



Administrative Report

N.1., File # 25-1464

Meeting Date: 11/4/2025

To: MAYOR AND CITY COUNCIL

From: GREG KAPOVICH, WATERFRONT AND ECONOMIC DEVELOPMENT DIRECTOR

TITLE

DISCUSSION AND POSSIBLE ACTION REGARDING THE INSTALLATION OF A PUBLIC BOAT LAUNCH ON MOLE D IN KING HARBOR

APPROVE OPTION E AS THE PREFERRED LOCATION FOR THE BOAT LAUNCH AND DIRECT STAFF TO PREPARE A RESOLUTION TO APPLY FOR A GRANT FROM THE CALIFORNIA DIVISION OF BOATING & WATERWAYS TO FUND THE RAMP'S FINAL DESIGN AND CONSTRUCTION

EXECUTIVE SUMMARY

Staff is seeking authorization from the City Council to apply for a grant from the State of California's Division of Boating and Waterways (DBW) to cover the costs of designing and constructing a public boat launch on Mole D. The application is due to DBW by February 2, 2026 and requires an identified preferred location as part of the submittal package.

In 2024, the City entered into a contract with Moffatt & Nichol, an Engineering firm with experience in designing boat launches nationwide. The first phase of the contract required the consultant to conduct necessary technical studies such as traffic, parking, wave attenuation, and overall demand, along with the identification of location options along Mole D. The firm was also charged with identifying potential boat launch locations that conform to the completed studies and are large enough to conceptually accommodate a boat launch that adheres to the State's minimum design standards, and to assist with the preparation and submittal of a grant application to DBW. If the City is awarded funding for the boat launch project, the consultant would conduct additional community outreach and further refine the design within the preferred location to accommodate exact sizing and placement of other elements of the boat launch, such as a boat wash-down area, pay station, open space, relocated commercial structures, etc.

The consultants identified several locations on Mole D for the placement of the boat launch for City consideration. On September 23, 2025, the City hosted a public workshop to review the locations and to gather public feedback. On October 13, 2025 the Harbor Commission reviewed the location options and unanimously recommended that the City Council select Option E as the preferred location for the boat launch. Staff members from the WED and Fire Departments concur with the Commission and recommend the City Council approve Option E as the preferred location and authorize the submission of a grant application to DBW to fund the design and construction of the

boat launch.

BACKGROUND

Unlike many regional harbors, King Harbor has historically been without a public boat launch, instead relying on boat hoists. Since 1959 the City has examined over 20 potential locations across Moles A, B, C, and D to build a public boat launch in accordance with direction from the Coastal Commission and to satisfy the requirements of Measure C. Measure C was a voter initiative that places emphasis on improvements to the King Harbor Marina that are recreational in nature, inclusive of a public boat launch. Measure C not only requires that a boat launch be constructed, but it stipulates that the ramp must include two lanes, 60 trailer parking spaces, be located a safe distance from the hand launch, not reduce the number of boat slips in the marina, operate in normal surge conditions, avoid locations where waves overtop the break wall, and is designed to meet minimum DBW design standards for boat launch ramps.

The most recent locations considered were along Mole C in 2015 and on Mole B in 2017. The Mole C location was not of sufficient size to meet minimum Measure C parking requirements. In addition, the general public cited concerns with ingress/egress to the site. There were two options considered for Mole B. Neither option could accommodate the parking requirements outlined by Measure C. In addition, option 1 along Mole B resulted in a net loss of slips, which Measure C prohibits, as well as a design that resulted in a narrow channel width between the end of the boat ramp and existing slips to the north. Option 2 on Mole B required the proposed boat launch to extend west into the main channel, which was not supported by the public.

In 2022, the City Council approved the King Harbor Public Amenities Plan which identified Mole D as the location for the public boat launch ramp within King Harbor. Mole D was favored by the general public, Harbor Commission, and City Council citing its proximity to the open water, as well as its size, which can accommodate the necessary parking and circulation.

The next step in the boat launch project schedule is to apply for a Boat Launching Facilities grant from DBW, which would fund the final design, permitting and construction of the public boat launch. The grant will not fund “pre-planning” phases, which includes preparation of a grant application, entitlement approval, or CEQA review. The City Council appropriated approximately \$650,000 in the FY 2025-26 budget to cover the pre-planning phases. City staff and the consultant are currently working on the grant application. Should the City receive a grant funding award from DBW, staff would advance the City funded portion of the project to the entitlement phase, which includes additional community outreach to design the specific preferred location, CEQA environmental analysis, and efforts to obtain City and Coastal Commission approvals. Once complete, the awarded grant funding from DBW would cover preparation of plans and specifications for building permit submittal and construction.

To qualify for the 2026/2027 application cycle for this grant, City Council must choose a preferred location and prepare a resolution to be included with the application package, which is due by February 2, 2026. The City’s work to date, including the demand study, conceptual layouts, environmental and coastal hazard reconnaissance, traffic and parking analysis, and public outreach aligns with submittal expectations. DBW emphasizes equitable access, limited impact on the environment, and year-round ramp functionality as desirable criteria in selecting which boat launch applications to fund.

The consultant created six location alternatives along Mole D that could be designed to accommodate the results of the technical studies, meet minimum DBW design standards, and minimum Measure C requirements. Staff and the consultant initially narrowed the alternatives down to three, referred to as Options A, B, and C. The three other designs that were eliminated from consideration were variations of Option C, whereby the boat ramp faced west and had similar advantages/disadvantages; including the need for a 10-15-foot-tall sheet pile wall to eliminate wave uprush into the Mole D parking lot (more details to follow).

Prior to identifying location options for the boat launch on Mole D, the consultant was required to perform the following studies:

Demand Study: The Boat Launch Demand Study is a required study for the DBW grant. It assists in identifying the number of boaters expected to utilize the new boat launch, which in turn helps designers determine the appropriate number of lanes to accommodate demand. Through this study, the consultants calculated that approximately 54 new vehicle trips would occur on Mole D with the construction of a boat launch. The study determined that a two-lane ramp would cover the demand. Each of the location alternatives under consideration by the City Council include two-lanes.

Transportation Study: The Transportation Impact Study evaluated whether or not the proposed boat launch would have adverse impacts to traffic on Mole D. As concluded in the demand study, the boat launch ramp on Mole D is anticipated to add 54 vehicle trips to Mole D. The Transportation Study evaluated the level of service at the existing intersections along Harbor Drive at Herondo Street, Yacht Club Way, and Beryl Street. It also evaluated the intersections at Herondo Street & Francisca and Catalina Avenue & Beryl Street. The study concluded that the addition of 54 vehicle trips per day does not reduce the levels of service at any of the aforementioned intersections.

As part of the boat launch installation, the City Traffic Engineer (in consideration of the study) recommends slight modifications to the existing ingress/egress driveway accessed off of Harbor Drive. Currently, the driveway is wide enough to accommodate three lanes of vehicles (one inbound and two outbound). The City Traffic Engineer recommends a slight reduction in driveway width to eliminate the third lane while maintaining adequate width for the turning radius of large vehicles with trailers. Existing medians within the driveway would be removed and the sidewalk would be reconfigured to the adequate width. The new design could also accommodate additional pedestrian/bicycle alert signals or ground material changes to further reduce conflict between pedestrians and users of the bike lane. Design criteria would be considered, after the City is awarded grant money, during the entitlement process, and would include additional community input. In addition to the physical driveway improvements, the City Traffic Engineer also recommends prohibiting vehicles with trailers from turning right (south) onto Harbor Drive when leaving the Mole D surface parking lot. The intersection at Pacific Avenue and Catalina Avenue does not accommodate the necessary turning radius of a vehicle with a trailer. All vehicles with trailers would be required to turn left (north) onto Harbor Drive and could utilize either Beryl Street or Herondo Street to leave the area. Should the City receive a grant funding award from DBW, the grant funding would cover the costs associated with the driveway improvements and the City Traffic Engineer recommendations.

Parking Study: The existing surface parking lot on Mole D provides 719 spaces in total; 382 in the north lot (Seaside Lagoon and California Surf Club side) and 337 in the south lot (Cantina, R10 side). The placement of a new boat launch on Mole D would result in a net loss of existing parking stalls to

accommodate circulation, the boat launch itself, and the inclusion of trailer parking as required by Measure C.

With the boat launch, each of the location alternatives under consideration by City Council would reconfigure the existing marina parking lot to a combined 525 spaces: 465 regular (including ADA), 54 vehicle-plus-trailer (including ADA), and 6 RV-plus-trailer. This would result in a net reduction of 194 regular spaces but an increase of 6 trailer spaces plus 6 new RV-plus-trailer spaces. It should be noted that the 525 total parking spaces would be sufficient to meet the parking requirements for all existing buildings and uses on Mole D, inclusive of the new proposed boat launch.

Coastal Criteria and Hazards Analysis: The Coastal Criteria and Hazards Analysis is a required report to apply for a Coastal Development Permit from the California Coastal Commission. The study demonstrates that the City is addressing future sea level rise to explore the impact on the locations. Modeling and short-term wave measurements inside the harbor show that operational wave heights at the proposed sites are generally low under typical conditions, with storm periods generating more significant swells. The studies also looked at a worst-case-scenario in the form of the impact of a once-in-100-year storm surge. Sea-level rise should be accommodated over the service life of the boat launch and can be planned for via freeboard, grading, and adaptable features in design. The technical data indicated that the wave attenuation would have the most impact on Option C, thus requiring a 10-15-foot-tall sheet pile wall situated 50 feet from the toe of the boat launch to mitigate wave attenuation run-up and parking lot flooding. The study identified the least amount of sea level rise impact on Option A with more of an impact on Option B, but not enough to require a sheet pile wall.

Initial Location Options

Attachment 1 includes the three proposed location options presented to the community during the public workshop held on September 23rd.

Option A: Option A locates the ramp near the southern tip of Mole D and provides the most efficient land side design for queuing and circulation of vehicles. It provides minimal disruption of the pedestrian promenade and does not present a scenario in which vehicles with trailers are reversing across a pedestrian walkway. The ramp itself is the shortest of the three options due to the existing grade of this particular area of Mole D and it has the lowest expected wave run-up due to its protected proximity closest to the Basin III marina. For these reasons it is also one of the least expensive options. A portion of the existing dock infrastructure would need to be removed to accommodate the ramp opening but this option (like all the other options) includes construction of new dock area to the west of the ramp to accommodate a vessel queuing area on the water.

The drawback of option A is that this location provides the least amount of launching space and would create conflicts with adjacent Basin III boating activities. The channel width in this location is only 130 feet and is shared by a variety of boating types and users. Pursuant to DBW requirements, at least 50 feet of channel width measured from the toe of the ramp is required to accommodate boats utilizing the ramp. In addition to boats utilizing the new boat launch, there are existing commercial and recreational boats located within 58 slips and 4 dock areas in Basin III. Therefore, additional channel width must be accommodated for two-way vessel traffic. According to DBW standards, the required width for each vessel lane is 30 feet, or 60 feet for two-way traffic. In total, DBW requirements stipulate a channel width of 110 feet is required (at minimum) to accommodate boat launch users and Basin III vessel traffic where Option A provides 130 feet. It is also important to

note that Basin III contains commercial vessel operators that rent stand up paddleboards, pedal boats, and Duffy boats for use by the general public. All three examples are small, slow-moving, and are often utilized by inexperienced operators. DBW standards base channel lane width requirements on the slip that can accommodate the largest vessel operating within Basin III. A stand-up paddleboard, pedal boat, and Duffy boat are all smaller than this vessel type and as such the DBW requirement that 30-foot-wide vessel lanes be provided to accommodate those users. However, there is concern that the inexperienced user of pedal boats/paddleboards/Duffy boats would attempt to traverse the narrow channel width while two larger vessels already occupy the travel lanes or alternatively, commercial vessels would grow impatient of the slow-moving human-powered vessels that are in the channel and potentially enter prematurely.

Option B: Option B is similar to Option A in that the ramp faces south. However, the ramp has been moved further west, within the footprint of the existing Cantina restaurant. Vehicle circulation and queuing on the landside would also shift west reducing the landside vehicle efficiency and causing vehicles with trailers to make sharper turns when approaching or leaving the launch ramp. The overall grade at the top of the ramp would increase two feet in height when compared to Option A to accommodate slightly higher grade elevations at this point on Mole D as well as slightly higher wave uprush. Wave uprush is expected to be higher in Option B due to its location closer west where wave attenuation is higher. That said, a sheet pile wall to protect against wave uprush is not needed. Due to the higher overall grade at the top of ramp, the ramp itself has a greater overall length than Option A and is therefore projected to be more expensive. While landside vehicle circulation efficiency is reduced with this option as compared to A, waterside navigability is gained. By shifting the south facing ramp further west the design takes advantage of the angle of the existing south breakwater wall, which results in a widened channel. Option B results in a channel width of approximately 170 feet, or 40 feet wider than Option A and moves the ramp away from the ingress/egress point of Basin III.

Option C: Option C completely changes the angle of the proposed boat ramp to face west. It is in close proximity to the hand launch and is located adjacent to the primary parking lot drive aisle connecting to Harbor Drive. It would result in the most waterside navigability clearance and is not limited in width by the south breakwater wall.

The drawbacks of option C include a major wave uprush concern. As shown in Attachment 2, there were several other west facing ramps explored for Mole D and all west facing options resulted in significant wave uprush issues in which the marina parking lot would be subject to periodic flooding. To mitigate against wave uprush risk, any west facing option would require the construction of a 10-15-foot-tall sheet pile wall. In addition to the sheet pile wall, the overall grade at the top of the ramp would need to be four feet higher than the Option B grade and six feet higher than Option A, resulting in the lengthiest ramp of all the options. Due to the overall length, the fact that the ramp projects further west (further into the ocean floor) and the need for a sheet pile wall, Option C represents the largest footprint, highest cost, and largest environmental impact to the ocean floor. It is important to note that when Coastal Commission reviews the final entitlement plans, options with minimal environmental impact are favored. For this reason, staff and the consultant have identified Option C as the most difficult to receive permits. Other drawbacks include a severed pedestrian promenade, in which vehicles with trailers would be required to reverse across a pedestrian heavy environment, and minimal vehicle queuing on the landside.

Public Feedback

On September 23, 2025, the consultant team (SWA and Moffatt & Nichol) and staff moderated an in-person community workshop to present the technical studies, location options, answer questions, and gather public input. The workshop was held at the Redondo Beach Public Library from 5:30 PM to 7:00 PM, with nearly 40 community members in attendance. The meeting was live-streamed on YouTube via the City's official channel for remote participants. During the meeting, the City and project consultant team introduced the project goals and reviewed past studies and planning efforts related to the boat launch. The project team discussed the analysis of existing conditions at the Mole D site, followed by a presentation of the boat launch location options currently under consideration. An in-depth analysis was provided for each option outlining the benefits and drawbacks. A live interactive survey was incorporated into the presentation to encourage public participation. The workshop concluded with a Q&A session, during which participants submitted written comments and questions on cards for the project team to address.

SWA moderated and conducted an interactive live survey during the meeting to collect community input and feedback. Seven survey questions were developed in collaboration with the project consultant team and the City. The first three questions focused on getting to know who was in the audience, attendee demographics, frequency of visits to King Harbor, and primary reasons for those visits. When asked about which group best described you, nearly 33% of the audience identified as local residents, 27% were boat owners with slips, 15% were yacht club members, and 12% were business owners. Approximately 34% of respondents reported visiting the harbor daily, while 36% visit multiple times per week. Of the seven response categories, the primary reasons for visiting King Harbor were identified as: boating (27%), dining (19%), walking the pier/biking (15%), visiting a yacht club (13%), attending harbor/pier events (11%), paddle boarding/kayaking (11%), and going to work (4%).

The remaining questions addressed the importance of various elements of the boat launch, the likelihood of participants using the facility, and their preferred option among those presented. Boater traffic safety was considered the most important factor by the majority of respondents. The second and third most important factors were wave protection and minimizing conflicts between pedestrians/bikes and vehicles. Nearly half of the respondents indicated they are either "likely" or "very likely" to use the boat launch. About 31% reported that the question was not applicable because they do not launch boats, while 25% indicated they are unlikely to use the facility. Among the boat launch locations, Option C was the most favored by respondents (42%), followed by Option A (35%). Option B was the least favored (23%).

A question and answer (Q&A) session was held after the presentation. Participants wrote their questions and comments on cards for the project team and the City to address. A total of 14 comment cards were collected, covering a range of questions. Several addressed operational aspects of the boat launch, such as hours of operation and regulated parking times. On-the-water boat traffic considerations were raised multiple times, and questions related to the sheet pile wall in Option C were also highlighted and discussed. One card provided a different location option for the boat launch, an "Option D," which located the launch near the existing boat hoist and R10. Option D has been included as Attachment 3 and the consultant team evaluated this location option prior to the Harbor Commission meeting on October 13, 2025. The option would require removing existing Basin III slips, which is prohibited by Measure C, so this site was not looked at in any further detail. At the conclusion of the Q&A, the consultant team again surveyed the participants on a preferred location option. Option C remained the most popular choice (46%), while Options A and B received similar levels of support, each at 27%.

Option E: Overall, the community expressed concerns with each of the original three options. As a result, staff and the consultant explored a hybrid option that would address the boating navigational concerns associated with Option A and the landside vehicle concerns of Option B. The consultant began by taking a south facing ramp as shown in Option A and B as a starting point and rotated the angle of the ramp to the west (clockwise). The proposal (Option E) has been included as Attachment 4. The idea is to rotate the ramp as far west as possible before wave uprush becomes a concern. By rotating the ramp west, the new ramp location can maximize a wider channel width by taking advantage of the south breakwater wall angle, but stop the rotation when a sheet pile wall would be necessary to avoid wave uprush. In this case, the channel width in Option E is approximately 160 feet, or 30 feet wider than Option A, but ten feet narrower than Option B. In addition, if the ramp is rotated west, then the vehicle turn-around circle located atop the boat ramp would rotate east, thus improving upon the vehicle circulation challenges in Option B by utilizing the same north/south drive-aisles within the parking lot as Option A and eliminating the sharp turns as vehicles traverse the surface parking lot and approach the turn-around circle. Option E also allows for the preservation of Mole D's existing commercial space.

Staff and Harbor Commission Recommendation

Preserving navigable waters and ensuring clearances and predictable traffic patterns for Basin III tenants, visiting boaters, and human-powered craft is an important consideration. Moffatt & Nichol took the minimum clearances required from the DBW boat launch guidelines and ensured that locations A, B, C, and E all meet and exceed the minimum requirements for safety. They accounted for the size and quantity of the vessels that have slips in Basin 3 and measured for the largest-sized boats, so two of the large boats could pass next to each other and someone could be launching a boat simultaneously.

Option A has the least on-water clearance space with 130 feet, while Option E provides more navigable width at 160 feet, and Option B has an even greater width at 170 feet. The sheet pile wall for Option C would extend the required 50 feet beyond the bottom of the ramp to give the minimum clearance for ramp ingress/egress. Beyond the 50-foot requirement, Option C provides the most navigable waters beyond the sheet pile wall with no other limitations.

While Option C provides the most navigable water, locations that avoid the construction of new offshore wave protection structures, including sheet pile walls, are generally less complex to permit. The additional sheet pile breakwater, rock mound, and length of ramp would impact more soft-bottom habitat as opposed to Option A, B, or E, where most of the ramp is being constructed on land side and only the bottom of the ramp is protruding into the existing coastline. Options A, B, and E would therefore be viewed as more favorable by the CCC because they are less impactful.

Staff and the consultant appeared before the Harbor Commission on October 13, 2025 to obtain a recommended location option for City Council consideration. Commissioners discussed wind, safety, and circulation tradeoffs: several comments criticized Option A's upwind, narrow fairway and wind-shadow turbulence that would force unpowered sailboats to tack in confined space. Poor landside circulation issues were identified with Option B, while Option C received unfavorable comments due to its need of a 15-foot tall sheet-pile wall. Commissioners commented that the sheet pile wall would likely create visibility issues as well as environmental impacts. By contrast, Option E's forty-five degree rotation toward the southwest was praised for yielding a safer, more controllable exit relative to prevailing winds, while preserving longer queuing docks and better land-side circulation.

As a result, the Harbor Commission (unanimously), and City staff, recommend Option E which maintains the benefits of Options A and B and improves upon their deficiencies. The channel width of Option E is approximately 30 feet wider than Option A and is significantly removed from the entrance to Basin III, thus providing more runway to engage boating traffic and more channel width to accommodate human powered vessels and other slow-moving boats. Option E also results in a vehicle turn around circle further east that is more in-line with the existing parking lot drive-aisles, thus eliminating the need for sharp turns before vehicles with trailers approach the turn-around circle. The channel width of Option B remains approximately 10 feet wider than Option E, however the landside circulation for both vehicles and pedestrians is significantly improved over Option B. The Harbor Commission acknowledged that picking a location was a difficult decision as there is no perfect option, but that Option E offered the best compromise between permitting, environmental impact, cost, and maximizing the channel navigation space, while both protecting against storm surges and ensuring optimal landside circulation. In addition to unanimously recommending that City Council direct staff to apply for the grant with Option E as the preferred location, the Harbor Commission carried a second motion recognizing the importance of future design phases to mitigate any pedestrian, vehicle, or boater conflicts.

Once a preferred location for the public boat launch is selected, staff would return to Council with a resolution formally authorizing the submission of a City funding application under the Boat Launching Facilities grant administered by DBW.

COORDINATION

The Waterfront & Economic Development Department coordinated this report with input from the Harbor Commission and the public.

FISCAL IMPACT

The pre-planning and conceptual design work for the new boat launch facility performed by Moffat and Nichol was funded as part of the City's Capital Improvement Program. Funding for the final design and construction costs associated with installation of the new ramp would be provided by DBW, if the City is selected for a Boat Launching Facilities Grant award.

APPROVED BY:

Mike Witzansky, City Manager

ATTACHMENTS

- Attachment 1 - Location Options A, B & C
- Attachment 2 - Additional location options
- Attachment 3 - Community Member Option D
- Attachment 4 - Option E
- Study - Boat Launch Demand Study, May 5, 2025
- Memo - Coastal Criteria and Hazards Analysis
- Study - Transportation Impact and Parking Study, September 12, 2025