

# San Francisco Bay Conservation and Development Commission

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**TO:** Design Review Board Members

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**SUBJECT: Mission Bay Ferry Landing Project; First Review  
(BCDC Permit Application No. 2017.008.00)**  
(For Design Review Board consideration on December 11, 2017)

## Project Summary

**Project Proponents & Property Owners.** Port of San Francisco (Owner and Project Proponent)

**Project Representatives.** Port of San Francisco -- Jonathan Roman (Project Manager), David Beaupre (Port Senior Planner), Dan Hodapp (Port Senior Urban Designer), and Ming Yeung (Port Waterfront Planner); COWI - James Connolly (Engineering Consultant and Project Manager); Surface Design -- Michal Kaputilnik (Project Landscape Designer), Robin Chiang & Associates -- Robin Chiang (Project Architect).

**Project Site.** The site is located east of Terry A. Francois Boulevard between 16th Street and the within the proposed Bayfront Park to the north (Exhibit 3) and within Agua Vista Park to the south in the City and County of San Francisco. (Exhibit 1 and 2).

**Existing Conditions.** The north side of the project site consists of a paved Bay Trail pathway along the waterfront roughly parallel to Terry A. Francois Boulevard. Agua Vista Park currently features an existing asphalt public access path for the Bay Trail, a 750-square-foot fishing pier that extends 75-feet into the Bay and will remain in place, an outfall overlook, several concrete picnic tables, outdoor lighting, planting areas, and bike racks. (Exhibit 4)

The project site includes a portion of the proposed Bayfront Park (required by BCDC Permit No. 2000.005.04 for the Mission Bay Redevelopment Project), which is in preconstruction phases. (Attachment 1 and Exhibit 3). Bayfront Park will feature approximately 14,000 square feet of plaza space and 32,000 square feet of landscaping. As described in the permit exhibit (Attachment 1), the 16<sup>th</sup> Street plaza should provide space for public gathering, food concession, street performers, seating and views. Bayfront Park provides connections to adjacent Port open spaces to the north through a 16-foot-wide Bay Trail which will be used for pedestrian and bicycle traffic. The Chase Center, a 18,000-seat event center for the Golden State Warriors and other special events, is located to the west of the proposed project, across Terry A. Francois Boulevard. The

event center is currently under construction. A collection of other low- and mid-rise commercial and medical office buildings, UCSF campus buildings and laboratory facilities are situated in the area. The Mission Bay South residential neighborhood is located northwest of the project site and the Dogpatch neighborhood is located south of the project site. Landside transit connections are currently located along 16<sup>th</sup> and 3<sup>rd</sup> Streets. In addition, a portion of the four-lane access road, Terry A. Francois Boulevard is located along a portion of the project site. Prior to the ferry landing construction, this road will be realigned to make room for the Bayfront Park.

**Proposed Project.** The Project proposes construction of a ferry landing and a water taxi landing. The single-float, two-berth ferry landing would provide regional ferry service from a location south of the intersection of Terry A. Francois Boulevard and 16<sup>th</sup> Street. A separate single float, two-berth water taxi landing would be located 300 feet south of the Ferry Landing site with access from Agua Vista Park. The project is intended to complement and enhance the existing Agua Vista Park and connect to the proposed Bayfront Park to the north. The project would also extend the water-side public transportation network, which includes ferry service to the Ferry Building, Oakland, Alameda, Vallejo, Richmond, and South San Francisco, to Mission Bay. (Exhibit 5).

The project will extend across 515 feet of shoreline and an approximately 8.8-acre area in the Bay (including dredging) and 100-foot shoreline band. Approximately 17,505 square feet of the project site would be located within the 100-foot shoreline band and consist of improvements to the existing Agua Vista Park and a plaza connecting to Bayfront Park. The project would involve approximately 10,625-square-feet of Bay fill. The ferry landing will total approximately 8,932 square feet of Bay fill, consisting of a ramp, pile-supported pier, gangway, and float. The water taxi landing will consist of a platform, gangway, and float totaling approximately 1,589 square feet. To provide for ferry service and the water taxi service, the project would involve approximately 129,374 cubic yards of dredging at the location of the ferry landing and water taxi landing. Construction would begin in June 2019 and the project would be completed in 2020.

1. **Mission Bay Ferry Landing.** The ferry landing consists of a ramp connecting to a fixed pier, a gangway, and float that would extend 350 feet bayward from the shoreline. A proposed 27-foot-high (above the pier deck) canopy would be constructed to provide weather protection and to create a sense of arrival at the ferry landing. (Exhibits 13-17). The project proponent states:

“[t]he canopy has been designed with three principles in mind: (1.) welcoming – the canopy opens to pedestrians on the landside and ferry passengers on the water side; (2.) layering – the canopy takes cues from the [event center] with layered sections; and (3.) light – the translucent roof allows light to flood the pier and float and the roof material conveys minimal weight. The structure draws from maritime and sailing design cues and from the surrounding architectural character.”

The structure would be located to prevent any obstructions to views from 16<sup>th</sup> Street. The fixed pier (approximately 2,948 square feet) would be available for public access during daytime hours, providing weather-protected public access experience over the water. During nighttime hours, gates at the ferry landing would close and lock, preventing access to the pier. (Exhibits 18-19).

The ferry landing would be operated and maintained by the Water Emergency Transportation Authority (WETA) and is designed to WETA's standards for ferry service. During commute times (between 6:45-9:45AM and 5:00-7:25PM) the ferry landing would service approximately 11-12 vessels, with approximately 90 people boarding per departure, totaling approximately 2,136 passengers. During events at the Chase Center, the ferry landing would service approximately 200 people per trip, particularly after an event, in approximately four vessel trips before and after an event, totaling approximately 2,100 passengers. (Exhibits 10-14).

2. **Water Taxi.** The water taxi landing consists of a landside platform, a gangway, and float that would extend approximately 160 feet bayward from the shoreline. The entire water taxi landing (approximately 1,748 sq. ft.) would be available for pedestrian public access during daytime hours and would be available for public launching of hand-launch boats such as kayaks. A gate would be closed and locked during nighttime hours. (Exhibit 23.)
3. **Landside Public Access.** Landside improvements include a new plaza at the ferry landing, a small water taxi landing plaza, and landscaping improvements within the temporary construction staging area between the two landings (totaling approximately 17,505 square feet). (Exhibits 7 and 15).

The ferry landing plaza would provide space for daily commuter and event queuing, while connecting to the proposed Bayfront Park 16<sup>th</sup> Street Plaza to the north as well as Agua Vista Park to the South. (Exhibits 8-9). The ferry landing plaza is located within a required public access area of BCDC Permit No. 2000.003.04 for the Mission Bay Redevelopment Project, as it is located in the southern portion of Bayfront Park. In the ferry landing plaza, a series of concrete benches (approximately 8 feet long with 8-foot gaps for circulation) would define the edge of the plaza and create spaces for gathering and celebrating views of the waterfront. The benches provide a buffer between queuing for the ferry landing and the Bay Trail circulation which connects the Southern Waterfront through Agua Vista and along Bayfront Park. The proposed project would provide seamless connections between the two adjacent parks by providing a 16-foot-wide continuous Bay Trail within the Bayfront Park area and 15-foot-wide promenade within Agua Vista Park along Terry Francois Boulevard.

The ferry landing plaza would be designed to provide the 200 feet of queuing space required to accommodate the expected 90 people per departure during commute times while maintaining Bay Trail and public access to the west of the queuing zone. (Exhibits 10-12). Before and after an event at the Chase Center, queuing would be accommodated through Bayfront Park and Agua Vista Park to provide space for up to 200 people to queue for ferry service. Use of the public access areas and the Bay Trail would be impacted before and after events at the Chase Center due to the increased congestion from ferry passenger embarkation and queuing. The project proponents state that police officers or other public safety personnel would be used for traffic management in both plazas before and after events at the Chase Center.

The Water Taxi landing plaza would consist of an approximately 900-square-foot paved area connecting the landing to Agua Vista Park. (Exhibit 17).

Landside improvements within the ferry landing and water taxi landing would consist of benches, lighting, trash containers, and wayfinding signage. Open views from 16<sup>th</sup> Street connect the ferry landing to the broader Mission Bay amenities such as the Chase Center and adjacent open spaces. Street parking would be located along the relocated Terry A. Francois Boulevard.

**Resilience and Adaptation to Rising Sea Level.** To determine the best estimates of future sea level rise and flooding, the Commission consults the “State of California Sea Level Rise Guidance Document” (“State Guidance”) issued in March 2013 by the Ocean Protection Council, which was drafted to help state agencies incorporate future sea-level rise impacts into planning decisions. This document integrates the best available science from the National Research Council’s report “Sea-Level Rise for the Coasts of California, Oregon, and Washington” issued in June 2012. The State Guidance provides a range of estimated sea level rise for 2050 and 2100, using 2000 levels as a baseline, and states that, by mid-century, sea level will rise by 4.5 to 24 inches and, by the end-of-century, by 16 to 66 inches—a mean of 16 inches by mid-century and 36 inches by end-of-century.

The Mission Bay Ferry Landing has been designed to withstand flooding from projected sea-level rise of 15.48-inches for its design life of 50 years (until 2070). (Exhibit 24). The State Guidance estimates a mean of 16-inches of sea level rise for mid-century. As a result, the ferry landing is designed based on a projected sea level rise that is likely lower than that recommended by the State Guidance. The fixed pier elevation of +13.52 feet (NAVD88) is above the projected Still Water Elevation (SWEL), representing the 100-year flood elevation with a 1% annual risk in terms of current day exposure to coastal flood hazards, and the Total Water Elevation (TWL) which includes wind-wave runup. The projected SWEL in 2070, including sea level rise of over 15.48-inches, is +11.19 feet and the projected TWL in 2070 is +13.49 feet. The connecting ramp, which transitions between the existing onshore grade of 11.35 feet NAVD88 to the higher pier deck elevation, will be designed for easy replacement if the shoreline requires raising due to sea level rise in the future.

The Water Taxi Landing has been designed to withstand flooding from projected sea-level rise for its design life of 30 years (until 2050). (Exhibit 24). The float, guide piles, and the gangway are designed to be resilient to approximately eight-inches of sea level rise, which is below the estimated mean of 16-inches of sea level rise projected by the State Guidance for mid-century. The platform elevation of +11.35 feet (NAVD88) is above the projected SWEL in 2050 (+10.47 feet). Although the platform is below the TWL in both 2020 (+12.10 feet) and 2050 (+ 12.77 feet), TWL water elevations occur during 1% storm events and project proponents state that it is unlikely that water taxi operations will occur during these storm events. Any flooding would be for a short duration (1-2 hours). The design shoreline elevation of the platform is controlled by the requirement to conform to the existing grade along the shore (11.35 feet) and to conform to ADA path of travel requirements as well as the way water taxis are loaded.

The elevation of the shoreline at the ferry landing plaza and water taxi plaza is at elevation +11.35 feet which is above the projected mean higher high water level of +8.03 feet at 2070 and the 1% SWEL in 2070. Although the project proponent anticipates that some wave overtopping along the shoreline could be expected during storm events, the wave overtopping is expected to occur for a short duration (1-2 hours) and not cause significant flooding of the ferry landing plaza.

### Commission Findings, Policies & Guidelines

**San Francisco Waterfront Special Area Plan** states that the project site states that permitted uses on new or replacement fill at the Central Basin area should be used for public recreation/open space/public access, marina, and maritime. In addition, the Special Area Plan states, “Central Basin should continue to be developed for public access and waterfront recreation in accordance with the Recreation and Open Space Plan of the City of San Francisco.”

The Bay Plan **Public Access** policies state, in part, that “...maximum feasible access to and along the waterfront and on any permitted fills should be provided in and through every new development in the Bay or on the shoreline...” and that “[a]ccess to and along the waterfront should be provided by walkways, trails, or other appropriate means and connect to the nearest public thoroughfare where convenient parking or public transportation may be available.” Further, these policies state, in part: “[a]ccess to and along the waterfront should be provided by walkways, trails, or other appropriate means and connect to the nearest public thoroughfare;” and that “... improvements should be designed and built to encourage diverse Bay-related activities and movement to and along the shoreline, should permit barrier free access for persons with disabilities to the maximum feasible extent, should include an ongoing maintenance program, and should be identified with appropriate signs.” Furthermore, “[p]ublic transit use and connections to the shoreline should be encouraged where appropriate.” Additionally, the policies provide that “[p]ublic access should be sited, designed, managed, and maintained to avoid significant adverse impacts from sea level rise and shoreline flooding,” and that access should be designed consistent with the physical and natural environment.

The Bay Plan **Appearance, Design, and Scenic Views** policies state, in part, that “all bayfront development should be designed to enhance the pleasure of the user or viewer of the Bay” and that “[m]aximum efforts should be made to provide, enhance, or preserve views of the Bay and shoreline, especially from public areas...” Furthermore, “[s]tructures and facilities that do not take advantage or complement the Bay should be located and designed so as not to impact visually on the and shoreline. In particular, parking areas should be located away from the shoreline.”

The Bay Plan **Transportation** Policy 4 state, in part, that “[t]ransportation projects on the Bay Shoreline... should include pedestrian and bicycle paths that will either be a part of the Bay Trail or connect the Bay Trail with other regional and community trails. Transportation projects should be designed to maintain and enhance visual and physical access to the Bay and along the Bay shoreline.”

The Commission's **Public Access Design Guidelines** state partly that public access should be designed "so that the user is not intimidated nor is the user's appreciation diminished by large nearby building masses...." Furthermore, "public access improvements should be designed for a wide range of users," should "provide basic public amenities, such as trails, benches, play opportunities, trash containers, drinking fountains, lighting and restrooms that are designed for different ages, interests and physical abilities," and should be designed for the weather of the site. The guidelines also state that viewing the Bay is the "most widely enjoyed 'use' and projects should be designed to "enhance and dramatize views of the Bay."

### **Board Questions**

**The Board's advice and recommendations are sought on the following issues regarding the design of the proposed public access:**

1. Would the proposed project provide attractive new public access areas? Does the site layout provide usable and inviting public spaces that are oriented to the Bay, incorporate unique and special amenities that draw the public to them, create a "sense of place", are safe, and feel public during commute, non-commute, and event hours?
2. Is the design of the ferry plaza designed to provide seamless connections to Bayfront Park and Aqua Vista Park? Does the proposal create one cohesively-designed shoreline space?
3. Are there additional improvements to the design of the public access plazas and Agua Vista Park that would enhance public use of the shoreline and reduce conflicts with the queueing areas for the ferry landing and water taxi landing? Does the proposed water taxi landing minimize potential conflicts with the park uses including the Bay Trail and the fishing Pier?
4. Are there adequate amenities, such as seating, lighting, and trash receptacles proposed for the ferry plaza and the water taxi within Agua Vista Park to accommodate anticipated levels of uses?
5. Is the water taxi landing designed sufficiently to allow for hand-launched watercraft? Are there opportunities to provide additional public access to and/or over the water?

**The Board's advice and recommendations are sought on the following issues regarding the design of the proposed physical and visual connections:**

6. Are the connections to and through the public access spaces adequate and appropriate? Are there potential conflicts between passengers queueing in the plaza and public access on the Bay Trail and in the plaza? How can potential conflicts be avoided or minimized? Are the queueing zones designed appropriately to maintain and enhance visual and physical access to the Bay and along the Bay shoreline?
7. Is the proposed ferry terminal designed to maximize views to and along the shoreline? Does the proposed ferry shelter minimize view impacts to the Bay? From directed views at the proposed Bayfront Park? Can the proposed shelter and entry gate be sited or designed to minimize view impacts from Terry Francois Boulevard?

**The Board's advice and recommendations are sought on the following issues regarding sea level rise:**

8. Are the public areas appropriately designed to be resilient and adaptive to sea level rise?