SAN FRANCISCO DISTRICT

US Army Corps of Engineers

PUBLIC NOTICE

PROJECT: 34th America's Cup Yacht Races
NUMBER: 2011-00057S
DATE: May 16, 2012
RESPONSE REQUIRED BY: June 15, 2012

Regulatory Division
1455 Market Street
San Francisco, CA 94103-1398

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1. INTRODUCTION: The Port of San Francisco (Port) and the America's Cup (AC) Event Authority (ACEA) (POC: Kelly Capone, 415-274-0256) have applied for a Department of the Army permit to conduct activities in connection with the running of the 34th America's Cup (AC34) yacht races in 2012 and 2013 on San Francisco Bay.

Hereafter, references to the Project Sponsors for AC34 will be defined as the Port, the ACEA (which includes America's Cup Race Management [ACRM] and the America's Cup Organizing Committee [ACOC]). The project sponsors for AC34 propose race events in August and October of 2012 and July-September of 2013, involving improvements and services at several facilities and locations.

Multiple permits must be obtained from regulatory agencies for this project. This Public Notice addresses only those activities that fall under the regulatory authority of the Corps.

The proposed activities subject to a Department of the Army (or U.S. Army Corps of Engineers [Corps]) permit would take place along the San Francisco waterfront in the City and County of San Francisco, California. The purpose of the proposed activities is to allow for the mooring, docking and safe navigational depths for race-related and spectator/recreational vessels. No discharge of dredged or fill material in San Francisco Bay has been proposed. The Corps has determined that the placement of mooring anchors (described below) does not constitute the discharge of dredged or fill material. The Corps' jurisdiction, in ocean waters, pursuant to Section 404 of the Clean Water Act is limited to the territorial seas. The San Francisco Deep Ocean Disposal Site is located beyond the territorial seas and is not within the Corps' jurisdiction. Therefore, no permitting pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344) is required. This application is being processed pursuant to the provisions of Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) and Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972, as amended (33 U.S.C. 1413).

(Note: In 1968, Congress declared a portion of the San Francisco waterfront to be "nonnavigable waters within the meaning of the laws of the United States". The area original declaration included pile-supported structures (piers) from the foot of Van Ness Avenue to Bryant Street. In November 2007, that area was extended southward to include Pier 40. Therefore, any work proposed by the AC34 Project Sponsors occurring within the existing pier footprints along this portion of the San Francisco waterfront is not subject to authorization pursuant to Section 10 Rivers and Harbors Act and a Corps permit is not required for these activities.)

A series of AC34 yacht races would be held in August and October 2012 (World Series) and in July through September 2013 (Youth, Louis Vuitton Cup, America's Cup Challenger Series, potential Defender Selection Series, and Match). A number of project sites, or venues, would be required to accommodate these events. These venues would

encompass all aspects of AC34 facilities and services, including team bases and operations, support space, media operations, hospitality services, sponsored commercial space, and entertainment and spectator venues.

The number and/or use of venues proposed for AC34 events in 2012 would be different from that proposed in 2013. In addition, a number of temporary improvements and certain permanent improvements would be constructed at the proposed venue sites to accommodate the AC34 events. Hereafter, references to all activities associated with the AC34 races in 2012 and 2013, including any associated construction activities leading up to or following each of the events, as well as operational-related activities associated with each of the events, will be identified as "AC34 2012" and "AC34 2013," respectively.

2. PROJECT DESCRIPTION: As shown in the attached drawings, the Project Sponsors plan to install temporary floating docks, mooring anchors and associated piles at various waterfront locations. Also proposed is the removal of a total of approximately 33,500 cubic yards (cy) of sediment from 9.9 acres (approximately) within Piers 32-36 open-water basin (OWB), Pier 14 N, and Pier 9 berths. Existing depths range from –7 to –10 feet mean lower low water (MLLW) in the OWB and berths. Design depth would range between -9 to -11 feet MLLW plus an additional 1-foot over-dredge allowance. The material would be removed using a clamshell and removed by barge to the San Francisco Deep Ocean Disposal Site (SF-DODS). Temporary floating docks and gangways would cover a total of 2.33 acres (101,356 sq. ft.) of water surface.

Prior to dredging, the Dredge Material Management Office (DMMO) would evaluate the sediments to be dredged for disposal or reuse suitability. The DMMO includes representatives from the U.S. Environmental Protection Agency, San Francisco Bay Conservation and Development Commission (BCDC), San Francisco Bay Regional Water Quality Control Board (RWQCB), and the U.S. Army Corps of Engineers (Corps). The DMMO is tasked with approving sampling and analysis plans in conformity with testing manuals, reviewing the test results and reaching consensus regarding a suitable disposition for the material.

Table 1 provides a brief summary of some of the key characteristics of the AC34 2012 and AC34 2013 events. The number and level of facilities proposed to accommodate AC34 2012 would be less than those proposed to accommodate AC34 2013.

Several of the venues proposed for the AC34 event consist of areas and facilities under the jurisdiction and management of Port of San Francisco, including certain piers (Piers 19, 19½, 23, 27-29½, 30-32, and 80), and certain water basins/water areas (at Piers 9, 23-27, 29-31, 14 North, and 32-36). Various other venues are proposed for spectator-related activities, some of which are under the jurisdiction of other City, state or federal agencies, including Marina Green, Herb Caen Way (from AT&T Park to Fisherman's Wharf), Civic Center, Union Square, and Justin Herman Plaza.

Not all AC34 activities at all venues are subject to authorization by the Corps. A complete description of all AC34 construction and improvement activities can be found in the Environmental Impact Report (EIR) entitled, "The 34th America's Cup & James R. Herman Cruise Terminal and Northeast Wharf Plaza." Copies of the EIR can be found at the San Francisco Planning Department at 1650 Mission St. Suite 400., San Francisco. (SF Planning Department Case No. 2010.0493E; State Clearinghouse No. 2011022040). The EIR can also be found online at the following address: http://www.sf-planning.org/index.aspx?page=1828.

Locations and Construction Elements

The vicinity map (Figures 1 and 2) provides an overview of all proposed AC34 venue sites (2012 and 2013 respectively) along the San Francisco waterfront and the U.S. Coast Guard regulated race areas.

The conditions for racing the high-tech AC34 race yachts require a setting where water and wind

conditions allow the race teams and support crew to operate to their maximum potential in a safe sailing environment. While the open ocean setting has worked for past America's Cup events in other parts of the world, the Pacific Ocean conditions outside San Francisco are not conducive for racing the currently designed AC34 vessels. Therefore, the AC34 and AC World Series sailing races and associated activities would occur on the San Francisco Bay within a specified "race area" as illustrated in Figure 2.

The various project sites that would serve as AC34 venues in 2012 and/or 2013 (and in the case of Pier 27, serve the proposed future cruise terminal and wharf plaza) are described below. The sections identify each pier or facility that would be utilized for AC34 2012 and/or AC34 2013 and associated temporary and/or permanent construction improvements that are within the regulatory authority of the Corps.

The following project descriptions start at the southern end of the project area (Pier 80) and proceed north then west along the San Francisco waterfront to Marina Green.

Waterfront Piers, Water Areas and Other Facilities

The Port of San Francisco manages approximately 7½ miles of the San Francisco Bay shoreline stretching from India Basin in the south to Hyde Street Pier in the north, totaling more than 1,000 acres. The Port's jurisdictional boundary as well as the Corps jurisdiction pursuant to Section 10 Rivers and Harbors Act, within the vicinity of the project sites, is shown in Figures 3 through 8. Table 2 provides estimated water surface coverage resulting from AC34 Project temporary docks, gangways, platforms, and barges, for each site along the San Francisco waterfront. Table 3 provides estimated square footage of impacts resulting from AC34 for placement of piles for temporary floating docks, mooring anchors, and for dredging along the San Francisco waterfront.

Pier 80

Pier 80 is located on the north side of Islais Creek Channel at the terminus of Caesar Chavez Street, and is adjacent to the City's Potrero Hill/Dogpatch and Bayview-Hunters Point neighborhoods (Figure 3). Pier 80 is a 69-acre facility and one of the Port's primary cargo terminals. Pier 80 would be used for team base support, fabrication, assembly and storage for racing yachts for the 34th America's Cup. This facility would focus on the assembly of racing yachts and wing masts for training and racing on San Francisco Bay.

Pier 80 would serve as an ancillary location for the proposed team bases for AC34 2012 race events[1] as well as during the AC34 2013 race events. A site plan for team bases at Pier 80 for the 2012 World Series is presented in Figure 9. Bases for up to 10 teams would be provided.

Up to two cranes, either a mobile or a tower crane, would be used along the south side of Pier 80 to lift the racing yachts in and out of the water in Islais Creek Channel; these cranes would extend to a height of approximately 200 vertical feet above the pier deck to provide adequate clearance while moving the yachts (Figures 10 and 11).

While Pier 80 would not serve as the primary team bases for AC34 2013, it would be used as an ancillary team base for AC34 2013 (Figure 12). Support structures, for racing teams, would be installed at Pier 80 for AC34 2012, including tents, cranes, floating docks, and boat wash areas and related components, which would remain in place through the AC34 2013 races.

Pier 80 Floating Dock Installation

Because the existing aprons on this pier are at too high an elevation to accommodate the range of smaller boats that could be docked here, temporary

[1] If proposed construction at Piers 30-32 is not completed in time for team bases to be located at Piers 30-32 for the AC 2012 races then Pier 80 would serve as Primary location for all team bases in 2012.

floating docks and gangways would be installed in Islais Creek Channel alongside the pier south apron adjacent to the team bases to provide temporary berthing for team boats. The AC34 2012/2013 floating dock would measure approximately 1,000 linear feet in length and 12 feet in width. Access points or gangways would also be installed for each floating dock and moorings for racing boats would be positioned along the Pier 80 southern face as shown in Figures 9 and 12.

Tables 2 and 3 provide summary information pertaining to square footage for each floating dock; number, size, and material of piles anticipated to be used. Temporary floating docks would be removed after all race events in 2012 and reinstalled before 2013 races begin. All floating docks and cranes would be removed once 2013 races have been completed and teams have left the premises.

Piers 30-32 and Piers 32-36 Brannan Street Wharf Open Water Basin

As shown in Figure 13, Piers 30-32, and the Piers 32-36 Open Water Basin (OWB) are located along The Embarcadero within the City's Rincon Point-South Beach neighborhood. Piers 30-32 are formed from two originally separate piers that were combined by bridging prior to 1955. Piers 30-32 consist together of an approximately 13-acre facility, with no above-deck structures with the exception of Red's Java House, a restaurant in the Embarcadero National Register [Historic] District (listed on the National Register of Historic Places in 2006). Piers 30-32 are currently used for off-street parking, managed by a parking operator, and are also occasionally used for special events.

Piers 30-32 would be used for team base support, fabrication, assembly and storage for racing yachts for the 34th America's Cup. This facility would also focus on the assembly of racing yachts and wing masts for training and racing on San Francisco Bay. The activities planned for Piers 30-32 are similar to those that would be conducted at Pier 80.

Piers 32-36 Brannan Street Wharf Open Water Basin

The Piers 32-36 OWB is located immediately south of Piers 30-32, along The Embarcadero between Delancey Street and Beale Street (Figure 13). The approximately 600-foot long area is designated as an Open Water Basin in the Port's Waterfront Land Use Plan (WLUP) and the San Francisco Bay Conservation and Development Commission's (BCDC) Special Area Plan for the San Francisco Waterfront (Special Area Plan). This area fronts the Port's planned Brannan Street Wharf public open space.

In order to provide sufficient water depth for boat clearance, dredging would be conducted within the Piers 32-36 OWB. Approximately 13,500 cy of sediment from a portion of the area would be dredged (Figure 14) to a design depth of approximately -10 feet MLLW plus a 1-foot over-depth allowance. The sediment would be tested and characterized for proposed disposal locations through the DMMO process.

Anchored moorings would be installed within the water basin for temporary fastening of racing yachts within this water basin. (As shown in Figure 14, the planned Brannan Street Wharf will be constructed by the Port in a separate action sometime after the demolition of Pier 36. In addition to the demolition and removal of Pier 36, this planned project includes removal of a portion of the adjacent bulkhead wharf, and development of a new wedge-shaped wharf containing 57,000 square feet of open space, and repair of the adjacent seawall to which the new wharf will connect.) The expanded water area created by the removal of Pier 36 would support the mooring needs for the AC34 racing yachts.

Piers 30-32 Over Water (Structural and Deck) Work

Piers 30-32 would serve as the primary team bases for AC34 2012 and 2013. Site plans for both years are shown in Figures 15 and 16. Bases for up to 10 teams would be provided at Piers 30-32 and would

include space for boat work, storage and maintenance facilities. Up to two cranes would be used (either a mobile or a tower crane) and would be located along the south side of Piers 30-32 to lift the racing yachts into and out of the adjacent water basin; these cranes would extend to a height of approximately 200 vertical feet above the pier deck to provide approximately 150 feet of clearance while moving the yachts. There would be a public access corridor created on Piers 30-32 for viewing of team base operations. Piers 30-32 would undergo a number of permanent upgrades and repairs to support full access and team base operations.

Piers 30-32 Floating Dock Installation

Floating docks would be installed along the south apron of Piers 30-32 to provide docking for the AC34 vessels as well as to provide dock space for team operations. Approximately 948 linear feet (8 – 16 ft width) of floating docks would be installed. Access points or gangways would be installed for each floating dock. Tables 2 and 3 provide summary information pertaining to square footage for the floating docks and gangways, and number, size, and material of piles anticipated to be used.

Pier 14 North

Pier 14 is located north of the San Francisco-Oakland Bay Bridge, along The Embarcadero roughly between Harrison Street and Mission Street (Figure 17). Sediment north of Pier 14 is proposed to be dredged to accommodate spectator and event sponsor vessels. Dredging would be conducted to achieve a design depth of -11 feet MLLW plus a 1-foot over-depth allowance (Figure 18). Approximately 10,000 cy of sediment has been tested and characterized for proposed disposal locations through the DMMO process. The sediment has been determined by the DMMO to be suitable for disposal at SF-DODS.

Pier 14 Floating Dock Installation

Approximately 1,660 linear feet (12-foot width) of floating docks would be installed north of Pier 14 to provide docking for support and spectator vessels. Gangways would also be installed to provide access from the land (Figure 17). Table 2 provides summary information pertaining to square footage for each floating dock, number, size, and Table 3 provides summary information for number of piles for each floating dock and gangway.

Pier 9

As with other piers, the existing apron on Pier 9 is at an elevation too high to accommodate the range of smaller boats that could be docked there during AC34 2013. Therefore, a temporary floating dock would be installed along Pier 9 for distributed berthing for AC34 2012 sponsor boats and/or private spectator boats (Figure 19). Based on a field survey of aprons conducted on April 28, 2011, the Pier 9 apron appears to be in good condition and thus repairs for the Pier 9 apron are not anticipated. Tables 2 and 3 provide summary information pertaining to square footage for the floating dock, number, size, and material of piles anticipated to be used.

Dredging in two areas would be necessary at Pier 9 to provide sufficient depth for the anticipated vessels. One area would be dredged to a design depth of -9 feet MLLW plus a 1-foot over-depth allowance and the other area would be dredged to -11 feet MLLW plus a 1-foot over-depth allowance (Figure 20). Approximately 10,000 cubic yards of sediment would be tested and characterized for proposed disposal locations through the DMMO process.

Pier 19, Pier 19½ and Pier 23

As shown in Figure 21, Pier 19, Pier 19½ and Pier 23 are located along The Embarcadero near the intersection of Front Street. Piers 19 and 23 are joined by a shed building, Pier 19½. Current uses include parking, office, and warehouse storage.

A site plan for Pier 19 and Pier 19½ (along with Pier 23, Piers 27-29½, and adjacent water basins, as described below) is presented in Figure 22. Temporary structures and installations would be constructed at Pier 19. Improvements would be

made to the Pier 19 south apron. Approximately 224 apron piles would be repaired and/or replaced.

Piers 23 North and South Floating Dock Installation

Pier 23 would be used for distributed berthing for AC34 sponsor boats and/or private spectator boats. Approximately 600 linear feet (8 ft width) of floating docks would be installed at Pier 23 south and approximately 760 linear feet (12-foot width) of floating docks would be temporarily installed on the north side of Pier 23. Gangways would be installed at both locations. Table 2 provides summary information pertaining to square footage for each floating dock, number, size, and Table 3 provides summary information for number of piles for each floating dock and gangway.

Piers 27-29

Piers 27-29 would be used as the America's Cup Host Village for the 2013 race events. With the dual cruise terminal and America's Cup proposals for Pier 27, development planning for this site is proposed to be phased to allow initial construction of AC Village uses at Piers 27-29 for the 2013 America's Cup races. The proposed improvements to complete the cruise terminal and plaza is a separate project for the Port and would be built out after the AC34 races are concluded.

As shown in Figure 21, Piers 27-29 are located along The Embarcadero at the intersection of Lombard Street. This 14.8-acre triangular-shaped facility is the largest pier in the northern half of the San Francisco waterfront (north of the Ferry Building), and includes the longest functional wharf face for vessel berthing (approximately 1,300 feet long, with an apron width of 48 feet).

Pier 27 has long been in continuous maritime usage for berthing deep-draft vessels and previously supported cargo ship, military, and government research vessel berthing. Under existing conditions, Pier 27 is an important secondary berth for passenger cruise ships when more than one cruise ship is in port, in addition to providing berthing for military ships, large research vessels and ceremonial ships. The berth at Pier 27 is maintained at a design depth of -35 feet MLLW under the Port's existing permitted maintenance dredging program.

Floating docks at Piers 27 and 29

The berth areas around Piers 27 and 29 (Figure 23) would provide distributed berthing sites for AC34 sponsor and support and/or private spectator boats. Given that the existing aprons on Piers 27-29 are at an elevation too high to accommodate the range of smaller boats that could be docked there during AC34 2013, temporary floating docks and gangways would be installed at these pier locations. Specifically, 1,302 linear feet of floating docks (16-foot width) would be installed on Pier 27; and another 830 linear feet of floating docks (12-foot width) would be installed on Pier 29. Tables 2 and 3 provide summary information pertaining to square footage for each floating dock, number, size, and material of piles anticipated to be used.

Marina Green/West Marina Green

Marina Green would be used for both AC34 2012 and for AC34 2013 activities. Floating docks would be installed and used only for the 2012 events. Figures 24 and 25 provide locations of the floating dock and moorings for AC34 2012 and AC34 2103 events. The Marina Green is located in San Francisco's Marina District, north of Marina Boulevard between Fort Mason on the east and the San Francisco Marina and St. Francis Yacht Club on the west.

Temporary floating docks would be installed at Marina Green for AC34 tender boats and race official boats (but could also accommodate private spectator boats) in 2012. The floating docks would measure approximately 500 feet in length and would be 16 feet in width. Tables 2 and 3 provide summary information pertaining to square footage for each floating dock; number, size, and material of piles anticipated to be used.

Mooring and Anchoring Systems

Mediterranean-style anchoring or mooring (Figure 26) locations are proposed within berths at Piers 80, 30/32, 32-36 OWB, Pier 14 North, 9, 23, 27/29, and Marina Green. Either concrete block or helical anchoring systems are proposed. The concrete anchors are a cube of concrete (5 by 5 by 5 feet or 25 square feet of surface coverage) with a steel fitting for transportation of the blocks and for anchor connection (Figure 27). The helical anchors consist of a long screw like threaded metal bar with plate and o-ring comprising the top portion of the anchor system (Figure 28).

The number of anchors per vessel size is as follows (Figure 29):

- Vessels 100 feet and smaller - two bow anchor weights (two blocks)
- Vessels between 101 and 165 feet – two set of two bow anchors (four blocks)
- Vessels between 166 and 200 feet – two sets of two bow weights (four blocks)
- Vessels between 201 and 264 feet - four sets of two bow weights (eight blocks)
- Vessels greater than or equal to 265 feet – seven sets of two bow weights (14 blocks)

For the open water moorings, the anchor arrangements described above would be doubled for a single point mooring. For dual point moorings, each mooring anchor would be sized as described above. Tables 3 provides the square footage and number of anchors proposed for mooring placement along the waterfront.

Construction Methods

In-water Construction Methods

In-water construction activities and best management practices are based on design information provided by the Project Sponsor, and typical construction practices in San Francisco Bay. All in-water construction would be conducted in compliance with regulatory permits, including scheduling of work during appropriate seasons to minimize or avoid effects on sensitive biological resources. Demolition work required at Piers 30-32 and Piers 27-29 would likely be conducted from both land and water (i.e., from barge), and standard construction specifications require implementation of practices to ensure that demolition debris does not enter the Bay. During demolition, the barges performing the work would be moored in a position to capture and contain the debris generated during the repair and dismantling activities of a wharf. In the event that debris does reach the bay, personnel in workboats within the work area would be required to immediately retrieve the debris for proper handling and disposal. Table 2 summarizes floating dock installation at each venue site. These construction activities are described below.

Pile Driving

Piles would be required to provide structural support for floating docks and to support apron repairs at Pier 19 and potentially for marginal wharf and pile repairs at other locations. Eighteen-inch diameter steel piles would be used for installation of floating docks at all locations along the waterfront. Vibratory hammers would be used to install all steel piles. Twelve-inch wood piles would be installed with an impact hammer at Pier 19 to repair the apron.

The pile length must be adequate for an approximately 20-foot embedment (generally) and thus would vary by site. As noted above, piles for all floating docks would be installed with a vibratory pile driver; no impact hammer is anticipated for floating dock installation.

Depending on the location and logistics, piles would be installed from the existing deck structure using land based pile driving equipment or from a barge. Table 3 provides current information on number of piles, size, and material at each location.

Although the pile driving at Pier 19 is exempt from Corps regulatory authority, it should be noted that impact hammers would be used to complete pile driving of the 12 inch wood piles. The ACEA, City and Port would develop a sound monitoring plan that

would be reviewed by the National Oceanic and Atmospheric Administration (NOAA), U.S. Fish and Wildlife Service, and California Department of Fish and Game (CDFG). This plan would provide detail on the methods used to monitor and verify sound levels during pile driving activities as required by the resource agencies. Pile driving would be conducted using a "soft start" technique to give fish an opportunity to move out of the area. Best management practices may include; interrupting pile driving activities if marine mammals are observed within 1,000 feet of the project site to allow them to completely exit the project site before resuming pile driving; if an impact hammer is used then a monitoring plan would be implemented as well as using cushions between top of pile and the hammer; and pre-drilling or jetting to help ease pile driving when feasible.

Floating Dock Installation

Floating docks would be made of either concrete, aluminum, or lighter-duty timber pre-cast sections with maximum widths of 8-16 feet (Figure 30 for typical dock construction). Docks would be delivered by truck or barge, depending on the contractor and float supplier.

A crane would be used to offload the dock sections from the trucks and place them on a material barge to be towed to the specific location for each section. The sections would then be assembled and located in the correct positions. Guide piles would be driven through pile guides to fix the dock system in place. Dock installation does not typically create underwater turbidity or noise and hence BMPs are not typically required. The removal of the systems would include each step in reverse.

Guide Piles

Both timber and concrete dock systems would be held in place via guide piles. The guide piles would consist of steel pipe piles embedded into the seafloor as required to achieve lateral resistance. In areas where water depths are less than 15 to 20 feet, the piles would be installed as cantilever guide piles, driven with a vibratory pile driver into the Bay sediment with sufficient embedment to provide the required lateral resistance. The embedment for these piles could range from 20 to 35 feet depending on Bay sediment soil conditions.

In cases where the water depth exceeds 20 feet and the floating docks are adjacent to a pier, the pile tops would be fixed to the pier face. The piles would be driven into the Bay sediment and a structural restraint would be installed on the top of the pile to fix it to the pier face to increase its lateral load capacity.

The guide piles would be installed using a vibratory pile driver operated from barge mounted cranes. The barges for this equipment are variable, but would likely be on the order of 150 feet long and 40 to 60 feet wide. The barge would be held in place with anchors and / or barge spuds. The barge is moved and positioned with a tug boat. There is typically a material barge adjacent to the crane barge to provide the construction materials. The material barges are typically smaller, in the range of 90 to 120 feet in length by 35 to 50 feet in width.

The most expedient method for the pile driving operation is to float the dock system into position and drive the anchor piles through the fixed guides in the dock system. This assures the correct position of the floating dock system and avoids any slight variances that might occur during the pile driving process. In typical operations with good conditions and crews, it is possible to drive 4 to 6 piles per day, possibly more in excellent driving conditions.

Dock and Pile Removal

To address issues with marine mammals occupying inactive floating docks, dock systems would be removed and stored between the AC34 2012 and AC34 2013 events. Piles would remain in place during this interim. After AC34 2013 events conclude and teams have left the premises, the dock systems would be dismantled and removed, including the piles. The installation processes described above would be completed in reverse order. The gangways would be removed and the abutment connections would be unbolted from the pier face. Then the piles can be pulled and salvaged,

allowing the dock system modules to be disconnected and removed.

The piles would typically be pulled out of the sediment using the same barge mounted crane type that would be used for installation. Rigging straps would be secured to the piles and the crane would apply a large and steady upward force to dislodge the pile. The construction duration anticipated for removal would require slightly less time than installation. The material would be moved to a storage yard until a reuse has been determined.

Gangway Installation

The gangways leading from the piers to the floating docks (Figure 31 for typical gangway construction) would likely be placed into position and attached with the aid of a barge mounted crane. The gangways are designed to be either perpendicular or parallel to the pier or seawall. For the perpendicular connection, a simple drop link hinge to the pier or seawall connection is proposed. The parallel connection would require an external platform measuring approximately five feet square. In most cases the abutment connections can be installed from the landside.

Anchoring System Installation

Mediterranean-style anchoring or mooring (Figure 28) locations are proposed within berths at Piers 80, 30/32, 32-36 OWB, Pier 14 North, 9, 23, 27/29, and Marina Green. Either concrete block or helical anchoring systems would be used. These anchors would be lowered to the seafloor and positioned as per the designs (Figures 26, 27 and 29). Typically, two cubes or helical anchors would be sufficient for vessels up to 100 feet. For larger vessels, multiple anchors would be connected together to provide greater resistance. Installation would be via derrick barge or other platform. The concrete anchor would be either placed through gravity drop with diver assistance or from a vessel with an "A" frame with a powered device. The helical anchor would be installed with an "A" frame powered device or with diver assistance to screw it into the sediment.

Dredging

Dredging of approximately 33,500 cubic yards (cy) is proposed within the basin between Piers 32 and 36; 10,000 cy within the Piers 14 North; and 10,000 cy at Pier 9. Proposed design depths would range between -9 feet MLLW to -11 feet MLLW (plus a 1- or 2-foot over-depth dredge allowance). The dredging would accommodate anchored mooring of AC racing boats and other support and spectator boats. Sediment has been tested and characterized for multiple disposal locations through the DMMO process. Dredging would be accomplished with a clamshell bucket. The proposed disposal location is SF-DODS.

Best Management Practices, including using debris booms and silt curtains to contain turbidity and suspended sediments, would be implemented during dredging. All floating debris would be removed and disposed at an upland location outside Corps jurisdiction. If upland disposal is determined to be required, dredged material would be placed onto barges and transported to Pier 94/96 for re-handling and ultimate disposal at a landfill.

Removal of Temporary Structures

All floating docks would be removed and stored after the AC34 2012 event. They would be reinstalled for the AC34 2013 events and removed entirely after the conclusion of these events. The general approach to remove pilings would be with a vibratory pile driver operated from a floating derrick barge.

Construction Equipment

All floating dock piles would be driven using a small vibratory hammer. All vibratory or pile hammer driving would be performed in compliance with the "U.S. Army Corps of Engineers Proposed Procedures for Permitting Projects that will Not Adversely Affect Selected Listed Species in California" and the USFWS and NOAA Fisheries endangered species consultation documents associated with these procedures.

A clamshell bucket up to 10 cy in size would place dredged material into a scow or barge. A grizzly (a steel grid with 12-inch openings) would be used to catch large debris, which would be disposed at a location outside Corps jurisdiction.

Avoidance, Minimization and Mitigation Measures

To avoid and minimize effects to marine mammals (harbor seals, California sea lions, and harbor porpoises); federally-listed threatened or endangered fish species (steelhead, green sturgeon) and their critical habitats; longfin smelt; Pacific herring; and essential fish habitat for a variety of managed fisheries species that may occur due to AC34 project activities, mitigation measures listed below would be implemented by the Project Sponsors. Some, but not necessarily all, of the mitigation measures would be included as special conditions to a Department of the Army permit, if issued.

Mitigation Measures for In-Water Construction

General and specific Avoidance and Minimization measures have been developed to reduce potential impacts to sensitive resources as listed below:

Potential Impacts related to Noise from Pile Driving

Avoidance and Minimization measures specific to pile driving activity have been developed to reduce project effects on sensitive resources and include the following:

- Pile driving will be conducted using a "soft start" technique to give fish an opportunity to move out of the area.
- Pile driving activities will be interrupted if marine mammals are observed within 1,000 feet of the project site to allow them to completely exit the project site before resuming pile driving.
- Vibratory pile drivers will be used for the installation and removal of all steel pilings (18-inch diameter) for floating docks. Vibratory pile driving will be conducted following The "U.S. Army Corps of Engineers Proposed Procedures for Permitting Projects that will Not Adversely Affect Selected Listed Species in California". Under this guidance a vibratory hammer may be used year-round to install steel, wood, or concrete piles of any size and in any number.
- If requested by the resource agencies, when an impact hammer is used, a monitoring plan will be implemented as well as using cushions between top of pile and the hammer; and pre-drilling or jetting to help ease pile driving when feasible.

If a Corps permit is issued for this proposed project, it would contain the conditions listed above for pile driving.

Potential Impacts from Floating Docks

The installation of temporary floating docks includes the placement of lights to illuminate the docks. The potential impact of lighting the docks is the artificial illumination of Bay waters. This could attract fish, which could become easy prey to birds. The AC34 Project Sponsors would install shielded, low elevation, and low intensity lighting on all temporary floating docks to minimize artificial illumination of Bay waters. Because mitigation with respect to lighting is part of the project description, if a Corps permit is issued for this proposed project, it would not contain a condition regarding lighting.

Potential Effects from Dredging Operations

The Project Sponsor's (ACEA) project description includes the use of a maximum 10 cy clamshell dredging equipment for all AC34 dredging. Because the 10-cy clamshell equipment is part of the project description, if a Corps permit is issued for this proposed project, it would not contain a condition regarding equipment size.

Dredging would be conducted between June 1 and November 30 in accordance with LTMS dredging windows to minimize potential adverse effects on threatened or endangered fish species in the Bay by activities authorized by a Corps permit, if issued

(see the discussion on endangered species, below). The dredged material is proposed for placement at the San Francisco Deep Ocean Disposal Site.

The Port has indicated it will provide $100,000.00 toward an LTMS study of benthic recovery.

Potential Impacts from the Placement of Temporary Mooring Anchors and Piles

Boat mooring anchors would be placed in the Bay at six piers along the waterfront and at the Marina Green. Concrete blocks would be placed at three piers as follows (each block would affect 25 square feet of Bay sediment):

- Pier 80: 28 blocks, 700 square feet affected;
- Pier 23: 6 blocks, 150 square feet affected;
- Pier 27: 119 blocks, 2,975 square feet affected;
- Marina Green: 34 blocks, 850 square feet affected.

The 153 concrete anchor blocks would affect a total of 3,825 square feet (0.09 acre).

Helical anchors would be placed at four piers as follows (each anchor would affect 7 square feet of Bay sediment):

- Pier 32-36 OWB: 28 blocks, 196 square feet affected;
- Pier 14N: 48 anchors, 330 square feet affected;
- Pier 9: 44 anchors, 308 square feet affected;
- Pier 29: 50 anchors, 350 square feet affected.

The 120 helical anchors would affect a total of 840 square feet (0.02 acre).

Although the placement of these mooring anchors would have an adverse effect on the benthic community under the anchor block (burial), the effect would be on a very small area (individually), localized and temporary. Any mooring anchors installed for the AC34 2012 events that would not be used for AC34 2013 events would be removed following the AC34 2012 events.

The placement of temporary piles for docks would have the same adverse effects on the benthic community (burial) as the placement of the mooring anchors.

To compensate for this temporary adverse effect on the benthic community from the placement of mooring anchors and piles, the Project Sponsors plan to remove 6,277 square feet (0.144 acres) of creosote piles from Pier 64.

If a permit is issued by the Corps for this project, it will include conditions regarding the placement of mooring anchors and piles.

Potential Effects from Removal of Temporary Floating Docks and Concrete Anchors

In order to reduce the possible spread of invasive species in the Bay, and at the request of the RWQCB and NOAA Fisheries, the Project Sponsors would develop and implement an Invasive Species Control Plan prior to commencement of the removal of the temporary structures. The plan would be prepared in coordination with the RWQCB and NOAA Fisheries. Provisions of the plan would be implemented by the party undertaking the applicable in-water construction work.

Construction Schedule

Construction of in-water work would last from one to six months in 2012 and 2013, depending on the specific location and extent of construction required. All construction activities are proposed to occur on weekdays (Monday through Friday) for up to 10 hours per day, and within the allowable construction hours permitted by City code.

AC34 2012 and 2013 Event Schedule

Two World Series events would occur in the San Francisco Bay in August and October of 2012. Each World Series event would run for nine days, with six race days in each series. There would be multiple races per day.

The World Series races would be followed in 2013 by the Louis Vuitton Cup, America's Cup Challenger Series (CSS) to determine which of the challenger teams advances to compete with the defender in the final Match. The overall timeframe for the CSS races would occur over an approximate 81-day duration between mid-July and early September of 2013. Currently up to 44 race days are planned and the proposed schedule of the race days would occur over three- or four-day weekends; these schedules are illustrative and dates may be subject to further changes. The final Match races would occur over an approximately two week period in mid September.

3. COMPLIANCE WITH VARIOUS FEDERAL LAWS:

National Environmental Policy Act of 1969 (NEPA): Four federal agencies are involved in the assessment of the environmental impacts of this proposed event: the National Parks Service (NPS), the U.S. Coast Guard (USCG), the Presidio Trust (PT) and the Corps. NPS and USCG are the federal leads for this assessment; the PT and the Corps are cooperating agencies. Although NPS is preparing an Environmental Assessment (EA) for the entire proposed event, the Corps is preparing a separate EA (due to timing issues) for the environmental impacts of the proposed action in accordance with the requirements of the National Environmental Policy Act of 1969 (42 U.S.C. Section 4371 et. seq.), the Council on Environmental Quality's Regulations, 40 C.F.R. Part 1500-1508, and Corps' Regulations, 33 C.F.R. Part 230 and 325, Appendix B. Unless otherwise stated, the Corps' EA will describe only the impacts (direct, indirect, and cumulative) resulting from activities within the Corps' jurisdiction. The Corps' EA will be supplemented with the NPS EA, as necessary, when that document is completed. The documents used in the preparation of the Environmental Assessment will be on file with the U.S. Army Corps of Engineers, San Francisco District, Regulatory Branch, 1455 Market Street, San Francisco, California 94103-1398.

Endangered Species Act of 1973 (ESA): Section 7 of the Endangered Species Act requires formal consultation with the U.S. Fish and Wildlife Service (FWS) and/or the National Marine Fisheries Service (NMFS) if a Corps permitted project may adversely affect any Federally listed threatened or endangered species or its designated critical habitat. Species and critical habitat currently identified as potentially impacted by the proposed project include Chinook salmon, steelhead trout, green sturgeon and delta smelt.

Programmatic biological opinions (BOs) were issued by FWS (March 12, 1999) and NMFS (September 18, 1998) for the Long Term Management Strategy (LTMS) for the placement of dredged material in the San Francisco Bay region. As a result of the BOs, there are allowable time frames for dredging to protect the habitat for threatened (and endangered) species and the species themselves per Section 7 of the Endangered Species Act of 1973, as amended. If the dredge work is conducted within those time frames, there is no need for consultation.

Federally-listed endangered adult winter-run Chinook salmon (Oncorhynchus tshawytscha) migrate through San Francisco Bay, as well as Suisun Bay and Honker Bay, to spawning areas in the upper Sacramento River during the late fall and early winter. Juveniles travel downstream through San Francisco Bay to the Pacific Ocean in the late fall as well. The movements of adult and juvenile salmon through the Bay system are thought to be rapid during these migrations. Since impacts to the water column during dredge events would be short-term, localized and minor in magnitude, no potentially adverse effects to winter-run Chinook salmon that may be near the dredge sites are anticipated if the dredge work is conducted from June 1 through November 30.

Central California populations of steelhead trout (Oncorhynchus mykiss) were classified as federally threatened in August 1997. The steelhead that occur in San Francisco Bay are included in this ESU (evolutionarily significant unit) and therefore receive protection under the Endangered Species Act. There

is concern that steelhead migrating through the Bay might enter the proposed dredging areas. As a result, the Corps would condition the permit (if issued) so that dredging would be allowed only from June 1 through November 30 in any year. Dredging outside this time frame would require consultation (pursuant to Section 7 of the ESA) with and approval from NMFS and the Corps.

On July 6, 2006, NMFS listed the North American green sturgeon (Acipenser medirosrtis) south of the Eel River in California as threatened under the Endangered Species Act. The Corps has initiated consultation per Section 7 of the Endangered Species Act of 1973 regarding this species. A Biological Opinion has not been issued to the Corps for this consultation. If a Corps permit is issued for this proposed project it will contain any special conditions resulting from that consultation.

Additionally, the Corps has concerns regarding potential impacts to Pacific herring during its annual spawning season. The proposed maintenance dredging would occur within the traditional Pacific herring spawning grounds. As stated above, the Corps would condition the permit (if issued) so that dredging would be allowed only from June 1 through November 30 in any year.

The longfin smelt (*Spirinchus thaleichthys*) is listed as a threatened species under the California Endangered Species Act. Currently the longfin smelt is not federally protected by the Endangered Species Act. Juvenile longfin smelt have been collected throughout the Bay during the late spring, summer and fall by the California Department of Fish and Game. Juveniles tend to inhabit the middle and lower portions of the water column and may be present at the proposed project location. The above restriction on in-water work for the protection of federally-listed threatened and endangered species would also minimize the potential effects on longfin smelt. The Corps has advised the applicant that if their project would result in take of longfin smelt, then they would have to contact the California Department of Fish and Game to determine the need for an Incidental Take Permit.

Magnuson-Stevens Fisheries Conservation and Management Act: The U.S. Coast Guard (as one of two federal lead agencies for this event – see the NEPA discussion above) has initiated the Essential Fish Habitat (EFH) consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. The consultation is between the USCG and the National Marine Fisheries Service (NMFS).

Any NMFS Conservation Recommendations resulting from that consultation would be included in a Corps permit, if issued, as appropriate.

Clean Water Act of 1972 (CWA):

a. Water Quality: Under Section 401 of the Clean Water Act (33 U.S.C. Section 1341), an applicant for a Corps permit must first obtain a State water quality certification before a Corps permit may be issued. The applicant has provided the Corps with evidence that a valid request has been submitted to the San Francisco Bay Regional Water Quality Control Board for State water quality certification. No Corps permit will be granted until the applicant obtains the required water quality certification. The Corps may assume a waiver of water quality certification if the State fails or refuses to act on a valid request for certification within 60 days after the receipt of a valid request, unless the District Engineer determines a shorter or longer period is reasonable for the State to act.

Those parties concerned with any water quality issues that may be associated with this project should write to the Executive Officer, California Regional Water Quality Control Board, San Francisco Bay Region, 1515 Clay Street, Suite 1400, Oakland, California 94612 by the close of the comment period of this Public Notice.

b. Alternatives: Evaluation of a proposed activity's impact includes application of the guidelines promulgated by the Administrator of the Environmental Protection Agency under Section 404(b)(1) of the Clean Water Act (33 U.S.C. Section 1344(b)). The applicant has proposed a project that includes no discharge of fill or dredged material in Waters of the U.S. Therefore, no Section 404(b)(1)

Analysis of Alternatives is required for the proposed project.

Coastal Zone Management Act of 1972 (CZMA): Section 307 of the Coastal Zone Management Act requires the applicant to certify that the proposed project will comply with the State's Coastal Zone Management Program, if applicable. No Corps permit will be issued until the State has concurred with the applicant's certification. Coastal development issues should be directed to the San Francisco Bay Conservation and Development Commission (BCDC), 50 California Street, Suite 2600, San Francisco, California 94111.

National Historic Preservation Act of 1966 (NHPA): The Corps will be making a decision regarding the issuance of a Section 10 permit under the Rivers and Harbors Act to allow the installation of temporary structures and dredging activities to occur in San Francisco Bay. If the decision is to issue a permit, the permit would provide authorization for three types of temporary structures: (1) temporary piles and floating docks, (2) temporary cement block anchors and helical screw anchors, and (3) temporary cranes. The permit, again if issued, would also authorize dredging in the waters of the Bay to deepen the areas at the following locations to accommodate the temporary berthing of race, race support, and spectator vessels:

- Piers 32- 36 Open Water Basin
- Pier 14
- Two areas south of Pier 9

Two of the proposed actions have the possibility to affect known historic properties: (1) gangway attachment to historic properties, and (2) dredging. Other project activities, such as installation of temporary piles and floating docks, installation of temporary anchors, and installation of temporary cranes, are not anticipated to affect historic properties.

Possible effects on known historic properties could occur from the installation of temporary and removable attachment points between the steel gangways, which would connect to the temporary floating docks, and a number of the historic piers and bulkhead sections that are contributors to the National Register-listed San Francisco Embarcadero Historic District (Historic District). Gangways for floating docks are proposed at Piers 80, 32, 30, 14, 9, 19, 23, 27, and 29, and at Marina Green. Piers 80, 32, 30, and 14, and Marina Green are outside of the Historic District and are not on the National Register. Pier 27 is not a contributing element to the Historic District and is not on the National Register. Piers 9, 19, 23, and 29 are contributing elements within the Historic District. The Environmental Impact Report (EIR) prepared under the California Environmental Quality Act (CEQA) found that such project activities would have a less-than-significant impact on these known historic properties because the attachment points would be temporary and removable, and because the final design of the gangway attachments would be reviewed by qualified Port preservation specialists for compliance with the Secretary of the Interior’s Standards.

Potential effects on unknown and unrecorded historic properties, such as submerged marine resources, could also occur from the dredging. The areas proposed for dredging have historically been dredged to a depth deeper than the dredge depths proposed for this project. The EIR prepared under CEQA found that such project activities would have a less-than-significant impact on unrecorded historical resources. A records search with the Northwest Information Center and the State Lands Commission identified no recorded historic properties, including submerged shipwrecks, in the areas intended for dredging. Because the areas have historically been dredged to a depth deeper than currently proposed, and because the record search identified no known historic properties, effects to cultural resources are not expected. However, in the unlikely event that a cultural resource is discovered during dredge activities, a standard accidental discovery mitigation measure would be implemented.

The Corps has begun consultation with the State Historic Preservation Office (SHPO) in accordance with Section 106 of the National Historic Preservation Act, regarding effects on historic

properties. The Corps has prepared a letter describing its actions with regard to Section 106. The Corps has determined that the proposed Section 10 permitting and subsequent actions would have no adverse effect on historic properties. If SHPO concurs with this determination, the Corps' responsibilities under Section 106 would be fulfilled.

4. PUBLIC INTEREST EVALUATION:

The decision whether to issue a permit will be based on an evaluation of the probable impact, including cumulative impact, of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits that reasonably may be expected to accrue from the proposed activity must be balanced against its reasonably foreseeable detriments. All factors that may be relevant to the proposal will be considered, including its cumulative effects. Among those factors are: conservation, economics, aesthetics, general environmental concerns, wetlands, historical properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people.

5. CONSIDERATION OF COMMENTS:

The Corps of Engineers is soliciting comments from the public, Federal, State and local agencies and officials, Indian Tribes, and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps to determine whether to issue, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest in the proposed activity.

6. SUBMISSION OF COMMENTS:

During the specified comment period, interested parties may submit written comments to Mr. Robert Lawrence, San Francisco District, Dredged Material Management Office, 1455 Market Street, 16th Floor, San Francisco, California 94103-1398; comment letters should cite the project name, applicant name, and public notice number to facilitate review by the Permit Manager. Comments may include a request for a public hearing on the project prior to a determination on the Department of the Army permit application; such requests shall state, with particularity, the reasons for holding a public hearing. All substantive comments will be forwarded to the applicant for resolution or rebuttal. Additional project information or details on any subsequent project modifications of a minor nature may be obtained from the applicant and/or agent, or by contacting the Permit Manager by telephone or e-mail cited in the public notice letterhead. An electronic version of this public notice may be viewed under the *Current Public Notices* tab on the San Francisco District Regulatory website: http://www.spn.usace.army.mil/regulatory/.