

SUB-PHASE APPLICATION 3 TREASURE ISLAND

SUB-PHASES 1A, 1D, 1F, 1G, 1H, 1I

PREPARED FOR TREASURE ISLAND DEVELOPMENT AUTHORITY

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Treasure Island/Yerba Buena Island Citizen Advisory Board (CAB)

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San Francisco Public Utilities Commission (SFPUC)

San Francisco Planning Department (SFPD)

San Francisco Fire Department (SFFD)

San Francisco Mayor's Office of Disability/Disability Council (MOD)

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San Francisco County Transportation Authority (SFCTA)

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An Example of Minor Variations in a Streetwall

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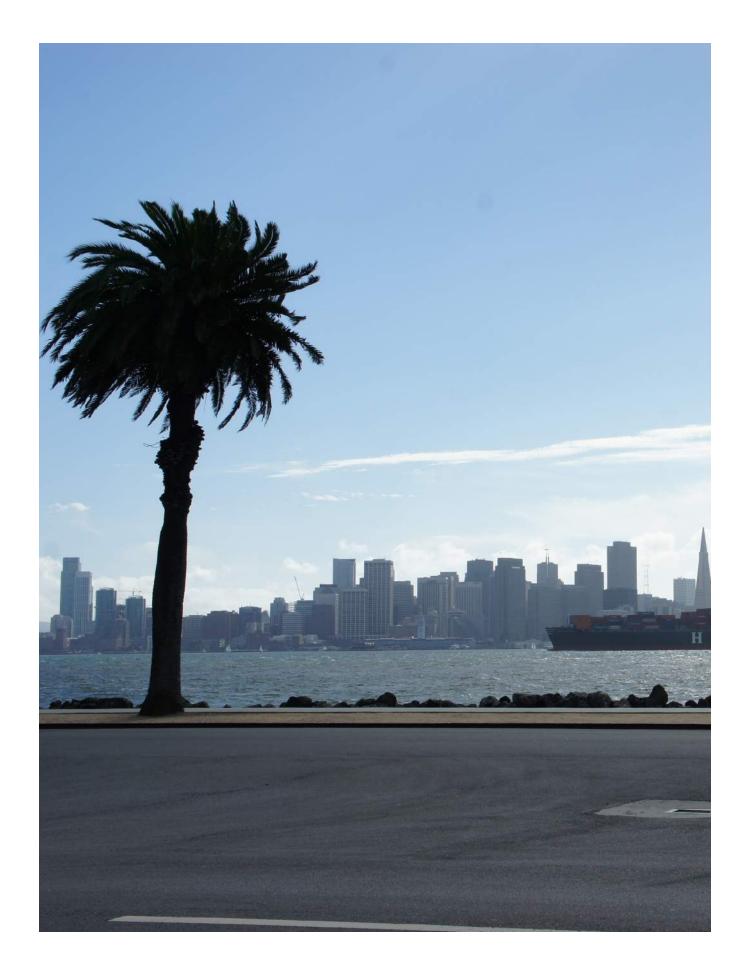
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GLOSSARY OF ABBREVIATIONS AND ACRONYMS

A	F	MP Major Phase	SLR Sea Level Rise
		MUP Master Utility Plans	SMP Signage Master Plan
AC Acres	FPS Feet Per Second		SOQHD Senior Officer Quarters Headquarters District
AC Alameda-Contra Costa (Transit)		N	SP Spaces (Parking)
ADA Americans with Disabilities Act	G		SS Sanitary Sewer
AT&T American Telephone & Telegraph		NAVD North American Vertical Datum of 1988	SWPPP Stormwater Pollution Prevention Plan
	GGIE Golden Gate International Exposition	NAVD88 North American Vertical Datum of 1988	
В	GSF Gross Square Fee	NRC National Research Council	Т
	·	NSTI Naval Station Treasure Island	
B2 Building 2	Н		TI Treasure Island
B3 Building 3		0	TICD Treasure Island Community Development
BFE Base Flood Elevation	HMP Habitat Management Plan		TIDA Treasure Island Development Authority
BMP Best Management Practices		O+M Operations and Maintenance	TIHDI Treasure Island Homeless Development Initiative
BLDG Building	I	·	TIMMA Treasure Island Mobility Management Agency
BOD Basis of Design		Р	TISC Treasure Island Sailing Center
C	ICA Interagency Cooperation Agreement	•	TITIP Treasure Island Transportation Implementation Plan
C	IP Infrastructure Plan	PG&E Pacific Gas and Electric	TSM Tentative Subdivision Map
	IPCC Intergovernmental Panel on Climate Change	POSP Parks and Open Space Plan	TTM Tentative Transfer Map
CAB Citizen Advisory Board		PV Photovoltaic	
CD Construction Documents	1	rv riiotovoitaic	U
CEQA California Environmental Quality Act	•	R	
CIP Cast-In-Place	JV Joint Venture	TX	US United States
	JV John Ventule	ROW Right of Way	on onto oracio
D	1	RW Recycled Water	V
	L	NW Necycleu Water	V
D4D Design for Development	LDDA Lease Disposition and Development Agreement	S	VTS Vessel Traffic Service
DA Development Agreement	LED Light-Emitting Diode	· ·	110 100001 1141110 0011100
DD Design Development	LEED-ND Leadership in Energy & Environmental Design	SBE Small Business Enterprise	W
DDA Disposition and Development Agreement	Neighborhood Development	SD MUP Schematic Design Master Utility Plans	VV
DRDAP Design Review and Document Approval Procedure	LPW Low Pressure Water		WDU W D II
BND/II BOOISH NOTON and Boodmont Approval Frooddare	LFW LOW Flessule Water	•	WRU Wave Run-Up
E	**	SF MUNI San Francisco Municipal Transit	
L	M	SFCTA San Francisco County Transportation Authority	Υ
(E) Evicting		SFFD San Francisco Fire Department	
(E) Existing	MHW Mean High Water	SFPUC San Francisco Public Utilities Commission	YBI Yerba Buena Island
EBMUD East Bay Municipal Utility District	MLLW Mean Lower Low Water	SFMTA San Francisco Municipal Transportation Agency	YMCA Young Men's Christian Association
EIR Environmental Impact Report	MMRP Mitigation and Monitoring and Reporting Program	SGMP Soil and Groundwater Management Plan	
		SLC (California) State Lands Commission	

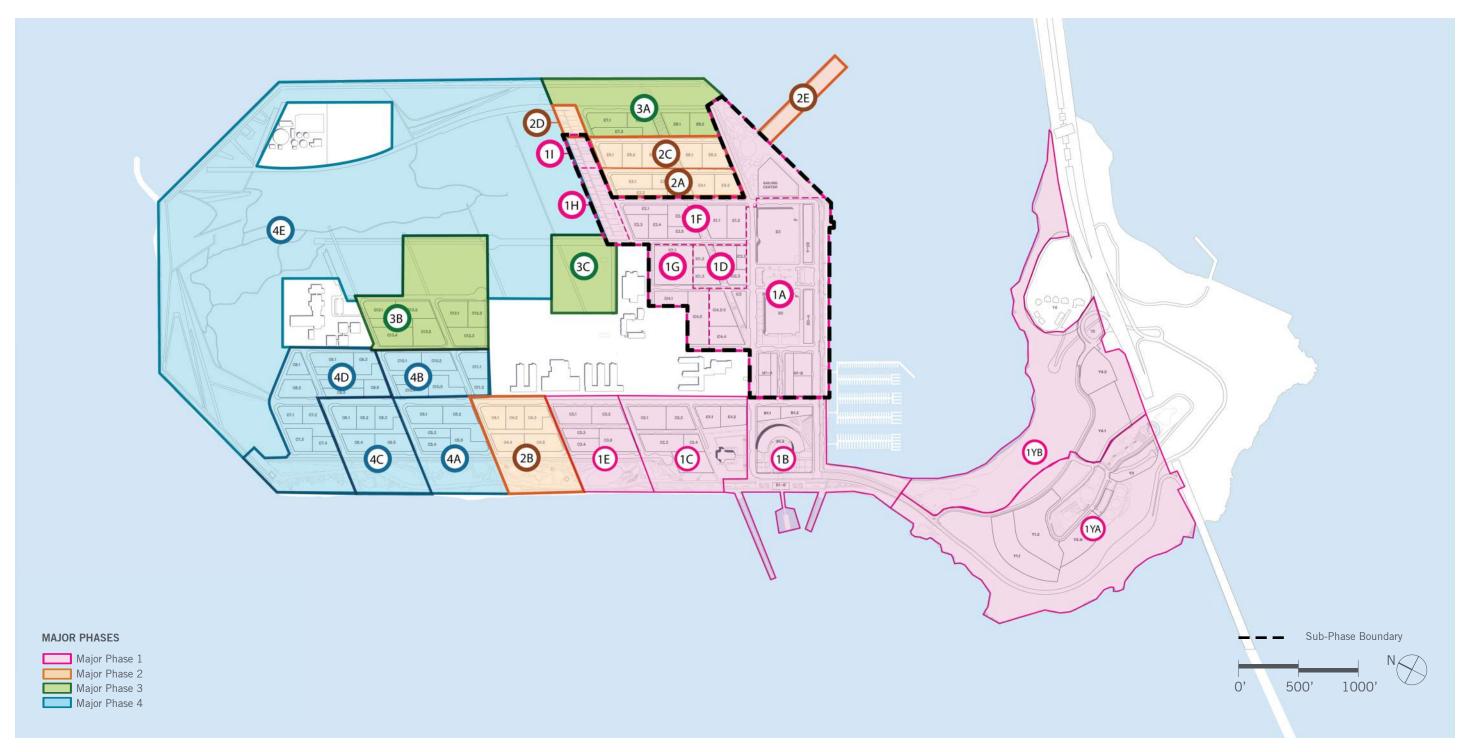


FIGURE 0.1 MAJOR PHASE SITE PLAN

EXECUTIVE SUMMARY

The site for the Treasure Island and Yerba Buena Island "Project" is divided into four "Major Phases" (large, mixeduse areas) and, within each Major Phase, various "Sub-Phases" (one or more adjacent blocks within the Major Phase). This is conceptually illustrated in the Major Phase diagram on the previous page.

Subject to the terms and conditions in the Project's Disposition and Development Agreement (DDA), Treasure Island Development Authority (TIDA) will convey portions of the Project Site owned or acquired by TIDA to the Developer. Treasure Island Community Development (TICD), for phased development by TICD.

This application is the presentation by TICD of additional detailed information for Sub-Phases 1A, 1D, 1F, 1G, 1H, and 1l. It includes all of the plans, diagrams, data, narrative, reports, and compliance updates that are set forth in the Project's Design Review and Document Approval Procedure (DRDAP) exhibit to the DDA.

The Sub-Phase Application 3: Sub-Phases 1A, 1D, 1F, 1G, 1H, and 1I is organized according to the following Chapters:

INTRODUCTION

The Introduction chapter provides summary project background information including the regulatory governing processes for the Project, an overview of Sub-Phases 1A, 1D, 1F, 1G, 1H, and 1I, confirmation of the Sub-Phase compliance with the Schedule of Performance and other entitlement documents, and a description of the Sub-Phase Associated Public Benefits.

LAND USE AND DEVELOPMENT BLOCKS

The Land Use and Development Blocks chapter describes proposed Sub-Phase land uses. The proposed land uses and building design standards are consistent with descriptions provided in previously approved project documents.

The chapter also confirms proposed locations for the various types of residential lots and commercial areas. Information about development blocks, easement standards, building heights and massing, and setbacks and street walls are also included in this chapter, along with information about the retail plan.

TRANSPORTATION AND STREETSCAPES

The Transportation and Streetscapes chapter describes the various transportation networks planned for Sub-Phases 1A, 1D, 1F, 1G, 1H, and 1I, including pedestrian, bicycle, vehicular, and transit. Information about street design and street intersections is included in the section, along with on-street and off-street parking locations, accessible loading and parking, and bicycle parking.

PARKS AND OPEN SPACE

The Parks and Open Space chapter includes 100% Design Development renderings, plans, illustrative images, and design narrative for all of the Open Space Lots within Sub-Phases 1A, 1D, 1F, 1G, 1H, and 1I. Design updates from the Schematic Design materials presented in the Major Phase 1 Application are provided for Clipper Cove Promenade 2, Eastside Common and Eastside Park (Stormwater Garden). Eastern Shoreline Park was not included in the Major Phase 1 Application and this document presents both concept, program and design development.

5.0 UTILITIES

The Utilities chapter features narratives and plans for each of the major utility systems in the Project, including storm water treatment, storm drainage, sanitary sewer, low pressure water, recycled water, and the joint trench (dry utilities: electric, gas, telephone, and cable TV). The information provided in this chapter is consistent with information in project-wide utility Master Plans for each system, except as noted within the chapter. 50% Construction Documents for utilities within this Sub-Phase are in Appendix F.

6.0 APPENDICES

Various appendices in this chapter provide greater level of data and technical detail in support of the Sub-Phase

The bulk of the Sub-Phase design can be found in the 50% Infrastructure Improvement Plans, which include all the improvements in the public right of way, and the 100% of Design Development (DD) package for open spaces. Other appendices include a compliance report for the Project EIR mitigation measures, the current Schedule of Performance, updated Housing Data Tables, cost estimates for Infrastructure, a form of Corporate Guaranty for Sub-Phase Improvements and Preliminary Stormwater Control Plan. Several appendices have been included for information only and are available on the enclosed disc with this document. Those include Subdivision Maps, Preliminary Utility Relocation Plans, Geotechnical Reports, Shoreline Improvement Plans and the Standards Analysis for Treasure Island Building 2 and 3.

SUMMARY OF APPENDICES

6.1 APPENDIX A: MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)

The MMRP was established to provide for the monitoring of mitigation measures required of the Project, as set forth in the Final EIR. Prior to the issuance of building permits, while detailed development plans are being prepared for approval by TIDA and/ or City staff, Treasure Island Development Authority (TIDA) and/ or City staff will be responsible for ensuring compliance with mitigation monitoring applicable to the Project construction, development and design phases. The status of all applicable mitigation measures is included in Appendix A.

6.2 APPENDIX B: SCHEDULE OF PERFORMANCE

The Disposition and Development Agreement (DDA) requires that the submission of Major Phase and Sub-Phase Applications, the Commencement and Completion of Infrastructure and Stormwater Management Controls within Sub-Phases, the Commencement and Completion of the Required Improvements and certain other major milestones will be commenced or completed by the specific dates in the Schedule of Performance included in the DDA as Exhibit JJ. A revised Schedule of Performance was approved with the Major Phase 1 Application on May 13, 2015, and it is further amended with this Application as discussed in Section 1.4. The revised Schedule of Performance is attached herein as Appendix B. with no further revisions.

APPENDIX C: SUB-PHASE HOUSING DATA TABLES

In order to track compliance with the Project's Housing Plan, each Sub-Phase Application includes a Housing Data Table that includes the location and acreage for each residential lot in those Sub-Phases, the percentage of acreage of Authority Housing Lots to the total housing in those Sub-Phases, the cumulative total of Authority Housing acreage to date, the cumulative number of Developer Residential Units in those Sub-Phases, and additional

information about each anticipated residential project in those Sub-Phases. When Sub-Phase property is conveyed to the Developer, TIDA retains the Authority Housing Lots within that sub-phase.

APPENDIX D: SUB-PHASE COST ESTIMATES

The Sub-Phase Cost Estimate identifies the estimated cost of completion for the improvements in Sub-Phases 1A, 1D, 1F, 1G, 1H, and 1I. Upon approval of the Sub-Phase Application by the TIDA Executive Director, this estimated cost of completion is the Sub-Phase Construction Secured Amount for which the Developer will provide Adequate Security (refer to Appendix E: Corporate Guaranty).

APPENDIX E: CORPORATE GUARANTY

The Developer must provide a Guaranty to secure its obligations for each Sub-Phase no later than 30 days after approval of that Sub-Phase, the proposed form of which is included herein. For this Sub-Phase Application 3, the Developer proposes to provide a Corporate Guaranty equal to 125% of the cost of completion of the obligations. TICD may acquire land and construct improvements in increments. The cost estimates provided in Appendix D indicate cost by Sub-Phase area. Prior to acceptance of TICD's Corporate Guaranty, TICD will assign its Sub-Phase Application 3 interests in the DDA to Treasure Island Series 2. LLC, who will execute the obligations and serve as the Developer for the Guaranty. Treasure Island Series 2, LLC is a wholly owned subsidiary of TICD

APPENDIX F: 50% INFRASTRUCTURE IMPROVEMENT **PLANS**

This Sub-Phase Application includes 50% Improvement Plans for all utilities, along with a plan or narrative that indicates the relationship of those Sub-Phases to their Major Phase and to the

utilities serving the entire Project, including sanitary sewer and storm drain facilities, low pressure, high pressure, and reclaimed water facilities, and joint trench for electric power, natural gas, telephone and data communications. The Developer plans to submit Permit Set Infrastructure Plans for agency review in April 2019, for DPW's issuance of construction permits.

APPENDIX G: PRELIMINARY STORMWATER CONTROL PLAN

The Preliminary Stormwater Control Plan for Sub-Phase Application 3 describes the proposed stormwater system, which includes a "treatment train" strategy in an urban park setting for the Sub-Phases' large centralized treatment area. The Preliminary Stormwater Control Plan identifies all drainage management areas with Best Management Practices (BMPs) for each, area summary tables, BMP sizing calculations, and typical details for each BMP type. The Final Stormwater Control Plan should be submitted at the Permit Set Improvement Plans, or upon approval of the Preliminary Stormwater Control Plan.

APPENDIX H: 100% DD PARKS AND OPEN SPACE

The Sub-Phase Application includes 100% Design Development drawings for the Open Space Lots within the Sub-Phase areas, including landscape architectural plans and sections that fix the location and design of landscape elements, outline specifications, and material and color information. The Developer plans to submit the 100% Construction Documents for the Open Space Lots for approval by the TIDA Executive Director after approval of the Infrastructure Improvement Plans.

APPENDIX I: TENTATIVE TRANSFER MAP

Prior to conveyance of the Sub-Phase Lots from the Authority to the Developer, the City will approve and the Authority will record a Transfer Map for the applicable property, which is in compliance with the California Subdivision Map Act. A Tentative

Transfer Map was submitted in October 2018. Following approval of the Tentative Transfer Map by the DPW Director and prior to the conveyance of property to the Developer, the Developer will submit Final Transfer Maps for approval by the San Francisco Board of Supervisors.

6.10 APPENDIX J: DRAFT TENTATIVE SUBDIVISION MAP

Prior to conveyance of the Sub-Phase Lots from the Authority to the Developer, the Developer will procure approval of the Tentative Subdivision Map, which is in compliance with the California Subdivision Map Act. A Tentative Subdivision Map will be submitted after approval of the Transfer Map, expected May 2019. Following approval of the Tentative Subdivision Map by the DPW Director and prior to the subdivision of parcels by the (Master) Developer for sale of development lots to Vertical Developers, the Developer will submit Phased Final Subdivision Maps for approval by the San Francisco Board of Supervisors.

6.11 APPENDIX K: PRELIMINARY UTILITY RELOCATION PLANS (FOR INFORMATION ONLY)

Before commencing construction of improvements and to ensure minimal interruption of utility services to remaining existing operations on Treasure Island, existing buildings in the Sub-Phase area that are scheduled for removal must be demolished and existing utilities must be moved out of the way. Preliminary demolition and utility relocation plans are included in this Sub-Phase Application for information only. The Developer plans to submit the Demolition and Utility Relocation Plans in April 2019, for approval by the TIDA Executive Director.

6.12 APPENDIX L: GEOTECHNICAL REPORTS (FOR INFORMATION ONLY)

Geotechnical reports for this Sub-Phase area that were developed subsequent to the submission of the Major Phase 1 Application are included in this Sub-Phase Application for information and include data report, characterization report, supplemental basis of design memorandum, and design report. The Draft Geotechnical Data and Characterization Report for Sub-Phases 1A, 1D, 1F, 1G, 1H, and 1I is included with this submittal, and the Geotechnical design recommendations will be submitted to DPW and DBI for their review and approval in March 2019.

6.13 APPENDIX M: PRELIMINARY SHORELINE IMPROVEMENT PLANS (FOR INFORMATION ONLY)

The existing rock slope shoreline protection along the perimeter of Treasure Island will be augmented with additional rock and receive geotechnical stabilization improvements. Preliminary shoreline improvement plans are included in this Sub-Phase Application for information only. The Developer plans to submit

the 100% Shoreline Improvement Plans in April 2019, for approval by the TIDA Executive Director.

6.14 APPENDIX N: STANDARDS ANALYSIS FOR TREASURE ISLAND BUILDINGS 2 & 3 (FOR INFORMATION ONLY)

Prepared by Page & Turnbull, this document includes a summary of Building 2 and Building 3's historic status and character defining features, a narrative description of the proposed project, analysis of the proposed project under the *Secretary of the Interior's Standards for the Treatment of Historic Properties* (Standards), and guidance for further work within the evolving scope. The report was produced to analyze the proposed landscape project at Buildings 2 and 3 for potential impacts to both the historic landscape and the historic buildings.



SUB-PHASE APPLICATION 3: SUB-PHASES 1A, 1D, 1F, 1G, 1H, 1I

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FIGURE 1.1 OVERALL ILLUSTRATIVE PLAN

1. INTRODUCTION

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1.1 REGULATORY CONTEXT AND AUTHORITY

The General Plan land use designations and policies governing Treasure Island and Yerba Buena Island are set forth in the Treasure Island / Yerba Buena Area Plan, an area plan of the City's General Plan that provides the broad General Plan objectives and policies to redevelop the islands. The overall objectives and policies of the General Plan are implemented through the applicable zoning for the islands, which is found in the Treasure Island / Yerba Buena Island Special Use District ("Special Use District"), Section 249.52 of the Planning Code. The Special Use District includes basic land use and development standards for the development areas of Treasure Island and Yerba Buena Island identified in the Special Use District ("Development Plan Area"), and sets forth the process for approval by TIDA and the Planning Department and Commission, as applicable, of Vertical Improvements. The Special Use District references the Design for Development, also adopted by the Planning Commission, for more detailed design standards and guidelines for development.

TIDA is the public agency responsible for the oversight of the development within the Development Plan Area, and administers the property that is subject to the Tidelands Trust in accordance with the land use restrictions set forth in the Treasure Island Conversion Act of 1997 (amending Section 33492.5 of the California Health and Safety Code and added Section 2.1 to Chapter 1333 of the Statutes of 1968). TIDA will have oversight for the horizontal development of the islands as more particularly described in the Design for Development. TIDA, for the Tidelands Trust property, and the Planning Department and Commission, as applicable, will review and approve the development of buildings on the islands in accordance with the standards and procedures set forth in the Special Use District and the Design for Development.

As set forth in the Special Use District, the Special Use District and Design for Development supersede the San Francisco Planning Code in its entirety except as otherwise expressly noted in the Design for Development. The Green Building Specifications in the

Design for Development supplement the City and County of San Francisco's Green Building Ordinance, essentially "raising the sustainability bar" for the islands' development. In addition, all development on the islands is subject to contractual agreements with the Developer that include detailed infrastructure and transportation plans, as more particularly described in the Design for Development. In the event of any conflict between the Design for Development and the Special Use District, the Special Use District provisions control.

DESIGN REVIEW AND DOCUMENT APPROVAL PROCEDURE

The Design Review and Document Approval Procedure (DRDAP), which is part of the Treasure Island and Yerba Buena Island Disposition and Development Agreement (DDA), sets forth the procedures for submitting, reviewing, and approving Major Phase and Sub-Phase Applications for the Project Site. The review and approval process set forth in the DRDAP relates primarily to horizontal infrastructure development and compliance with various obligations under the DDA.

MAJOR PHASE APPLICATIONS AND APPROVALS

The purpose of a Major Phase Application is for the Developer -- Treasure Island Community Development (TICD) -- to present additional detailed information for a certain geographic area of the Treasure Island and Yerba Buena Island Project (Project), referred to as a Major Phase (see Figure 1.3). Major Phase Applications generally include overall site plans, vicinity plans, illustrative concept plans for Infrastructure and Stormwater Management Controls, including all Associated Public Benefits, and any proposed changes to the Phasing Plan attached to the DDA, as updated and approved from time to time.

The Treasure Island Development Authority (TIDA) shall review such Applications and coordinate with applicable City Agencies for review in accordance with the Interagency Cooperation Agreement (ICA). TIDA's approval of the Major Phase confirms that the Major Phase Application conforms to and is consistent with the applicable Development Requirements, and for the Developer to obtain approval by TIDA of the additional detailed information included in a Major Phase Application that has not been previously reviewed or approved by TIDA.

Under the DDA, the TIDA Board must approve the Major Phase Application before the TIDA Executive Director may approve a Sub-Phase.

SUB-PHASE APPLICATIONS AND APPROVALS

A Sub-Phase is a smaller geographic area within a Major Phase. A Sub-Phase Application includes plans for Infrastructure and Stormwater Management Controls within the Sub-Phase, including data charts, site plans, 50% Construction Documents for Infrastructure and Stormwater Management Controls within the Sub-Phase, and 100% Design Development Documents for Open Space Lots.

A Sub-Phase Application must be approved by the Executive Director before the conveyance of land to TICD, before building permits may be issued for Infrastructure and Stormwater Management Controls and before the Authority's consideration of and grant of Vertical Approvals.

The Developer will submit Sub-Phase Applications for the Sub-Phases within Major Phase 1 in accordance with the Schedule of Performance (See Sections 1.4 and 1.6 of the approved Major Phase Application).

VERTICAL APPLICATIONS AND APPROVALS

The procedure for submitting, reviewing and approving applications for Vertical Improvements in the Project Site is governed by the Treasure Island and Yerba Buena Island Special Use District that resides in Section 249.52 of the City's Planning Code.

RELATIONSHIP OF THE SUB-PHASE APPLICATION TO OTHER PROJECT DOCUMENTS

The Disposition and Development Agreement (DDA) for Treasure Island and Yerba Buena Island was approved by the City of San Francisco in June 2011. The DDA and its attached Exhibits guide and regulate the implementation of the redevelopment project. The Major Phase 1 application was approved by Treasure Island Development Authority in May 2015. The following related documents are the most relevant to the information provided in this Sub-Phase Application.

Design for Development Document

The Design for Development for Treasure and Yerba Buena Islands (D4D) is the guiding document for the land use, urban design, vertical development and building design, streets and public parks and open spaces. It includes the overall vision for the project, the planning and transportation frameworks, land use, building massing and height controls, as well as programmatic requirements, standards and guidelines for the implementation of the streets, parks, and open spaces. It is the primary reference document relative to the design of the public realm and vertical development.

Treasure Island and Yerba Buena Island Parks and Open Space Plan The Parks and Open Space Plan was approved by the City in June of 2011 as part of the project entitlements and establishes the scope and program for park and open space improvements that are required as part of the project. The Open Space Plan is consistent with the standards and design guidelines established in the Design for Development and provide additional information regarding program, materials and furnishings, as well as maintenance and operations. The Plan is the primary reference for review of the Parks and Open Spaces in this Sub-Phase Application.

Streetscape Master Plan

The Streetscape Master Plan was approved by TIDA in February 2015 and further develops the streetscape design defined in the Design for Development. The Master Plan includes specific design standards and guidelines that will direct the implementation of

streetscapes on both islands. The Master Plan also positions the streetscape as an integral component of an innovative and welcoming public realm by establishing guidelines for paving, street trees, planting, lighting, furnishings, accessible parking and on-street loading as well as coordinating with necessary utilities. The document is the primary reference for review of the streetscape design in this Sub-Phase Application.

Treasure Island & Yerba Buena Island Signage Master Plan

The Treasure Island & Yerba Buena Island Signage Master Plan provides concept-level designs and locations for nonstandard signs within the public right of way and in TIDA-owned parks and open spaces. The signage in the Master Plan falls into three general categories: identification, interpretation and wayfinding. Wayfinding – including vehicular, bicycle, and pedestrian – is the primary focus of the Signage Master Plan because it requires a cohesive, project wide approach to be effective. Illustrative examples of identification and interpretive signage are provided in the Signage Master Plan, however it is anticipated that these types of signs will be site specific and will be designed with their environs.

Master Utility Plans

The Master Utility Plans further develop the Infrastructure Plan approved by the City as part of the entitlements in June 2011 and provide detailed design criteria and systematic layout for the construction of new infrastructure on both Treasure Island and Yerba Buena Island. The Master Utility Plans include; Grading and Storm Drain, Joint Trench, Low Pressure Water, Recycled Water, and Sanitary Sewer systems. Each has been coordinated with applicable City Departments and utility service providers.

Stormwater Control Plans

Stormwater Control Plans documenting the proposed storm water management and treatment measures are required by the SFPUC Stormwater Design Guidelines. A Preliminary Stormwater Control Plan is included with this Sub-Phase Application as Appendix G. It further specifies the size, type, and detailed design of storm water treatment systems and features. In accordance with the approved 2016 Treasure Island and Yerba Buena Island Subdivision regulations. The design of stormwater treatment

systems and open spaces shall be coordinated to ensure aesthetic and programmatic consistency.

Sustainability Plan

The Sustainability Plan finalized in June 2011 includes both sustainability commitments and aspirations. The Environmental Sustainability Obligations are part of the project entitlements. The obligations they describe in greater detail address Land Use, Transportation, Infrastructure, Energy and Water, Building Design and Construction, Solid Waste Management, and Community Benefits.

Basis of Design

In cooperation with multiple City Agencies, TICD has prepared and submitted a "Basis of Design" (BOD) document that illustrates the design intent for public improvements, and references the approved documents above as guiding detailed designs for this Sub-Phase. The Basis of Design was circulated to City Agencies in October 2018.



1.2 PROJECT OVERVIEW, PHASING AND MAJOR PHASE OVERVIEW

PROJECT OVERVIEW

Treasure Island and Yerba Buena Island are in the San Francisco Bay, about halfway between the San Francisco mainland and Oakland. The Islands are the site of the former Naval Station Treasure Island (NSTI), which is owned by the U.S. Navy. NSTI was closed on September 30, 1997, as part of the Base Realignment and Closure Program. The Islands also include a U.S. Coast Guard Station and Sector Facility, a U.S. Department of Labor Job Corps campus, and Federal Highway Administration land occupied by the San Francisco-Oakland Bay Bridge and tunnel structures.

The Project facilitates the City's long-term goal of implementing the creation of a new City neighborhood on Treasure Island and Yerba Buena Island that provides extensive public benefits to the City such as significant amounts of new affordable housing, increased public access and open space, transportation improvements, extensive infrastructure improvements, and recreational and entertainment opportunities, while creating jobs and a vibrant, sustainable community. In particular, the Project provides an innovative transportation program designed to maximize transit usage and opportunities for walking and biking, with a dense mixed-use urban core in close proximity to transit, and provides a model for sustainable development. The Project provides for the creation of approximately 300-acres of public open spaces, including neighborhood parks, sports fields, shoreline parks, wetlands, an urban farm and large areas for passive recreation and native habitat.

The Treasure Island Development Authority (TIDA) proposes to redevelop NSTI, some portions of which have been transferred to TIDA and other portions which are still owned by the Navy. The Development Plan will be carried out by Treasure Island Community Development, LLC (TICD), a private development entity who has the right to develop the Project Site in accordance

with the Development Agreement (DA) and the Disposition and Development Agreement (DDA), and related Project approvals (including the certified Environmental Impact Report (EIR), Design for Development (D4D), Parks and Open Space Plan (POSP), Streetscape Master Plan, Treasure Island Transportation Implementation Plan (TITIP), and Infrastructure Plan (IP). These documents control the overall design, development and construction of the Project and all improvements, including the permitted uses on the Project Site, the density and intensity of uses, the maximum height and size of buildings, the number of allowable parking spaces and all Mitigation Measures required in order to eliminate or mitigate any materially adverse environmental impacts of the Project.

The development of the Project's planning and design documents is a thorough, thoughtful, and collaborative process, and it has included the engagement of hundreds of members of the community and many public agencies. A series of public hearings and numerous workshops with regulatory agency representatives have led to the preparation of this Sub-Phase Application.

Currently, the former military base consists primarily of low-density residential uses, along with vacant and underutilized non-residential structures. There are about 1,005 total dwelling units on Treasure Island (of which about 726 are available for occupancy), about 100 buildings with existing and former non-residential uses, parking and roadways, open space, a wastewater treatment facility, and other infrastructure.

The Project provides a new, high-density, mixed-use community with a variety of housing types, a retail core, open space and recreation opportunities, on-site infrastructure, and public and community facilities and services. In all, there will be up to 8,000 residential units; up to 140,000 square feet (sq. ft.) of new commercial and retail space; approximately 100,000 sq. ft. of new office space; up to 500 hotel rooms; approximately 300

acres of parks and open space; bicycle, transit, and pedestrian facilities; a ferry terminal and inter-modal transit hub; and new and/or upgraded public services and utilities, including a new or upgraded wastewater treatment plant.

Three historic buildings on Treasure Island will be adapted to house up to 311,000 sq. ft. of commercial space. There is an opportunity to adaptively reuse nine historic buildings and four garages on Yerba Buena Island. The Navy will remediate hazardous materials to standards consistent with applicable Federal laws governing base closure prior to transfer. Geotechnical improvements will be made to stabilize Treasure Island and the causeway that connects it to Yerba Buena Island. Build out will be implemented in phases, anticipated to occur from approximately 2017 through 2034, depending on market conditions.

The Project's urban form is intended to be distinctive, placebased, and experience-focused, establishing a memorable identity on the Bay. Treasure Island is arranged with a series of fine-grained, walkable blocks. The new homes on Treasure Island will form two neighborhoods - one along the island's western edge with spectacular views back to the City, and a second stretching to the east along Clipper Cove with views of the new Bay Bridge and the East Bay hills. Each neighborhood will feature a distinctive mix of parks, and both will be enveloped by a regional waterfront park system that will occupy the majority of land on the island. The east and west neighborhoods will have a retail main street linking the historic buildings along clipper cove to the west-facing ferry and bus facilities. On Yerba Buena Island, the rugged natural topography informs the placement and form of development, which is focused on views and relationship to natural habitats. Yerba Buena Island's limited development footprint allows preservation of natural vegetation and landform along with historic structures and gardens.

PROJECT PHASING

The Project Site has been divided into four Major Phases and, within each Major Phase, various Sub-Phases, each of which is illustrated in Figure 1.3 (Current Major Phase Site Plan). Subject to the terms and conditions of the DDA, TIDA will convey portions of the Project Site owned or acquired by TIDA to the Developer, and such portions shall be developed by Developer in phases under the DDA. TIDA Approval of each Major Phase Application is required before, or concurrently with its consideration of and grant of a Sub-Phase Approval for any Sub-Phase in that Major Phase. Major Phase 1, comprised of 11 Sub-Phases, was approved by the TIDA Board in May 2015. This application covers all of the remaining area in Major Phase 1.

With this application, TICD proposes to slightly alter the phasing presented in the Major Phase 1 Application. As indicated in Figures 1.2 and 1.3, TICD proposes to include in this Sub-Phase, and to bring into Major Phase 1 the area previously labeled area 3C, as well as the non-developable area comprising Eastern Shoreline Park, and the adjacent Second Street. The proposal also includes moving from Major Phase 1 to Major Phase 3 the non-developable area intended to become part of the urban farm that was previously labeled as the northern portion of area 1F. This sequencing is more logical in bringing usable public open space on line in conjunction with adjacent residential and commercial development, and allowing development and infrastructure to be built in a more compact way. Specifically, the Eastern Shoreline Park will provide a greater public amenity for residents and island businesses than would the area moving to Major Phase 3, which is part of a much larger amenity that will be provided in the future. 1H and 1I have been added to include the larger centralized stormwater treatment area required based upon refined calculation of the Sub-Phase 3 treatment flows. Including the development area now labeled 1G will allow TICD to move forward in the schedule the public parcel for the future police and fire station as well as aligning the public parking parcels with the retail district in Major Phase 1. This will help ensure the success of this Sub-Phase and round out development on the south and east boundaries of the Job Corps property during one phase. The Schedule of Performance has been updated to align with the modifications to phasing presented above. See Section 1.4 of this Application.

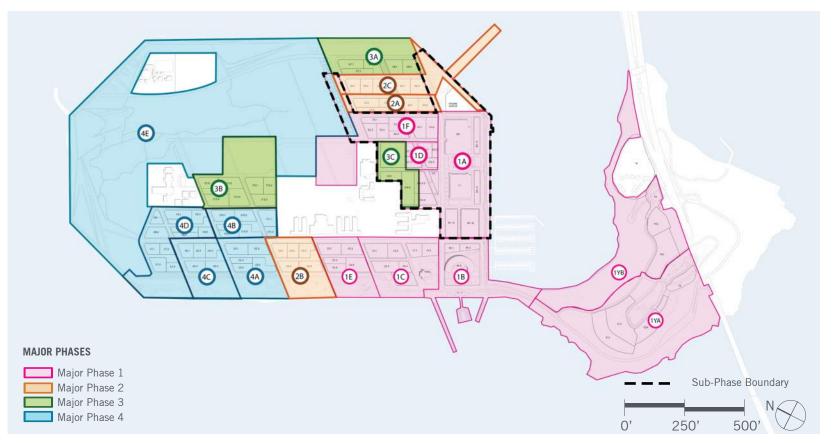


FIGURE 1.2 PREVIOUS MAJOR PHASES SITE PLAN

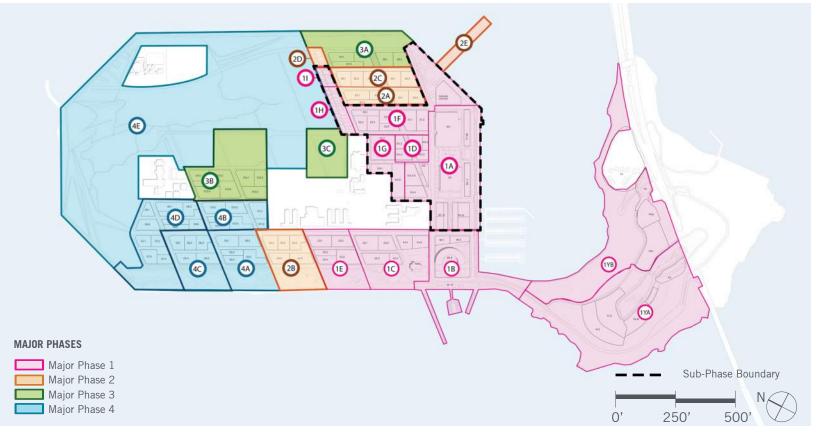


FIGURE 1.3 CURRENT MAJOR PHASES SITE PLAN

1.3 SUB-PHASE OVERVIEW

Within these six Sub-Phases are new development blocks that form the commercial core of the Island Center District described in the Design for Development. The Island Center will be a mixed use district with repurposed historic buildings, a retail main street, an inviting network of lively spaces, and marina and water access via an extension of Clipper Cove Promenade, the westernmost stretch of which will be constructed as part of area 1B (Sub-Phase 2).

Much of the Sub-Phase 3 area is under a 240 ft flex zone, allowing TICD flexibility in placing taller buildings in the most appropriate locations in the new area. The result will be a predominantly 3-6 story building fabric, punctuated by high-rise buildings along California Avenue, and neighborhood towers to the east.

Sub-Phase 1A is the commercial and community core of Treasure Island. This area contains the historic Buildings 2 and 3, former hangars that will be restored and developed into commercial space. West of Building 2 there is a new retail street lined with shops and housing above that will link Building 2 with Building 1 and the transit hub further to the west. The southern edge of Sub-Phase 1A is Clipper Cove Promenade, an active open space walkway proceeding along Clipper Cove with access to the new Marina. Clipper Cove Promenade serves many functions, acting as a main walking path to the Sailing Center and the Eastern Shoreline Park, providing access to the marina, providing a major cycling thoroughfare in a class IV cycle track, and providing a portion of the transit circulation with MUNI and AC Transit buses utilizing the westernmost block.

Sub-Phases 1D and 1F consist of residential development lots that establish the typical development pattern of the Eastside neighborhood.



FIGURE 1.4 SUB-PHASE APPLICATION 3 SITE PLAN

Sub-Phase 1G allows for the development of parking structures to serve the commercial core in the Island Center, parking for visitors to the island's recreational amenities, and potentially Island residents.

Sub-Phases 1H and 1I are included in a slightly expanded area north of Fourth Street and are un-developable parcels that provide area for stormwater gardens.



1.4 SCHEDULE OF PERFORMANCE

APPLICATION OUTSIDE DATES

The Schedule of Performance included in the DDA (as amended in Major Phase 1 application and this Sub-Phase Application 3, and included as Appendix B) provides for the submittal of the Sub-Phase Application as follows:

- 2019 Sub-Phase 1A
 - Blocks B2, B3, M1, IC3, IC4.2-3, IC4.4
 - Clipper Cove Promenade 2
 - Eastside Common 1
- 2019 Sub-Phase 1D
 - Blocks IC1.2, IC1.3, IC2.1, IC2.2, IC2.3
 - Eastside Common 2
- 2020 Sub-Phase 1F
 - Blocks E1.1, E1.2, E2.1, E2.2, E2.3, E2.4, E2.5
 - Fastern Shoreline Park
 - Eastside Common 3
- 2026 Sub-Phase 1G
 - Blocks IC1.1, IC4.1, IC4.5
- 2020 Sub-Phase 1H
- 2020 Sub-Phase 11

All references to year used herein are the last day in such year. As noted in Table 1.1, this submittal of the application conforms to such requirements.

COMPLETION OUTSIDE DATES

The Horizontal Obligations for the Sub-Phase include outside dates for completion of Infrastructure and Stormwater Management Controls for the Lots and all improvements for the Open Space Lots. The Schedule of Performance included in the DDA (as amended in Major Phase 1 application and included as

Appendix B) provides for the completion of all these Horizontal Obligations as follows:

- 2024 Sub-Phase 1A
 - Blocks B2, B3, M1, IC3, IC4.2-3, IC4.4
 - Clipper Cove Promenade 2
 - Eastside Common 1
- 2025 Sub-Phase 1D
 - Blocks IC1.2, IC1.3, IC2.1, IC2.2, IC2.3
 - Eastside Commons 2
- 2025 Sub-Phase 1F
 - Blocks E1.1, E1.2, E2.1, E2.2, E2.3, E2.4, E2.5
 - Eastern Shoreline Park
 - Eastside Common 3
- 2033 Sub-Phase 1G
 - Blocks IC1.1, IC4.1, IC4.5

- 2024 Sub-Phase 1H
- 2033 Sub-Phase 11

All references to year used herein are the last day in such year. As noted in Table 1.1, the Planned Completion Dates conform to such requirements.

OBLIGATIONS UNDER THE HOUSING PLAN

The Housing Plan requires the developer to prepare developable lots in Sub-Phases in accordance with the Schedule of Performance. As noted in Table 1.1, the planned Completion Dates conform to such requirements.

Sub-phase Area	Blocks
1A	B2-B3-M1-IC3-IC4.2-IC4.4
1D	IC1-IC2
1F	E1-E2
1G	IC1.1-IC4.1-IC4.5
Parks and Open Space	
1A	Clipper Cove Promenande 2
1F	Eastern Shoreline Park 1
1A	Eastside Commons 1
1D	Eastside Commons 2
1F	Eastside Commons 3
1A	Sailing Center Pad

2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
		*	*	*	*								
		*		*	*	*	*						
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	Application Outside Date Commencement and Completion Outside Dates (Horizontal Obligations Only)
*	Actual Application Date
*	Planned Commencement and Completion Dates (Horizontal Obligations Only)

^{*}Actual dates compared with Schedule of Performance deadline dates



1.5 ASSOCIATED PUBLIC BENEFITS

Sub-Phase Application 1A, 1D, 1F, 1G, 1H and 1I includes a variety of public benefits that will be provided to support the needs of the current and future residents, businesses and visitors. Associated Public Benefits shown in the Schedule of Performance (Appendix B) and the anticipated timing of the community benefits, including any payments or obligations to be fulfilled in this Sub-Phase Application in accordance with the DDA are described in this section. These will be completed in compliance with the Schedule of Performance. See Figure 1.5 on the following page.

PARKS AND OPEN SPACE

Sub-Phase Application 3 will provide 15.8 acres of open space and parks on Treasure Island. Consistent with the principle of adjacency described in the DDA, open space and parks will be developed in conjunction with the adjacent horizontal development proposed for these Sub-Phases. Chapter 4 – Parks & Open Space of this Sub-Phase Application provides detailed descriptions of the location, boundary and character of each open space and park that will be developed, including:

- Clipper Cove Promenade 2
- Eastside Commons 1, 2, and 3
- Eastern Shoreline Park
- Eastside Park (Stormwater Treatment Garden)
- Building 2 and 3 Open Space

COMMUNITY FACILITIES with Sub-Phases 1A, 1D, 1F, 1G, 1H and 1I

Note that obligations that apply to the entire Major Phase 1 may be referred to redundantly in all Sub-Phase Applications within that Major Phase.

- <u>Treasure Island Sailing Center Parcel:</u> Property indicated in Figure 1.5 will be set aside and geotechnically improved for development of a new Sailing Center facility.
- New Gas Regulator Pad: Property indicated in Figure 1.5 will be set aside and geotechnically improved for development of a new Gas Regulator Station supporting permanent PG&E gas service to the entire island. The existing Gas Regulator Station will be demolished after the new facility is on line.
- <u>Police / Fire Station:</u> Property indicated in Figure 1.5 will be set aside and geotechnically improved for development of a new approximately 20,000 square foot combined Police and Fire Station.
- <u>Buses for East Bay Service</u>: \$3,213,675 to fund the purchase of up to five (5) buses in cooperation with AC Transit for service anticipated to commence with the occupancy of the first new residential units.
- <u>Supplemental Fire Water:</u> In this Sub-Phase TICD will install an emergency water system that will act as a back-up if major disaster damages or overloads the primary system. The supplemental system will be supplied by an intake pipe near Pier 1/Eastern Shoreline Park. The system will include four hydrants. One on each block on California Avenue and Second Street.

FINANCIAL OBLIGATIONS with Sub-Phases 1A, 1D, 1F, 1G, 1H, 11

Note that obligations that apply to the entire Major Phase 1 may be referred to redundantly in all Sub-Phase Applications within that Major Phase.

• Open Space Annual O+M Subsidy: \$14.32 million of total subsidy beginning with the first opening of the first park

owned by TIDA at the maximum rate of \$1.5 million per year for the first 5 years and \$3 million per year thereafter

- <u>Transportation Annual Operating Subsidy:</u> \$30 million of total subsidy to be funded for transportation operation subsidies up to a maximum of \$4 million per year, commencing after first new on-island shuttle AC transit bus, or ferry service begins.
- <u>Transportation Capital Contributions:</u> \$1.8 million for the purchase of up to six (6) Muni buses at the lesser of 20% of the cost of a Muni bus or \$300,000
- <u>Community Center Space Subsidy:</u> \$9.5 million or 13,500 square feet of community center space (or a combination thereof as approved by TIDA and TICD) subject to a maximum of \$2.375 million per Major Phase and consistent with timing provisions described in the DDA.
- Affordable Housing Subsidy: Approximately \$28,800,000 at a subsidy rate of \$17,500 per market rate unit sold from the approximately 1,650 market rate units expected to be developed within Sub-Phases 3.
- Ramps/Viaduct SFCTA Cost Reimbursement:
 Approximately \$5.5 million in payment to SFCTA 30 days following the initial conveyance of land by the Navy to TIDA, followed by additional payments prior to the end of 2016.
- <u>Import Fill:</u> Approximately \$1 million for landfill stockpiled on Treasure Island paid at a rate of \$3.50 per cubic yard removed or in 3 equal annual installments at the end of 2015, 2016 and 2017.

PUBLIC BENEFITS

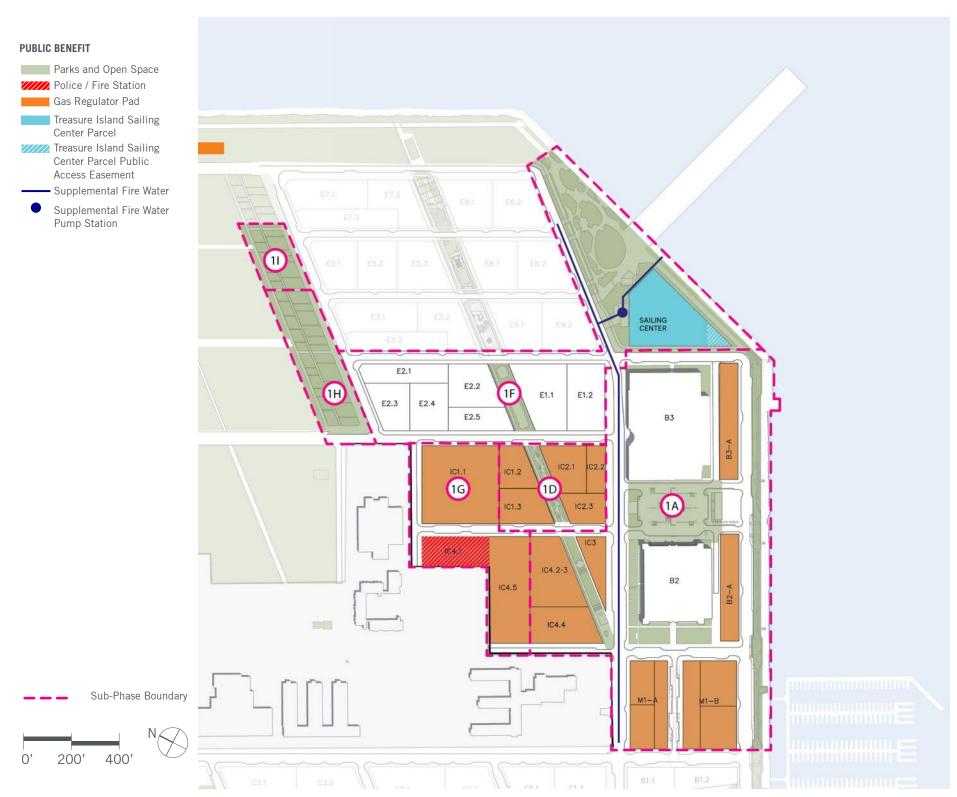


FIGURE 1.5 SUB-PHASE PUBLIC BENEFITS

1.6 CONSISTENCY WITH ENTITLEMENT DOCUMENTS

PHASING AND SCHEDULE OF PERFORMANCE

The Project Phasing Plan for Sub-Phase Application 3 is consistent with the Plan approved in Major Phase 1, with the proposed modification described in Section 1.2. As further described in Section 1.4, the Schedule of Performance for Sub-Phase Application 3 is consistent with the Schedule approved in Major Phase 1, with the exception of Area 1A, which was anticipated to be submitted in 2017, but is being submitted as part of this package.

LAND USE AND DEVELOPMENT PROGRAM

The proposed land use for this Sub-Phase Application is consistent with all previous entitlement documents. The locations of housing, commercial and community uses are shown illustratively based on the land use standards and guidelines in Section T3 of the TI-YBI Design for Development. The proposed development program is also within the limits established by the Project EIR. The development blocks in this Sub-Phase Application are consistent with the TI-YBI D4D, but have been revised slightly based on updated street designs and new survey information. The changes to the development block dimensions are not substantive. Building height limits, setbacks, bulk and massing standards shown in this Sub-Phase Application are all consistent with those in Section T4 of the TI-YBI D4D. The Tidelands Trust configuration is also consistent with the TI-YBI Trust Exchange Agreement.

TRANSPORTATION AND STREETSCAPES

The transportation systems and streetscapes included as part of this Sub-Phase Application are consistent with previous entitlement documents, the Treasure Island/Yerba Buena Island Streetscape Master Plan and the Major Phase 1 Application, which were approved by TIDA in February 2015 and May 2015, respectively, except as noted in this application.

PARKS AND OPEN SPACE

The Parks and Open Spaces included as part of this Sub-Phase Application 3 are consistent with the Schematic Designs approved in the Major Phase 1 Application. The designs presented in this Sub-Phase Application are consistent with the Treasure Island/Yerba Buena Island Parks and Open Space Plan, except as noted in this application.

UTILITIES

The utility systems included as part of this Sub-Phase Application are generally consistent with previous entitlement documents and the Treasure Island/Yerba Buena Island Master Utility Plans with minor deviations to storm drain alignment in Second Street between Eastside and Avenue G and the locations of the Sanitary Sewer and Storm Drain Lift Stations near the corner of Fourth Street and Avenue F. Chapter 5 includes more information for Utilities within this Sub-Phase. Appendix F includes 50% Construction Documents for all infrastructure on Treasure Island Sub-Phases 1A, 1D, 1F, 1G, 1H and 1I. Further information regarding pump stations, phasing, and interim utility improvements will be provided as part of subsequent improvement plan submittals.

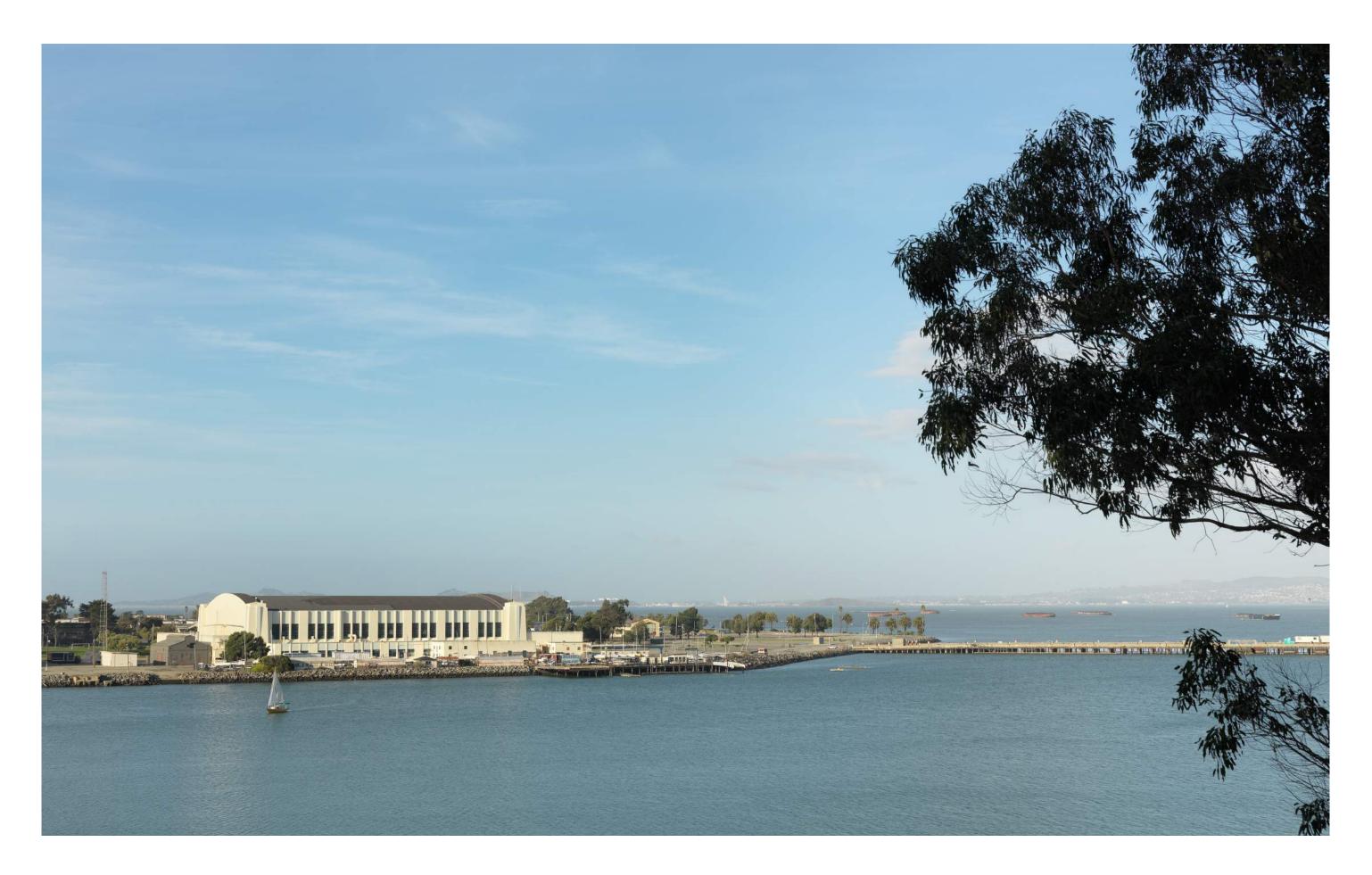
GEOTECHNICAL

In 2009, during the Treasure Island and Yerba Buena EIR effort, conceptual geotechnical design reports were developed for Treasure Island and Yerba Buena Island. The subject reports identified the geotechnical issues and provided concept level geotechnical improvement strategies to mitigate the geotechnical hazards. For information only, Appendix L includes Geotechnical Data Report, Characterization Report, Design Report, and Supplemental Basis of Design for Sub-Phases 1A, 1D, 1F, 1G, 1H and 1I. The geotechnical concerns and the proposed geotechnical

mitigation measures are similar to the ones identified in 2009 conceptual geotechnical design reports.

MARINE AND SHORELINE IMPROVEMENTS

The design of the Shoreline improvements are consistent with the project as set forth in the Design for Development and Mitigation Measures described in the Final Environmental Impact Report. Preliminary Shoreline Improvement Plans are included in Appendix M.





2. LAND USE AND DEVELOPMENT PROGRAM

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CONSISTENCY WITH ENTITLEMENT DOCUMENTS

The proposed land use for this Sub-Phase Application is consistent with all previous entitlement documents. The locations of housing, commercial and community uses are shown illustratively based on the land use standards and guidelines in Section T3 of the TI/YBI Design for Development. The proposed development program is also within the limits established by the Project EIR. The development blocks in this Sub-Phase Application are largely consistent with the TI/YBI D4D, but have been revised slightly based on updated street designs and new survey information. The changes to the development block dimensions are not substantive. Building height limits, setbacks, bulk and massing standards shown in the Sub-Phase Application 3 are all consistent with those in Sections T4 and Y4 of the TI/YBI D4D. The Tidelands Trust configuration is also consistent with the TI/YBI Trust Exchange Agreement.

2.1 OVERALL LAND USE

A map depicting the land use zones for the Project is shown in Figure 2.1. A map depicting the land use zones for Sub-Phases 1A, 1D, 1F, 1G, 1H and 1I is shown in Figure 2.2. Table 2.1 provides the following information: the TI/YBI Total Allowable Building Program, the Major Phase 1 land uses, and the proposed land uses for Sub- Phases 1A, 1D, 1F, 1G, 1H and 1I. This Sub-Phase is unique in the Project, as large areas are zoned mixeduse.

Further details of the development planned for this Sub-Phase are described in the subsequent sections and Appendices of this Sub-Phase Application.

Land Use	Total Allowable Building	Major Phase 1	Sub-Phase 1A, 1D,	Sub-Phase 1A	Sub-Phase 1D	Sub-Phase 1F	Sub-Phase 1G	Sub-Phase 1H	Sub-Phase 1I
Land Ose	Program	iviajor Priase 1	1F, IG Total	Total	Total	Total	Total	Total	Total
Total Residential Units	8,000	4,119	2,132	953	458	621	100	-	-
Adaptive Reuse (GSF) - Office /Commercial	202,000	202,000	202,000	202,000	-	-	-	-	-
Adaptive Reuse (GSF) - Retail/Community	67,000	67,000	-	-	-	-	-	-	-
Adaptive Reuse (GSF) - Circulation	42,000	42,000	-	-	-	-	-	-	-
New Construction Retail (GSF)	140,000	140,000	115,000	100,000	10,000	5,000	-	-	-
Hotel (Rooms)	500 Rooms	500 Rooms	150 Rooms	150 Rooms	-	-	-	-	-
Office (GSF)	100,000	100,000	100,000	100,000	-	-	-	-	-
Total Communical Area (CCF & Dooms)	551,000 sq ft & 500	551,000 sq ft &	417,000 sq ft &	402,000 sq ft &	10,000	F 000			
Total Commercial Area (GSF & Rooms)	Rooms	500 Rooms	150 Rooms	150 Rooms	10,000	5,000	-	-	-
Parks and Open Space (AC)	300	103.6	15.8	6.6	0.5	5.4	-	2.3	1.0

TABLE 2.1 TI SUB-PHASES AGGREGATE DEVELOPMENT IN RELATION TO THE MAJOR PHASE AND THE TOTAL ALLOWABLE BUILDING PROGRAM





FIGURE 2.1 OVERALL PROPOSED LAND USE

2.2 SUB-PHASE LAND USE

Sub-Phase 1A is within the Island Center district and includes Mixed-Use and Open Space land use zones. Land uses in Sub-Phase 1A are anticipated to include retail, office, hotel, institutional and residential, as allowed by the standards in the Design for Development. The M1 blocks will contain a new Retail Street linking the commercial historic Buildings 1 and 2.

Sub-Phase 1D establishes the residential development pattern of the Eastside neighborhoods on Treasure Island, and is zoned Mixed-Use, with the exception of a portion of the Eastside Common Park, that runs diagonally through this area and is designated Open Space.

Sub-Phase 1F continues the residential development pattern of the Eastside neighborhoods on Treasure Island, and is zoned Residential, transitioning the development to purely residential from the mixed-use area to the west. A portion of the Eastside

Common Park runs diagonally through this area and is designated Open Space, as is Eastern Shoreline Park (which is being added to Sub-Phase 1F). Within the footprint of the Eastern Shoreline Park is the 1.83 acre parcel designated for the Treasure Island Sailing Center. This area will be geotechnically improved and made available to the Sailing Center for development of their program, which includes a structure with classroom and meeting space, offices and bathrooms, and an outdoor boat yard.

Sub-Phase 1G is a mixed-use zone, and can accommodate residential, ground floor commercial, and public parking garages, either stand alone or mixed-use. This Sub-Phase also includes a parcel set aside for the future police and fire station.

Sub-Phases 1H and 1I are non-developable areas dedicated to treatment of stormwater for the areas included in this Sub-Phase Application.

			Sub-Phase 1A									Sub-Phase 1D					Sub-Phase 1F							Phase 1	G
		Block	: B2	Block	В3	Bl	ock M1	Block IC3	Blo	ck IC4	Block IC1 Block IC2				Block E1 Block E2						Block IC1 Blo		ck IC4		
	Sub-Phase 1A,																								
	1D, 1F, 1G	В2	B2A	В3	вза	M1A	M1B	IC3	IC4.3	IC4.4	IC1.2	IC1.3	IC2.1	IC2.2		E1.1	E1.2	E2.1	E2.2	E2.3	E2.4	E2.5	IC1.1	IC4.1	IC4.5
	Total																								
Total Residential Units	2,132	-	30	-	46	330	180	27	140	200	58	150	160	40	50	120	115	20	175	68	73	50	-	-	100
Adaptive Reuse (GSF) - Office /Commercial	202,000	82,000	-	120,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Adaptive Reuse (GSF) - Retail/Community	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Adaptive Reuse (GSF) - Circulation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Construction Retail (GSF)	115,000	-	4,000	-	2,000	24,000	66,000	4,000	-	-	1,500	2,500	2,000	1,000	3,000	2,500	500	-	2,000	-	-	-	-	-	-
Hotel (Rooms)	150 Rooms	-	-	-	-		150 Rooms	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Office (GSF)	100,000	30,000	-	30,000	-	25,000	ı	-	-	15,000	-	-	-	-	-		-	-	-	-	-	-	-	-	-
Total Commercial Area (GSF & Rooms)	417,000 sq ft & 150 Rooms	112,000	4,000	150,000	2,000	49,000	66,000 SF & 150 Rooms	4,000	-	15,000	1,500	2,500	2,000	1,000	3,000	2,500	500	-	2,000	-	-	-	-	-	-

TABLE 2.2 TI SUB-PHASES PROGRAM OF USES AND APPROXIMATE AGGREGATE SQUARE FOOTAGE OF EACH USE BY LOT



FIGURE 2.2 SUB-PHASE PROPOSED LAND USE

2.3 SUB-PHASE HOUSING

Sub-Phases 1A, 1D, 1F, 1G, 1H and 1I on TI can accommodate up to approximately 2,100 housing units. Included in this phase are four (4) Authority Housing Lots (representing approximately 19% of the development land in the Sub-Phase) that will be dedicated to TIDA and will accommodate approximately 396 units, including units TIDA may choose to allocate to One Treasure Island (formerly known as TIHDI). In addition, there will be a requirement to provide inclusionary units within market-rate developments with an overall target of 5%, consistent with the requirements and process described in the DDA. The land parcels created within these Sub-Phases will enable the construction of all four anticipated Treasure Island Product Types (town-homes, low-rise, mid-rise and towers) to serve households with a broad range of incomes.

A summary of the housing proposed within this Sub-Phase is shown in Table 2.3.

The locations of parcels dedicated to TIDA/One Treasure Island as Authority Housing Lots are shown in Figure 2.3.

The Housing Date Table in Appendix D provides more details on all proposed housing parcels within this Sub-Phase.

RESIDENTIAL UNITS	Lot No.	Lot Area (SF)	Housing Type	Total (Units)	Townhomes (Units)	Low-Rise (Units)	Mid-Rise (Units)	Tower (Units)
Total Allowable Building Program				8,000	421	3,916	519	3,144
Major Phase 1 Total				4,119	271	1,431	367	2,050
	B2A	32,190	Developer	30	30			
	B3A	49,496	JV	46		46		
	M1A	57,499	JV	330				330
	M1B	81,893	JV	180			180	
	IC3	24,360	Auction	27	27			
	IC4.3	61,180	Authority	140		140		
	IC4.4	35,062	Developer	200				200
Sub-Area 1A Total		341,680		953	57	186	180	530
	IC1.2	25,060	Auction	58			58	
	IC1.3	28,152	Developer	150				150
	IC2.1	31,284	Auction	160				160
	IC2.2	19,303	Developer	40		40		
	1C2.3	22,302	Developer	50		50		
Sub-Area 1D Total		126,101		458	-	90	58	310
	E1.1	52,272	Auction	120			120	
	E1.2	50,018	Authority	115		115		
	E2.1	30,983	Auction	20	20			
	E2.2	36,155	Auction	175				175
	E2.3	29,621	Authority	68		68		
	E2.4	31,799	Authority	73		73		
	E2.5	25,740	Developer	50		50		
Sub-Area 1F Total		256,587		621	20	306	120	175
	IC4.5	75,096	Developer	100		100		
Sub-Area 1G Total		75,096		100		100		
Market Rate + Inclusionary		626,846		1,736	77	186	358	1,015
Authority		172,618		396	-	496	-	-
Total Sub-Phases 1A, 1D, 1F, and 1G		799,464		2,132	77	682	358	1,015
Developer		498,889		1,312	30	636	120	525
Auction		111,687		265	47	-	58	160
JV		188,888		556	-	46	180	330
Total Sub-Phases 1A, 1D, 1F, and 1G		799,464		2,132	77	682	358	1,015

TABLE 2.3 TI SUB-PHASE SUMMARY OF PROPOSED HOUSING DATA

AUTHORITY LOTS

As required by the DRDAP and the DDA, Figure 2.3 identifies the proposed locations of Authority Housing lots. The acreage and approximate number of units in each product type are provided in Table 2.3. Per agreement with TIDA, parcel IC2.2 which was identified as an Authority Lot in the Major Phase Application, will be a Market Rate Lot. A similar size lot in a future Major Phase will be re-designated from Market Rate to Authority. This change will better align with the availability of funds to support development of Auction Lots, and avoid having this lot remain undeveloped while the rest of the Sub-Phase is built out.



FIGURE 2.3 SUB-PHASE AUTHORITY LOTS

SUB-PHASE APPLICATION 3: SUB-PHASES 1A, 1D, 1F, 1G, 1H, 1I 2 - LAND USE AND DEVELOPMENT PROGRAM 35

RESIDENTIAL AUCTION LOTS AND JV LOTS

Figure 2.4 identities the auction lots and JV lots proposed for this Sub-Phase. Note that this area now includes six (6) Auction Parcels fulfilling the entire requirement for Major Phase 1. Per agreement with TIDA two Auction Parcels that were previously anticipated to be part of sub-phase area 1E are now replaced with parcels of like development capacity within area 1F.

The acreage and proposed number of units in each product type are provided in Table 2.3.

RESIDENTIAL AUCTION LOT BID PRICES

Due to the period of time necessary to construct the infrastructure, it is more appropriate to set the minimum bid prices closer to the time when land parcels would be offered for sale, so that they are reflective of current market conditions.

PROPOSED MAJOR PHASE 1 EXCESS LAND APPRECIATION STRUCTURE

The following schedule in Table 2.4 was proposed for the Excess Land Appreciation Structure for Major Phase 1. At the time of this submittal, TICD believes this structure represents the market conditions for land sales in San Francisco for similar products. As proposed in Sub-Phase Application 2, it is proposed that TICD and TIDA revisit the Excess Land Appreciation Structure closer to the time of land sales, and adjust the structure by mutual agreement.

		Profit Participation
Product Type	Profit Margin	%
Townhome	10%	50%
Low Rise	12%	30%
Mid Rise/Tower	**	**

TABLE 2.4 PROPOSED SCHEDULE FOR THE EXCESS LAND APPRECIATION STRUCTURE



FIGURE 2.4 SUB-PHASE AUCTION LOTS AND JV LOTS

2.4 SUB-PHASE RETAIL PLAN

This section below fulfills the Retail Plan (DRDAP 1.2.16.) requirement to provide a plan that includes the sizes and types of retail that will be targeted during the Sub-Phase, including an updated assessment of the needs of Project residents for retail goods and services.

The overall Project's commercial component includes a total amount of retail space not exceeding 207,000 square feet, including approximately 140,000 square feet of new commercial and retail space and adaptive reuse of Buildings 1, 2, and 3 for approximately 67,000 square feet of additional retail.

TICD's Retail Plan will evolve as construction of the Island progresses. This Sub-Phase Application indicates the land use plan and focused areas for retail activity. A leasing strategy will be developed in conjunction with TIDA so that the plan is current when attraction of retail tenants begins. TICD proposes creating and submitting this plan during the construction of infrastructure for this Sub-Phase. The plan will address both the retention of currently existing businesses and attracting new users to the Island, along with an overall marketing plan indicating space needs, servicing, parking demand and overall phasing.

TICD's approach to retail has three components:

- 1. To engage existing retail and commercial businesses to assess how their current operations and projected activities could be incorporated into current, new and repurposed spaces.
- 2. To "curate" the commercial uses to promote a complimentary mix of businesses that both meet the needs of current and future island residents and attract visitors to Treasure Island.



FIGURE 2.5 SUB-PHASE RETAIL PLAN

3. To thoughtfully phase the retail space. This Sub-Phase Application describes the ultimate land use pattern at full build-out of the project. It is the intent to bring retail space to market in smaller, discrete phases as the development of new residences and other amenities increase the demand and pedestrian traffic to Treasure Island so that businesses have the best chance to succeed. In order to bring essential support services and retail uses such as grocery and pharmacy on line for the first new residents, TICD will consider temporary use of existing buildings and/ or the use of provisional structures that can provide this space in a pleasant and convenient way and remain outside active construction areas.

A variety of retail uses are anticipated for residents and visitors. Neighborhood-serving businesses include personal services, restaurants and cafés, housewares, and health and fitness clubs. Visitor-serving retail uses could include specialty foods, specialty gift or crafts, and entertainment uses. Retail tenant spaces will typically range in size from 500 to 5,000 SF per tenant, depending upon the type of retail establishment. Smaller spaces accommodating businesses like a small specialty gift or food boutiques, and the larger spaces accommodating tenants such as general merchandising or restaurants. The exception would be the anticipated grocery store in Building 2 that is conceived of as a 10,000-20,000 square foot space. Spaces within the retail core area on Blocks M1-A and M1-B will be designed so that they can function as small spaces or be combined in to larger footprints to ensure flexibility in attracting users with varying needs.

This Sub-Phase Application 3 includes the majority of the retail and commercial space in the Master Plan. Retail uses are envisioned in historic Buildings 2 and 3, and on the M1 Blocks that will form the retail main street of the island. Retail will be concentrated along the Retail Street between Blocks M1A and M1B, forming a link of commercial activity between Building 1 and 2. In addition, retail uses are envisioned in blocks B2-A and B3-A along the Clipper Cove marina and to a lesser extent in the ground floors of some residential buildings in the Island Center

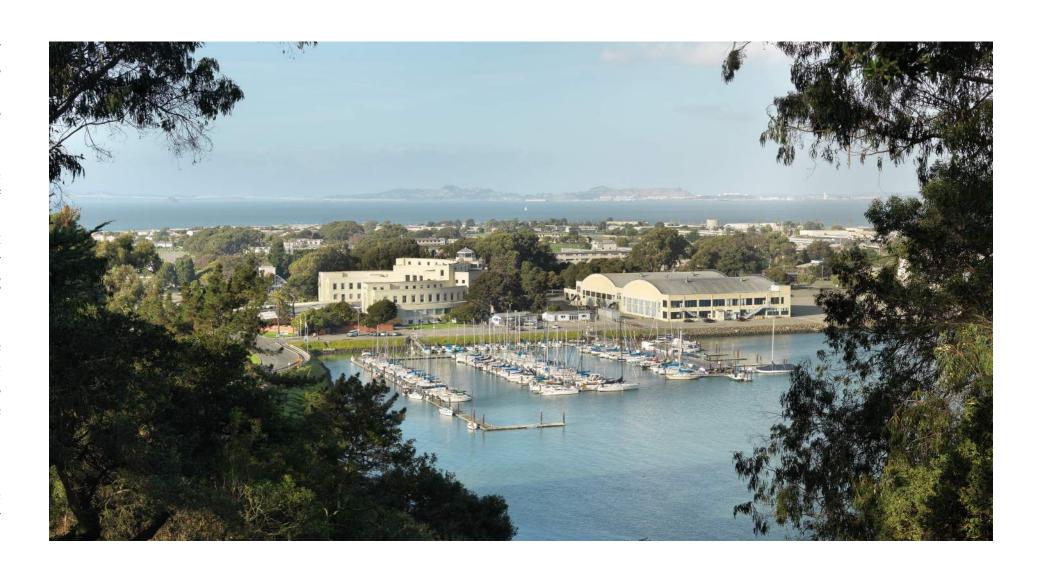
residential neighborhoods to the north of California Avenue. TICD intends to enter in to a LDDA and Ground Lease for Buildings 2 and 3 within the time frames indicated in the DDA.

Current retail services on Treasure Island include convenience stores, a full service grocery store, three cafés, a bike shop, and several wineries. As the early phases of development occur on Treasure Island, TICD will work with TIDA on a strategy to engage key existing business to explore whether it would support their operations to potentially relocate to the Island Center area.

As the residential population on the island increases, neighborhood retail needs assessments will be conducted to guide vertical developers in creating spaces that provide goods and services that support the goal of establishing and maintaining a walkable

neighborhood community. Targets for types of retail TICD will pursue include:

- Grocery Store
- Convenience Goods and services, such as pharmacy, dry cleaning, hair and nail salons, hardware, pet care
- Food and Beverage, including restaurants and bars with offerings and price points and appropriate for the range of incomes expected in island residents as well as visitors
- Pet-centric shops
- Health and Medical related uses including an urgent care clinic, medical and dental office space, spa, and yoga studio
- Sports and recreation related, including water sport sales and rental, bike shops, batting cages, ping pong parlor
- Home décor



2.5 SUB-PHASE DEVELOPMENT BLOCKS **AND MID-BLOCK EASEMENTS**

DEVELOPMENT BLOCKS AND EASEMENT STANDARDS

Sub-Phase Application 3 development areas are identified on the Development Block and Easement Plan (Figure 2.6).

Table 2.5 provides the area of land within each proposed lot. Note these areas are approximate and subject to change in accordance with adjustments permitted in the subdivision map for this area.

	LAND USE BLOCK					
SUB-PHASE	NUMBER	LOT NUMBER	(SQ FT)			
1A	B2	B2	136,336			
1A	B2	B2 B2A				
1A	B3	B3	201,603			
1A	В3	B3A	49,496			
1A	M1	M1A	57,499			
1A	M1	M1B	81,893			
1A	IC3	IC3	24,360			
1A	IC4	IC4.3	61,180			
1A	IC4	IC4.4	35,062			
	Sub-Phase 1A Total		679,618			
1D	IC1	IC1.2	25,060			
1D	IC1	IC1.3	28,152			
1D	IC2	IC2.1	31,284			
1D	IC2	IC2.2	19,303			
1D	IC2	1C2.3	22,302			
	Sub-Phase 1D Total		126,101			
1F	E1	E1.1	52,272			
1F	E1	E1.2	50,018			
1F	E2	E2.1	30,983			
1F	E2	E2.2	36,155			
1F	E2	E2.3	29,621			
1F	E2	E2.4	31,799			
1F	E2	E2.5	25,740			
:	256,587					
1G	IC1	IC1.1	101,440			
1G	IC4	IC4.1	36,083			
1G	1G IC4 IC4.5					
	Sub-Phase 1G Total					

TABLE 2.5 SUB-PHASE DEVELOPMENT LOTS SQUARE FOOTAGE



FIGURE 2.6 SUB-PHASE DEVELOPMENT BLOCKS AND EASEMENT PLAN

Typical Eastside development block corner conditions are defined in Figure 2.7, and identified on the Sub-Phase Development Blocks and Easement Plan, Figure 2.6.

Required easements and allowable easement zones are identified on the Development Block and Easement Plan (Figure 2.6). Easements are permitted anywhere and in any configuration within the allowable easement zone, as long as they provide a connection between public rights-of-ways at both ends. However, the easement on Blocks B2 and B3 must be specifically located and dimensioned as shown in Figure 2.8.

Easements must be open to the sky and are intended to serve as dedicated throughways that are publicly accessible. Easements must have a predominantly pedestrian character, but may be used for limited vehicular access. Easements must be a minimum width of 16 feet and a maximum of 35 feet, with the exception of the following:

- Easements on Blocks B2 and B3 shall be dimensioned as specified in Figure 2.8.
- Cityside and Eastside easements must be separated from the edge of the nearest right-of-way by a minimum of 150', as measured from the edge of the easement (as demonstrated in Figures 2.7).

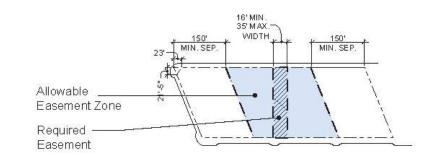


FIGURE 2.7 EASTSIDE TYPICAL BLOCK PLAN

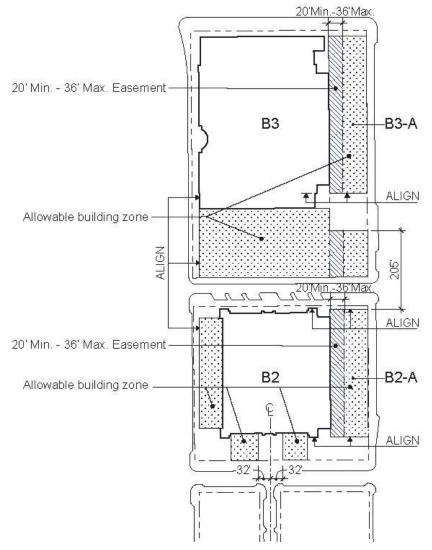
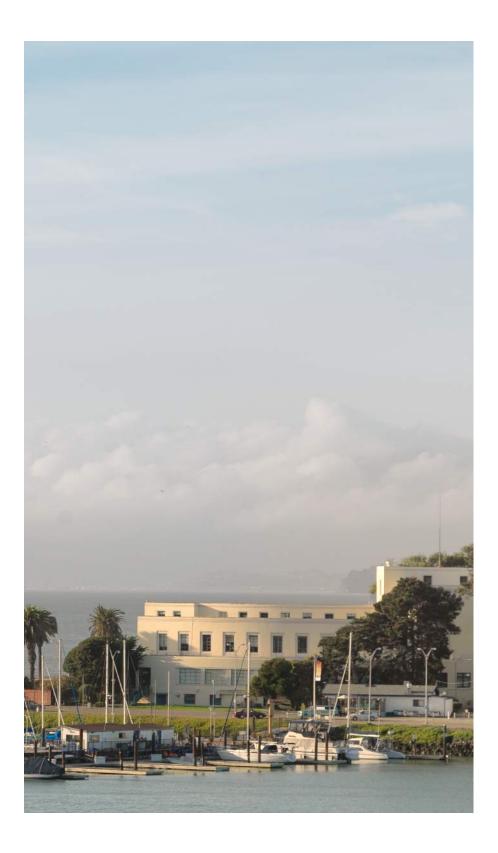


FIGURE 2.8 B2 AND B3 DEMONSTRATIVE BLOCK PLAN



2.6 SUB-PHASE BUILDING HEIGHTS AND MASSING

CONSISTENCY WITH DESIGN FOR DEVELOPMENT

Building heights, massing, setbacks, and building design standards and guidelines are addressed in detail as part of the approved Design for Development document and Disposition and Development Agreement. No changes to the provisions for building height and massing are proposed as part of this Sub-Phase Application. An overview of the vision and general parameters for building height and massing are provided below to provide context. Refer to the following sections in the Design for Development document for detailed information regarding building heights and massing:

T4 - Building Envelope Treasure Island

T5 - Building Design Treasure Island

TREASURE ISLAND

The heart of the design vision for Treasure Island is the creation of a series of distinctive, pedestrian-oriented, high-density and sustainable neighborhoods that have time-tested virtues but can also accommodate emerging trends in building design, sustainability and household makeup. Each neighborhood on Treasure Island will house a diverse population in a mix of low, mid and high-rise buildings. Density is focused near transit, services and amenities, and building massing is carefully considered to create places that are appropriately scaled to the pedestrian, shield public places from prevailing winds, and form a visually appealing skyline.

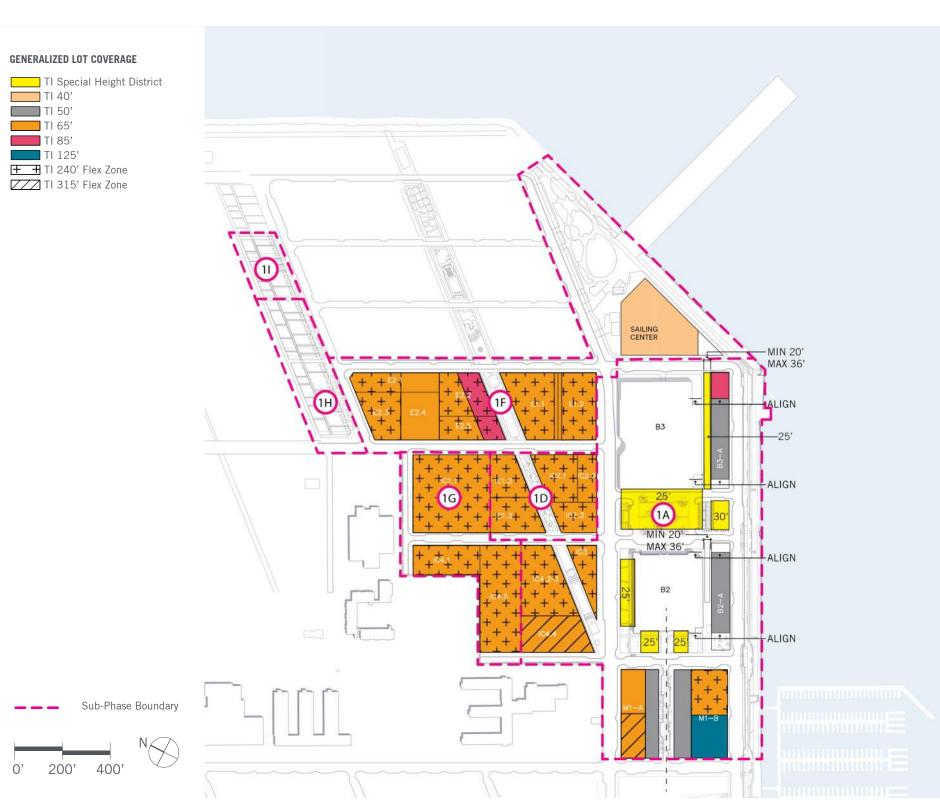


FIGURE 2.9 SUB-PHASE BUILDING MAXIMUM HEIGHTS AND MASSING PLAN

BUILDING HEIGHT

BUILDING HEIGHTS

Maximum height requirements establish the predominant heights of development and the location of taller buildings. Height zones on Treasure Island focus the greatest density near transit, provide a comfortable pedestrian environment that is visually and socially engaging, and craft an attractive skyline that will be viewed from around the Bay Area. Height zones describe the three-dimensional maximum height envelopes without defining specific locations, numbers or shapes of buildings or parcels. Flex height zones allow for a variety of buildings types to be built up to the indicated maximum height as long as they conform to the relevant and applicable standards in Design for Development Sections T4.5, Building Separation, and T4.6, Bulk and Massing.

BUILDING HEIGHT STANDARDS

The height of structures shall not exceed the applicable maximum height as indicated on the Maximum Height Plan (Figure 2.9). Height limits are to be measured from the average finish grade, along the full parcel perimeter, to the roof of the top occupied floor of each building.

Flex Height Zones have been established to allow for the flexibility in locating tall buildings within the overall built form of the island. The Flex Height Zones allow for a variety of building types to be built up to the indicated maximum height for their zone as long as they conform to the relevant applicable Bulk and Massing Standards, and Figure. 2.14, Bulk and Massing Controls Matrix. Sloped roofs are to be measured to the midpoint of the vertical dimension of the roof.

Buildings that are located within an allowable development block as indicated on Figure 2.6 shall not exceed the applicable maximum height as indicated on Figure 2.9.

Those portions of a building that may project above the applicable maximum height are:

- Parapets up to four feet (4') in height above the roof of the last habitable floor.
- For buildings less than 125 feet tall, mechanical enclosures and other rooftop support facilities that occupy less than 20% of the roof area up to 15 feet in height above the roof of the last habitable floor.
- For buildings taller than 125 feet, mechanical enclosures and other rooftop support facilities that occupy less than 50% of the roof area, up to 30 feet in height above the roof of the last habitable floor.
- For buildings taller than 125 feet, wall planes extensions that are either 50% physically and visibly permeable or translucent, up to 30 feet above the roof of the last habitable floor.

Components contributing to environmental sustainability, such as renewable power generation, may project above the applicable maximum height if they do not significantly alter the apparent height and mass of the building.

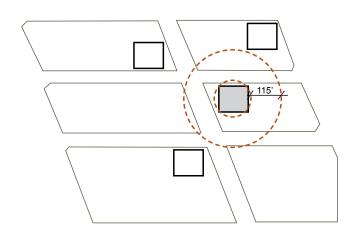


FIGURE 2.10 EASTSIDE BUILDING SEPARATION EXAMPLE (MINIMUM OF 115 FEET)

The majority of the area of these Sub-Phases are governed by a 240 foot Flex Zone height control. This 240 foot Flex Zone includes large portions of areas 1D, 1F and 1G. Two 315 foot Flex Zone areas occur on Block M1A, and on Block IC4 in Area 1A. A 125 foot Zone occurs on Block M1B. In area 1F, the interior of the block steps down to a 65 foot height limit, with the 240 foot Flex Zone flanking on the north and south. See Figure 2.9 for reference diagram of building heights and massing. Because so much of this Sub-Phase is in a Flexible Height Zone, the tower spacing requirements in the D4D will dictate the placement of tall buildings. These requirements will primarily impact placement of taller building elements on parcels ICI.3 and IC2.1.

The 25 foot Open Space height limit is established for structures to be built in the open space areas of the island. Temporary structures to remain in place 6 months or less, structures with a plan area of 500 square feet or less, sculptural structures that have a positive contribution to the visual quality of the public realm, or structures that contribute to the island's sustainability goals are exempt from the indicated height limit.

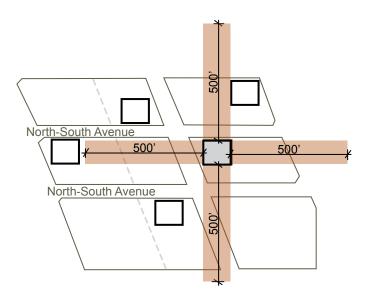


FIGURE 2.11 EASTSIDE CLEAR CORRIDOR EXAMPLE (MINIMUM OF 500 FEET)

VESSEL TRAFFIC SERVICE

Buildings whose height does not exceed the applicable maximum height on the Maximum Height Plan, subject to projections permitted under Maximum Height standards, but do exceed the applicable height on the Heights Requiring Consultation Plan (see Figure 2.12) inclusive of any projections, are permitted but require consultation with TIDA, Planning Department Staff or the Planning Commission, subject to the provisions of Planning Code Section 249.52 (g)(4)(E)(i), and the US Coast Guard to determine whether the building may interrupt direct contact between the U.S. Coast Guard's Vessel Traffic Service (VTS) and vessels in the Bay's shipping channels.

In the event that the consultation determines that the building would interrupt the VTS's direct contact, the applicant must alter the building so it does not do so, or make other arrangements to avoid doing so. Such arrangements include, but are not limited to: upgrading the VTS equipment, locating VTS equipment on the roof of the building, or relocating VTS equipment to a new location.

BUILDING HEIGHT PERMISSIONS TRIGGERS

Height of buildings above which USGS to be consulted

Existing building to remain

For block study purposes only locate radar illumination source at Elevation +380', California Coordinate System 83, CCS83, coordinate, epoch 1991.35.



FIGURE 2.12 SUB-PHASE HEIGHTS REQUIRING CONSULTATION

SUB-PHASE APPLICATION 3: SUB-PHASES 1A. 1D. 1F. 1G. 1H. 1I

BULK AND MASSING

Building bulk and massing have been established to support the creation of a neighborhood form that is comfortable for people, enhances views both to and from the island, and establishes a signature identity of a compact, visually engaging urban environment. The objective of bulk and massing controls is to create buildings that will be pedestrian scaled and visually well proportioned by defining: maximum floor plates, plan lengths, apparent faces and diagonals; building design elements that constitute a change in apparent face; and controls for sculpting the tallest buildings on Treasure Island. There are supplemental standards and guidelines for tall towers, which must respond to a unique set of issues due to their high degree of visibility from around the Bay Area. Tall towers are meant to be well proportioned, visually attractive, high quality design landmarks composed of simple geometries with tops that are visually engaging and accentuate smaller volumes as they rise towards the sky. As with all buildings on Treasure Island, tall towers are expected to engage the public and pedestrian realm by providing active bases and articulating facades with a high degree architectural detailing which promote a sense of vibrancy.

Figure 2.13 is a conceptual representation of the building heights and massing described in the Design for Development. Actual building designs will be completed in subsequent submittals consistent with the Design Review and Document Approval Procedure.

Figure 2.9 indicates the lot coverage and height zones for Treasure Island within Sub-Phases 1A, 1D, 1F, 1G, 1H and 1I.

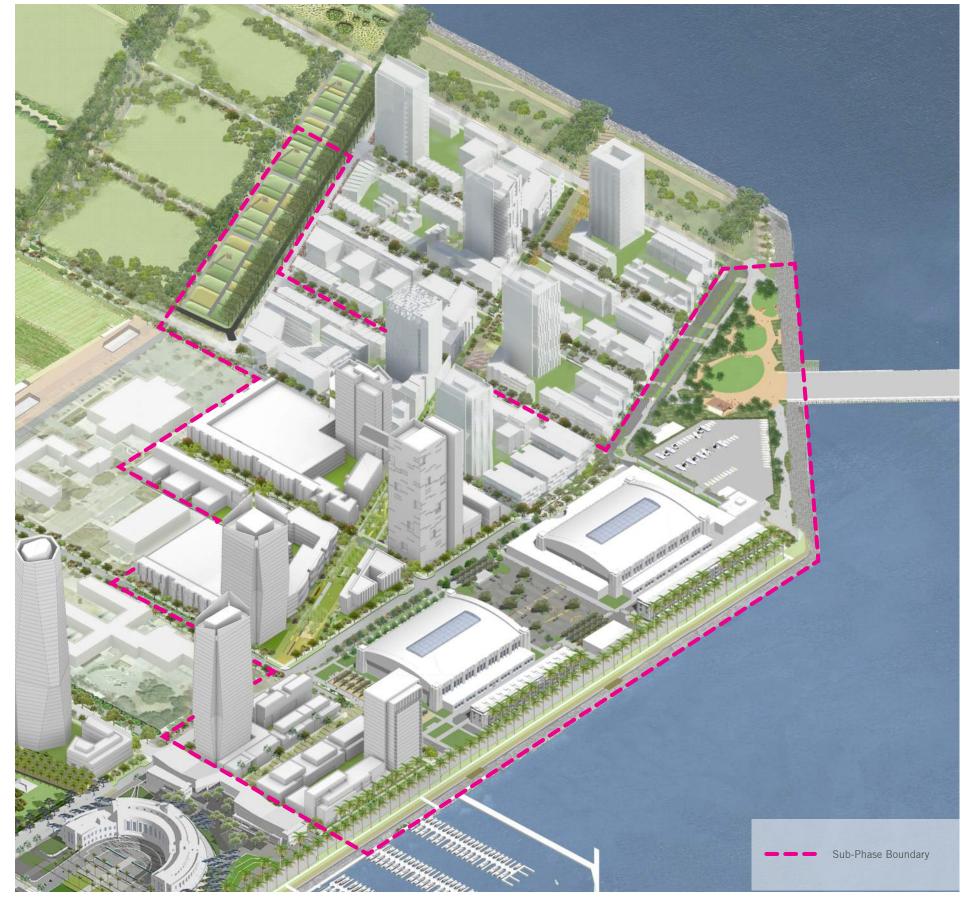
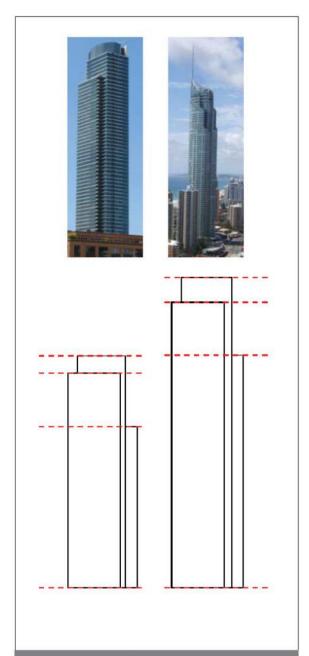


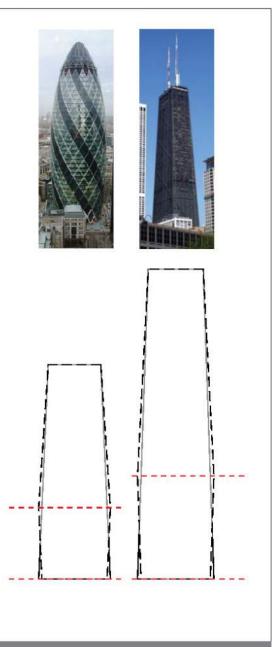
FIGURE 2.13 SUB-PHASE CONCEPTUAL BUILDING HEIGHT AND MASSING



STEPPED

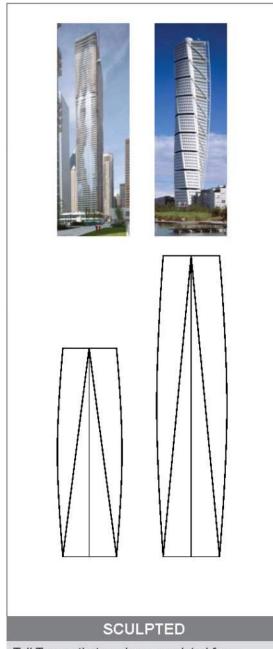
Tall Towers that reduce their floor plan area at upper floors should utilize this stepping strategy to help accentuate their verticality and reduce the apparent mass of the towers as they reach the sky.

FIGURE 2.14 BULK REDUCTION STRATEGIES



TAPERED

Tall Towers that result in tapered forms should produce a tower form that is visibly narrower towards the top of the tower than at the bottom.



Tall Towers that produce a sculpted form should include one of the following:

- Individual floor plan profiles (not unit plans) that do not repeat consecutively
- A minimum floor plan rotation .2° / floor
- A minimum floor plan offset avg. 6" horizontal / floor

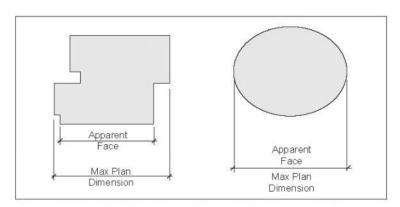
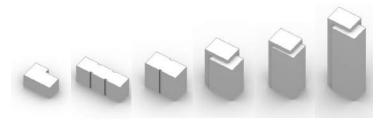


FIGURE 2.15 MAX. PLAN DIMENSION AND MAX. APPARENT FACE



BUILDING HEIGHT	Up to 60 ft	61-85 ft	86-125 ft	126-180 ft [*]	181-240 ft [*]	241-450 ft			
MAX FLOOR PLATE	NA	NA	10,500 sf	12,000 sf	10,500 sf	12,000 sf			
MAX PLAN LENGTH	NA	200 ft	140 ft	140 ft*	140 ft*	140 ft 105 ft			
MAX APPARENT FACE	120 ft Typical 25-30 ft Shared Public Way	75	100 ft	105 ft*	100 ft*				
MAX DIAGONAL	X DIAGONAL NA		NA	170 ft	160 ft	170 ft			
CHANGE IN APPARENT FACE	Two feet (2') deep X three foot (3') wide Notch, two foot (2') setback of building massing or major change in fenestration pattern and / or material.	Five feet (5') deep X ten foot (10') wide notch, five foot (5') setback of building massing in combination with a major change in fenestration pattern and / or material.		Ten feet (10') deep X ten foot (10') wide notch, ten foo (10') setback of building massing in combination with a major change in fenestration pattern and / or material.					

^{*}Buildings within the Cityside District taller than 125 feet are limited to maximum plan dimensions of 120 feet and maximum apparent faces of 100 feet, parallel to the western shoreline

FIGURE 2.16 BULK AND MASSING CONTROLS MATRIX

BULK AND MASSING STANDARDS

All buildings, except as listed below, shall comply with the bulk and massing maximums for their height category indicated in Figure 2.16.

The maximum plan dimension as described in Figure 2.14 is defined as the maximum linear horizontal dimension of a building or structure, at a given level, between the outside surfaces of its exterior walls. The maximum plan dimension of a building or structure is the greatest plan dimension parallel to the long axis of the building (Figure 2.15).

To help reduce the overall bulk of building massing and produce buildings that are visually well proportioned the apparent face width for specific building types is limited as indicated in Figure 2.13 and generally varies by building height.

Tall towers on Treasure Island are defined as those buildings that are taller than 300 feet.

Due to the potential need for additional service core area within towers taller than 300 feet, supplemental allowances may be permitted for increased maximum: floor plates, plan lengths, apparent face widths, and diagonal dimensions; provided the proposed buildings comply with all other Standards and Guidelines. Such modifications shall be considered Major Modifications as defined in the Treasure Island/Yerba Buena Island Special Use District, Planning Code Section 249.52.

In order to respond to their high degree of visibility from around the Bay Area, towers taller than 300 feet shall be well proportioned, producing slender forms as viewed from 360 degrees. To accentuate the vertical nature of tall towers, at least some portion of the tower shall be expressed for the entire height of the tower.

BULK AND MASSING GUIDELINES

All buildings taller than 85 feet should have a minimum of 25% of their perimeter extend directly to the ground.

Buildings taller than 85 feet should incorporate a minimum ten foot (10') height difference between separately articulated volumes or wall planes.

Towers taller than 300 feet should utilize a minimum of one of the three tower form strategies indicated in Figure 2.14. The three tower form strategies encourage building designs that are slender, accentuate smaller volumes and result in distinctive forms that reinforce the notion of Treasure Island as a unique destination.

Towers taller than 300 feet should be visually attractive landmarks constructed of high quality materials and architectural detailing. Façade elements should be related to the pedestrian realm in scale and where feasible they should be integrated into the building's overall sustainability strategy and/or provide private outdoor space for residents.

Recognizing the visible nature of towers taller than 300 feet on Treasure Island, tower tops are intended to be visually engaging and accentuate smaller volumes as they rise towards the sky. A variety of strategies may be employed to achieve this objective including, but not limited to: stepped forms, wall plane extensions and sculpted tops.

STREETWALL

Streetwall requirements ensure buildings create clearly defined edges to the public realm. The individual character of streets and open spaces is influenced by the varying percentage of building massing that is built to the setback line. Thus, the streetwall requirements are a major component of the placemaking strategy for Treasure Island.

STREETWALL STANDARDS

Buildings must meet the minimum streetwall requirements shown in Figure 2.17. Streetwall requirements are a combination of horizontal percentages and minimum height as listed in Figure 2.17. Streetwall standards and calculations apply to each building, as opposed to being aggregated over the total length of a block.

A building's streetwall percentage is calculated as the sum of those portions of the building built up to the setback line at the minimum streetwall height divided by the total property street frontage (Figure 2.20).

Minor variations along the streetwall are allowed and count towards the overall streetwall requirements. Minor variations include covered pass-throughs and recessed building entries up to two (2) stories in height; recessed balconies; vertical recesses up to three feet (3') deep and four feet (4') wide; enclosed building area encroachments and projections; and building setbacks no further than two feet (2') from the setback line (Figure 2.21).

Public open spaces, rights-of-way, and easements, as indicated on the Development Block and Easement Plan in the Design for Development are excluded from streetwall calculations.

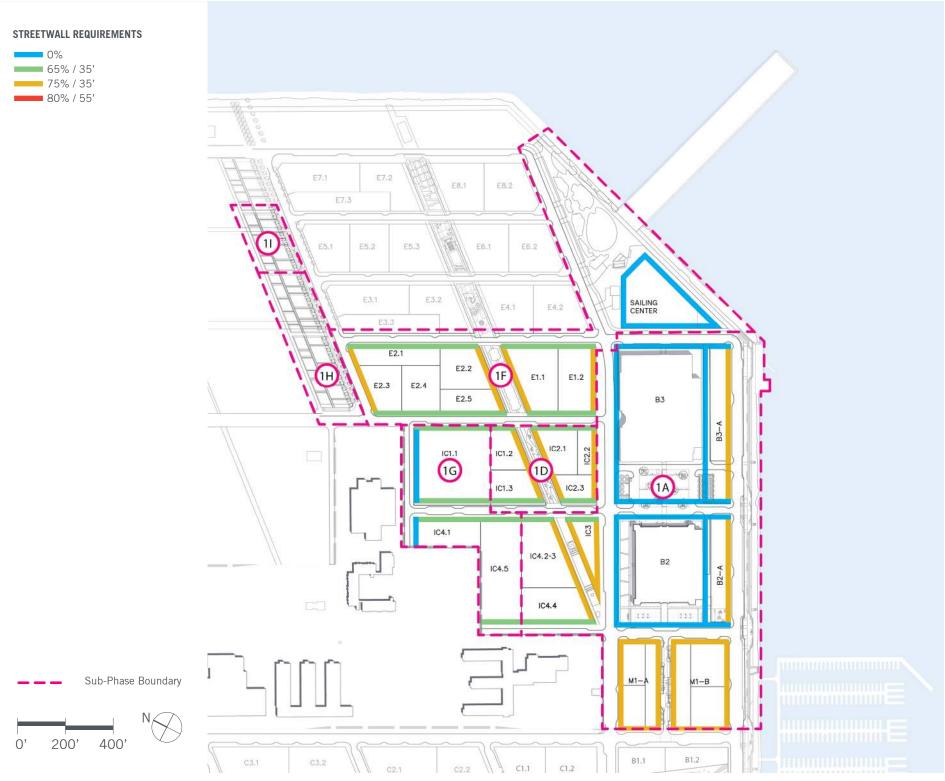


FIGURE 2.17 SUB-PHASE STREETWALL REQUIREMENTS

Buildings taller than 35 feet fronting on the north-south Avenues (Avenue D, E, F, and G) are to maintain a 65% minimum streetwall to a height of 35 feet. Buildings fronting on Fourth Street, Eastside Common, California Avenue, Clipper Cove Avenue, and the Retail Street are to maintain a 75% minimum streetwall to a height of 35 feet.

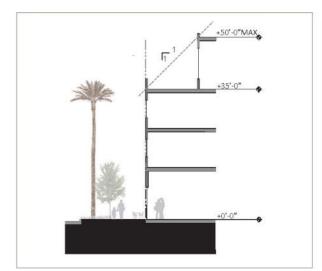


FIGURE 2.18 RETAIL MAIN STREET STEPBACK ABOVE 35 FEET

 $^*\mbox{Building}$ setbacks greater than 3 FT and parallel to the property line are limited to a maximum of 100 linear feet or 50% of street frontage measured continuously.

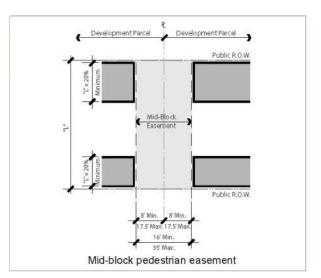


FIGURE 2.19 AN EXAMPLE OF STREETWALL ALONG EASEMENTS

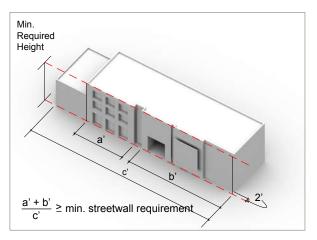
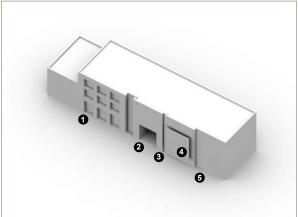


FIGURE 2.20 STREETWALL CALCULATION EXAMPLE



- 2 Pass-throughs (up to 2 stories)
- 3 Vertical recesses (no greater than 3'x4'
- Building projections
- 6 Minor setback (no further than two feet

FIGURE 2.21 AN EXAMPLE OF MINOR VARIATIONS IN A STREETWALL

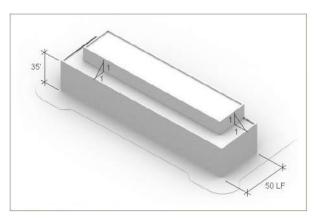


FIGURE 2.22 RETAIL MAIN STREET STEPBACK WRAPS CORNERS

SETBACKS AND ENVIRONMENT

Setbacks are intended to provide a comfortable buffer between the street and the interior of ground floor residences and to ensure that commercial streets are comfortably contained. Residential setbacks are intended to include stairs, stoops, private gardens and patios that will foster use and thus social interaction among neighbors.

SETBACK STANDARDS

The development of every parcel shall adhere to the required setbacks shown on the Setback Plan (Figure 2.23). Indicated setbacks are minimums. Additional setbacks may be used, provided they comply with streetwall requirements (Figure 2.17).

Setbacks are zero on the Retail Street blocks with the exception of the California Avenue frontage of Block M1A. Along the Eastside Common a setback of 15 feet is required. Along the Clipper Cove frontage of Blocks B2 and B3 setbacks are zero if the use is commercial and 12 feet for residential use. All other frontages in these Sub-Phases have a 6 foot setback.

SUNLIGHT

No shadow studies are required for buildings conforming to the standards outlined in this document. Individual projects should seek to minimize shadowing of internal courtyards.

WIND

All projects must comply with Mitigation Measure M-WS-4 (please see Appendix A which restates the mitigation measure from the Final Environmental Impact Report for the Treasure Island/Yerba Buena Island Redevelopment Project).

Buildings greater than 100 feet in height should incorporate additional design measures, where practicable, to further reduce wind speeds in pedestrian and public areas, while balancing other design objectives as stated in this document.

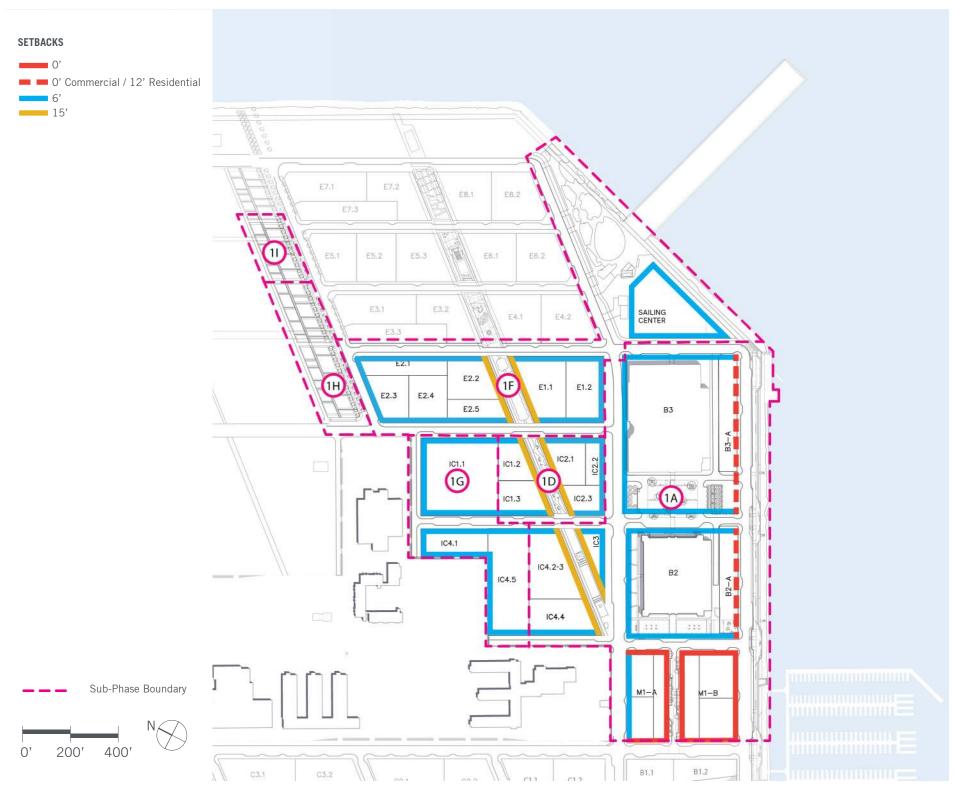


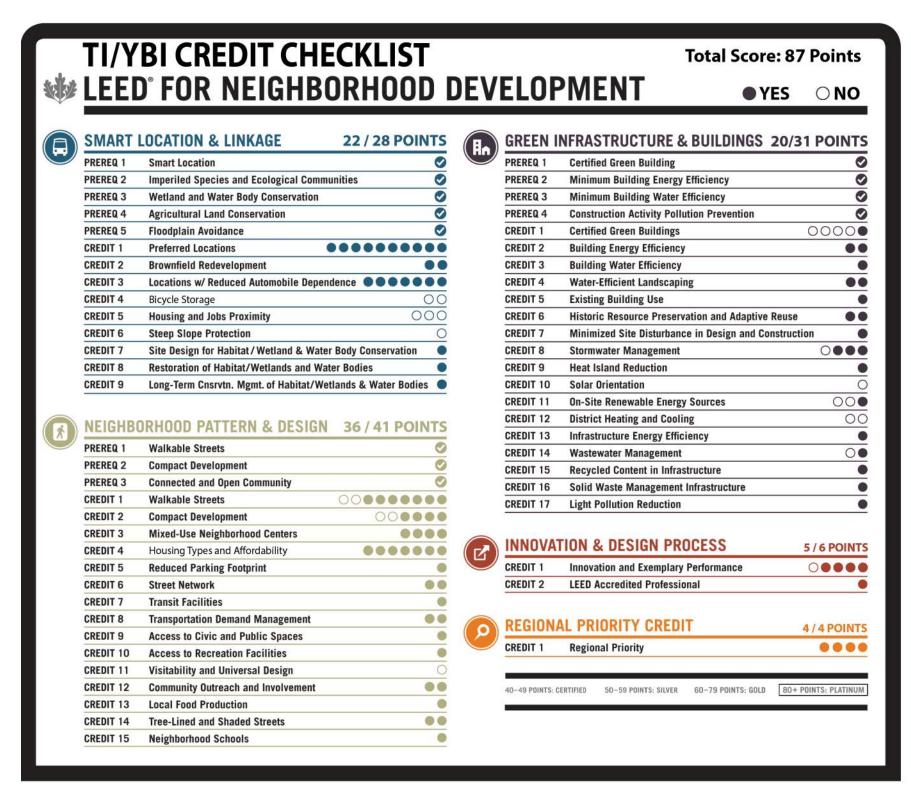
FIGURE 2.23 SUB-PHASE SETBACK REQUIREMENTS

2.7 LEED-ND CREDIT CHECKLIST

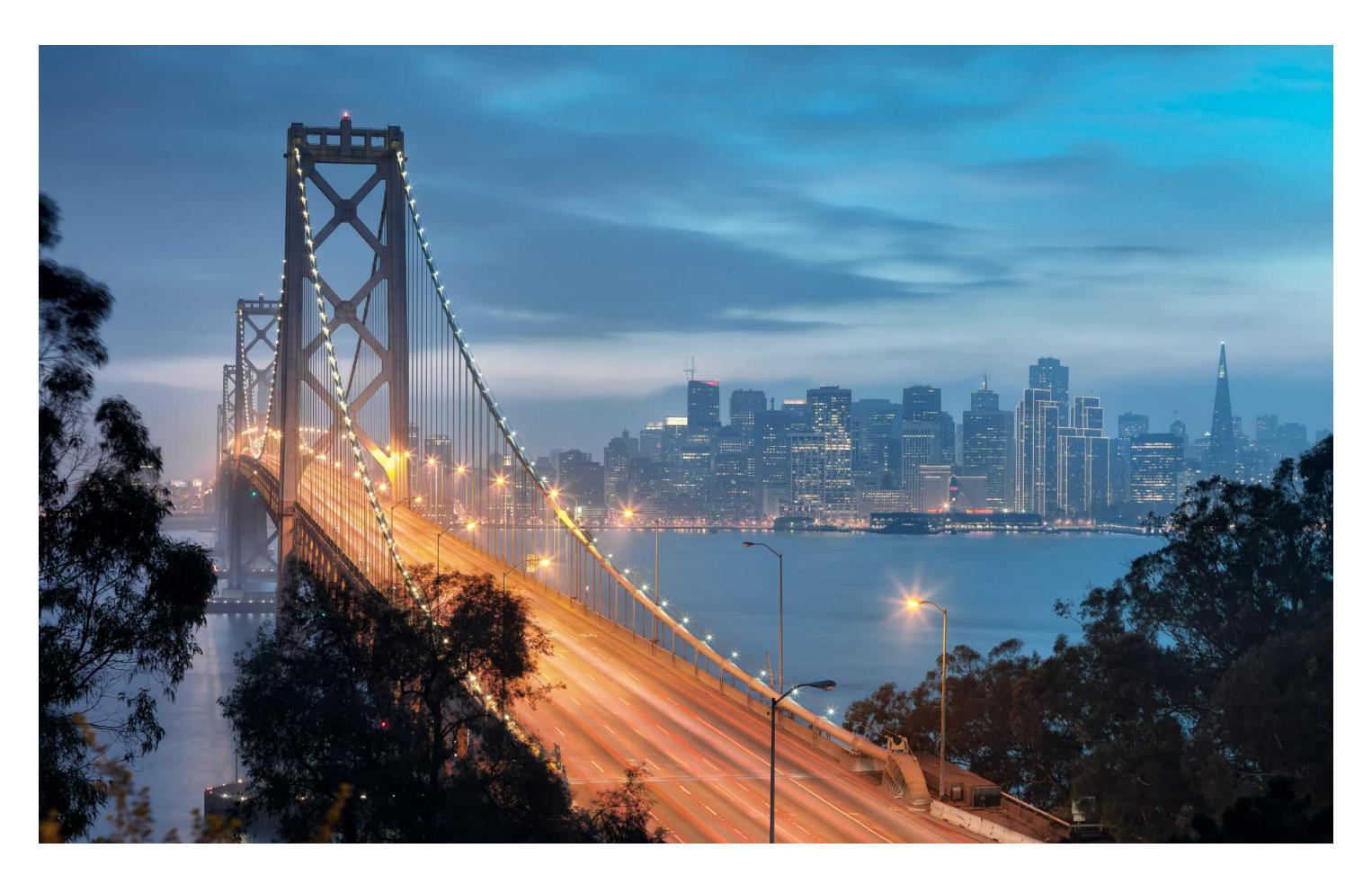
Included here is a final scorecard showing the LEED-ND (LEED for Neighborhood Development) credits that the Treasure Island and Yerba Buena Island Development project earned under Plan certification. In the fall of 2016, the Treasure Island and Yerba Buena Island Development Plan was submitted and achieved LEED-ND Platinum Plan certification from the U.S. Green Building Council, with a total of 87 points. The final LEED-ND Platinum Project certification will be documented and submitted upon build-out of the project (or of project phases, such as at the completion of Phases 1, 2, and 3, with subsequent final certification for additional phases coming later). These credit points are shown in the scorecard on this page, and are currently being tracked and implemented in the project.

This LEED-ND checklist is consistent with Land Use Obligation #1 in the project's Developer Environmental Sustainability Obligations, which calls for the project to achieve LEED-ND Gold. while "making a good faith effort to achieve the higher Platinum" certification." LEED-ND Gold is achieved with a minimum of 60 points, while LEED-ND Platinum is a minimum of 80 points.

The Treasure Island and Yerba Buena Island Development Plan was certified under LEED-ND version 4, U.S. Green Building Council's (USGBC) most current rating system version that was publicly released in November 2014. The Sustainability Obligations reference the July 2010 version of the LEED-ND rating system, but Version 4 is widely considered more stringent and complete, and was recommended as the preferred version to use by USGBC. Future Built Project certifications may use future iterations of the rating system.







3. TRANSPORTATION AND STREETSCAPES

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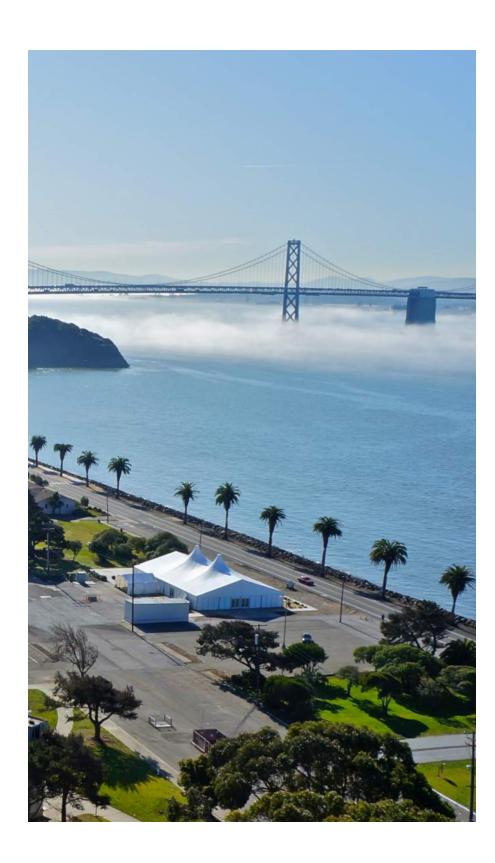
CONSISTENCY WITH ENTITLEMENT DOCUMENTS

The transportation systems and streetscapes included as part of this Sub-Phase Application 3 are consistent with previous entitlement documents, the Treasure Island/Yerba Buena Island Streetscape Master Plan and the Major Phase 1 Application, which were approved by TIDA in February 2015 and May 2015, respectively.

Refinements to the street designs in the preceding documents have been reviewed with City Departments and are included within the Sub-Phase Application. Those improvements include the following:

- 1. Avenue G Class IV Cycle Track: Expansion of class IV cycle track on Avenue G and Second Street adjacent to the Sailing Center connects the Clipper Cove Avenue cycle track to the cycle track along Eastern Shoreline Park at Eastside Avenue.
- 2. With the 2-way cycle track along Eastern Shoreline Park and Second Street, the Class II eastbound bicycle lane has been converted into a class III "sharrow" in the eastbound direction to avoid redundancy with the cycle track and to prevent conflict with the shuttle drop-off.
- 3. California Avenue Island Shuttle Stops: All Shuttle Stops on California Avenue include a shuttle loading island which allows a bypass for cyclists behind the island to avoid conflicts between the shuttle and cyclists. Once the shuttle vehicle is selected by TIMMA, the designs will be developed and presented to the SFAC Civic Design Review Board for approvals.
- 4. Special paving in the sidewalk of Eastside Common, crosses over Avenue D, and extends along Avenue D to run the entire length of Building 2 Plaza sidewalk to visually link this open space network.
- 5. Clipper Cove Streetscape: To accommodate loading needs for the marina, along with providing separate bicycle and pedestrian circulation facilities along the promenade, curb alignment adjustments to the ROW have been made to facilitate all demands.
- California Avenue cycle track extends from Avenue C to Avenue D through an easement on the Job Corps property. This links the California Avenue cycle track to the multi-use path through the Eastside Common. This connection is pending the finalization of the Job Corps easement. Once finalized, the SFMTA and AC Transit Bus Operator Restroom design will be finalized and reviewed by the SFAC Civic Design Review Board for approvals.

3.1 STREETS OVERVIEW



FUNCTION AND CHARACTER

Streets serve the important function of connecting places and people. Within the developed districts of Treasure Island, they are the primary place for circulation of all types. The streets are designed to provide safe, efficient, and enjoyable routes for pedestrians, cyclists, and public transportation, while efficiently directing private vehicles to parking destinations. Streets also are corridors for utility infrastructure, emergency vehicle access, and wildlife.

Just as important is the street's role in the daily life of people living on Treasure Island and Yerba Buena Island, and the visitor's experience. It is an address, a setting outside the window, where the dog is walked, and where a neighborly conversation takes place. Streets are the primary place for vibrant urban life in the Island Core, and routes out to the island's expansive destination parks.

Treasure Island and Yerba Buena Island streets are designed with equal attention to their function and their character, to comprise a pragmatic and efficient, diverse and delightful street network.

NEW ON-SITE STREETS

Although several of the streets on Treasure Island will fall into a footprint of an existing street, all streets will be reconfigured and re-built. The design of the streets will comply with DPW and PUC standards, including curb and gutter, street grade, and utility placement.

STREET AND BLOCK PATTERN

Treasure Island's unconventional street grid is designed to increase access to sunlight and views while minimizing the effects of wind on neighborhood public spaces. A conventional orthogonal street grid would have resulted in cross streets opening directly to prevailing westerly winds that flow through the Golden Gate and blow unimpeded across the Bay.

As a result, Treasure Island's street pattern features a unique non-orthogonal grid that maximizes solar access to streets and open spaces while protecting them from the prevailing west winds. The angled streets across the island align with views to the San Francisco skyline. In the Island Core, where several historic buildings are retained and preserved, the existing right-angle street grid is retained. The two grids intersect along the existing California Avenue.



FIGURE 3.1 TREASURE ISLAND STREETS AND PARCELS

SUB-PHASE APPLICATION 3: SUB-PHASES 1A, 1D, 1F, 1G, 1H, 1I 3 - TRANSPORTATION AND STREETSCAPES 55

3.2 TRANSPORTATION NETWORKS

PEDESTRIAN NETWORK

The island's various blocks, neighborhoods, parks, and other public spaces are connected by a diverse network of pedestrian routes. Its heart consists of primary routes leading from the Island Core and the Inter-modal Transit Hub out to the neighborhoods and parks beyond. Primary routes include Eastside Common and the Shared Public Way, which is a pedestrian-oriented City street. Secondary routes along the islands' neighborhood streets and through parks and development blocks enable pedestrians to explore and link to regional open spaces on both islands.

BICYCLE NETWORK

Bicycles are a key transportation option on the islands. Routes are designed to invite riders of all ages and capabilities for trips that range from a daily commute, to a school trip, to convenient shopping, or casual recreation.

A system of separated Class IV cycle tracks, Class II bike lanes, and shared bike routes fully covers both islands. Bicycle pathways connect through neighborhoods and open spaces, with a range of options and experiences for cyclists of all types.

As an added improvement to the Streetscape Master Plan, the cycle track along California Avenue extends from Avenue C to Avenue D and connects to the Eastside Common. This cycle track extension creates a safe and simple bicycle route from the Waterfront Plaza through to the Eastside Common. A special signalized crossing controls this intersection and ensures safe crossings for all proposed multi-directional travel.

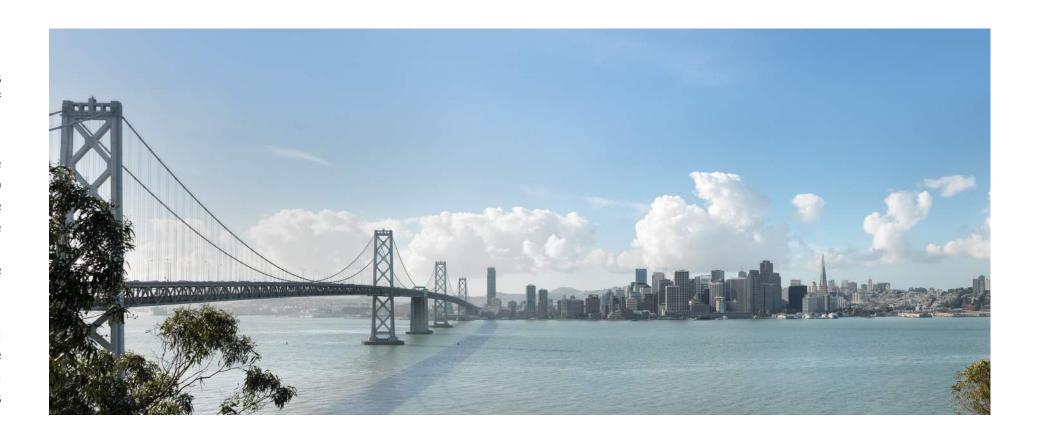
An additional improvement to the Streetscape Master Plan includes the extended cycle track alongside Eastern Shoreline Park at Avenue G and Second Street. This cycle track extension connects the class IV track at Clipper Cove to the planned class IV facility along Eastside Avenue.

VEHICULAR NETWORK

A sustainable transportation system on Treasure Island and Yerba Buena Island promotes pedestrian and bicycle mobility and provides strong public transit connections, therefore de-emphasizing private automobile use. All island streets accommodate vehicles, but within design parameters that emphasize use by pedestrians and cyclists, regardless of the amount of traffic they must carry. Primary avenues, California Avenue and Avenue C, serve as arrival and main circulation routes, connecting local streets. Lots and garages are planned throughout the network to encourage visitors arriving by car to park once and circulate the islands on foot, bicycle, and shuttles.

TRANSIT NETWORK

The use of public transportation by significant numbers of visitors, residents, and workers on the islands is essential to meeting sustainability commitments, providing economic opportunity, and achieving a high quality of life. The objective is to provide an efficient, attractive hub for transit in the Island Core District, located at the point of arrival from the Bay Bridge and at the iunction of the two islands. An "Inter-modal Transit Hub" will connect all regional, off-island transportation services such as buses and ferries with on-island services including shuttles, bicycles and attractive pedestrian routes. The inter-modal facility is planned to include a ferry shelter facing the historic Building 1 on the shore of Treasure Island. The Transbay buses have stops and layover spaces on Island Center streets.



3.2.1 PEDESTRIAN NETWORK

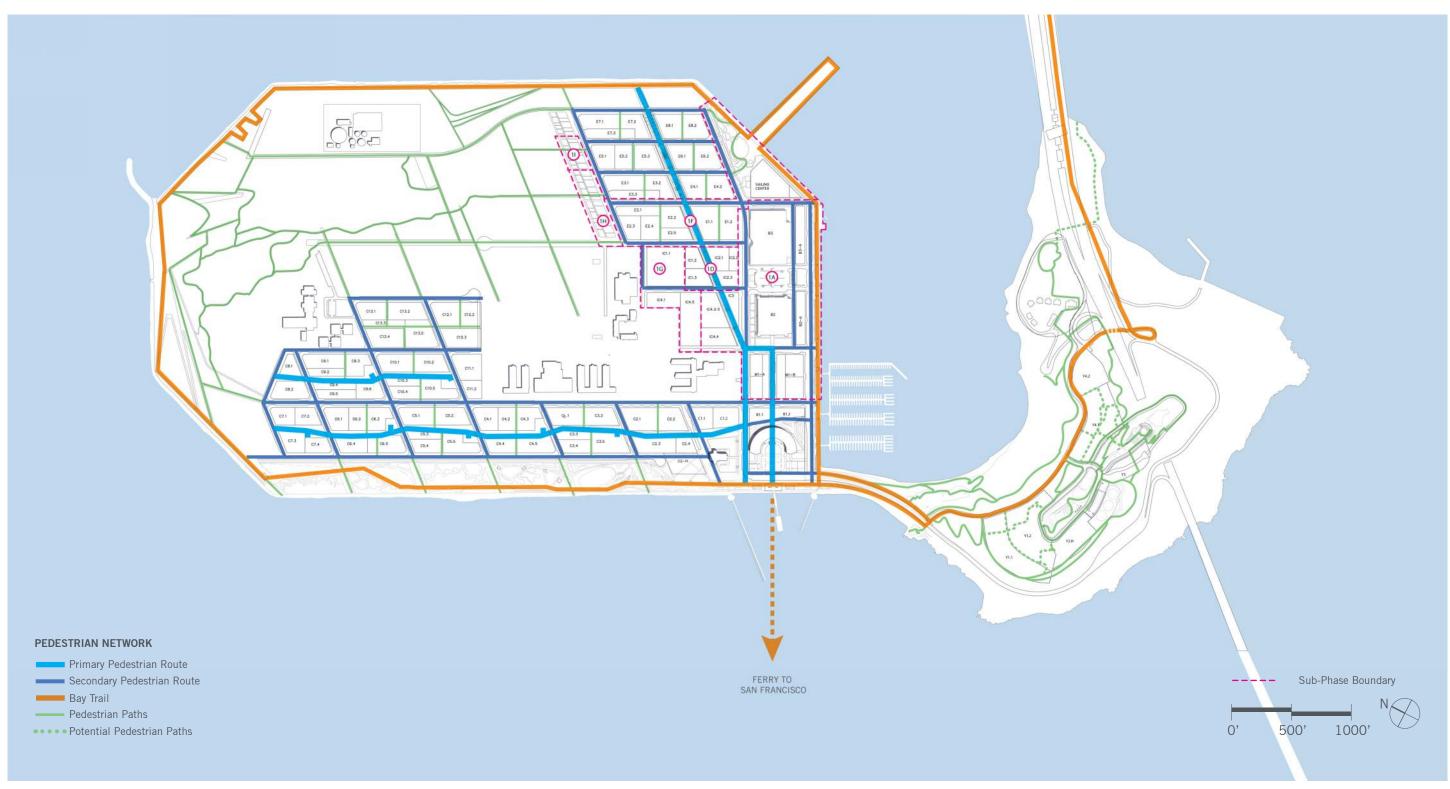


FIGURE 3.2 PEDESTRIAN NETWORK SITE PLAN

3.2.2 BICYCLE NETWORK

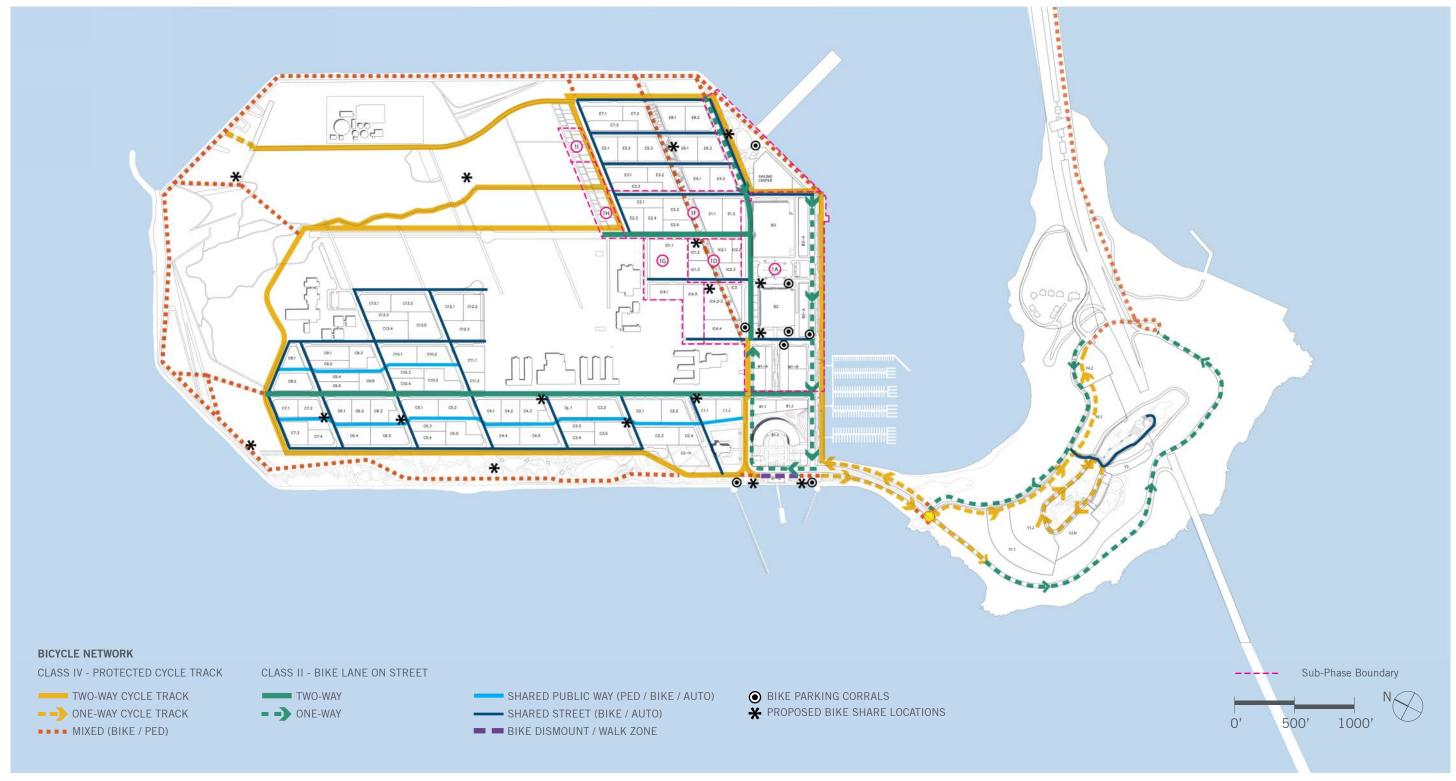


FIGURE 3.3 BICYCLE NETWORK SITE PLAN

3.2.3 VEHICULAR NETWORK

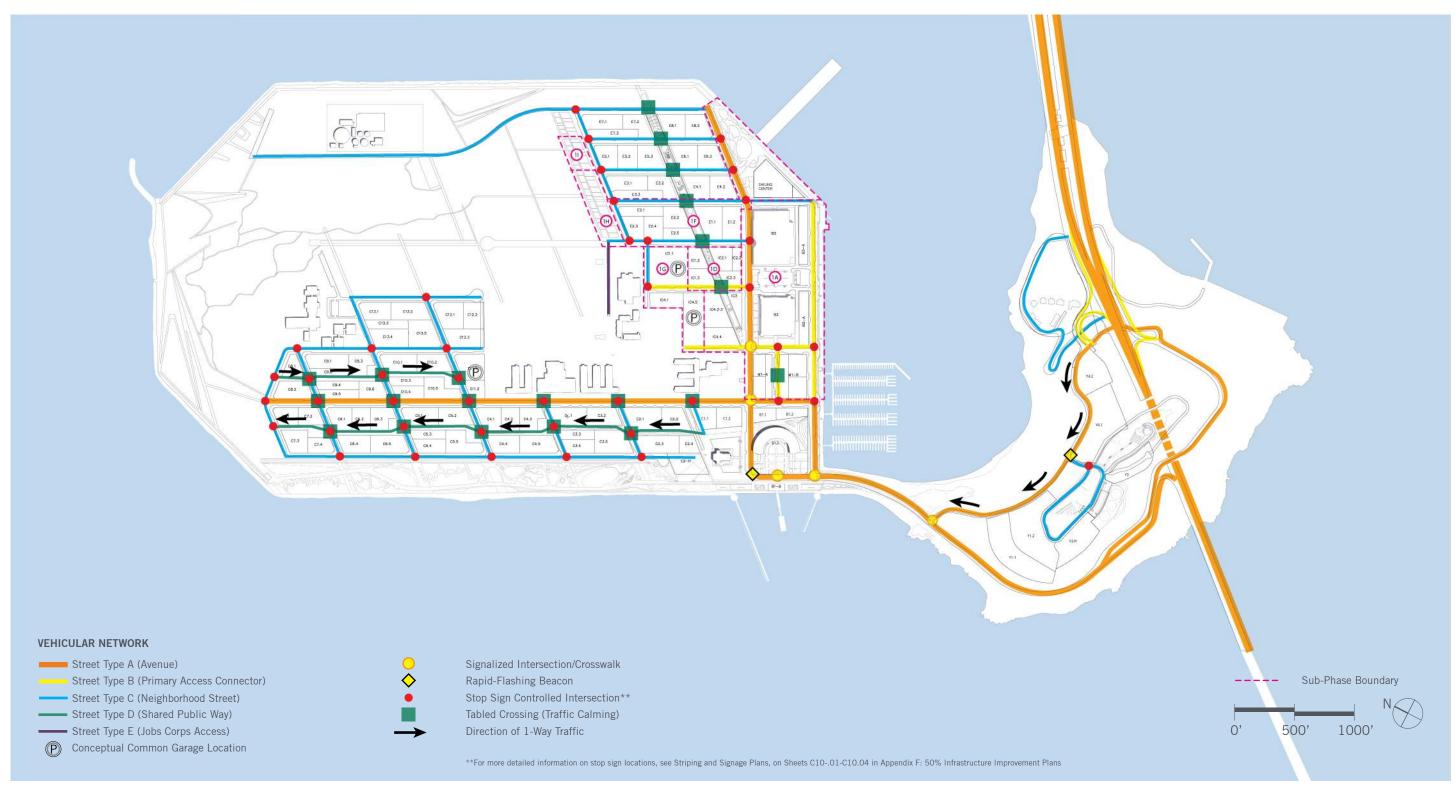


FIGURE 3.4 VEHICULAR NETWORK SITE PLAN

3.2.4 TRANSIT NETWORK



FIGURE 3.5 TRANSIT NETWORK SITE PLAN

3.2.5 INTER-MODAL TRANSIT HUB

The Design for Development's strategy for compact development includes creating an Inter-modal Transit Hub on Treasure Island's southwest corner, which is the location of its most buildable site and its single point of access by land.

Both MUNI and AC Transit buses will operate in a one-way clockwise manner through the Inter-modal Transit "Loop," moving north from the Treasure Island Road Causeway, taking a right on Clipper Cove Avenue, a left on Avenue D, moving west on California Avenue, before stopping at Palm Drive and re-entering the Causeway. Bus stops are located on Clipper Cove Avenue near the Treasure Island Road Causeway intersection and on Avenue D near the Clipper Cove intersection. Buses will have the opportunity to layover on the south side of the Job Corps on California Avenue to recalibrate their arrival schedule before picking up passengers on the south side of Palm Drive. This location is currently planned as the only pick-up stop for MUNI and AC Transit buses on the Island and a generous bus shelter will be provided here for the comfort and convenience of passengers.

The Treasure Island Shuttle circulates in the same direction around the Inter-modal Transit "Loop" as the buses, however there is no layover zone for the shuttles. Both stop locations on Avenue D (near California Avenue) and on Palm Drive will accommodate pick-up and drop-off. Two additional shuttle "loops" connect residents in both the Cityside and Eastside neighborhoods and sixteen total stops are planned for the island – each including a transit shelter. The Treasure Island shuttle will be managed by the Treasure Island Mobility and Management Authority (TIMMA) and the specific shuttle vehicle will be determined in the future along with the detail of the shelter designs.

Figure 3.6 reflects updates to the Inter-modal Transit Hub since the Major Phase Application including the extension of the California Avenue cycle track between Avenues C and D.

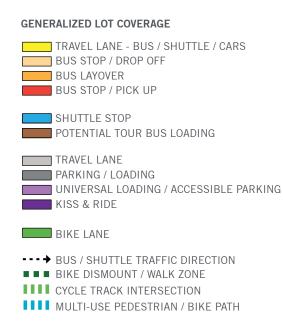




FIGURE 3.6 - INTER-MODAL TRANSIT HUB

3.2.6 TRUST STREETS

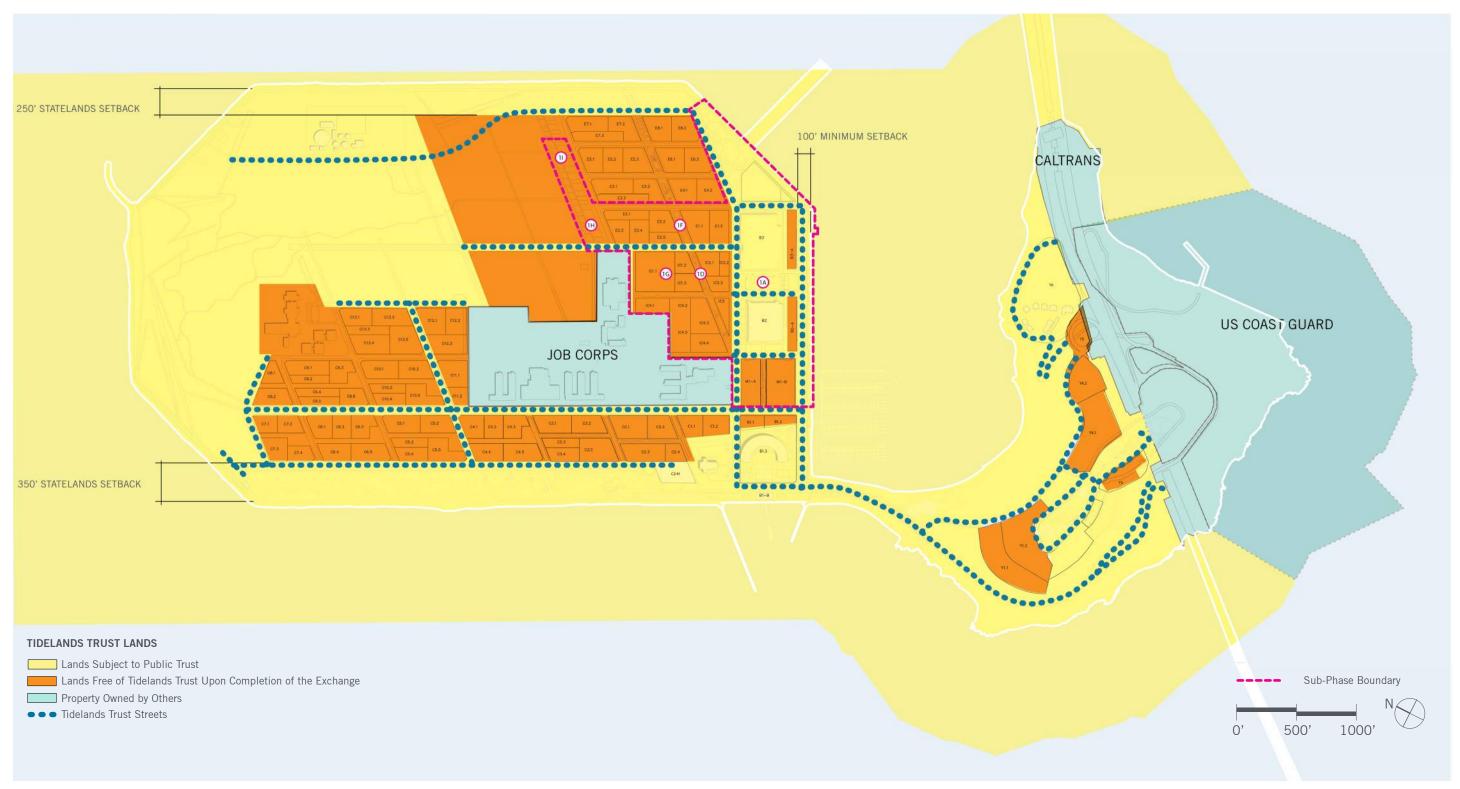


FIGURE 3.7 TIDELANDS TRUST SITE PLAN

3.3 STREET DESIGN



FIGURE 3.8 STREET DESIGN KEY PLAN

The area within the Sub-Phase Application 3 boundary includes a wide range of Treasure Island streetscape typologies: Windrow Streets; Island Perimeter Streets; Treasure Island Village Streets; Eastside Neighborhood Garden Streets; Eastside Core Streets; the Retail Main Street; California Avenue and Clipper Cove Avenue. While further detail is provided on the materiality, planting, and furnishings of these streetscapes in the Streetscape 50% Construction Documents set and the Parks 100% Design Development set provided in Appendices F and H, several key goals remain paramount to the creation of these public spaces:

- Generous, pedestrian focused throughways
- Comfortable, safe and accessible routes of travel that encourage walking for all users
- Safely designed and comfortable routes of travel for bicyclists
- Quality materials and plant selections that endure the test of time
- Safely designed intersections to accommodate a variety of user groups such as pedestrian and bicyclists
- 6. Code compliant designs within all right-of-ways to meet the requirements of various City Departments
- Minimize conflicts between pedestrians, cyclists and vehicles

The following plans and narratives are included to further explain the circulation and design intent for critical streets and intersections. The following plans reflect the design intent and will be incorporated into subsequent infrastructure plan submittals.

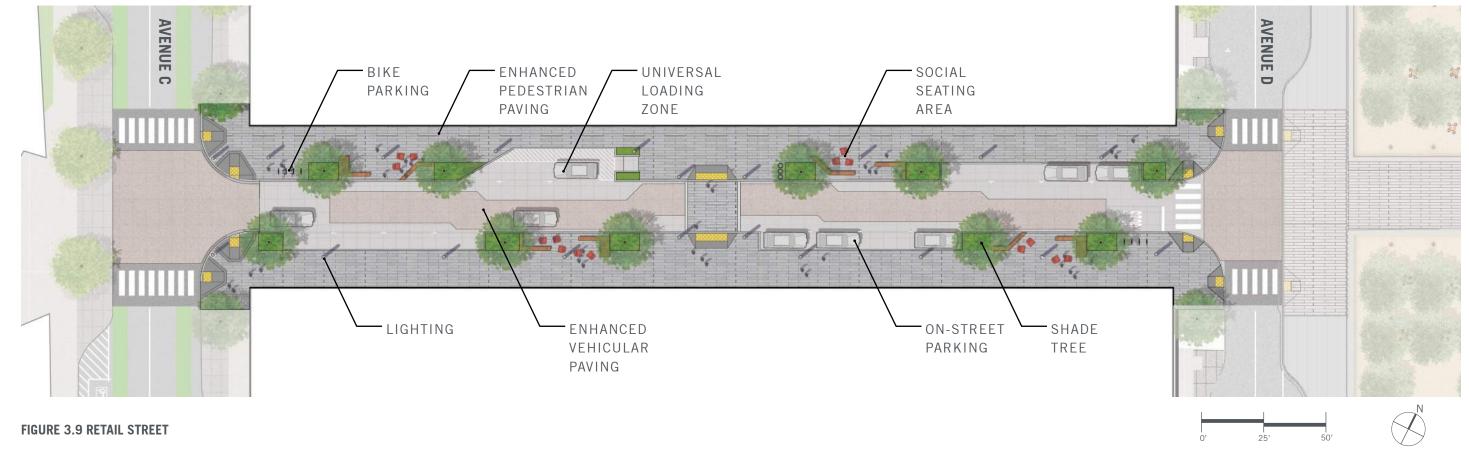
RETAIL STREET

Retail Street, is a vibrant, social block in the middle of Treasure Island Village. It is the center of urban activity and an important destination on the island. The street is designed for bustling retail activity and frequent special events. Prioritizing the pedestrian, Retail Street has generous walkways, enhanced paving, site furnishings, and plantings, creating a unique destination. Retail Street features special flexible "lounge" areas for gathering, which could serve as expanded dining space, or for hosting smaller events. The street is designed to be closed-off to traffic for special events of various sizes. Enhanced paving extends from the sidewalks through to the vehicular travel and parking zones to elevate the street and highlight the street's focus on events and pedestrian use. Retail Street is lined with medium-sized trees

and large planting areas that create a pedestrian scale, shade, and softened edges. Key characteristics of Retail Street include:

- Treasure Island's main shopping street and the central public space of Treasure Island Village.
- Connection from Block B1 shopping to Building 2.
- Pedestrian priority street with minimal parking.
- A city street that is privately maintained and managed.
- Interesting furniture that provides expanded flexible areas for gathering and dining.
- Can be closed to traffic for special events of various scales.
- Enhanced paving that elevates the space to create a special atmosphere.





CLIPPER COVE AVENUE AND AVENUE G

The intersection of Clipper Cove Avenue and Avenue G connects many modes of transportation at the interface of two waterfront parks. The adjacent Sailing Center will bring an intensity of activity and children, so it is imperative to ensure safe and obvious crossings between the sidewalks, streets and cycle track at this important intersection.

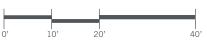
Clipper Cove Promenade terminates at this juncture, but the class IV cycle track wraps the corner and continues northbound along Avenue G. Pedestrians that wish to continue from Clipper Cove northbound along Avenue G can comfortably cross at clearly designated pedestrian crossings. Where pedestrians must cross both the street and class IV cycle track an island or refuge is provided for enhanced safety and visibility.

The Sailing Center drop-off on the east side of Avenue G will result in high volumes of pedestrian traffic crossing the cycle track between the street and open space. The tabled bicycle/ pedestrian crossing and change in paving at this location ensures cyclists are aware of the potential cross-traffic.





FIGURE 3.10 CLIPPER COVE AVENUE AND AVENUE G INTERSECTION





CALIFORNIA AVENUE AND AVENUE D

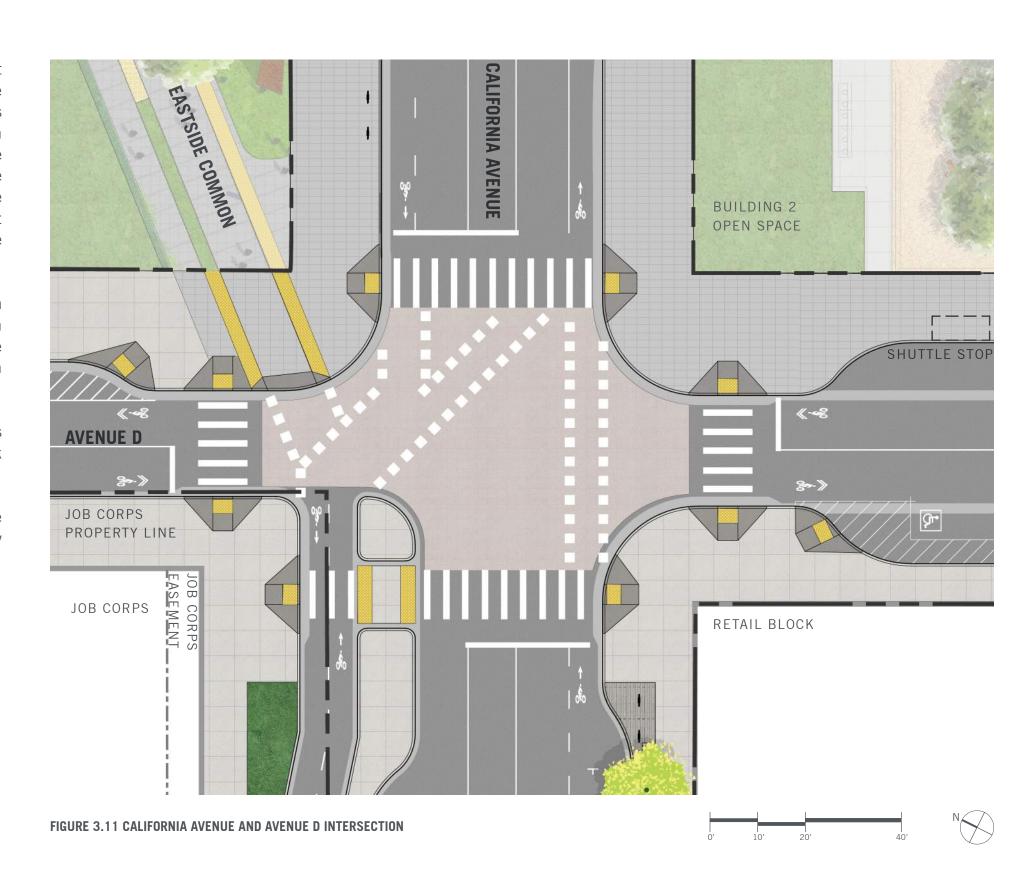
The intersection of California Avenue and Avenue D is an important interface for visitors where two main streets connect with the Eastside Common, a key pedestrian and bicycle route. Cyclists will move in various ways through the intersection to transition from the class IV cycle track on California Avenue to either the class II lanes on the street or the multi-use path through the Eastside Common (and vice versa). The crossing between the Eastside Common and the Building 2 Open Space is an important link to bring pedestrians from the Eastside neighborhood to the Retail Street and waterfront along Clipper Cove.

Enhanced paving and a specialized traffic signal are used to calm traffic and heighten awareness of the various crossings within the intersection. The traffic signal includes a dedicated bicycle phase to safely accommodate the diagonal crossings shown on the plan.

Where pedestrians and bikes intersect, yellow truncated domes line dedicated crossings and an island between the cycle track and California Avenue provides a refuge.

Enhanced paving in the throughway at the end of the Eastside Common and surrounding the Building 2 Open Space visually links the open space network across California Avenue.



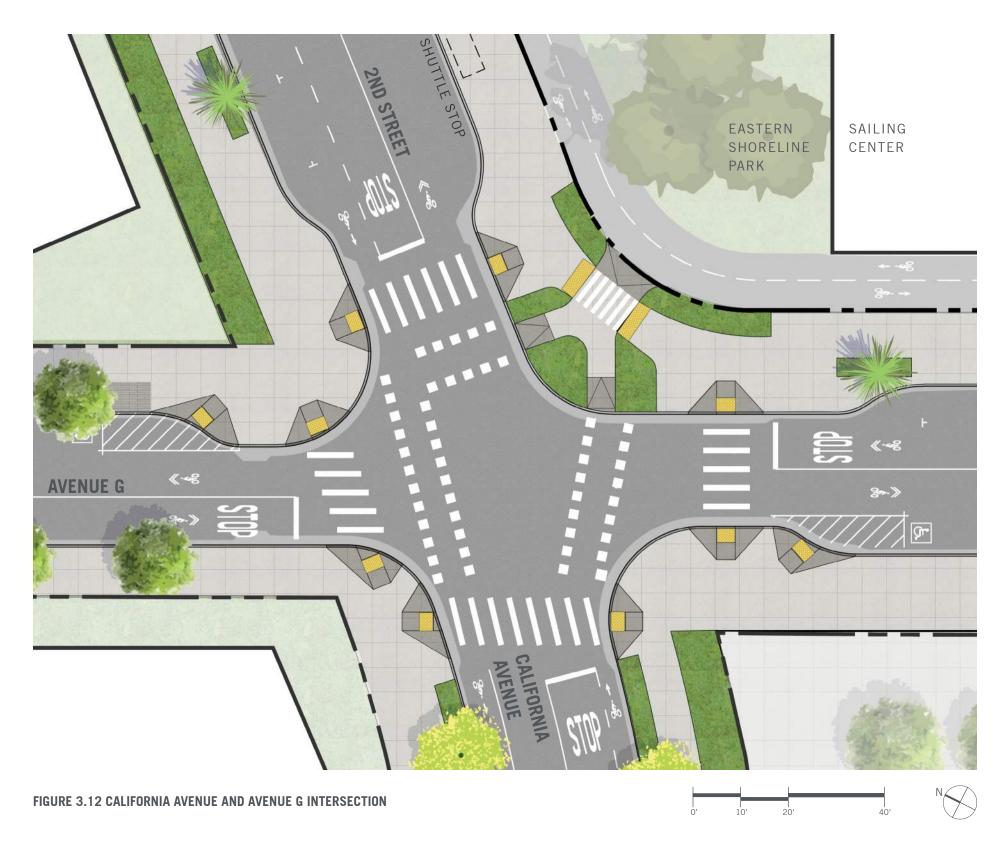


CALIFORNIA AVENUE AND AVENUE G

The intersection of Avenue G where California Avenue transitions to Second Street is arranged to allow cyclists to move from California Avenue onto the new cycle track that wraps the Eastern Shoreline Park. Markings and dedicated bicycle ramps guide cyclists from the class II bike lanes through the intersection and over the sidewalk to the cycle track. Cyclists heading east make a direct connection through the intersection to the ramp while cyclists heading west are directed to make the transition in two movements, north and then west. This ensures the cyclists are moving through the intersection in a way that is predictable to cars. The markings encourage cyclists to use the cycle track instead of the Second Street facilities, but a class II westbound bike lane is also provided for cyclists from the Eastside Neighborhood to connect to the California Avenue class II bike lane for those heading directly to the island center or Inter-modal Transit Hub. The eastbound lane of Second Street is marked as a class III shared lane since a class II bike lane along the curb would cause a bike/shuttle conflict at the shuttle stop.

Where cyclists cross the sidewalk yellow truncated domes and crosswalk markings alert pedestrians. The throughway concrete paving is specified at this crossing to emphasize that pedestrians have priority in this space.



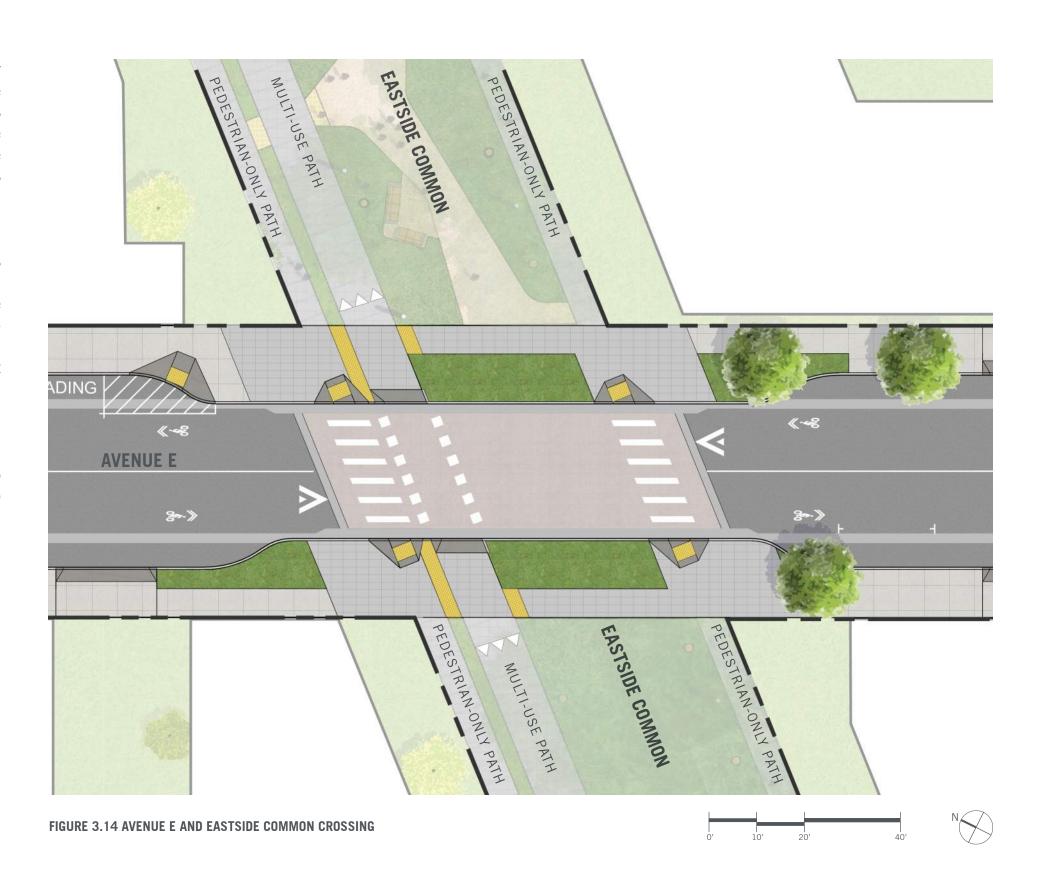


AVENUE E AND EASTSIDE COMMON CROSSING

The Eastside Common is an important circulation route for pedestrians and bikes through a continual park which unites the Eastside neighborhood blocks while still making safe crossings visible to all. Avenue E presents the typical condition of the Eastside Common crossings since the park dimensions are the same on both sides of the street. The Eastside Common crossings have been developed through several meetings with the San Francisco Department of Public Works Accessibility Coordinator. They are designed to safely separate bikes and pedestrians and ensure that the path of travel aligns with the proper path across the intersection. Due to the angle where the Eastside Common meets the Garden Streets, crossings are designed at an angle through the intersection to directly link pedestrian-only and multiuse facilities across the street. A low traffic table and enhanced paving in the intersection is designed to calm traffic and alert cars that this is a key crossing moment. Separate pedestrian and bike crosswalk markings make drivers aware of the multi-modal cross traffic.

Enhanced paving extends from the park into the throughway to continue the richness and character of the park out to the curb and visually connect the open space network across the street. As the bike path crosses the throughway, truncated domes warn pedestrians of crossing bicycle traffic.



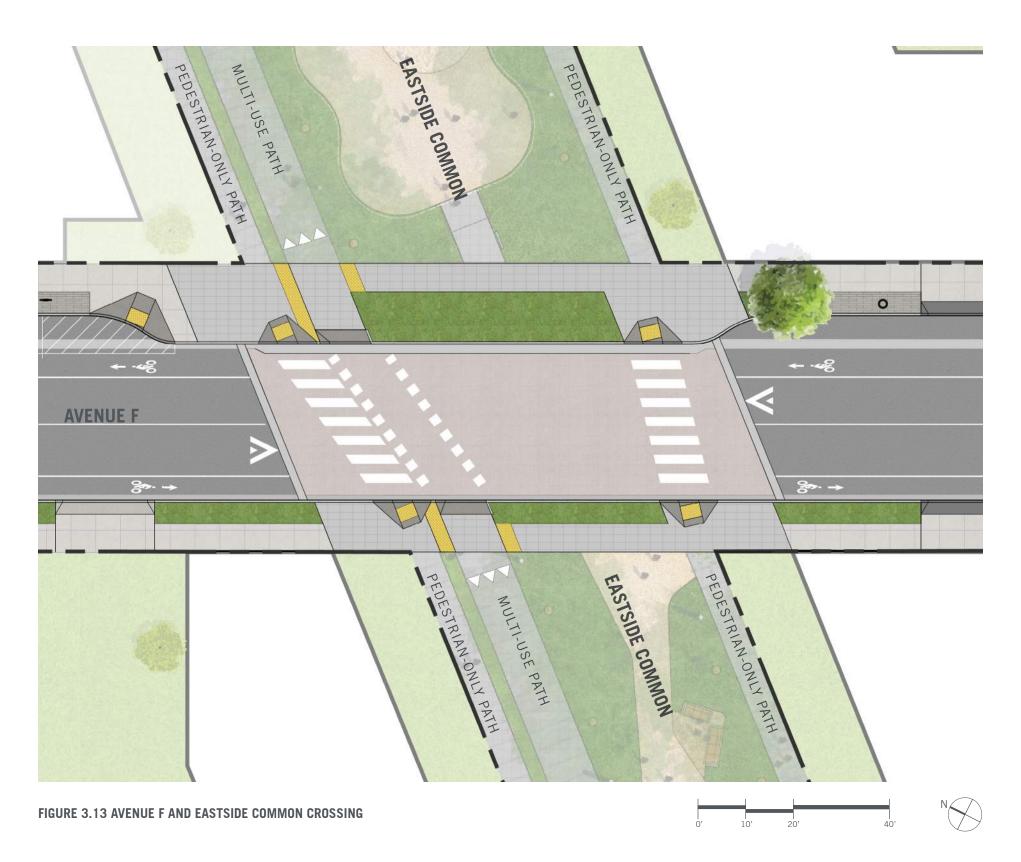


AVENUE F AND EASTSIDE COMMON CROSSING

Avenue F presents an atypical condition where Eastside Common changes dimension as it becomes wider on the eastern side of Avenue F. As described on the previous page, the crossing is designed to connect users across the street in the direction of the path of travel for the pedestrian-only and multi-use paths. Dedicated pedestrian and bike ramps as well as separate crosswalk markings keep bikes and pedestrians safely apart. A low traffic table and enhanced paving in the intersection is used to calm traffic and alert cars that this is a key crossing moment.

At this intersection, the curb ramps and crossings are more angled than the typical crossings found on the previous page. This angle is necessary to directly connect the respective paths. Dedicated bike ramps and pedestrian crossings on either side of Eastside Common allow for seamless travel through the park. As the bike path crosses the throughway, truncated domes warn pedestrians of crossing bicycle traffic.





AVENUE F AND FOURTH STREET

The intersection of Fourth Street and Avenue F is located at the threshold of the Eastside and Windrow streets. Due to the future Sports Park located north of this intersection, many people will be traveling down Avenue F connecting the cycle track. The cycle track wraps the Stormwater Garden and connects north to the Sports Park and east to the waterfront. Dedicated bike ramps and crossings keep pedestrians and cyclists safely separated.

At this T-intersection, traffic is controlled with all-way stop signs to allow for movement onto and off the cycle track. Yellow tactile warning strips alert bikes and pedestrians to crossings.





3.4 PARKING AND LOADING

ON-STREET PARKING

Parking is an important element for island residents with vehicles, for their visitors, for tourists who choose to drive, and for those people with disabilities who are not able to use the other transportation means. Parallel parking is the only type of on-street parking provided. Per the development agreements, all street parking on the island is metered, per City standards. Onstreet parking is provided on one side only for the streets around the island perimeter and for many of the neighborhood streets such as those in the Eastside Neighborhood. On-street parking is provided on both sides of specific primary streets.

STREET	PUBLIC PARKING SPACES	ADA SPACES	LOADING
STREET	FUBLIC PARKING SPACES	ADA SPACES	LUADING
CALIFORNIA AVENUE	42	5	5
CLIPPER COVE AVENUE	74	5	6
AVENUE D	17	2	2
AVENUE E	30	2	2
AVENUE F	17	2	2
AVENUE G	40	3	3
4 TH STREET	27	2	1
2 ND STREET	16	3	3
RETAIL	10	1	1
TOTAL	273	25	25

TABLE 3.1 SUB-PHASE ANTICIPATED ON-STREET PARKING ALLOCATION

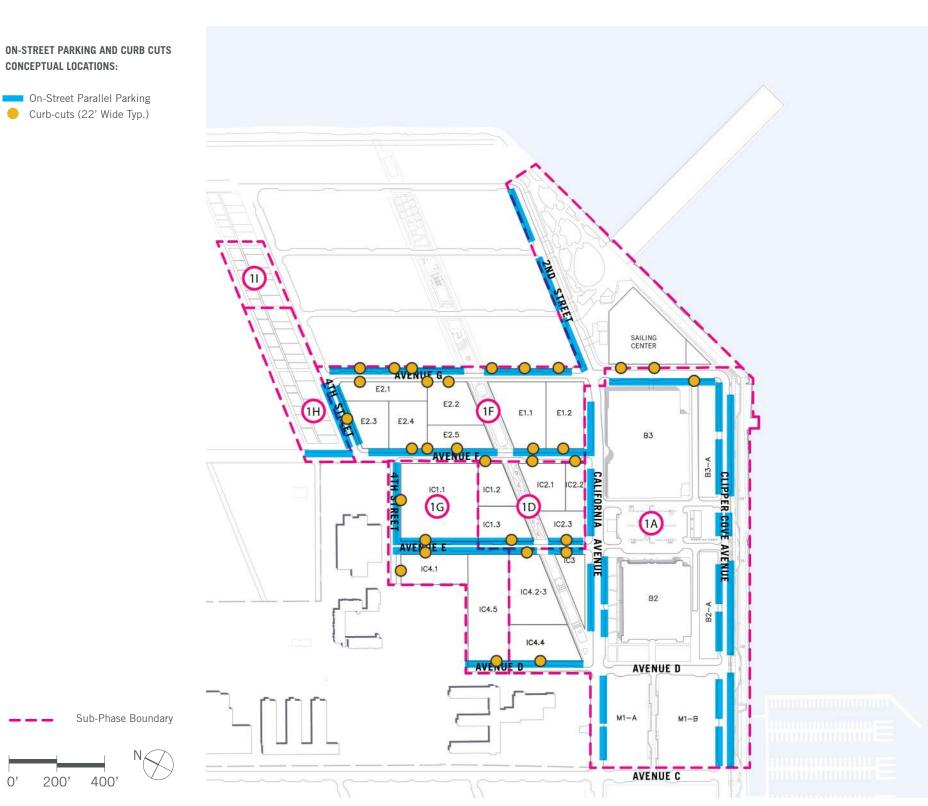


FIGURE 3.16 SUB-PHASE ON-STREET PARKING ZONES

SUB-PHASE APPLICATION 3: SUB-PHASES 1A. 1D. 1F. 1G. 1H. 11

OFF-STREET PARKING

OFF-STREET PARKING

Table 3.2 shows the maximum number of parking spaces to be allocated to Sub-Phases 1A, 1D, 1F, 1G, 1H and 1I, as required by DDA Sec. 4.2.1. Off-street parking shall not be required for any use, and the quantities of off-street parking specified in Table 3.2 shall serve as the maximum amount of off-street parking that may be provided as accessory to the uses specified, calculated based on the proposed program for Sub-Phases 1A, 1D, 1F, 1G, 1H and 1I. Any off-street parking space dedicated for use as a car-share parking space shall not be counted toward the total parking permitted as accessory.

Accessory off-street parking spaces for residential and nonresidential uses may be located either on the same development block as the building served, or off-site within the Development Plan Area. All off-street parking spaces accessory to residential uses with common access in new structures of ten (10) dwelling units or more, shall be leased or sold separately from the rental or purchase fees for dwelling units for the life of the dwelling units, such that parking spaces are marketed and sold or rented as separate and optional additions to the base advertised or listed purchase or lease price for residential units alone, and the price for residential units with parking shall be marketed and sold or rented at a higher price than residential

units without parking. Off-street non-residential parking will be primarily provided in centralized parking facilities. Centralized structured and surface parking will incur a charge.

Off-street freight loading will be provided for commercial buildings consistent with San Francisco Planning Code. Commercial loading locations and sizes will be determined on a case-by-case basis with the design of commercial buildings.

		Sub-Phase 1A		Sub-Phase 1D		Sub-Phase 1F		Sub-Phase 1G		Total	
		Development	Off-Street Parking	Development	Off-Street Parking	Development	Off-Street Parking	Development	Off-Street Parking	Development	Off-Street Parking
Use or Activity	Maximum Parking Ratios	Program	Spaces	Program	Spaces	Program	Spaces	Program	Spaces	Program	Spaces
Residential	1 for each dwelling unit calculated on an aggregate basis for all dwelling units constructed within the Development Plan Area, but in no event more than 8,000 residential accessory spaces within the combined Treasure Island and Yerba Buena Island Development Plan Area.	953	953	458	458	621	621	100	100	2132	2132
Office / Commercial	1 for every 1,000 square feet of gross floor area calculated on an aggregate basis for all office/commercial uses (other than retail, hotel and marina) but in no event more than 302 office/commercial accessory spaces within the combined Treasure Island and Yerba Buena Island Development Plan Area.	New: 100,000 Adaptive Reuse: 202,000 Total: 302,000		_	_	_	_	_	_	_	_
Retail	2 for every 1,000 square feet of gross floor area calculated on an aggregate basis for all retail uses, but in no event more than 414 retail accessory spaces within the Treasure Island portion of Development Plan Area.	100000	200	10000	20	5000	10	_	_	115000	230
Hotel	0.4 for every hotel room calculated on an aggregate basis for all hotel uses on Treasure Island, but in no event more than 180 hotel accessory spaces on Treasure Island.	100	40		_	_	_		_	100	40
Marina	0.6 for every slip constructed within the Development Plan Area calculated on an aggregate basis, but in no event more than 236 Marina accessory spaces within the Treasure Island portion of Development Plan Area.	218 Slips	131	_	_	-	_	_	_	218 Slips	131
	Totals		1,324		478		631		100		2,533

TABLE 3.2 SUB-PHASE ANTICIPATED OFF-STREET PARKING ALLOCATION

*Marina developed by separate entity; timing unknown

ACCESSIBLE LOADING ZONES

On-street universal passenger loading zones and accessible parking zones shall be located throughout Treasure Island, providing convenient access to the island's buildings and open spaces.

Passenger loading zones are curbside stalls for pick-up and drop-off, limited to five minute stops (per SFMTA). Drivers must remain with the vehicle. Most of the site's loading zones will be universally accessible and ADA compliant, providing a wheelchair access aisle along the passenger side of the car and access to the sidewalk via a DPW standard curb ramp. To meet the Mayor's Office of Disability and DPW Accessibility Department request of providing a loading zone at building block faces, "Modified Loading Zones" are provided which meet the same criteria as the Universal Zones, but without the access aisle. Generally passenger loading zones shall be located in the middle of a block face, to provide convenient access to building entrances on the block. In some cases, such as at parks and open spaces, the loading zone may be located at an intersection, to utilize the associated bulb-out and crosswalk, for easy access across the street.



FIGURE 3.17 SUB-PHASE ACCESSIBLE LOADING ZONES

SUB-PHASE APPLICATION 3: SUB-PHASES 1A. 1D. 1F. 1G. 1H. 1I

ACCESSIBLE PARKING ZONES

Accessible parking stalls ensure convenient, equal parking access for drivers and passengers with a valid disabled parking permit. There are two types of accessible parking stalls: standard and "enhanced." "Enhanced" accessible parking stalls are at sidewalks greater than 14 feet. Generally, accessible parking stalls are located at the beginning of the block, utilizing the street corner bulb-out for curb-ramp access to the sidewalk.



FIGURE 3.18 SUB-PHASE ACCESSIBLE PARKING ZONES

BICYCLE PARKING

Bicycles are a key transportation element on the island. Well-located, secure bicycle racks and corrals are an important link to the success of the overall bicycle network. For convenience, potential single or dual bicycle racks have been placed throughout the island at most intersection and mid-block locations.



FIGURE 3.19 SUB-PHASE BICYCLE PARKING

SUB-PHASE APPLICATION 3: SUB-PHASES 1A, 1D, 1F, 1G, 1H, 1I 3 - TRANSPORTATION AND STREETSCAPES 75



4. PARKS AND OPEN SPACE

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		(STORMWATER TREATMENT GARDEN)	
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CONSISTENCY WITH ENTITLEMENT DOCUMENTS

The Parks and Open Spaces included as part of this Sub-Phase Application 3 are consistent with the Schematic Designs approved in the Major Phase 1 Application. The designs presented in this Sub-Phase Application are consistent with the Treasure Island/Yerba Buena Island Parks and Open Space Plan, except as noted in the Major Phase 1 Application and this Sub-Phase Application.

4.1 TI SUB-PHASE 3 PARKS AND OPEN SPACE OVERVIEW

The Treasure Island and Yerba Buena Island Parks and Open Space system and program are the culmination of over a decade of public discussion on how these extraordinary open spaces at the center of San Francisco Bay can best contribute to the City's and region's future. In addition to the public discussion and ongoing work with TIDA, TI/YBI Citizens Advisory Board (TI/YBI CAB), existing residents, and stakeholder organizations, the programming and design of the open spaces reflects intensive analysis of site opportunities and constraints, natural and cultural resources, Tidelands Trust, sea level rise, infrastructure, transportation, access, sustainability and habitat management.

The islands' diverse open space program is made up of ten distinct open space types – six on Treasure Island and four on Yerba Buena Island. Together they encompass a wide variety of programs and experiences that will contribute to the unique identity of each island.

The redevelopment of Treasure Island and Yerba Buena Island will provide approximately 290 acres of open space and parks, including 80 acres on YBI and 210 acres on Treasure Island. Consistent with the principle of adjacency described in the DDA, the open space and parks will be developed in conjunction with development blocks. Chapter 4 – Parks & Open Space of this Sub-Phase Application provides detailed descriptions of the location, boundary and character of each open space and park that will developed as part of Sub-Phases 1A, 1D, 1F, 1G, 1H and 1I.

TREASURE ISLAND

Shoreline Park

A series of waterfront parks that wrap the western, northern and eastern edges of Treasure Island, characterized by the Waterfront Plaza at the transit hub, Pier 1, a continuous waterfront promenade, water access, and sculpted topography.

Sports and Recreation Park

An active park designed specifically for sports recreation.

<u>Urban Agriculture Park</u>

A park devoted to the production of food and/or nursery stock with opportunities to provide an educational outreach program.

Northern Shoreline Park and Wilds

Constructed habitats that integrate stormwater management, education and limited passive recreation.

Urban Core

A series of plazas and open spaces that help activate the retail core and the transit hub. These areas include Waterfront Plaza, Clipper Cove Promenade, Marina Plaza and the Cultural Park.

Pedestrian Network & Neighborhood Parks

Social spaces and amenities specifically designed for residents.

YERBA BUENA ISLAND

Hilltop Park

A regional and neighborhood serving park with passive recreational areas, overlooks, and picnic areas.

Regional Open Space - Habitat Management Areas

The majority of the island's open space is dedicated to habitat management and associated recreational uses such as hiking, biking, and picnicking.

Trails and Overlooks

A continuous network of rustic hiking trails provides access to the island's open space areas and overlooks.

Senior Officers' Quarters Historic District

Existing gardens surrounding the historic Senior Officers Quarters.

OPEN SPACE AND PARK TYPOLOGIES

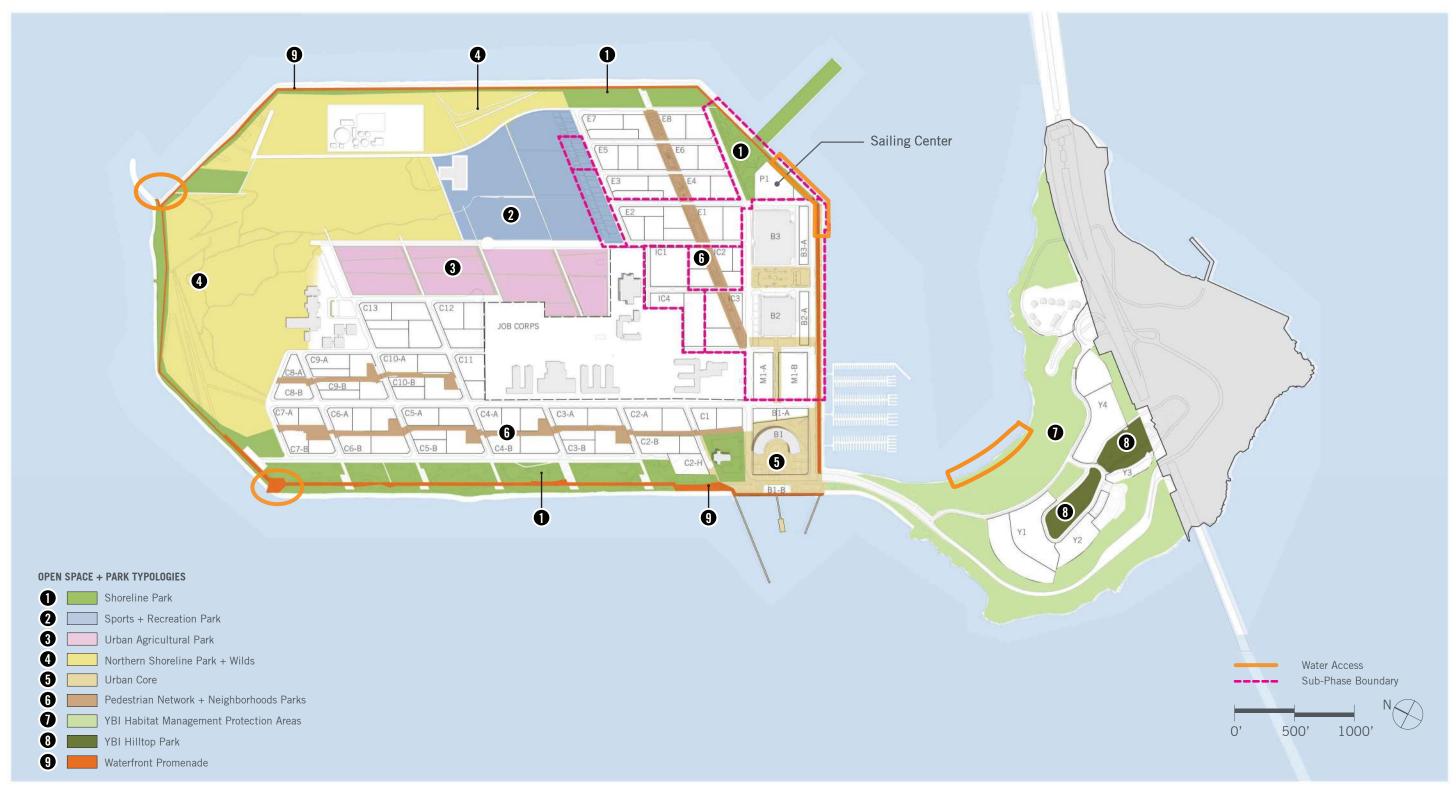


FIGURE 4.1 OPEN SPACE AND PARK TYPOLOGIES

SUB-PHASE PARKS AND OPEN SPACE

	PROPOSED PARKS AND OPEN SPACE			
	TREASURE ISLAND: SUBPHASES 1A, 1D, 1F, 1G, 1H, 1I			
		ACRES		
1	Clipper Cove Promenade	1.4		
2	Building 2 Open Space	1.4		
3	Building 3 Open Space	3.1		
4	Eastside Common	1.8		
5	Eastside Park (Stormwater Treatment Garden)	3.3		
6	Eastern Shoreline Park	4.8		
_	TOTAL	15.8		

TABLE 4.1 TI SUB-PHASE PARKS AND OPEN SPACE ACREAGE



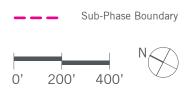


FIGURE 4.2 SUB-PHASE 3 PROPOSED PARKS AND OPEN SPACE

4.2 TI SUB-PHASE 3 PARKS AND OPEN SPACE

Located in the middle of San Francisco Bay, the two islands share an incredible water bound landscape with sweeping views of the entire Bay Area, proximity to downtown San Francisco and Oakland. Both islands are exposed to wind. That factor plays a major role in shaping the parks and open space program and design. Within these shared circumstances, different parts of the islands have very different characters. The western edge of Treasure Island that looks directly back to the skyline of San Francisco, one of the great prospects in the world, yet does so in the face of persistent afternoon winds that sweep in through the Golden Gate. The southern and eastern edges of Treasure Island are more protected, and have the East Bay and the new Bay Bridge as their backdrop.

Each park and open space has been programmed and designed to exploit and emphasize these differences in order to enhance the diversity and memorable qualities that are hallmarks of great regional and world destinations alike. The Parks and Open Space chapter provides illustrative material that highlights the Sub-Phase parks and open spaces and describes how they contribute to the creation of a unique island community and a truly regional destination.

Sub-Phases 1A, 1D, 1F, 1G, 1H and 1I on Treasure Island include approximately 15.8 acres of parks and open space. Consistent with the principle of adjacency described in the DDA, open space and parks will be developed in conjunction with development blocks. The following goals and principals have guided the design of each park and open space.

SAFE AND ACCESSIBLE

Ensure that parks and open spaces are easily accessible by transit, universally accessible to all and safe for both pedestrians and bicyclists.

DIVERSE PROGRAMS

Sub-Phases 1A, 1D, 1F, 1G, 1H and 1I parks and open space programs are consistent with the Standards and Guidelines included in the Design for Development Document and the Open Space Plan approved as part of the Disposition and Development Agreement. The creation of an authentic San Francisco neighborhood and regional destination that will draw visitors from around the Bay Area and beyond are central to the vision set forth in those documents. The parks and open space program has been developed to reach a wide demographic of residents and visitors with a diversity of uses and opportunities for social and cultural events, passive and active recreation, hiking, biking, and natural areas. As part of the design process, the design team has worked with MJM Management to address the programing, operations, and maintenance of each park and to ensure that they will function as part of a holistic network; will have the necessary infrastructure in place to support the program; and can be maintained and operated sustainably.

UNIQUE PLACES

Each park has been designed to reveal and magnify the natural and cultural forces that influences its unique role in the community and its place in the landscape, and each has its own visual character and experiential qualities, specific to location, context and program. Taken as a whole, Treasure Island's parks support a cohesive vision that contributes to the identity of the island and is greater than the sum of parts.

ENGAGE THE WATERFRONT

The parks and open spaces take advantage of the waterfront, visually, experientially, and ecologically, and bring people to the water's edge to fully appreciate the Bay.

CONNECTED AND INTEGRATED WITH DEVELOPMENT

The plan creates strong connections between parks, streets, and public open spaces and designs for indoor-outdoor relationships with both historic buildings and new development. The goal is to integrate park, open space, and habitat concepts with adjacent uses, private development, and street design.

SUSTAINABILITY AND ECOLOGICAL INFRASTRUCTURE

Stormwater management, food production, habitat creation, water conservation, and integrated pest management are the focus of the parks and open space sustainability. In addition, the park and open space design is integrated with the new island infrastructure and natural processes to support urban sustainability.

INTERPRETATION AND EDUCATION

The intent is to provide park facilities and opportunities that support learning about cultural history, ecology, and urban sustainability, and provide for discovery and personal connection with the natural and cultural resources of the Bay Area.

ADAPTABILITY

As a long-term redevelopment project, the construction of Treasure Island and Yerba Buena Island will happen in multiple phases over many years. With that in mind, a philosophy of adaptive management and flexibility has guided each park design to allow for ongoing public participation in an evolving community; changing needs and uses; varying design approaches; and sustainable management and operations.

4.2.1 CLIPPER COVE PROMENADE



CLIPPER COVE PROMENADE OVERALL PLAN



OVERVIEW

On the south side of Treasure Island, the Clipper Cove Promenade will provide access along the marina waterfront and create a linear open space oriented toward the water and marina activities. The promenade is part of the Bay Trail and will connect on either end to future continuations of the trail system. The promenade ranges in width from 35 to 40 feet and will include a designated twoway cycle track, a continuous pedestrian sidewalk on the street side of the cycle track and a continuous pedestrian promenade on the water side of the cycle track. The design presented in this Sub-Phase Application is a continuation of the first phase of the promenade submitted as part of Sub-Phase Application 2.

At key points along the promenade, major and minor overlooks provide spaces for people to stop, gather, and appreciate the beauty of the bay. The surface of the promenade will be paved using different materials to visually differentiate the pedestrian zone from the cycle track and to emphasize the overlooks. Palm trees and planting have been added in a band between the cycle track and the pedestrian promenade to further mark the separation. The proposed grades take into account sea level rise projections. Clipper Cove has reduced wave run-up due to its proximity to Yerba Buena Island, so the proposed grades are very similar to the existing condition.

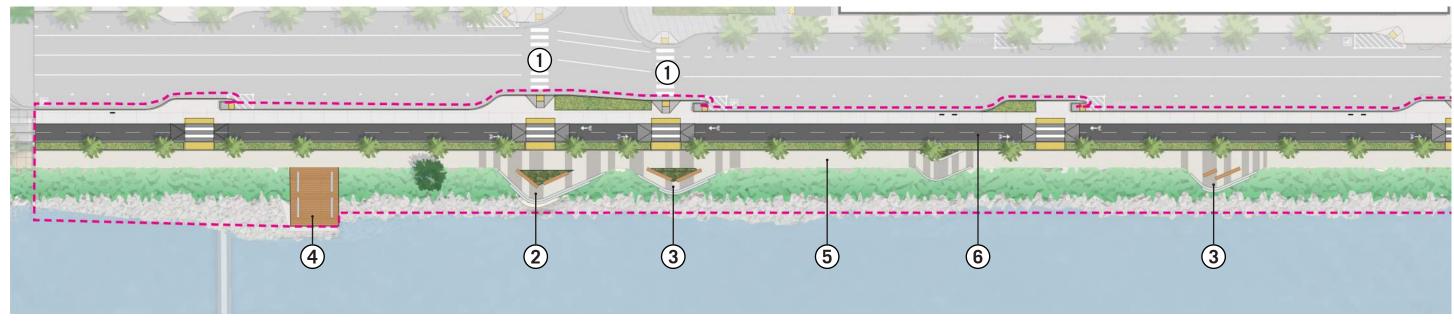
SUB-PHASE UPDATES

The extents of the Sub-Phase for the Clipper Cove Promenade are from Avenue C to Avenue G. These three blocks of the project include some key revisions to ensure a successful, functional, and beautiful promenade experience.

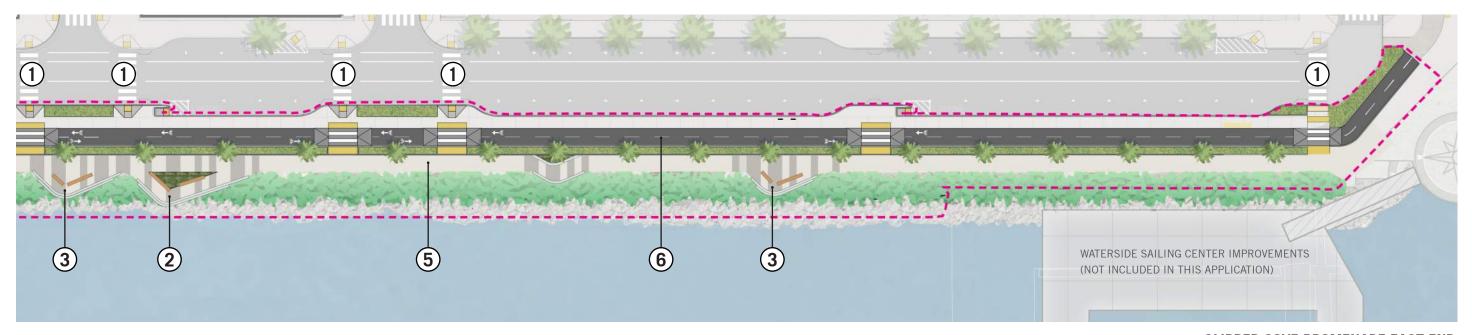
In addition to a waterside pedestrian promenade and a cycle track, a continuous sidewalk has been added along the south side of Clipper Cove Avenue. Designated automobile loading zones and short-term parking provide access to the waterfront and to the marina. Ample long-term parking is located nearby.

Additional bulb outs with access ramps ensure pedestrian safety and convenience. Pedestrian crossing points are located in key locations across the cycle track and have distinctive paving that give the pedestrian the right of way.

The cycle track is now depressed, except at the pedestrian crossing locations, another way to differentiate it from the pedestrian promenade.



CLIPPER COVE PROMENADE WEST END



CLIPPER COVE PROMENADE EAST END

- 1. CROSSWALKS
- 2. MAJOR OVERLOOK
- 3. MINOR OVERLOOK
- 4. PRESERVED OVERLOOK
- 5. PROMENADE
- 6. CYCLE TRACK

Sub-Phase Park Boundary

FIGURE 4.3 CLIPPER COVE PROMENADE ILLUSTRATIVE PLAN

SUB-PHASE APPLICATION 3: SUB- PHASES 1A, 1D, 1F, 1G, 1H, 1I

SOILS

The design requires various planting soils. The palms use a specified palm soil mix within planted areas, and a structural soil mix is used within the paved areas.

Other areas planted with groundcover and grasses require a planting soil of approximately 24 inches deep. These softscape areas are at grade and are not raised planters.

PLANTING

The planting palette is made up of California native and drought tolerant plants to promote efficient water use and waterfront habitat. The shoreline edge is vegetated with coastal native planting that includes small and medium sized shrubs. This planting zone is found between the edge of the promenade and the existing rip-rap where iceplant is currently found.

Date Palms and Phoenix dactylifera, are proposed along the promenade to continue and enhance the existing identity of the island. This species is also being proposed throughout Treasure Island in other park areas.

IRRIGATION

The irrigation system includes water efficient measures such as bubblers, subsurface drip irrigation, controllers, flow sensors and rain sensors. In addition, the irrigation system will switch to use recycled water once the service is available on Treasure Island. An adequate mulch layer covers the irrigation lines, thus reducing evaporation.



FIGURE 4.4 CLIPPER COVE PROMENADE MAJOR OVERLOOK



FIGURE 4.5 CLIPPER COVE PROMENADE VIEW TOWARDS THE WEST

4.2.2 BUILDING 2 OPEN SPACE

OVERVIEW

The landscape surrounding Building 2 is informed by the grand scale and simple form of the historic hangar structure, as well as the building's program. Located at the heart of the Island Center District, Building 2's open space will provide space for programming within this central district. Each elevation and side of the building has a unique character and a distinct shadow



pattern created by the mass of the building. The open space design honors and recognizes the historic significance of the structure and responds to the unique conditions that define each edge.

The West Plaza

Located at the terminus of the Retail Street on the east side of the building and aligned with the historic central axis that extends from Building 1, the west plaza is anchored by a grove of relocated olive trees that remain from the Golden Gate Exposition. The grove at the western entry to the building provides a simple, flexible space to allow for events like festivals, small markets and fairs that will extend down the retail street, and to Marina Plaza and Building 1. The plaza is divided by a large central entry path and surrounded by simple Mediterranean plantings that create a buffer along the front of the building and surrounding streets. Bike share and bicycle parking areas are located on the ends of the plaza areas. The area at the southern edge of the space adjacent to Clipper Cove Avenue may be developed with a small building to provide space for Tidelands Trust compliant uses.

The North Gardens

Directly adjacent to California Avenue the north gardens provide a simple backdrop to the large north elevation of the building. This elevation is characterized by shady mornings and late afternoon sun. The gardens provide a generous buffer between the street and the building.

The South Alley - (Not included in Sub-Phase Scope)

The South Alley has been removed from this Sub-Phase Application and will be designed in conjunction with the adjacent development parcel. The Alley will not be managed by Public Works as a public right of way, but it will remain publicly accessible and allow for vehicular and pedestrian access.

SUB-PHASE UPDATES

Grading

The site grading has been further developed to reconcile the proposed street grades, which are raised to accommodate sea level rise, and the existing building, which will remain at its current, lower elevation. To ensure proper drainage away from the structure, the landscape slopes away from the building for a minimum of 10 feet. The grades then rise up to street elevations by way of gently sloped gardens. To maintain the universal accessibility of the West Plaza, the plaza remains relatively level at the lower grade of the existing building, with the paving surface gently sloped to achieve the proper drainage. The grade difference between the West Plaza and street is retained by a low wall that wraps the olive groves and serves as a curb barrier along the sidewalk. At the northern façade, a new stairway connects the sidewalk grades down to the building entry.

Existing Olive Tree Grove

Existing olive trees originally planted during the Golden Gate International Exhibition will be boxed and transplanted into the Building 2 West Plaza. These trees will continue to be a part of the Treasure Island story as a grove of trees framing the west entry to Building 2 and creating a shady space for visitors to enjoy.

Historical Review

The landscape plans were reviewed by Page & Turnbull Architects to ensure the plans aligned with the historically significant landscape requirements. A summary of the historical review can be found in Appendix N. Building 2 was used for the Hall of Transportation during the Golden Gate International Exposition. This significant landscape is defined largely by olive trees and open planting areas. The olive trees at Building 2, along with the open garden plantings, reinforce this Arte Moderne architectural style as the central element which the landscape frames.



FIGURE 4.6 BUILDING 2 OPEN SPACE ILLUSTRATIVE PLAN

Preserving Building 2 and integrating it into the Master Plan design will reduce demolition and construction materials while maintaining iconic elements in the history of Treasure Island. In addition to retaining Building 2, large planting areas are incorporated to reduce stormwater runoff. Relocating existing olive trees also reduces demolition waste and preserves larger carbon consuming tree canopies.

SOILS

The planting soils will be pre-blended and designed to reduce the need for future inputs or fertilizers. Refer to the soils plan included with the park design documents for more information regarding soil types and depths.

PLANTING

The planting complements Building 2, using relocated olive trees to frame entry points and reinforce the overall scale of the building. The simple garden planting at the base of Building 2 displays the color and seasonality of climate adapted plants and echoes the historic landscape planting. The northern gardens are ornamental and home to birds, butterflies, flowers and fragrance. The peripheral plantings on each side of the olive grove are simple large mass plantings of climate adapted plants with habitat value.

STORMWATER MANAGEMENT

Runoff from the impervious areas surrounding the plaza are treated with flows from the adjacent streets and development parcels in the centralized bioretention area located at the Eastside Park Stormwater Treatment Garden (See Section 4.2.5).

IRRIGATION

A new irrigation system is provided throughout the open space. The system is designed to use recycled water and most often drip irrigation. The system utilizes centrally controlled water efficient technology including soil moisture sensors and smart controllers to reduce and manage water use.



FIGURE 4.7 BUILDING 2 PLAZA VIEW

4.2.3 BUILDING 3 OPEN SPACE



OVERVIEW

The open space between Building 2 and 3 is framed by the massive facades of the historic hangars. The north edge of the space is defined by California Avenue and the southern edge is defined by a building parcel that is designated as part of the Trust Land. From the plaza both Clipper Cove and the eastern span of the Bay Bridge are visible. Several sheds and non-historic structures adjacent to the Buildings will be removed as part of the development program.

During the Golden Gate International Exposition, Building 2 hosted the Hall of Air Transportation. The area between the Buildings 2 and 3 served as a large plaza that opened onto Clipper Cove, where the China Clipper and other great sea planes were on exhibit. The design concept for the Building 3 open space builds upon this history, creating a large plaza and event space that playfully recalls its aeronautical past. On a regular basis the plaza serves as non-residential off-street parking as outlined in the TITIP. All parking at this lot will incur a charge.

The plaza is framed by two tree groves at its northern and southern edges, and the open space is punctuated by a series of large specimen trees surrounded by generous areas of understory planting. The plaza parking area may host farmers markets and other events consistent with its designation as Trust Land and public open space. Light poles that complement the historic character and scale of the buildings illuminate the area. The parking area is paved with asphalt, and the pedestrian routes are paved with simple concrete recalling the industrial heritage of the site. Surface markings delineate the parking areas and also create a graphic, lively paving surface and break down the scale of the hardscape area. The markings are inspired by the history of the hangers and aeronautical forms and patterns. A central pedestrian path connects from Building 2 to Building 3 through the plaza, and is lined with several large-scale wood seating elements. Matching wood elements are placed at the edges of the planting to protect them from vehicular traffic.

The landscape area between Building 3 and California Avenue is planted with a variety of shade tolerant plants. The east side of the building includes simple sidewalks and garden plantings that bring color and seasonality to this side of Building 3. The south alley will be designed in conjunction with the adjacent development parcels.

SUB-PHASE UPDATES

Grading

The site grading has been further developed to reconcile the proposed street grades, which are raised to accommodate sea level rise, and the existing building, which will remain at its current, lower elevation. To ensure proper drainage away from the building, the plaza sits at the lower building elevation and the driveways and walkways slope from the street and sidewalk down to the plaza elevation. The sloping walkways are universally accessible and do not require ramps or handrails. On the north side of Building 3, where space is constrained, a low wall retains the higher grade sidewalk grade and protects the north face of the building. The eastern landscape gently grades away from the building, and then slopes up to meet the raised street grades. Additionally, there are two rebuilt staircases to the north and east of the building to negotiate the grade change and maintain access.

Infrastructure and Utilities

To accommodate required civil infrastructure, a pump station/ utility area has been added to the north side of the parking lot. This enclosure will be carefully destined to be aesthetically pleasing, and the forthcoming design will be presented to the SFAC Civil Design Review Board.

Paving

The permeable paving selected in the Major Phase, is replaced by impermeable paving, since treating the runoff in the centralized treatment will be more effective and efficient.

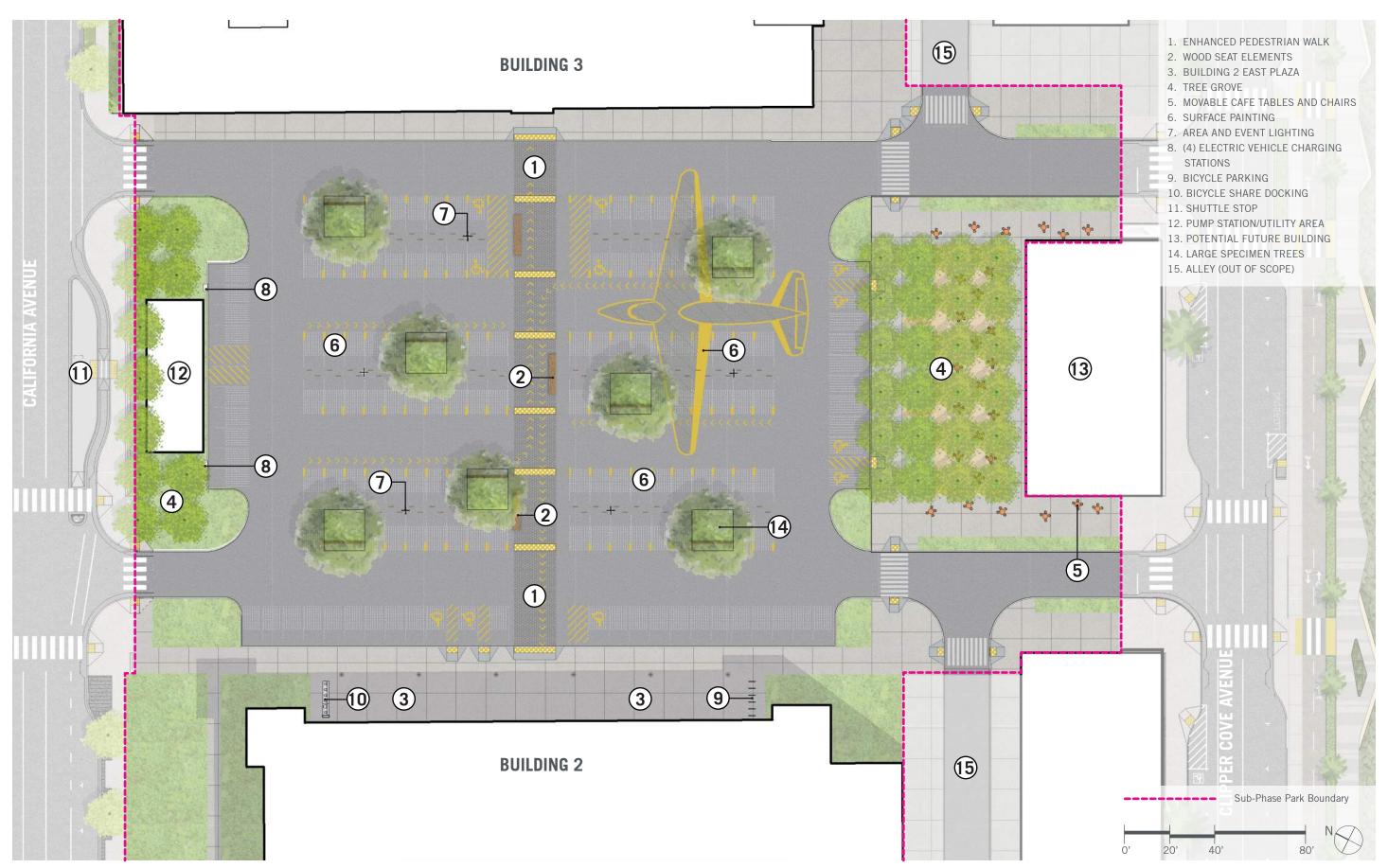


FIGURE 4.8 BUILDING 3 WEST SIDE OPEN SPACE ILLUSTRATIVE PLAN

SUB-PHASE APPLICATION 3: SUB- PHASES 1A, 1D, 1F, 1G, 1H, 1I

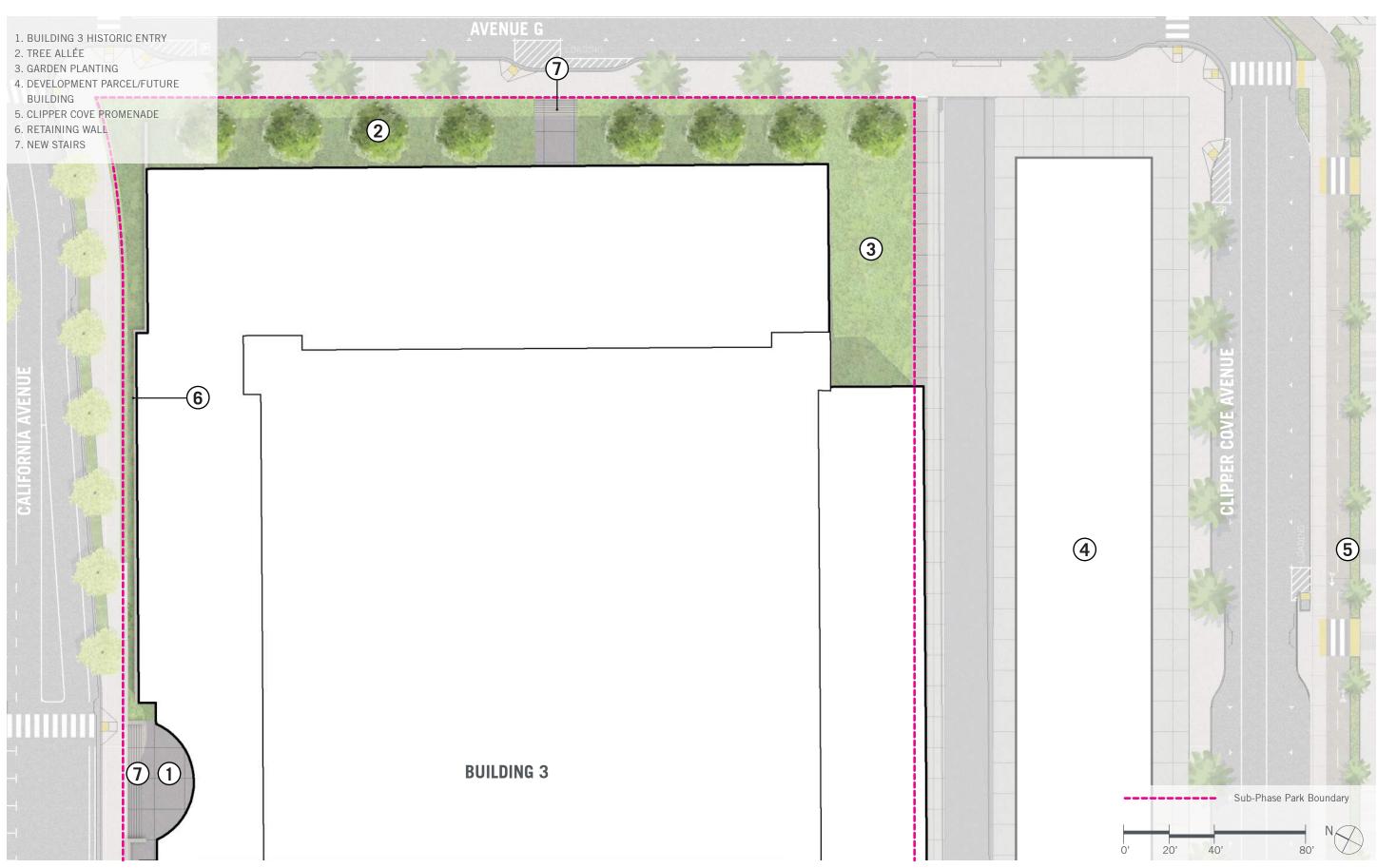


FIGURE 4.9 BUILDING 3 EAST SIDE OPEN SPACE ILLUSTRATIVE PLAN



FIGURE 4.10 BUILDING 3 OPEN SPACE VIEW

SOILS

The soils are pre-blended and designed to reduce the need for future inputs or fertilizers. Refer to the soils plan included with the park design documents for more information regarding soil types and depths.

PLANTING

The Building 3 open space is flanked by groves of ginkgo trees that will provide fall color and shade the seating areas beneath them. Large specimen trees in planted areas soften and shade the plaza. These large trees are central to the character of the open space and will attract visitors to gather nearby during events. A row of trees with large garden plantings line the east side of building 3 to add color and seasonality.

STORMWATER MANAGEMENT

Stormwater runoff from the open space is captured, and sent to the centralized bioretention area located at the Eastside Park Stormwater Treatment Garden (See Section 4.2.5).

IRRIGATION

A new irrigation system is provided throughout the park. The system is designed to use recycled water, and the majority of the system will utilize drip irrigation. The system also utilizes centrally controlled water efficient technology, including soil moisture sensors, and smart controllers to reduce and manage water use.

4.2.4 EASTSIDE COMMON

OVERVIEW

The Eastside Common creates a grand, vehicle-free, and socially active pedestrian and bicycle connection from the Eastern Shoreline Park through the Eastside District to the Island Center and Inter-modal Transit Hub. Eastside Common is approximately one half mile in length. Required 15 foot setbacks and residential gardens flank both sides of the park. As the center of the largely residential Eastside District, the Common serves as a



neighborhood park and community space. Bordered by buildings on either side, the Eastside Common provides one of the most protected open spaces on the island, and its orientation provides good solar access with many hours of sun each day. The park's program was designed based on the adjacent residential needs. The first three of six blocks are included in this Sub-Phase Application.

Similar to the Golden Gate Panhandle Park and Commonwealth Avenue in Boston, the Eastside Common is a grand linear park that is legible at the neighborhood scale, yet fine grained and nuanced as a series of spaces that give character and identity to each block. The Eastside Common is distinguished by an allée of trees arranged in groves that allow for sunny open areas along the length of the park. Together with lawn areas, paving materials and gardens, the allée creates cohesion and continuity while the program and site elements create moments of distinction. Eastside Common shows a sample of the programming possibility in this space. Recognizing that the development of these blocks are subject to change, TICD reserves the right to shuffle the program as needed to accommodate future development.

The Civic Garden

The first block between Avenues D and E is a residential garden and civic space. Beginning at the intersection of California Avenue, a simple open plaza and grove announces the park and allows for open circulation, seating areas and has space for a potential future community kiosk. Flexible lawn space for recreation, an intimate social seating area and garden plantings define this block.

The Swing Room

"Playful Recreation" is the design inspiration for the second block of the Eastside Common. The Swing Room includes playful seat elements with an artful quality attracting adults and children alike. The swinging seat elements are complemented by more

intimate seating areas. These dynamic spaces support different sized groups of people, and are set within an allée of trees along a decomposed granite pathway. Garden planting surrounds the seating and creates quiet moments separated from the adjacent pathway.

The Dog Run

Pet and specifically dog ownership is very popular in San Francisco and with an estimated 120,000 dogs residing in the City, providing spaces for responsible dog ownership is an essential part of neighborhood park programming. This is particularly important for the early phases of neighborhood development on the east side of Treasure Island when access to larger open spaces in future phases are not currently available to new residents. The space is divided into two zones, one for exercise and another for socialization. Between the two fenced dog areas sits a small plaza and community table to be enjoyed by those with and without pets. The dog runs are set among the allée of trees and are separated from the adjacent paths by a fence and planting areas.

SUB-PHASE UPDATES

Circulation

The circulation is updated to include a 3 foot horizontal separation between the multi-use path and the pedestrian walkway that runs the length of the north side of the Eastside Common. This separation is largely planted, but it is paved with yellow truncated domes marking dedicated crossings that connect to the central program spaces.

EASTSIDE COMMON OVERALL PLAN

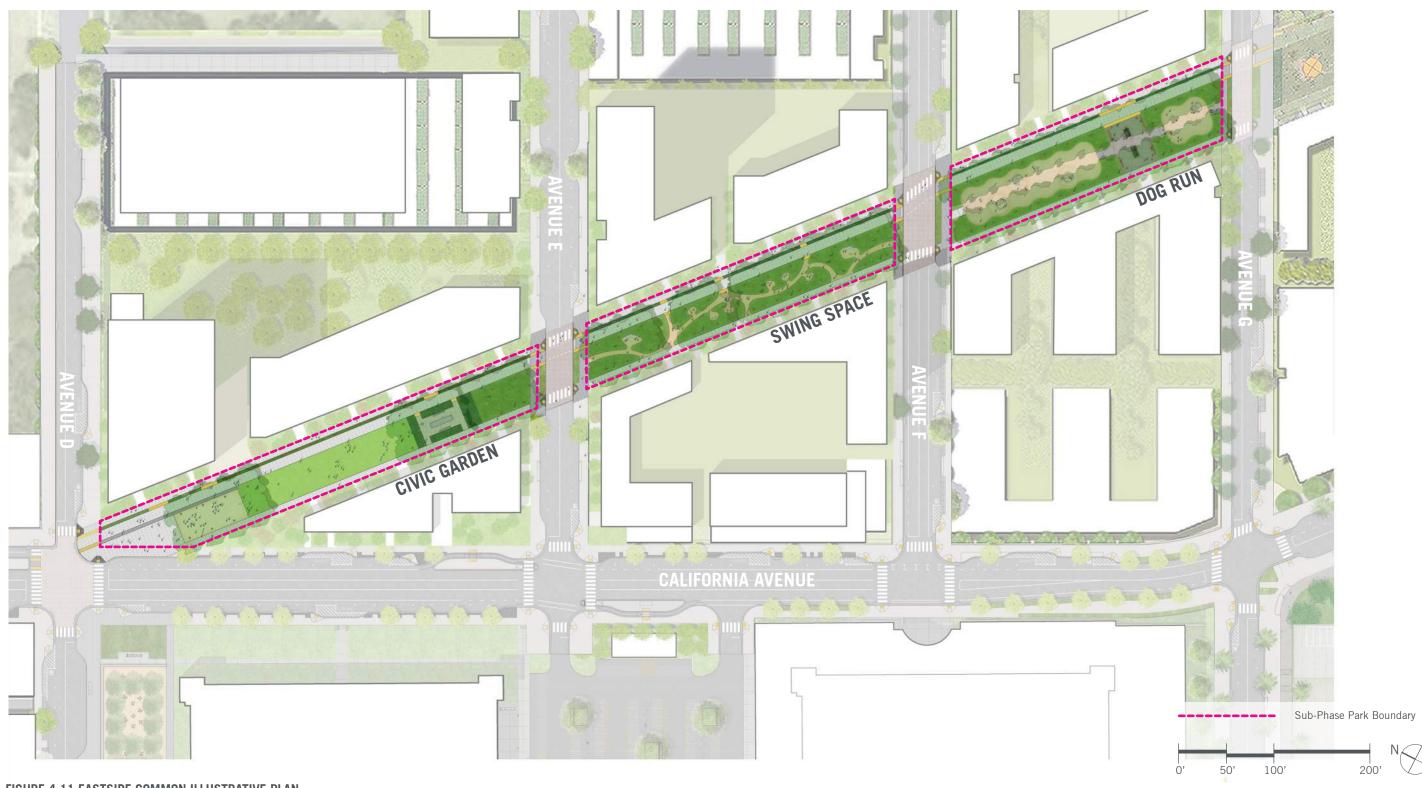


FIGURE 4.11 EASTSIDE COMMON ILLUSTRATIVE PLAN

The Eastside Common transforms existing paved areas and structures to a largely planted garden space, reducing stormwater runoff. Lighter color materials reduce heat absorption and the allée of trees provide shade. Large planting areas with climateadapted plantings reduce irrigation demands and provide habitat.

SOILS

A modest amount of fill is required to establish final park elevations. Topsoil from adjacent existing lawn areas is stripped, stockpiled and reused and new landscape soils is provided as required for each planting area and type. The soils are preblended and designed to reduce the need for future inputs or fertilizers. Refer to the soils plan included with the park design documents for more information regarding soil types and depths.

PLANTING

The structure of the planting is set by the allée of trees that form a linear grove along the length of the Common. That framework is complemented by large garden areas of medium to low water use plants, used as a border at the Dog Run and as immersive plantings at Swing Space. The larger garden planting continues on the east end of the Civic Garden where it is comprised of sculptural masses of perennials and grasses. The Civic Garden continues with an open lawn used as a flexible space for passive recreation.

STORMWATER MANAGEMENT

To maintain as much usable park space for residents, the runoff from the limited impervious areas within the park is treated with flows from the adjacent streets and development parcels in centralized bioretention areas in Eastside Park (See Section 4.2.5).

IRRIGATION

A new irrigation system is provided throughout the park. The system is designed to use recycled water and most often drip irrigation, with the exception of the lawn space at The Civic Garden. The system also uses centrally controlled water efficient technology including soil moisture sensors and smart controllers to reduce and manage water use.

EASTSIDE COMMON: CIVIC GARDEN

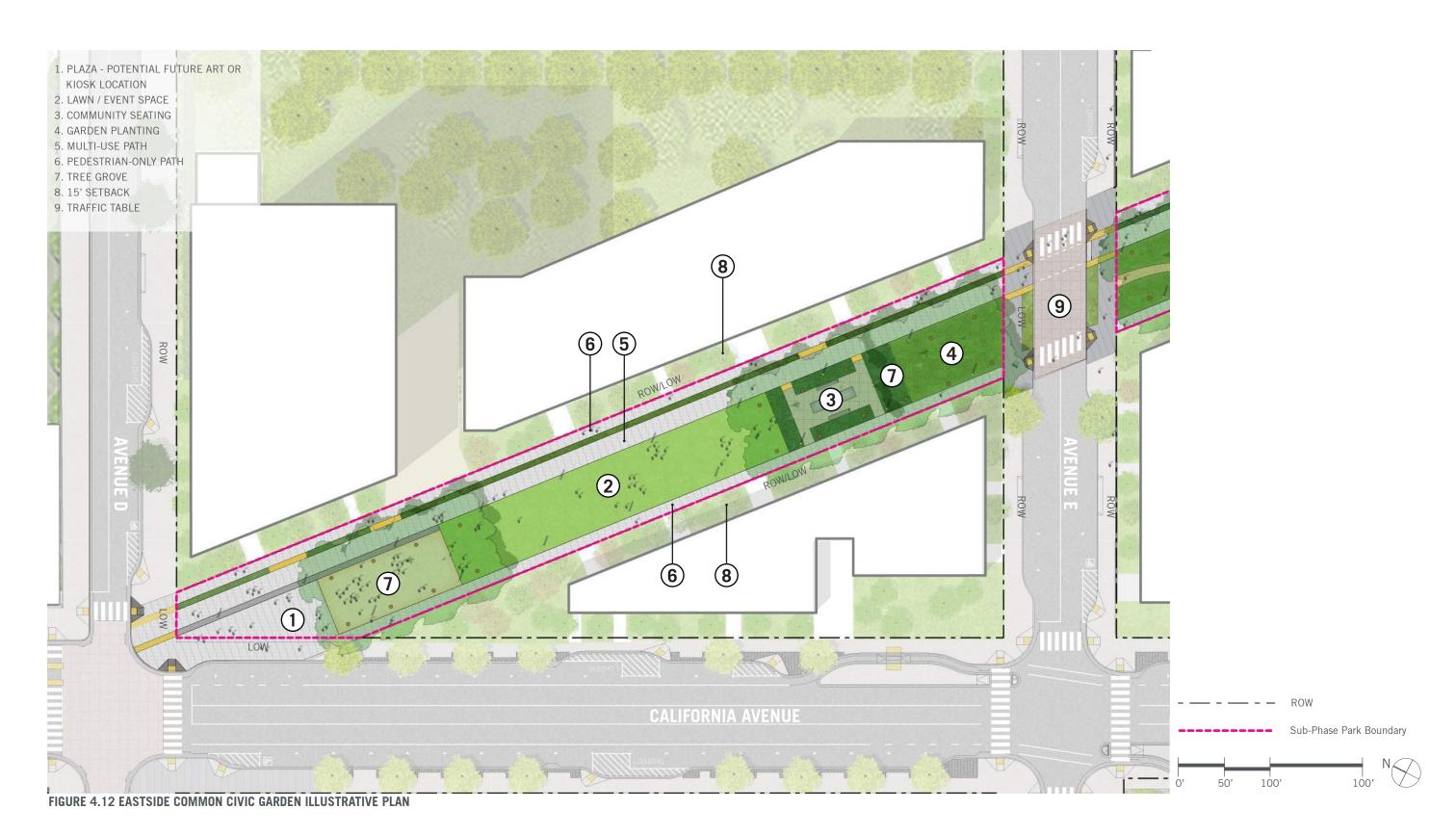




FIGURE 4.13 EASTSIDE COMMON CIVIC GARDEN VIEW

EASTSIDE COMMON: SWING SPACE





FIGURE 4.15 EASTSIDE COMMON SWING SPACE VIEW

EASTSIDE COMMON: DOG RUN

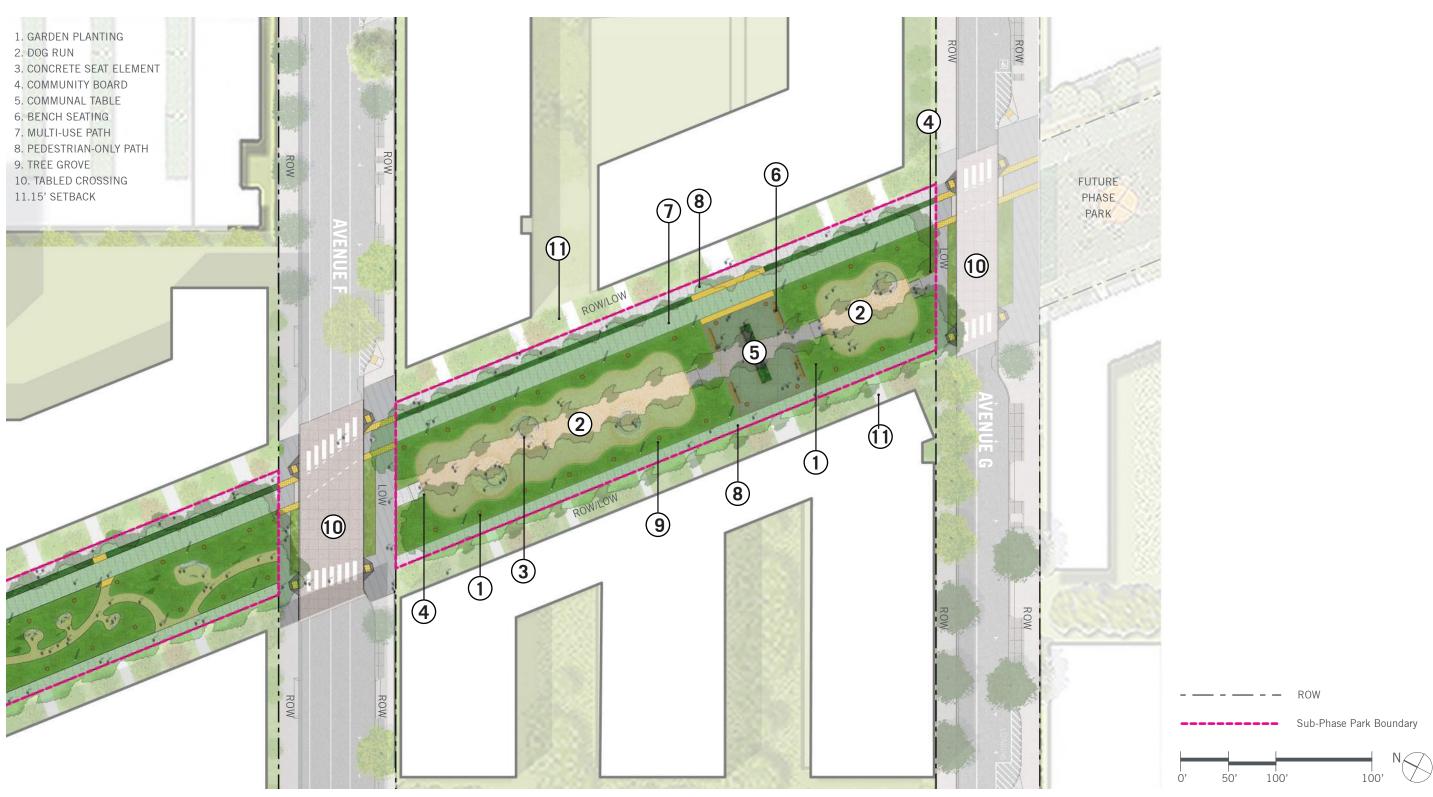


FIGURE 4.16 EASTSIDE COMMON DOG RUN ILLUSTRATIVE PLAN



FIGURE 4.17 EASTSIDE COMMON DOG RUN VIEW

4.2.5 EASTSIDE PARK (STORMWATER TREATMENT GARDEN)



OVERVIEW

The stormwater treatment garden is an approximately 4 acre park located at the southern edge of Eastside Park and adjacent to the future Sports Park. This centralized treatment area collects and cleans runoff from the impervious areas throughout Sub-Phase 3, and its size provides an opportunity to showcase a large-scale, productive landscape. Unlike the sinuous curves and naturalistic plant layout designed for the treatment areas in Sub-Phases 1 and 2, the design of this treatment area is inspired by the patterning of agricultural landscapes and forms a linear patchwork of basins of various size and plant palettes.

A central concrete distribution channel acts as an architectural datum that continues through the length of the site. Treatment flows are lifted from the storm drain system and are released into a forebay, located at the head of each channel. The forebay slows the water before it flows over a weir into the main body of the channel. A series of check dams and weirs along the sides of the channel direct the appropriate amount of flow into each biotreatment cell.

The biotreatment areas are depressed basins with layers of drain rock, soil and planting consistent with SFPUC stormwater treatment design guidelines. Low berms topped with a band of crushed stone paving divide the treatment areas both physically and visually and provide maintenance access. The planting palettes create subtle variations in color between the basins with swaths of sturdy grasses in various shades of green. Intermixed with this backdrop, bands of flowering perennials create a patterning of seasonal interest and important pollinator habitat.

A sidewalk along Fourth Street and a parallel walkway to the north provide pedestrian access along the length of the stormwater treatment garden. At the terminus of each residential garden street, a pathway extends through the treatment area allowing pedestrians to walk through the site and connect directly to the planned Sports Park. Small boardwalks within the treatment areas lead visitors out to viewing decks to be immersed in and experience the scale of the landscape. The pathways, decks and furniture are universally accessible.

More information regarding the design of the stormwater treatment garden can be found in the Preliminary Stormwater Control Plan which is included as Appendix G.

SUB-PHASE UPDATES

Refined Sizing: Since the Major Phase Application, the scale of the treatment areas has increased based on the more detailed calculations of the treatment flows. An area to the east of this phase is reserved as the future treatment area for the Eastside Neighborhoods in Major Phase 2 and has been sized to accommodate the estimated flows from that phase.

The centralized treatment area in Eastside Park is designed to limit impact on the future Sports Park, which is planned as part of Major Phase 4.

To accommodate required civil infrastructure, a pump station/ utility area has been located in a future phase of the farm. This enclosure will be carefully destined to be aesthetically pleasing, and the forthcoming design will be presented to the SFAC Civil Design Review Board in this phase of the project.



Centralized stormwater treatment gardens allow for ease of maintenance, monitoring and consistent treatment. The centralized treatment also allows other areas of the site to provide important program space and more generous pedestrian and bicycle facilities for the community. This large band of green-infrastructure will serve as a landmark that can teach residents and visitors about the water cycle within our cities and demonstrate a direct connection between treating the runoff from the development and the water quality in the San Francisco Bay.

Regionally appropriate planting limits the amount of maintenance required and the flowering perennial palette is selected to provide a refuge for declining pollinator populations. This treatment area is located near the adjacent future farm and a healthy population of pollinator species on the island will be critical to the success of the agriculture.

SOILS

Much of the park area is currently paved or includes existing structures, and topsoil from the existing lawn area will be stripped, stockpiled and reused. New landscape soils will be provided as required for each planting area and type. The soils are preblended and designed to reduce the need for future inputs or fertilizers. The soil within the biotreatment areas complies with SFPUC guidelines. Refer to the soils plan included with the park design documents for more information regarding soil types and depths.

PLANTING

Separate plant palettes have been developed for the upland areas outside of the treatment areas and the lowland areas within treatment basins. The upland palette contains drought-tolerant shrubs that are low maintenance and visually distinct from the patterned planting within the basins. A line of windrow trees

frames the southern edge of the area and provides a windbreak to protect the Eastside Neighborhood.

The plants within the treatment basins must tolerate periodic inundation and the fast-draining, sandy soils of the treatment area. Several species of grasses dominate the palette and create slight variations in tone across the basins. Distinct bands of flowering perennials are woven into the site to create vibrant lines of color that play off the more subtle green background planting. The species of flowering perennials are carefully selected to provide important habitat to Bay Area pollinators and maintenance guidelines will limit the use of chemicals to create a safe space for these vulnerable species.

STORMWATER

Since most of this site is comprised of pervious biotreatment areas, the small amount of runoff that comes from the impervious pathways will be graded to flow directly into the basins to be treated with the treatment flows from the rest of the development area. No additional storm drains are required to collect runoff from this site.

IRRIGATION

A new irrigation system is provided throughout the park and is designed to use recycled water. The system utilizes centrally controlled water efficient technology including soil moisture sensors and smart controllers to reduce and manage water use.



FIGURE 4.19 EASTSIDE PARK STORMWATER GARDEN VIEW

4.2.6 EASTERN SHORELINE PARK

OVERVIEW

Situated on the southeastern corner of the island, Eastern Shoreline Park is envisioned as an iconic park on Treasure Island with grand views of the Bay Bridge, Yerba Buena Island and the East Bay. When complete, the Eastern Shoreline Park will be a 9.8 acre open space that wraps the eastern neighborhoods of the island and will include a waterfront promenade and plazas planted with tall trees to shelter the flexible lawn, picnic and other programmed spaces between them. More protected than the western facing Cityside Park, this park provides an opportunity for residents and visitors to enjoy the waterfront and its panoramic views without the direct force of the wind coming from the Golden Gate.

This first phase of the park connects the Clipper Cove Promenade and the main body of the Eastern Shoreline Park to the east.



It wraps around the future home of the Treasure Island Sailing Center, which will bring lively and continual activity to the adjacent promenade and to Clipper Cove. From the center of this area, Pier 1, the existing pier built by the Navy, extends over 900 feet into Clipper Cove and provides sweeping views of San Francisco and back to Treasure Island. Though the pier is not included in this first phase of work, it is anticipated to become a destination when opened to the public as part of a future phase of development. As the Major Phase Application did not include Eastern Shoreline Park, this section is intended to describe both the schematic design including the concept, program and circulation in addition to the design refinements from the design development phase.

CONCEPT AND PROGRAM

In this first phase, the park consists of flexible, open lawn spaces that accommodate a full-range of passive recreational activities and are surrounded by pathways and framed by informal groves of trees. Cut into the edge of the lawns, a series of picnic and seating areas include an assortment of furniture types that can accommodate various-sized groups and may include playful seating elements like swings and see-saws. Surrounding the lawns, islands of coastal garden planting provide a regionally appropriate ornamental frame for the park and act a planted buffer between the park and the traffic of Second Street.

At the base of Pier 1 and adjacent to the largest lawn is a flexible plaza space designed for events within the park and intended to serve as a generous, open entry point for the pier once it has opened for public access. At the southern end of the plaza, a trellis marks the home of a future public restroom. Within this central plaza/lawn space, an installation of original Bay Bridge steel will serve as a landmark for the park. The new eastern span of the Bay Bridge is highly visible from the park and a forest of thirty steel eye bars salvaged from the demolished eastern span

will be a landmark feature within the Eastern Shoreline Park. This installation will create a direct visual connection between the historic Bay Bridge and its modern counterpart.

ACCESS AND CIRCULATION

A wide waterfront walkway continues from the Clipper Cove Promenade and serves as the Bay Trail and main circulation through the park space. At the southern end of the park, the promenade passes between the Treasure Island Sailing Center and the rip-rap shoreline. The sailing center improvements will be part of a separate project and are not included in this application, but the design anticipates that a series of gangways and docks near the sailing center parcel will provide water access to the students. Due to this activity, this section of the promenade will have frequent pedestrian cross-traffic from sailing center students moving from the parcel to the water-side dock areas. To prevent conflicts, this section of the promenade has been designated as pedestrian-only.

The southeastern corner of the sailing center is designated as a public access easement and will serve as the main entry and outdoor classroom. At Avenue G, adjacent to the easement area, the sailing center has a dedicated drop-off for groups of students arriving by van or bus. These groups must cross the cycle track to enter the sailing center site so a generous, tabled, concrete crosswalk has been added to slow cyclists and call attention to the pedestrian cross-traffic.

Once past the sailing center, the promenade continues beyond the plaza weaving between lawn and coastal garden planting. The adjacent seating and lawn areas provide invitation to linger and enjoy the park. The promenade wraps behind the easternmost lawn which gives visitors a space for uninterrupted access to the shoreline.

A class IV, two-way cycle track connects to the Clipper Cove cycle track and wraps on the west side of the Sailing Center parcel and parallel to Second Street along the northern edge of the park. Crosswalks at each intersection of Second Street allow pedestrians from the Eastside neighborhoods to directly access the parks and safe crossings with striping warn cyclists in the cycle track of the pedestrian cross-traffic. Once in the park, pedestrians can walk on the pedestrian path adjacent to the cycle track or a series of secondary paths lead through the various picnic and seating areas and to the waterfront promenade. A shuttle stop near the corner of Second Street and Avenue G will bring visitors from around the island to the park. All pathways within the park are universally accessible.

A sanitary sewer pump station and supplemental fire water pump station will sit within the park just north of the Sailing Center parcel. These provide vital infrastructure to the development and have been carefully located to avoid blocking waterfront views. The stations will be screened by both an opaque fence and planting. Utility screen designs will be finalized pending approval of the SFPUC and San Francisco Arts Commission Civic Design Review. A driveway just east of the shuttle stop provides access for maintenance vehicles to the stations.

The shoreline will be fortified with additional rip-rap to meet the required sea level rise protection outlined in the approved Major Permit from the Bay Conservation and Development Commission (BCDC).

SUB-PHASE UPDATES

The Major Phase Application did not include the Eastern Shoreline Park so the schematic design was not developed at that point. This portion of the park was added when the overall boundary of Major Phase 1 shifted, as previously documented in this application.



FIGURE 4.20 EASTERN SHORELINE PARK ILLUSTRATIVE PLAN

SUSTAINABILITY

SOILS

Much of the park is currently paved or includes existing structures, and some fill is required to establish final park elevations. Topsoil from other areas of the phase will be stripped, stockpiled and reused and new landscape soils will be provided as required for each planting area and type. The soils are pre-blended and designed to reduce the need for future inputs or fertilizers. Refer to the soils plan included with the park design documents for more information regarding soil types and depths.

PLANTING

Recreational lawns sit among a series of regionally appropriate coastal gardens in the Eastern Shoreline Park. The lawn spaces provide important social opportunities for visitors and residents of the adjacent neighborhoods. The coastal gardens showcase low water use plants in vibrant, seasonal displays, which will also serve as bird and pollinator habitats.

The lawn and seating areas are sheltered by an informal grove of trees. A row of palm trees lines Second Street as part of the island-perimeter character that recalls the original palms from the Golden Gate International Exposition.

STORMWATER MANAGEMENT

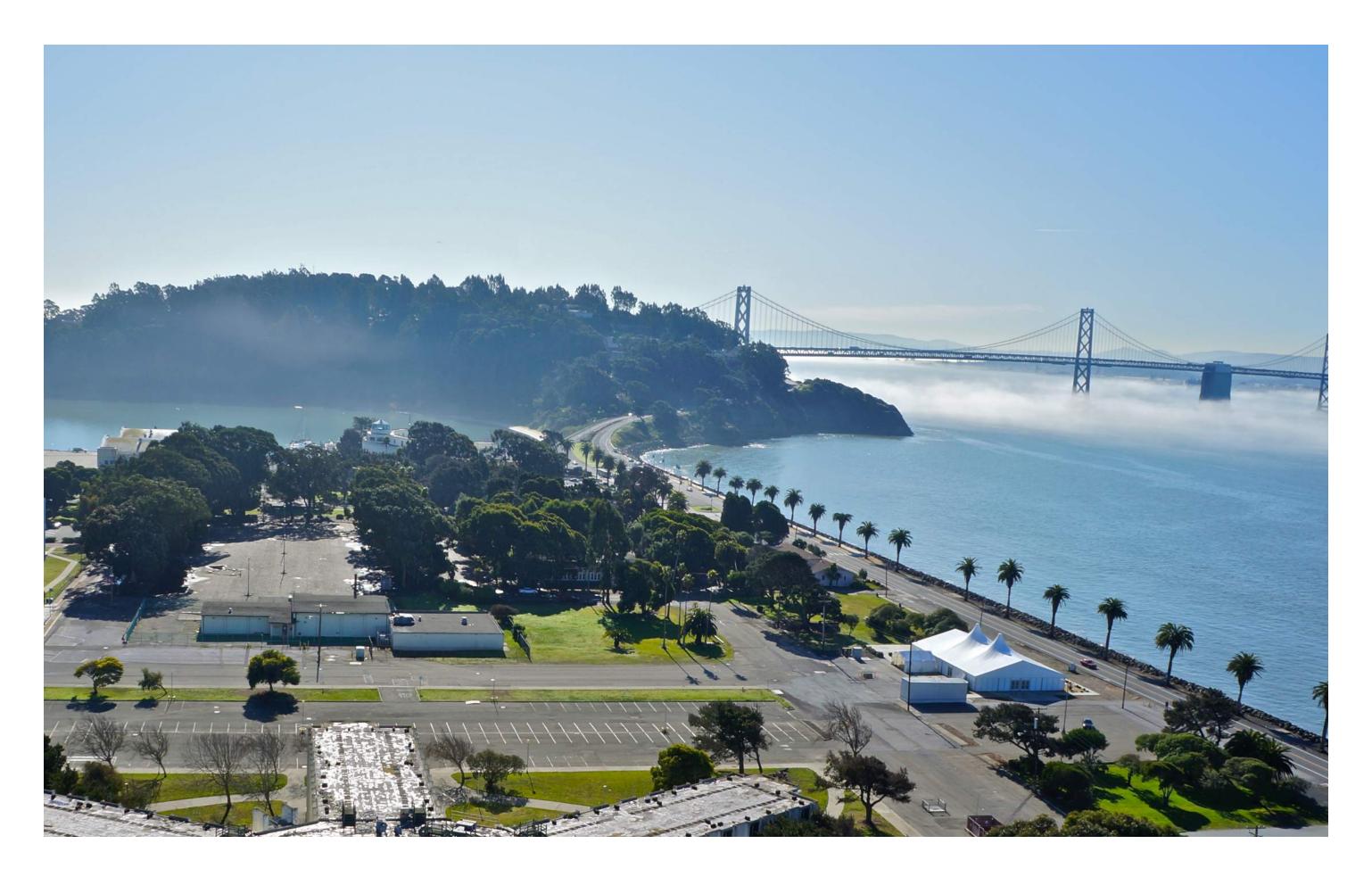
Stormwater runoff from the Eastern Shoreline Park will be captured in a storm drain system and treated at the centralized treatment area in the Eastside Park (See Section 4.2.5).

IRRIGATION

A new irrigation system is provided throughout the park. The system is designed to use recycled water and the majority of the system will utilize drip irrigation, with the exception of the recreational lawns. The system utilizes centrally controlled water efficient technology including soil moisture sensors and smart controllers to reduce and manage water use.



FIGURE 4.21 EASTERN SHORELINE PARK VIEW



5. UTILITIES

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CONSISTENCY WITH ENTITLEMENT DOCUMENTS

The Utility systems included as part of this Sub-Phase Application are generally consistent with previous entitlement documents and the Treasure Island/Yerba Buena Island Master Utility Plans, which have been approved by applicable City Agencies. Further information regarding phasing and interim utility improvements will be provided as part of improvement plan submittals.

SUB-PHASE APPLICATION 3: SUB-PHASES 1A, 1D, 1F, 1G, 1H, 1I 5 - UTILITIES 113

5.1 STORMWATER TREATMENT

Stormwater treatment for all watershed areas within this Sub-Phase will be provided by centralized treatment which treats stormwater from the entire watershed including private parcels, city rights-of-way and TICD controlled property. The Stormwater Garden will provide private on-site treatment areas. Private vertical development and TIDA controlled property will not be required to implement any stormwater treatment measures on their parcels because the stormwater treatment is provided in designated off-parcel centralized treatment areas as approved by the SFPUC.

Centralized stormwater treatment areas shown are conceptual only and will be further documented in the Project's Preliminary and Final Stormwater Control Plans. The Preliminary Stormwater Control Plan is included in this application as Appendix G. The centralized treatment facilities will consist of a "treatment train" strategy in an urban park setting. The treatment train will consist of a swirl separator, a forebay, a vegetated swale, extended detention, and dispersed biotreatment areas. Landscaping will be selected for stormwater treatment, biological habitat benefits and aesthetics, while providing screening of the structural elements (primarily, the pump discharge location and the bioretention outlet structure).



FIGURE 5.1 SUB-PHASE STORMWATER TREATMENT

5.2 STORM DRAIN

The proposed storm drain mains within the Sub-Phase area will be located primarily in the street right-of-ways. Storm drain piping that cross through parks connecting to proposed storm drain outfalls will be within easements. An interim storm drain main will be constructed outside of the Sub-Phase area parallel to, and outside of, the Fourth Street right of way to allow for it to remain in service while that portion of Fourth Street is improved at a later time. The approved SD MUP shows Second Street draining to Avenue H and Avenue J to Fourth Street. However these streets are not within this phase, therefore Second Street is proposed to drain down Avenue G toward the Clipper Cove outfall.

Existing storm drain mains will be demolished and removed as needed to construct the Sub-Phase infrastructure however interim storm drain improvements will be constructed where needed to provide drainage to areas affected by the Sub-Phase area improvements. Two permanent outfalls will be constructed for the new storm drain system.

Treatment pump stations will be constructed near:

- Clipper Cove Avenue, perpendicular to proposed Avenue E
- Fourth Street and Avenue G

Treatment pump stations will pump pre-treatment stormwater flows to a centralized bioretention area located in an open space area designated for stormwater treatment.

A storm drain lift station is proposed near the intersection of Avenue F and Fourth Street.



FIGURE 5.2 SUB-PHASE STORM DRAINS

SUB-PHASE APPLICATION 3: SUB-PHASES 1A. 1D. 1F. 1G. 1H. 1I 5 - UTILITIES 115

5.3 SANITARY SEWER

The proposed sanitary sewer (SS) system will serve the sewer demands for the development and provide service for existing buildings to remain in operation. The existing SS mains and laterals within the Sub-Phase will be demolished however interim sanitary sewer improvements will be constructed where needed to provide continued sewer services to buildings that connect to sewer infrastructure removed within the Sub-Phase area.

Proposed lift stations will be located at the following locations:

- Intersection of proposed California Ave and proposed Avenue E
- Intersection of proposed Fourth Street and proposed Avenue F

A proposed pump station will be located at:

• Intersection of proposed Second Street and proposed Avenue G

The pump station and lift stations will be designed per SFPUC access and layout requirements.

A new force main will be constructed in California Avenue between Avenue C and Avenue G and in Second Street from Avenue G to Eastside Avenue. This force main will connect to the permanent force main near the corner of Avenue C and California Avenue and connect to the interim force main located along Eastern Shoreline Park at the easterly most line of the Sub-Phase area. The interim force main along Clipper Cove and Eastern Shoreline Park within the Sub-Phase boundary will be demolished and removed after the new force main is constructed and operational.



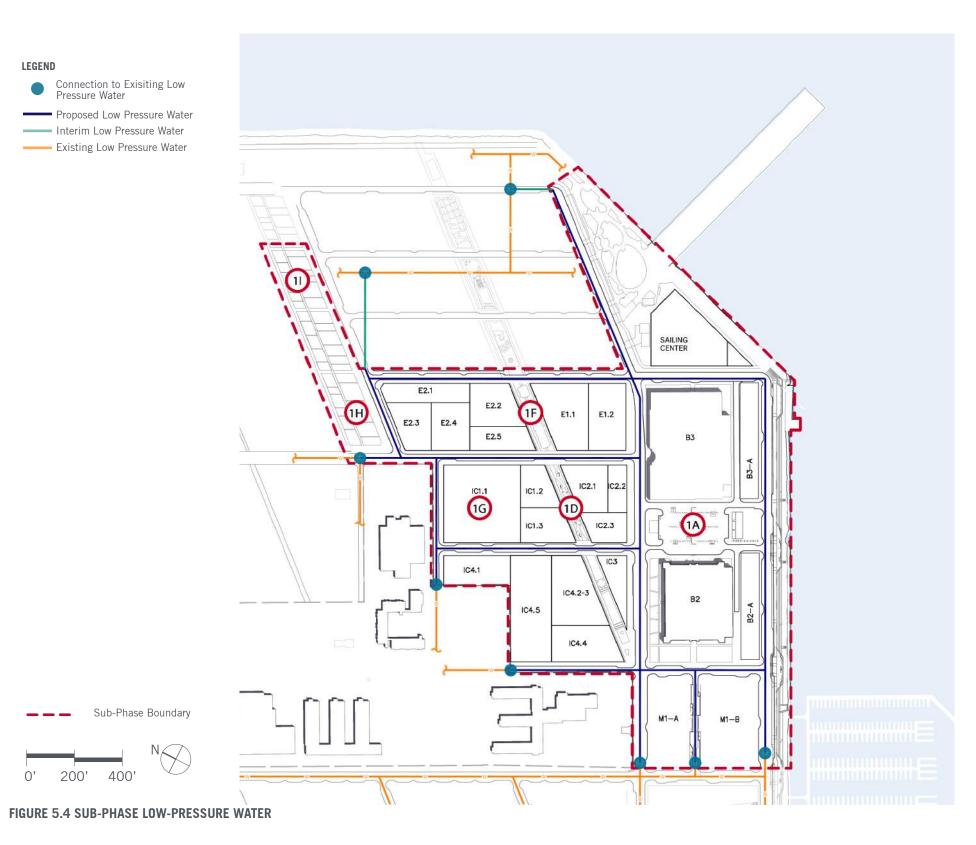
FIGURE 5.3 SUB-PHASE SANITARY SEWER

5.4 LOW PRESSURE WATER

The proposed low pressure water (LPW) system will serve the potable water demands and the fire flow demands for the development. LPW includes fire protection on TI.

The existing LPW mains within the Sub-Phase will be demolished.

LPW facilities will be located within public right-of-way to allow for access and maintenance of facilities unless an alternative design is approved by SFPUC under the Subdivision Regulations for Treasure Island and Yerba Buena Island. In every location where a SFPUC low pressure water main is located outside the public right-of-way, an easement will be dedicated for that low pressure water main. The SFPUC will only consent to such water main easement if the SFPUC determines that the proposed alignment and easement are appropriate based on the SFPUC policy.



SUB-PHASE APPLICATION 3: SUB-PHASES 1A, 1D, 1F, 1G, 1H, 1I 5 - UTILITIES 117

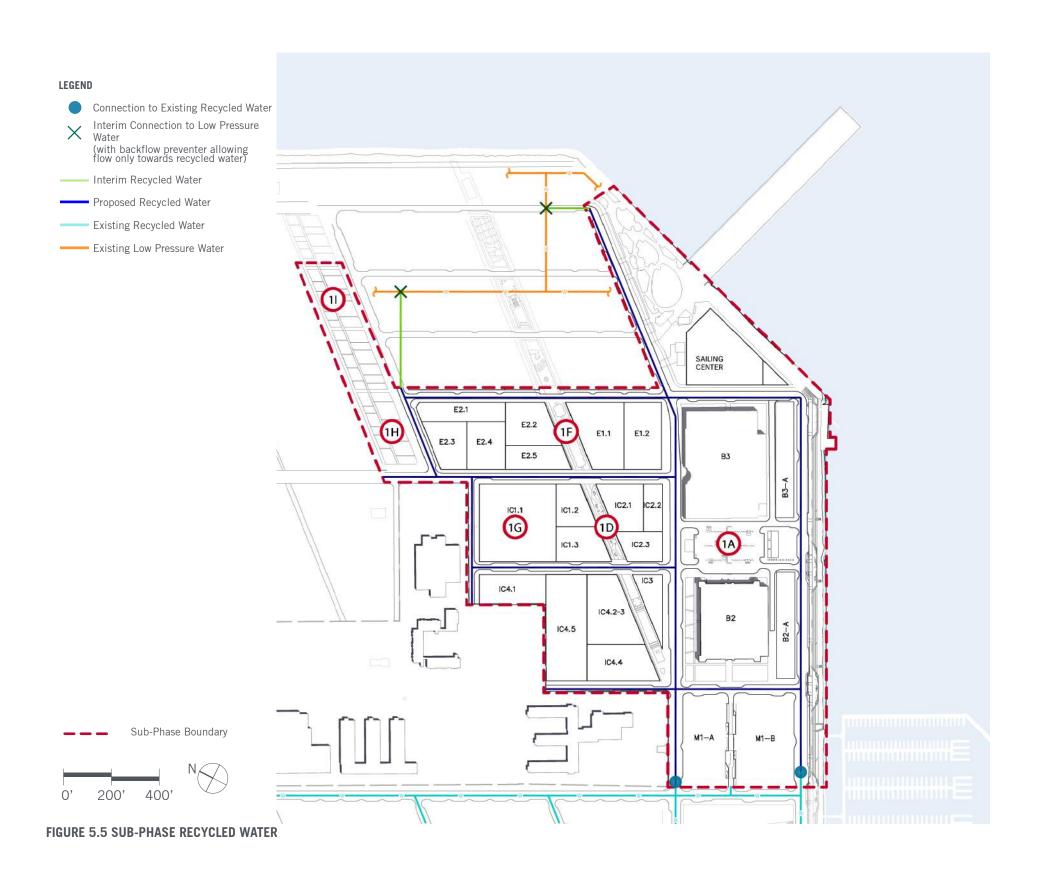
5.5 RECYCLED WATER

The proposed recycled water (RW) system will be used on Treasure Island primarily for irrigation and toilet flushing.

The layout of the proposed RW system is generally within the proposed street right-of-way. Treasure Island has several different street sections, and RW mains will typically be located under street parking and occasionally under bulb-outs.

The City currently does not have an existing RW system to supply the Project with recycled water. The proposed RW Treatment Facility is subject to future negotiation and agreement between the SFPUC and TIDA.

Since the recycled water supply will not be available during the first phases of project development, the RW system will be served from interim connections to the new LPW system. A backflow device will be installed at each connection point to prevent backflow from the RW system to the LPW system.



5.6 SUPPLEMENTAL FIRE WATER SYSTEM

Emergency water supply system for Treasure Island will be supplied from a Wet Standpipe system. An intake pipe nearby Pier 1 will connect from the bay to a pump station that will pressurize the standpipe system. The system will include four hydrants, with one hydrant at each block along Second Street and California Avenue. The hydrants will be identified as non-potable water.

The Supplemental Fire Water System pump station will be located along the northern border of the Sailing Center and south of Second Street. Design of the intake pipe will be coordinated with SFPUC and SFFD.



FIGURE 5.6 SUB-PHASE SUPPLEMENTAL FIRE WATER SYSTEM

SUB-PHASE APPLICATION 3: SUB-PHASES 1A, 1D, 1F, 1G, 1H, 1I 5 - UTILITIES 119

5.7 JOINT TRENCH

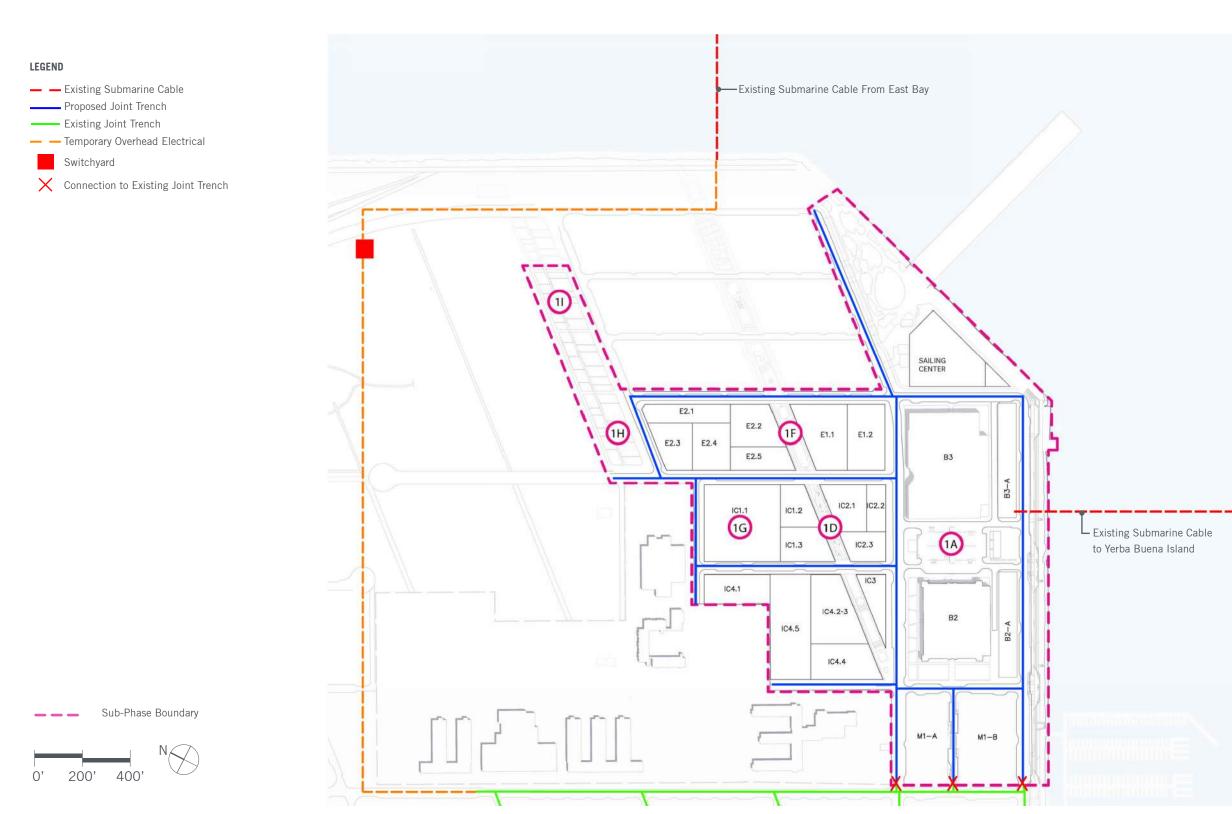


FIGURE 5.7 SUB-PHASE JOINT TRENCH

A joint utility trench system is planned for the project and will include the following dry utilities: electric, gas, public street lighting, telephone, cable TV and other ancillary communication facilities required by SFPUC.

Joint utilities on site shall be placed in a common trench located in the franchised area, under the sidewalk for mechanical protection and will be installed to maintain utility standard clearances from wet utilities and other improvements. Vaults, boxes, manholes and enclosures housing equipment will be installed in the franchised area as well; their locations will be coordinated with wet utilities, other civil and architectural improvements and street lights. Joint utilities will be installed in Shared Public Ways as applicable.

The joint trench exhibit illustrates the general location of proposed joint trench facilities, an overhead line relocation and new switch gear at the eastern shore and identifies other joint utility source locations. General system elements for each dry utility are described briefly below.

Treasure Island is served by existing submarine cable from Oakland. These lines connect to existing switchgear in existing Building 3. This switchgear then feeds distribution on Treasure Island and a submarine cable to feed distribution facilities on Yerba Buena Island. For Sub-Phase 3, 12kV distribution facilities will be extended from existing facility locations installed within in Sub-phases 1A, 1D, 1F, 1G, 1H and 1I. New 12kV, 600 and 200 amp distribution circuits will be installed throughout the new development.

Electric facilities provided by SFPUC will include conduits, boxes, vaults, cables and devices including, but not limited to, switches transformers, capacitor banks and metering. The electric distribution system will consist of 600 and 200 amp 12 kV underground primary distribution circuits throughout the project. Transformers placed in strategic locations will supply

residential, commercial and support facilities with secondary voltage below 600V.

Where feasible, equipment will be placed subsurface. In some areas, subsurface transformers may not be allowed due to water table and soil characteristics. This will be determined by the electric utility on a case by case basis. Transformers supplying electricity to residential and commercial customers may be located either in the franchise area or on private property assuming that adequate operating clearance and access is provided. In areas where subsurface transformers are not feasible pad mounted equipment may be necessary.

Existing natural gas service comes to Treasure Island through an existing 10-inch submarine gas pipeline from Oakland. This line terminates at a large PG&E meter and service lines radiate out from this meter to serve existing uses on TI and YBI. New gas distribution will be provided to serve the proposed development. Gas facilities provided by PG&E will consist of plastic gas pipe, fittings, appurtenances and metering equipment.

Telephone and cable TV facilities provided by AT&T and Comcast will consist of conduits, boxes, vaults and amplifiers to facilitate the installation and operation of copper and fiber optic cables as proposed by the communication providers.

Joint Trench will be provided in streets and will be adjacent to proposed pump station locations. It is assumed that each pump station will connect to power available in joint trench and will have its own service point with a meter. Communication facilities will also be available adjacent to pump stations to allow for connection to the internet.

Street lighting systems will consist of steel conduits, boxes, wiring and lighting units. A lighting unit will consist of a foundation, pole, mast arm, luminaire(s) and photocell. The street lighting

system will utilize LED type lighting and provide photometric and lighting characteristics that are defined in the Treasure Island & Yerba Buena Island Streetscape Master Plan.

SUB-PHASE APPLICATION 3: SUB-PHASES 1A, 1D, 1F, 1G, 1H, 1I 5 - UTILITIES 121

5.8 EXISTING SOILS AND GEOTECHNICAL MITIGATIONS

The San Francisco Bay around Treasure Island is underlain by rocks of the Franciscan Complex of the Alcatraz Terrain, consisting mainly of interbedded greywacke sandstone and shale. Under Treasure Island, the Franciscan Complex bedrock is covered by Quaternary sediments and fill to depths ranging from 180 feet under the causeway to as deep as 280 feet near the north end of the island.

The Quaternary sediments at Treasure Island can generally be divided into older, Pleistocene-age marine and alluvial deposits ("Older Bay Deposits"), young Holocene-age marine clay and sand deposits ("Young Bay Mud"), native sandy shoal deposits, and hydraulic sand fills. Under Treasure Island, the Young Bay Mud varies greatly in thickness from about 20 feet near the causeway to more than 120 feet near the northwest corner of the island. The Young Bay Mud varies in thickness because it was deposited on an eroded surface of Older Bay Deposits as sea level rose over the last 12,000 years. Under the southern portions of the island, the Young Bay Mud contains many interbedded layers of fine silty sand making up as much as one-third to one-half of the thickness of the deposit. The sand lenses thin and decreases in number to the north. Near the north end of the island, sand lenses within the Young Bay Mud are very thin or absent.

Extensive windblown sand deposits are believed to have formed across the bottom of San Francisco Bay when it was exposed during low stands of sea level. Just south of Clipper Cove, Yerba Buena Island is mantled with thick (100 to 120 feet) deposits of uniform fine silty sand interpreted to be windblown deposits. The thick sand deposit has been extensively eroded by wave action at the north side of Yerba Buena Island, forming a steep sand bluff that is over 200 feet high and is still periodically shedding sand into the Bay. The grain-size distribution of windblown sands on Yerba Buena Island is essentially the same as fine silty sands interbedded with Young Bay Mud below Treasure Island. The erosion of the windblown sand from Yerba Buena Island and

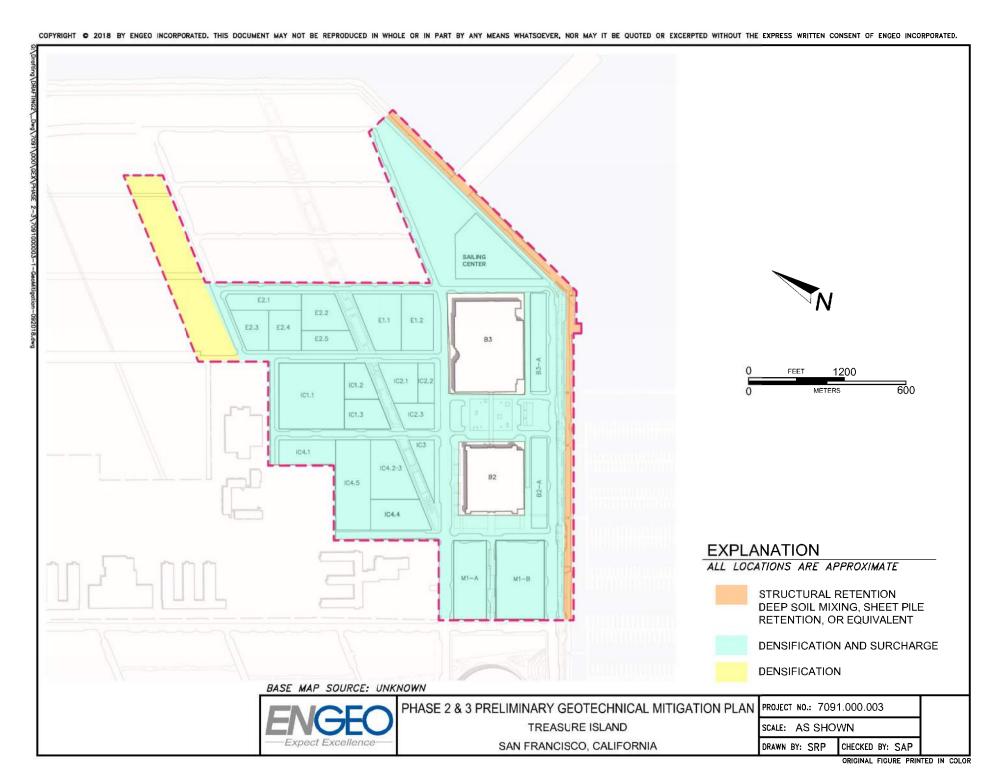


FIGURE 5.8 SUB-PHASE PRELIMINARY MITIGATION PLAN

surrounding areas is likely the source for both the historic sandy shoal deposits, and the fine silty sands interbedded with Young Bay Mud deposits.

Interpretations of the subsurface stratigraphy across the entire island along the north-south direction are illustrated on Figure 5.8.

TREASURE ISLAND CONSTRUCTION

Treasure Island and the causeway that connects it to Yerba Buena Island were constructed in the late 1930s by placing over 29 million cubic yards of fine- to medium-grained sand and silty sand over a natural sand shoal and a layer of weak, compressible clay (locally known as Young Bay Mud). The sand was dredged from the shoals south of the island and from other shoals to the east. The dredged sand fill was placed hydraulically. Where the Bay floor was lower than approximately Elevation -6 feet NAVD, a bed of hydraulic fill was placed to raise the Bay floor elevation to -6 feet. A rock dike was then constructed with crest elevations between 2 and 6 feet MLLW, and sand fill was deposited in place until the elevation reached the top of the dike. Another rock dike was placed on the previously constructed dike and filling continued. This process was repeated until the interior elevation reached approximately Elevation 13 feet NAVD. Filling started at the southwest corner and progressively proceeded to the east and north. The rock dikes were faced with riprap constructed with an outboard slope of 1:1 and extended to a final grade elevation of approximately Elevation 14 feet NAVD.

SUBSURFACE STRATIGRAPHY

Sand Fill and Shoal Sands

As described above, the hydraulic sand fills were deposited directly on native sandy shoals across most of the island footprint. In many CPT probes, the contact between the base of fill and top of shoal sand can be approximately distinguished by an increase in interbedded clays and silts. Determination of the base of fill deposits is difficult in many borings. The approximate base of the hydraulic fills can be estimated from the pre-filling bathymetry, plotted on the Cross Sections. The hydraulic fill and shoal sands both consist of loose to medium-dense silty to clayey fine sand with variable fines contents. The base of sand shoal deposits was selected as the contact between loose to medium-dense sand and soft clay or denser sand deposits interbedded with the younger Bay Mud. The combined thickness of the sand fill and shoal sands varies between approximately 30 and 50 feet.

Young Bay Mud: Onshore Fine-Grained Deposits

The sandy fill and shoal materials is underlain by Young Bay Mud consisting of soft to stiff silty clay deposits with occasional interbedded sand layers. The Young Bay Mud thickness varies from 20 to 120 feet with the greatest thickness occurring under the northwest corner of the island. The Young Bay Mud is also deeper under the southeast corner of the island. The Bay Mud is generally normally consolidated and moderately compressible. Where the Young Bay Mud has been consolidated under the weight of the existing fill, it has moderate shear strength.

Young Bay Mud: Soft Offshore Deposits

The Young Bay Mud deposits encountered in offshore borings are very soft to soft. The difference between onshore and offshore Young Bay Mud may be due to consolidation effects from the shoal sands and from consolidation due to placement of the island hydraulic fills. Comparison of 1926 to modern bathymetry shows that areas immediately offshore along the west margin of Treasure Island are at nearly the same elevation as 1926. Somewhat further offshore, up to approximately 25 feet of recent sedimentation may have occurred. In Clipper Cove, soft organic clays up to 20 feet thick have accumulated since 1949.

Older Bay Deposits

Older Bay deposits encountered below the Young Bay Mud deposits consist of interbedded very stiff to hard, low to high plasticity clays, silts, and dense to very dense fine silty and clayey sands. In many borings, the deep stiff/dense deposits are described as containing shell fragments or peat, suggesting that they are mainly old Bay or Bay margin deposits. Many borings note color changes from gray or dark gray to light greenish gray or brown or note mottling suggestive of oxidation and weathering. Borings just east of Sub-phase 1A note thick layers of brown gravelly sand and clay that may be of alluvial origin. The variation in thickness of these older sediments is not generally known because only a few exploratory borings on the island have penetrated to bedrock.

Bedrock

The Franciscan-Formation bedrock encountered in deep borings has been described as moderately weathered dark gray sandstone and shale. Bedrock was encountered under the south end of the causeway at an elevation of -10 feet NAVD and at an elevation of -180 feet NAVD near the middle of the causeway. Under Treasure Island, bedrock was encountered at an elevation of -255 NAVD. Under the middle of the island bedrock was encountered at an elevation of -271 NAVD.

GEOTECHNICAL CONCERNS

There are three primary geotechnical issues that influence shoreline and site improvements at Treasure Island: liquefaction, settlement, and seismic stability.

Liquefaction of Sand Layers

The combined thickness of the sand shoal and the dredged sand fill ranges from about 30 to 45 feet. These sands are generally loose to medium dense and are susceptible to liquefaction and seismic recompression settlement.

EXISTING SOILS AND GEOTECHNICAL MITIGATIONS

Settlement of Young Bay Mud

Beneath the sands are layers of compressible Young Bay Mud that ranges in thickness across the site from approximately 20 to 140 feet. The Young Bay Mud is generally normally consolidated and the settlement rate due to the weight of the dredged sand fill is now small. However, increases in loads due to placement of new fill or the construction of buildings will initiate a new cycle of consolidation settlements. The Young Bay Mud is underlain by dense to very dense sands and stiff to hard clays, which extend to bedrock at depths of 180 to 270 feet.

Seismic Stability of Perimeter and Causeway

The perimeter of the island and the causeway connecting Treasure Island to Yerba Buena Island are susceptible to earthquake-induced lateral spreading due to liquefaction of the fill and shoal sands. In addition, deeper lateral deformations are expected within the underlying Young Bay Mud layer.

GEOTECHNICAL MITIGATION

Mitigation of Liquefaction and Lateral Spreading

Numerous ground improvement techniques are available to mitigate the potential for liquefaction and its consequences. Some of these techniques considered in Sub-phase 1A include Vibro-compaction, and Deep Soil Mixing.

Mitigation of Young Bay Mud Consolidation Settlements

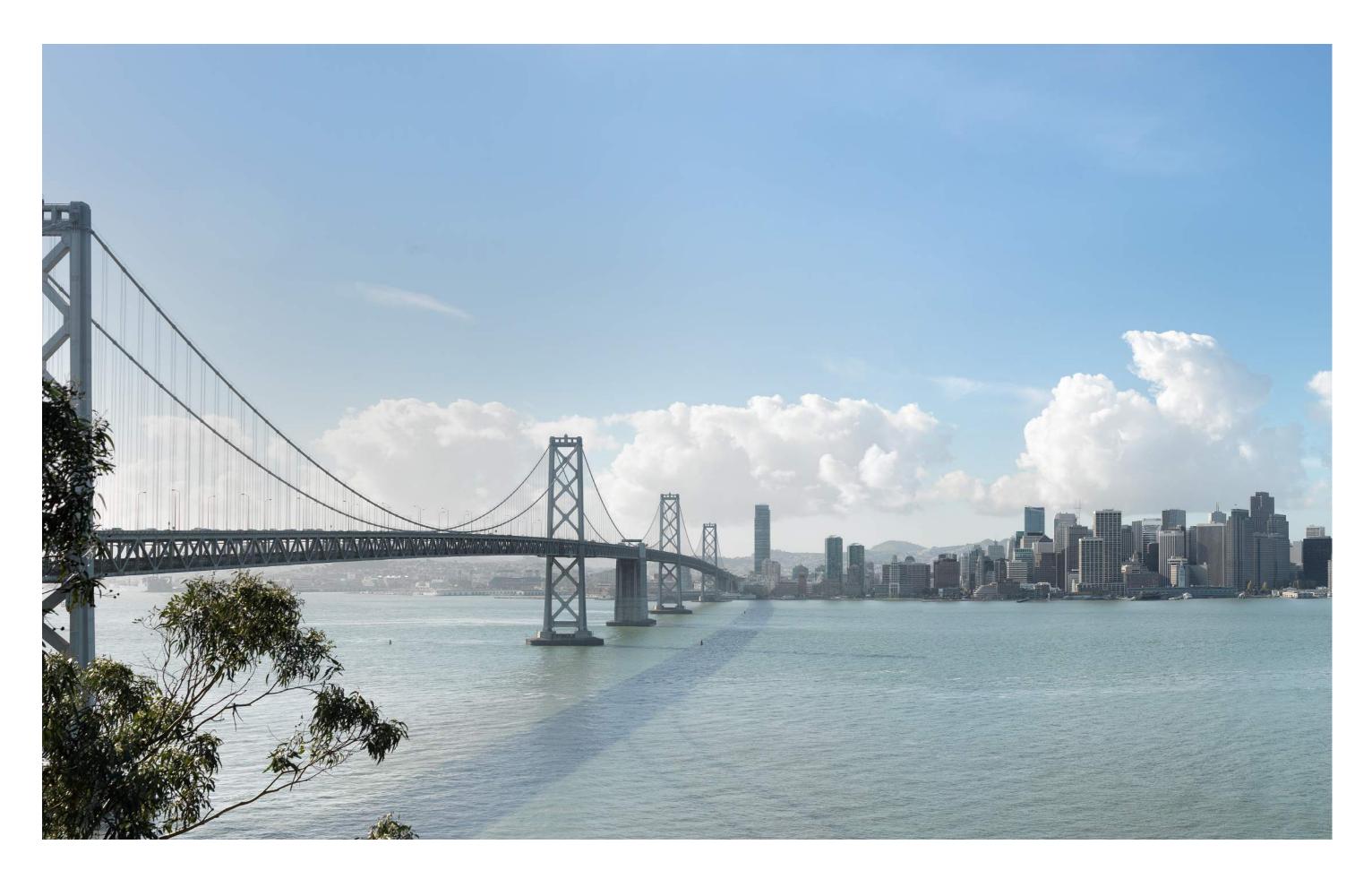
Surcharging or preloading can be used both to speed primary consolidation under the weight of additional fill and to reduce the settlement caused by subsequent building loads. Surcharging is often coupled with the installation of pre-fabricated vertical drains, commonly known as wick drains, which allow excess pore pressures to drain laterally, shortening the drainage path and taking advantage of the fact that the horizontal permeability of soils is normally much greater than the vertical permeability. The rate of consolidation can be controlled by selecting the type of

drain and the spacing between the drains. A horizontal drainage system can also be installed at the ground surface to collect and divert water expelled from the wicks. Wick drain and surcharge test sections can be used to confirm and refine the surcharge design.

Shoreline Stabilization

As discussed previously, the shoreline may be susceptible to earthquake-induced deformation and, possibly, deep-seated slope failures in areas of deep Young Bay Mud. Lateral spreading of the island perimeter can be mitigated using vibro replacement methods, or deep soil mixing to improve approximately a zone around the island perimeter.

A conceptual geotechnical mitigation plan for Treasure Island Sub-Phase 3 is illustrated in Figure 5.8.





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6.1 APPENDIX A: SUB-PHASE MMRP

Treasure Island and Yerba Buena Island Mitigation Monitoring Reporting Program

Mitigations Applicable to Major Phase 1

Implementation Status

					IMPLEMENTATION	
Mitigation ID #	Mitigation Short Text	Action #	Action	EIR Mitigation Timing	Implementation Responsibility	Major Phase Implementation Status Notes
	AND PALEONTOLOGICAL RESOURCE	S				
M-CP-1	Archaeological Testing Program	1	The archaeological consultant shall prepare and submit to the Environmental Review Officer ("ERO") for review and approval an Archaeological Testing Plan ("ATP") and then conduct the archaeological testing program in accordance with the ATP. The program will determine the presence or absence of archaeological resources and evaluate their significance.	Prior to commencement of soil-disturbing activities	Archaeological consultant	Archaeological Testing Plan for every Sub Phase to be submitted for approval to the City Environmental Review Officer prior to any work on site. Submission of testing plans for Sub Phase Applications 1 and 2 was completed on June 12, 2015.
	Re-design or data recovery program	2	Based on the archaeological testing program results, if the consultant finds the presence of significant archaeological resources, the ERO and consultants will determine if re-design or data recovery program is required.	Prior to commencement of soil-disturbing activities	Archaeological consultant	Report prepared during implementation of ATP will include determination if archaeological data recovery is appropriate. Archaeological Testing Plan implementation is estimated to occur in August and September 2015.
	Archaeological Monitoring Program (AMP)	3	The ERO and consultants will determine what project activities (in most cases, any soil disturbing activities) shall be archaeologically monitored and design an Archaeological Monitoring Program.	Prior to any demolition or removal activities, and during construction at any location	Project Sponsor and Archaeological consultant, in consultation with ERO	Archaeological Monitoring Program will establish schedules for any monitoring required prior to and during construction.
	Archaeological Monitoring Program (AMP)	4	Implement an Archaeological Monitoring Program.	Prior to any demolition or removal activities, and during construction at any location	Project Sponsor and Archaeological consultant, in consultation with ERO	Implement the Archaeological Monitoring Program for any monitoring required prior to and during construction.
	Archaeological Data Recovery Plan (ADRP)	5	Conduct Archaeological Data Recovery Program in accordance with the ADRP, to preserve the significant information the archaeological resource is expected to contain.	Prior to commencement of soils disturbing or removal activities, and during construction	Project Sponsor and Archaeological consultant, in consultation with ERO	ADRP will describe how the proposed data recovery program will preserve the significant resource.
	Human Remains and Associated or Unassociated Funerary Objects	6	Notify Coroner upon discovery and make all reasonable efforts to develop agreement for the appropriate excavation, removal, recordation, analysis, custodianship, curation, and final disposition of any remains or funerary objects.	Throughout soils-disturbing activities.	Project Sponsor, Archaeological consultant, and Contractor, in consultation with ERO	Contractor to immediately notify Coroner in the event of any funerary object discovery.
	Final Archaeological Resources Report (FARR)	7	Prepare Final Archaeological Resources Report (FARR) about any discovered resource, including the historical significance and the methods employed in the testing/monitoring/data recovery program(s).	Upon completion of Construction	Project Sponsor and Archaeological consultant, in consultation with ERO	FARR to be prepared upon completion of construction at a given site.
M-CP-3	Paleontological Resources Monitoring and Mitigation Program (PRMMP)	1	Design a Paleontological Resources Monitoring and Mitigation Program	Prior to any demolition or removal activities, and during construction at any location on YBI	Project Sponsor, Paleotological consultant, and Contractor, in consultation with ERO	Design a Paleontological Resources Monitoring and Mitigation Program for YBI. Submission of PRMMP for Sub Phase Applications 1 is estimated to occur July 2015.
	Paleontological Resources Monitoring and Mitigation Program (PRMMP)	2	Implement a Paleontological Resources Monitoring and Mitigation Program	Throughout soils-disturbing activities on YBI.	Project Sponsor, Paleotological consultant, and Contractor, in consultation with ERO	Implement a Paleontological Resources Monitoring and Mitigation Program for YBI.
M-CP-6	Any alterations to and within Building 1's contributing landscape shall comply with Secretary's Standards	1	Ensure alterations and additions designed for Building 1's contributing landscape are consistent with the Secretary's Standards	During Design, prior to TIDA's approval of Design.	TIDA in consultation with qualified professional Preservation Architect, Architectural Historian, and/or Planner experienced with applying Secretary's Standards to adaptive reuse projects	During its design review process, TIDA to issue findings regarding landscape improvements contributing to Building 1.
M-CP-7	Any new free-standing construction west of Building 1 in its contributing landscape area shall comply with Secretary's Standards	1	Ensure design for new free-standing construction west of Building 1 in its contributing landscape areas is consistent with the Secretary's Standards	During Design, prior to TIDA's approval of Design.	TIDA in consultation with qualified professional Preservation Architect, Architectural Historian, and/or Planner experienced with applying Secretary's Standards to adaptive reuse projects	During its design review process, TIDA to issue findings regarding new structures proposed in landscape area west of Building 1.
M-CP-9	Documentation and interpretation of the Damage Control Trainer (housed in Building 341) must occur before it is demolished.	1	Prepare photographic and written dcumentation of the Damage Control Tower based on HABS and HAER guidelines.	Prior to any action to demolish or remove the Damage Control Tower	Project Sponsor and Architectural Historian Consultant	Following TIDA's approval of documentation, consultant to transmit it to SF History Center, TIDA, Planning Dept, and NWIC
	Documentation and interpretation of the Damage Control Trainer (housed in Building 341) must occur before it is demolished.	2	Provide a permanent display of interpretive materials concerning the history and architectural features of the Damage Control Tower	Prior to any action to demolish or remove the Damage Control Tower	TIDA to establish location(s), media, and characteristics of display. Project Sponsor and Architectural Historian Consultant to prepare display	Design interpretive display.

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			IMPLEMENTATION			
Mitigation ID #	Mitigation Short Text	Action #	Action	EIR Mitigation Timing	Implementation Responsibility	Major Phase Implementation Status Notes
TRANSPORT	TATION					
M-TR-1	Construction Traffic Management Plan (CTMP)	1	minimize overall disruptions and ensure overall circulation is maintained to extent possible.	Prepare CTMP and submit for approval prior to construction of the first Sub-Phase of the first Major Phase, to be updated for each subsequent Sub-Phase	Project Sponsor and their Consruction Contractor(s)	Project Sponsors and their construction contractor(s) to prepare and implement CTMP, with update for each Sub-Phase. TIDA to coordinate with other City agencies. Contractors to disseminate appropriate info to employees and subcontractors.
	Once streets are accepted as City streets, additional coordination is required for temporary traffic and transportation changes	2	Once streets are accepted as City streets, coordinate through SFMTA's Interdepartmental Staff Committee on Traffic and Transportation (ISCOTT), and conduct public hearing. CMTP may be reviewed by SFMTA's Transportation Advisory Committee (TASC) to resolve internal differences.	Implement process as soon as any streets are accepted by City	Project Sponsor and their Consruction Contractor(s)	Project Sponsors and their construction contractor(s) to coordinate any temporary changes with ISCOTT after streets are accepted by City.
	Separate Traffic Management Plan (TMP) for Caltrans	3		In advance of construction activities in Caltrans right-of-way	Construction contractors and permit applicants	Construction contractors and permit applicants to coordinate with Caltrans and submit Certification Checklist forms to Caltrans when appropriate
	Consultation with other Island users about transit route changes	4		Coordinate preparation of CTMP (and its updates) with other Island users.	Project Sponsor	Project Sponsors and their construction contractor(s) to coordinate transit route changes with other agencies during preparation of CTMP (and subsequent updates).
	Notify vendors of special requirements for STAA trucks (largest commercial shipping trucks) larger than 65 feet	5	Notify vendors that STAA trucks larger than 65 feet exiting from the eastbound direction of the Bay Bridge may only use the off-ramp on the east side of YBI	When contracting with vendors	Construction contractor(s)	Construction contractor(s) to report vendor notifications to TIDA
M-TR-24	New Transit Only Lane only triggered by operational delays to Muni service	1	YBI or upon completion of 1,000 dwelling units (whichever comes first), TIMMA (TITMA) to monitor length and duration of potential queues and associated delays. Project Sponsor to provide Transit Only Lane if	Commence monitoring upon installation of metering light on westbound on-ramp on east side of YBI or upon completion of 1,000 dwelling units, whichever occurs first. Continue throughout life of project.	TIMMA (formerly TITMA) to monitor. Project Sponsor and their Construction Contractor(s) to re-stripe for Transit Only Lane, if needed.	TIMMA to conduct monitoring upon trigger event and report quarterly to SFMTA, and then monthly if there are further triggers.
NOISE						
M-NO-1a	Implement noise control measures during construction.	1	i i	For each construction permit. Construction contractors to report on noise measures implemented on a monthly basis.	Construction contractor(s)	All feasible noise control measures should be implemented.
M-NO-1a	Designate a Noise Disturbance Coordinator during construction.	1	construction contractors shall work with the Coordinator and post	Noise Disturbance Coordinator to be available throughout all construction phases until buildout is complete.	Construction contractor(s)	Noise Disturbance Coordinator must be empowered to address noise complaints.
M-NO-1b	Identify and implement noise-reducing pile driving techniques and noise shielding and muffling devices.	1	Use noise-reducing pile driving techniques if nearby structures are subject to pile driving noise and vibration. Within 48 hours prior to such activities, notify building owners and occupants within 500 feet of project site of dates, hours, and expected duration of those activities.		Project Sponsor to report to agencies and notify persons within 500 feet. Construction contractor(s) to identify and implement noise-reducing techniques.	Equipment used shall employ state-of-the-art noise shielding and muffling devices.
M-NO-2	Vibro-Compaction Monitoring	1	·	Prior to commencement of construction with impact or vibro-compaction activities.	Project Sponsor and their Geotechnical Engineer(s)	Pre-construction assessment required prior to each use of impact or vibro-compaction methods.
M-NO-5	Mitigate traffic induced interior L_{max} noise levels in homes, schools, lodging.	1	acoustical insulation or other equivalent measures. Provide post-	Prior to completion of design and issuance of building permits for each home, school or hotel.		Applicable for vertical development of homes, schools and hotels.
M-NO-6	Locate noise producing facilities away from noise sensitive receptors or require appropriate noise attenuating features.	1	sensitive receptors and provide site and noise attenuation features during design. Monitor noise levels after installation to ensure compliance.	Site and noise attenuation features to be established during design of each noise source. Monitor within 3 months of installation of each noise source.	TIDA, in consultation with SFPUC, if appropriate.	Facilities such as pump stations, electric substation equipment, etc may be such noise sources.

					IMPLEMENTATION	
Mitigation ID #	Mitigation Short Text	Action #	Action	EIR Mitigation Timing	Implementation Responsibility	Major Phase Implementation Status Notes
AIR QUALIT	Υ					
M-AQ-1	Prepare and implement Construction Dust Control Plans	1	Incorporate all eight BAAQMD-identified construction mitigation measures into the required Construction Dust Control Plan.	Prepare and implement Dust Control Plans during each phase of site preparation and building construction.	Project Sponsors to create plan and their construction contractors to implement it.	Includes requirement to post publicly visible sign with contact info for any dust complaints.
M-AQ-2	Implement combustion emission reduction measures during construction activities.	1	Implement combustion emission reduction measures and submit quarterly reports regarding compliance through 2018 and annually thereafter.	Implement measures throughout construction and submitting quarterly and annual compliance reports.	Project Sponsors and their construction contractors.	Diesel powered generators for construction activities prohibited unless TIDA finds there are no other commercially available alternatives.
M-AQ-3	At submission of any Major Phase application, Air Quality consultant must review proposed development in that Major Phase along with existing uses and uses approved in prior Major Phases to determine whether the actual project phasing deviates materially from the representative phasing plan.	1	Review of phasing by Air Quality consultant prior to approval of each Major Phase application to confirm there will not be any additional significant impacts on any group of receptors.	Prior to submission of each Major Phase application	TIDA for horizontal construction or Planning Department for vertical construction outside Tidelands Trust Overlay Zone, and an air quality consultant.	There have been no changes in the proposed development for Major Phase 1 or existing uses; therefore, there are no potential impacts on any group of receptors for review by an Air Quality consultant.
M-AQ-4	Implement BAAQMD mitigation measures for projects that exceed construction thresholds that would be applicable to reducing PM2.5 emissions	1	Implement 13 additional construction mitigation measures to reduce construction emissions.	Implement during construction and submit quarterly reports regarding implementation.	TIDA shall require, and Project Sponsors and their construction contractors, shall implement	Measures are identified by BAAQMD as recommended for all projects regardless of whether threshholds are exceeded.
WIND AND S	SHADOW					
M-WS-3	Identify measures to reduce exposure to hazardous winds.	1	At least once a year, throughout construction, Wind Consultant shall visit site and identify measures to reduce exposure to potentially hazardous winds in publically accessible areas.	Implement during construction and submit annual reports regarding implementation.	Project Sponsor to retain consultant and annual assessments are sent to TIDA, DBI and Planning.	Site assessment to include design for all buildings approved or under construction.
	Identify measures to reduce exposure to hazardous winds.	2	Contractor shall develop safety plan to mitigate all wind-related risks.	Implement prior to issuance of building permit for each structure.	Project Sponsor and their Consruction Contractor(s)	Object is to minimize risks from stacked materials that can be picked up by strong winds and from light structures that could be detached.
	Ensure compliance with Wind Consultant measures by conditions of approval for all construction permits.	3	Ensure implementation of Wind Consultant's structural measures and precautions by conditions of approval for all construction permits.	Implement prior to issuance of site and building permits.	TIDA and Planning	Project sponsors and subsequent building developers must cooperate to implement measures.
	Maintain records for compliance with Wind Mitigation Measures.	4	TIDA shall maintain records of EIR technical memorandum, all written recommendations, reports of wind testing, and proof that mitigation measures were followed.	Implement throughout construction	TIDA	Planning will provide TIDA with all reports prepared for vertical development. TIDA shall document and maintain reports for horizontal and maintain reports for vertical.
M-WS-4	Identify and compare potential impacts of every proposed building relative to those described in EIR	1	If building design would cause new or increased wind hazard that would not be eliminated by design changes, additional wind tunnel testing may be needed.	Implement prior to approval of schematic design for every building.	Planning, Project Sponsors, Wind Consultant, and design consultants.	If wind consultant concludes building would cause increased or new wind hazard that cannot be eliminated by design modifications wind tunnel testing may be required. Ferry Shelter in Sub Phase Application 2 has been evaluated for compliance with level of impacts defined in the EIR.
	Wind tunnel testing is required if increased or new wind hazards are likely that will likely not be eliminated by design modifications.	2	If wind testing is required, it shall be performed for an area at least 3 blocks wide and several blocks deep, inclduing the test points tested in the EIR	Implement prior to approval of schematic design for every building.	Planning, Project Sponsors, Wind Consultant, and design consultants.	The goal is to cause no additional wind effects than identified by prior testing; it is not be expected that all the wind hazard(s) identified by prior testing will be eliminated.
	Maintain records for compliance with Wind Mitigation Measures.	3	TIDA shall maintain records of EIR technical memorandum, all written recommendations, reports of wind testing, and proof that mitigation measures were followed.	Implement prior to approval of schematic design for every building.	TIDA. Planning to provide copies of documentation to TIDA.	All constructed buildings must incorporate requisite design mitigations specified by wind consultant.

					IMPLEMENTATION	
Mitigation ID#	Mitigation Short Text	Action #	Action	IR Mitigation Timing	Implementation Responsibility	Major Phase Implementation Status Notes
BIOLOGICA	L RESOURCES					
M-BI-1a	Avoid disturbance of special-status plants on YBI	1	1	onduct survey in May or June prior to any onstruction on YBI		Surveys to be conducted in each construction area in May or June prior to any construction. 2015 survey was completed May 20, 2015 and issued to TIDA on June 17, 2015.
M-BI-1b	Conduct no activities within no-work buffer zone that could disrupt birds during breeding season.	1				Depending on species, input from CA Dept of Fish and Game and/or US Fish and Wildlife Service may be warranted.
M-BI-1c	Tree removal and building demo to occur during periods least likely to impact bats.	1	to conduct surveys for active day or night roosts. Found roosts to be made unsuitable habitat prior to tree removal or building demoand 100	/inter hibernacula and maternity roosts ave overlapping sensitivity periods (only ear months are 15-Feb to 15-Apr), so urvey is likely required prior to demo.		A reduced buffer could be provided for on a case by case basis by the bat biologist.
M-BI-1d	Off-leash dogs will be prohibited on YBI outside of designated, enclosed, off-leash dog parks. Feeding of feral cats prohibited on both islands.	1	communicate to tenants and visitors, prior to occupation of new structures pr			All construction specs general conditions should include note that feeding of feral cats is prohibited and to include off-leash dog restriction for activities on YBI.
M-BI-1e	Employ specific noise and vibration mitigation measures during off-shore pile driving.	1	Monitor area during off-shore pile driving to ensure aquatic species are not impacted and that sound pressures 500 meters from source do not exceed 160 db. If either occurs, employ bubble curtains. In addition, 4 other mitigation measures must be employed.	uring all off-shore pile driving activities	Project Sponsors and qualified marine biologist and acoustical consultant.	If marine mammals are observed within 1,000 feet of pile driving activities, allow them to exit before resuming pile driving.
M-BI-2a	Shoreline activities generally restricted to terrestrial and upper intertidal zones.	1	Minimize to extent possible activities in lower intertidal and near subtidal zones. No disturbance of rocks in lower intertidal zone outside of planned dredging areas.	uring any construction conducted in and round the islands' rocky shoreline.		Related activities include geotech stabilization, shoreline heightening and repair, stormwater outfall improvements, and other shoreline activities.
M-BI-2b	Shoreline work limited to period between 1-Mar and 30-Nov	1		uring any construction conducted in and round the islands' rocky shoreline.		Related activities include geotech stabilization, shoreline heightening and repair, stormwater outfall improvements, and other shoreline activities.
M-BI-2c	Survey all eelgrass beds	1	Aquatic Vegetation (SAV) beds, and not less than every 2 years	lithin 3-6 months of start of any construction in SAV areas and not less than very 2 years thereafter.		Eelgrass beds occur in subtidal areas along northeast and east sides of TI and in Clipper Cove, adjacent to northeast shore of YBI.
	Conduct mandatory eelgrass bed training.	2	Conduct eelgrass bed environmental training for all TIDA staff in charge of overseeing construction, all contractors and subcontractors working or transporting materials or operating boats in Bay waters within 1/4 mile of TI/YBI.	rior to any activities in SAV areas.		Eelgrass beds occur in subtidal areas along northeast and east sides of TI and in Clipper Cove, adjacent to northeast shore of YBI.
M-BI-4a	Ensure building design minimizes potential for bird strikes.	1				Design for vertical structures and their immediately adjacent landscaping; typically by vertical developers (also includes Ferry Shelter). Ferry Shelter has been designed to minimize potential for bird strikes.
	Ensure lighting design minimizes potential for bird strikes.	2	Incorporate lighting design features into buildings and landscapes in such a way as to reduce lighting usage, change light direction, and contain light.	rior to issuance of building and site ermits.		Planning responsible for compliance on non-Trust property and TIDA responsible for compliance on Trust property. Lighting for Parks and Open Spaces in Sub Phase Applications 1 and 2 has been designed to minimize potential bird strikes.
	Minimize rooftop antennas and equipment.	3	·	rior to issuance of building and site ermits.	TIDA and Planning	To be addressed for every building permit

					IMPLEMENTATION	
Mitigation ID #	Mitigation Short Text	Action #	Action	EIR Mitigation Timing	Implementation Responsibility	Major Phase Implementation Status Notes
	Educating Residents and Occupants	4	Provide educational materials to building tenants and occupants, hotel guests, and residents encouraging them to minimize light transmission from windows, especially during peak spring and fall migratory periods.	Prior to issuance of building permits. Educational materials to be reviewed and approved by TIDA prior to occupancy.	Planning for permits on non-Trust property and TIDA for permits on Trust property.	To be addressed for every building permit
	Documentation of Bird Strike mitigations	5	Building developers to provide written descriptions of measures and features to address potential bird impacts and biologist to prepare recommendations and memoranda to ensure potential for bird strikes is minimized.	Throughout vertical development	TIDA and Planning	TIDA to maintain records.
M-BI-8 (Variant B3 - southern breakwater constructed in later phase)	Survey construction area for eelgrass beds.	1	Survey construction area prior to initiation of any construction activities for the southern breakwater. If eelgrass has established beds that could be impacted by breakwater construction, restoration of offsite eelgrass beds or transplantation and establishment of offsite or onsite eelgrass beds with replacement ratio of 3:1 will be required.	a later phase.	Project Sponsors, construction contractors, marine biologist, in consultation with ACOE, BCDC, NMFS, and CDFG where necessary.	If eelgrass beds are found, construction to be restricted to 1-Mar through 30-Nov with restoration or offsite eelgrass beds to occur immediately after breakwater construction.
	Survey construction area for protected fish species, and marine mammals.	2	Survey construction area prior to initiation of any construction activities for the southern breakwater. If breakwater could impact utilization of area by protected species, work to be conducted in manner to not adversely effect them.	a later phase.	Project Sponsors, construction contractors, marine biologist, in consultation with NMFS.	Survey construction area prior to initiation of any construction activities for the southern breakwater.
M-BI-9 (Variant C2 - supplement firefighting water supply with Bay water)	Design and construct water intake pipe to prevent impingement of fish and macrovertebrates.	1	If firefighting water will be supplemented by Bay water, submit the final design of the Bay water intake pipe to NMF, CDFG, CA Water Board/SF, and BCDC.	Prior to issuance of permits to construct the bay water intake pipe.	TIDA and Project Sponsor's qualified marine biologist and engineering consultants.	One option is installing the pipe inside a screened subsea vault large enough to reduce water suction to acceptable levels.
GEOLOGY AN	ND SOILS					
M-GE-5	Locate new improvements at YBI a minimum of 100 feet from top of existing slope along Macalla Road.	1	Locate new improvements at YBI a minimum of 100 feet from top of existing slope along Macalla Road unless a site-specific geotech slope stability evaluation indicates a static factor of safety of 1.5 and a seismic factor of safety of 1.1 will be implemented.	Prior to issuance of building permit for improvements or structures along Macalla Road.	Project Sponsor and geotech consultant	If geotech recommendations regarding slope stability have been identified for any YBI site that is within 100 feet from top of existing slope along Macalla Road, they must be incorporated into building specs.
HAZARDS AN	ID HAZARDOUS MATERIALS					
M-HZ-1	Implement a Soil and Groundwater Management Plan (SGMP)	1	Construction specs must include implementation of SGMP prepared by qualified environmental consulting firm and reviewed and agreed to by DTSC and RWQCB.		Project Sponsor for first Sub Phase to prepare doc and all subsequent Project Sponsors to prepare and follow parcel-specific plans.	If additional remediation is necessary to meet proposed land use, it must be completed as directed by the responsible agency, DTSC or RWQCB, prior to commencement of construction activities. Project SGMP approval by regulatory agencies is anticipated by July 2015.
	SGMP: Soil Management Requirements	2	Comply with protocols for stockpiling, sampling, and transporting soil generated from on-site activities and for soil imported to the site for placement.	Prior to first Sub Phase Application approval and prior to issuance of building or grading permit for any parcel(s).		Protocols address stockpiling, on-site reuse, transport and disposal, and importation.
	SGMP: Groundwater Management Requirements	3	Comply with protocols for conducting dewatering activities and sampling and analysis requirements for groundwater extracted during dewatering activities.		Project Sponsor for first Sub Phase to prepare doc and all subsequent Project Sponsors to prepare and follow parcel-specific plans.	Protocols address on-site reuse, discharge, pre-discharge treatment, and off-site transport.
	SGMP: Unknown contaminant/hazard contingency plan	4	Comply with contingency plan procedures in the event that unanticipated subsurface hazards or hazardous material releases are discovered during construction.	approval and prior to issuance of building or	Project Sponsor for first Sub Phase to prepare doc and all subsequent Project Sponsors to prepare and follow parcel-specific plans.	Protocols address identifying potential contaminants, what to do if underground storage tank is encountered, emergency contact procedures, site controls and security procedures, sampling and analysis, and interim removal work.
M-HZ-8	Incorporate BMPs into construction specs	1	BMPs must be incorporated to minimize potential negative effects to groundwater and soils.	Prior to initiation of construction activities throughout construction.	Project Sponsors and their construction contractors.	BMPs to include handling of chemical products, fueling, containment of grease and oils, and disposal of fuel and chemical containers.

					IMPLEMENTATION	
Mitigation ID #	Mitigation Short Text	Action #	Action	EIR Mitigation Timing	Implementation Responsibility	Major Phase Implementation Status Notes
M-HZ-10	Vapor Barriers for enclosed structures within IR Sites 21 or 24	1	If vapor barriers are necessar,y building plans must include DTSC-approved vapor barriers beneath foundation.	Prior to issuance of a building permit for construction in IR Sites 21 and 24	Project Sponsors for buildings in IR Sites 21 and 24 and their construction contractors, in consultation with DTSC	Required prior to construction in IR Sites 21 and 24.
M-HZ-13	Voluntary Clean-Up Agreement (VCA) prior to reopening the presently closed elementary school	1	Prior to reopening the elementary school for elementary school use, TIDA or SFUSD shall enter into VCA with DTSC's School Property Evaluation and Cleanup Division.	Prior to reopening elementary school for elementary school use	TIDA or SFUSD to prepare and negotiate a VCA with DTSC	Site is near boundaries of Major Phase 4
I-GHG-1	Consider implementation of measures to reduce construction-related greenhouse gas (GHG) emissions	1	BAAQMD Guidance encourages Lead Agencies to incorporate best management practices for purposes of reducing construction-related GHG emissions.	Throughout construction	Project Sponsors and their construction contractors.	Measures to be considered include at least following %'s: use of alternatively fueled construction equipment for 15% of fleet, use of local building materials for 10% of construction materials, and recycle or reuse of 50% of construction and demo waste.
IMPROVEM	ENTS					
I-RE-3a	If artificial turf is proposed, use latest SFRPD criteria at time of implementation	1	If used, design and build artificial turf fields using latest SFRPD criteria at time of implementation, including City's purchasing criteria	Prior to and during construction of recreational fields	Project Sponsors for any fields proposing artificial turf	TIDA to ensure appropriate materials are installed
I-RE-3b	If artificial turf is proposed, develop signage about hand washing before and after use and proper wound care.	1	If used, develop signage to educate athletes about importance of washing hands before and after field use and proper wound care for turf-related injuries	Signage to be installed prior to opening and maintained during operations	Project Sponsors in consultation with City Fields Foundation and SFDPH	TIDA to ensure signage is installed and maintained
I-RE-3c	If artificial turf is used develop air quality monitoring program for the turf fields.	1	If used, develop air quality monitoring program using methodology developed by Office of Environmental Health Hazard Assessment or US EPA.	During operation of recreational fields	Project Sponsors and air quality monitoring consultant in consultation with City Fields Foundation and SFDPH	Monitoring reports submitted to TIDA and SFDPH
M-NO-4	Operator of ferry service to ensure that its operations do not exceed SF Land Use Compatibility Guidelines for Community Noise standards	1	Ferry service operator to retain acoustical consultant to prepare a Ferry Terminal Noise Reduction Plan and comply with guidelines including reducing propulsion engine power to low when approaching and departing the terminal.	Prior to Ferry Terminal operation.	Ferry service operator	Implement prior to ferry service operation.
M-AQ-5	Ferries to meet CA Air Resources Board regulations	1	Ferry service must meet CARB regs and be equipped with diesel particulate filters or alternative technology to reduce diesel particulate emissions.	Prior to vessel selection or award of ferry service contract	WETA and WETA's ferry operator(s)	Implement prior to vessel selection or award of ferry service contract.
M-BI-4b	Implement operational adjustments to minimize impacts to rafting waterbirds	1	Ferry service to operate in reduced numbers and slower speeds during Dec and Jan or, to extent possible, maintain a buffer zone of 820 feet from areas of high-use by rafting waterbirds	During ferry operations in December and January each year.	WETA's ferry operator(s)	Implement during ferry operations in December and January each year.

6.2 APPENDIX B: SCHEDULE OF PERFORMANCE

EXHIBIT JJ SCHEDULE OF PERFORMANCE

						1/11/2019
Major	Sub-		- · · · · · · · · · · · · · · · · · · ·	Application	Commencement	Completion
Phase	Phase	Block	Parks & Open Space 1/	Outside Date 2/	Outside Date 2/	Outside Date 2/
1	1			2015	2017	2028
-	1-Y-A	1Y-2Y-3Y		2015	2017	2019
	1170		YBI Hilltop Park 1	2010	2020	2021
			YBI Hilltop Park 2		2023	2024
			YBI Open Space / HMP 1		2020	2022
	1-A	B2-B3-M1-IC3-IC4	·	2019	2021	2024
			Eastside Commons 1		2023	2024
			Clipper Cove Promenade 2		2023	2024
			Clipper Cove Promenade 3		2023	2024
			Sailing Center Pad		2023	2024
			Eastern Shoreline Park 1		2025	2026
	1-B	B1	D 1111 A D1	2016	2018	2020
-			Building 1 Plaza		2021	2022
			Marina Plaza		2021	2022
	1-C	C1-C2	Clipper Cove Promenade 1	2015	2021 2017	2022 2019
	1-0	01-02	Cityside Waterfront Park 1	2015	2020	2019
			Cityside Waterilont Park		2020	2021
	1-D	IC1-IC2	Guiturai Faik	2019	2022	2025
		101102	Eastside Commons 2	2013	2023	2025
	1-E	C3	Editional Commission 2	2019	2021	2023
			Cityside Waterfront Park 2		2024	2025
	1-F	E1-E2		2020	2022	2025
			Eastside Commons 3		2025	2026
	1G	IC1-IC4		2026	2028	2033
	1-Y-B	4Y		2021	2023	2025
			YBI Beach Park		2026	2027
			YBI Open Space / HMP 2		2026	2028
2				2021	2023	2030
	2-A	E3-E4		2021	2023	2025
			Eastside Park 2		2026	2027
-			Eastside Commons 4		2026	2027
	2-B	C4		0000	2026	2027
	Z-D	U4	City cide Westerfront Douls 2	2022	2024 2027	2026 2028
	2-C	E5-E6	Cityside Waterfront Park 3	2023	2025	2027
	20	20 20	Eastside Park 3	2023	2028	2029
			Eastside Commons 5		2028	2029
			Eastern Shoreline Park 2		2028	2029
			Pier 1		2029	2030
		l.		II.		I.
3				2024	2026	2033
	3-A	E7-E8		2024	2026	2028
			Eastside Park 4		2029	2030
			Eastside Commons 6		2029	2030
			Eastern Shoreline Park 3		2029	2030
	3-B	C12-C13		2025	2027	2029
			Urban Farm 2		2031	2032
	3-C		Haban 54	2026	2028	2033
			Urban Farm 1		2028	2033
	1			T ac=		
4	4.4	C5		2027	2029 2029	2037
}	4-A	<u> </u>	Cityside Waterfront Park 4	2027	2029	2031 2033
-		 	Sports Park		2032	2033
—	4-B	C10-C11	ороно ган	2028	2030	2032
	· -		Urban Farm 3	2020	2034	2032
	4-C	C6	O.Dan. I WIII O	2029	2031	2033
			Cityside Waterfront Park 5		2034	2035
			Urban Farm 4		2035	2036
	4-D	C7-C8-C9		2030	2032	2034
			Cityside Waterfront Park 6		2035	2036
	1		Northern Charoline Dayl / The Wilds / Environmental Contact Dayl	1 -	2026	2027

Northern Shoreline Park / The Wilds / Environmental Center Pad

SCHEDULE OF PERFORMANCE

1/	1	3	/2	0	1	5
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					1/13/2015	
		_	Application Outside	Commencement	Completion	
Community Facility	Obligation	/ Trigger 3/	Date 4/	Outside Date 4/	Outside Date 4/	
		Α	В	С	D	
Waterfront Plaza / Ferry Terminal Phase 1	Facility	100 du	+6mo	+12mo	+36mo	
Police / Fire Station	Facility	2,500 du	+6mo	+12mo	+24mo	
Retail - Final Grocery Store (15,000sf)	Facility	5,000 du	+6mo	+12mo	+24mo	
Ferry Terminal Phase 2	Facility			, and TIDA, after engagir ween TIDA and WETA.	ng in a meet and	
WWTP / Recycled Water Plant / PUC 4-6 acres	Developable Pad	See PUC / TIDA W	WTP MOA for timing of	of pad delivery.		
Sailing Center Pad	Developable Pad	Developer shall use commercially reasonable efforts to provide the Sailing Center Pace earlier if the Authority requests it and if the Treasure Island Sailing Center provides reasonable evidence that it will be ready to proceed with construction of the Sailing Center building at that earlier date.				
Environmental Center Pad	Developable Pad		liver the Environmental The Northern Shoreline	Center Pad commensur Park and The Wilds	rate with	
Pier 1 / Eastern Shoreline Park 2	Improvements	Construction of these improvements may be deferred if the area is still needed for barging operations related to importing material for the site. In no case will the Completion Outside Date for these improvements be later than the Completion Outside Date of the last Sub-Phase.				
Buses for East Bay Service	Rolling Stock	Nine (9) Buses for East Bay Bus Service. First five (5) buses at inception of service, remaining four busses no earlier than the occupancy of the 5,000th residential unit.				
On -Island Shuttle Buses	Rolling Stock	Four (4) Shuttle Buses. Up to two (2) buses will be provided when the service initially begins, but no earlier than the occupancy of the three thousandth (3000th) unit, subject to the meet and confer process described in Exhibit N, Transportation Plan Obligations. The remaining two (2) buses will be provided as needed based on service schedules.				
Bicycle Lending Library	Rolling Stock		re of \$110,000. Must b	stablish the bicycle lendi be completed no later tha		

Financial Obligation	Obligation	Mechanism
Open Space Annual O&M Subsidy	\$14.3 MM (NPV)	Max \$1.5mil first 5 yrs, \$3 mil per yr from Yr 6, subject to need per annual operating budget. See Financing Plan for amounts and schedule.
Transportation Annual Operating Subsidy	\$30 MM (NPV)	Max \$4 mil per year, subject to need per annual operating budget. See DDA for amounts and schedule.
Additional Transportation Subsity	\$5 MM max	Five annual consecutive installments (max \$1 mil per year) after the first certificate of occupancy (whether temp or final) has been issued for the 4,000th dwelling unit on the Project Site, payable within 90 days after request of SFCTA if transit report shows residential transit mode share is 50% or less.
Transportation Capital Contributions	\$1.8 MM (NPV)	Used to purchase up to six (6) busses. Per-bus subsidy: the lesser of 20% of the cost of a Muni bus, or \$300,000.
Community Center Space(s) Subsidy	\$9.5 MM (NPV)	Space or susidy determination made at Major Phase Approval. Max \$2.375 mil each Major Phase - subject to approved budget and program description.
Childcare Facility Subsidy	\$2.5M (NPV)	Space or funding no later than the first approved Sub-Phase within Major Phase Three or 18 months before the existing facility is no longer operational due to development activity, whichever comes first.
Affordable Housing Subsidy	\$98 MM max; \$73.5 MM baseline	\$17,500 per market rate unit at each lot sale. Trueups at 50% of TI land acreage make-up to 2,100 units and at 4,200 units land sales, credit for any payment made at 2,100 unit true-up. See Housing Plan for amounts and schedule.
School Improvement Payment	\$5 MM (NPV)	Payment due at the start of refurbishment work on the school grounds for purposes of opening a K-8 school. See DDA for amounts and schedule.
Ramps / Viaduct SFCTA Soft Cost Reimbursement	\$10 MM (NPV)	Annual schedule of payments. See TIDA / SFCTA MOA 3rd Amendment for amounts and schedule.
Import Fill	\$1 MM	Payment due upon removal from stockpile at rate of \$3.50 per CY or for any remaining in stockpile after 12/31/2015 in 3 equal annual installments. See TIDA / D.A. McCosker Agreement.

Horizontal obligations only, no vertical improvement or rehabilitation except as defined in Open Space Plan

^{2/} All dates are subject to navy's environmental remediation efforts provided in the Navy MOA and land transfers from Navy and TIDA

^{3/} Community Facility obligation is triggered by number of total building permits issued for residential dwelling units (shown in table above)

^{4/} Timeframes are additive: Completion Outside Date = Date of Trigger (A) + (B) + (C) + (D)

6.3 APPENDIX C: SUB-PHASE HOUSING DATA TABLES

					-					_							1	
Major Phase	1																	
Sub-Phase	1A																	
Block	B2																	
	All Lots	S							Market Rate	e Units							Authori	ty Units
																		Target
Residential Project								Number			Number Incl	Number Incl	Number Incl	Number Incl	Number Incl	Number Incl		Infrastructure
Lot Number and			Anticipted Product	Max Building	Anticipated		Total Developer	Market Rate	Number Incl	Rental or For-	Units @ 60%	Units @ 80%	Units @ 90%	Units @ 100%	Units @ 110%	Units @ 120%	Change to Size	Completion
Location	Lot Type	Acres	Type	Height Allowed	Building Height	Density (DUA)	Unit Count	Units	Units	Sale	(rental)	(For-Sale)	(For-Sale)	(For-Sale)	(For-Sale)	(For-Sale)	or Location?	Date
B2A	Developer	0.74	Low Rise / Mid Rise	50	50	41.14	30	27	3	Rental	3							
Block Subtotal		0.74				41.14	30.40	27.40	3.00		3.00							
Major Phase	1																	
Sub-Phase	1A																	
Block	В3																	
	All Lots	S		11			"		Market Rate	e Units	II.	ll .		Ш		1.	Authori	ty Units
																		Target
Residential Project								Number			Number Incl	Number Incl	Number Incl	Number Incl	Number Incl	Number Incl		Infrastructure
Lot Number and			Anticipted Product	Max Building	Anticipated		Total Developer	Market Rate	Number Incl	Rental or For-	Units @ 60%	Units @ 80%	Units @ 90%	Units @ 100%	Units @ 110%	Units @ 120%	Change to Size	Completion
Location	Lot Type	Acres	Type	_	Building Height	Density (DUA)		Units	Units	Sale	(rental)	(For-Sale)	(For-Sale)	(For-Sale)	(For-Sale)	(For-Sale)	or Location?	Date
B3A	IV		Low Rise	50 / 85	50	40.13	46	41		For Sale	(101101)	(i oi saic)	(1.01.0010)	5	(i di daid)	(1.01.00.0)	0. 2004.0	2010
5571	3.0	1.1.	LOW MISC	30 / 03	30	10.13	10			, i oi suic								
Block Subtotal		1.14				40.13	45.60	40.60	5.00	For Sale	_	_	_	5.00				
Block Subtotul		1.1.				10.13	13.00	10.00	3.00	TOT Suic				3.00				
Major Phase	1																	
Sub-Phase	1A																	
Block	M1A																	
DIOCK	All Lots								Market Rate	a I Inite							Authori	ty Units
	All LOC	,							Widiket Nati	Offics							Authori	Target
Residential Project								Number			Number Incl	Number Incl	Number Incl	Number Incl	Number Incl	Number Incl		Infrastructure
Lot Number and			Anticipted Product	Max Building	Anticipated		Total Developer	Market Rate	Number Incl	Rental or For-	Units @ 60%	Units @ 80%	Units @ 90%	Units @ 100%	Units @ 110%	Units @ 120%	Change to Size	Completion
Location	Lot Type	Acres	Type	_	Building Height	Doneity (DLIA)	Unit Count	Units	Units	Sale	(rental)	(For-Sale)	(For-Sale)	(For-Sale)	(For-Sale)	(For-Sale)	or Location?	Date
LOCATION	Lot Type	Acres	туре	neight Allowed	bulluling neight	Delisity (DOA)	Offic Courie	Ullits	Units	Sale	(rental)	(FOI-Sale)	(FUI-Sale)	(FUI-Sale)	(FUI-Sale)	(FOI-Sale)	or Location:	Date
M1A	1) /	1.32	T	315	300	250.00	330	330		For Sale								
IVITA	JV	1.32	Tower	313	300	250.00	550	330		rui sale								
Diagle Cubtotal		1.32				250.00	330	330										
Block Subtotal		1.32				250.00	330	330										
Maiar Dhasa	1																	
Major Phase	1																	
Sub-Phase	1A																	
Block	M1B	_							NA-dal Dal								A the d	11.21.
	All Lots	5							Market Rate	e Units							Authori	ty Units
Danislandi - I Danis								Ni. m. l			Niconala 1 1	Niconala	Namekaalaal	Namekaalaa	Niconale 1 1	Niconale		Target
Residential Project			A . 15 . 1 . 1 . 1 . 1 . 1 . 1	NA - B '' ''			Table 1	Number	No color	Destal 5	Number Incl	Number Incl	Number Incl	Number Incl	Number Incl	Number Incl	Character St	Infrastructure
Lot Number and			Anticipted Product	Max Building	Anticipated		Total Developer	Market Rate		Rental or For-	Units @ 60%	Units @ 80%	Units @ 90%	Units @ 100%				
Location	Lot Type	Acres	Туре		Building Height			Units	Units	Sale	(rental)	(For-Sale)	(For-Sale)	(For-Sale)	(For-Sale)	(For-Sale)	or Location?	Date
M1B	JV	1.88	Mid Rise	240	125	95.74	180	171	9	For Sale				9				
Block Subtotal		1.88				95.74	180	171	9					9.00				
Major Phase	1												<u> </u>		<u> </u>			
Sub-Phase	1A																	
Block	IC3														1			
	All Lots								Market Rate								A	ty Units

SUB-PHASE APPLICATION 3: SUB-PHASES 1A, 1D, 1F, 1G, 1H, 1I 6 - APPENDICES 135

6.3 APPENDIX C: SUB-PHASE HOUSING DATA TABLE

	A11.1 -+								Market Rate	a Unite							A+l	rity Units
	All Lot	5							iviarket Kate	Units							Autnor	rity Units
Residential Project Lot Number and			Anticipted Product	Max Building	Anticipated		Total Developer	Number Market Rate	Number Incl	Rental or For-	Number Incl Units @ 60%	Number Incl Units @ 80%	Number Incl Units @ 90%	Number Incl Units @ 100%	Number Incl Units @ 110%	Number Incl Units @ 120%	Change to Size	Target Infrastructure Completion
Location	Lot Type	Acres	Type	Height Allowed	Building Height			Units	Units	Sale	(rental)	(For-Sale)	(For-Sale)	(For-Sale)	(For-Sale)	(For-Sale)	or Location?	Date
IC4.3	Authority		Mid Rise	240	70	99.68					140						No	202
IC4.4	Developer	0.80	Tower	315	315	248.47	200	200	10	For Sale				10				
		2.24				452.00	240	200	4.0		110							
Block Subtotal		2.21				153.89	340	200	10)	140			10	1			
Major Phase	1																	
Sub-Phase	1D																	
Block	IC1																	
DIOCK	All Lot								Market Rate	- Units							Author	rity Units
	All Lot	3							IVIAI KCE NACE	Comes							Addition	Target
Residential Project								Number			Number Incl	Number Incl	Number Incl	Number Incl	Number Incl	Number Incl		Infrastructure
Lot Number and			Anticipted Product	Max Building	Anticipated		Total Developer	Market Rate	Number Incl	Rental or For-	Units @ 60%	Units @ 80%	Units @ 90%	Units @ 100%	Units @ 110%		Change to Size	
Location	Lot Type	Acres	Туре	_	Building Height	Density (DUA)	Unit Count	Units	Units	Sale	(rental)	(For-Sale)	(For-Sale)	(For-Sale)	(For-Sale)	(For-Sale)	or Location?	Date
IC1.2	Auction		Mid Rise	240	70	100.82	58	55	3	For Sale				3				
IC1.3	Developer	0.65		240	240	232.10	150	143		For Sale				7				
Block Subtotal		1.22				170.27	208	198	10)				10				
Major Phase	1																	
Sub-Phase	1D																	
Block	IC2																	
	All Lot	S							Market Rate	e Units							Author	rity Units
																		Target
Residential Project								Number			Number Incl	Number Incl	Number Incl	Number Incl	Number Incl	Number Incl		Infrastructure
Lot Number and			Anticipted Product	Max Building	Anticipated		Total Developer	Market Rate	Number Incl	Rental or For-	Units @ 60%	Units @ 80%	Units @ 90%	Units @ 100%	Units @ 110%	_	Change to Size	Completion
Location	Lot Type	Acres	Туре	Height Allowed			Unit Count	Units	Units	Sale	(rental)	(For-Sale)	(For-Sale)	(For-Sale)	(For-Sale)	(For-Sale)	or Location?	Date
IC2.1	Auction		Tower	240	240	222.78	160	152	8	For Sale				8				
IC2.2	Developer		Mid Rise	240	70	90.27	40			Rental	3							
1C2.3	Developer	0.51	Low Rise	240	70	97.66	50	47	3	Rental	3							
Disable business		4.67				1.40.44	250	100										
Block Subtotal		1.67				149.41	250	199	11	L	6			8				
Major Dhasa	1																	
Major Phase Sub-Phase	1 1F			+														
Block	E1			1														
DIOCK	All Lot			1	1	<u> </u>	1		Market Rate	Units	1	<u> </u>	<u> </u>	<u> </u>	1	<u> </u>	Author	rity Units
	All Lot	3							IVIAI KCE NACE	Comes							Adtion	Target
Residential Project								Number			Number Incl	Number Incl	Number Incl	Number Incl	Number Incl	Number Incl		Infrastructure
Lot Number and			Anticipted Product	Max Building	Anticipated		Total Developer	Market Rate	Number Incl	Rental or For-	Units @ 60%	Units @ 80%	Units @ 90%	Units @ 100%			Change to Size	
Location	Lot Type	Acres	Type		Building Height	Density (DUA)	Unit Count	Units	Units	Sale	(rental)	(For-Sale)	(For-Sale)	(For-Sale)	(For-Sale)	(For-Sale)	or Location?	Date
E1.1	Auction		Mid Rise	240	60			114		For Sale	, 223.,	, ,, ,,,,,	, 5. 53.6,	6	(2. 23.0)	,,		
E1.2	Authority		Low Rise	240	65		115	0		Rental	115						No	202
	-,									1								
Block Subtotal		2.35				100.13	235.14	114	6	5	115			6				
							1		1	1	1	1	1	1	1	1	1	+
	1																	
Major Phase	1																	
	1 1F E2																	

6.3 APPENDIX C: SUB-PHASE HOUSING DATA TABLE

Major Phase	1																	
Sub-Phase	1A																	
Block	B2																	
	All Lot	S			1		1		Market Rate	Units		1		1			Authori	
																		Target
Residential Project								Number			Number Incl	Number Incl	Number Incl	Number Incl	Number Incl	Number Incl		Infrastructure
Lot Number and			Anticipted Product	Max Building	Anticipated		Total Developer	Market Rate	Number Incl	Rental or For-	Units @ 60%	Units @ 80%	Units @ 90%	Units @ 100%	Units @ 110%	Units @ 120%	Change to Size	Completion
Location	Lot Type	Acres	Туре	Height Allowed				Units	Units	Sale	(rental)	(For-Sale)	(For-Sale)	(For-Sale)	(For-Sale)	(For-Sale)	or Location?	Date
B2A	Developer	0.74	Low Rise / Mid Rise	50	50	41.14	30	27	3	Rental	3							
Block Subtotal		0.74				41.14	30.40	27.40	3.00		3.00							
Major Phase	1																	
Sub-Phase	1A																	
Block	B3																	
	All Lot	S		T.	TI.	T	TI.		Market Rate	Units		TP.		TP.			Authori	·
																		Target
Residential Project								Number			Number Incl	Number Incl	Number Incl	Number Incl	Number Incl	Number Incl		Infrastructure
Lot Number and			Anticipted Product	Max Building	Anticipated		Total Developer	Market Rate	Number Incl	Rental or For-	Units @ 60%	Units @ 80%	Units @ 90%	Units @ 100%	Units @ 110%	Units @ 120%	Change to Size	Completion
Location	Lot Type	Acres	Туре	Height Allowed			Unit Count	Units	Units	Sale	(rental)	(For-Sale)	(For-Sale)	(For-Sale)	(For-Sale)	(For-Sale)	or Location?	Date
B3A	JV	1.14	Low Rise	50 / 85	50	40.13	46	41	5	For Sale				5				
Block Subtotal		1.14				40.13	45.60	40.60	5.00	For Sale	-	-	-	5.00				
		1.14				40.13	45.60	40.60	5.00	For Sale	-	-	-	5.00				
Block Subtotal Major Phase	1	1.14				40.13	45.60	40.60	5.00	For Sale	-	-	-	5.00				
	1 1A	1.14				40.13	45.60	40.60	5.00	For Sale	-	-	-	5.00				
Major Phase	1 1A M1A	1.14				40.13	45.60	40.60	5.00	For Sale	-	-	-	5.00				
Major Phase Sub-Phase						40.13	45.60	40.60	5.00 Market Rate		-	-	-	5.00			Authori	ty Units
Major Phase Sub-Phase	M1A					40.13	45.60	40.60			-	-	-	5.00			Authori	ty Units Target
Major Phase Sub-Phase	M1A					40.13	45.60	40.60 Number			- Number Incl	- Number Incl	- Number Incl	5.00 Number Incl	Number Incl	Number Incl	Authori	,
Major Phase Sub-Phase Block	M1A		Anticipted Product	Max Building	Anticipated	40.13	45.60 Total Developer								Number Incl Units @ 110%	Number Incl Units @ 120%	Authori Change to Size	Target
Major Phase Sub-Phase Block Residential Project	M1A		Anticipted Product Type		Anticipated Building Height		Total Developer	Number	Market Rate	Units	Number Incl	Number Incl	Number Incl	Number Incl				Target Infrastructure
Major Phase Sub-Phase Block Residential Project Lot Number and	M1A All Lot	S					Total Developer	Number Market Rate	Market Rate	Units Rental or For-	Number Incl Units @ 60%	Number Incl Units @ 80%	Number Incl Units @ 90%	Number Incl Units @ 100%	Units @ 110%	Units @ 120%	Change to Size	Target Infrastructure Completion
Major Phase Sub-Phase Block Residential Project Lot Number and	M1A All Lot	s Acres					Total Developer Unit Count	Number Market Rate Units	Market Rate Number Incl Units	Units Rental or For-	Number Incl Units @ 60%	Number Incl Units @ 80%	Number Incl Units @ 90%	Number Incl Units @ 100%	Units @ 110%	Units @ 120%	Change to Size	Target Infrastructure Completion
Major Phase Sub-Phase Block Residential Project Lot Number and Location	M1A All Lot Lot Type	s Acres	Туре	Height Allowed	Building Height	Density (DUA)	Total Developer Unit Count	Number Market Rate Units	Market Rate Number Incl Units	Rental or For- Sale	Number Incl Units @ 60%	Number Incl Units @ 80%	Number Incl Units @ 90%	Number Incl Units @ 100%	Units @ 110%	Units @ 120%	Change to Size	Target Infrastructure Completion
Major Phase Sub-Phase Block Residential Project Lot Number and Location	M1A All Lot Lot Type	s Acres	Туре	Height Allowed	Building Height	Density (DUA)	Total Developer Unit Count	Number Market Rate Units	Market Rate Number Incl Units	Rental or For- Sale	Number Incl Units @ 60%	Number Incl Units @ 80%	Number Incl Units @ 90%	Number Incl Units @ 100%	Units @ 110%	Units @ 120%	Change to Size	Target Infrastructure Completion
Major Phase Sub-Phase Block Residential Project Lot Number and Location M1A	M1A All Lot Lot Type	Acres	Туре	Height Allowed	Building Height	Density (DUA)	Total Developer Unit Count	Number Market Rate Units	Market Rate Number Incl Units	Rental or For- Sale	Number Incl Units @ 60%	Number Incl Units @ 80%	Number Incl Units @ 90%	Number Incl Units @ 100%	Units @ 110%	Units @ 120%	Change to Size	Target Infrastructure Completion
Major Phase Sub-Phase Block Residential Project Lot Number and Location M1A	M1A All Lot Lot Type	Acres	Туре	Height Allowed	Building Height	Density (DUA)	Total Developer Unit Count	Number Market Rate Units	Market Rate Number Incl Units	Rental or For- Sale	Number Incl Units @ 60%	Number Incl Units @ 80%	Number Incl Units @ 90%	Number Incl Units @ 100%	Units @ 110%	Units @ 120%	Change to Size	Target Infrastructure Completion
Major Phase Sub-Phase Block Residential Project Lot Number and Location M1A Block Subtotal	M1A All Lot Lot Type JV 1 1A	Acres	Туре	Height Allowed	Building Height	Density (DUA)	Total Developer Unit Count	Number Market Rate Units	Market Rate Number Incl Units	Rental or For- Sale	Number Incl Units @ 60%	Number Incl Units @ 80%	Number Incl Units @ 90%	Number Incl Units @ 100%	Units @ 110%	Units @ 120%	Change to Size	Target Infrastructure Completion
Major Phase Sub-Phase Block Residential Project Lot Number and Location M1A Block Subtotal Major Phase	M1A All Lot Lot Type JV	Acres	Туре	Height Allowed	Building Height	Density (DUA)	Total Developer Unit Count	Number Market Rate Units	Market Rate Number Incl Units	Rental or For- Sale	Number Incl Units @ 60%	Number Incl Units @ 80%	Number Incl Units @ 90%	Number Incl Units @ 100%	Units @ 110%	Units @ 120%	Change to Size	Target Infrastructure Completion
Major Phase Sub-Phase Block Residential Project Lot Number and Location M1A Block Subtotal Major Phase Sub-Phase	M1A All Lot Lot Type JV 1 1A	Acres 1.32 1.32	Туре	Height Allowed	Building Height	Density (DUA)	Total Developer Unit Count	Number Market Rate Units	Market Rate Number Incl Units	Rental or For- Sale	Number Incl Units @ 60%	Number Incl Units @ 80%	Number Incl Units @ 90%	Number Incl Units @ 100%	Units @ 110%	Units @ 120%	Change to Size	Target Infrastructure Completion Date
Major Phase Sub-Phase Block Residential Project Lot Number and Location M1A Block Subtotal Major Phase Sub-Phase	M1A All Lot Lot Type JV 1 1A M1B	Acres 1.32 1.32	Туре	Height Allowed	Building Height	Density (DUA)	Total Developer Unit Count	Number Market Rate Units	Market Rate Number Incl Units	Rental or For- Sale	Number Incl Units @ 60%	Number Incl Units @ 80%	Number Incl Units @ 90%	Number Incl Units @ 100%	Units @ 110%	Units @ 120%	Change to Size or Location?	Target Infrastructure Completion Date
Major Phase Sub-Phase Block Residential Project Lot Number and Location M1A Block Subtotal Major Phase Sub-Phase	M1A All Lot Lot Type JV 1 1A M1B	Acres 1.32 1.32	Туре	Height Allowed	Building Height	Density (DUA)	Total Developer Unit Count	Number Market Rate Units	Market Rate Number Incl Units	Rental or For- Sale	Number Incl Units @ 60%	Number Incl Units @ 80%	Number Incl Units @ 90%	Number Incl Units @ 100%	Units @ 110%	Units @ 120%	Change to Size or Location?	Target Infrastructure Completion Date
Major Phase Sub-Phase Block Residential Project Lot Number and Location M1A Block Subtotal Major Phase Sub-Phase Block	M1A All Lot Lot Type JV 1 1A M1B	Acres 1.32 1.32	Туре	Height Allowed 315 Max Building	Building Height 300 Anticipated	Density (DUA) 250.00 250.00	Total Developer Unit Count	Number Market Rate Units 330	Market Rate Number Incl Units	Rental or For- Sale	Number Incl Units @ 60% (rental)	Number Incl Units @ 80% (For-Sale)	Number Incl Units @ 90% (For-Sale)	Number Incl Units @ 100% (For-Sale)	Units @ 110% (For-Sale)	Units @ 120% (For-Sale)	Change to Size or Location?	Target Infrastructure Completion Date
Major Phase Sub-Phase Block Residential Project Lot Number and Location M1A Block Subtotal Major Phase Sub-Phase Block Residential Project	M1A All Lot Lot Type JV 1 1A M1B	Acres 1.32 1.32	Tower	Height Allowed 315 Max Building	Building Height 300	Density (DUA) 250.00 250.00	Total Developer Unit Count 330	Number Market Rate Units 330 330 Number	Market Rate Number Incl Units Market Rate	Rental or For- Sale For Sale	Number Incl Units @ 60% (rental)	Number Incl Units @ 80% (For-Sale)	Number Incl Units @ 90% (For-Sale)	Number Incl Units @ 100% (For-Sale)	Units @ 110% (For-Sale)	Units @ 120% (For-Sale)	Change to Size or Location? Authori	Target Infrastructure Completion Date ty Units Target Infrastructure

SUB-PHASE APPLICATION 3: SUB-PHASES 1A, 1D, 1F, 1G, 1H, 1I

6.4 APPENDIX D: SUB-PHASE COST ESTIMATES

Item	Subareas 1A, 1G & 1H (Stage 2)	Subareas 1D, 1F & 1I (Stage 3)
Mobilization		
Mobilization	\$551,409	\$180,557
Subtotal Mobilization	\$551,409	\$180,557
Grading		
Earthwork	\$1,273,542	\$112,589
Subtotal Grading	\$1,273,542	\$112,589
Street Improvements	640.442.722	ć4 000 047
Streets and Roads	\$19,142,723	\$1,980,817
Streetscape Subtotal Street Improvements	\$19,142,723	\$1,980,817
Subtotal Street improvements	\$13,142,723	\$1,960,617
Storm Drain		
Storm Drain System	\$10,047,031	\$1,073,536
Subtotal Storm Drain		\$1,073,536
		, , ,
Sanitary Sewer		
Separated Sanitary Sewer System	\$7,232,746	\$769,262
Subtotal Sanitary Sewer	\$7,232,746	\$769,262
Water Supply (Low Pressure)		
Low Pressure Water System	\$3,744,306	\$412,493
Subtotal Water Supply (Low Pressure)	\$3,744,306	\$412,493
Supplemental Water Supply System		
Supplemental Water Supply System	\$1,103,862	
Subtotal Supplemental Water Supply System	1	\$0
Subtotal Supplemental Water Supply System	V1,103,002	γo
Recycled Water Supply System		
Recycled Water Supply System	\$3,552,381	\$338,954
Subtotal Recycled Water Supply System	\$3,552,381	\$338,954
Electrical / Telcom / Gas		
Joint Trench	\$4,135,119	
Subtotal Joint Trench	\$4,135,119	\$0
Geotechnical Mitigation	400 000 000	4= === ===
Soil Stabilization	\$30,080,000	\$7,520,000
Subtotal Geotechnical Mitigation	\$30,080,000	\$7,520,000
Parks and Open Space		
Clipper Cove Promenade 2	\$4,640,000	
Eastside Commons 1	\$1,735,000	
Eastside Commons 2	, , , , , , ,	\$1,735,000
Eastside Commons 3		\$1,735,000
Eastern Shoreline Park 1		\$6,400,000
Building 2 Plaza	\$2,500,000	
Building 3 Plaza	\$4,700,000	
Stormwater Gardens	\$2,715,000	\$1,280,000
Subtotal Parks and Open Space	\$16,290,000	\$11,150,000
Miscellaneous	A	
Demolition, Site Prep, and Abatement	\$2,988,692	*****
Temporary Utilities	\$442,659	\$144,307
Subtotal Miscellaneous	\$3,431,350	\$144,307
Subtotal	\$100,584,468	\$23,682,514
Subtotal	7100,364,406	ŞZ3,U6Z,314
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6.5 APPENDIX E: CORPORATE GUARANTY

The Developer must provide a Guaranty to secure its obligations for each Sub-Phase no later than 30 days after approval of that Sub-Phase, the proposed form of which is included herein. For this Sub-Phase Application 3, the Developer proposes to provide a Corporate Guaranty equal to 125% of the cost of completion of the obligations. Prior to acceptance of TICD's Corporate Guaranty, TICD will assign its SP2 interests in the DDA to Treasure Island Series 2, LLC, who will execute the obligations and serve as the Developer for the Guaranty. Treasure Island Series 2, LLC is a wholly owned subsidiary of TICD.

GUARANTY AGREEMENT (TREASURE ISLAND/YERBA BUENA ISLAND)

This GUARANTY AGREEMENT (TREASURE ISLAND/YERBA BUENA ISLAND) (this "Guaranty") dated as of _______, 2015 (the "Effective Date"), is made by TREASURE ISLAND COMMUNITY DEVELOPMENT, LLC, a California limited liability company ("Guarantor"), to and for the benefit of the TREASURE ISLAND DEVELOPMENT AUTHORITY, a California non-profit public benefit corporation (the "Authority"). Unless otherwise defined in this Guaranty, all initially capitalized terms used in this Guaranty shall have the meanings given to them in the DDA (as defined below).

This Guaranty is made with reference to the following facts and circumstances:

RECITALS

- B. In accordance with the DDA, the Authority has given a Sub-Phase Approval dated ______, 2015 for the Sub-Phase commonly known as ______ (as more particularly described in the Sub-Phase Approval and Sub-Phase Application therefor, the "Guaranteed Sub-Phase").
- C. Guarantor will derive material financial benefit from the DDA and the taking of actions in accordance with the DDA under which the obligation to provide this Guaranty arose. In accordance with section 26.4 of the DDA, Guarantor is willing to provide this Guaranty to the Authority.

AGREEMENT

ACCORDINGLY, in consideration of the matters described in the above Recitals, and for other good and valuable consideration, the receipt and sufficiency of which are mutually acknowledged, Guarantor agrees as follows:

1. Guaranty

1.1 Guaranty. Guarantor unconditionally and irrevocably guarantees to the Authority the due and punctual payment (and not merely the collectability) and performance of the Guaranteed Obligations (as defined below), as and when the same shall become due and/or payable, on the terms provided in this Guaranty. The Authority may make a claim under this Guaranty for payment and/or performance of the Guaranteed Obligations by Guarantor only

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upon and during the continuance of an Event of Default by Developer under the DDA for failure to fulfill the Guaranteed Obligations. In addition, Guarantor shall pay, and upon the Authority's request shall reimburse the Authority promptly for, all costs and expenses actually incurred by the Authority to enforce the Authority's rights, powers or remedies under this Guaranty (including reasonable collection charges and Attorneys' Fees and Costs (as defined below)) (together with any late payment interest on amounts due as set forth below, the "Reimbursement Amount"). With respect to Guaranteed Obligations that constitute payment (i.e., not performance) obligations under the DDA, any amount due and payable by Guarantor under this Guaranty but not paid within sixty (60) days after receipt of the Authority's written demand therefor shall be accompanied by interest on such amounts at the lesser of ten percent (10%) per annum or the maximum amount permitted by law, calculated from the date of Guarantor's receipt of the Authority's written demand therefor through and including the date of payment of such amounts (calculated on the basis of a 365-day year and for the actual number of days elapsed). With respect to Guaranteed Obligations that constitute performance (i.e., not payment) obligations, to the extent that the Authority makes a claim under this Guaranty for performance of the Guaranteed Obligations the period for performance under the DDA shall be extended as reasonably necessary to permit Guarantor to undertake such performance in an orderly and timely manner.

1.2 Definition of Guaranteed Obligations. As used herein, "Guaranteed **Obligations**" means all of Developer's obligations under the DDA with respect to the Guaranteed Sub-Phase, including Developer's obligation to Complete all of the Infrastructure, Stormwater Management Controls, Required Improvements and Associated Public Benefits associated with that Sub-Phase, which obligations include but are not limited to all hard and soft costs relating to construction of such Infrastructure, Stormwater Management Controls, Required Improvements and Associated Public Benefits, and all work required to be performed by Developer to Complete such Infrastructure, Stormwater Management Controls, Required Improvements and Associated Public Benefits such as land assembly, mapping, and performance under the Land Acquisition Agreements, but excluding the payment of the Financial Obligations and all Indemnification obligations, each of which are secured by the applicable Base Security; provided, however, that under no circumstances shall the aggregate liability of Guarantor for the Guaranteed Obligations, excluding the Reimbursement Amount, exceed \$ [insert Sub-Phase Construction Secured Amount determined under section 26.4 (the "Secured Amount"). Without limiting the generality of the preceding sentence, to the extent the Guaranteed Obligations include a guaranty of performance, Guarantor shall not be obligated to incur obligations or spend funds for the Guaranteed Obligations that, in the aggregate (including payment obligations to the Authority for the Guaranteed Obligations), exceed the Secured Amount.

1.3 Acknowledgments by Guarantor. Guarantor acknowledges, confirms, and agrees that: (a) it has received fair and adequate consideration for its execution of this Guaranty; (b) it derived material financial benefit from the Authority's execution of the DDA and the Authority's actions under which the obligation to provide this Guaranty arose; and (c) there are no conditions to the full effectiveness of this Guaranty other than those expressly set forth in this Guaranty.

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1.4 Independent Obligations; Continuing Guaranty. This Guaranty is a primary and original payment and performance obligation of Guarantor and is absolute, unconditional, continuing and irrevocable.

2. Waivers by Guarantor

2.1 Waivers. Guarantor hereby waives: (a) notice of acceptance of this Guaranty; (b) demand of payment, notice of nonperformance, notice of dishonor, presentation, protest, and indulgences and (except as specifically provided in this Guaranty) notices of any kind whatsoever; (c) any right to assert or plead any statute of limitations relating to this Guaranty and the DDA (and Guarantor agrees that any act that tolls any statute of limitations applicable to the DDA will operate similarly to toll the statute of limitations applicable to Guarantor's liability hereunder); (d) any right to require the Authority to proceed against Developer or any other person or entity liable to the Authority except to the extent expressly set forth in the DDA; (e) any right to require the Authority to apply to the cure of any default any letter of credit or other security it may hold under the DDA, except to the extent expressly set forth in the DDA; (f) until the Guaranteed Obligations have been satisfied in full, any right of subrogation; (g) any right to require the Authority to pursue or enforce any remedy that the Authority now has or may later have against Developer or any other person or entity; (h) any right to participate in any letter of credit or other security now or later held by the Authority; and (i) any defense that may arise by the reason of: (1) the incapacity, lack of authority, death, disability or other defense of Developer or any other person or entity; (2) the revocation or repudiation of this Guaranty by Guarantor; (3) failure of the Authority to file or enforce a claim against the estate (either in administration, bankruptcy or any other proceeding) of Developer or any others; (4) any election by the Authority in any proceeding instituted under the United States Bankruptcy Code, as amended (11 U.S.C. §§ 101, et seq.); (5) any borrowing or granting of a security interest under section 364 of the United States Bankruptcy Code; (6) the Authority's election of any remedy against Guarantor or Developer or any other party to the extent permitted hereunder or under the DDA; (7) the Authority's taking, modification, or releasing of any collateral or guarantees, or any failure to perfect any security interest in, or the taking of or failure to perfect any other action with respect to any collateral securing performance of obligations under the DDA; (8) any amendment or modification of the DDA or related documents, whether or not known or consented to by Guarantor; or (9) any offset by Guarantor against any obligation now or later owed to Guarantor by Developer or any other person or entity, it being the intention of this Guaranty that Guarantor remain liable to the full extent set forth in this Guaranty until the full performance of each and every term, condition and covenant of the DDA to be performed with respect to the Guaranteed Obligations, notwithstanding any act, omission or thing that might otherwise operate as a legal or equitable discharge of Guarantor. Without limiting the generality of the foregoing, Guarantor expressly waives any and all benefits under California Civil Code sections 2809, 2810, 2819, 2839, 2845, 2846, 2848, 2849, 2850, 2855, 2899 and 3433.

Without limiting the foregoing, Guarantor understands and acknowledges that if the Authority exercises any rights under the DDA or any related agreements, then the exercise of such rights could impair or destroy any ability that Guarantor may have to seek reimbursement, contribution or indemnification from Developer or others based on any right Guarantor may have of subrogation, reimbursement, contribution or indemnification for any amounts paid or cost

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incurred by Guarantor under this Guaranty. Guarantor further understands and acknowledges that in the absence of this Section 2.1, such potential impairment or destruction of Guarantor's rights, if any, may entitle Guarantor to assert a defense to this Guaranty based on law or in equity, including, in the case of any real property security, section 580d of the California Code of Civil Procedure as interpreted in Union Bank v. Gradsky, 265 Cal. App. 2d 40 (1968). By executing this Guaranty, Guarantor freely, irrevocably, absolutely and unconditionally: (i) waives and relinquishes that defense and agrees that Guarantor will be fully liable under this Guaranty even though the Authority may exercise any right or remedy under the DDA, including any act judicially or nonjudicially against any real property security; (ii) agrees that Guarantor will not assert that defense in any action or proceeding which the Authority may commence to enforce this Guaranty; (iii) agrees that the rights and defenses waived by Guarantor under this Guaranty include any right or defense that Guarantor may have or be entitled to assert based on or arising out of law or equity, including any one or more of sections 580a, 580b, 580d or 726 of the California Code of Civil Procedure; (iv) waives notice of default, acceleration, protest or dishonor; (v) waives any notice of sale or other disposition of any security; (vi) waives notice of acceptance of this Guaranty and of the existence, creation or incurring of new or additional guaranteed obligations, and all other notices of any kind with respect to any Guaranteed Obligations except for any notice required to be given to Guarantor under this Guaranty; and (vii) agrees that the Authority relied on these waivers in entering into the DDA and taking the actions under which the obligation to provide this Guaranty arose and that these waivers are a material part of the consideration that the Authority is receiving in connection with such acts.

2.2 Waiver of Subrogation. Subject to the waivers set forth in Section 2.1, upon satisfaction in full of all of the Guaranteed Obligations, Guarantor shall be subrogated to the rights of the Authority against Developer or others with respect to the Guaranteed Obligations, and the Authority agrees to take such steps as Guarantor may reasonably request to implement such subrogation (provided Guarantor shall pay the Authority all costs actually incurred with respect thereto pursuant to the DDA and that the Authority shall not incur any liabilities in taking any such steps).

3. Consents by Guarantor

3.1 Consents; No Discharge of Obligations. Without releasing, discharging, impairing, or otherwise affecting any obligations of Guarantor under this Guaranty or the validity or enforceability of this Guaranty, the Authority, by action or inaction, in its sole and absolute discretion and without notice to Guarantor, may refuse or fail to enforce all or any portion of the Authority's rights, powers or remedies under this Guaranty, the DDA or any related documents. The Authority, in its sole and absolute discretion and without notice to Guarantor may additionally: (a) compromise, settle, extend the time for payment or performance of all or any part of the Guaranteed Obligations; and (b) deal in all respects with Guarantor as if this Guaranty were not in effect. It is the intent of Guarantor and the Authority that Guarantor shall remain liable for the payment and performance of the Guaranteed Obligations and all other obligations guaranteed hereby to the extent set forth herein, notwithstanding any act or thing that might otherwise operate as a legal or equitable discharge of a surety.

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- 3.2 Payments to Other Persons. The Authority shall be under no obligation to marshal any assets in favor of Guarantor or against, or in payment or performance of, any or all of the Guaranteed Obligations. If all or any part of any payment to or for the benefit of the Authority in respect of the Guaranteed Obligations is invalidated, declared to be fraudulent or preferential, set aside, or required for any reason to be repaid or paid over to a trustee, receiver or other person (a "trustee") under any insolvency law or any other law or rule of equity (collectively, "set aside"), to the extent of that payment or repayment, the Guaranteed Obligations (or the part thereof) intended to have been satisfied shall be revived and continued in full force and effect as if that payment had not been made, and Guarantor shall be primarily liable for that obligation, provided that nothing hereunder shall preclude Guarantor from obtaining a refund from a trustee.
- 3.3 Additional Rights. This Guaranty is in addition to, and not in substitution for or in reduction of, any other guaranty by Guarantor, or any obligation of Guarantor under any other agreement or applicable law that may now or hereafter exist in favor of the Authority. Except as may be expressly provided to the contrary in the DDA, the liability of Guarantor under this Guaranty shall not be contingent upon the enforcement of any lien or realization upon the security, if any, the Authority may at any time possess with respect to the Guaranteed Obligations. Nothing herein shall limit the obligations of Developer or others under the DDA.
- 3.4 Recourse. The Authority shall have the right to seek recourse against Guarantor to the full extent provided for in this Guaranty, which right shall be absolute and shall not in any way be impaired, deferred, or otherwise diminished by reason of any inability of the Authority to claim any amount of such Guaranteed Obligation from Guarantor or Developer or others as a result of bankruptcy or otherwise, including any limitation on the Authority's claim from Guarantor or Developer or others under section 502(b)(6) of the United States Bankruptcy Code. No election to proceed in one form of action or proceeding, or against any person or entity, or on any obligation, will constitute a waiver of the Authority's right to proceed in any form of action or proceeding or against other persons or entities unless the Authority has expressly waived that right in writing.

4. Representations and Warranties of Guarantor

- **4.1 Representations and Warranties**. Guarantor represents and warrants to the Authority that it has full power and authority to execute, deliver and perform its obligations under this Guaranty, and that execution, delivery and performance have been duly authorized by all requisite action on its part.
- **4.2 Independent Investigation**. Guarantor represents and warrants to the Authority that Guarantor has performed its own independent investigation as to the matters covered by this Guaranty.

5. Termination of Guaranty

5.1 *Release/Termination*. (a) <u>Partial Release</u>. Upon request by Guarantor and approval by the Authority Director (which approval will not be unreasonably withheld,

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conditioned or delayed), Guarantor's liability under this Guaranty shall be proportionately reduced upon partial satisfaction of the Guaranteed Obligations by an amount equal to the cost of specified components of the Guaranteed Obligations when such components are fulfilled, except to the extent Authority has received notice by Developer in accordance with section 16.5.4 of the DDA that the amount of the Guaranty is to be retained by the Authority to the extent necessary to satisfy the requirements for recordation of the Reverter Release.

- <u>Termination</u>. Guarantor's liability under this Guaranty shall be terminated, discharged and satisfied, and Guarantor shall be relieved of any and all further obligations under this Guaranty for the Guaranteed Obligations upon the complete satisfaction of the obligation secured thereby, as evidenced by the issuance of Developer's last Certificate of Completion with respect to the Guaranteed Sub-Phase, and payment in full of any then outstanding Reimbursement Amount related thereto in accordance with this Guaranty; provided, that (1) if the Authority records the Reversionary Quitclaim Deed with respect to the real property in the Guaranteed Sub-Phase, then this Guaranty shall be terminated as set forth in section 16.5.1(c) of the DDA, and (2) if the Authority terminates the DDA with respect to the Guaranteed Sub-Phase before the issuance of Developer's last Certificate of Completion for that Sub-Phase, then this Guaranty shall be terminated when the Guaranteed Obligations that relate to the period before such termination have been Completed (or, if applicable, upon and in accordance with a final, unappealable judicial determination). Guarantor's liability under this Guaranty shall also be terminated, discharged and satisfied in whole or in applicable part, and Guarantor shall be relieved of any and all further obligations under this Guaranty for all or the applicable part of the Guaranteed Obligations if Developer substitutes this Guaranty, or any portion thereof, with another form of Adequate Security that meets all of the requirements or Approvals needed for it to be Adequate Security as defined in the DDA.
- **5.2 Evidence of Termination**. Following any such termination and upon Guarantor's request, the Authority shall confirm in writing the fact of termination of this Guaranty and promptly return this Guaranty to Guarantor (or, if requested by Guarantor, to Developer).

6. Notices

- (a) A notice or communication under this Guaranty by either Guarantor or the Authority to the other shall be sufficiently given or delivered if given in writing and dispatched by hand, by registered or certified mail, postage prepaid, or by a recognized overnight carrier, such as Federal Express, addressed as follows:
 - (i) In the case of a notice or communication to the Authority:

Treasure Island Development Authority c/o Office of Economic and Workforce Development City Hall, Rm. 448
1 Dr. Carlton B. Goodlett Place San Francisco, California 94102

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Attn: Treasure Island Project Director

Facsimile: 415.554.6018

And to:

Office of the City Attorney City Hall, Rm. 234 1 Dr. Carlton B. Goodlett Place San Francisco, California 94102 Attn: Real Estate/Finance

Facsimile: 415.554.4755

(ii) In the case of a notice or communication sent to Guarantor:

Treasure Island Community Development, LLC c/o Lennar Urban
One Sansome Street, Suite 3200
San Francisco, California 94104
Attn: Kofi Bonner

And to:

Treasure Island Community Development, LLC c/o Wilson Meany Sullivan LLC 4 Embarcadero Ctr., Suite 3330 San Francisco, California 94111 Attn: Chris Meany

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And to:

Paul Hastings LLP 55 Second Street, 24th Floor San Francisco, California 94105 Attn: David A. Hamsher, Esq. Facsimile: 415.856.7123

And to:

Gibson, Dunn & Crutcher 555 Mission Street, Suite 3000 San Francisco, CA 94105 Attn: Mary G. Murphy Facsimile: (415) 374-8480

For convenience, copies of notices may also be given by facsimile.

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Every notice pursuant to the terms of this Guaranty must be in writing and must state (or must be accompanied by a cover letter that states) substantially the following:

- (b) the <u>Section</u> of this Guaranty pursuant to which the notice is given and the action or response required, if any;
- (c) if applicable, the period of time within which the recipient of the notice must respond thereto;
- (d) if approval is being requested, that it is a "Request for Approval under Guaranty Agreement"; and
- (e) if it provides notice of a disapproval or an objection that requires reasonableness, specifically and with particularity the reasons therefor.

Any mailing address or facsimile number may be changed at any time by giving written notice of such change in the manner provided above at least ten (10) days before the effective date of the change. All notices under this Guaranty will be deemed given, received, made or communicated on the date personal receipt actually occurs or, if mailed or delivered by a recognized carrier, on the delivery date or attempted delivery date shown on the return receipt or in the records of such carrier, as applicable. Official or binding notice may not be given by facsimile. The effective time of a notice shall not be affected by the receipt, before receipt of the original, of a facsimile copy of the notice.

7. General Provisions

- **7.1** Successors and Assigns. This Guaranty will be binding upon, and inure to the benefit of, Guarantor and the Authority and their respective successors, heirs, administrators and assigns.
- **7.2 Amendments**. This Guaranty may be amended or modified only by a written instrument executed by the Authority and Guarantor.
- 7.3 Waivers. No action taken pursuant to this Guaranty by the Authority shall be deemed to be a waiver by the Authority of Guarantor's compliance with any of the provisions hereof. No waiver by the Authority of any breach of any provision of this Guaranty shall be construed as a waiver by the Authority of any subsequent or different breach. No forbearance by the Authority to seek a remedy for noncompliance hereunder or breach by Guarantor shall be construed as a waiver by the Authority of any right or remedy with respect to such noncompliance or breach.
- **7.4 Continuation and Survival of Covenants**. All covenants by Guarantor contained herein shall be deemed to be material and shall survive any termination of the DDA or a portion thereof if the Guaranteed Obligations have arisen and not been satisfied as of the date of any such termination.

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 Sub-Phase
- 7.5 Governing Law; Selection of Forum. This Guaranty shall be governed by and construed in accordance with the laws of the State of California. As part of the consideration for the DDA and the Authority's actions under which the obligation to provide this Guaranty arose, Guarantor agrees that all actions or proceedings arising directly or indirectly under this Guaranty may, at the sole option of the Authority, be litigated in courts located within the State of California, and Guarantor expressly consents to the jurisdiction of any such local, state or federal court, and consents that any service of process in such action or proceeding may be made by personal service upon Guarantor wherever Guarantor may then be located, or by certified or registered mail directed to Guarantor at the address set forth in this Guaranty for the delivery of notices.
- 7.6 Merger of Prior Agreements. Guarantor and the Authority intend that this Guaranty shall be the final expression of their agreement with respect to the subject matter hereof and may not be contradicted by evidence of any prior or contemporaneous oral or written agreements or understandings. Guarantor and the Authority further intend that this Guaranty shall constitute the complete and exclusive statement of its terms and that no extrinsic evidence whatsoever (including prior drafts or changes therefrom) may be introduced in any judicial, administrative or other legal proceeding involving this Guaranty.
- **Interpretation of Guaranty**. Unless otherwise specified, whenever in this Guaranty reference is made to any Section, or any defined term, the reference shall be deemed to refer to the Section or defined term of this Guaranty. Any reference to a Section includes all subsections and subparagraphs of that <u>Section</u>. The use in this Guaranty of the words "including", "such as" or words of similar import when following any general term, statement or matter shall not be construed to limit such statement, term or matter to the specific items or matters, whether or not language of non-limitation, such as "without limitation" or "but not limited to", or words of similar import, is used with reference thereto, but rather shall be deemed to refer to all other items or matters that could reasonably fall within the broadest possible scope of such statement, term or matter. In the event of a conflict between the Recitals and the remaining provisions of the Guaranty, the remaining provisions shall prevail. Any titles of the several parts and Sections of this Guaranty are inserted for convenience of reference only and shall be disregarded in construing or interpreting any of its provisions. The masculine, feminine or neutral gender and the singular and plural forms include the others whenever the context requires. References to days, months and years mean calendar days, months and years unless otherwise specified. References to any law, specifically or generally, will mean the law as amended, supplemented or superseded from time to time. The provisions of this Guaranty shall be construed as a whole according to their common meaning and not strictly for or against either Guarantor or the Authority in order to achieve the objectives and purposes of Guarantor and the Authority, regardless of who drafted this Guaranty.
- 7.8 Attorneys' Fees and Costs. Should either Guarantor or the Authority institute any action or proceeding in court to enforce any provision hereof or for damages by reason of an alleged breach of any provision of this Guaranty, the prevailing party shall be entitled to receive from the losing party court costs incurred by the prevailing party including expert witness fees and costs and expenses, travel time and associated costs; transcript preparation fees and costs; document copying expenses; exhibit preparation costs; carrier expenses and postage and

Sub-Phase Security	
Sub-Phase	

communications expenses; such amount as a court or other decision maker may adjudge to be reasonable attorneys' fees for the services rendered to the prevailing party in such action or proceeding; fees and costs associated with execution upon any judgment or order; and costs on appeal and any collection efforts (the "Attorneys' Fees and Costs"). For purposes of this Guaranty, the Attorneys' Fees and Costs shall include the fees and costs of in-house counsel for the City, the Authority and Guarantor based on the fees regularly charged by private attorneys with the equivalent number of years of professional experience in the subject matter area of the law for which the City's, the Authority's or Guarantor's in-house counsel's services were rendered who practice in the City and County of San Francisco in law firms with approximately the same number of attorneys as employed by the City, the Authority or Guarantor.

7.9 Severability. Invalidation of any provision of this Guaranty, or of its application to any person or entity, by judgment or court order, will not affect any other provision of this Guaranty or its application to any other person, entity or circumstance, and the remaining portions of this Guaranty shall continue in full force and effect, unless enforcement of this Guaranty as invalidated would be unreasonable or grossly inequitable under all the circumstances or would frustrate the purposes of this Guaranty.

7.10 Substitute Security. (a) Substitute Security. If at any time during the period this Guaranty is in effect, the Net Worth of Guarantor falls below Fifty Million Dollars (\$50,000,000) (the "Net Worth Requirement"), or Guarantor causes or allows to occur a Significant Change (as defined in Section 7.10(b) below) (each, a "Substitute Security Event"), then Guarantor shall notify the Authority and Developer as soon as reasonably practicable. On each five (5) year anniversary of the Effective Date (as defined in the DDA; for avoidance of doubt such Effective Date is), the Net Worth Requirement shall be increased, automatically, by an amount equal to ten percent (10%) of the then current Net Worth Requirement. Upon the occurrence of a Substitute Security Event, Developer is required under section 26.3 of the DDA to supply the Authority with a substitute guaranty (in the form of this Guaranty), an unconditional letter of credit, or other form of security, in each case: (i) in favor of the Authority; (ii) in form and substance, and issued by persons or entities, reasonably satisfactory to the Authority (including satisfaction of the Net Worth Requirement); (iii) in the amount of one hundred percent (100%) of the Guaranteed Obligations up to the Secured Amount; and (iv) to remain in effect until the Guaranteed Obligations are fulfilled, but will be reduced from time to time, in accordance with the release provisions of Section 5.1(a) above ("Substitute Security"). If Developer does not supply the Authority with the Substitute Security within the time period required under the DDA, the Authority shall notify Guarantor and Guarantor shall provide such Substitute Security within ten (10) days after the Authority's notice. Failure of the Authority to give notice of Developer's failure to provide the Substitute Security shall not relieve Guarantor of its obligations hereunder. It shall be a default of Guarantor under this Guaranty, and a default of Developer under the terms of the DDA, if Guarantor fails to provide the Substitute Security within ten (10) days after the Authority's notice. The Authority's sole remedy against Guarantor for Guarantor's failure to provide the Substitute Security in the event Developer does not provide it as required under the DDA will be to require Guarantor to specifically perform its obligation to provide the Substitute Security in the Secured Amount and not to seek damages against Guarantor attributable to such failure;

Sub-Phase Security
Sub-Phase

however, this limitation on remedies shall apply only to Guarantor's failure to provide the Substitute Security in the event Developer fails to provide the Substitute Security as required under the DDA, not to the Authority's rights to enforce this Guaranty generally, and shall not limit the Authority's rights against Developer under the DDA. Upon the Developer or Guarantor providing the Substitute Security required under this Section 7.10(a), the Authority shall promptly return this Guaranty.

- (b) Significant Change. For purposes of Section 7.10(a) above, "Significant Change" means (i) Guarantor files a petition for bankruptcy, or makes a general assignment for the benefit of its creditors, (ii) a receiver is appointed on account of Guarantor's insolvency, (iii) a writ of execution or attachment or any similar process is issued or levied against any bank accounts of Guarantor, or against any property or assets of Guarantor being used or required for use in the development of the Infrastructure or against any substantial portion of any other property or assets of Guarantor unless a writ of execution is dismissed within ninety (90) days and a writ of attachment is dismissed within thirty (30) days, (iv) a final non-appealable judgment is entered against Guarantor in an amount in excess of ten percent (10%) of Guarantor's Net Worth and Guarantor does not satisfy or bond the judgment within twenty (20) days, or (v) without the consent of Guarantor, an application for relief is filed against Guarantor under any federal or state bankruptcy law, unless the application is dismissed within ninety (90) days.
- **7.11 Counterparts**. This Guaranty may be executed in two or more counterparts, each of which shall be deemed an original, but all of which taken together shall constitute one and the same instrument.
- **7.12 No Third Party Beneficiaries**. No person or entity other than the Authority and Guarantor shall have or acquire any right or action of any kind based upon the provisions of this Guaranty.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, Guarantor and the Authority, each being duly authorized, have executed and delivered this Guaranty as of the Effective Date.

GUARANTOR:

TREASURE ISLAND COMMUNITY DEVELOPMENT, LLC, a California limited liability company

UST Lennar HW Scala SF Joint Venture, a Delaware general partnership its co-Managing Member

> By: Name: Kofi Bonner

Title: President

KSWM Treasure Island, LLC, a California limited liability company

its co-Managing Member

WMS Treasure Island Development I, LLC, a Delaware limited liability company its Member

By: Wilson Meany Sullivan LLC,

a California limited liability company its Sole Member and Manager

Name: Christopher Meany Title: Managing Member

[SIGNATURES CONTINUE ON NEXT PAGE]

LEGAL_US_W # 81979292

ACCEPTED AND AGREED:

	AUTHORITY:
APPROVED AS TO FORM: DENNIS J. HERRERA, City Attorney	TREASURE ISLAND DEVELOPMENT AUTHORITY, a California non-profit public benefit corporation
By: Name: Title: Deputy City Attorney	By: Name: Title: Executive Director

LEGAL_US_W # 81979292

6.6 APPENDIX F: 50% INFRASTRUCTURE IMPROVEMENT PLANS

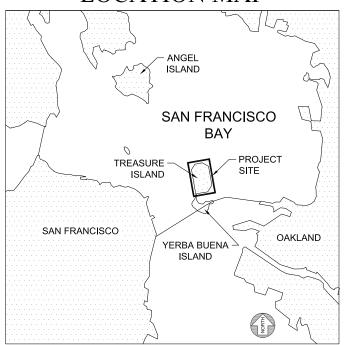
24" x 36" plan set and specifications delivered/available under separate cover. Digital file on enclosed DVD.

STREET IMPROVEMENT PLANS 50% CONSTRUCTION DRAWINGS

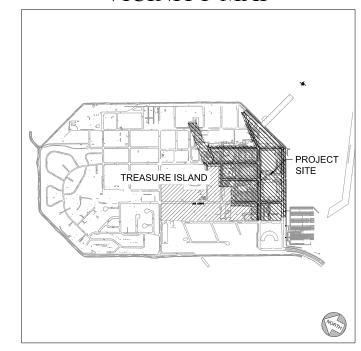
TREASURE ISLAND SUB-PHASE 1A, 1D, 1F, 1G, 1H, &1I **IMPROVEMENT PLANS**

CITY AND COUNTY OF SAN FRANCISCO CALIFORNIA

LOCATION MAP



VICINITY MAP



HOUSING EXECUTIVE DIRECTIVE 13-01/17-02: TOP PRIORITY PROCESSING

NOTES FOR COST ESTIMATOR:

PLACEHOLDER COSTS THAT SHOULD BE ESTABLISHED FOR ITEMS NOT HIS PLAN SET INCLUDE (BUT ARE NOT NECESSARILY LIMITED TO):



- TEMPORARY UTILITIES FOR CONSTRUCTION PHASING AND GEOTECHNICAL WORK
- · UTILITY CONNECTIONS TO BUILDING 2, 3, AND 369.
- GEOTECHNICAL AND SHORELINE IMPROVEMENTS
- CONNECTIONS TO EXISTING UTILITIES SURROUNDING STAGE LIMITS.
- NTERSECTION SIGNALIZATION

 1. THE NEW TRAFFIC SIGNAL AT THE CALIFORNIA AVENUE/AVENUE INTERSECTION WILL BE A 5-LEGGED INTERSECTION, WITH THE EASTSIDE COMMONS TERMINUS ACTING AS THE FIFTH LEG OF THE SIGNALIZED INTERSECTION. AS SUCH, THE INTERSECTION WILL HAVE SIGNAL INDICATIONS FOR VEHICLES, PEDESTRIANS, AND BICYCLES. WE ANTICIPATE 4 SIGNAL POLES WITH MAST ARMS OF SUFFICIENT LENGTH TO PROVIDE TURN SIGNAL INDICATIONS FOR THE LEFT TURNS OFF OF CALIFORNIA AVE AND OVERHEADS SIGNAL INDICATIONS FOR AVENUE D AND EASTSIDE COMMONS APPROACHES. WE ALSO ASSUME AT LEAST 6 TYPE 1 AND/OR 15 SIGNAL POLES. WE ANTICIPATE BICYCLE SIGNAL HEADS FOR THE EASTSIDE COMMONS CONNECTION WITH THE TWO-WAY CYCLE TRACK ON THE NORTHWEST CORNER OF THE INTERSECTION. THE INTERSECTION WILL HAVE SENSYS DETECTION SYSTEMS FOR ALL APPROACHES, PEDESTRIAN PISH BUTTONS AT ALL APPROACHES, AND SUFFICIENT INTERSECTION WILL HAVE SCHALL CONTROLLER AND CABINET AND CONNECTIONS TO THE FIBER OPTIC INTERCONNECT COMMUNICATION SYSTEM INTERSECTION WILL HAVE A TRAFFIC SIGNAL CONTROLLER AND CABINET AND CONNECTIONS TO THE FIBER OPTIC INTERCONNECT COMMUNICATION SYSTEM LIKE ALL SIGNALS PROPOSED AS PART OF STAGE 1. THE INTERSECTION WILL HAVE A TRAFFIC SIGNAL CONTROLLER AND CABINET AND CONNECTIONS TO THE FIBER OPTIC INTERCONNECT COMMUNICATION SYSTEM LIKE ALL SIGNALS PROPOSED AS PART OF STAGE 1. THE INTERSECTION WILL ALSO HAVE EMERGENCY VEHICLE PREEMPTION (EVP) HARDWARE ON ALL MAST ARMS FOR EMERGENCY VEHICLES, AND WILL LIKELY HAVE CAPABILITIES TO PROVIDE TRANSIT SIGNAL PRIORITY (TSP) FOR SHULP AND LIFT STATION DESIGN:
- PUMP AND LIFT STATION DESIGN:

 1. SANITARY SEWER PUMP STATION (2ND STREET)

 a. WET WELL SIZE. 10' DIAMETER

 b. WET WELL DEFTH 25'

 c. DUPLEX PUMP STATION HP TBD

- d. VALVE PIT (PLUG VALVE, CHECK VALVE) FOR EACH PUMP.
- SANITARY SEWER LIFT STATION (BETWEEN BUILDINGS 2 AND 3)
 WET WELL SIZE 7' DIAMETER
 WET WELL DEPTH 21.5'
 DUPLEX PUMP STATION 6.3 HP FLYGT PUMPS (2)

 - d. VALVE PIT (PLUG VALVE, CHECK VALVE) FOR EACH PUMP.
- 3. SANITARY SEWER PUMP STATION (AVENUE F)

 o. WET WELL SIZE. 7' DIAMETER

 b. WET WELL DEPTH 19'

 c. DUPLEX PUMP STATION 4.2 HP FLYGT PUMPS (2)

- d. VALVE PIT (PLUG VALVE, CHECK VALVE) FOR EACH PUMP.
- 4 STORM DRAIN PLIMP STATION (AVENUE E)
- a. WET WELL SIZE 15' DIAMETER
 b. WET WELL DEPTH 17.5'
- . PUMPS = 80 HP FLYGT PUMPS (3), 10HP FLYGT PUMP (1) d. VALVE PIT (PLUG VALVE, CHECK VALVE) FOR EACH PUMP



TREASURE ISLAND SUB-PHASE 14, 1D, 1F, 1G, 1H, & 1I IMPROVEMENT PLANS

STREETS

C1.00

TITLE SHEET

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TREASURE ISLAND SUB-PHASE 1A, 1D, 1F, 1G, 1H & 1I IMPROVEMENT PLANS 50% SUBMITTAL CONTENT MATRIX

<u>Team</u>	Submittal Item	Plan Location
F&L	Civil Plans	
	 Title Sheet 	Sheet C1.00
	 Stationing/Survey Control Monuments 	Sheet C1.07 – C1.14
	Paving Plan	Sheet C2.01 – C2.06
	 Typical Sections 	Sheet C2.07 – C2.09
	 Surface Improvements 	Sheet C3.01 – C3.23
	 Composite Utility Plan 	Sheet C4.01 – C4.05
	 Sanitary Sewer and Storm Drainage 	Sheet C5.01 – C5.23
	 Low Pressure Water, Reclaimed Water & 	Sheet C6.01 – C6.23
	Supplemental Fire Water System Lines	
	 Sanitary Sewer Force Main 	Sheet C7.01 – C7.05
	o Erosion Control Plan	Sheet C8.01 – C8.05
	 Demolition Plan 	Sheet C9.01 – C9.05
_	 Utility Relocation Plans 	Separate Submittal ⁱ
F&L/F&P	 Striping & Signage Plans 	Sheet C10.01 – C10.04
F&L	Civil Details	Sheet C11.00 – C11.12
PSD	Joint Trench Plans	Sheet JT1.0 – JT7.0
WSP	Street Light Plans	Sheet SL1.01 – SL1.23
PAE	MEP Plans	Sheet MEP1.01 – MEP1.23
JDH	Cathodic Protection Plans	Sheet CP1.00 – CP4.00
BKF	Stormwater Plans & Details	Sheet SW.10 – SW.22
CMG/GWO	Streetscape Plans	
	 Materials Schedule 	Sheet L0.01 – L1.00
	Surface Improvements Materials Plan	Sheet L1.01 – L1.23
	Surface Improvements Layout Plan	Sheet L2.01 – L2.23
	 Surface Improvements Soils Plan 	Sheet L4.01 – L4.23
	 Surface Improvements Planting Plan 	Sheet L5.00 – L5.23
GWO/RMA	 Surface Improvements Irrigation Plan 	Sheet L6.00 – L6.29
CMG/GWO	Streetscape Details	Sheet L9.00 – L9.12
CMG/HUNT	Streetscape Signage Plans	
	 Sign Type, Menu, Typography, Graphics & 	Sheet G0.0
	Icons Color Schedule	01 . 044.0
	 Signage Quadrant Location Plan 	Sheet G1A.0
	 Signage Enlarged Plan 	Sheet G2A.1 – G2A.12
	 Elevations, Layouts and Colors 	Sheet G3A.0 – G3A.2
A11	o Details	Sheet G4A.0
ALL	50% Submittal Specifications	

¹Refer to Treasure Island Sub-Phase 1A, 1D, 1F, 1G, 1H and 1I Utility Relocation Plans

SUB-PHASE APPLICATION 3: SUB-PHASES 1A, 1D, 1F, 1G, 1H, 1I

6.7 APPENDIX G: STORMWATER CONTROL PLAN

(Digital file of submittal on enclosed DVD)

Treasure Island

Preliminary Stormwater Control Plan

East Side Park Centralized Treatment

For Major Phase 1
Stage 2 & 3
TI Sub-Phases 1A, 1D, 1F, 1G, 1H, & 1I

January 11, 2019

Prepared for



Prepared by

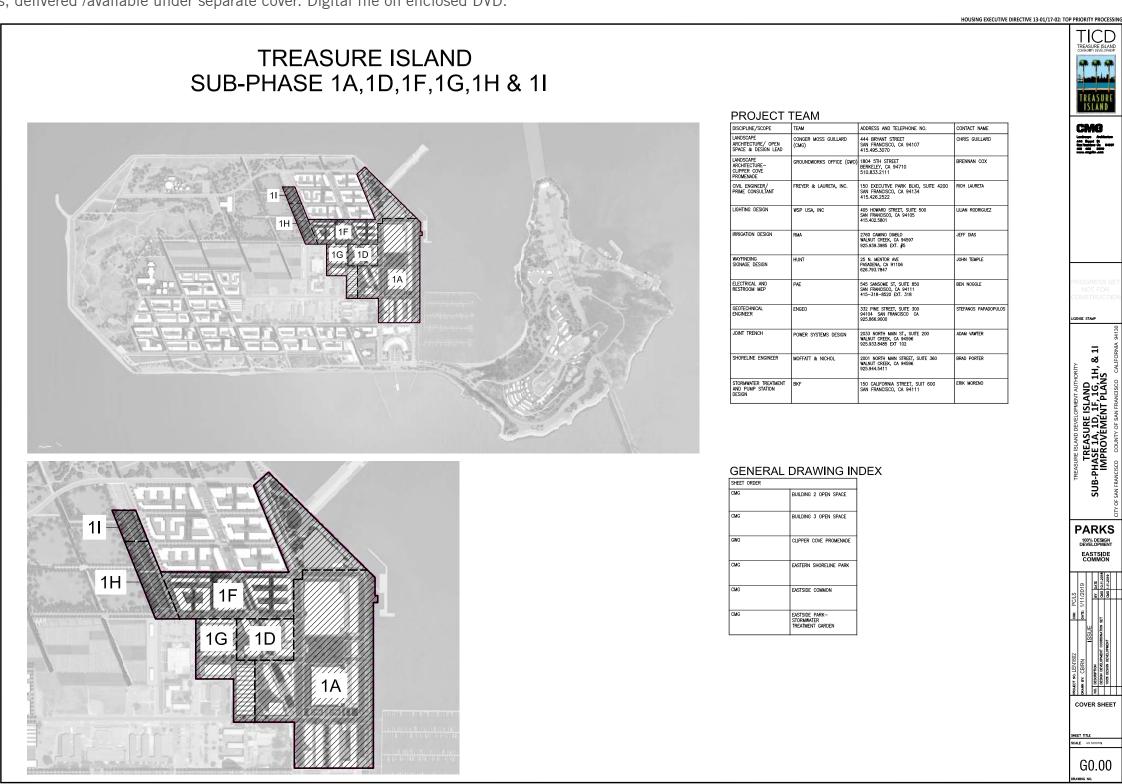






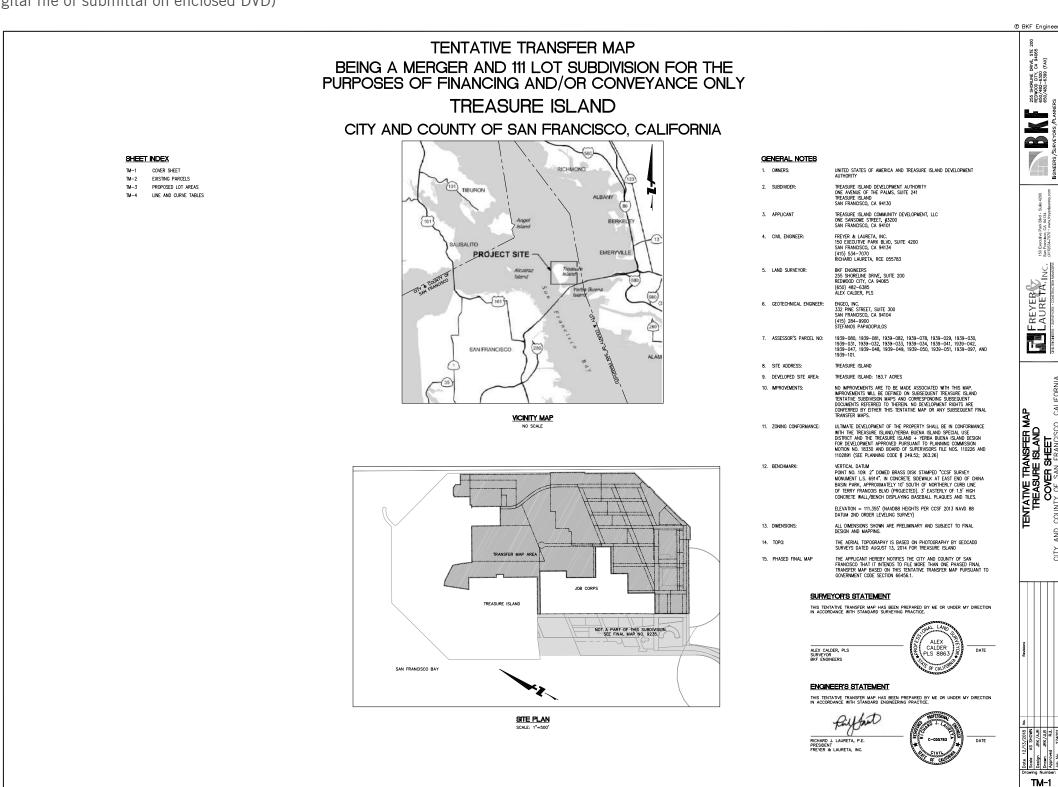
6.8 APPENDIX H: 100% DD PARKS AND OPEN SPACE

24" x 36" plan set and outline specifications, delivered /available under separate cover. Digital file on enclosed DVD.



6.9 APPENDIX I: TENTATIVE TRANSFER MAP

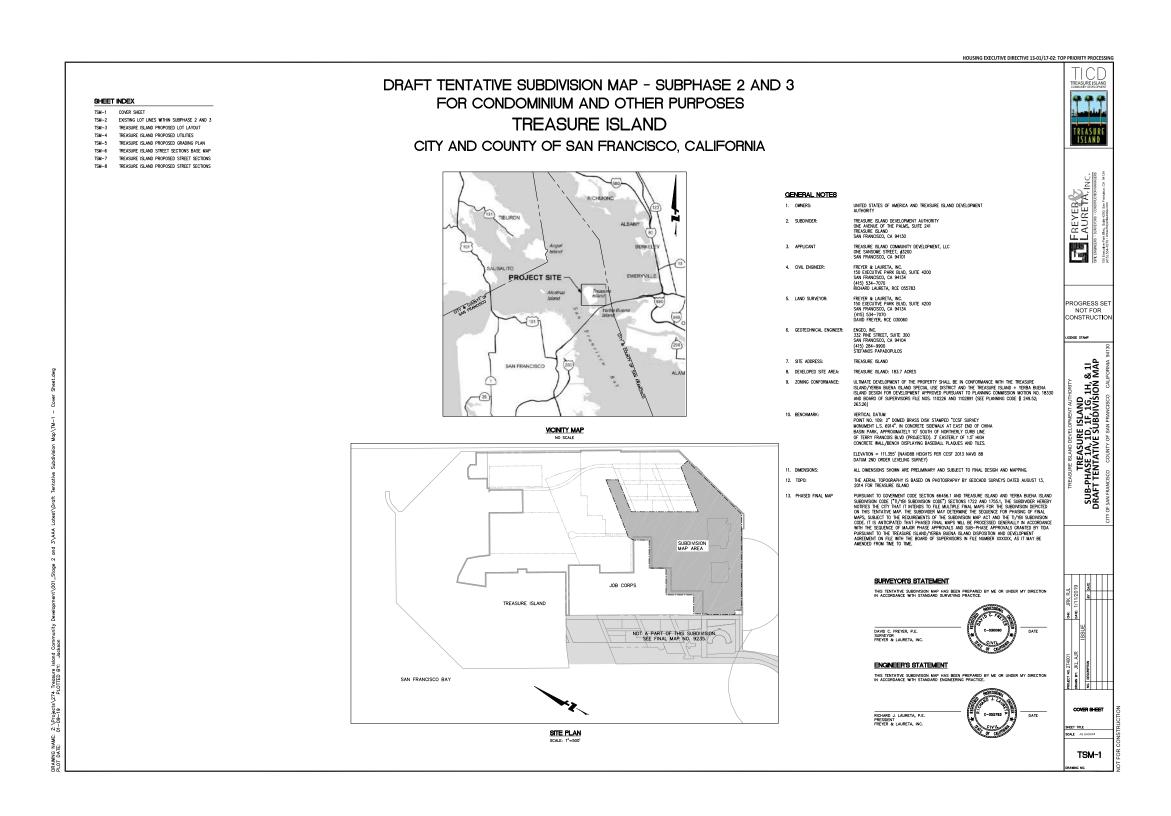
(Digital file of submittal on enclosed DVD)



TENTATIVE TRANSFER MAP NO 9837

6.10 APPENDIX J: DRAFT TENTATIVE SUBDIVISION MAP

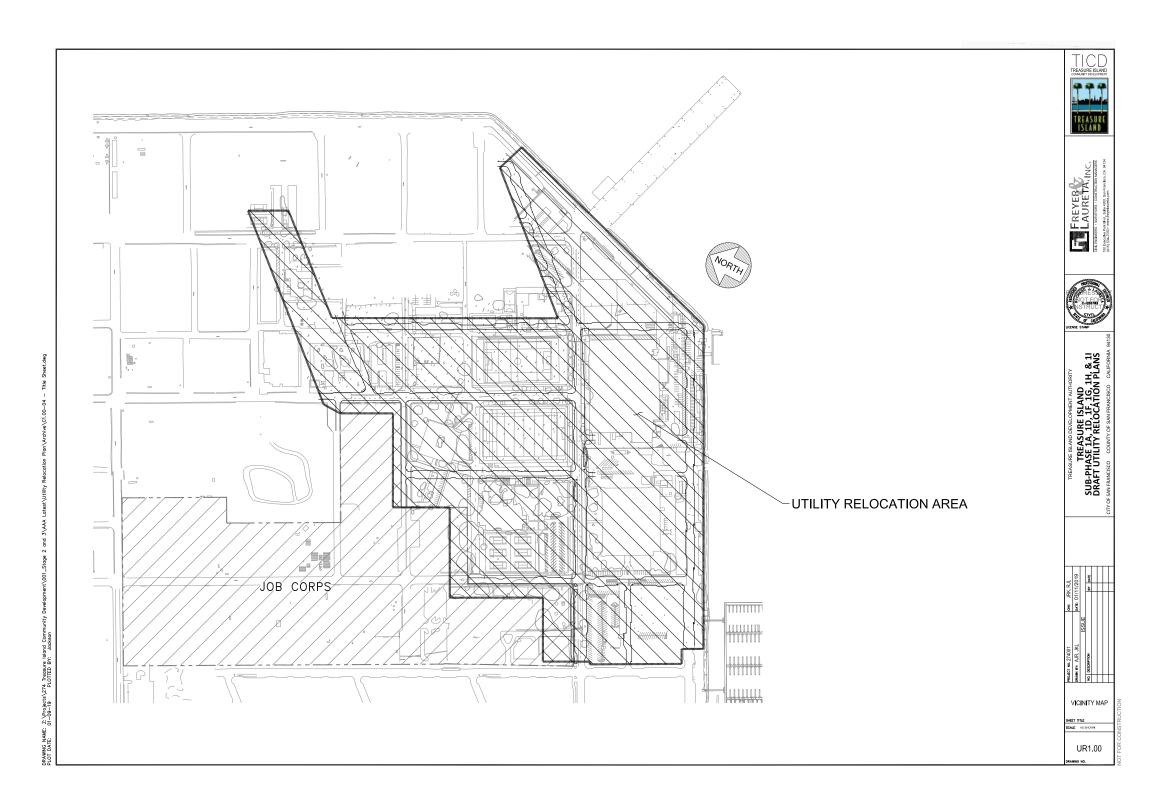
(Digital file of submittal on enclosed DVD)



SUB-PHASE APPLICATION 3: SUB-PHASES 1A, 1D, 1F, 1G, 1H, 1I 6 - APPENDICES 151

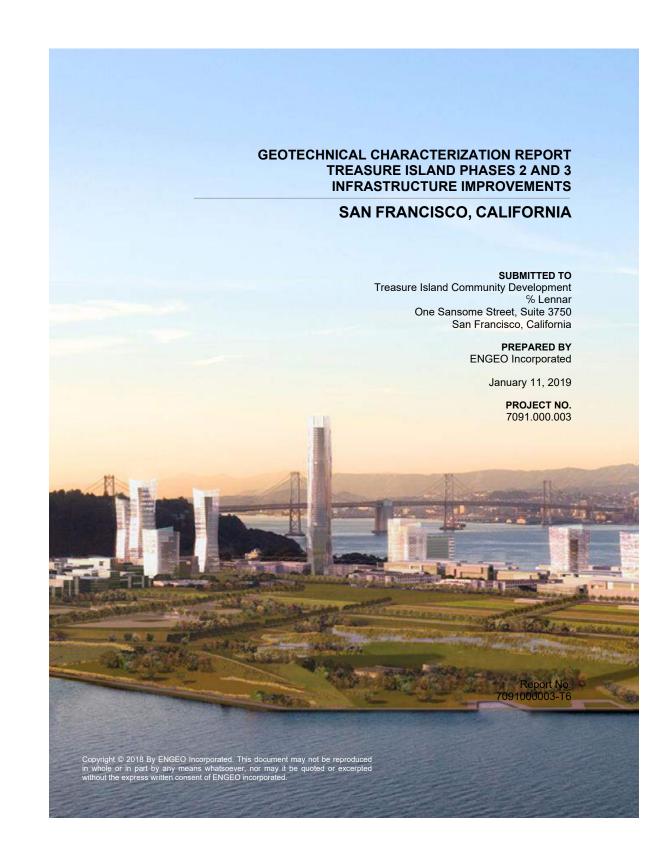
6.11 APPENDIX K: UTILITY RELOCATION PLANS (INFORMATION ONLY)

(Digital file on enclosed DVD)



6.12 APPENDIX L: GEOTECHNICAL REPORTS (INFORMATION ONLY)

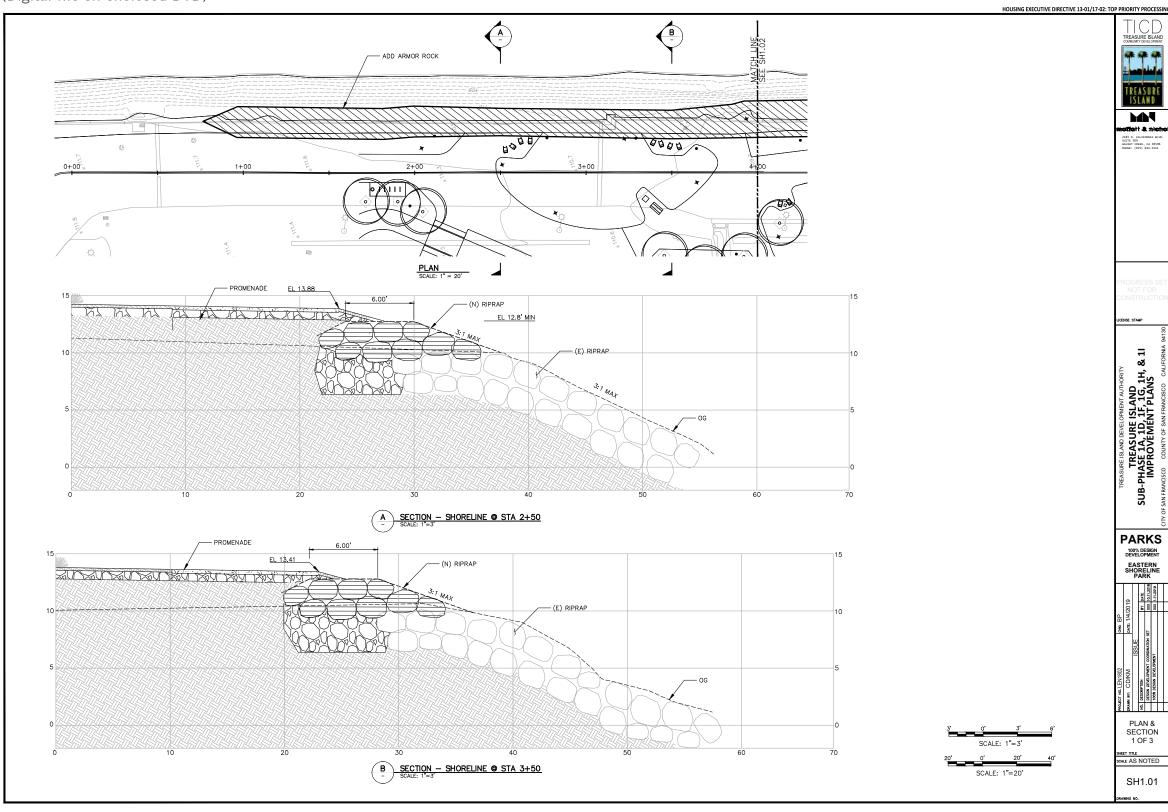
(Digital file on enclosed DVD)



SUB-PHASE APPLICATION 3: SUB-PHASES 1A, 1D, 1F, 1G, 1H, 1I 6 - APPENDICES 153

6.13 APPENDIX M: PRELIMINARY SHORELINE IMPROVEMENT PLANS (INFORMATION ONLY)

(Digital file on enclosed DVD)



6.14 APPENDIX N: STANDARDS ANALYSIS FOR BUILDING 2 & 3 (INFORMATION ONLY)

(Digital file on enclosed DVD)



BUILDING 2 & BUILDING 3, TREASURE ISLAND LANDSCAPE DESIGN STANDARDS ANALYSIS

> SAN FRANCISCO, CALIFORNIA [18106]

> > PREPARED FOR: CMG LANDSCAPE ARCHITECTURE SAN FRANCISCO, CA

imagining change in historic environments through design, research, and technology

JANUARY 11, 2019