

3.0 PROJECT DESCRIPTION

3.1 PROJECT LOCATION AND SETTING

Dana Point Harbor (Harbor) is located in Capistrano Bay on the Southern Orange County coastline. The Harbor is a County of Orange (County) facility located within the City of Dana Point (City) and offers recreational boaters, County residents, tourists, and others a number of recreational activities, retail shopping, and dining opportunities. The facility is operated by OC Dana Point Harbor, a County agency, and is owned by the County. The County was designated over 40 years ago by the Tidelands Act as the trustee of the Harbor for the people of the State of California.

The Harbor is bordered by the Pacific Ocean to the south; Dana Headlands and Old Cove Marine Preserve to the west; Doheny State Beach to the east; and a variety of commercial, hotel, residential, and park uses to the north. Interstate 5 (I-5), located approximately two miles east of the Harbor, runs north-south through the City and provides regional access to the Harbor. The Harbor is primarily accessible from Pacific Coast Highway and the Street of the Golden Lantern via Dana Point Harbor Drive (see Figure 3.1). Secondary access is provided by Cove Road and the Pacific Ocean.

Land uses surrounding the Dana Point Marina Improvement Project within the Harbor boundaries include Marine Services, commercial retail, restaurants, public parking, public waterways, yacht clubs, Harbor patrol facilities, a hotel, Harbor-related public recreational areas, the Ocean Institute, and public parks. Residential, commercial, and hotel uses are located to the north and west along the coastal bluffs, outside of the Harbor boundaries.

Some of the boater-related terms used in this document may be unfamiliar to readers. Therefore, a list of definitions is provided in Table 3.A in order to orient readers to the terms used to describe common features of the Harbor's Marinas and waterfront developments.

3.2 PROJECT HISTORY AND BACKGROUND

The construction of Dana Point Harbor began in the late 1960s, with the Harbor officially being dedicated on July 31, 1971. Since its creation nearly four decades ago, many parts of the Harbor's infrastructure, including dock facilities and landside facilities such as storm drains, sewers, parking lots, and some of the buildings, have deteriorated and are in need of modernization and/or replacement. In 1997, a Task Force was formed to help develop a plan for the future of the Harbor. The Dana Point Harbor Revitalization Project (Revitalization Plan) was developed over the next several years and officially adopted by the County Board of Supervisors and the Dana Point City Council in 2006. A Program Environmental Impact Report (Program EIR) was prepared for the overall Harbor Revitalization Project (landside and waterside areas) and certified by the Orange County Board of Supervisors on January 31, 2006 (County of Orange Dana Point Harbor Revitalization Program FEIR No. 591).

Table 3.A: Boater Terminology Definitions

Breakwater	A barrier that protects a Harbor or shore from the full impact of waves.
Buoy	A floating object marking the navigable limits of channels, sunken dangers, isolated rocks, telegraph cables etc.
Dock	A platform that forms the space for receiving or mooring a boat.
Doublewide	A slip designed to accommodate two boats between fingers
Dry Boat Storage	A landside system used for indoor or outdoor storage of boats, typically storing the boats in vertical rack systems.
End Ties	Locations where boats may be tied to the end of a mainwalk; usually in the main channel of a marina
Fairway	The unobstructed channel between boat slips; used to access individual slips
Fingers	Docks separating boats into slips
Float	A pier that floats on top of the water, with guide piles driven to maintain its location.
Freeboard	The distance between the statutory deck line of a boat and the waterline
Gangway	A ramp used to access floats and docks from the shore
Headwalk	A dock providing access from a gangway to several connected mainwalks
Jetty	A structure, usually constructed of large rock, that projects into a body of water to influence the current or tide or to protect a Harbor or shoreline from storms or erosion, similar to a breakwater.
Main Channel	Navigable channel used to enter/exit the marinas
Mainwalk	A dock providing access to slips
Mast-up Storage	A landside storage lot where boats with masts in a vertical position can be stored
Mole	A solid fill barrier that protects a Harbor or shore from the full impact of waves, similar to a breakwater or jetty.
Pier	A pile-supported structure over water that extends out from the seawall.
Pile or Piling	A long, slender column, usually of timber, steel, or reinforced concrete, that is driven into the ground to carry a vertical load. Piers and floating docks are typically supported or secured by pilings.
Quay	A wharf usually built parallel to the shoreline along the edge of a body of water.
Revetment	A facing of wood, stone, or any other material placed to sustain an embankment; also, a retaining wall.
Riprap	A loose assemblage of broken stones erected in water or on soft ground as a foundation.
Seawall	A retaining wall that separates land from a body of water.
Side Ties	Locations where one side of a boat may be tied to the side, or parallel with a dock
Whaler	A wooden frame structure that frames and supports the floatation foam within a dock system

FEIR No. 591 evaluated the entire Harbor Revitalization Plan at a program or conceptual level of detail and provided project- or construction-level EIR analysis where possible, consistent with CEQA Guidelines Sections 15146 and 15168. See Section 3.3 for further discussion regarding the use of the previously certified Program EIR.

FEIR No. 591

Implementation of the Dana Point Harbor Revitalization Plan required a series of subsequent approvals by the City of Dana Point and the California Coastal Commission (CCC) to modify existing regulatory documents, including the City's Local Coastal Program (LCP). The Revitalization Plan and District Regulations therefore required an LCP Amendment (LCPA). The LCPA includes a Land Use Plan (LUP) component and an Implementation Plan (IP) component, which together establish zoning regulations and other implementing actions required for ongoing implementation of improvements and management of Dana Point Harbor pursuant to procedures set forth in the Coastal Act. The LUP component of the LCPA for the proposed Dana Point Harbor Revitalization Project was approved with suggested modifications by the CCC on October 8, 2009. The IP component was approved with suggested modifications by the CCC on January 12, 2011.

The changes to the Harbor LUP certified by the CCC resulted in several changes to the plan as proposed, including removal of the lighthouse land use designation; the elimination of a freestanding Marine Retail store in PA 1; a "no net loss" or maximum of 155 slip-loss policy for boat slips; a requirement to maintain a minimum 1.6-acre (ac) shipyard; a requirement to provide dry boat storage capacity of 493 spaces; a minimum of 334 parking spaces for vehicles with trailers; and adoption of a parking standard of 0.6 space per boat slip and 1 space per 3 passengers for sport fishing, charter boat, and passenger ferry operations. The suggested modifications by the CCC did not intensify the proposed project, but rather clarified or refined the description and/or locations of the proposed project components.

Due to the incorporation of additional policies, regulations, and development standards by the CCC as part of the LCPA review and certification process, the previously certified FEIR No. 591 required review to determine whether the previous conclusions remain valid. An Addendum to FEIR No. 591 was prepared to provide a record of the changes resulting from the LCPA approval process that occurred subsequent to the certification of FEIR No. 591. The Addendum concluded that no new or more severe significant environmental effects were associated with the changes to the project that occurred since the 2006 FEIR No. 591 was certified.

The waterside portion of the project is now proceeding through a separate, independent process for environmental clearance and approval. As part of the CCC approval, a suggested modification was included to establish a goal for any dock replacement to attempt to achieve a “no net loss” of slips harborwide, but if not feasible to limit the loss of boat slips to a maximum of 155 slips with an average slip length not to exceed 32 feet (ft), as stated in LUP Policy 4.2.2-6:

LUP Policy 4.2.2-6: Protect and enhance berthing opportunities in Dana Point Harbor. The goal for any dock replacement should be no net loss of slips harbor-wide. However, if conformance with current engineering and Americans with Disabilities Act (ADA) design requirements and/or the provision of larger slips to meet demands, requires a reduction in the quantity of slips in existing berthing areas, those slips should be replaced, if feasible in new berthing areas elsewhere in the Harbor (e.g. within a portion of the ‘safe harbor’ area near the east breakwater). Priority shall be given to provision of slips that accommodate boats less than 25 feet in length. The average slip length shall not exceed 32 feet. If new berthing areas are not available or are limited in size, the net loss of slips harbor wide shall be minimized and shall not exceed 155 slips.

The Marina Improvement Project has been designed to be consistent with the approved LUP component of the LCPA for the Dana Point Harbor Revitalization Project.

3.3 USE OF THE PREVIOUSLY CERTIFIED FEIR NO. 591

As stated above, the Dana Point Harbor Revitalization Program EIR No. 591 (State Clearinghouse Number 2003101142) was certified by the Orange County Board of Supervisors on January 31, 2006. As defined by California Environmental Quality Act (CEQA) Guidelines Section 15168, “A Program EIR is an EIR which may be prepared on a series of actions that can be characterized as one large project and are related either: (1) Geographically; (2) As logical parts in the chain of contemplated actions; (3) In connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program; or (4) As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.”

FEIR No. 591 evaluated the entire Harbor Revitalization Plan at a program, or conceptual, level of detail and provided project- or construction-level EIR analysis where possible, consistent with CEQA Guidelines Sections 15146 and 15168.

As illustrated on Figure 3.2, the Harbor was divided into 12 planning areas for the purpose of establishing land use regulations and development standards. The planning and environmental analysis of the landside and waterside improvements were analyzed together in FEIR No. 591, but can be considered separately for planning, funding, and future environmental processing purposes. Portions of Planning Area (PA) 1 and all of PA 2 (known as the Commercial Core) were analyzed at a project level since project-specific construction-level details were available for those planning areas. FEIR No. 591 provided a programmatic analysis of the remaining PAs 3 through 12 and the remaining portion of PA 1. The proposed project addressed in this Subsequent Environmental Impact Report (SEIR) is composed of waterside PAs 8 through 12, as indicated on Figure 3.2. PAs 3 through 7 and the portion of PA 1 that includes the fuel dock facilities will require future additional environmental review as future projects and funding sources are identified.

As noted in FEIR No. 591 and explained above, the current project (PAs 8 through 12) was anticipated to require further environmental review by the County prior to consideration. Because more project-specific information and more detailed Marina design and engineering plans have been developed, environmental impacts for the Marina Improvement Project can be addressed at a detailed level not possible at the time Program EIR No. 591 was prepared and subsequently certified by the Orange County Board of Supervisors. Consistent with the concept of tiering and requirements in CEQA requiring a SEIR (Guidelines Section 15162), the Marina Improvement Project is not dependent on and is a complete and independently functioning project that can proceed as a separate project distinct from the Commercial Core Project and other landside projects. The County prepared an Initial Study (IS) to determine the appropriate documentation required for compliance with CEQA. The IS is included as Appendix A to this document. The analysis contained in the IS concluded that the project may have different effects on the environment than were analyzed in the previous Program EIR and that substantial new information and analyses are needed to assess the impacts on the environment. At the time FEIR No. 591 was prepared for the Revitalization Plan, specific construction-level detail was not available for the Marina Improvement Project. CEQA Guidelines (Section 15162) state that an SEIR should be prepared for a project under certain circumstances where major additions or changes to the previous EIR are required, and when new information of substantial importance not known at the time of the previous EIR shows that the project will have significant effects not discussed in the previous EIR. Therefore, because schematic level plans have subsequently been developed for the Marina Improvement Project, and these improvements and changes in Marina operations could potentially cause environmental impacts that can now be analyzed with greater detail, the IS determined that an SEIR is required for the project. By way of incorporating the findings of FEIR No. 591 and the environmental effects of the entire Harbor Revitalization Project, the Executive Summary of FEIR No. 591 is included in Appendix A of this SEIR.

The IS (see Appendix A) includes an overview of FEIR No. 591 and a summary of applicable Project Design Features (PDF), Standard Conditions (SC), and Mitigation Measures (MM) for each environmental topic. After analyses of the Marina Improvement Project, several measures were deemed no longer applicable. Additionally, the listed PDFs, SCs and MMs were restated verbatim in the IS as included in the certified Program FEIR. However, during the subsequent approval process for the Land Use Plan component of the Local Coastal Program Amendment (LCPA), several of these measures were clarified and became Land Use Plan (LUP) Policies within the revised Dana Point Harbor Revitalization Plan Land Use Plan. Where applicable, the wording has been revised throughout this SEIR to be consistent with the approved LUP Policy. Refer to Table 8.A in Section 8.0 of this SEIR for a list of mitigation measures deemed applicable to the Marina Improvement Project that are being carried forward and incorporated into the current project to reduce potential impacts.

Consistent with CEQA Guidelines, Section 15168, the County is proceeding with the SEIR, building upon and tiering on the analyses in the certified Program EIR to address the environmental impacts of the project. Therefore, the Marina Improvement Project is now being evaluated at a project or construction level. In accordance with CEQA Guidelines Section 15162, this SEIR is being prepared to focus on project details and environmental effects not identified at the time FEIR No. 591 was certified.

The analysis contained in this SEIR incorporates by reference the documentation contained in the certified Dana Point Harbor Revitalization Plan Program EIR No. 591. Attached to the IS as part of Appendix A is the Executive Summary from FEIR No. 591, which includes a summary of project impacts and issues. In addition, as stated in FEIR No. 591, applicable mitigation measures developed in FEIR No. 591 shall be incorporated into subsequent actions in the program. Table 8.A in Section 8.0 of this SEIR includes a list of mitigation measures deemed applicable to the Marina Improvement Project.

3.4 PROJECT SITE AND SITE DESCRIPTION

Dana Point Harbor

The Harbor comprises three areas: a landside area along Dana Point Harbor Drive, adjacent to the bluffs; the Island area (connected by a bridge to the landside); and marinas consisting of docks, commercial fishing slips, federal anchorage areas, Ocean Institute dock, tall ship docks for the Spirit of Dana Point and the Pilgrim in addition to the OC Sailing and Events Center docks, fishing pier, fuel dock, sport fishing dock, visitor slips, marine services docks, embarcadero docks, launch ramp floats, and Harbor Patrol docks. The Marina area includes two basins: the West Basin and the East Basin, generally referred to as the West Marina and the East Marina, respectively. Figure 3.3 illustrates the existing Dana Point Marina dock, slip, and waterway facilities. Landside improvements are not included within the scope of this SEIR. In addition, some of the existing Marina facilities and docks are not a part of the Dana Point Harbor Marina Improvement Project. The following several Marina components will be left unchanged by the proposed project: (1) fishing pier, (2) tall ship docks, (3) Ocean Institute docks, (4) Dana Point Yacht Club slips, (5) fuel dock, (6) bait barge (will however, be temporarily relocated during construction), (7) launch ramp floats, and (8) the Catalina Express dock.

The County is responsible for operation and maintenance of all facilities and property within the Harbor. The County contracts with Marina operators for the management of the East and West Marinas, surface storage and boat launch facilities. Public water-oriented recreation opportunities offered at Dana Point Harbor, aside from boating-related activities, include (1) fishing pier; (2) Harbor cruises and certified dive charters; (3) Baby Beach for young swimmers and the launching of nonmotorized watercraft; (4) whale watching; (5) other personal watercraft; (6) paddle boarding; and (7) windsurfing.

Dock Facilities

Construction of the existing dock systems in the East and West Basins began in the late 1960s, with the Harbor officially being dedicated on July 31, 1971. According to the Draft Dana Point Harbor Marina Condition Evaluation Report (BlueWater Design, January 2005), the design of East & West Basin docks are typically known as the “Huntington” dock system. This type of dock construction historically has a serviceable lifespan of up to 30 years, with a maximum of approximately 38 years. The average age of the current dock facilities in the Marinas is 38 years. The docks and pilings are deteriorating, requiring increasing maintenance, and the ramps pre-date the requirements of the Americans with Disabilities Act (ADA). According to the Draft Dana Point Harbor Marina Condition Evaluation Report, both Marinas are nearing the end of their useful lifespan, and most components of the dock system need to be replaced or will require substantial increases in maintenance.

The principal structural components comprising the dock system at Dana Point Harbor include the deck, timber whalers, and floatation. The floating structures are constructed from modular concrete-encased foam pontoons. Each pontoon ranges in width from 3 to 4 ft for the fingers to 6 to 8 ft for the end ties and main walks. Each pontoon length varies from 8 to 10 ft. The typical main walk pontoon unit is an 8 x 8 ft square pontoon float, while the finger floats vary based on the length of the slip. Representative photos depicting the typical gangway and deck components construction are provided in Figure 3.4.

Timber whalers hold the float units together. These timbers run along the edges of the float units and are bolted to the concrete floats, thereby connecting the pontoons together. The whalers are the structural elements that transfer the loads from one pontoon section to the next. Based on the Draft Dana Point Harbor Marina Condition Evaluation (BlueWater Design, January 2005), the cause of the widespread deck failure throughout the Marina is because the whaler design for fingers greater than 30 ft in length is inadequate for the loads affecting the fingers. This is also the case for the majority of the main walk sections. In addition, the stresses in the whalers are greater than the capacity of the bolted connection in the cantilever deck section; the cantilever section fails by cracking or breaking completely from the pontoon.

The Marina dock systems are anchored with both concrete and concrete-filled steel pipe piles that are approximately 14 inches in diameter. According to the Draft Dana Point Harbor Marina Condition Evaluation Report, all of the steel piles exhibit some level of corrosion, ranging from minor to very extensive, within the region of the pile that is subjected to repeated tidal inundations.

The shoreline interface of Dana Point Harbor is protected by a combination of quay wall and side slope panel protection. The bulkhead is a cast-in-place concrete L-wall that borders the water's edge in the East and West Marinas and the landside perimeter of the Harbor. The basin side slopes are protected within the east and west basins by a grid of precast concrete panels set on grade. Areas outside of the east and west basins are armored with stone riprap.

3.5 PROJECT GOALS AND OBJECTIVES

The primary goals of the project are to revitalize Dana Point Harbor as a popular destination for boaters, local residents, and tourists while maintaining the unique character of the Harbor. The project goals include implementation of Coastal Act Policies in conformance with the approved Dana Point Harbor Revitalization Plan Land Use Plan, including: preservation of marine resources; promoting low-cost recreational opportunities; promoting practices that improve water quality; promoting public access opportunities; and providing a slip mix that minimizes slip loss.

Specific project objectives include:

- Maintain the Harbor's current character and family atmosphere
- Renovate and replace the deteriorating docks and slips
- Satisfy ADA requirements for dock areas of the Harbor
- Maintain a full-service Harbor

- Enhance the level of services for boaters
- Update commercial fishing facilities
- Maximize the number of slips available in the East and West Marinas for public rental by relocating many of the yacht broker slips to another area of the Harbor.
- Relocate guest dock facilities and provide new dinghy docks convenient to Day-Use Commercial uses
- Upgrade utility infrastructure to all areas of the Marinas
- Maintain a safe environment for all levels of the boating community, Harbor users, and merchants
- Provide improvements in accordance with California Department of Boating and Waterways (DBW) guidelines, including the placement of boats in correctly sized slips
- Update sport fishing dock

3.6 PROJECT CHARACTERISTICS

The project addressed in this SEIR includes removal of nearly all floating docks and piles in the West and East Marinas; potential repair and/or reconstruction as necessary of portions of the quay wall; and installation of new docks, guide piles (or alternate anchoring methods), gangways, security gates, dock boxes, improved lighting on the docks and supporting utilities within both Marina areas. Additionally, new Dry Boat Storage Staging docks, and dinghy docks, along with potential renovations to the OC Sailing and Event Center docks, guest docks, Harbor Patrol docks, commercial fishing docks, and sport fishing docks are included in the proposed project. The project also includes public access improvements to gangways and docks in compliance with the ADA guidelines and construction of new docks along the eastern breakwater. Based on the CCC's suggested recommendation that the Marina Project result in the loss of no more than 155 slips, the project addressed in this SEIR includes installation of 2,293 slips for a net loss of 116 slips. The project addressed in this SEIR is based on a schematic preliminary design and is subject to revisions resulting from refinements during future design and engineering phases. Operational changes within the East and West Marinas due to dock and access changes are also described and addressed in this SEIR. Table 3.B contains a list of the proposed Dana Point Harbor Marina Improvement Project components.

Docks and facilities that are not a part of the project and are therefore not included in Table 3.B include the fishing pier, tall ship docks, Ocean Institute docks, Dana Point Yacht Club slips, fuel dock, bait barge, and Catalina Express dock. These dock and slip facilities are not included in the Dana Point Harbor Marina Improvement Project, and changes to these Harbor components are not addressed in this SEIR. It should be noted that most of the project components in Table 3.B are described in terms of the number of existing and proposed slips; however, several areas, including the OC Sailing and Events Center docks, dinghy docks, sport fishing docks, marine services docks, and the Embarcadero/Dry Boat Storage Staging docks, are described in linear feet, not slip numbers. The reason for this is because these dock areas accommodate a varying number and size of boats based on the fluctuating use of these areas by different boats and are not included in the permanent slip count. The conceptual layout of proposed Marina facilities and the dock locations are illustrated in Figure 3.5 and are described in further detail below.

Table 3.B: Proposed Project Components

Element	Existing Conditions	Marina Improvement Project
Floating Docks (East/West Marinas and Satellite Areas)	Floating docks supported by 1,306 concrete filled steel pipe piles 2,409 boat slips Average slip length of 29.85 feet (ft). Majority of West Marina slips oriented west-east. East Marina slips oriented north-south Approximately 492,530 square feet (sf) of area covered by floating docks	Remove existing piles and replace with 969 piles 2,293 boat slips (loss of 116 slips) Average slip length not to exceed 32 ft West Marina slips to be reoriented to a north-south direction. East Marina slips to remain oriented north-south Approximately 459,540 sf ² of area covered by floating docks
Access	52 gangways	59 gangways plus 9 Americans with Disabilities Act (ADA) gangways, for a total of 68 gangways
Boat Services	3 sewage pumpouts	4 upgraded sewage pumpouts ³
Utilities	electrical service, water service, telephone and cable service	Upgraded electrical service, water service, telephone and cable service
	Dock Boxes	New Dock Boxes
Embarcadero/Dry Boat Storage Staging Docks	766 linear feet (lf)	1,300 lf
Marine Services Docks	1,190 lf	896 lf
Sport Fishing Docks	1,350 lf	1,350 lf
Guest Slips	42 slips	46 slips
Dinghy Dock	No dinghy dock	374 lf
Harbor Patrol Slips	8 slips plus 2 emergency side-ties	8 slips plus 2 emergency side-ties
Commercial Fishing Slips	15 slips plus 1 end-tie for California Department of Fish and Game boat	15 slips plus 1 end-tie for California Department of Fish and Game boat
OC Sailing and Events Center Docks	890 lf	893 lf
Temporary/Yacht Broker Docks	No existing temporary/yacht broker docks	1 dock located along the eastern breakwater – approx. 2,590 lf ⁴

¹ Includes the following: 4 slips at the guest docks, 3 slips at the Harbor Patrol docks and 62 slips at the temporary/yacht broker docks

² Includes Temporary Docks during estimated 8 years of construction, and becoming Yacht Broker docks after completion of construction.

³ Pumpout facilities for individual vessels will be in accordance with CCC requirements and determined at the time CDPs are processed for Marina improvements.

⁴ Subject to discretionary approvals to be obtained with completion of the Marina Improvement Project

Embarcadero/Dry Boat Storage Staging Docks (PA 11). The existing Embarcadero docks include 766 linear feet (lf) of dock space used for Embarcadero Marina Services, including boat and watercraft rentals, sailing instruction, and dry boat storage hoist operations. The Embarcadero docks are located in the basin adjacent to the public boat launch ramp.

With project implementation, the Embarcadero docks will be completely replaced and renamed the Embarcadero/Dry Boat Storage Staging docks. These docks will be located adjacent to the future Dry Boat Storage building in the basin area adjacent to the boat launch ramp, as shown in Figure 3.6. A new ADA-accessible gangway is also included in the plans for renovation to these docks.

The Embarcadero/Dry Boat Storage Staging docks will accommodate a varying number and size of boats on a fluctuating basis. Therefore, capacity of this area is discussed in terms of linear feet, not number of slips. These docks will contain 1,300 lf of dock space and will continue to provide dock space for Embarcadero Marina operations, as well as for staging boats as they are taken in and out of the storage facility. The Dry Boat Storage building is a part of the landside improvements addressed in the previously certified Program EIR. The design of the Dry Boat Storage building was revised as a result of City and Coastal Commission approvals during the adoption of the FEIR and approval of the LCPA. The FEIR included two Dry Boat Storage buildings with a capacity for storing 800 boats; the Dry Boat Storage buildings were subsequently reduced to one building, reduced in height, with a decreased capacity for 400 boats. Therefore, it is anticipated that the Dry Boat Storage building will house up to 400 boats, which will be operated as a valet launch service and not require trailers or launch vehicles. The Dry Boat Storage building will be supported on piles and will extend out over portions of the new docks, as illustrated in Figures 3.7a through 3.7c. The building has a large door on the south end over the water, which will allow natural light into the overhang area when it is open. In addition, the siding on the lower portions of the wall that overhang the water is proposed to be translucent panels in order to allow natural light into the same overhang area.

Operations related to the Embarcadero Marina are anticipated to remain similar to existing conditions, with boat rentals, sailing lessons, and operation of one hoist for boats stored in surface spaces or on trailers. Overall, approximately 400 boats will be housed in the Dry Boat Storage building and 93 boats will remain in surface parking spaces, providing a total storage capacity for 493 boats. It is anticipated that use of this basin will remain consistent with existing and historic levels. Boats will be staged at the docks by Embarcadero staff as part of the dry dock storage service, which will help eliminate potential boater loading/unloading conflicts and congestion in the staging area. Operational changes in this project area will be further addressed in the discussion of impacts in Section 4.0 of this SEIR.

Marine Services Docks (PA 11). The proposed project includes the renovation of the Marine Services docks in their present location in the Marina. The existing and planned Marine Services docks accommodate a varying number and size of boats based on a fluctuating basis, not a permanent slip count. Therefore, capacity is discussed in terms of linear feet, not number of slips. The Marine Services docks currently contain 1,190 lf of dock space, which will be reduced to 896 lf with project implementation. The shipyard currently utilizes approximately 560 lf of this dock space for uses directly related to shipyard operations. The remainder of the dock space is used for monthly rental purposes (e.g. personal watercraft rentals).

The possible future reduction of dock space at the Marine Services docks will proportionally reduce the amount of boating activity at this location. The proposed configuration and location of the Marine Services docks are illustrated on Figure 3.6.

Sport Fishing Docks (PA 11). The sport fishing docks will be renovated in their existing location, as illustrated in Figure 3.8. The sport fishing docks accommodate a varying number and size of boats based on a fluctuating basis. Therefore, capacity is discussed in terms of linear feet, not number of slips. The existing sport fishing docks have approximately 1,350 lf of dock space, and this linear footage will remain the same. The preliminary design plans indicate that the mainwalks will extend approximately 10 ft further into the channel. However, this extension is due to the installation of a new 10 ft headwalk; the fingers will remain the same length as in the existing condition and do not create any increased capacity at these docks. The proposed design allows for inclusion of a new ADA-accessible gangway and a larger range of vessel sizes at the sport fishing docks. Operations at the sport fishing docks will remain essentially the same as existing conditions because no increased capacity is planned.

Guest Slips/Dinghy Dock (PA 10). The existing guest slips are currently located on the cove side of the West Marina near the OC Sailing and Events Center, as shown earlier on Figure 3.3 (PA 9). The existing guest slips will be removed from the West Marina, and a new guest dock will be located on the cove side of the East Marina, adjacent to the planned Commercial Core. The proposed project could increase the number of existing guest slips from 42 to a total of 46 guest slips. The proposed Marina Improvement Project will provide a minimum of 42 guest slips in accordance with approved LUP Policy 4.2.2-5. The guest slips are illustrated in Figure 3.9.

No public, general use dinghy dock space is currently available in the Harbor. The new dinghy docks will be located near the commercial core in the East Marina on the cove side of the Harbor. The dinghy docks are intended for use by small dinghies on a short-term temporary basis for convenient access to the commercial core for such purposes as shopping, dining and loading and unloading supplies. Because dinghy docks accommodate a varying number and size of boats on a fluctuating basis, capacity is discussed in terms of linear feet, not number of slips. A total of 374 lf is included in the proposed project as dinghy dock space. A new ADA gangway is also included in the plans for the new dinghy docks. The ADA gangway will also provide access to the guest slips because a headwalk connects the dinghy docks to the guest slips. The dinghy docks are illustrated on Figure 3.9.

The guest slips and dinghy docks will replace some existing slips in the East Marina, but will create space for additional slips in the West Marina. Boater activity associated with guest slips is typically higher as compared to regularly rented slips. Moving the slips from one marina to another will slightly increase traffic in the East Basin and slightly decrease traffic in the West Basin. Operations at the new dinghy dock will be a new use in the Harbor because no public general use dinghy dock space is currently available. However, dinghy boat traffic is not expected to congest or cause conflicts due to the relatively small size of the boats and the nature of their maneuverability.

Harbor Patrol Slips and Dock (PA 10). The proposed project includes the renovation of the Harbor Patrol slips and dock in their present location on the island side of the East Marina, as shown in Figure 3.10. The schematic design for this area provides for one long dock near the channel will be renovated as a platform dock area. The platform design meets the Harbor Patrol's needs for emergency boat access and provides more deck space for potential emergency situations. Currently there are eight slips plus two emergency side-ties located adjacent to the emergency platform. The proposed project does not change the number of slips.

Operations at the Harbor Patrol docks are anticipated to remain essentially the same as in the existing condition because there is no change in capacity or location.

Commercial Fishing Slips (PA 10). The commercial fishing slips are connected by a headwalk to the Harbor Patrol docks. The commercial fishing slips will be renovated in their present location but they will be extended out to the pier headline in the channel, as illustrated on Figure 3.10. The dock extension will allow for additional rental slips in the East Basin and accommodates commercial fishing vessels that will be displaced by East Marina renovations, as East Marina tenants will replace the slips presently used by the commercial fishing boats. No additional commercial fishing boat capacity is planned; the replacement of the 15 existing commercial fishing slips will result in 15 new slips. The one existing end-tie for the California Department of Fish and Game (CDFG) boat will remain after project implementation.

Operations at the commercial fishing docks are anticipated to remain essentially the same as in the existing condition because there is no increase in capacity or change in location.

OC Sailing and Events Center Docks (PAs 8/9). The proposed project includes the renovation of the OC Sailing and Events Center docks (previously known as the Youth and Group Facility docks) on the cove side of the West Marina, as shown in Figure 3.11.

Because the OC Sailing and Events Center docks accommodate a varying number and size of boats on a fluctuating basis, capacity is discussed in terms of linear feet, not number of slips. The existing docks consist of 890 lf; an increase to 893 lf is included in the proposed project. The new docks will be provided on the westernmost side of the facility near Baby Beach. It is anticipated that the new dock will be utilized by small boats used by the facility for teaching purposes. Due to the shallow depths in this area, only small boating craft would have access. Buoys with low tide warnings will be placed in this area to warn boaters during tidal fluctuations. The docks on the eastern side of the OC Sailing and Events Center will become part of the West Basin Marina. The new OC Sailing and Events Center docks are an expansion into an area not currently occupied by docks and will create additional slip space in the West Marina.

The renovations to the OC Sailing and Events Center docks will result in an increase of only 3 lf and will not significantly alter the existing uses and activities associated with this facility. The docks will not replace any existing docks or slips and will not conflict with any existing boat uses but may require the designated hand launch area and swim buoys to be moved approximately 50 ft to the west. Continued provision of small boat access and opportunities is consistent with CCC policies.

Temporary/Yacht Broker Docks. (PA 11). In order to accommodate boaters during the dock and slip renovations, the project also includes a set of temporary docks along the eastern breakwater. An ADA gangway is included in the plans for the temporary/yacht broker docks. Once renovations to all dock areas are completed, the temporary docks may become docks for some yacht brokers who currently have docks in the East and West Basins. The relocation of some yacht broker slips to this new location will allow for more slips to be made available to the general public. The placement of

these docks near the breakwater would require the relocation of the nearby existing bait barge. It should be noted that these docks are located within a federal anchorage area and that any permanent use within this area would require approval by the Army Corps of Engineers, and the CCC.

West and East Marinas (PAs 9 and 10). Marina renovations will include removal of nearly all floating docks and piles and installation of new docks, guide piles (or alternate anchoring methods), gangways, security gates, dock boxes, and utilities. Other Marina Improvement Project components include improved lighting on the docks and public access improvements, including gangways and docks in compliance with ADA guidelines. A total of four ADA gangways will be installed in the West and East Marinas: one each on the cove side and the island side. The ADA gangway platforms are proposed to be connected to concrete pilings where they attach to the seawall.

A minimal amount of soil disturbance would occur where the piles are installed in order to meet the engineering requirements for the platforms and the 80 ft long gangways.

The structure and materials for the proposed docks will conform to applicable LUP Policies as included in the approved Dana Point Harbor Revitalization Plan Land Use Plan. Approved LUP Policy 7.3.2-3 specifies the following regarding construction materials:

LUP Policy 7.3.2-3: The preferred material for pilings used for construction of piers, docks or slips is concrete or steel coated with a nontoxic material. Pilings treated with Ammoniacal Copper Arsenate (ACA), Ammoniacal Zinc Arsenate (ACZA) or Chromated Copper Arsenate (CCA) wrapped or coated prior to installation with a water tight plastic sleeve or similar sealant can also be used, but are not preferred over concrete piles or steel piles coated with a non-toxic material. Timber piles preserved with creosote (or similar petroleumderived products) are not allowed. To prevent the introduction of toxins and debris into the marine environment, the use of plastic wrapped pilings (e.g., PVC Pilewrap) and reinforced plastic for pilings (e.g., high density polyethylene (HDPE) pile armor) shall conform to the following requirements: (a) The material used shall be durable and a minimum of one-tenth of an inch thick; (b) All joints shall be sealed to prevent leakage; (c) Measures shall be taken to prevent ACA, CCA and/or ACZA from dripping over the top of plastic wrapping into Harbor waters. These measures may include wrapping pilings to the top or installing collars to prevent dripping; (d) The plastic sleeves shall extend a minimum of eighteen (18) inches below the mud line; (e) Plastics used to protect concrete or timber piers and docks or for flotation shall be subject to regular inspection to prevent sloughing of plastics into the waterway. A comprehensive inspection and maintenance plan shall be a requirement of any approval for projects involving plastic or similar material wrapped piles; (f) The marina operator shall be made responsible for removal and disposal of failed docks or materials; and (g) If federal or state regulatory agencies, through new or better scientific information, determine that less environmentally damaging materials or methods are available for new piles or piling replacement, the least environmentally damaging materials and/or methods should be required for such projects, as feasible.

The construction materials for the proposed dock facilities will be trucked to the project site as needed during each phase and stored at a staging area. Once the piles have been emplaced, the

prefabricated docks will be craned into the water from the staging area, and floated to the area under construction.

The West and East Marinas currently contain 2,409 slips, with an average length of 29.85 ft. Due to changes in the Dana Point Harbor specific needs of the public, and based on the Dana Point Harbor wait lists, which show local Dana Point Harbor existing boater's needs for slightly larger slips, the proposed Marina improvements include adjustments to the number and location of slips throughout the Harbor. In consideration of all factors related to slip size, including larger boats in smaller slips, boater feedback, waitlists, local market demand, slip mixes at other marinas located throughout the State, design criteria, and CCC recommendations, California Department of Boating and Waterways (DBW), and ADA design requirements, OC DPH has concluded that a plan with a modified slip mix with a slightly larger average slip size is appropriate.

During the review and approval of the LUP component of the LCPA for the proposed Dana Point Harbor Revitalization Project, the CCC and the Dana Point City Council adopted LUP Policy 4.2.2-6 stating that the Marina Project would result in the loss of no more than 155 slips, with an overall average length not to exceed 32 ft. Therefore, at project completion, the total number of boat slips under the County's preferred design would decrease from 2,409 to 2,293, resulting in a net loss of 116 slips. However, the average slip length would increase from 30 (29.85) ft to no more than 32 ft. As shown in Figure 3.13, the proposed reconfiguration of the docks includes an encroachment in the existing 200 ft wide inner channel. The proposed plan includes 20 ft of encroachment on both the north and south sides of both the East and West Basins, for a total of 40 ft, with only 20 ft of encroachment at the entrances of the East and West Basins. The encroachment tapers back to 0 ft adjacent to the Island Bridge to allow vessels to more easily turn around at the Bridge if needed. One-third of the slips (except for pitchforks) are also going to be constructed as double-wide slips in an effort to limit the loss of slips. In addition, to maximize the number of boat slips, the West Marina would be realigned from a north-south orientation to an east-west orientation, consistent with the existing dock orientation in the East Marina. The reconfiguration of the OC Sailing and Events Center docks will add 13 additional slips to the West Basin plus 256 ft (13 boats) of inside ties. Upon completion, the project will result in an approximately 33,000-square-foot (sf) increase of open water area due to the reconfiguration of docks and slips.

The County expects that no boaters with boat slip license agreements (BSLAs) will need to be relocated from the Harbor upon project completion because the expected number of vacancies over the past few years has exceeded the number of slips that could be lost with the proposed plan. In other words, the number of slips that have been vacated to date and then assigned as temporaries is anticipated to absorb the loss of slips due to project implementation. As slip tenants vacate, the slips will be rented on a temporary basis in anticipation of the proposed Marina Improvement Project. Boat owners with temporary agreements may need to vacate their slips.

The California Integrated Waste Management Board requires all jurisdictions to recycle, reuse or divert 50 percent of all generated waste. The Marina Improvement Project will be required to comply with the Construction and Demolition Debris Waste Reduction and Recycling Program developed by OC Waste and Recycling. It is anticipated that construction debris that cannot be reused or recycled, including docks, pilings and gangways, will be trucked off site to landfills.

3.7 PROJECT PHASING

The proposed project is anticipated to be implemented in 17 phases over approximately 8 years. The first phase includes the construction of the temporary dock and upgrading of the utilities. Each phase will include removal of the existing dock and piles and installation of the new dock and piles. Removal of the existing dock system consists of separating the slips in the water and floating the structures to the west side cove staging area, where landside construction equipment would remove the slip structures from the water via crane and transport the discarded material off site for proper disposal. Installation of the new dock system would be done in reverse. Piles will be removed by vibratory extraction equipment mounted to a crane operating from a barge. However, if piles break off at the mudline, they will be manually cut 2–3 ft below the mudline. The old piles will be lifted from the water using a crane and then trucked off site. The last phase would be placement of the piles and docks. The preferred method of pile installation is to predrill boreholes to facilitate pile driving. Prestressed concrete piles will then be driven into these holes and grouted with cement or sand.

During construction, boats normally berthed in areas where construction is taking place will be relocated to the temporary docks or open slips throughout the Marinas. It is estimated that an average of 150 boats will need to be relocated during each phase to available berths in the Marina or moved to the temporary dock, as necessary. The County estimates that the number of slips vacated since June 2007, also known as attrition, will offset the loss of slips due to project implementation. As of August 14, 2011, there has been a slip attrition of over 950 boats. As a result, the County expects that no boaters will need to be relocated from the Harbor upon project completion because the expected number of vacancies through attrition over the next few years will exceed the number of slips lost with the proposed plan.

The primary staging area for the duration of project construction will be located in the West Cove parking lot. This construction staging area will result in the loss of approximately 150 parking spaces for the duration of construction activities. The parking spaces would become available once construction activities are finished. Additional potential staging areas have been identified in East Cove, Island West, and Island East parking lots and on a portion of the shipyard parking area. These potential staging areas would temporarily displace parking or dry boat storage; however, the parking requirement of 0.6 space per boat slip would be retained harborwide, and any displaced dry boat storage spaces would be relocated within the Harbor if these secondary staging areas are used. It is not the intent of OC Dana Point Harbor to use multiple staging areas at any one time. The preferred staging area will be based on the location of ongoing improvements in the Harbor. The on-water construction equipment required for the proposed project will generally be localized within the dock areas where construction activities are being conducted.

The preliminary phasing plan and locations of staging areas are illustrated in Figure 3.14.

3.8 DISCRETIONARY PERMITS, APPROVALS, OR ACTIONS REQUIRED

In accordance with Sections 15050 and 15367 of the State CEQA Guidelines, the County is the designated Lead Agency for the project and has principal authority and jurisdiction for CEQA actions. Responsible Agencies are those agencies that have jurisdiction or authority over one or more aspects associated with the development of a proposed project. Trustee Agencies are State agencies

that have jurisdiction by law over natural resources affected by a proposed project that are held in trust for the people of the State.

The following discretionary actions have been taken in association with the proposed project and FEIR No. 591:

- **January 31, 2006:** The County Board of Supervisors certified the Harbor Revitalization Plan Program FEIR No. 591 (State Clearinghouse [SCH] No. 2003101142) (Resolution No. 06-013) and approved the Harbor Revitalization Plan (Resolution No. 06-014).
- **September 27, 2006:** The City Council adopted the LCPA (LCPA 06-03) for the Revitalization Plan and District Regulations, thereby amending the City LCP and Zoning Code (Resolution No. 06-09-13-06 and Ordinance No. 06-08).
- **October 13, 2010:** The CCC effectively certified the LUP component of the LCPA with suggested modification, which amended the City Specific Plan LCP to incorporate the proposed Harbor Revitalization Plan.
- **February 8, 2010:** The City approved the LUP component of the LCPA as modified by the CCC.
- **January 12, 2011:** The CCC effectively certified the IP portion of the LCPA (City LCP Amendment No. 1-10) with suggested modification. The IP portion of the LCPA is the accompanying Implementing Actions Program to carry out the certified LUP
- **June 13, 2011:** The City approved the IP component of the LCPA, as modified by the CCC.

Project implementation related to the Marina Improvement Project will require approval of a Coastal Development Permit by the CCC and administrative (ministerial) approvals from the County and Responsible and Trustee Agencies, including but not limited to the City, the CCC, California Water Resources Control Board Region 9, the United States Department of the Interior, the United States Fish and Wildlife Service (USFWS), the United States Army Corps of Engineers (ACOE), the CDFG, National Marine Fisheries Service (NMFS), DBAW, and the California State Lands Commission. See Table 3.C for a list of discretionary and permit approvals required for project implementation.

Table 3.C: Discretionary Permits and Approvals

SEIR Certification	County of Orange: Planning Commission – Recommendation Board of Supervisors – Certification
Project Plan Approval	County of Orange Board of Supervisors California Coastal Commission (CCC) State Lands Commission (consultation)
Coastal Development Permit(s)	CCC
Section 404 Permit Navigable waters (dock renovations and pile placement, temporary/proposed yacht broker docks)	United States Army Corps of Engineers (ACOE) United States Fish and Wildlife Service (USFWS) (consultation) National Marine Fisheries Service (NMFS) California Department of Fish and Game (CDFG) California Regional Water Quality Control Board, San Diego Region (RWQCB)
Section 10 Permit Navigable waters (docks)	ACOE United States Coast Guard (consultation)
Section 401 Certification water quality permits	San Diego RWQCB
Improvement Plans (infrastructure) Water Quality Management Plans Building Plans/Permits Certificates of Occupancy Dewatering Permit (WDR)	OC Public Works (OC PW) San Diego RWQCB

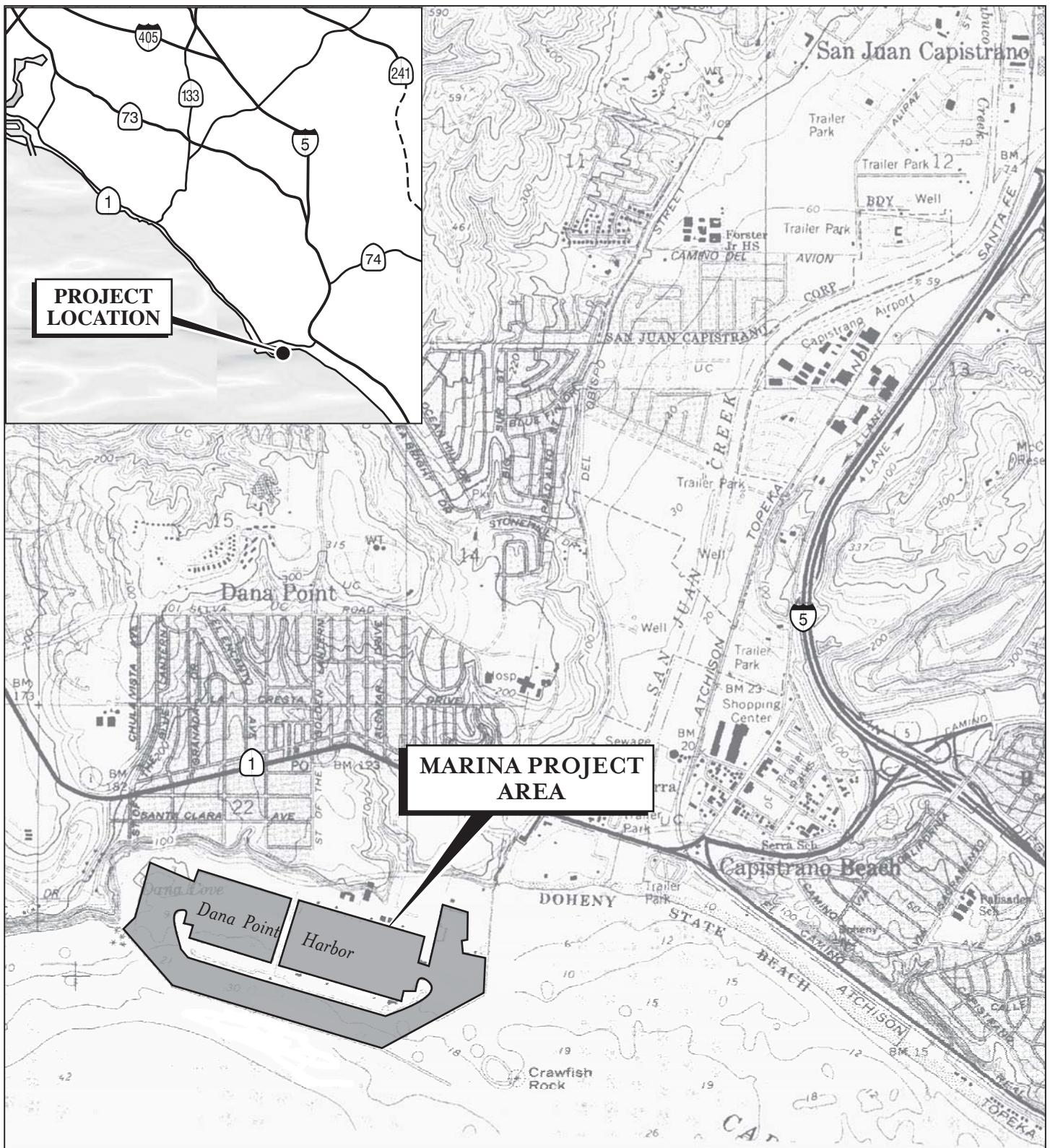


FIGURE 3.1

Dana Point Harbor Marina Improvement Project

Project Location

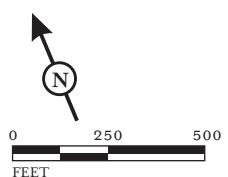
SOURCE: USGS 7.5' Quadrangle, "Dana Point, Calif."

I:\CAE0601\G\6_3_10\FIG 3-1.cdr (6/23/10)



FIGURE 3.2

LSA



SOURCE: URS/Cash & Associates

I:\CAE0601\G\6_3_10\FIG 3.2 Exist Harbor LO.cdr (6/3/10)

Dana Point Harbor Marina Improvement Project

Existing Harbor Layout

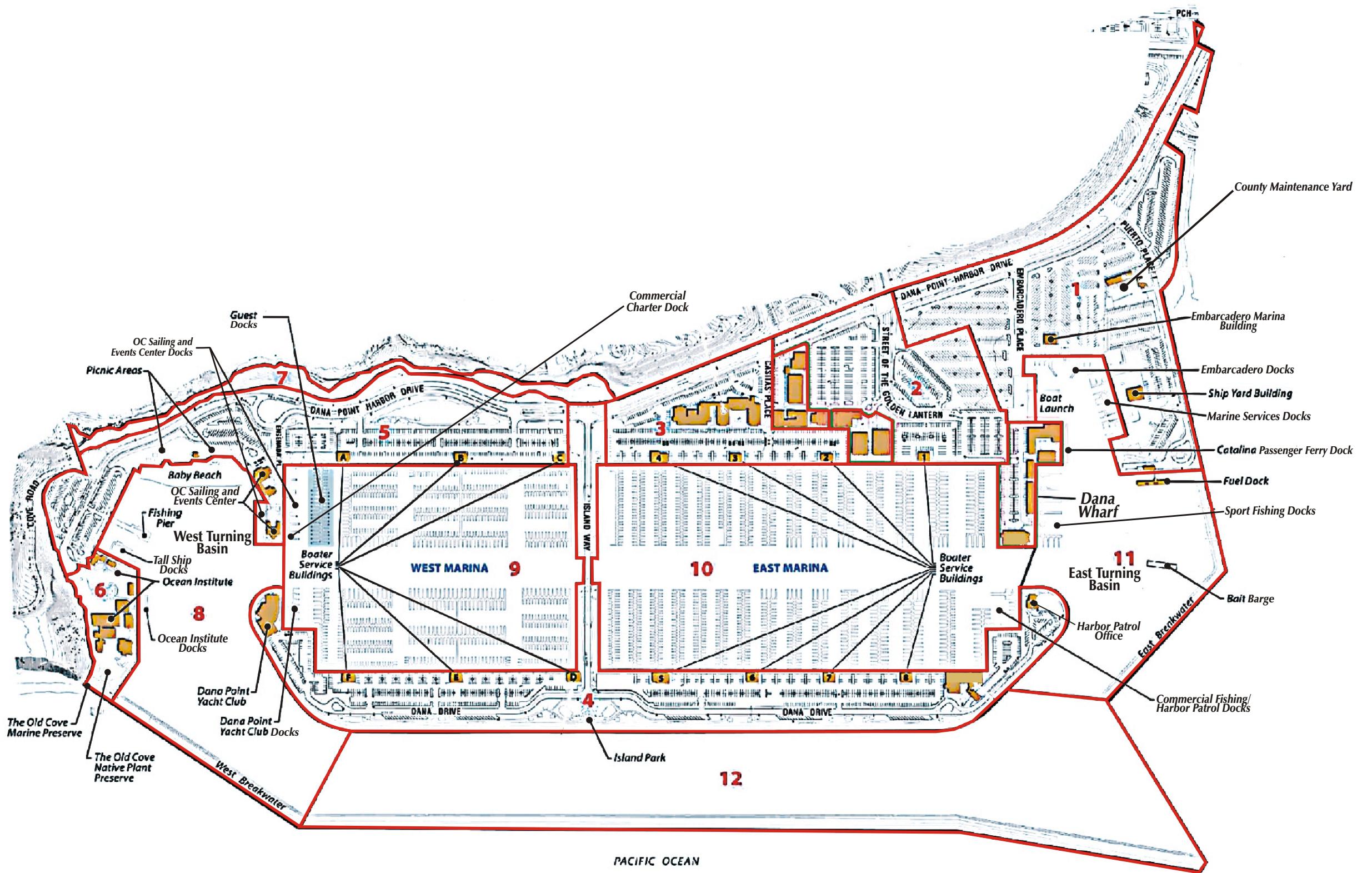


FIGURE 3.3

L S A

PLANNING AREAS

0 250 500
FEET

SOURCE: URS/Cash & Associates

I:\CAE0601\G\04_08\FIG 3-3.cdr (9/8/11)

Dana Point Harbor Marina Improvement Project

Existing Dock Facilities



View of typical gangway.



End view of typical dock.

LSA

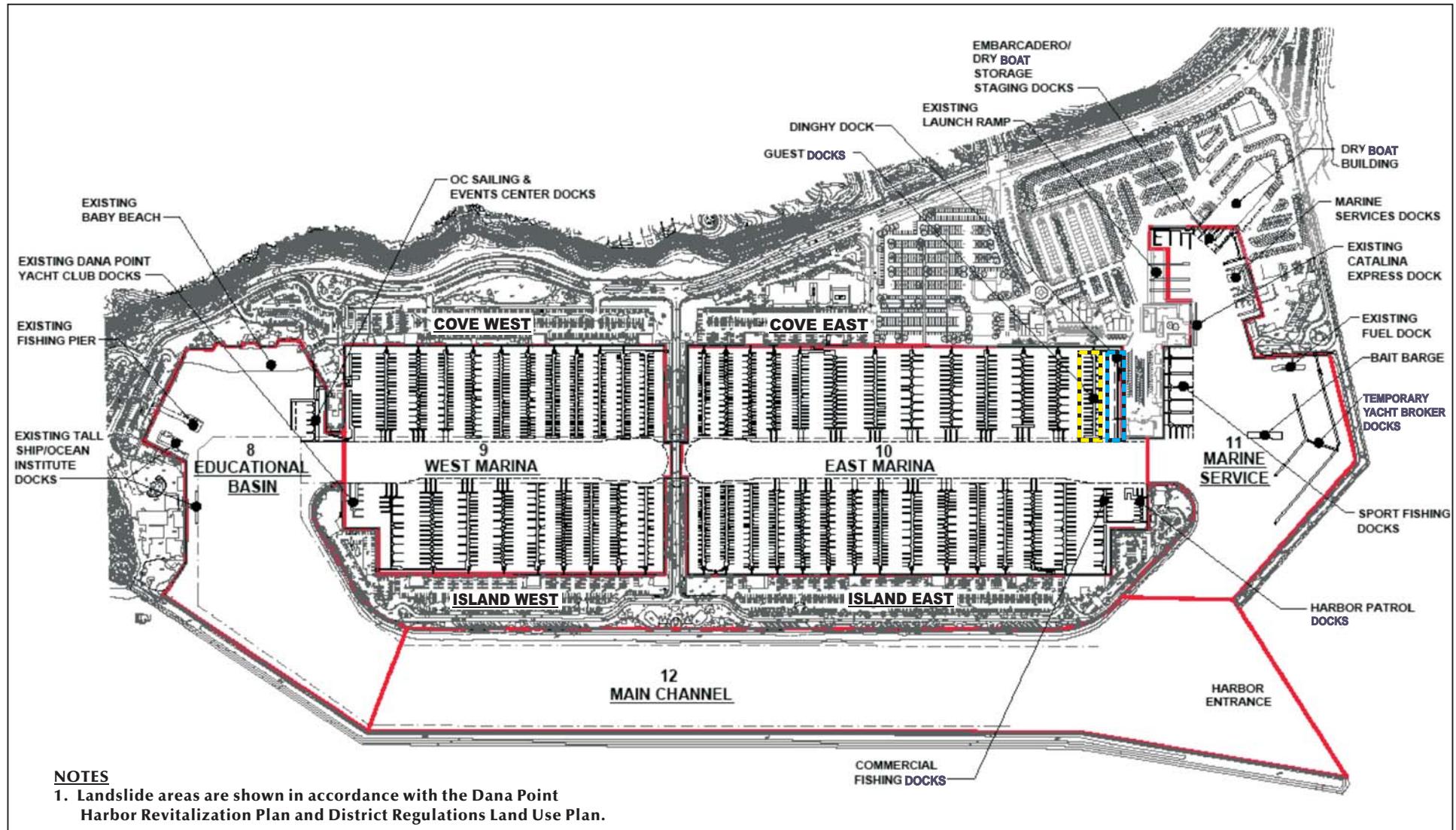
FIGURE 3.4

Dana Point Harbor Marina Improvement Project

Typical Gangway and Dock Components

SOURCE: LSA April 2007, Bluewater Design Group Jan. 2005

I:\CAE0601\G\6_3_10\FIG 3.4 Typ GDC.cdr (6/3/10)



LSA

LEGEND

- Marina Improvement Project Area (Red line)
- Dinghy Docks (Blue dashed line)
- Guest Dock (Yellow dashed line)

0 300 600
FEET

SOURCE: URS Corp.

I:\CAE0601\G\6_3_10\FIG 3.5 Prop Harbor LO.cdr (9/9/11)

FIGURE 3.5

Dana Point Harbor Marina Improvement Project

Proposed Harbor Layout

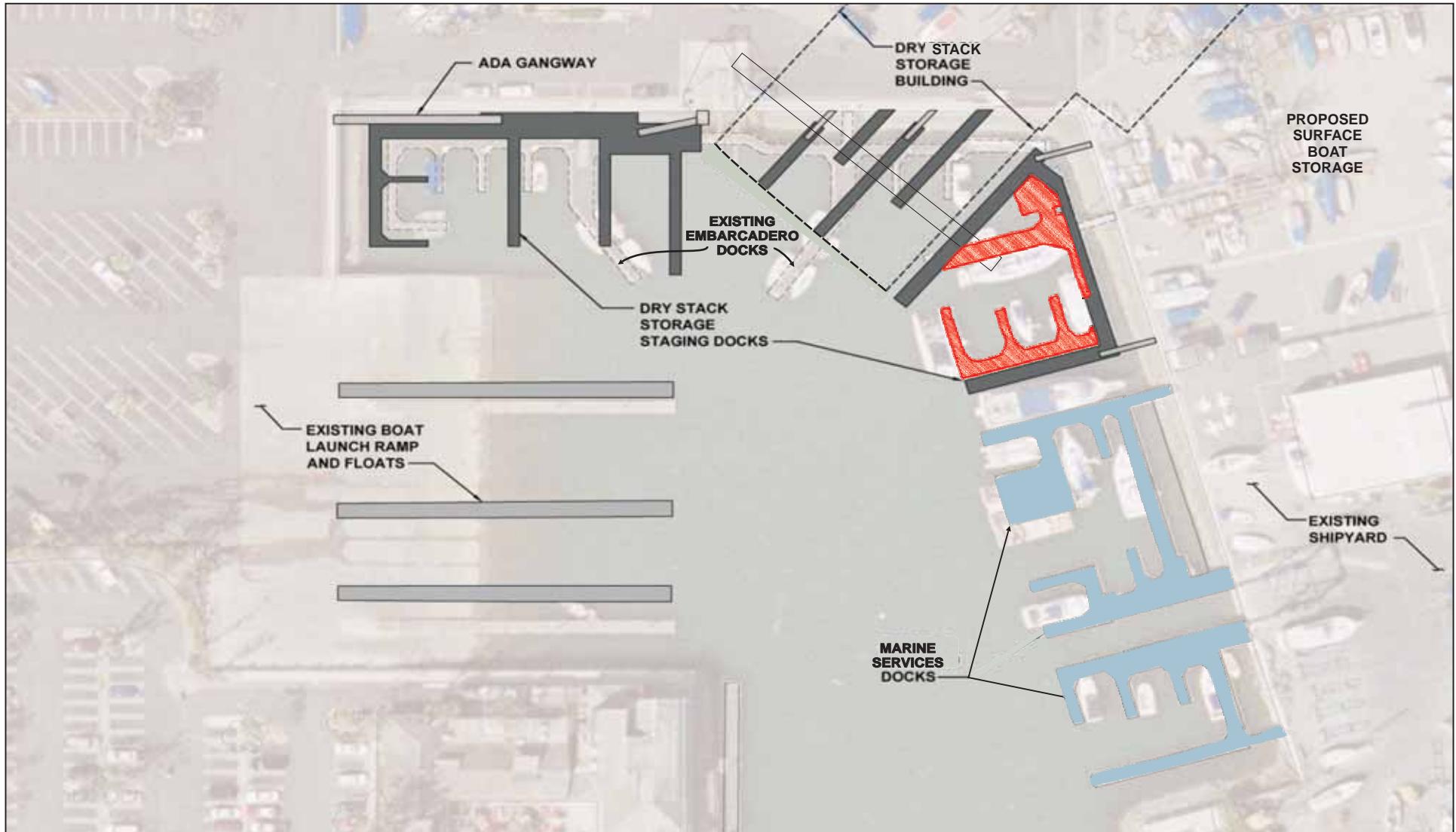
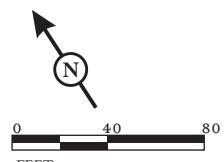
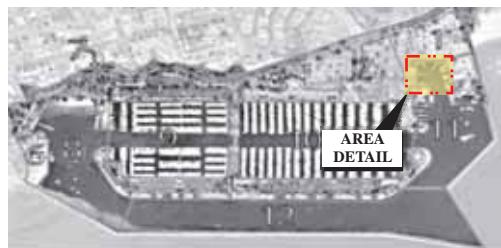


FIGURE 3.6

LSA



SOURCE: URS Corp.



- EXISTING MARINE SERVICES DOCKS TO BE REMOVED

Dana Point Harbor Marina Improvement Project

Embarcadero/Dry Stack Storage Staging Docks and Marine Services Docks

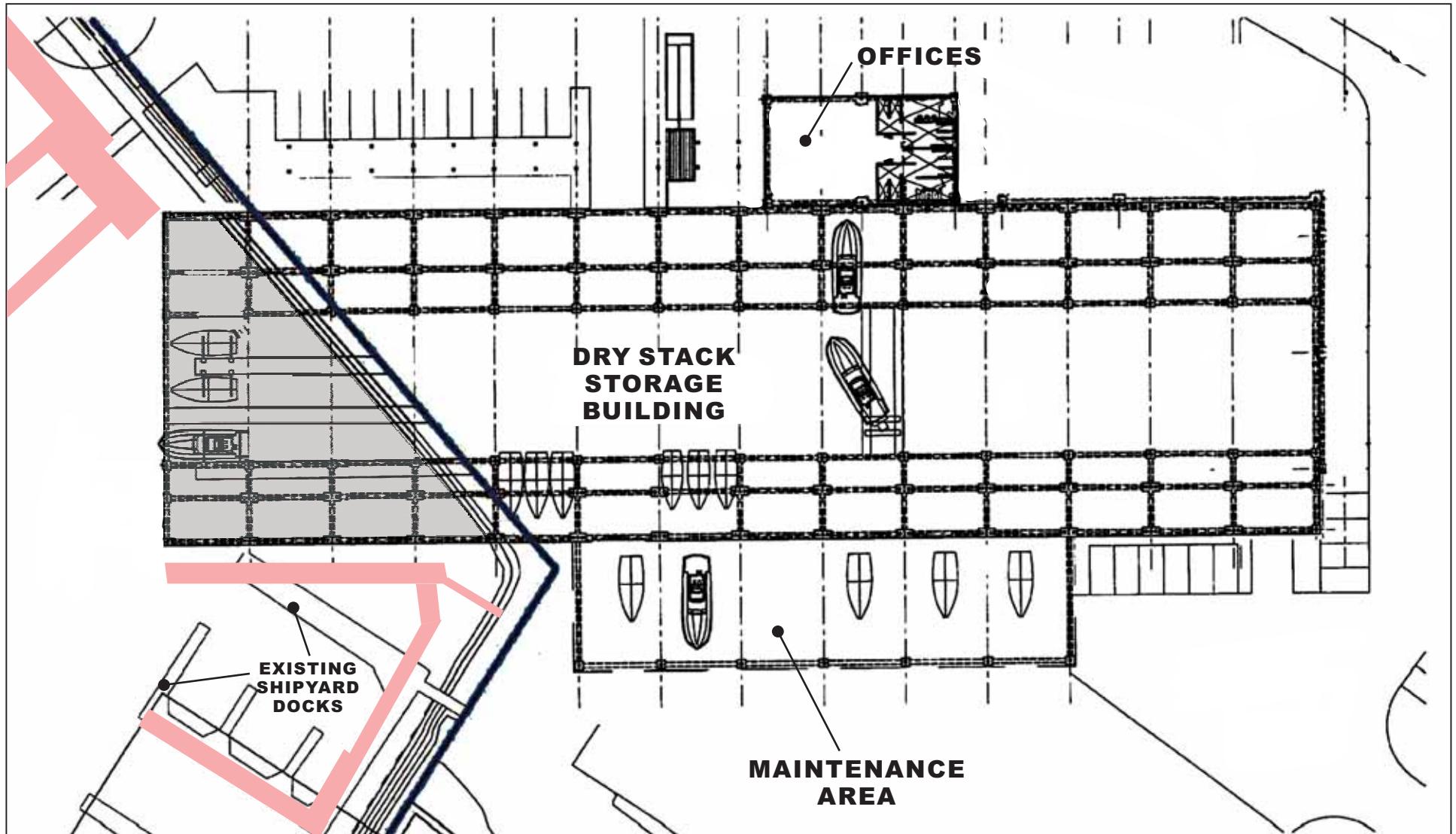
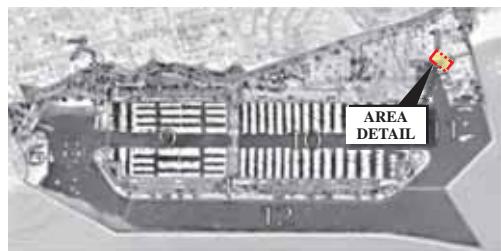
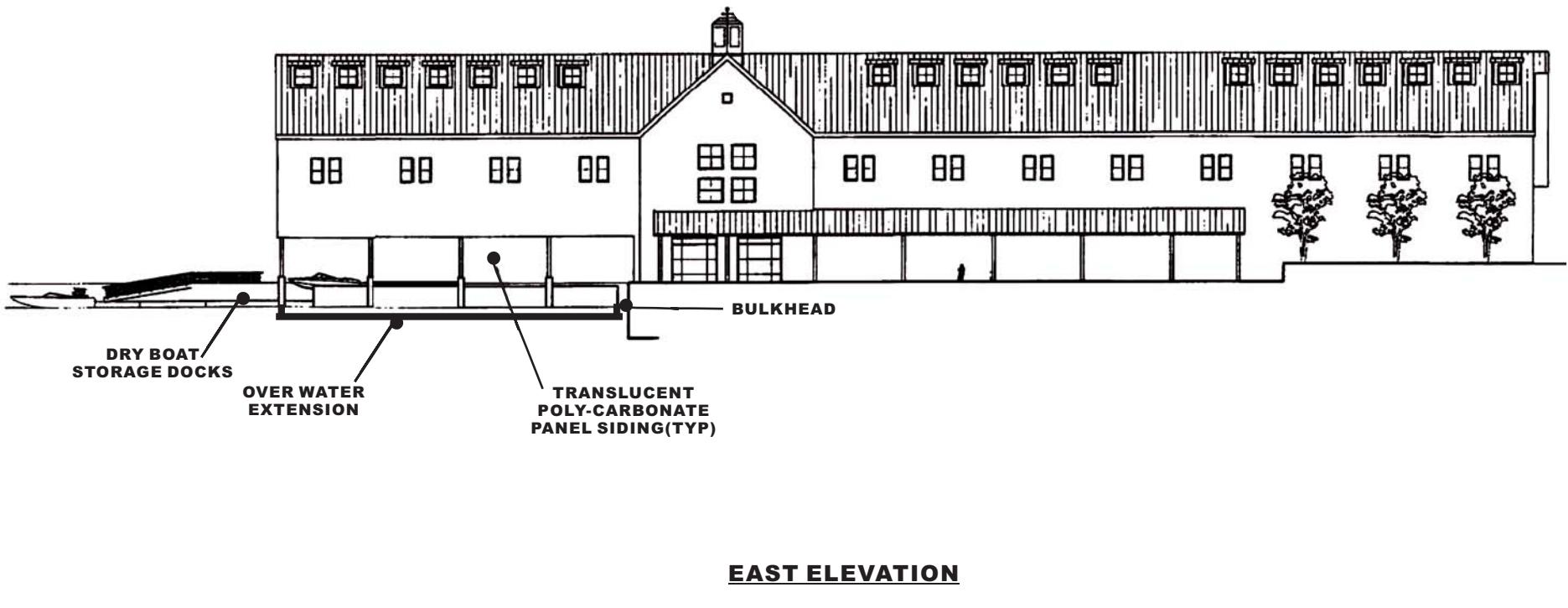


FIGURE 3.7A

- BUILDING EXTENSION OVER PROPOSED DOCKS
- DRY STACK STORAGE STAGING DOCKS



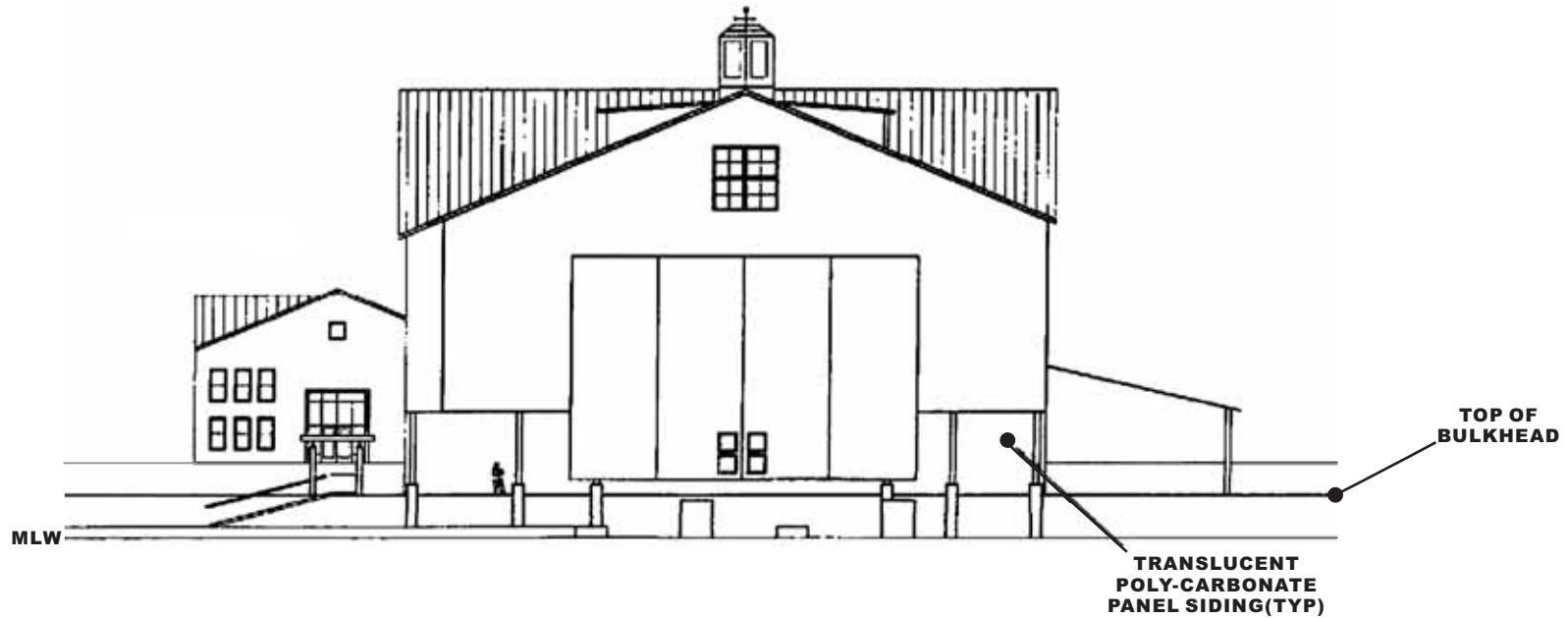
Dana Point Harbor Marina Improvement Project
Conceptual Plans - Dry Stack Storage Building



LSA

FIGURE 3.7B

*Dana Point Harbor Marina Improvement Project
Conceptual East Elevation - Dry Boat Storage Building*

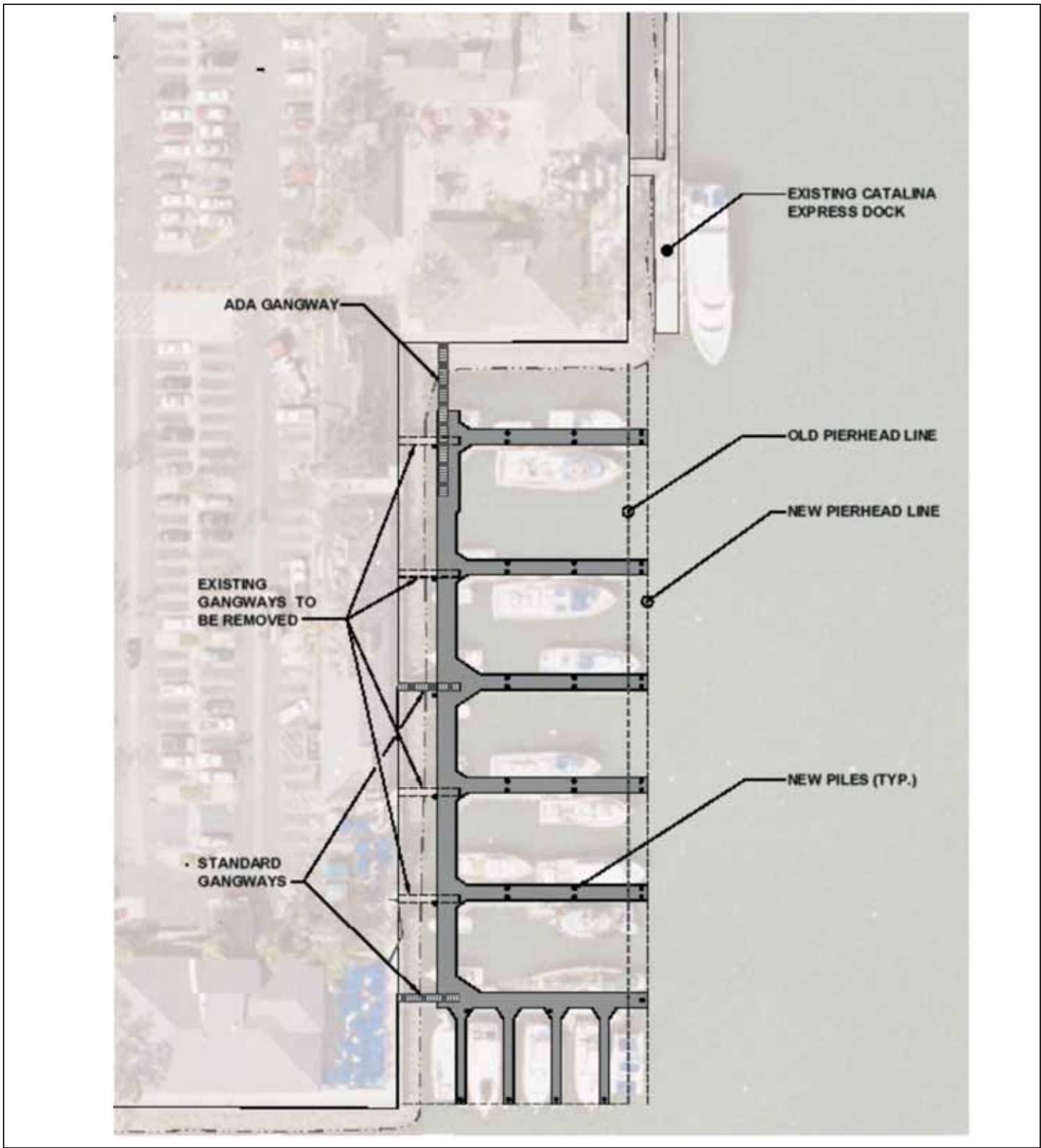


SOUTH ELEVATION

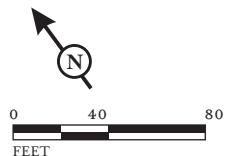
LSA

FIGURE 3.7c

Dana Point Harbor Marina Improvement Project
Conceptual South Elevation - Dry Stack Storage Building



L S A



SOURCE: URS Corp.

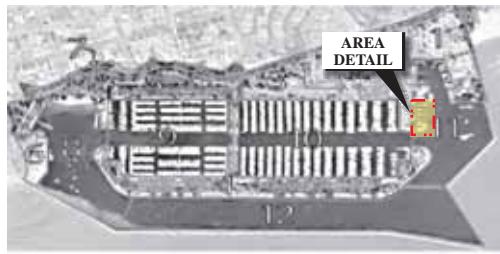
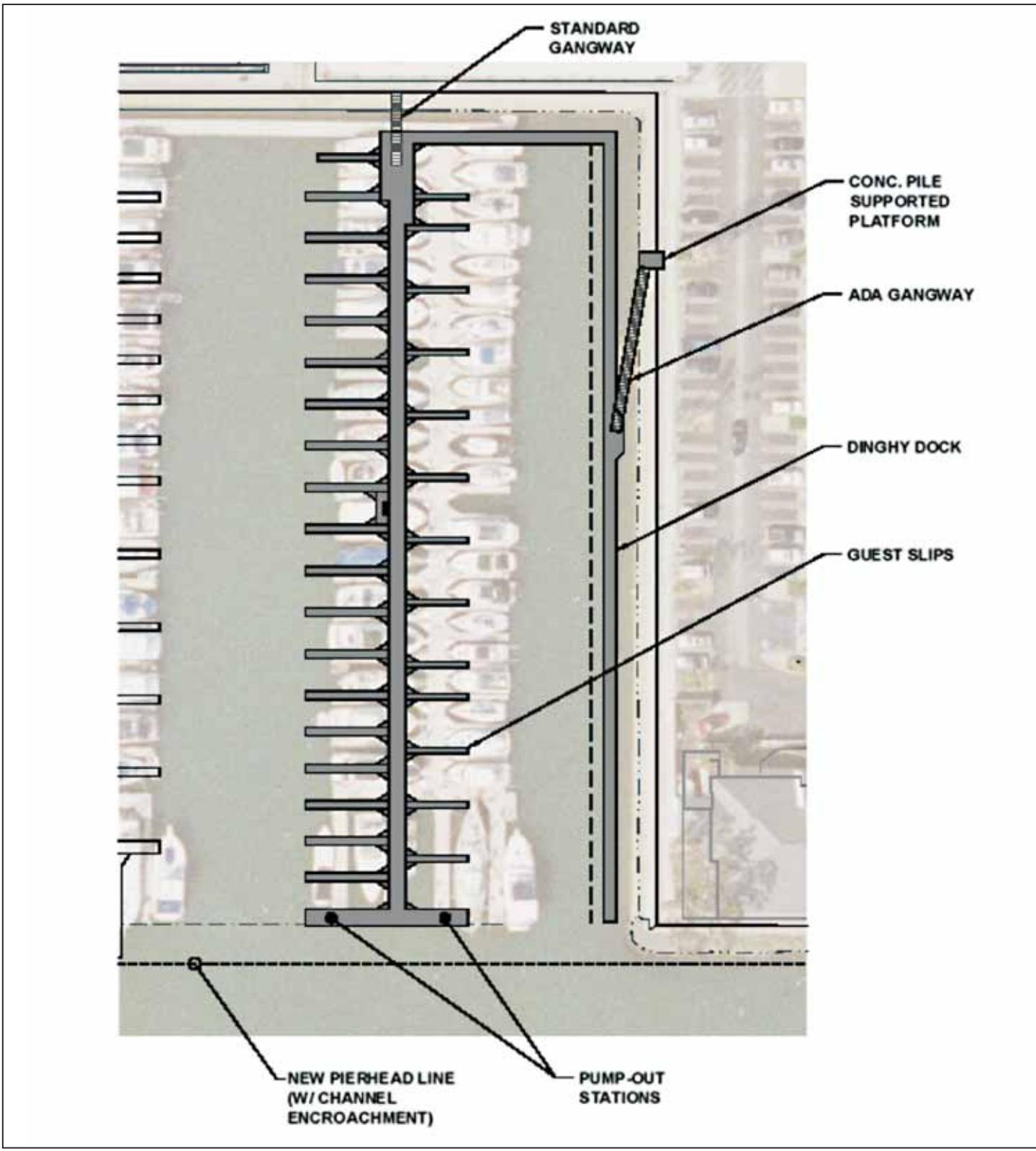
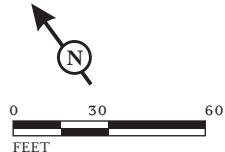


FIGURE 3.8

*Dana Point Harbor Marina Improvement Project
Sport Fishing Docks*



L S A



SOURCE: URS Corp.

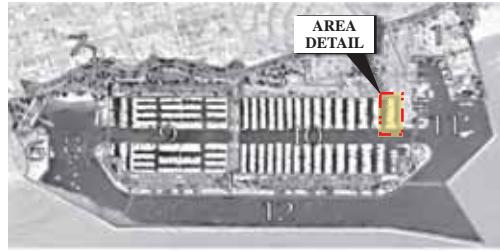
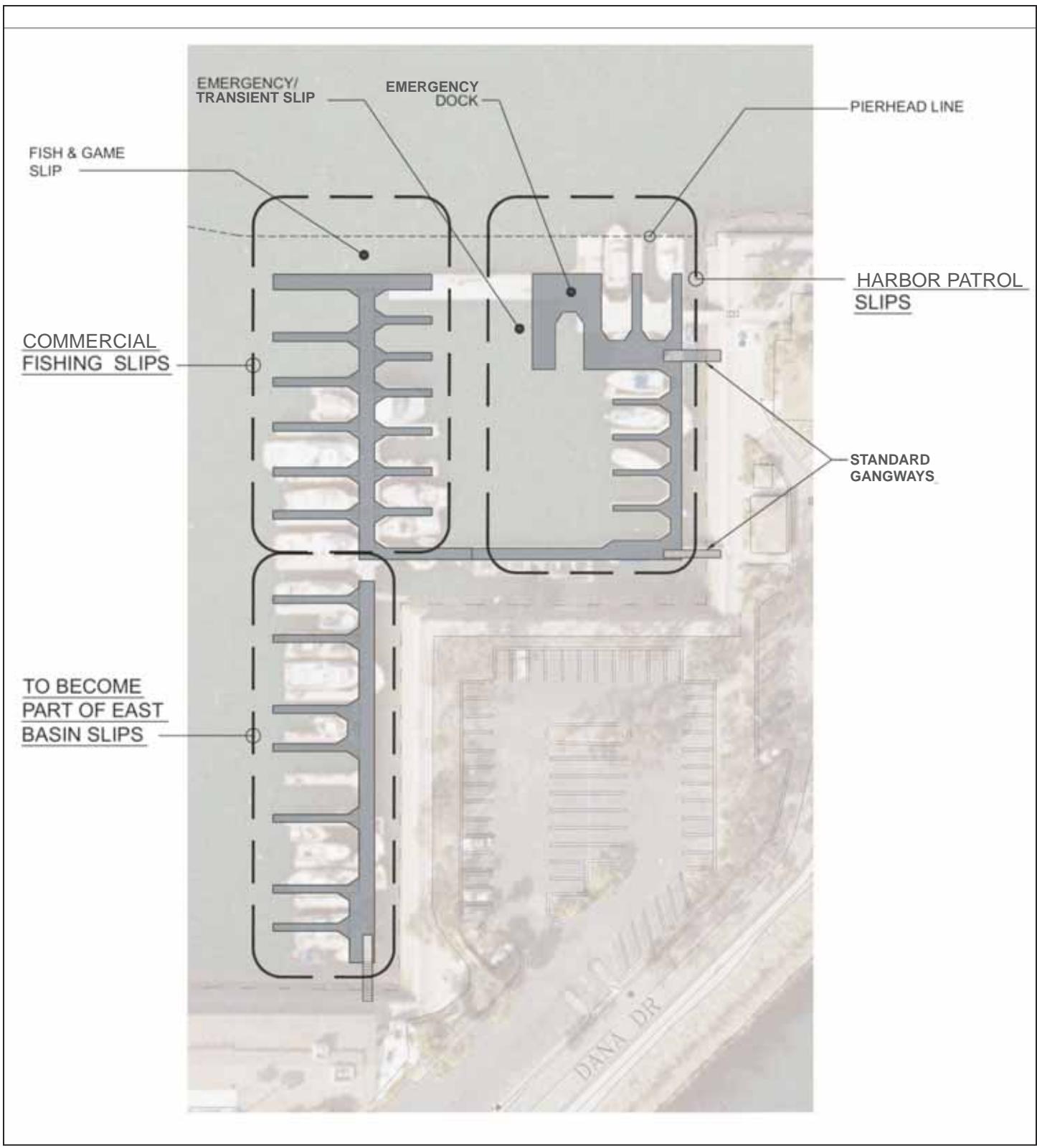


FIGURE 3.9

*Dana Point Harbor Marina Improvement Project
Guest Slips and Dinghy Dock*



L S A

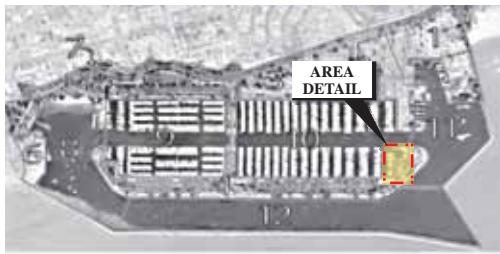
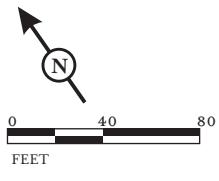
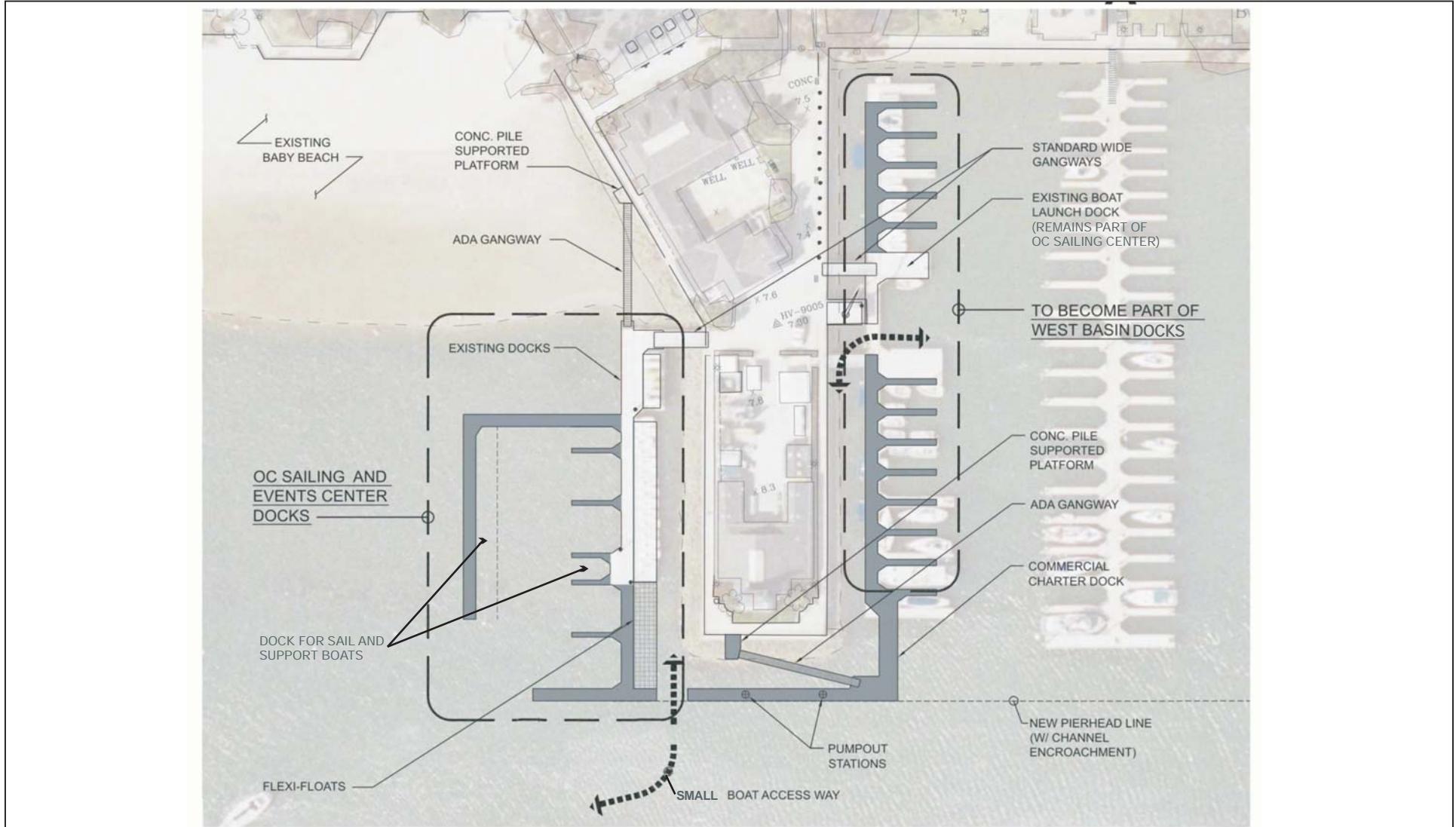
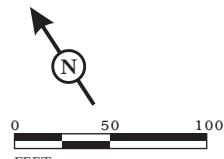


FIGURE 3.10

Dana Point Harbor Marina Improvement Project
Harbor Patrol and Commercial Fishing Slips



LSA



SOURCE: URS Corp.

I:\CAE0601\G\6_3_10\FIG 3.11OC S ECD.cdr (9/9/11)

FIGURE 3.11

Dana Point Harbor Marina Improvement Project

OC Sailing and Events Center Docks

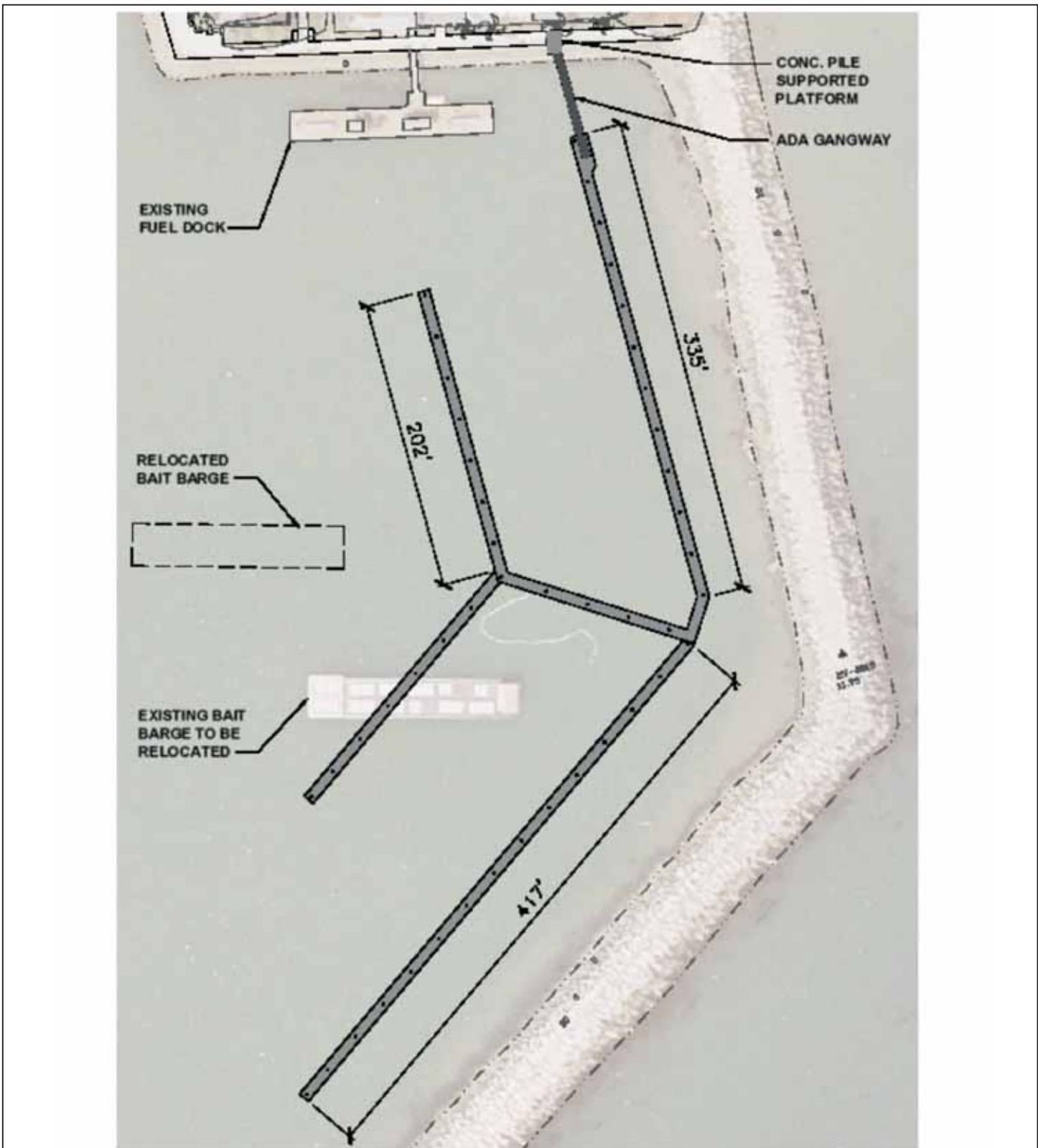
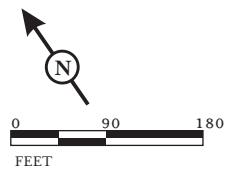


FIGURE 3.12

L S A



SOURCE: URS Corp.

I:\CAE0601\G\6_3_10\FIG 3.12 Temp D PYBD.cdr (6/3/10)

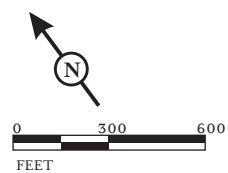
Dana Point Harbor Marina Improvement Project

Temporary Docks/Proposed Yacht Brokers Docks



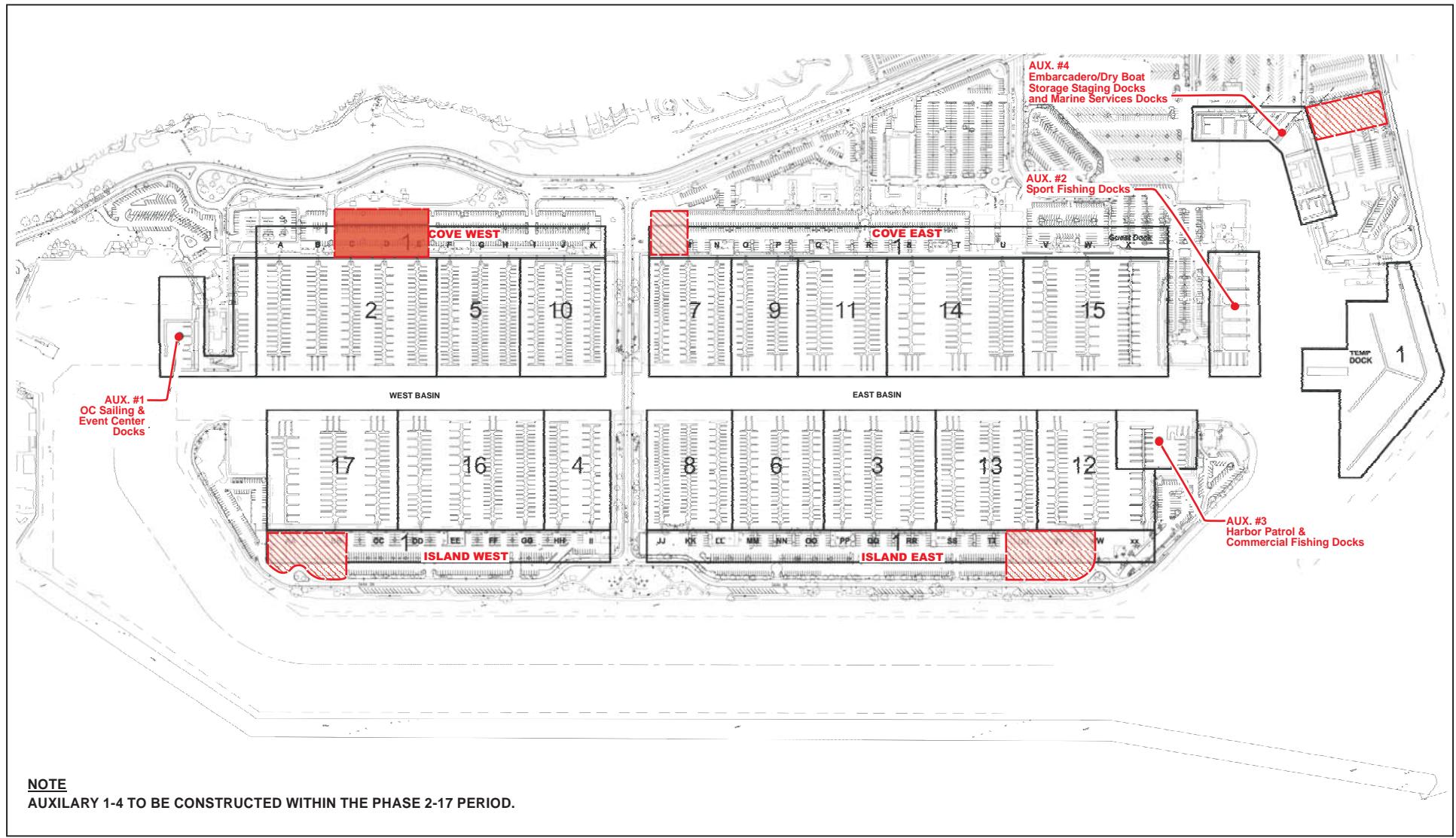
FIGURE 3.13

LSA



Dana Point Harbor Marina Improvement Project

Proposed Channel Narrowing



LSA

- Primary Construction Area
- Additional Potential Staging Areas

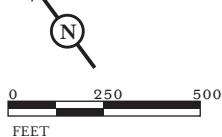


FIGURE 3.14

Dana Point Harbor Marina Improvement Project

Preliminary Marina Phasing Plan