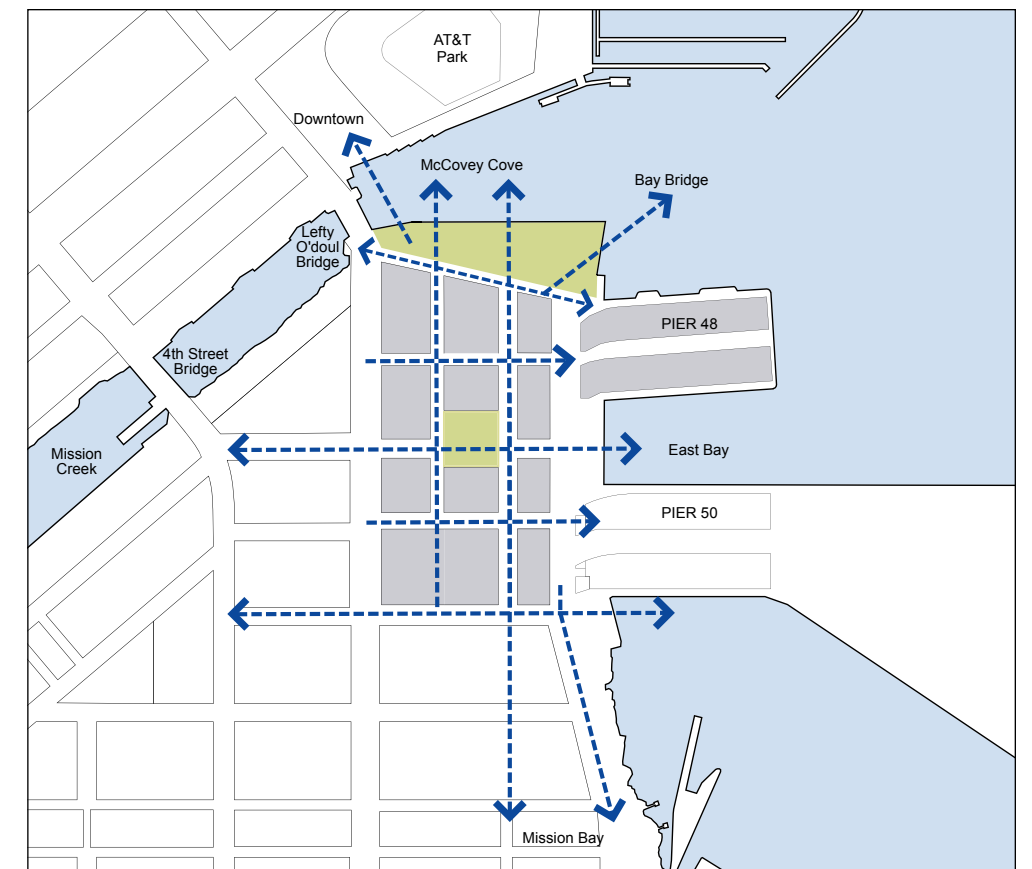


ORIENTATION & LANDMARKS

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.

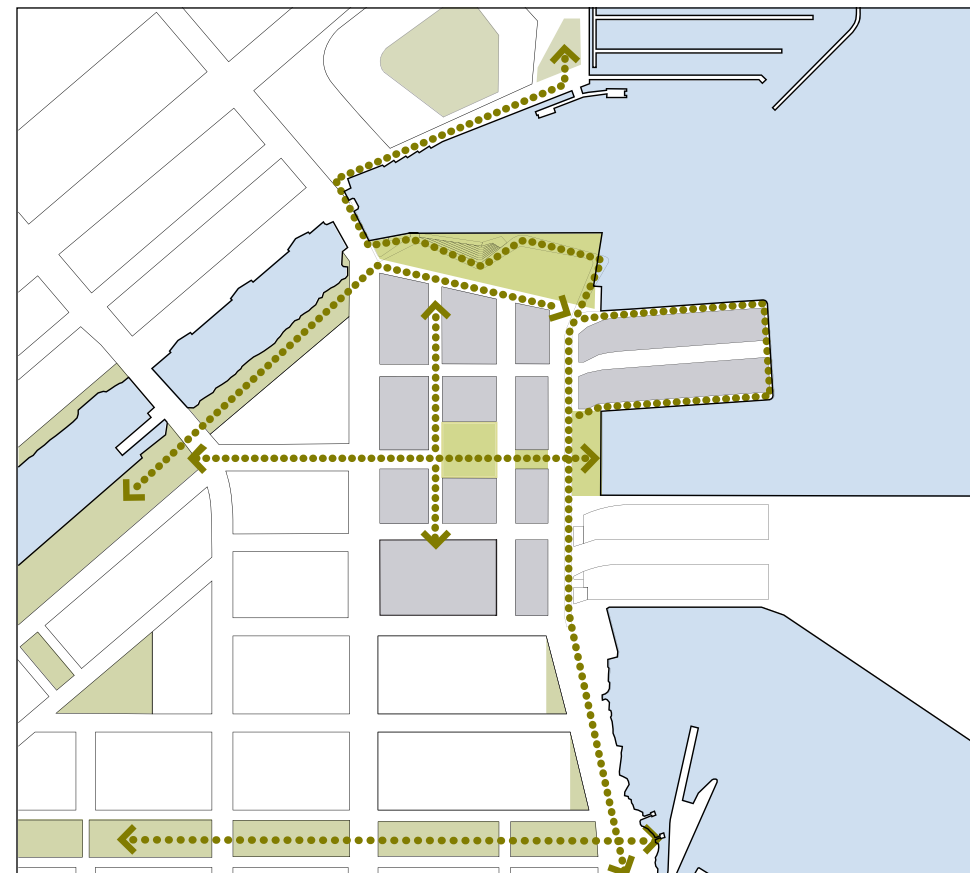
The water's edge is treated as a dynamic promenade specifically responding to and interacting with direct views toward landmarks such as the Bay Bridge, the Oakland container cranes, the ballpark, the downtown skyline, and the Lefty O'Doul Bridge. The promenade is then linked into the Pier 48 apron where 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.



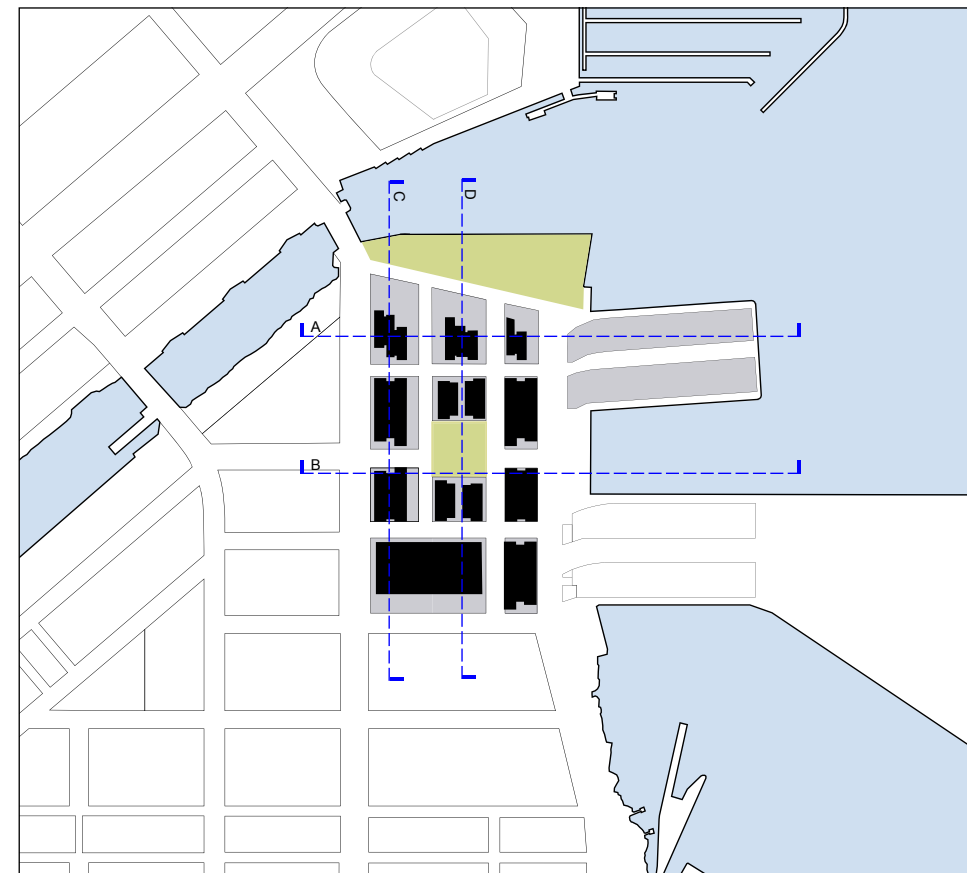
NETWORK

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

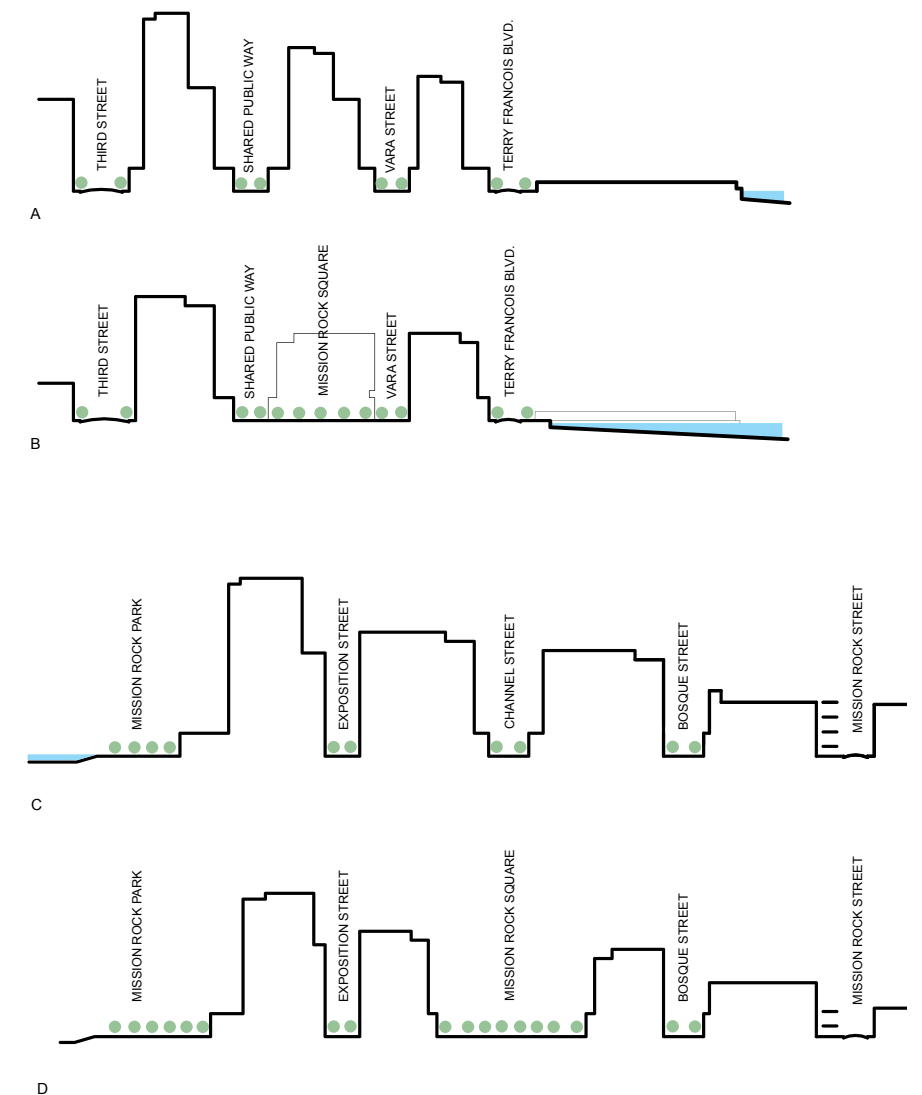
The varied urban form of the Mission Rock neighborhood – composed of towers and mid-rise buildings, a mix of retail, housing, offices, civic uses, vibrant ground-floor spaces, and visually identifiable green features – will define the relationship among the public, semi-public, and private realms. The 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.

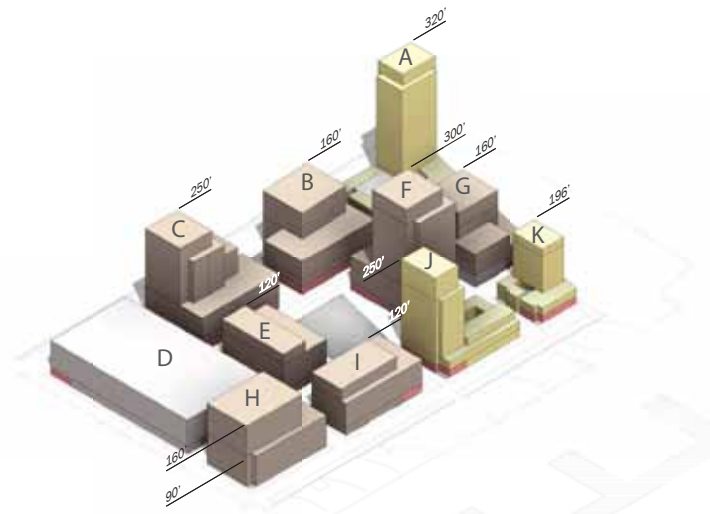
As the gateway to Mission Rock and Mission Bay, the northern edge of Mission Rock Park will be defined by a series of buildings stepping down in height from the west towards the water’s edge at the east. From there, the general development profile will reflect this stepping to the water whereby building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



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.

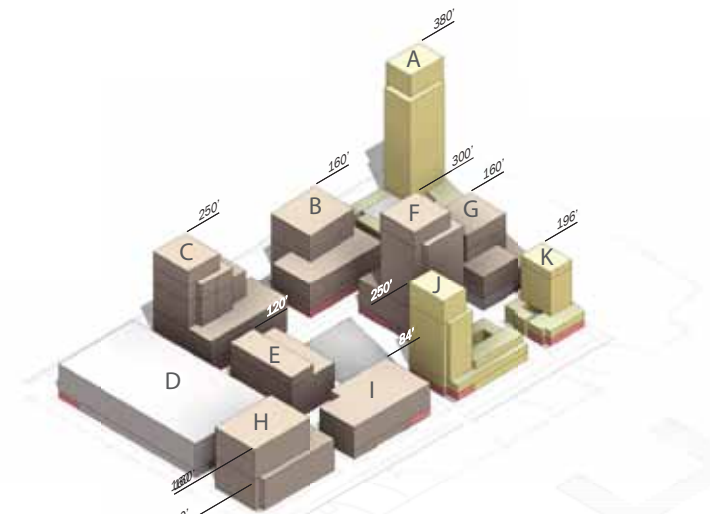
Consistent with the flexible zoning approach outlined in the Land Use section, the proposed height ranges reflect various building uses. In order to create a vibrant and economically sustainable neighborhood across the 1,215,571 square foot site, a minimum total density of 3,500,000 built square feet 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.



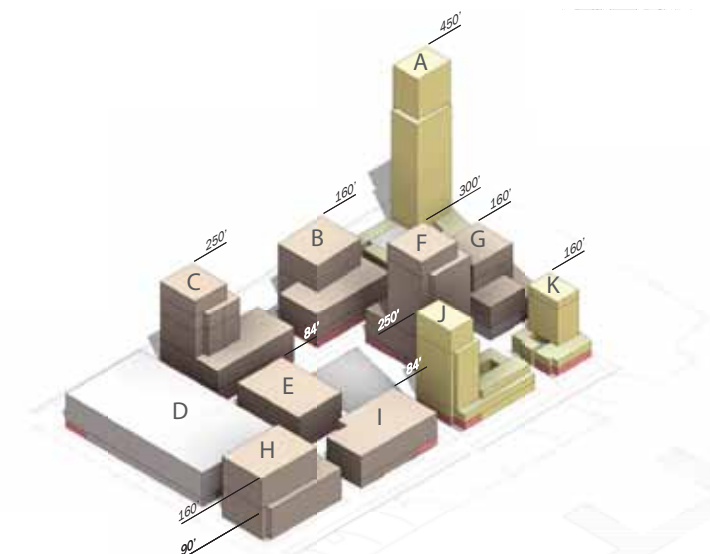
View of Option A massing in urban context, as seen from Potrero Hill



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



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



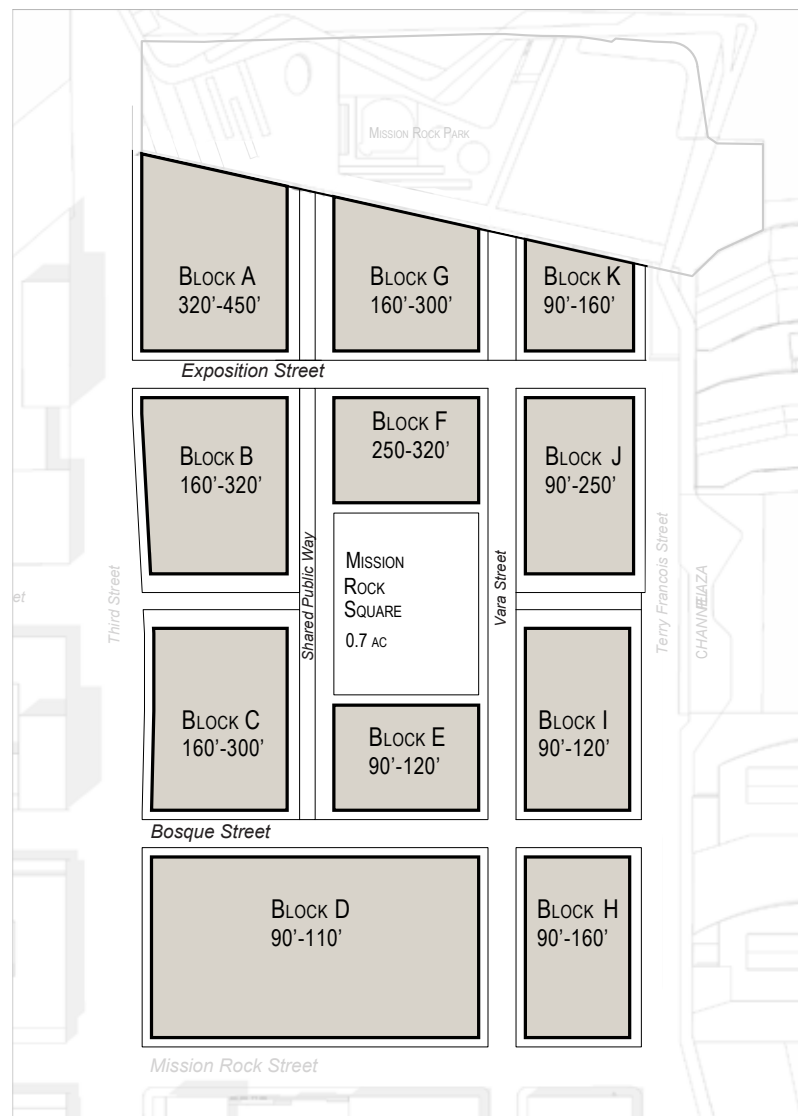
Option C: Third option for land use program site footprint.



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.

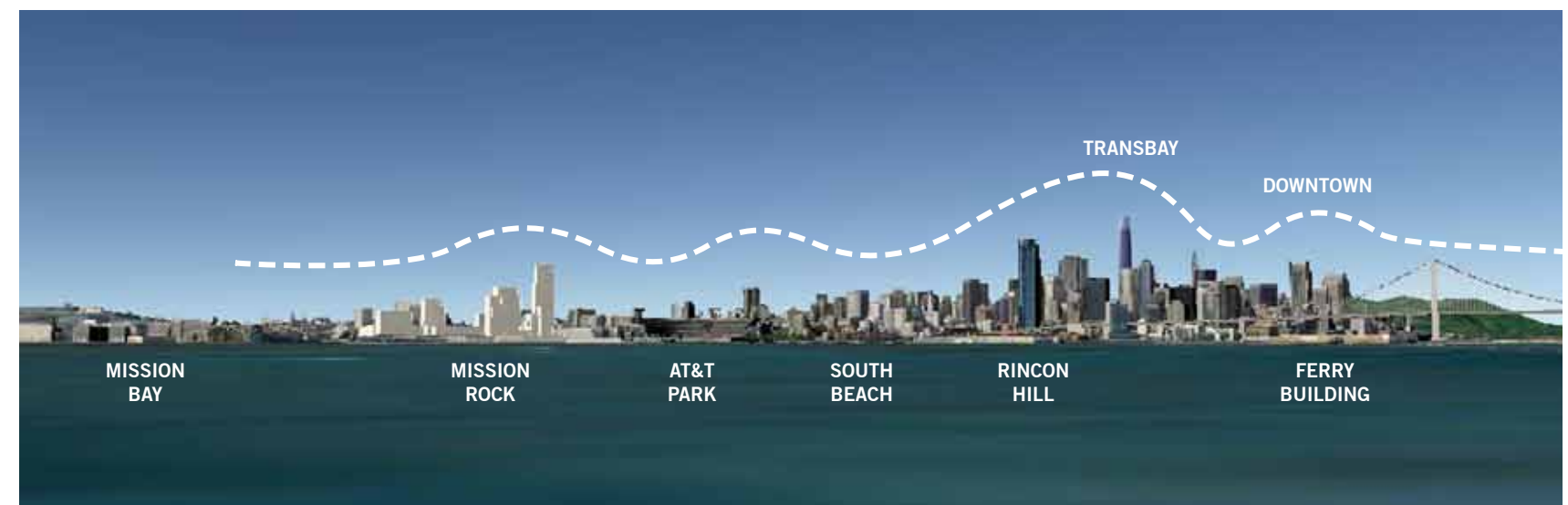
CONTRIBUTION TO URBAN FORM:

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 axes dominates, reinforcing the site's historical form and providing for sunny north-south streets, and light-filled public spaces. With street width's 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.



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

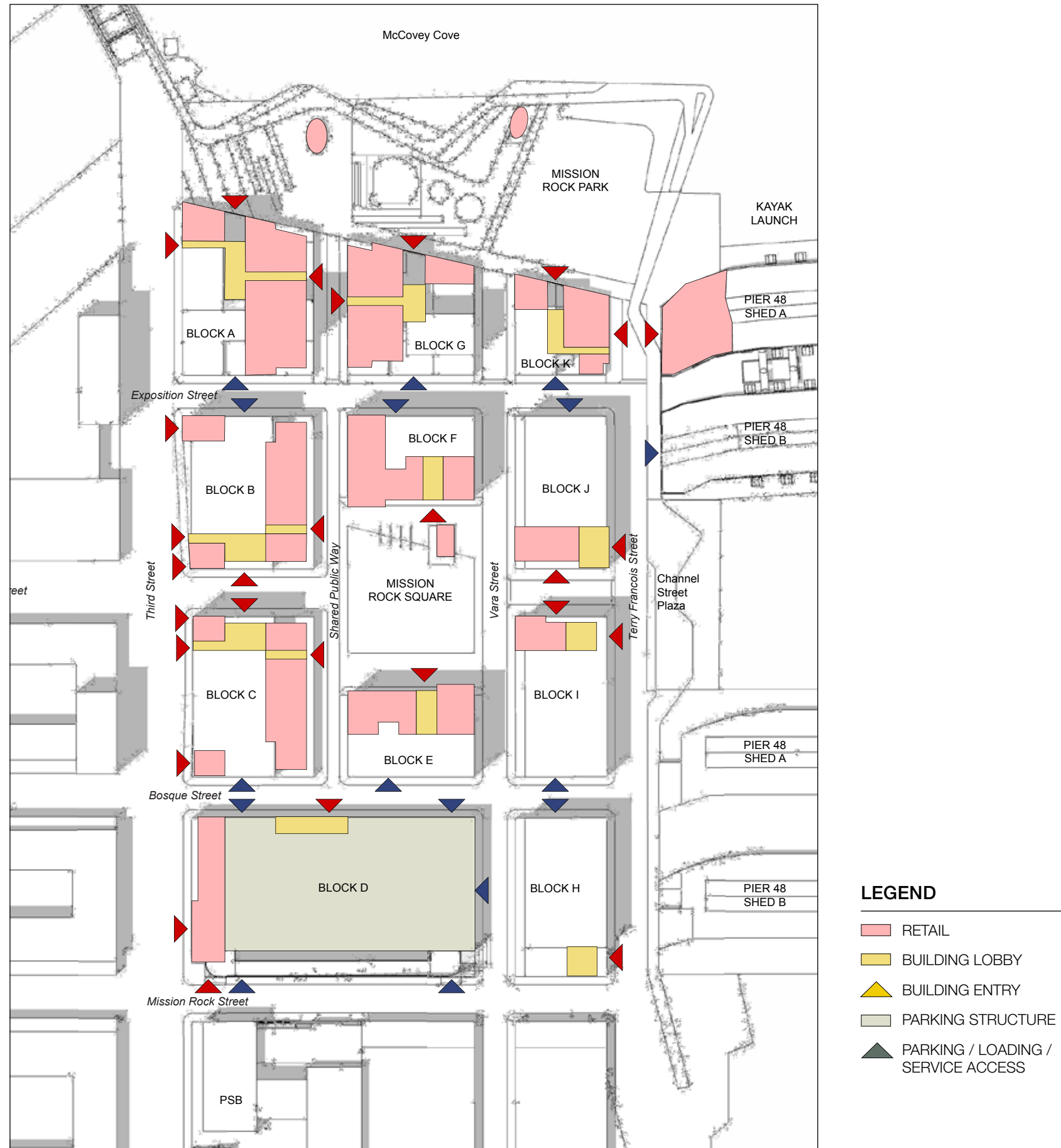
Office space will be located along the western, eastern and southern boundaries of the site, lining at least three sides of Mission Rock Square. It is anticipated that many of the office users would be innovative bio-tech or high-tech firms, capitalizing on the energy and creativity of the adjacent UCSF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

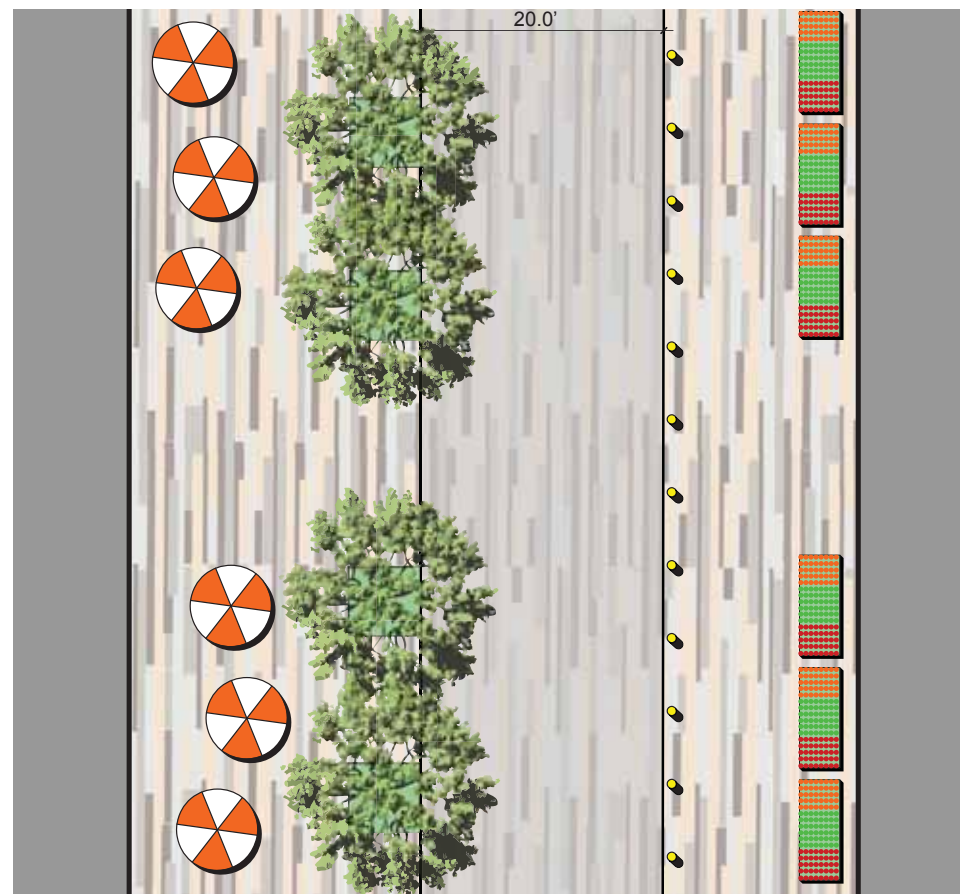
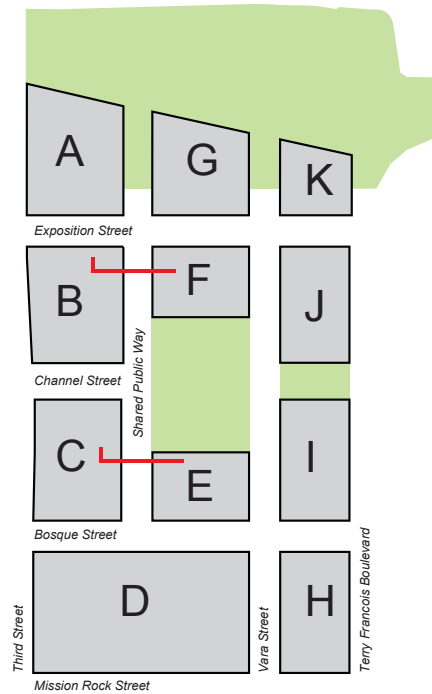
Given its development program and the need for ballpark parking resources, Mission Rock will have a responsible number of parking spaces. Several of the blocks will contain in-building parking, designed where feasible to minimize its aesthetic impact on the surrounding neighborhood streets and public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

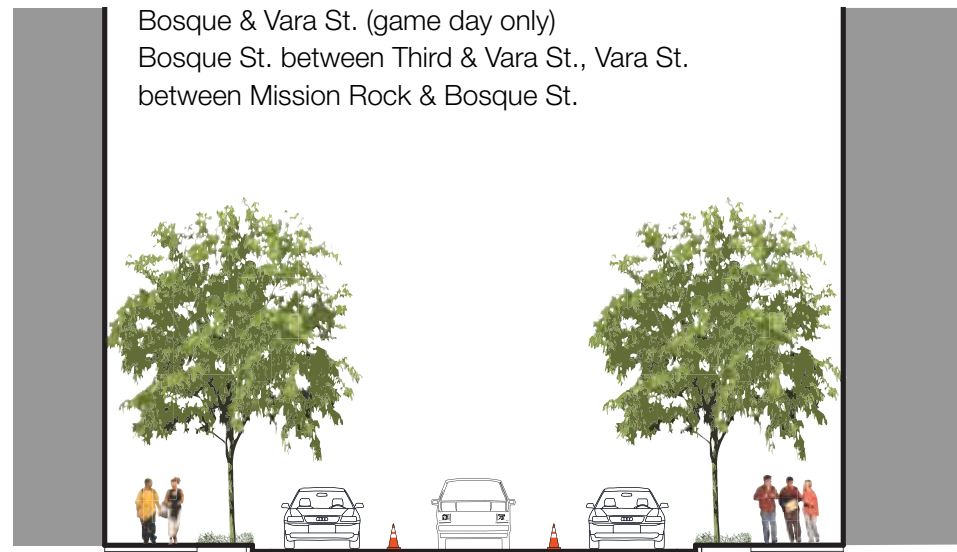


NEIGHBORHOOD STREETS

Exposition, Vara & Bosque St. (non-game day)

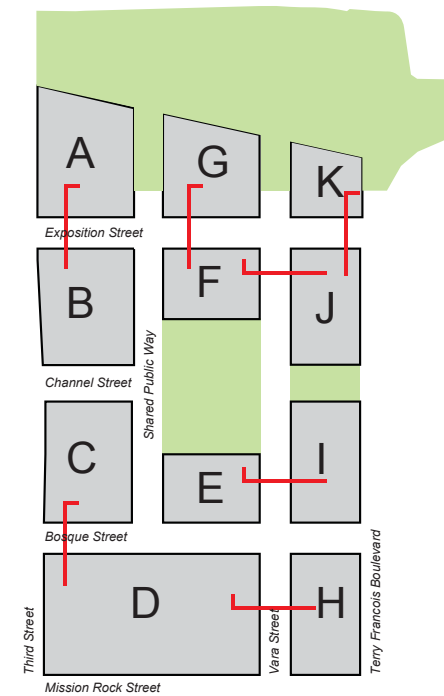
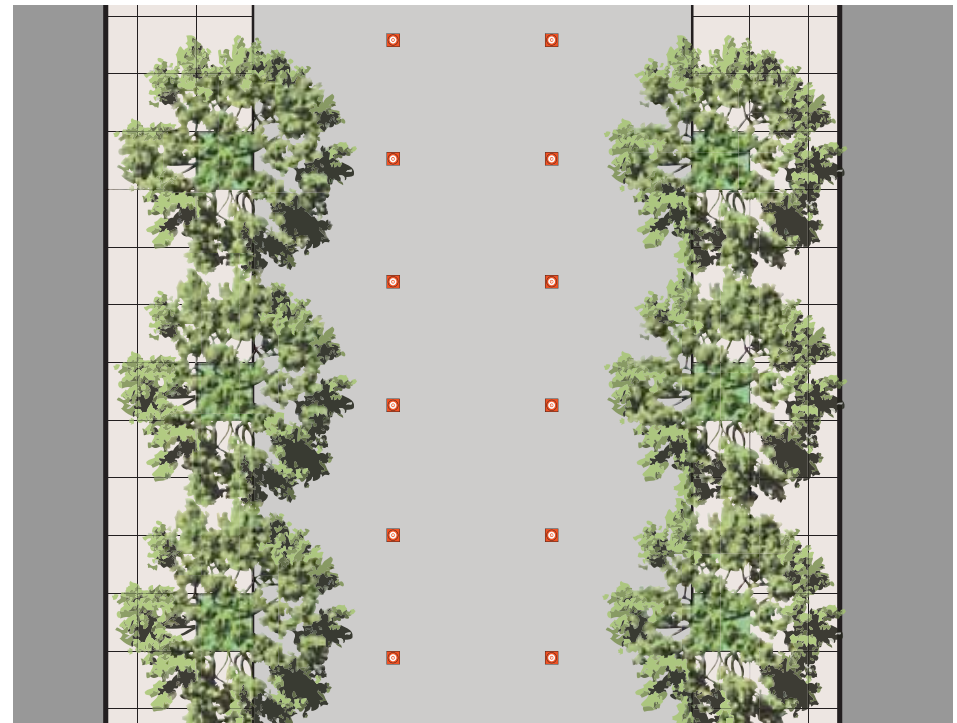
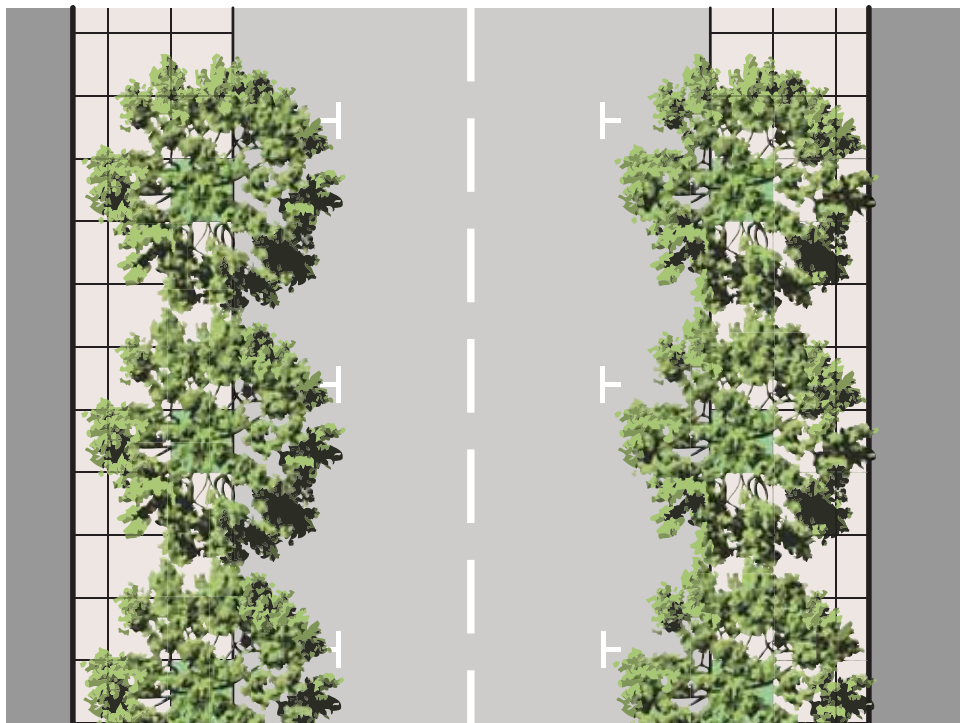


Bosque & Vara St. (game day only)
Bosque St. between Third & Vara St., Vara St. between Mission Rock & Bosque St.



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.



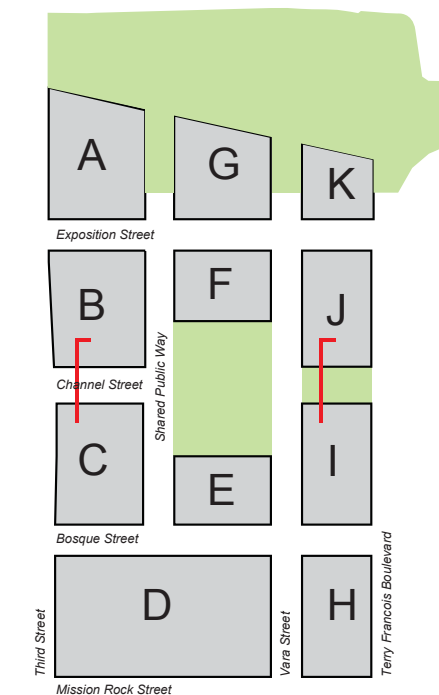
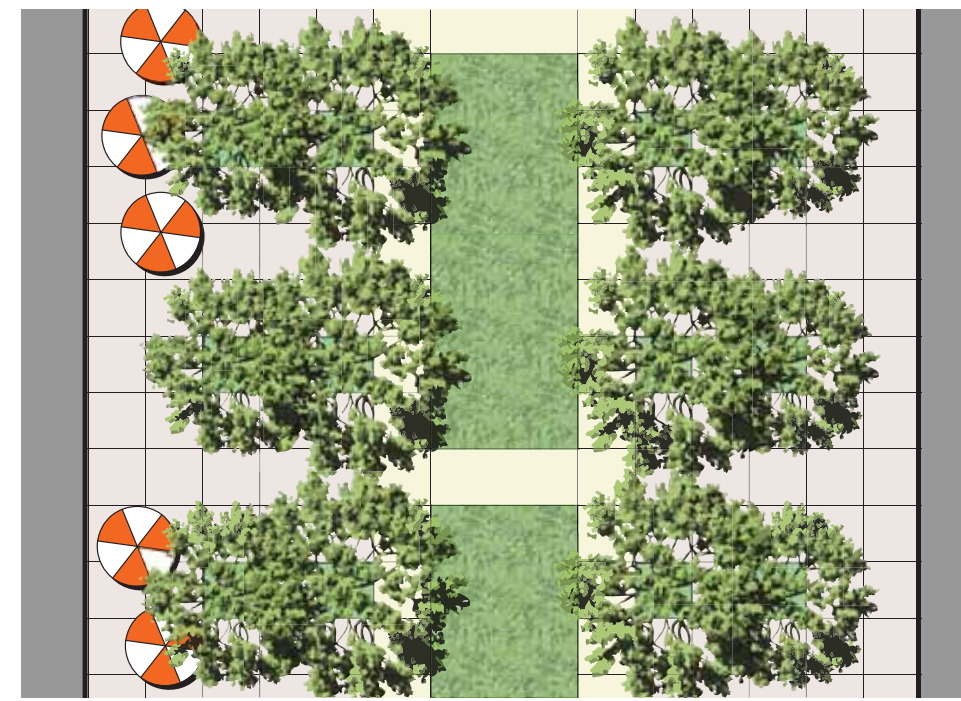
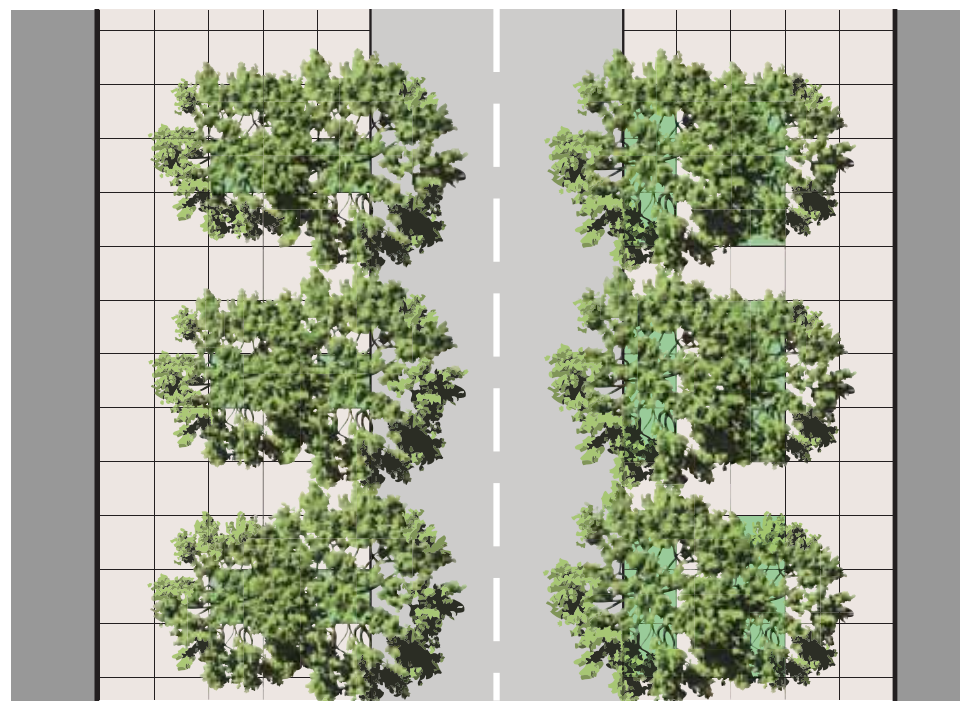
CHANNEL STREET

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.

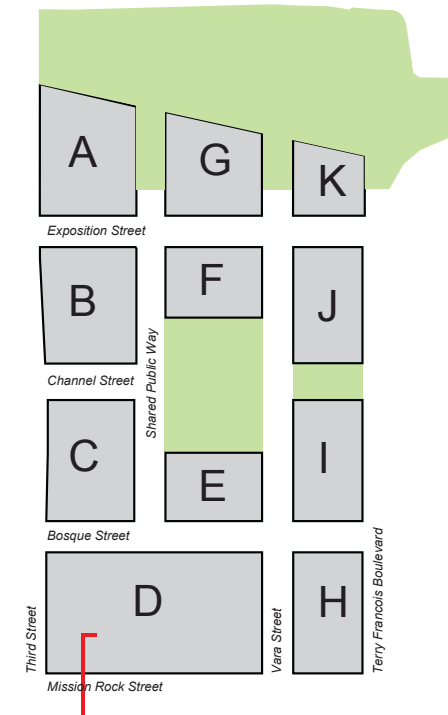
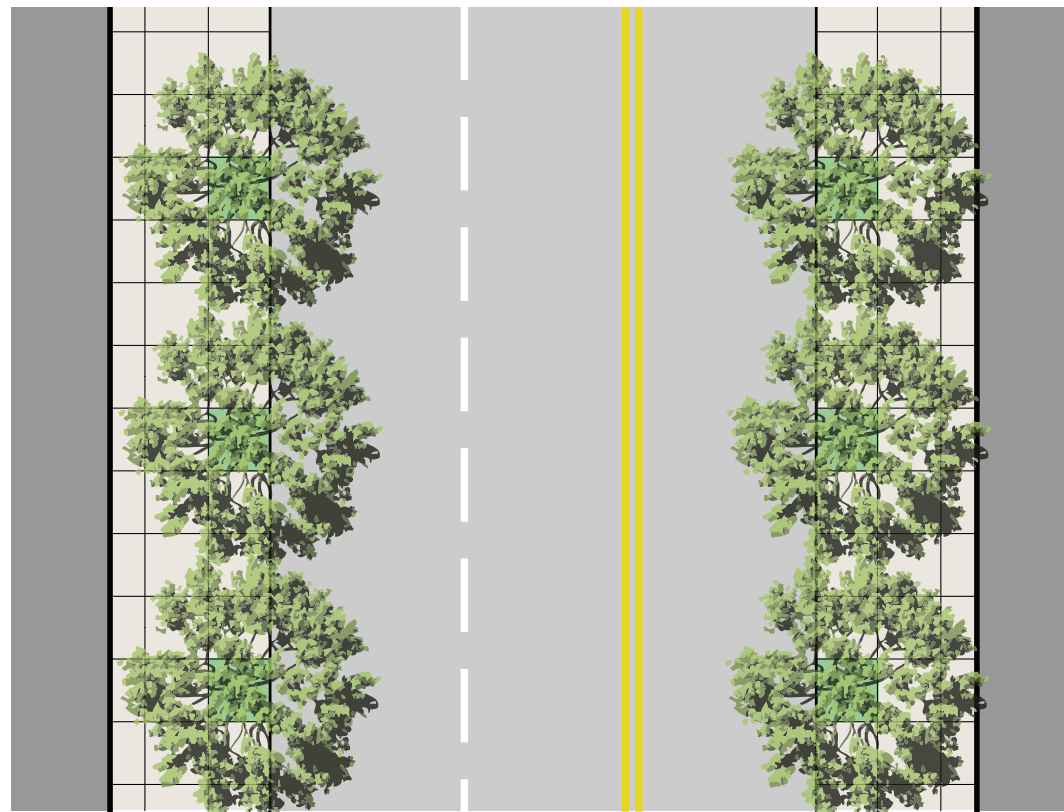
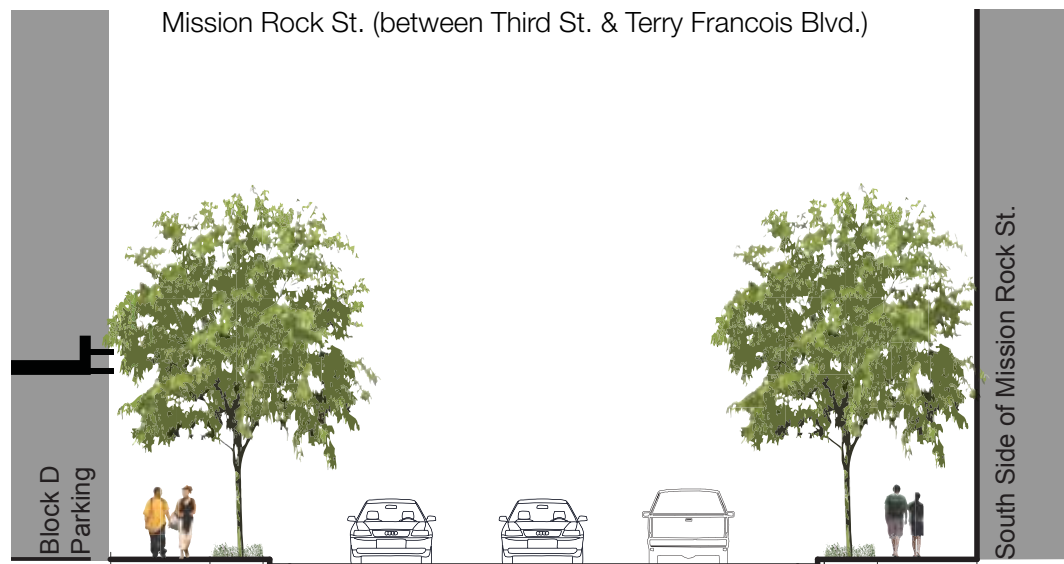
The eastern portion linking Vara Street to Terry Francois Boulevard is a pedestrian way connecting Mission Rock Square to the proposed Channel Plaza, with space for adjoining retail and restaurants to spill out and animate this portion of the open space network.



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.

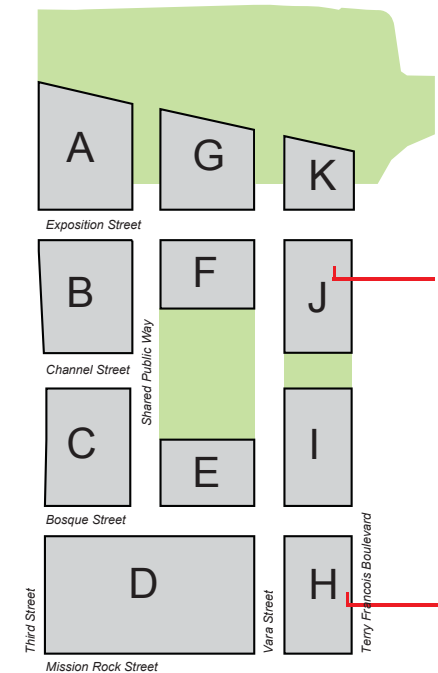
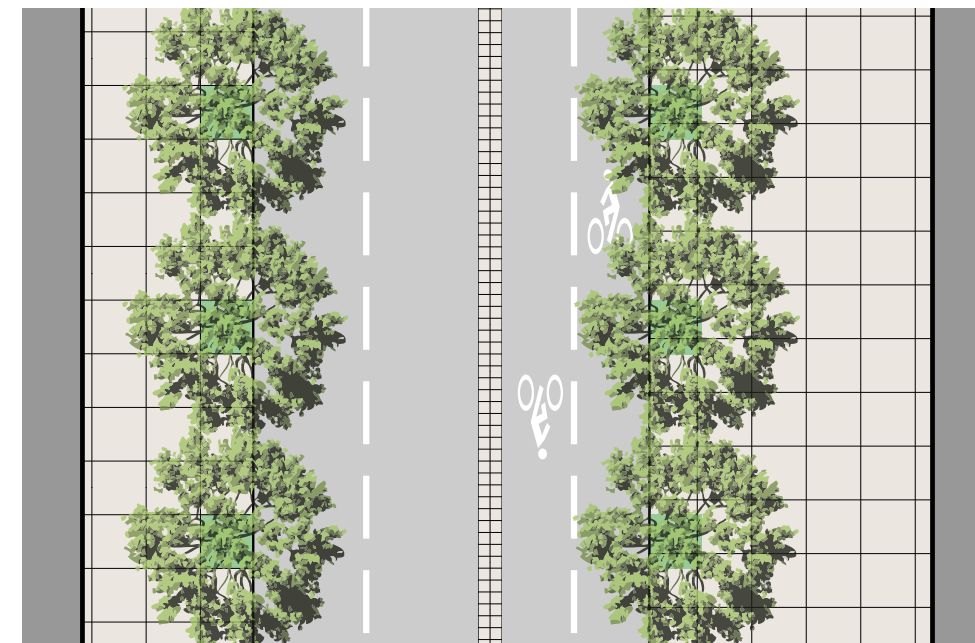
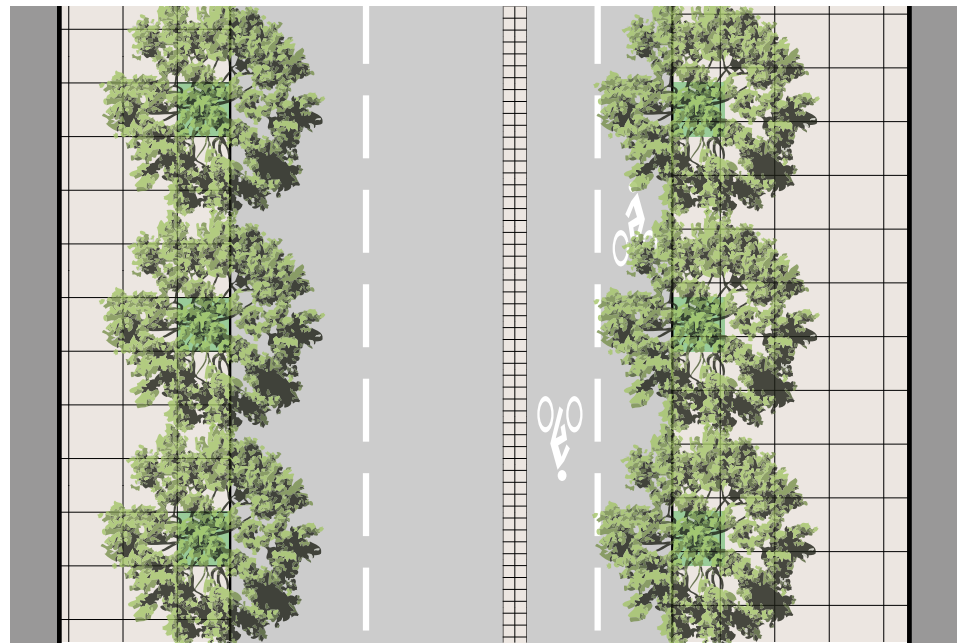


TERRY FRANCOIS BOULEVARD

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.

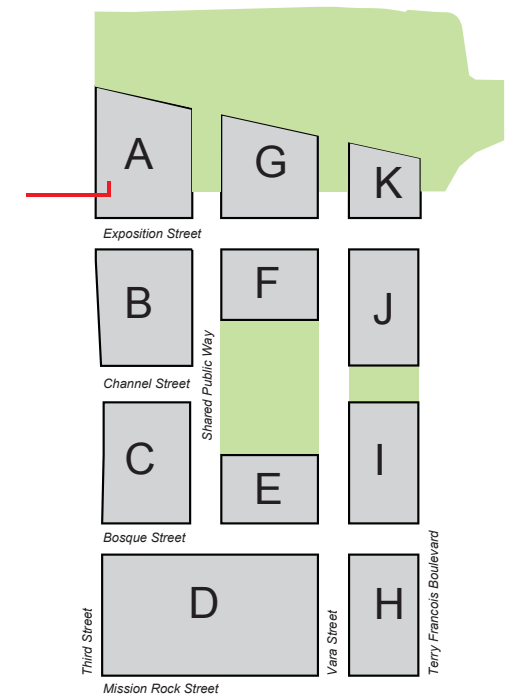
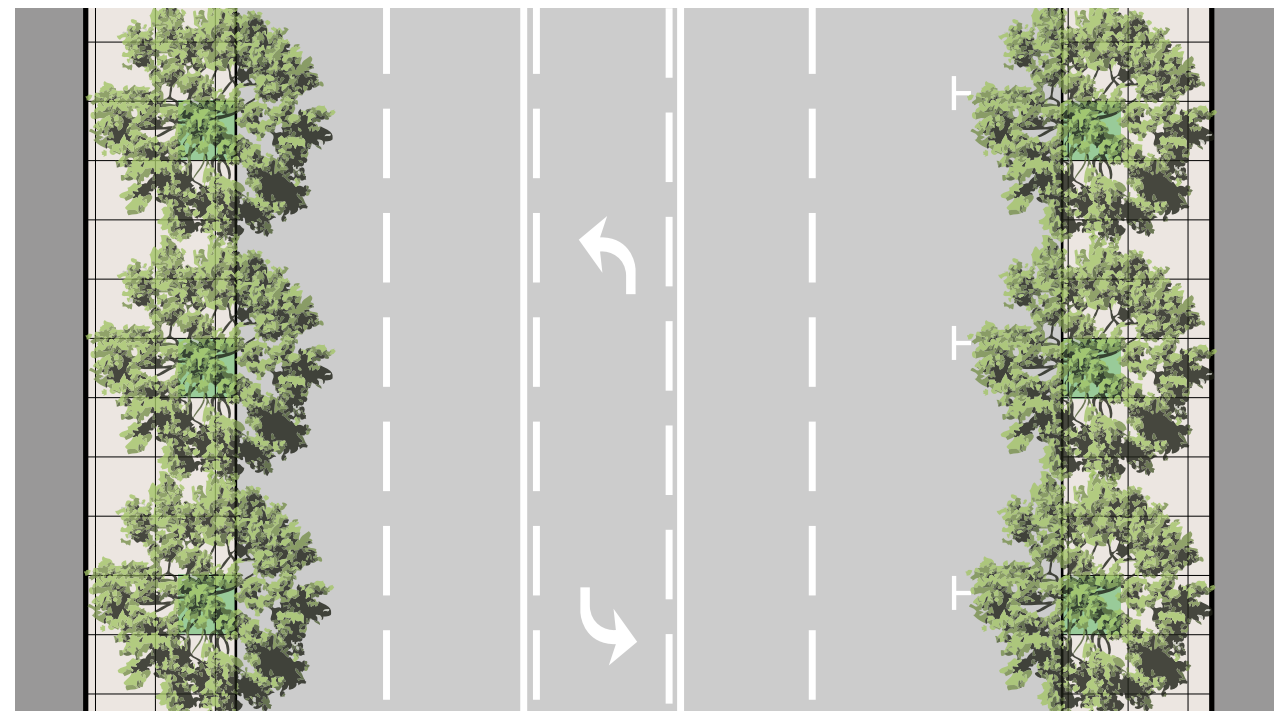
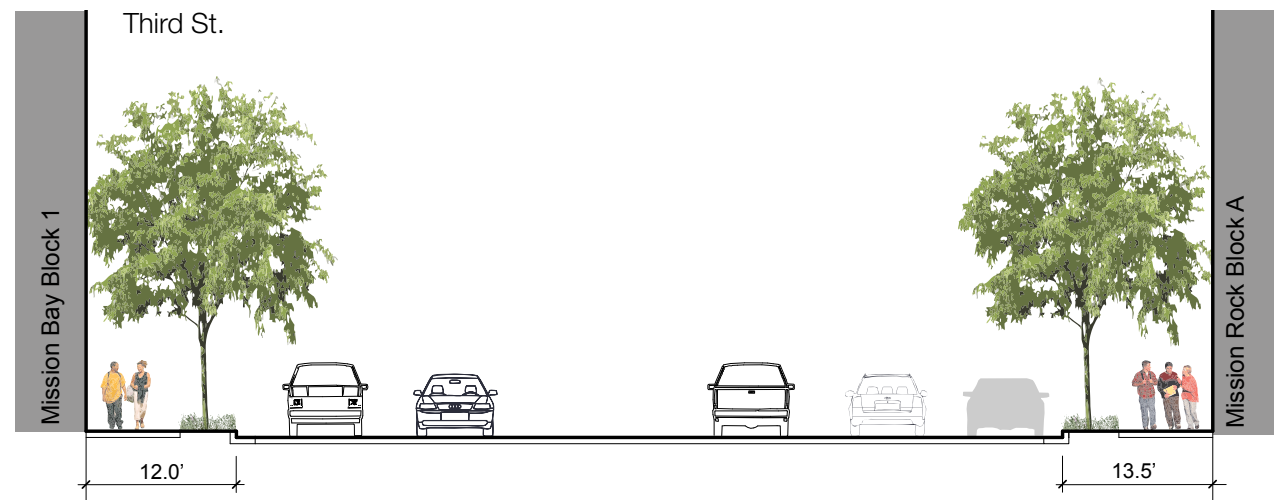


THIRD STREET

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.



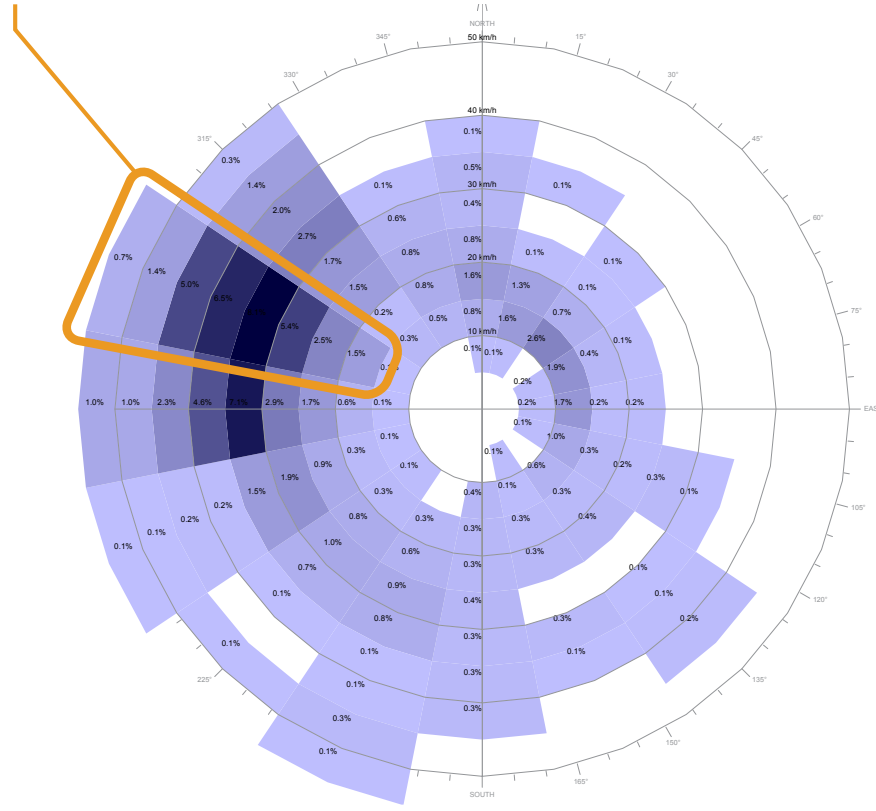
MICRO-CLIMATE STUDIES:

MISSION ROCK PARK WIND EXPOSURE

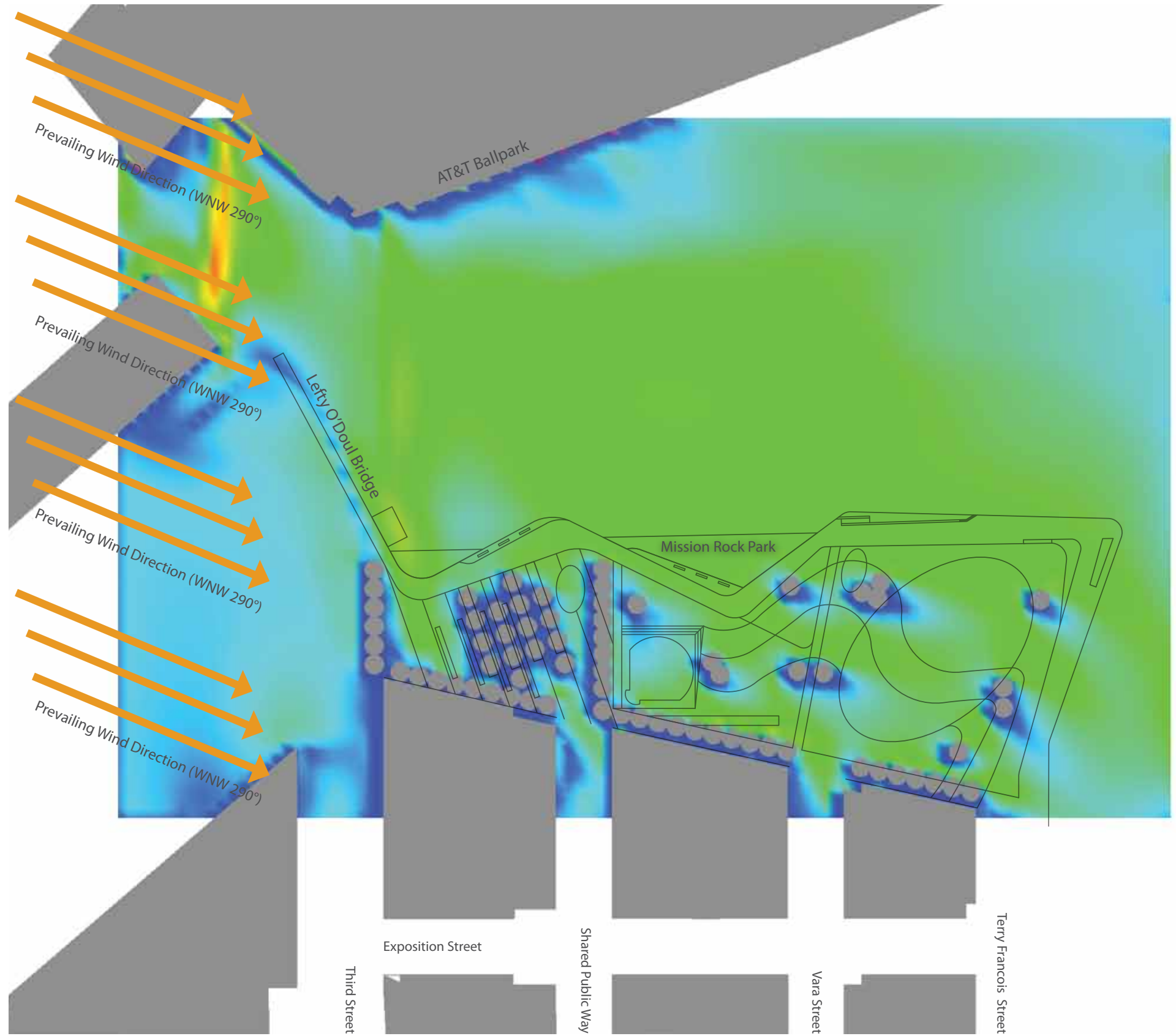
Annual Prevailing Winds

During the midday period, the prevailing wind direction ranges from WNW 290 – WNW 310° 30% of the time

Most frequent wind speed = 18.6 mph (@ el. +30')



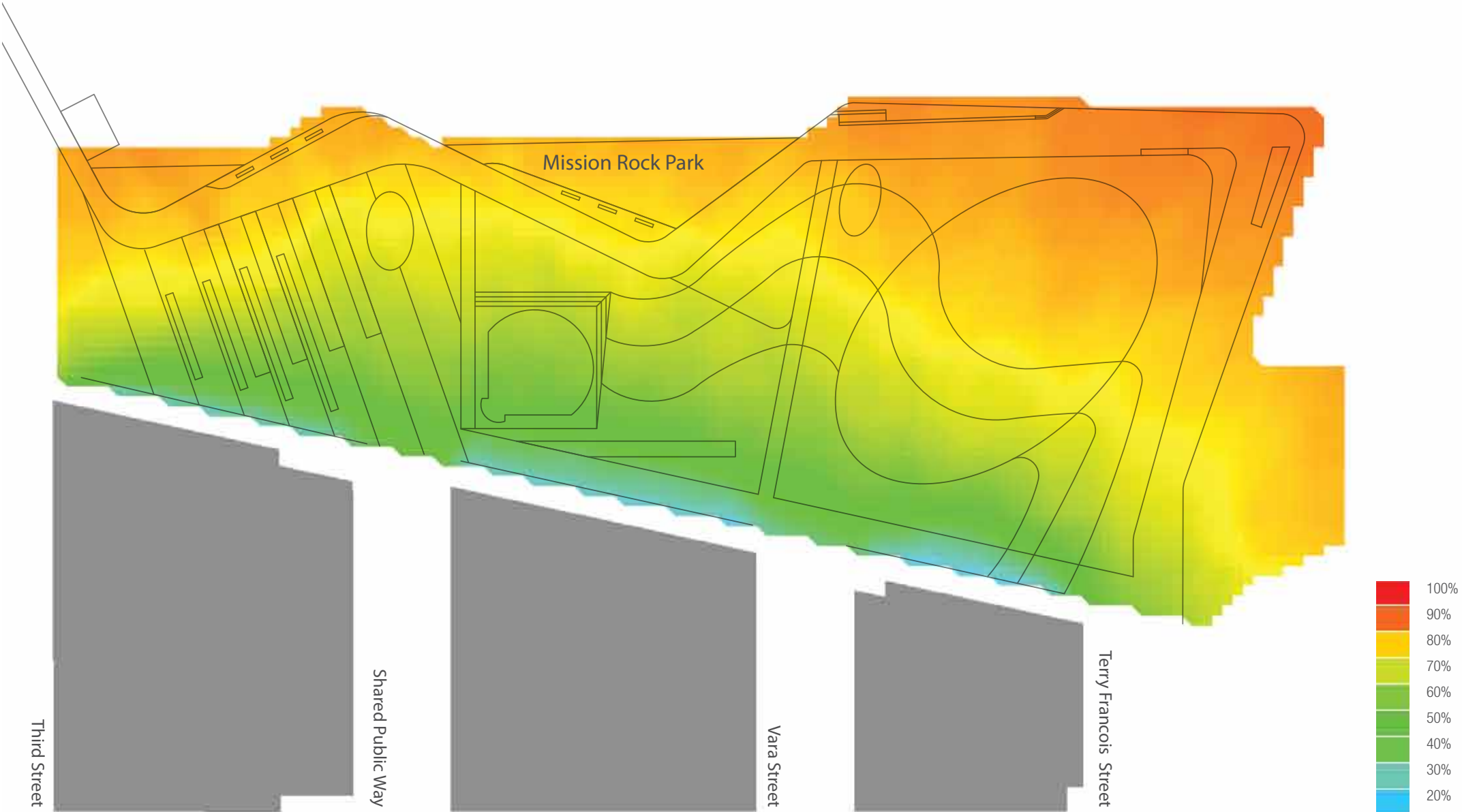
Comfort Scale for Wind Exposure



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

MICRO-CLIMATE STUDIES:

MISSION ROCK PARK SOLAR EXPOSURE STUDY



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

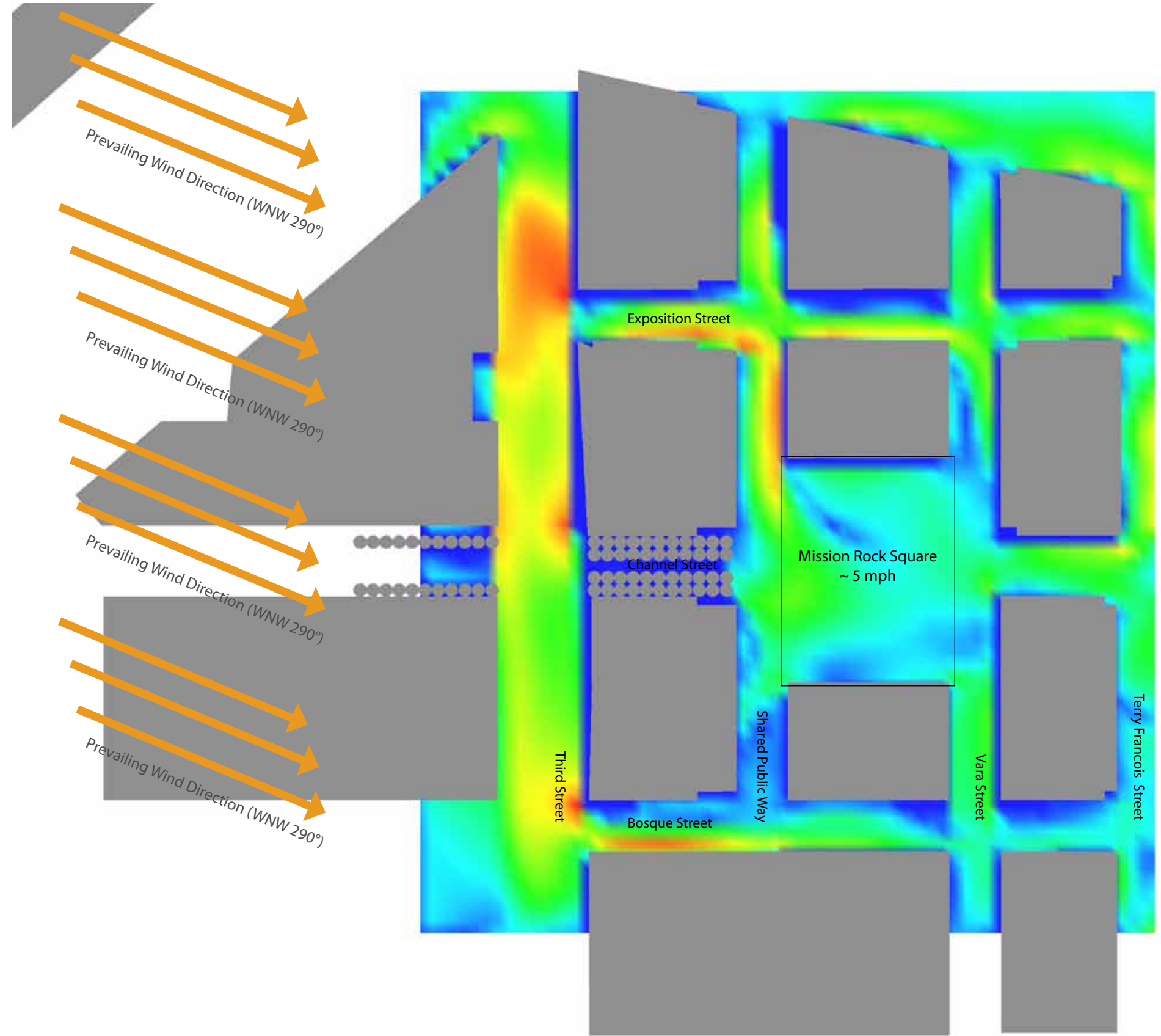
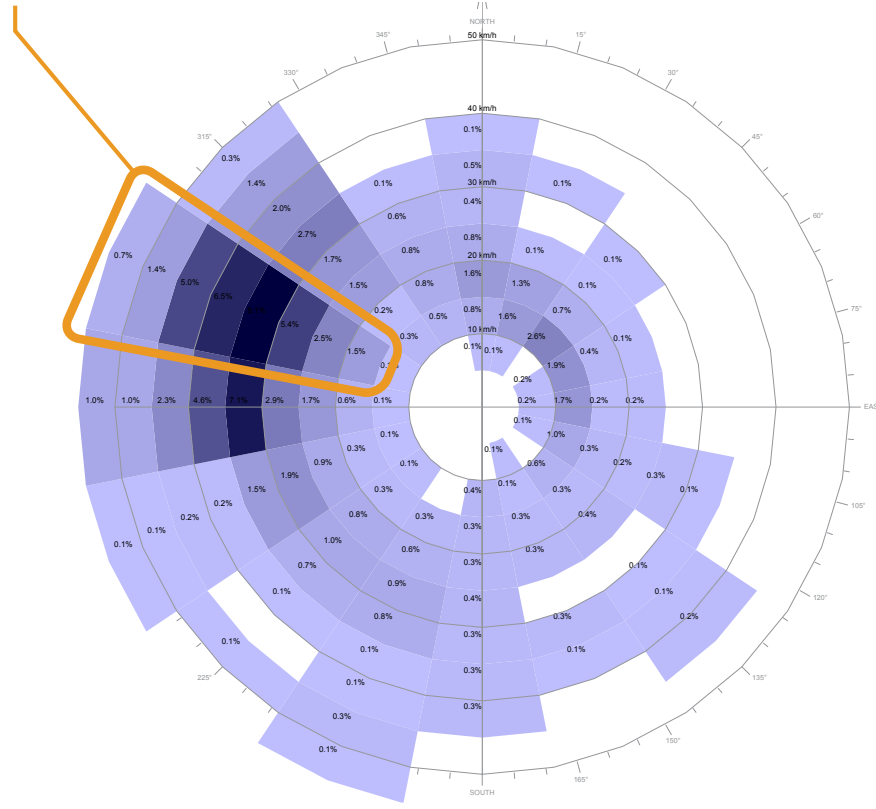
MICRO-CLIMATE STUDY:

MISSION ROCK SQUARE WIND EXPOSURE STUDY

Annual Prevailing Winds

During the midday period, the prevailing wind direction ranges from WNW 290 – WNW 310° 30% of the time

Most frequent wind speed = 18.6 mph (@ el. +30')



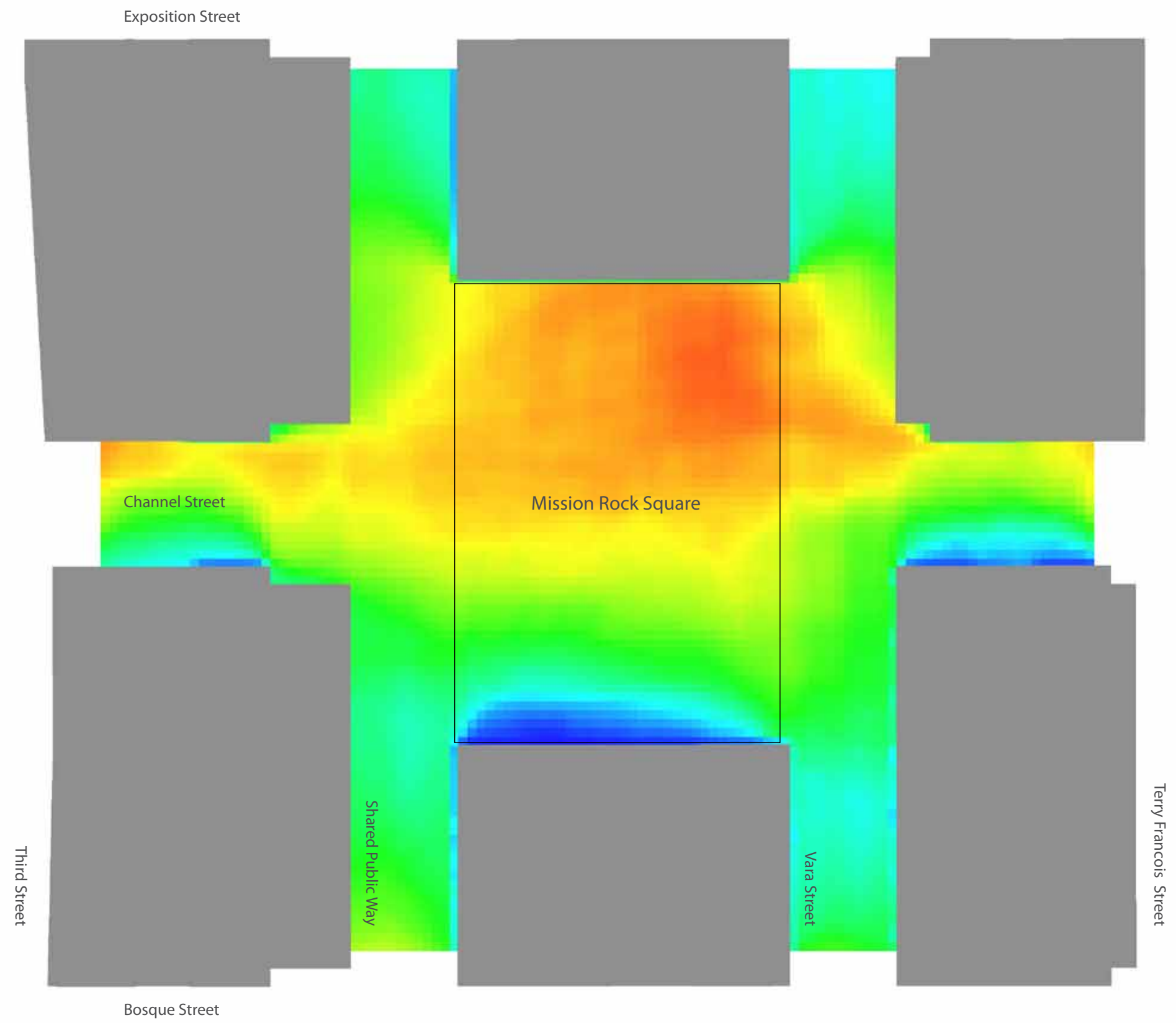
Comfort Scale for Wind Exposure

Calm, light air 0-3 mph	Light Breeze 4-7 mph	Gentle Breeze 8-12 mph	Moderate Breeze 13-18 mph	Fresh Breeze 19-24 mph	Strong Breeze 25-34 mph
No noticeable wind.	Wind felt on face.	Wind extends light flag. Hair is disturbed. Clothing flaps.	Raises dust and loose paper. Hair disarranged.	Force of wind felt on body.	Umbrellas used with difficulty. Difficult to walk steady. Wind noise on ear unpleasant.
Comfortable for long periods of sitting or standing.	Comfortable for short periods of sitting or standing.	Comfortable for walking.	Slightly less comfortable for walking.	Uncomfortable for walking.	Very uncomfortable for walking.

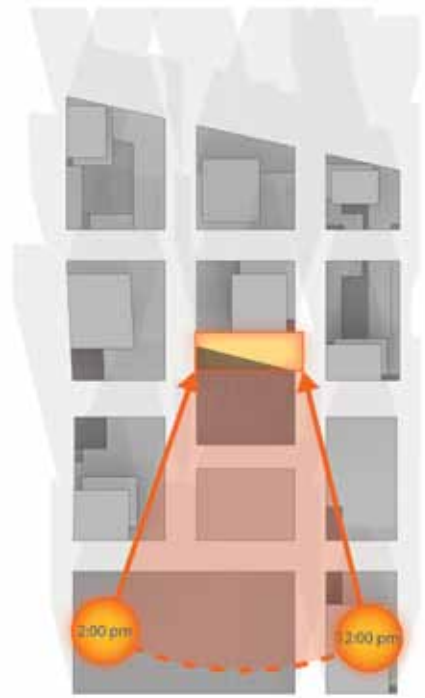
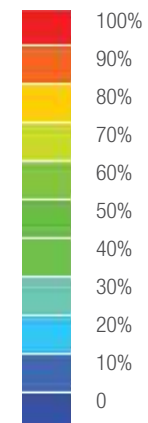
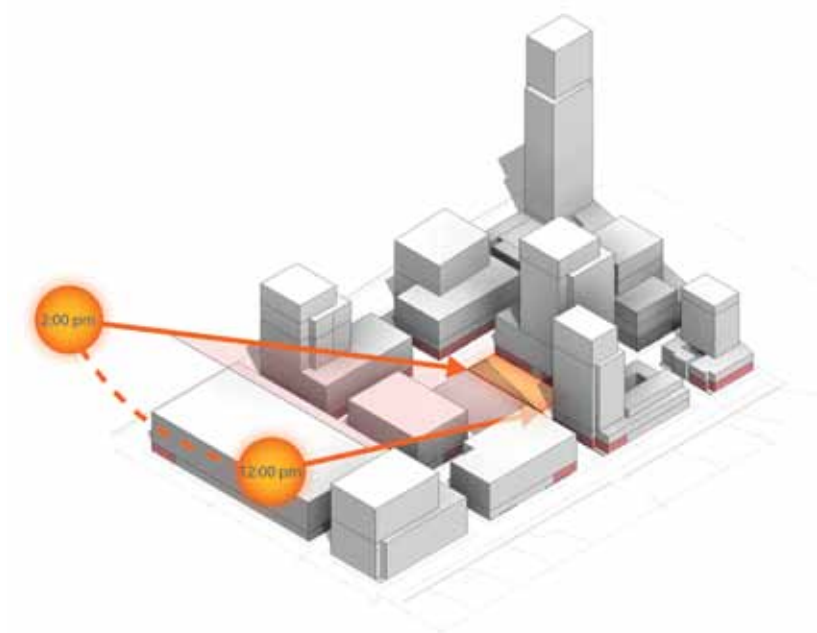
Annual prevailing winds in Mission Rock Square at 10'-elevation

MICRO-CLIMATE STUDIES:

MISSION ROCK SQUARE SOLAR EXPOSURE STUDY



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



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.

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.

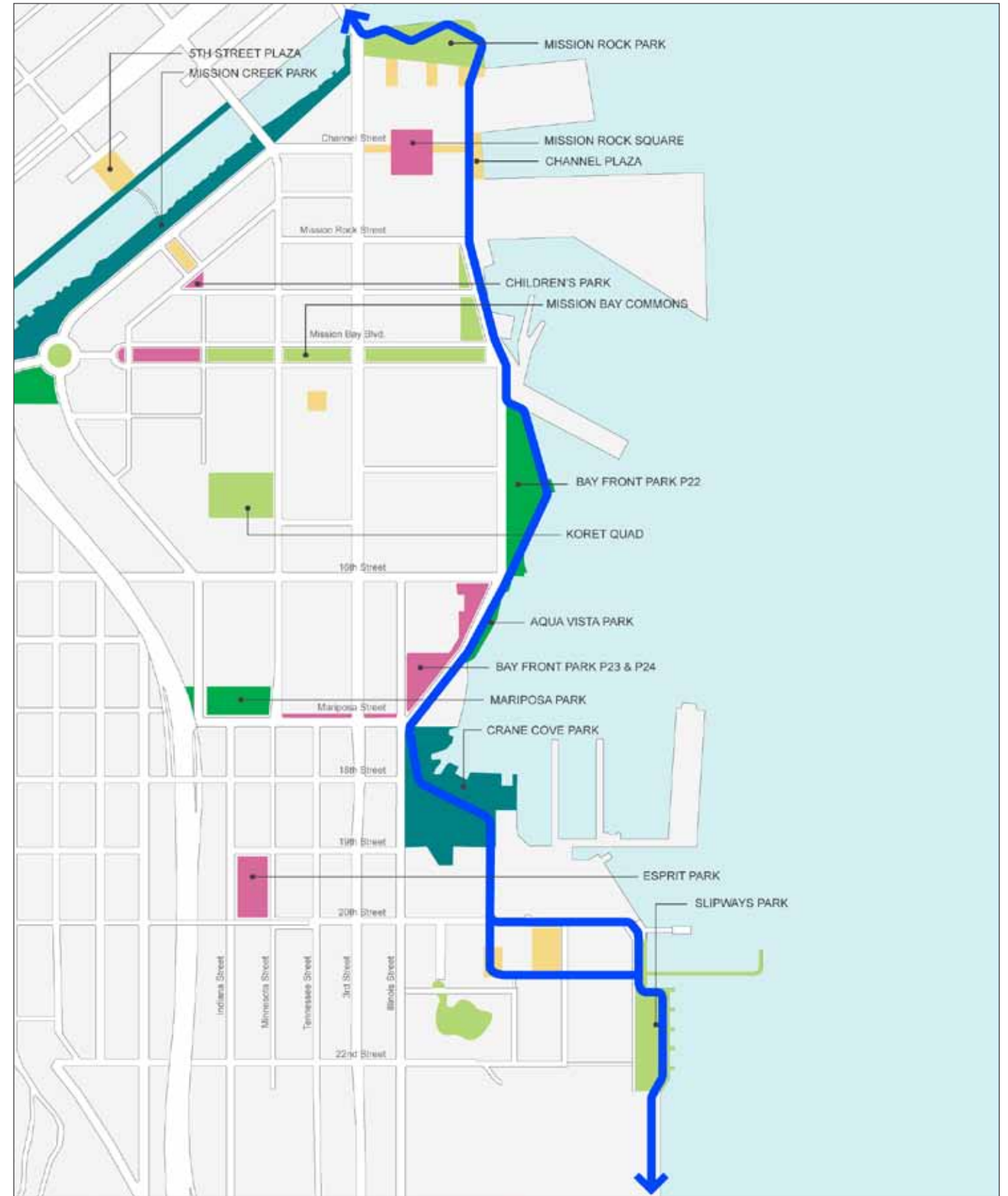


Blue Greenway Master Plan, Prepared by the SF Port

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 Bay Open Space Types

MISSION BAY OPEN SPACE TYPES

Top Left: Mission Creek Park System: Mission Rock Park will complete the Mission Creek Park System, extending this system to McCovey Cove, Pier 48, and the Bay.

Top Right: Gameday Open Space System: The Mission Rock park system has been designed to optimize pedestrian connections and collection points to promote safe and efficient circulation.

Bottom Left: Channel Park System: Mission Rock will extend the critical Channel view corridor and circulation spine that begins at 4th Street and continues through Mission Rock Square to a proposed Channel Plaza.

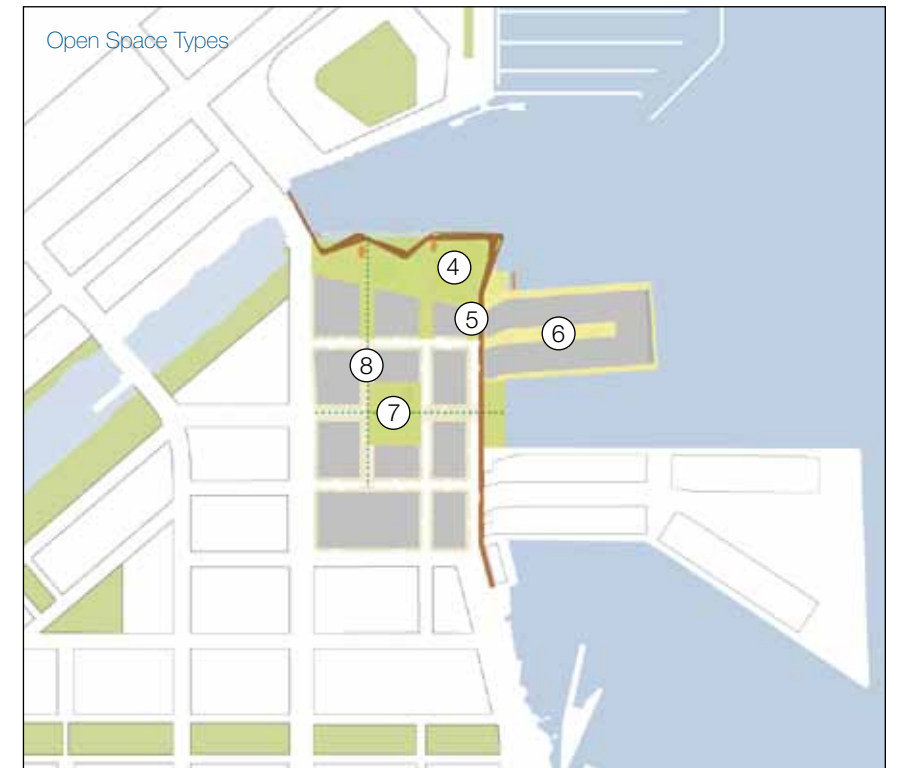
Bottom Right: Mission Rock Park System: The Mission Rock Park System and integration with context and the Mission Bay Parks Plan.



OPEN SPACE CONTEXT

Mission Rock will offer three major new open spaces - Mission Rock Park, Mission Rock Square, and a proposed Channel Plaza – connected by the pedestrian oriented Shared Public Way and the Blue Greenway. The layout, scale, and orientation of these spaces have been optimized to connect with the surrounding neighborhood, promote programmatic variety, and enhance the value and natural beauty of this rare bayfront site.

Recognizing the site as a pivotal location in the fabric of the city and the larger bayfront, the open space design approach embraces the opportunity to provide San Francisco and the region with a new, significant waterfront park. The southern edge of Mission Rock Park will connect two key historic structures that frame the site, Pier 48 to the east and Lefty O'Doul Bridge to the west. The esplanade, a linear pedestrian promenade along this edge of the park will be energized day and night with shopping, eateries, and views of these two landmarks. This esplanade, connecting the new development, pier, bridge and park, celebrates this unique waterfront location and historic context.



LEGEND

1. Blue Greenway & Bay Trail
2. SF Bay Waterfront
3. Mission Creek Park
4. Mission Rock Park
5. Pier 48 Plaza
6. Pier 48 Valley
7. Mission Rock Square
8. Shared Public Way

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

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.

Size: 5.12 acres

Purpose: Signature Waterfront Park, Northern Start of Blue Greenway

Character: Open, Flexible, Connected, Dramatic

Components: Great Lawn, Retail Esplanade, Gateway Plaza, Junior Giants Field, Waterfront Promenade, Esplanade, Stormwater Treatment Gardens, Kayak Launch

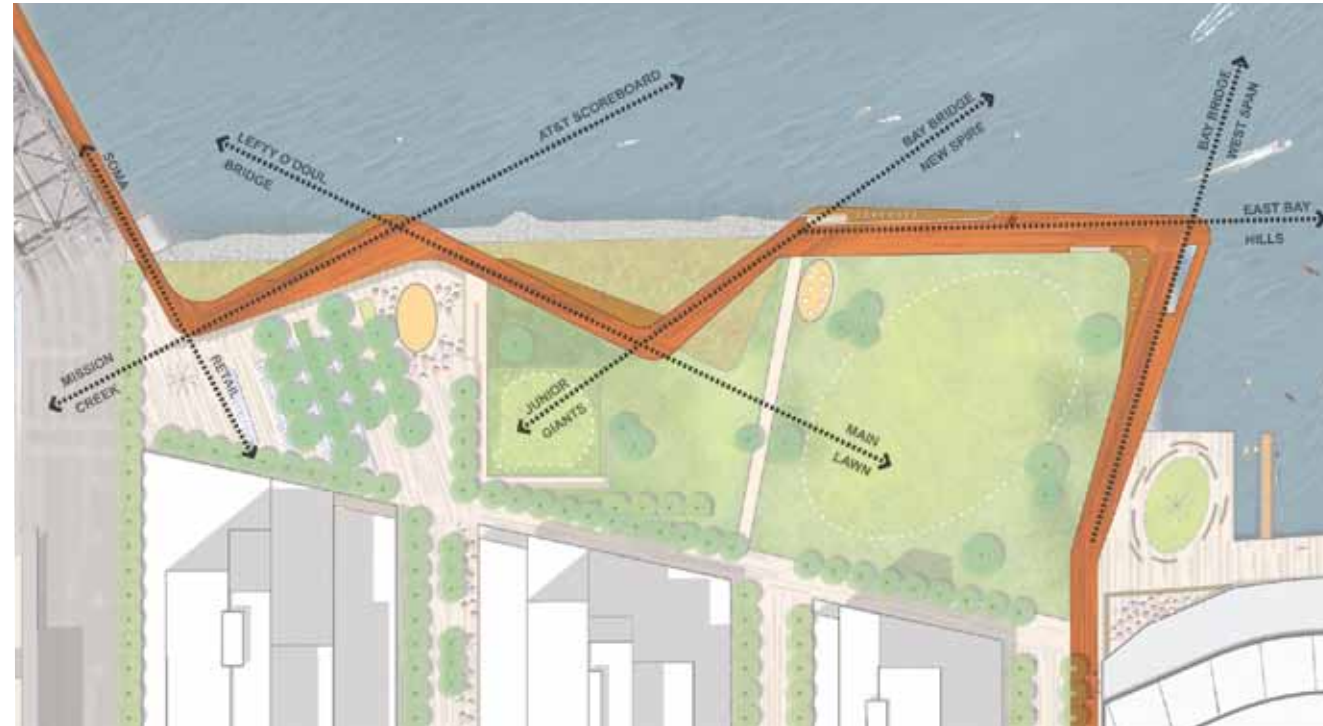
Added Area Take-off: 5.12 AC total



Mission Rock Park and Pier 48 Plaza



PROGRAMMING



Waterfront Views



Programming Opportunities



Bicycle Route



Stormwater Treatment & Coastal Gardens

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 Spire, 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.

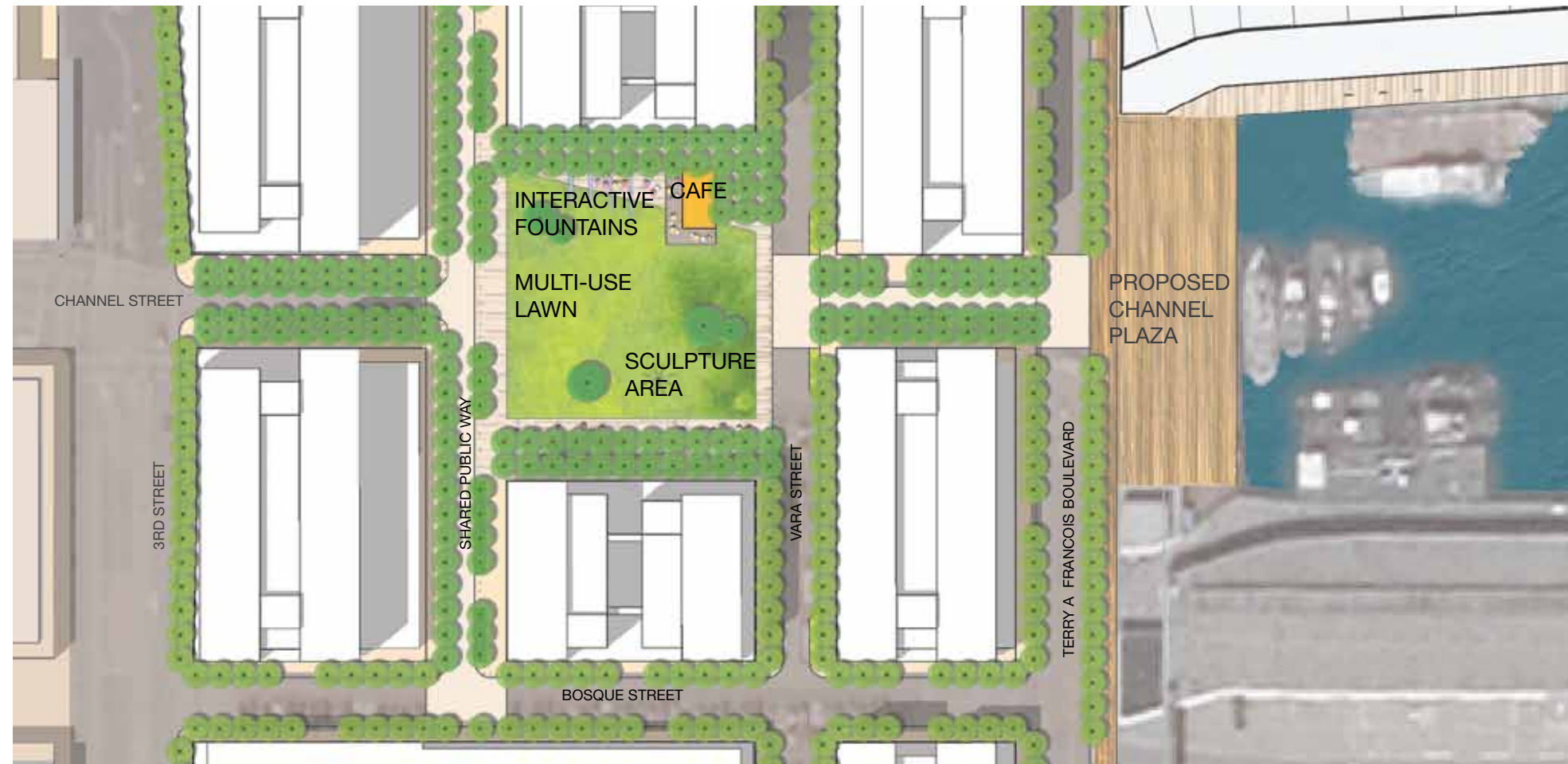
To the east and west of Mission Rock Square will be pedestrian oriented connections along Channel Street that will preserve views to the water and promote access between the neighborhood and Bay. Between Vara Street and Terry Francois Boulevard, Channel Street will be closed to traffic to further promote 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

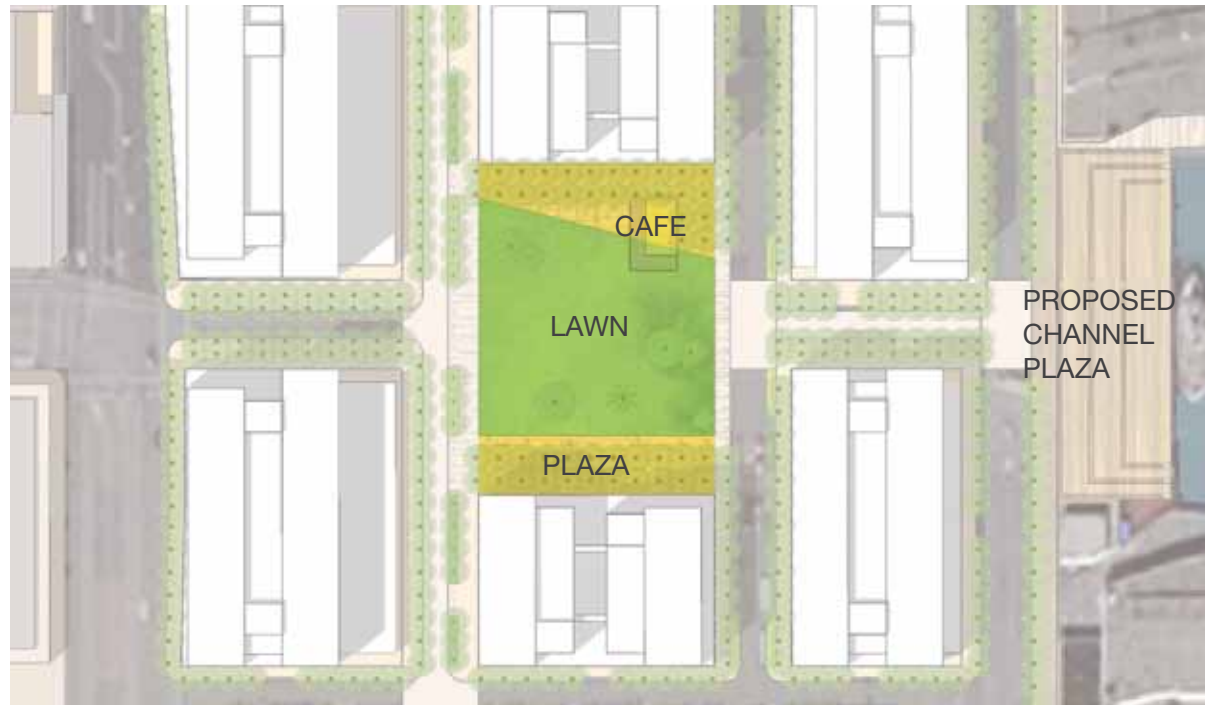
Character: Urban Green, Relaxing, Comfortable, Sheltered

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



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 TDV, excl. plug loads & ext. lighting) [SFGBO] OR 15% 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, OR purchase renewable power, OR 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 TDV, excluding plug loads & ext. lighting) [SFGBO] OR 15% 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 [Plumbing 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 (>2,500 ft2); if over 5,000 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 SSc6.2 (filter 80% TSS from average annual rainfall) [SFSDG] 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, pervious hardscape, flow-through planters, vegetation infiltration, bioswales) 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 bioswales). 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) [SFGB0] Low-emitting materials (EQc4.1-4) [CALGreen] 	<ul style="list-style-type: none"> Parking lot demolition will meet construction waste recycling requirements All other requirements to be met through vertical development Re-use of Pier 48 historic sheds 	<ul style="list-style-type: none"> Recycle construction waste Specify low-emitting materials Specify low embodied carbon materials Specify 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 8% 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/vanpools Preferred parking will be provided in the central garage Bicycle parking may be handled in individual buildings and/or centrally; decentralized 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 [SFGB0] Specific credits required: SSp1, SSc4.2, SSc6.2, WEc3 (30%), EAc3, EAc4, MRc2 (75%), EQc3.1, EQc4.1-4 Residential high-rise: LEED Silver version 2009 [SFGB0] Specific credits required: SSp1, SSc6.2, WEc3 (30%), MRc2 (75%), EAp1 	<ul style="list-style-type: none"> Commercial: LEED Gold target is achievable without horizontal improvements, beyond those noted above. Required credits SSp1, SSc4.2 will be part of horizontal development. SSc6.2 can be handled jointly by horizontal and vertical development Residential: LEED Silver target is achievable without horizontal improvements, beyond those noted above. Required credit SSp1 will be part of horizontal development. SSc6.2 can be handled jointly by horizontal and vertical development Other credits that could be targeted in horizontal development are SSc2 (development density), SSc3 (brownfield redevelopment), SSc4.1 (public transportation access), SSc5.2 (maximize open space), and SSc7.1 (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%), EAc3, EAc4, MRc2 (75%), EQc3.1, EQc4.1-4, will be part of vertical development Residential: LEED Silver target is achievable without horizontal improvements, beyond those noted at left. WEc3 (30%), MRc2 (75%), EAp1 will be part of vertical development All 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 credits: Commercial: SSc4.3-4 (alternative transportation), SSc8 (light pollution), water sub-meters, reduce wastewater by 20%, EQp2 (ETS), EQc1 (outdoor air monitoring) Residential high-rise: SSc4.3-4 (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 SSc4.3-4 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 SSc8, water sub-meters, wastewater reduction (20%), EQp2, EQc1 will be part of vertical development Residential: CALGreen requirements are achievable without horizontal improvements, beyond those noted above. Required equivalency EQc5 will be part of vertical development
	<p>ACRONYMS</p> <p>SFGB0: San Francisco Building Ordinance</p> <p>SFSDG: San Francisco Stormwater Design Guidelines</p> <p>CALGreen: California Green Building Code (Title 24 Chapter 11)</p> <p>SFWEIO: San Francisco Water Efficient Irrigation Ordinance</p> <p>MAWA: Maximum Applied Water Allowance or "Water Budget"</p>		

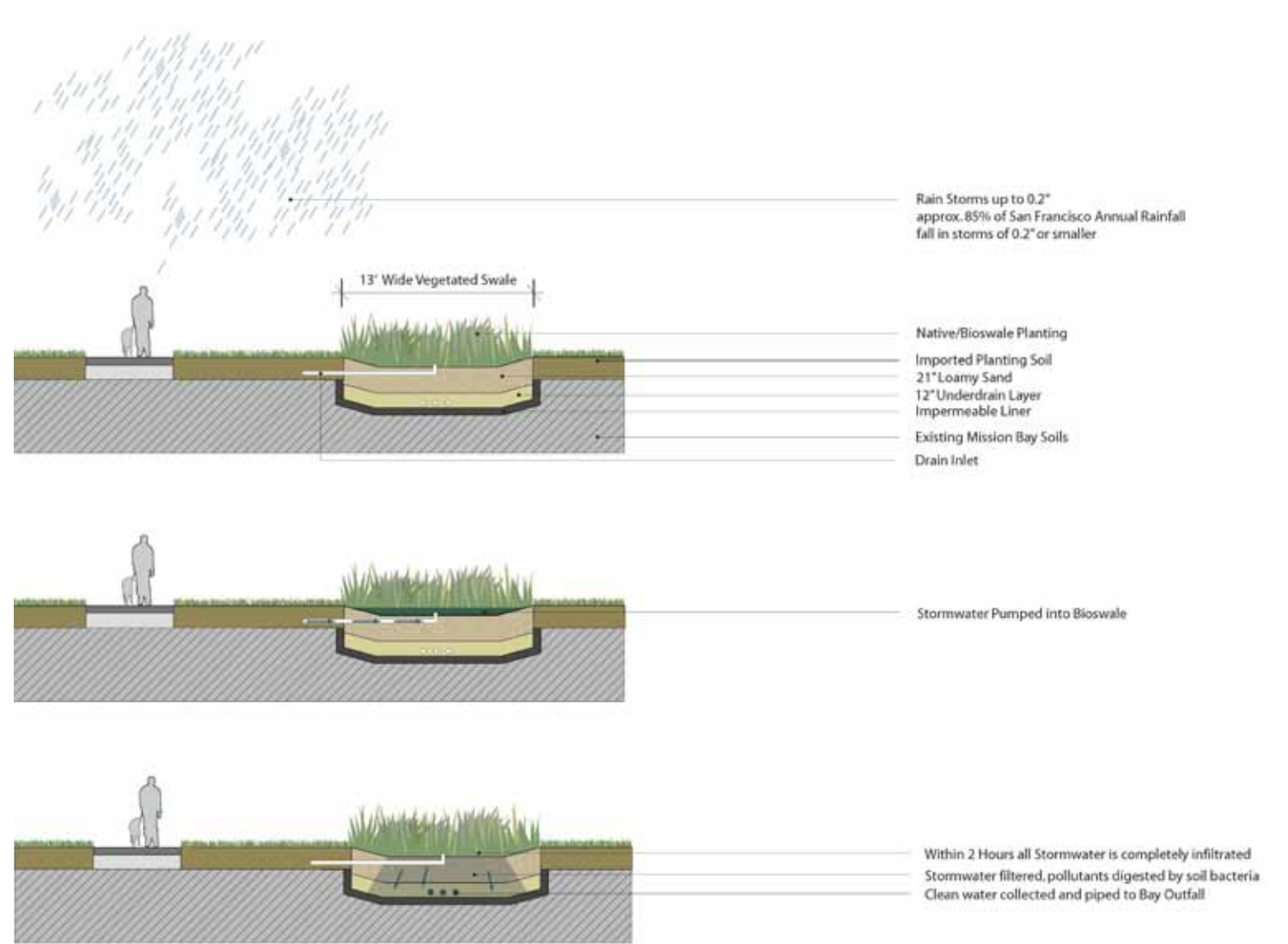
WATER & LANDSCAPE

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



HORIZON LINES



PRECEDENTS

MARINA GREEN

TORONTO WATERFRONT WAVE DECK

HIGHLINE

WASHINGTON SQUARE PARK

YERBA BUENA PARK

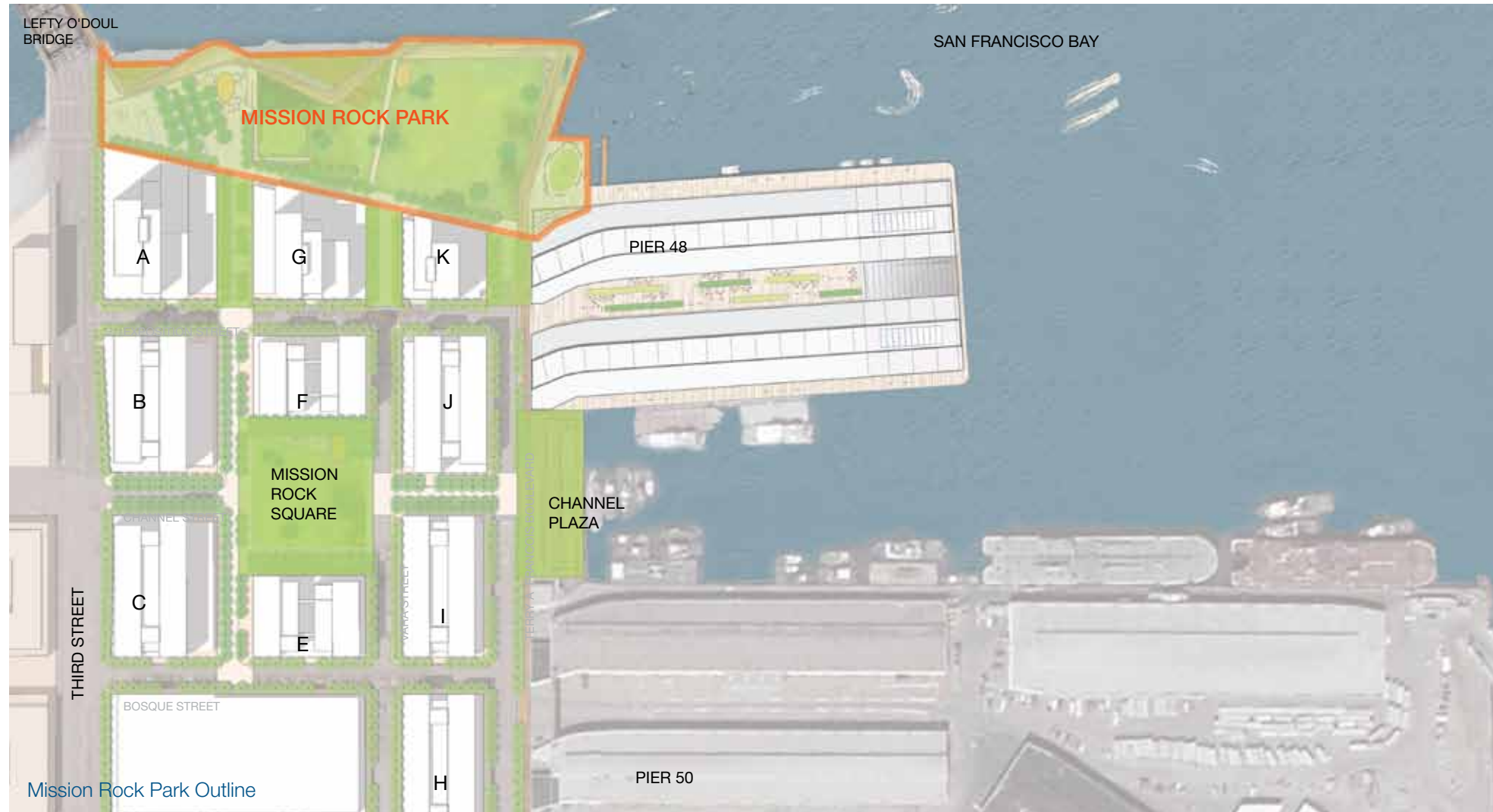
BRYANT PARK

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.

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

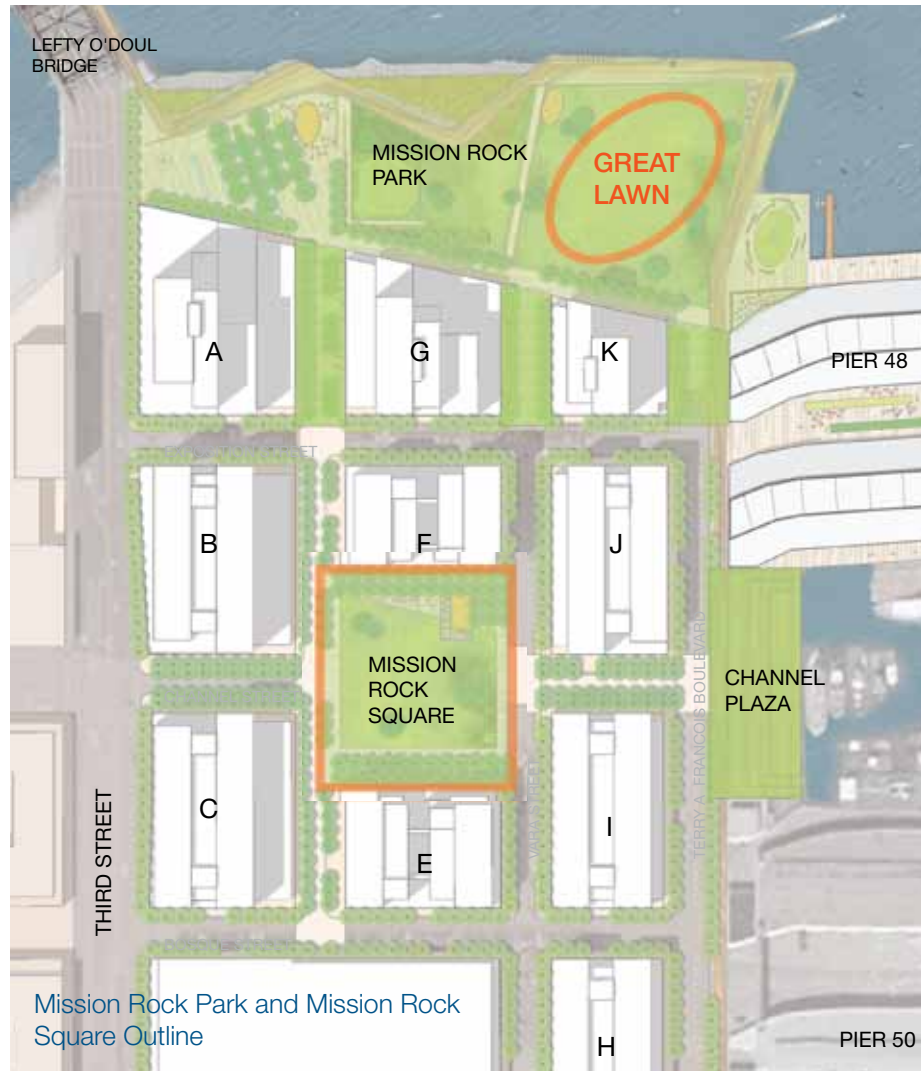


San Francisco, CA

Washington Square Park is an 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.

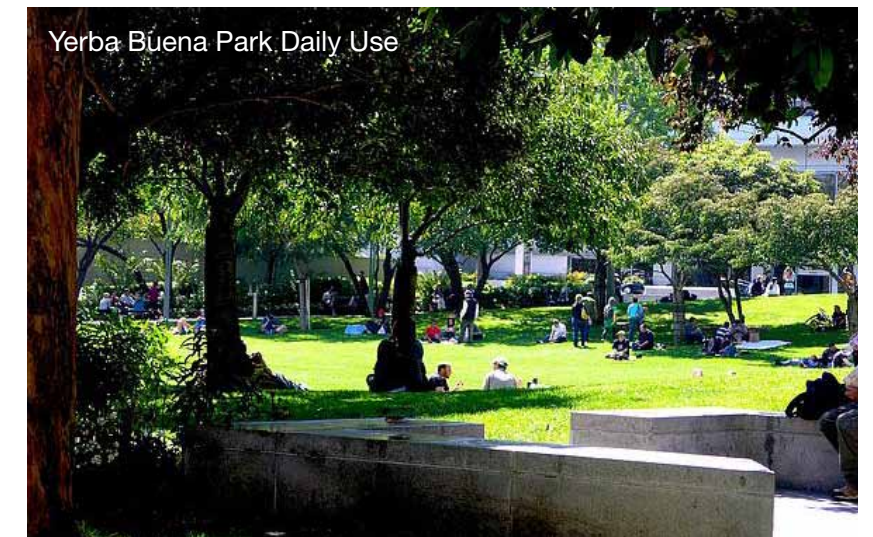


YERBA BUENA PARK

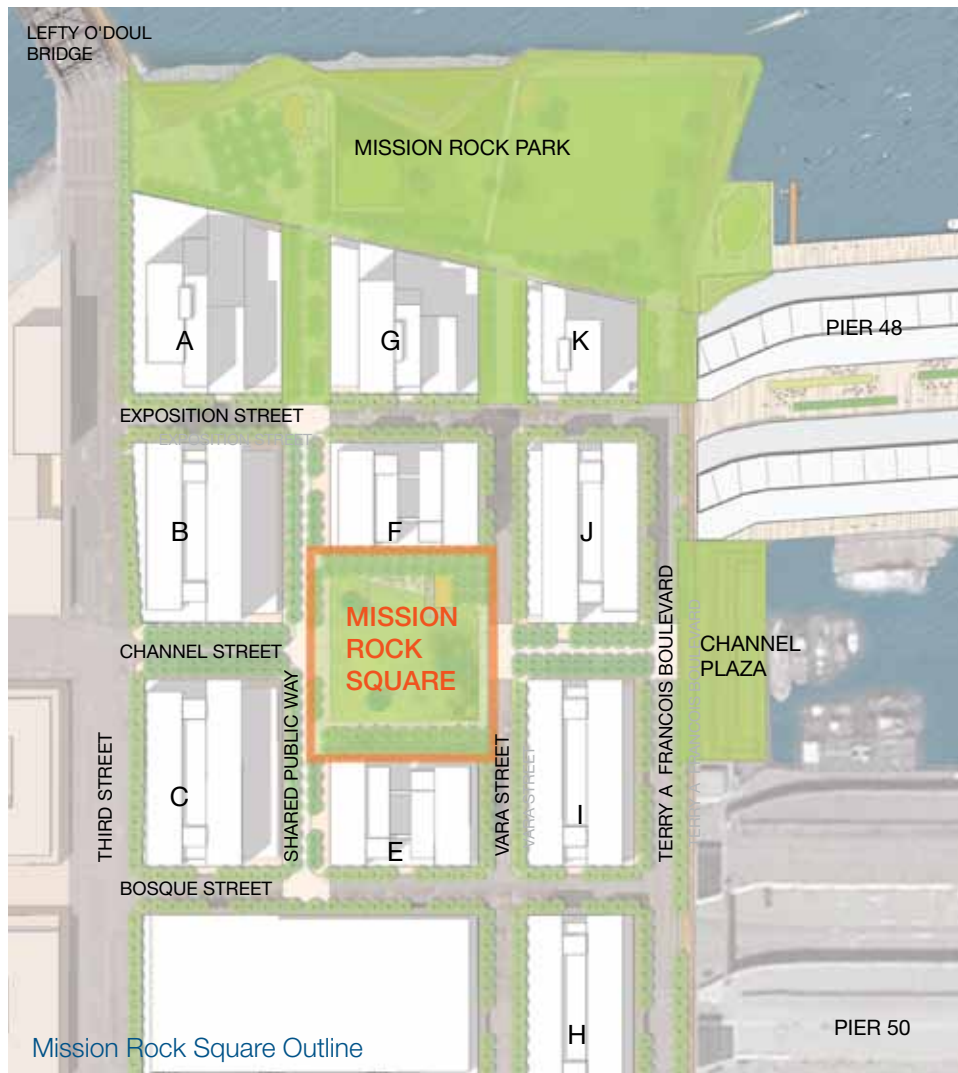


San Francisco, CA

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.



BRYANT PARK



Mission Rock Square Outline



New York City, NY

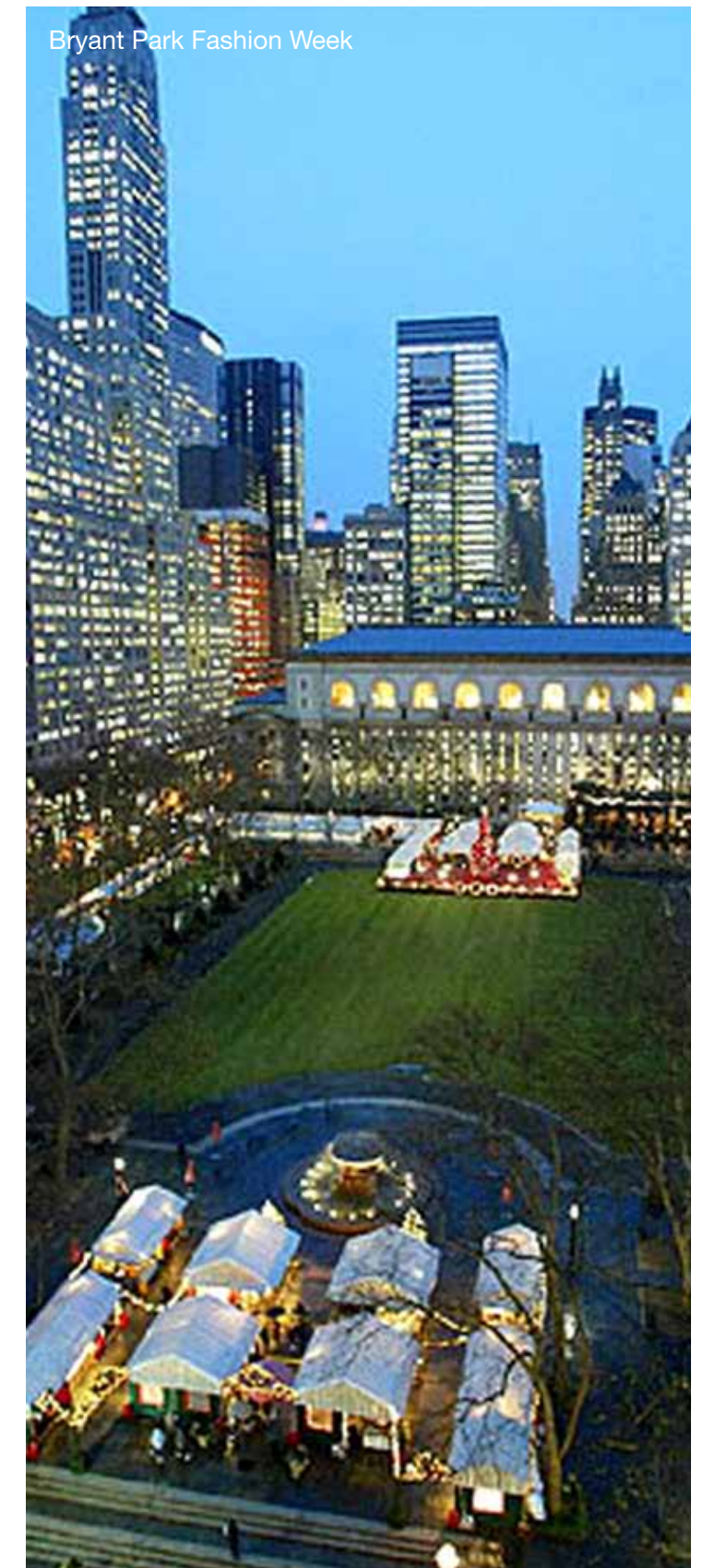
Bryant Park serves as a scale and programming precedent for Mission Rock Square. The central lawn of Bryant Park plays host to a diverse set of structured events throughout the year including festivals, civic holiday celebrations, fund raiser events and the well known NYC Fashion Week. As such, Bryant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



Bryant Park Daily Use



Bryant Park Daily Use



Bryant Park Fashion Week

MADISON SQUARE

Shake Shack Pavilion and Seating



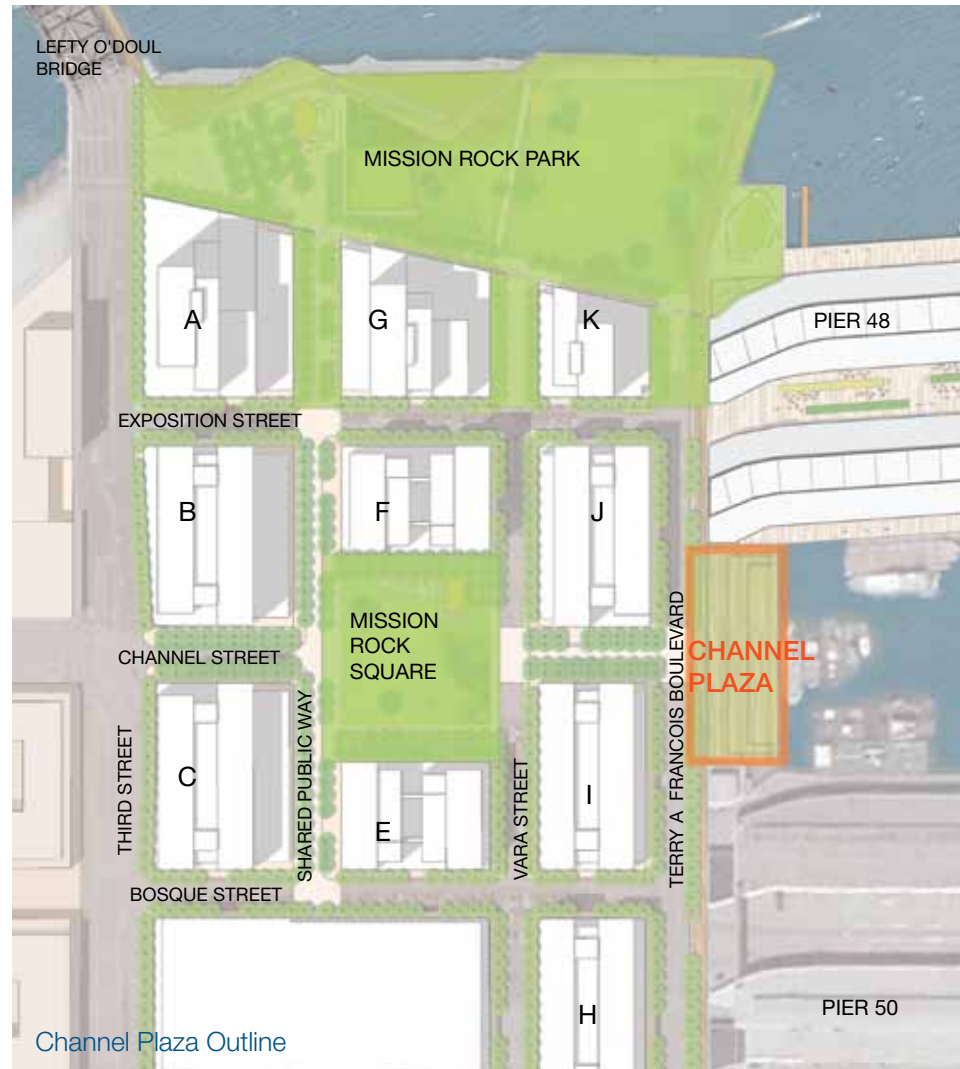
Main Lawn



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.

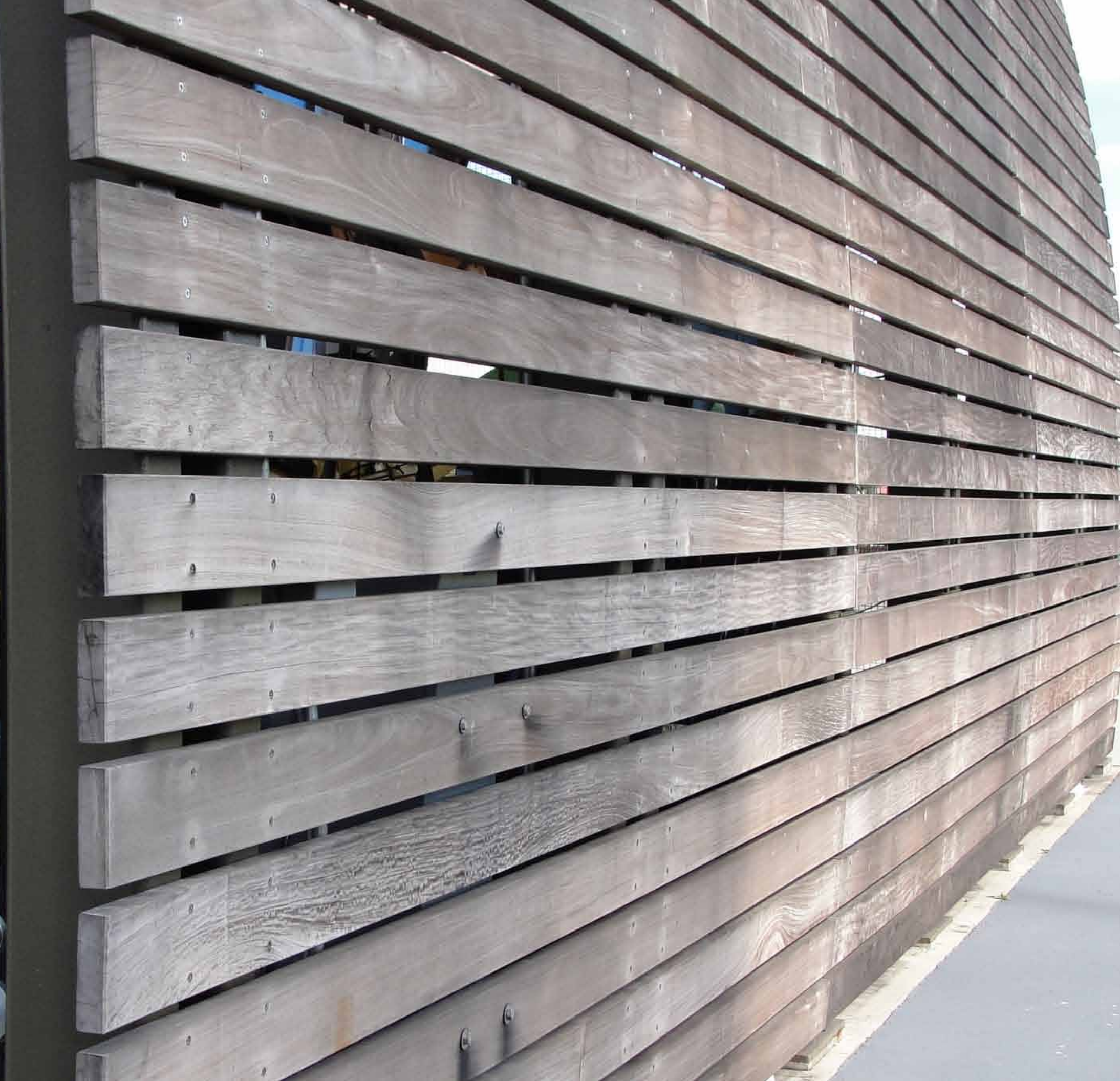
PIERS 14 & 35



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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