



# PUBLIC NOTICE

**U.S. ARMY CORPS OF ENGINEERS  
LOS ANGELES DISTRICT**

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**APPLICATION FOR PERMIT  
U. S. Navy Joint Logistics Over the Shore (JLOTS), Maritime Prepositioning  
Force (MPF), and Field Exercise Training (FEX) at Marine Corps Base Camp Pendleton**

**Public Notice/Application No.:** SPL-2015-00389-RRS

**Project:** U. S. Navy Joint Logistics Over the Shore (JLOTS), Maritime Prepositioning Force (MPF), and Field Exercise Training (FEX) at Marine Corps Base Camp Pendleton

**Comment Period:** July 16, 2015 through August 17, 2015

**Project Manager:** Robert Smith; 760-602-4831; [Robert.R.Smith@usace.army.mil](mailto:Robert.R.Smith@usace.army.mil)

**Applicant**

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**Location**

The proposed project area is located at and up to several miles offshore of Marine Corps base (MCB) Camp Pendleton in California, the U.S. Marine Corps (USMC's) major amphibious training center for the west coast. MCB Camp Pendleton encompasses approximately 200 square miles within the northern portion of San Diego County, approximately 40 miles north of the City of San Diego. MCB Camp Pendleton is bordered to the northwest by Orange County, to the north and east by the City of San Clemente and the Cleveland National Forest, to the east by the community of Fallbrook and the Naval Weapons Station Seal Beach Detachment Fallbrook, to the south by the City of Oceanside, and to the west by the Pacific Ocean. The proposed project would occur at MCB Camp Pendleton, offshore of and adjacent to three training beaches (Red, Gold, and White), and within and adjacent to the Del Mar Boat Basin (DMBB) near Oceanside Harbor (see attached drawings). Project is located at: Latitude: N 33.295, and W Longitude -117.469.

**Activity**

The proposed project (Alternative 2), per the Final Environmental Assessment as prepared by the Navy and dated May 2015, includes amphibious training exercises utilizing: causeways, piers, ship to shore hoses and bulk liquid transfer facilities, lighterage system facilities, tanker and container ships, amphibious craft landing zones, and logistical movements of personnel and equipment from Ships to Shore for the Army, Air Force, and Navy Joint Logistics Over the Shore, Maritime Prepositioning Force, and Field Exercise Training (JLOTS/MPF/FEX) project activities. Project

includes proposed project activities that are generally the same as those permitted and described in the previous Department of the Army Permit (File No. SPL-2008-00530-FBV [issued 10 November 2008; expired 31 August 2013]) located in the City of Coronado on the Silver Strand, however, emerging platforms and new technologies (e.g., Joint High Speed Vessel) would be integrated into future exercises. In addition, ship-to-ship refueling operations would take place approximately up to 3 miles offshore MCB. Amphibious training exercises would occur on Red, Gold, and White beaches and Landing Craft storage and vehicle staging areas in and near the Del Mar Boat Basin (DMBB). The average annual amphibious training exercise tempo would increase by approximately 25 percent (as compared to existing conditions), resulting in an approximate average annual total of 15 amphibious training exercises each year at Marine Corps Base (MCB) Camp Pendleton. Depending on scheduling and training needs, some years would experience a lower or higher number of total amphibious training exercises and impacts. No permanent impacts to waters of the U.S. are proposed from the temporal construction or site improvements. Maximum temporary impacts to navigable marine waters of the U.S. may be up to 12.5 acres of temporary causeways, anchorages; amphibious landing zones, beach grading, piers, pile driving, and anchors for each training event (see attached drawings). For more information see page 3 of this notice.

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Interested parties are hereby notified an application has been received for a Department of the Army permit for the activity described herein and shown on the attached drawing(s). We invite you to review today's public notice and provide views on the proposed work. By providing substantive, site-specific comments to the Corps Regulatory Division, you provide information that supports the Corps' decision-making process. All comments received during the comment period become part of the record and will be considered in the decision. This permit will be issued, issued with special conditions, or denied under Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act. Comments should be mailed to:

DEPARTMENT OF THE ARMY  
LOS ANGELES DISTRICT, U.S. ARMY CORPS OF ENGINEERS  
REGULATORY DIVISION  
ATTN: Robert Smith  
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Alternatively, comments can be sent electronically to: [Robert.R.Smith@usace.army.mil](mailto:Robert.R.Smith@usace.army.mil)

The mission of the U.S. Army Corps of Engineers Regulatory Program is to protect the Nation's aquatic resources, while allowing reasonable development through fair, flexible and balanced permit decisions. The Corps evaluates permit applications for essentially all construction activities that occur in the Nation's waters, including wetlands. The Regulatory Program in the Los Angeles District is executed to protect aquatic resources by developing and implementing short- and long-term initiatives to improve regulatory products, processes, program transparency, and customer feedback considering current staffing levels and historical funding trends.

Corps permits are necessary for any work, including construction and dredging, in the Nation's navigable water and their tributary waters. The Corps balances the reasonably foreseeable benefits and detriments of proposed projects, and makes permit decisions that recognize the essential values of the Nation's aquatic ecosystems to the general public, as well as the property rights of private citizens who want to use their land. The Corps strives to make its permit decisions in a timely manner

that minimizes impacts to the regulated public.

During the permit process, the Corps considers the views of other Federal, state and local agencies, interest groups, and the general public. The results of this careful public interest review are fair and equitable decisions that allow reasonable use of private property, infrastructure development, and growth of the economy, while offsetting the authorized impacts to the waters of the United States. The permit review process serves to first avoid and then minimize adverse effects of projects on aquatic resources to the maximum practicable extent. Any remaining unavoidable adverse impacts to the aquatic environment are offset by compensatory mitigation requirements, which may include restoration, enhancement, establishment, and/or preservation of aquatic ecosystem system functions and services.

### **Evaluation Factors**

The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit, which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof. Factors that will be considered include conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food production and, in general, the needs and welfare of the people. In addition, if the proposal would discharge dredged or fill material, the evaluation of the activity will include application of the EPA Guidelines (40 CFR Part 230) as required by Section 404 (b)(1) of the Clean Water Act.

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 of Engineers to determine whether to issue, modify, 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 of the proposed activity.

### **Preliminary Review of Selected Factors**

**EIS Determination**- A preliminary determination has been made an environmental impact statement is not required for the proposed work.

**Water Quality**- The applicant is required to obtain water quality certification, under Section 401 of the Clean Water Act, from the California Regional Water Quality Control Board. Section 401 requires any applicant for an individual Section 404 permit provide proof of water quality certification to the Corps of Engineers prior to permit issuance. The Navy has submitted a Section 401 application and it has been deemed complete on July 1, 2015 by the Regional Board.

**Coastal Zone Management**- For those projects in or affecting the coastal zone, the Federal Coastal Zone Management Act requires that prior to issuing the Corps authorization for the project, the applicant must obtain concurrence from the California Coastal Commission the project is consistent with the State's Coastal Zone Management Plan. The Navy, per lead agency guidance, has provided a certified CZM compliance concurrence letter from the California Coastal Commission dated December 16, 2014 that the proposed activity would comply with and would be conducted in a manner consistent with the approved State Coastal Zone Management Program.

**Essential Fish Habitat/Marine Mammal Protection Act**- The Navy, as the lead federal agency, has determined that the proposed action will have an adverse effect on Essential Fish Habitat (EFH) and has received a EFH and MMPA letter dated January 5, 2015 from the National Marine Fisheries Service (NMFS) providing EFH Conservation Recommendations (benthic surveys with habitat avoidance; seasonal grunion spawning surveys and avoidance) and MMPA comments with avoidance requirements and MMPA compliance. The Navy has completed consultation with NMFS for EFH and has provided the ACOE with a final EFH documentation. Pre-construction Caulerpa surveys at DMBB will be performed to document the absence of Caulerpa and eelgrass impacts within the project footprint, as applicable.

**Cultural Resources**- The location of the proposed action will occur in underwater lands that in some cases have been previously disturbed and the Navy has consulted under the National Historic Preservation Act (NHPA) with the State Historic Preservation Office (SHPO) and has submitted to the Corps a letter to SHPO dated November 3, 2014 documenting their lead agency determination that the project will have No Adverse Affect to cultural resources. Therefore the implementation of the proposed action would not affect any archaeological sites or other cultural resources per the lead agency. The Navy, per lead agency guidance, may provide more NHPA documentation for the Project to the Corps which will be reviewed and/or adopted by the Corps. Also the Corps may adopt a "No Potential to Cause an Effect" determination for any potential impacts to cultural resources determination.

**Endangered Species**- Based on the review of MCB Camp Pendleton's provided geographic information system, 10 federally listed species (or suitable habitat for these species) are known to occur in the project area. MCB is exempt from any designated critical habitat designations due to the protection provided by the MCB Integrated Natural Resources Management Plan (INRMP). The listed species present in the project area include: thread-leaved brodiaea, Riverside fairy shrimp, San Diego Fairy shrimp, the California least tern, the coastal California gnatcatcher, the least Bell's vireo, the light-footed clapper rail, the southwestern willow flycatcher, the western snowy plover, and the tidewater goby. Also five listed whale species and four listed sea turtle species may occur near or in the project area. No listed white or black abalone has been found in the project area. The Navy as lead agency has consulted for the project under the HSTT Biological Opinion (NMFS 2015) and the MCB Programmatic Riparian BO from the USFWS (1995) and all training associated with the project would comply with MCIWEST-MCB CAMPENO 3500.1 and the identified avoidance/minimization measures shown in the Final Environmental Assessment executed by the Navy in May 2015.

**Public Hearing**- Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearing shall state with particularity the reasons for holding a public hearing.

## **Proposed Activity for Which a Permit is Required**

**Basic Project Purpose-** The basic project purpose comprises the fundamental, essential, or irreducible purpose of the proposed project, and is used by the Corps to determine whether the applicant's project is water dependent (i.e., requires access or proximity to or siting within the special aquatic site to fulfill its basic purpose). Establishment of the basic project purpose is necessary only when the proposed activity would discharge dredged or fill material into a special aquatic site (e.g., wetlands, pool and riffle complex, mudflats, coral reefs). The basic project purpose for the proposed project is to perform military beach landing training. The project must be staged at a beach in the coastal intertidal zone due to the need for construction of a floating causeway and appurtenant amphibious transport systems to complete the training, which makes the project water dependent.

**Overall Project Purpose-** The overall project purpose serves as the basis for the Corps' 404(b)(1) alternatives analysis and is determined by further defining the basic project purpose in a manner that more specifically describes the applicant's goals for the project, and which allows a reasonable range of alternatives to be analyzed. The overall purpose for the proposed project/activity is to construct temporary onshore and near shore facilities or systems for conducting military training on a beach in southern San Diego County, California.

**Alternatives-** The Navy prepared a Final Environmental Assessment entitled "Joint Logistics Over the Shore, Maritime Prepositioning Force, and Field Exercise Training, Marine Corps Base Camp Pendleton, San Diego County, California", dated May 2015 that evaluated the No Action Alternative, Alternative 1 (Continuation of Existing training exercises on Red and Gold beaches with a higher 25% increase in tempo), and Alternative 2 (the proposed project with the new use of White Beach). Another site that was evaluated was the Silver Strand Training Complex (SSTC) that can support JLOTS but not the full range of operations analyzed in the EA (MPF/FEX) and it already sustains its own training activity schedules and priorities that created logistical constraints. Also the SSTC fails to meet several of the screening criteria and thus fails to meet the purpose of and need for the Proposed Action. Notably, the Silver Strand Training Complex is not able to provide for the co location of commands, equipment, facilities, and infrastructure to support existing and future training and personnel tempo requirements. The Silver Strand Training Complex also does not have the necessary geographic area (i.e., 5 beach acres or 50 upland acres), or beach characteristics to support the focused assemblage and execution of the Range of Military Operations associated with the amphibious training analyzed in this EA. The Corps will be requiring the compilation of a Section 404(b)(1) alternatives analyses. Other offsite training sites could be used such as the Silver Strand Training Complex but such training can only occur on designated military areas. Per Regulatory Guidance Letter 93-2 and the Section 404(b)(1) Guidelines the Corps will require that the compliance evaluation procedure be dependent on the seriousness of potential for adverse impacts on the aquatic ecosystems posed by the proposed project. The off-site and onsite alternatives analysis should determine if there are any alternative sites that would meet the overall project purpose, would result in less damage to the aquatic ecosystem, and do not have other significant adverse environmental consequences.

## **Additional Project Information**

**Baseline information-** The Hawaii-Southern California Testing and Training Activities (HSTT) Environmental Impact Statement (EIS)/Overseas EIS (OEIS)/(Navy 2013a) analyzed the project activities which was supplemented by the Navy's Final Environmental Assessment (EA) which was executed by the Navy in May 2015. Overall the onshore and offshore terrestrial and marine areas at MCB, which are within the Southern California Bight/Oceanside Littoral cell, are considered excellent

per a report done by Heal the Bay in 2013, although some areas have been subject to disturbances from previous Navy activities.

The project area lies within 4 of 7 distinct ephemeral and perennial watershed areas (Coastal Drainage, Las Flores, Aliso, and Santa Margarita) and the natural open space canyons abutting the project area contribute to highly functioning marine resources. The majority of the terrestrial project area consists of beach, developed areas, disturbed habitat, and pre-existing paved and dirt roads. Several ephemeral/intermittent riverine drainages flow into the project area. Red, Gold, and White beaches contain low, wave-cut terraces that have distinct cliffs or escarpments as high as 145 ft. along the intertidal and adjacent areas with coastal and sage scrub terraces eastward of the wave-cut terraces. Coastal high energy littoral drift includes both longshore and offshore seasonal conditions that create a wider beach in the summer and a thinner beach in the winter. Fluvial transport from the upper watersheds of the San Luis Rey and Santa Margarita rivers does nourish the project area, but upstream damming of sediments and development in both watersheds has reduced the sediment transport from historic levels.

Two recent naval biological studies done in 2010 documented that the marine environment within the project area has a variety of habitat types including kelp and eelgrass beds, sandy substrates, rocky bottom, and a steep initial drop of 23 ft. near the shoreline with a gradual slope to a depth of 65 feet (ft.) at about 2.3 miles offshore. Sea grasses do not occur in the surf zone of the area where amphibious landings occur. In the northern portion of Gold beach there are kelp beds and rocky reef and cobble-boulder beds that support an extensive kelp bed known as the Barn Kelp bed. There is no kelp off of White beach which does have a cobble strip in its southern area but all of the beaches have patches of drift kelp in the intertidal and adjacent shorelines. Red beach has extensive kelp beds off about 1 mile from its shore. Thirty nine fish species including coastal pelagic species, stars, crabs, prawns, shrimp, and rays including lobsters and hermit crabs are found in the project marine areas and California grunion are known to spawn along the beaches of the project area. The Del Mar Boat Basin with depths ranging from 16 to 25 ft. contains nursery eelgrass areas with developed berthing areas (including the Oceanside Rail Yard) adjacent to the navigational areas. Also the DMBB does contain seventeen fish species and 25 mega-benthic invertebrate species including abundant anchovies and juvenile halibut fishes and swimming crabs.

Project description- Proposed amphibious training exercises would increase the scope and size of previously analyzed, approved, and permitted exercises at MCB. These exercises would also provide the Navy and the Marine Corps an opportunity to integrate as an amphibious warfare team to move Marines from ships afloat to inland areas to support the Range of Military Operations associated with amphibious warfare training. The proposed action is needed for Navy, Marine Corps, and Army units to conduct repetitive and realistic routine amphibious training exercises to ensure continued combat readiness. Amphibious training exercises would allow military commands to practice their individual skills as well as prepare for joint operations, where multiple units, multiple commands, and multiple services work together under a single commander in a realistic setting. The training aims to validate, enhance, and refine military tactics, techniques, procedures, and doctrine for these operations, which ultimately provides the U.S. military the capability to move combat power across the surf zone, on to land, and to inland areas.

For more than 70 years, various military units have conducted amphibious training exercises at MCB Camp Pendleton. Since 2001, over 20 exercises of similar size and scope of JLOTS and MPF have occurred at MCB Camp Pendleton. These exercises have occurred in five general geographic areas at MCB Camp Pendleton: offshore, in the littoral zone (including the Del Mar Boat Basin), on the beaches, in inland training areas, and in the air. JLOTS exercises typically occur once every 3 to 5 years and last up to 90 days. On average, approximately 2,000 – 3,500 personnel take part in JLOTS

training exercises. MPF exercises typically occur once every 2 years and last around 30 days, and include an average of approximately 600 – 1,500 personnel. On average, between 6 and 8 FEXs are conducted on an annual basis and last 7 to 14 days and typically involve 30 – 800 personnel. The last JLOTS occurred in 2008 (JLOTS 08; June 25 to August 20), the last stand-alone MPF exercise occurred in 2011 (Pacific Horizon 11; March 2-14), and at least 18 FEXs have occurred since 2005.

Table 1 summarizes existing amphibious exercises at MCB Camp Pendleton.

**Table 1 Current Amphibious Training Exercise Frequency at MCB Camp Pendleton**

<b>Exercise Type</b>	<b>Average Frequency</b>	<b>Average Duration</b>	<b>Average Personnel</b>
JLOTS	Once every 3–5 years	90 days	2,000–3,500
MPF	Once every 2 years	30 days	600–1,500
FEX	6–8 times a year	7–14 days	30–800

During JLOTS and MPF amphibious training exercises, MPF ships or chartered vessels containing cargo, supplies, and equipment are anchored approximately 3 nautical miles (5.6 km) offshore of Red or Gold beaches. The cargo consists of rolling stock, tracked vehicles, and Twenty-foot Equivalent Units. During the exercise, personnel transfer cargo, supplies, and equipment to the beach using a variety of systems/platforms, including the Improved Navy Lighterage System, Modular Causeway System, Logistics Support Vessels, Landing Craft Utility boats, Landing Craft Mechanized boats, and Utility boats. The Improved Navy Lighterage System and Modular Causeway System consist of interchangeable powered and non-powered floating platforms that are assembled offshore. Bulk and containerized cargo, rolling stock, and tracked vehicles are transferred from a ship to the floating platforms via the ship's crane or ramp.

Another part of the project includes the Offshore Petroleum Discharge System (OPDS), Amphibious Bulk Liquid Transfer System (ABLTS), and Inland Petroleum Discharge System which are used to simulate the transfer of petroleum products from ships to forces on the shore, and inland areas. The simulated transfer uses seawater; no petroleum products have ever been transferred during exercises. Approximately 100,000 to 200,000 gallons (378,500 to 757,000 liters) of seawater are used during any single exercise. The Offshore Petroleum Discharge System/Amphibious Bulk Liquid Transfer System process consists of pumping seawater from a tanker ship through a flexible conduit that runs along the ocean floor and then up to a beachside receptor known as a Beach Termination Unit or a Beach Interface Unit. Collectively, the aforementioned component features constitute an Offshore Bulk Fuel System. The OPDS has a flexible hose system that can extend from the beach inland for up to 4 miles (6.4 km), although the Offshore Petroleum Discharge System typically only extends approximately 1-2 miles (2-3 km) inland during training events. The system includes a Single Anchor Leg Mooring that is anchored on the ocean floor and used as a mooring buoy for the flexible hose system. The Offshore Petroleum Discharge System hose is anchored to the sea floor at various locations along the hose. The Offshore Petroleum Discharge System hose extends onshore to a Beach Termination Unit that connects with the Inland Petroleum Discharge System that pumps the liquid further inland. The Inland Petroleum Discharge System hose can extend up to 5 miles (8 km) to a simulated petroleum bag farm. The Amphibious Bulk Liquid Transfer System is a floating hose system that is deployed at up to 1.9 miles (3 km) from the Beach Interface Unit to the tanker ship. The Amphibious Bulk Liquid Transfer System has a floating hose that is marked with

affixed lights. The water used in the Offshore Petroleum Discharge System or Amphibious Bulk Liquid Transfer System is gradually discharged into the Pacific Ocean away from the shoreline at the completion of the exercise.

Tactical Water Purification Systems, formerly known as “Reverse Osmosis Water Purification Units,” are also used during training, although infrequently. These systems desalinate and purify seawater to create potable water. The Tactical Water Purification System process uses reverse osmosis and chlorination to treat seawater, which is usually extracted from the ocean offshore of Red Beach. A Tactical Water Purification System produces approximately 20,000 gallons (75,700 liters) of potable water per average use. At the end of the Tactical Water Purification System evolution, a percolation pit is excavated in the sand above the high tide line of sufficient size to contain all product water and brine solution. The product water and brine solution are then discharged into the pit to remix and percolate into the underlying sand. The pit is then filled with the excavated sand.

Personnel accomplish cargo offload using several methods, including piers and beach landings. The Elevated Causeway is a temporary pier that extends from the beach into the water through the surf zone to a distance of approximately 3,000 ft (914 m) offshore. The Elevated Causeway allows vessels with deeper draft (that are unable to land on the beach) to dock and offload their cargo/equipment safely outside the surf zone. Once all of the Elevated Causeway components are assembled onshore (within an approximately 4-acre [1.6-ha] area), two bulldozers grade a ramp in the beach to facilitate construction from the beach seaward. The area graded is approximately 100-ft wide by 200-ft long (30-m by 61-m) and the ramp is filled in to match the existing beach contour after removal of the Elevated Causeway. Using a diesel impact hammer, personnel drive approximately one hundred, 24-inch (60-centimeter) diameter steel piles into the sand below the water before hoisting the causeway platform pieces into place where they are installed using hydraulic jacks. Consistent with the HSTT permit (NMFS 2014), no more than four pile driving events may occur per year. Causeway platforms containing the cargo are motored through the surf onto the beach. Bulldozers excavate temporary notches in the beach to make an anchor point for the platform, which is beached using a barge ferry.

Once the materiel are assembled onshore (within an approximate 4-acre [1.6-ha] area), two bulldozers grade the beach (i.e., level the sand) into the surf zone to create an excavated area that is approximately 150 ft by 150 ft (45 m by 45 m) that serves as the beachhead for the platform or pier. Vehicles and cargo are then driven off the floating causeway onto the beach (Figure 2-11). Any beach areas excavated during the exercise are filled in at the conclusion of the exercise. To facilitate the movement of vehicles up and along the beach, mobility matting is used from the high-water mark up and throughout the beach area. Mobility matting is a lightweight, durable, and rapidly deployable polyester matting/soil stabilization system that enables wheeled military traffic to traverse sand and soft soil. An Elevated Causeway is typically constructed in 10 days. Also Modular Causeway Systems (MCS) may be used for transfer of personnel and cargo/equipment. The temporary pier extends from shore to a depth of 20 ft (6 m) Mean Lower Low Water; which at Red Beach typically corresponds to distance of approximately 1,200 ft (366 m) (as a point of reference, 11 days were needed to assemble a 1,020-ft [311-m] long temporary pier for the 2008 JLOTS). Once constructed, offloading operations are similar to those of a conventional pier. Two cranes and a vehicle turnstile (at the end of the Elevated Causeway) are used for container offload. The temporary Elevated Causeway pier and all component pieces, including associated piles, are removed at the conclusion of training, a process that takes approximately two weeks to complete. Personnel use a vibratory extractor to remove all of the piles. Figure 2-8 presents images of an Elevated Causeway. On average, an Elevated Causeway is either being assembled, used, or removed over a period of approximately 30 continuous days.

The TRIDENT Pier is an assembled floating platform typically 60-90 ft (18-27 m) wide that extends from the beach through the surf zone out to distances of approximately 1,200 ft (366 m). While the TRIDENT Pier is typically held in place with anchors to the beach, the TRIDENT Pier can also be

positioned via anchors on the ocean floor. Construction of the pier involves digging a pit in the wet sand (generally 25-ft [8-m] wide by 30-ft [9-m] long by 8-ft [2-m] deep). Multiple craft with deeper draft can be moored to any of the up to three pier heads on a TRIDENT Pier to offload their cargo (refer to Figure 2-1). Rolling stock constitutes the bulk of the equipment offloaded via the TRIDENT Pier.

Landing Craft Utility boats, Logistics Support Vessels, and Landing Craft Mechanized boats move rolling stock and containerized cargo to shore. Cargo and vehicles are transferred from the ship onto the Landing Craft Utility boats and Logistics Support Vessels utilizing the Roll-On/Roll-Off Discharge Facility or via the ship's crane, and the vessels motor to the shore, lower their ramps, and the vehicles and cargo are driven onto the beach.

Amphibious training exercises use the Del Mar Boat Basin as a safe harbor during inclement weather, as well as an anchorage location for the Landing Craft Utility boats at all times. In addition, the area is used to swap ship crews, perform minor maintenance, and refuel lighterage craft. A pier or other floating causeway (approximately 270-ft [82-m] long) is typically anchored onto the beach in the Del Mar Boat Basin and/or in the water to serve as a mooring platform for the vessels. Some parts of the TRIDENT Pier can be assembled in the Del Mar Boat Basin and be towed offshore before the complete structure is assembled on or offshore of the beach.

Causeway platforms containing the cargo are motored through the surf onto the beach. Bulldozers excavate temporary notches in the beach to make an anchor point for the platform, which is beached using a barge ferry. Once the materiel are assembled onshore (within an approximate 4-acre [1.6-ha] area), two bulldozers grade the beach (i.e., level the sand) into the surf zone to create an excavated area that is approximately 150 ft by 150 ft (45 m by 45 m) that serves as the beachhead for the platform or pier. Vehicles and cargo are then driven off the floating causeway onto the beach (Figure 2-11). Any beach areas excavated during the exercise are filled in at the conclusion of the exercise.

Typically, cargo is reloaded onto ships at the conclusion of the exercise. This usually occurs in the Del Mar Boat Basin using the same systems/platforms used to bring the materiel to shore and back out to the larger craft outside of the Del Mar Boat Basin, but can also occur on the beach in the opposite manner with which the cargo came ashore, using the same equipment and procedures.

Proposed Mitigation– The proposed mitigation may change as a result of comments received in response to this public notice, the applicant's response to those comments, and/or the need for the project to comply with the 404(b)(1) Guidelines. In consideration of the above, the proposed mitigation sequence (avoidance/minimization/compensation), as applied to the proposed project is summarized below:

Avoidance: The footprint of the temporary piers and causeways will be approximately 12.5 acres of navigable waters and are largely located in areas previously disturbed by other MCB prior activities with little to no impacts to rocky reef, kelp, seagrass, or eelgrass habitats. Per NMFS EFH conservation measures the Navy will perform nearshore benthic habitat surveys to avoid impacts to aquatic resources such as anchoring/OPDS and other bottom habitat disturbances. The location of the temporary training activities and infrastructure and the location for the temporary vessel moorings and OPDS and ABLTS will both be situated to avoid rocky reef, kelp, seagrass, and eelgrass impacts to the maximum extent practicable. All simulated fuel and utility line training activities will make use of clean water instead of fuel or petroleum. Pre- and post-construction eelgrass surveys will be performed at all project locations capable of supporting eelgrass. Similar activities in 2008 did not result in any eelgrass impacts. No kelp impacts are expected. Pre-construction *Caulerpa taxifolia* surveys will also be performed at all project locations. Grunion monitoring will be performed and avoidance measures will be undertaken if needed to the maximum extent practicable.

Minimization: The potential for impacts to EFH, green sea turtles, and marine mammals (reduced light, altered wave and tidal energy patterns, substrate disturbance/smothering, influx of non-indigenous species, elevated level of toxics) will also be reduced by the SPCCP and other measures discussed in NMFS' EFH and MMPA response letter dated January 5, 2015 and any other MMPA protections from further consultations. Also for green sea turtles a ramping up procedure along with monitoring will be used for pile driving activities (driving of 100 temporary steel piles) to allow for mammals to disburse. For all beach activities, vehicles and equipment shall make use of matting with all temporary grading and beach fills restored to pre-activity contours. All hazardous materials are kept a safe distance from the percolation pits and managed in accordance with applicable Federal and state regulations. Most of the effects of noise, pile driving, increased turbidity, pier and causeway construction, the beaching of large landing craft, and the placement of anchoring devices per NMFS's EFH consultation would be no more than minimal and temporary in nature. The Navy would be required to implement the Navy's Spill Prevention Control and Countermeasure Plan (SPCCP) to manage potential storm water and vessel and equipment fueling issues. The proposed action will employ Best Management Practices.

Compensation: MCB has committed to avoiding impacts to wetland and kelp and eelgrass impacts to the maximum extent practicable on any beaches, nearshore activities, and intertidal areas. Also the exercises would not be allowed within any lagoon or estuary (excluding DMBB), salt-marsh/mudflat, or marsh. Any eelgrass impacts would be mitigated per the current eelgrass mitigation policy per lead agency guidance and any other impacts to rocky reef, seagrasses, or kelp (although not anticipated) would be mitigated with appropriate mitigation after consulting with the Navy/NMFS under lead agency policy.

### **Proposed Special Conditions**

No special conditions are proposed at this time. For additional information please call Robert Smith of my staff at 760-602-4831 or via e-mail at [Robert.R.Smith@usace.army.mil](mailto:Robert.R.Smith@usace.army.mil). This public notice is issued by the Chief, Regulatory Division.



#### *Regulatory Program Goals:*

- To provide strong protection of the nation's aquatic environment, including wetlands.
- To ensure the Corps provides the regulated public with fair and reasonable decisions.
- To enhance the efficiency of the Corps' administration of its regulatory program.

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**DEPARTMENT OF THE ARMY  
LOS ANGELES DISTRICT, U.S. ARMY CORPS OF ENGINEERS**

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[WWW.SPL.USACE.ARMY.MIL/MISSIONS/REGULATORY](http://WWW.SPL.USACE.ARMY.MIL/MISSIONS/REGULATORY)

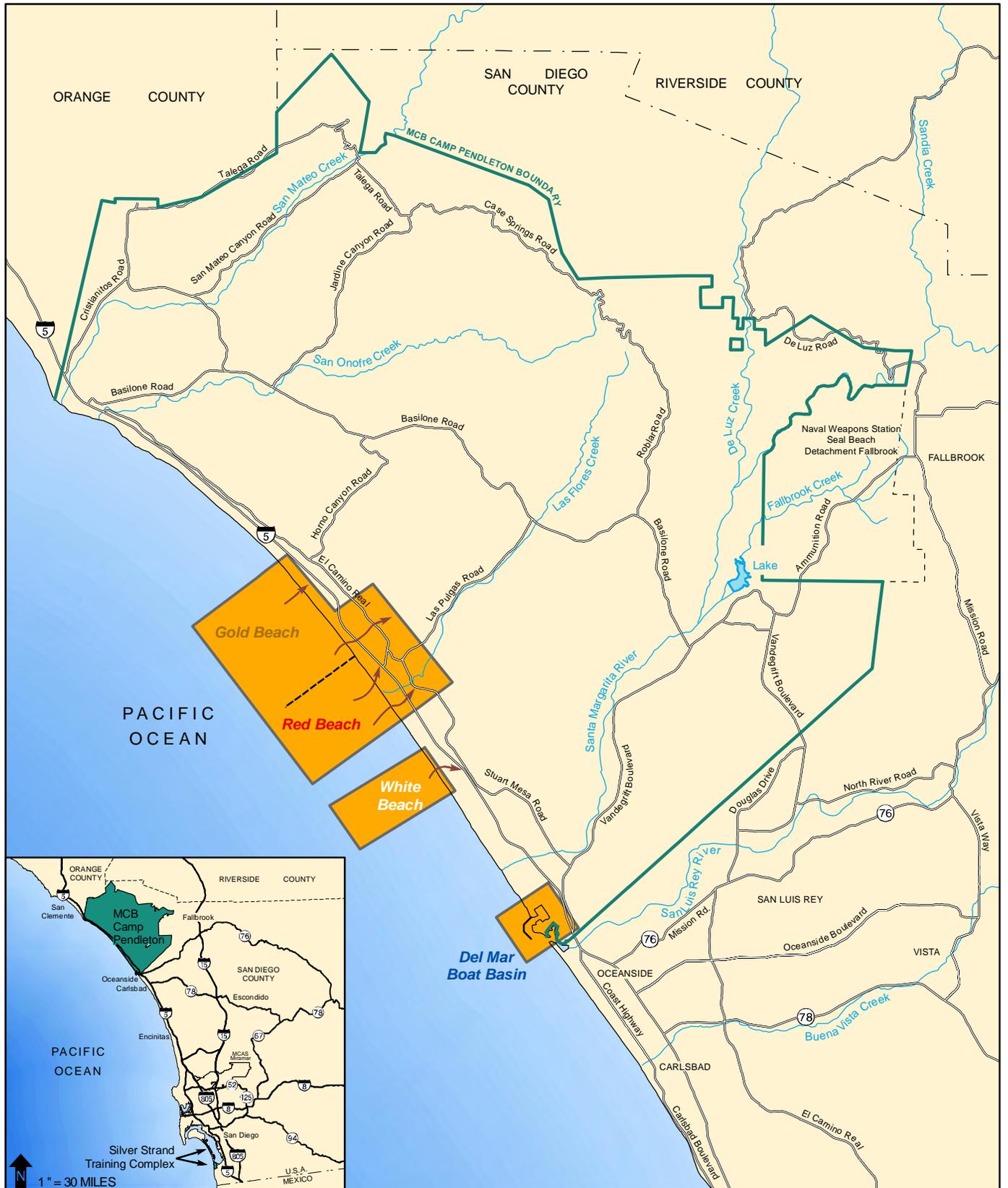
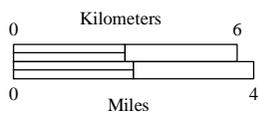


Figure 1  
 General Location of the Proposed Action and  
 Notional Depiction of Major Transit Corridors



Notes: This notional depiction is provided to give the reader an understanding of where notable operations are likely to happen; locations can change from exercise to exercise. Furthermore, it should not be interpreted to mean that the above locations are the only places where exercises can happen.

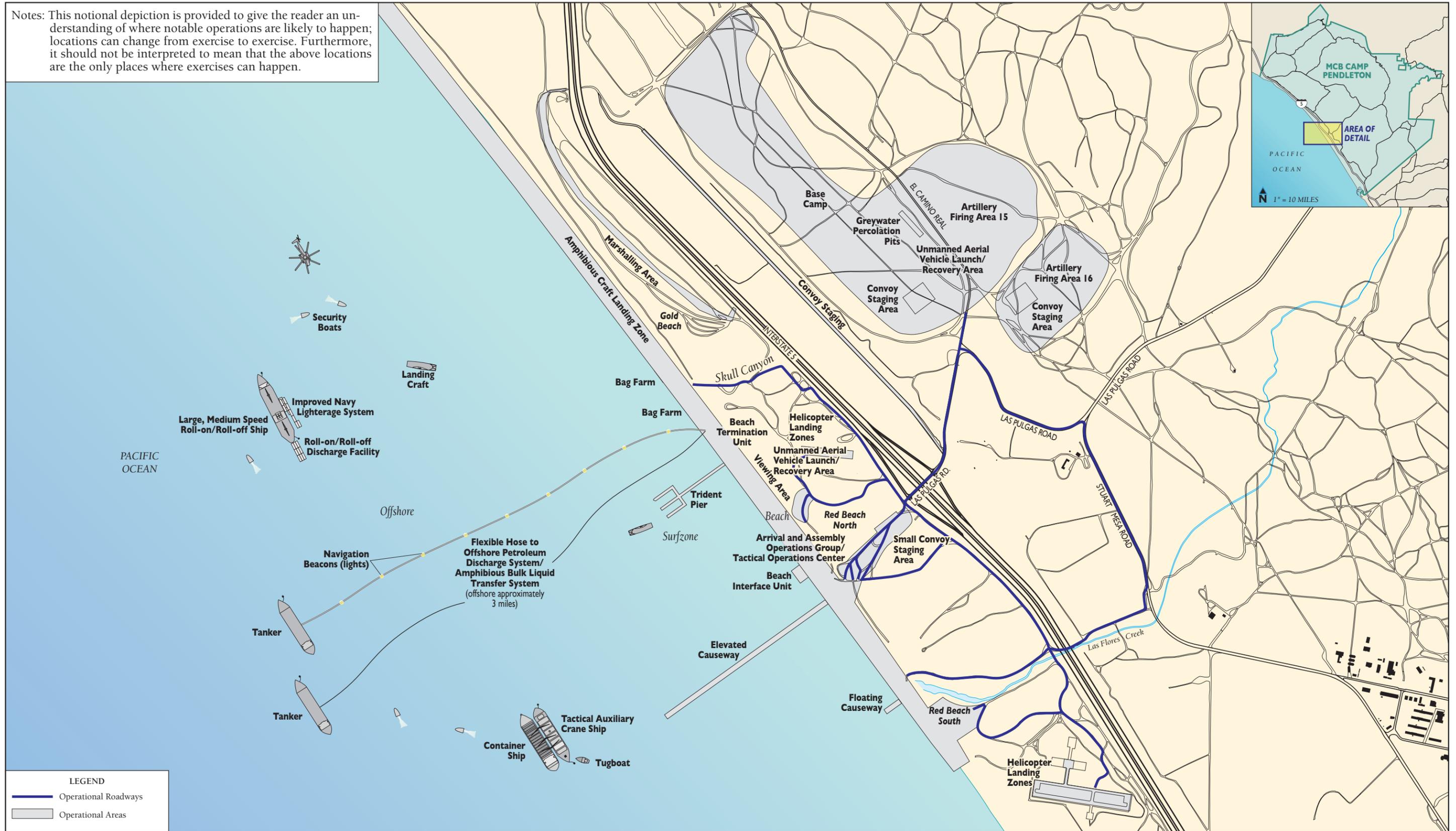


Figure 2  
Notional Depiction of Major Amphibious Training Exercise Elements at MCB Camp Pendleton



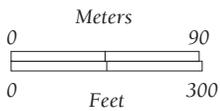
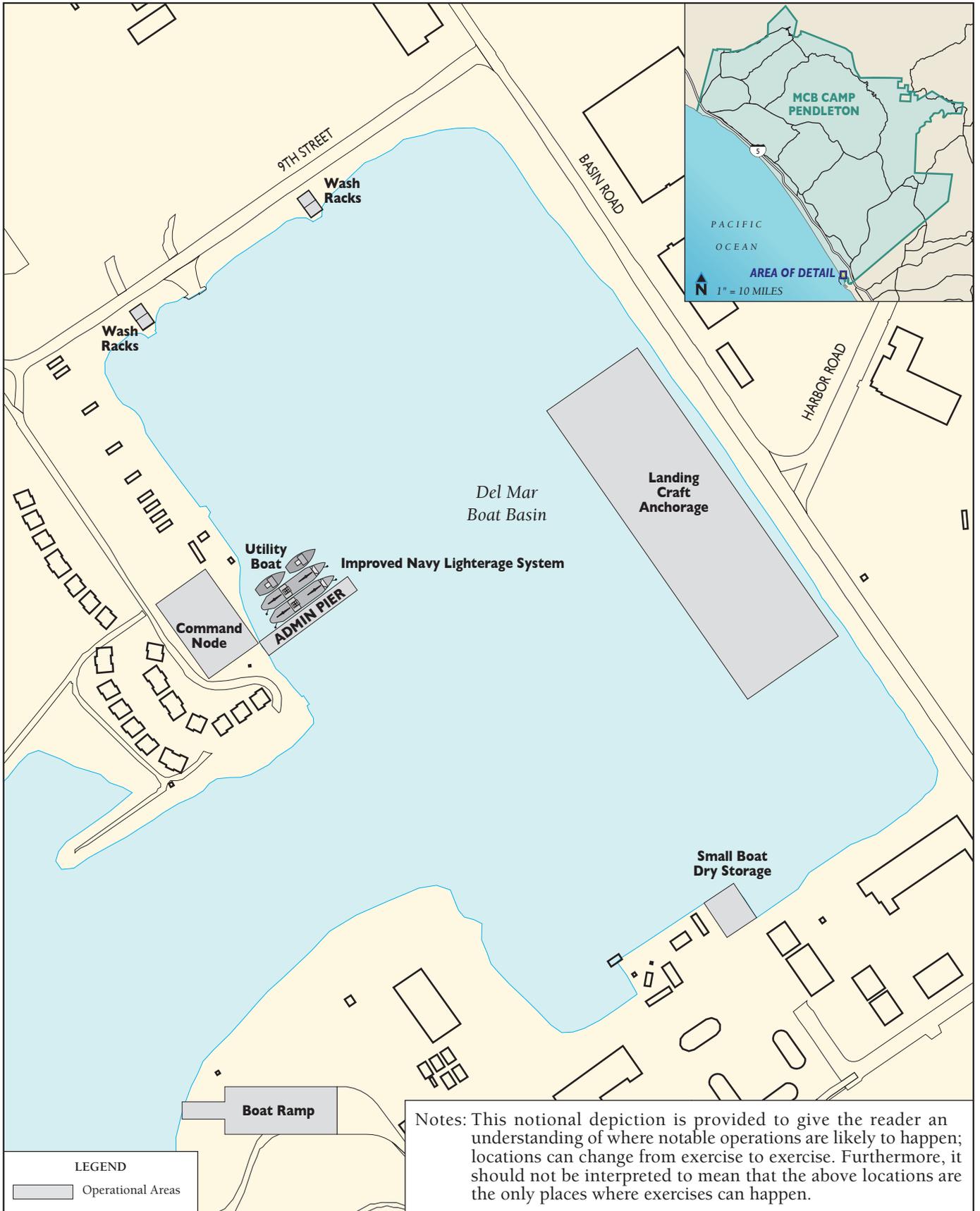
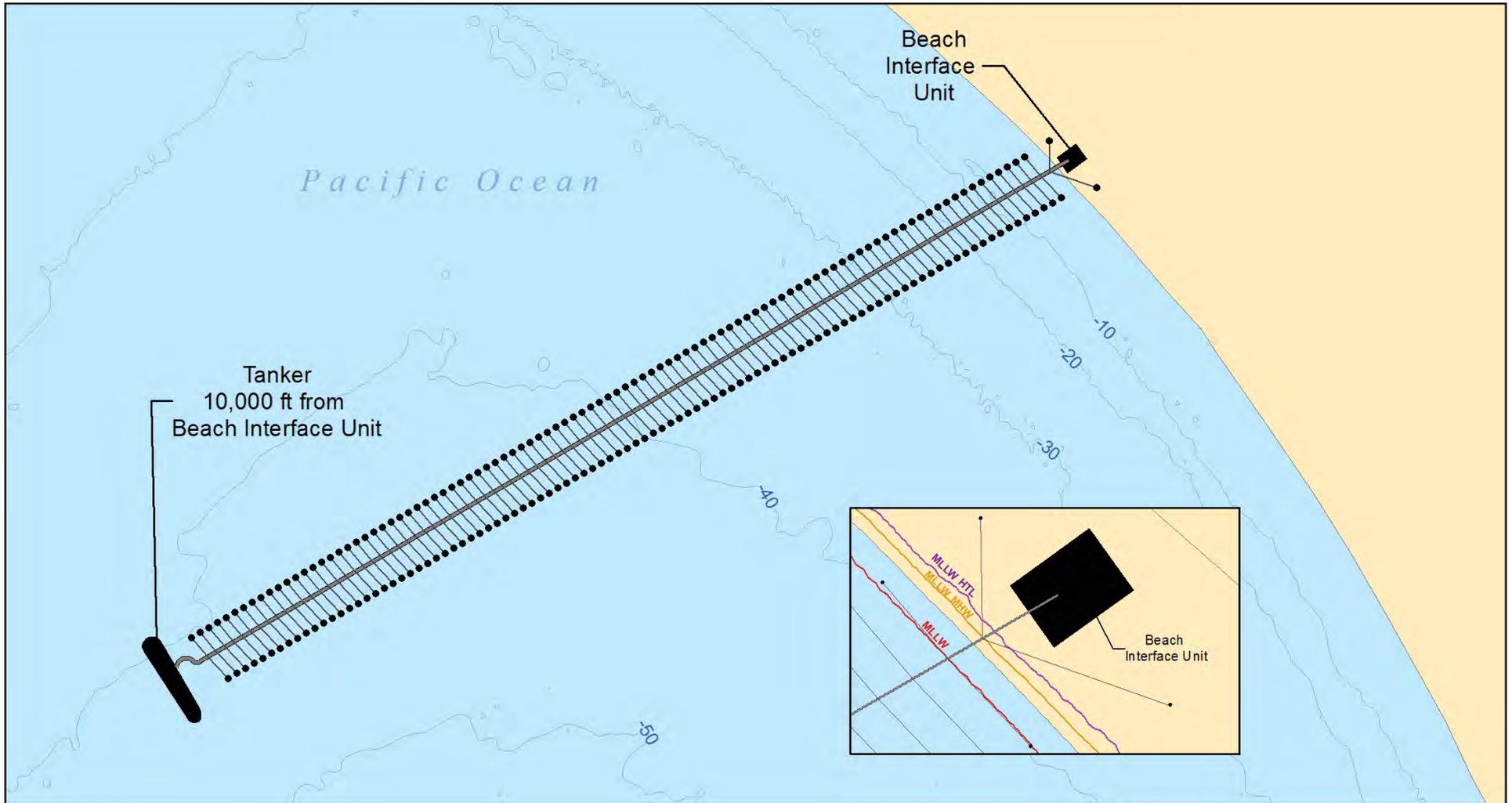


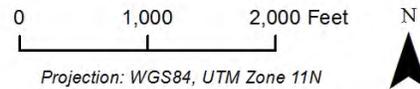
Figure 3  
Notional Depiction of Major Amphibious Training Exercise Elements at the Del Mar Boat Basin





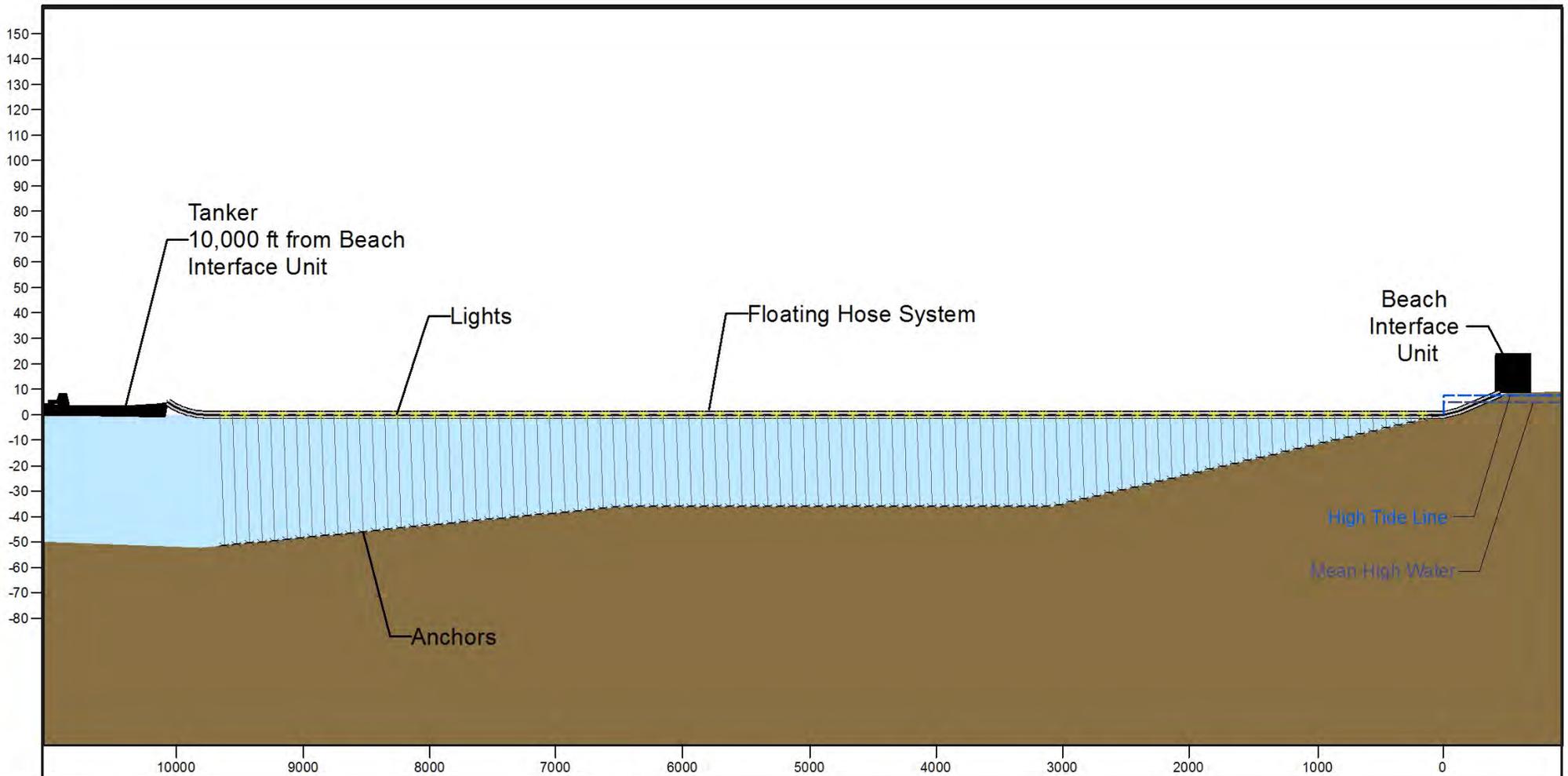
## Legend

- Anchor (75 Pounds)  
Spaced 100 ft Apart
- Anchor Tethor
- Main Line
- Bathymetry  
10 ft Intervals (Notional)
- 0 ft Bathymetric  
contour is MLLW



Note: Typical deployment shown, locations can vary.

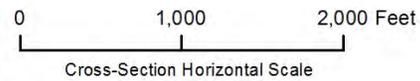
**Exhibit 1**  
**ABLTS Plan View**



### Legend

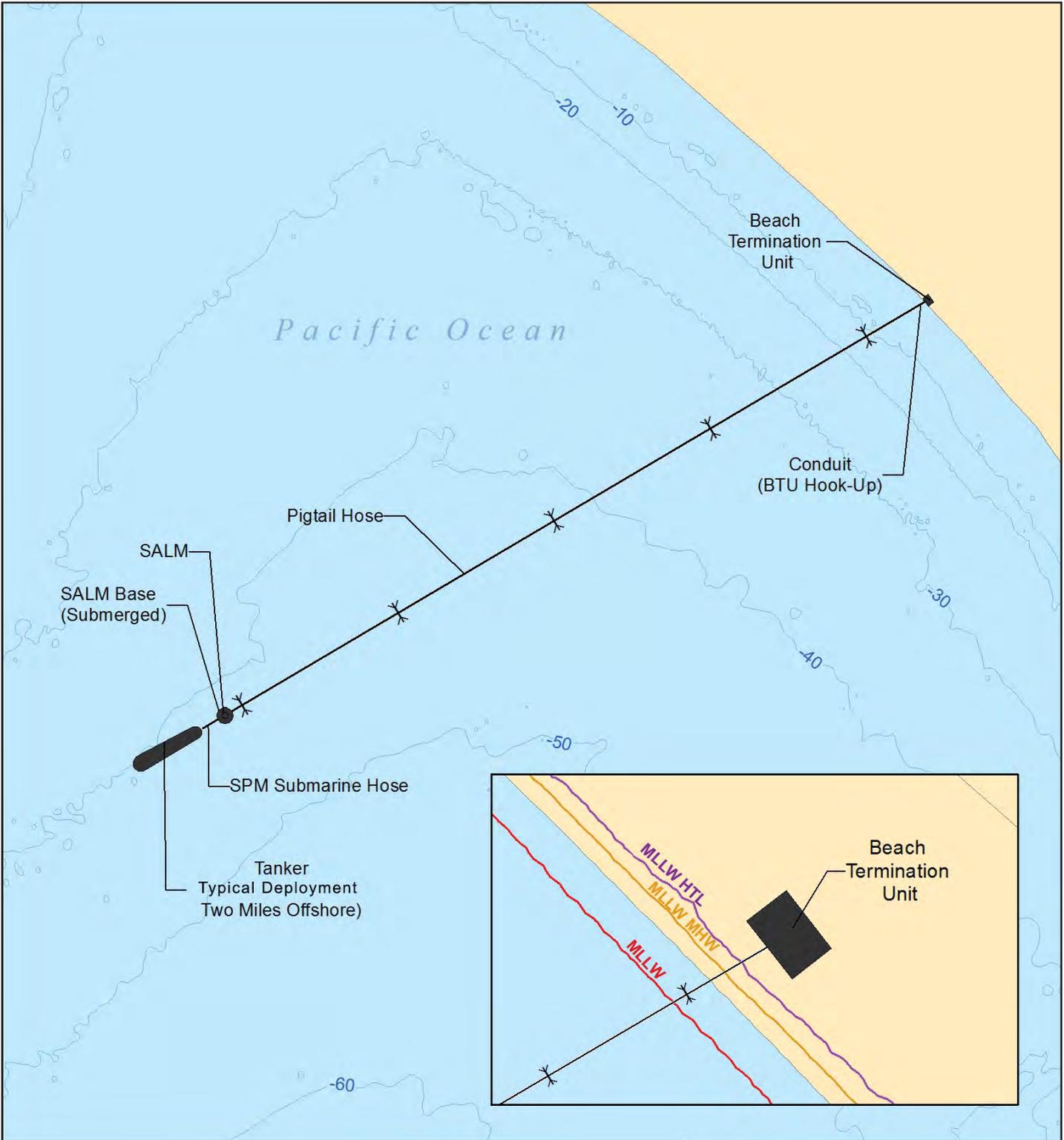
-  Anchor
-  Flashing Navigation Light  
Placed every 150 ft on hose
-  Floating Hose System
-  Six-Inch Buoyant Fuel Hose
-  Four-Inch Buoyant Water Hose
-  Anchor Tether Line

Sources: The General Bathymetric Chart of the Oceans (GEBCO), U.S. Navy



Features not drawn to scale.

**Exhibit 2**  
**ABLTS Cross-Section**



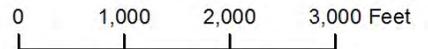
**LEGEND**

- ⌵⌵ Anchor at Various Points Along Conduit
- Submerged Conduit
- Bathymetry  
10 ft Intervals (Notional)
- 0 ft Bathymetric contour is MLLW

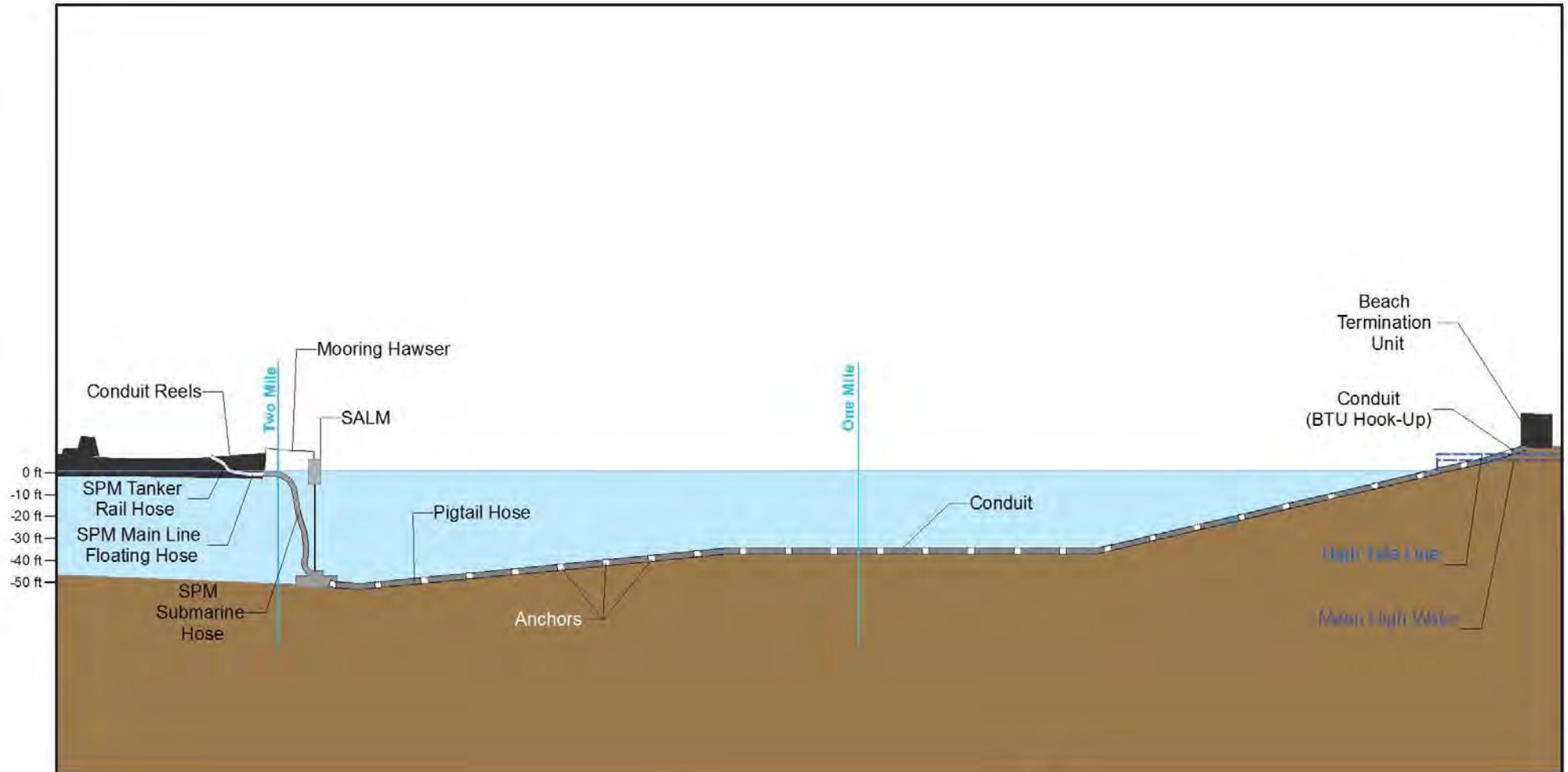
Note: Typical deployment shown, locations can vary.



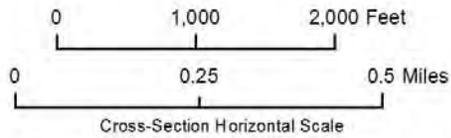
**Exhibit 3  
OPDS Plan View**



Projection: WGS84, UTM Zone 11N



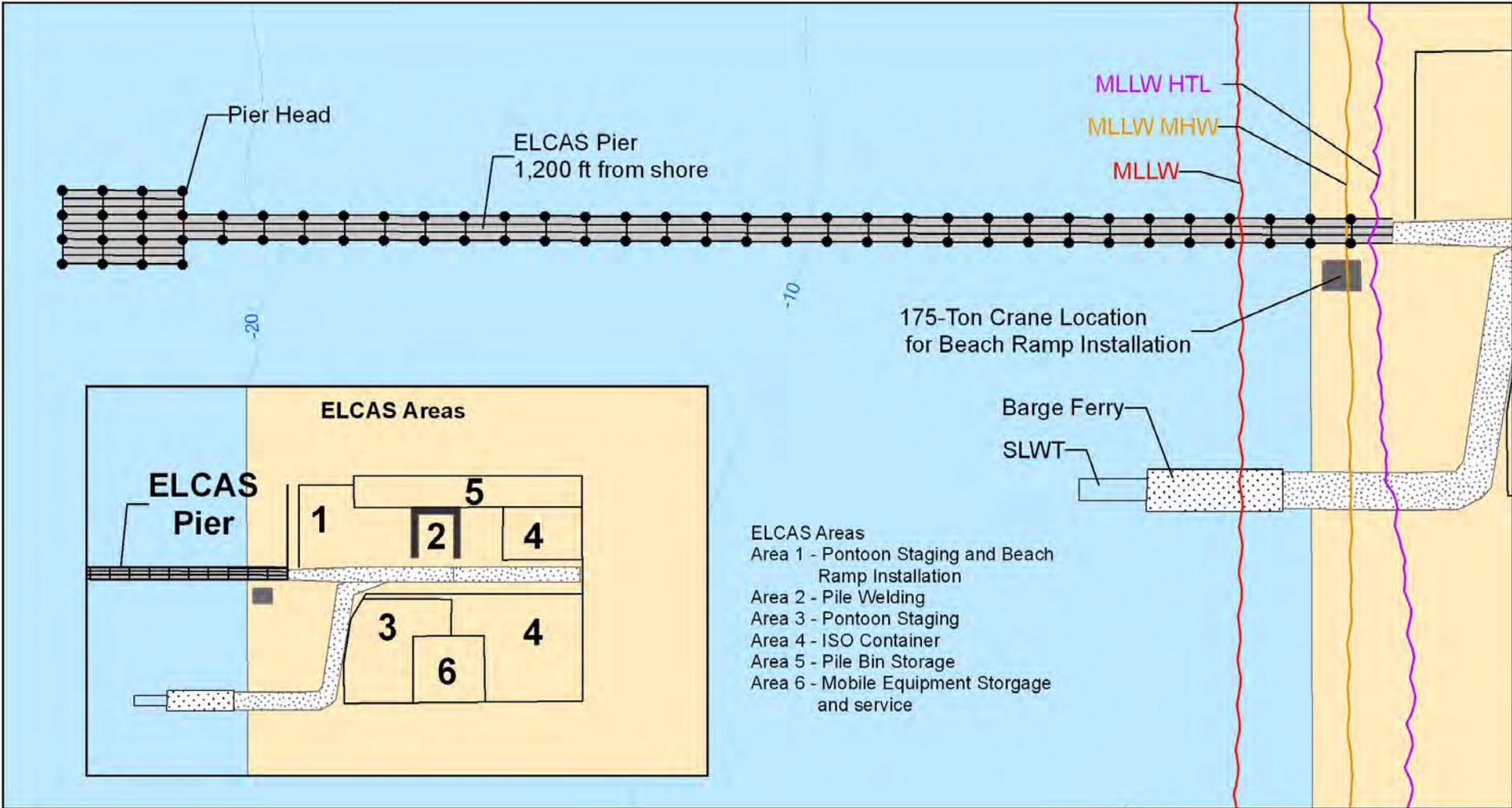
**Exhibit 4**  
**OPDS Cross-Section**



Cross-section created at 20x vertical exaggeration. Features not drawn to scale.

Note: Typical training extends two miles as shown in the cross-section.

Sources: The General Bathymetric Chart of the Oceans (GEBCO), U.S. Navy



- ELCAS Areas
- Area 1 - Pontoon Staging and Beach Ramp Installation
  - Area 2 - Pile Welding
  - Area 3 - Pontoon Staging
  - Area 4 - ISO Container
  - Area 5 - Pile Bin Storage
  - Area 6 - Mobile Equipment Storage and service

**Legend**

- Pier Piling
- Bathymetry
- 10 ft Intervals (Notional)
- 0 ft Bathymetric contour is MLLW

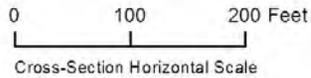
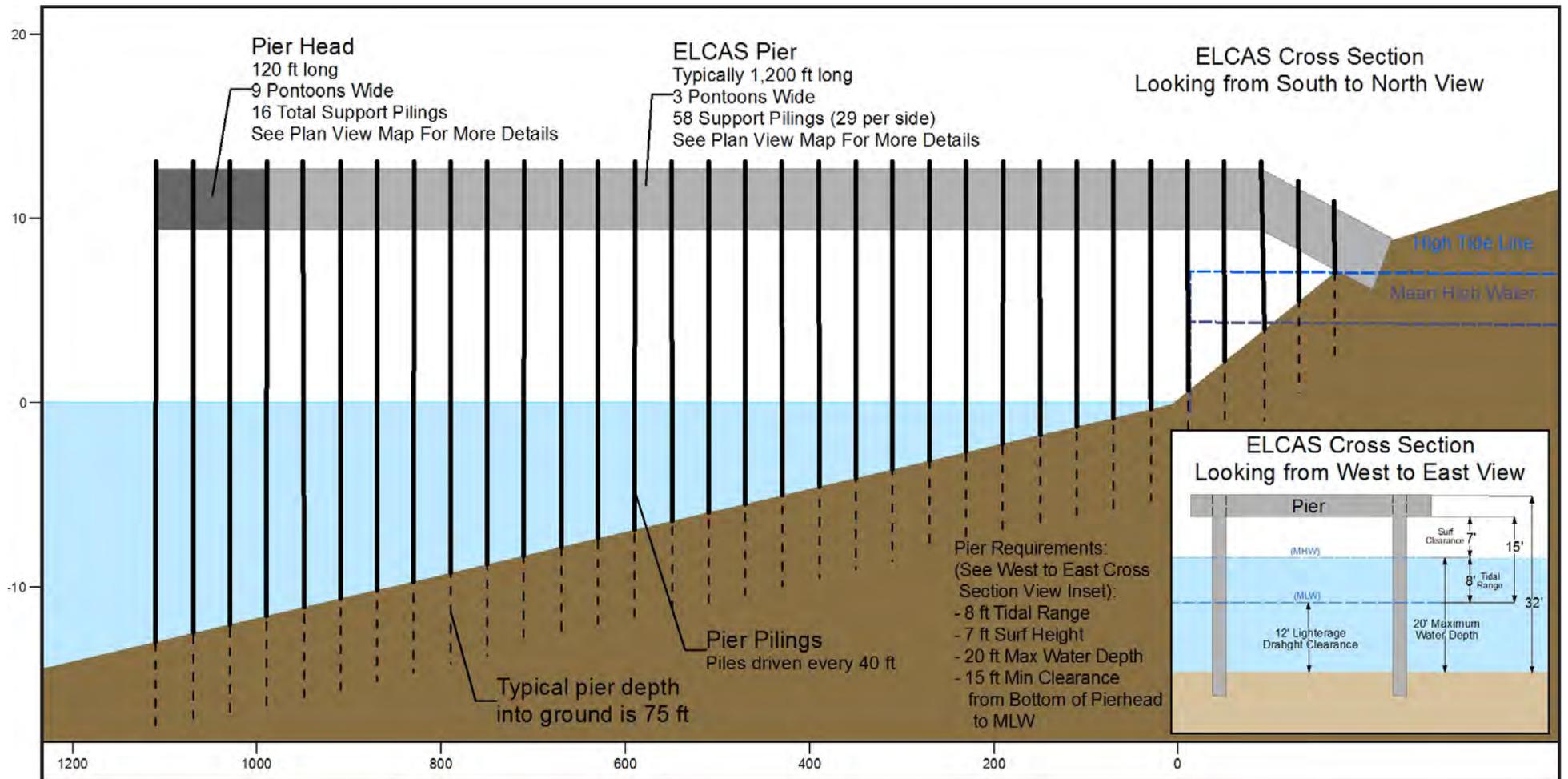
0 50 100 200 Feet

Projection: WGS84, UTM Zone 11N

Source: U.S. Navy



**Exhibit 5**  
**ELCAS Plan View**

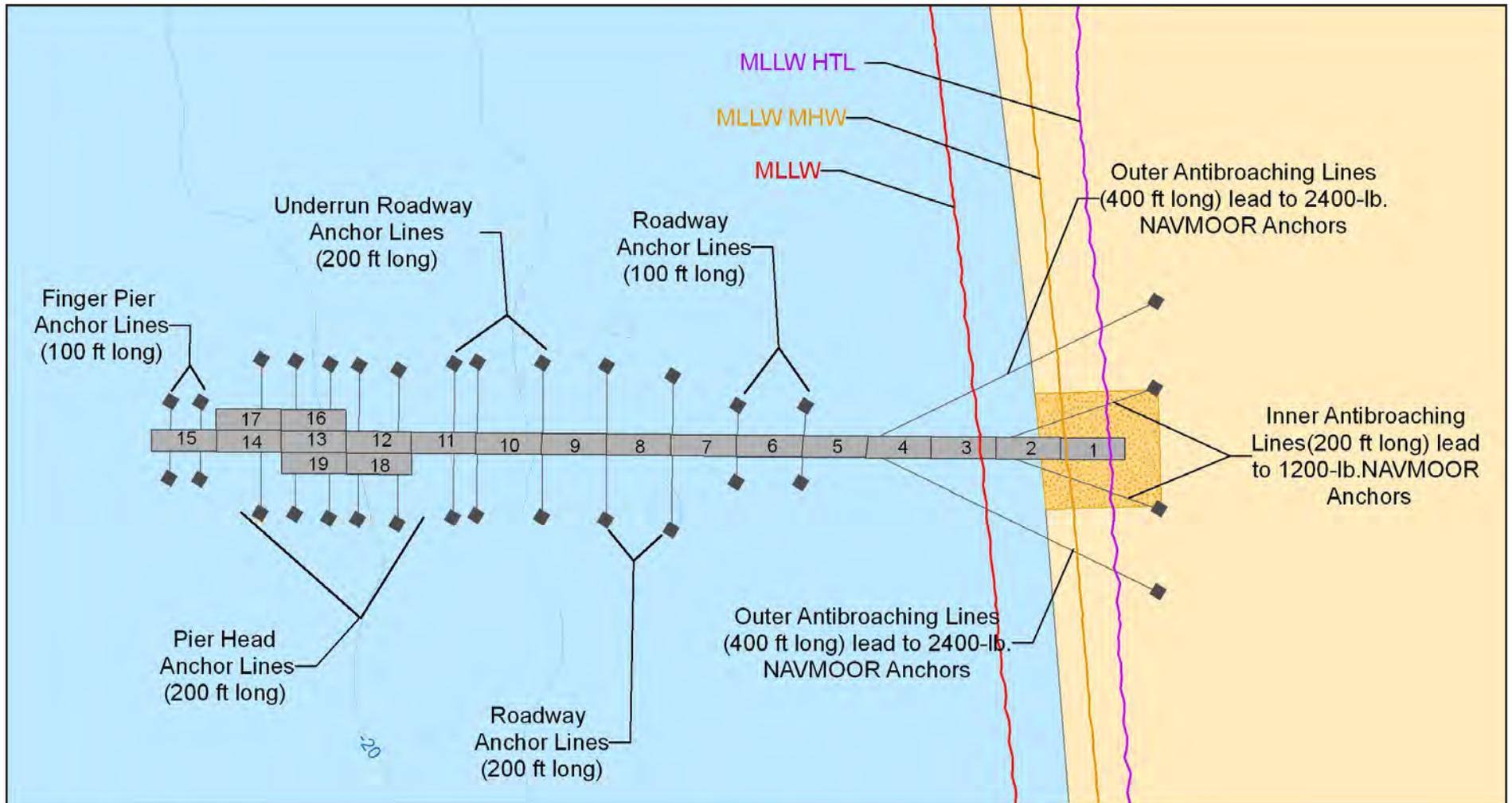


Cross-section created at 20x vertical exaggeration. Features not drawn to scale. Some features exaggerated to show detail.

Note: Typical training extends 1,200 ft as shown in the cross-section. Potential maximum distance for training is 3,300 ft.

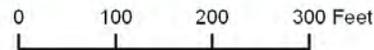
**Exhibit 6**  
**ELCAS Cross-Section**

Sources: The General Bathymetric Chart of the Oceans (GEBCO), U.S. Navy



**Legend**

- Anchor Offshore anchors are 2400-lb. NAVMOOR
- Anchor Line
- Bathymetry 10 ft Intervals
- 0 ft Bathymetric contour is MLLW
- Floating Platform
- Temporary Excavated Area Area: 150 ft x 150 ft Max Depth: 10 ft

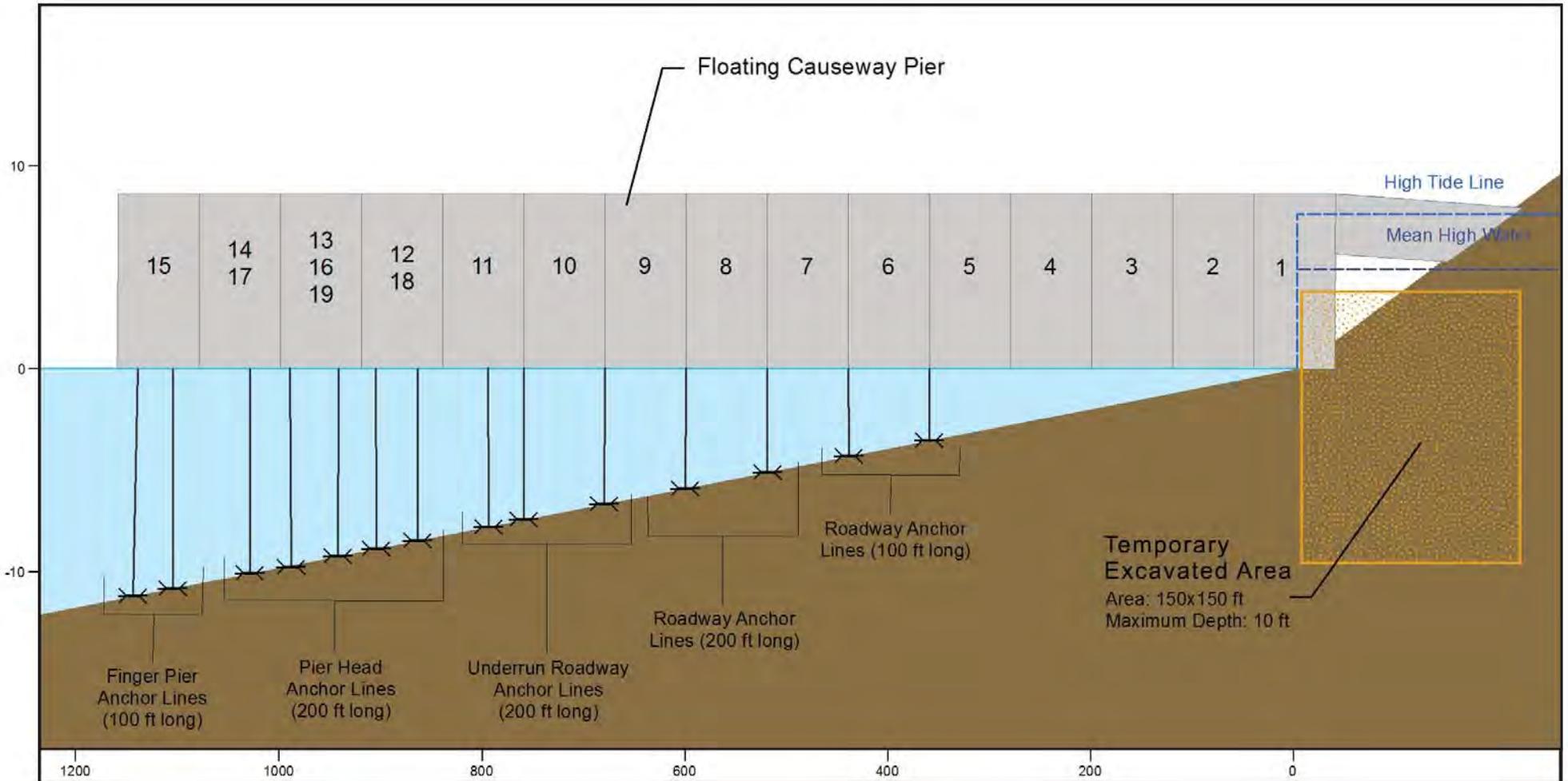


Projection: WGS84, UTM Zone 11N



Note: Typical deployment shown, locations can vary and ABLTS can be deployed up to 1,200 ft distance from shore.

**Exhibit 7  
Floating Causeway Pier  
Insertion and Retraction  
Plan View**

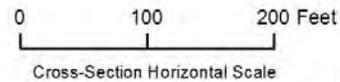


**Legend**

-  Offshore Anchor  
2,400 lbs NAVMOOR
-  Anchor line
-  Floating Platform

Cross-section created at 20x vertical exaggeration. Features not drawn to scale. Some features exaggerated to show detail.

Note: Potential training extends 1,200 ft as shown in the cross-section.  
 - See plan view map for outer and inner antibroaching line and onshore 1,200 pound NAVMOOR anchors.  
 - Anchor lines travel away from pier in both directions to their designated See site map for all potential activity areas.



Sources: The General Bathymetric Chart of the Oceans (GEBCO), U.S. Navy

**Exhibit 8**  
**Floating Causeway Pier**  
**Insertion and Retraction**  
**Cross-Section**