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STAFF REPORT: PERMIT AMENDMENT

Application No.:	**5-11-085-A1**
Permittee:	**City of Long Beach**
Agents:	Eric Lopez, Department of Public Works Rafael Holcombe, Tetra Tech, Inc.
Location:	Rivo Alto Canal and Naples Canal (Naples Island and Treasure Island), Alamitos Bay, City of Long Beach, Los Angeles County
Description of Amendment:	Phase Two of Naples Island Seawall Repair Project. Phase Two includes installation of 2,148 linear feet of new steel sheet-pile seawall on the water sides of the existing vertical seawalls at The Colonnade/ Boca del Naples (the southern entrance to Naples Canals), the south side and eastern end of Treasure Island, and the western end of the Naples Peninsula. Also includes new sidewalks, guardrails, drainage improvements, lighting, seven ADA-accessible view areas with public benches, and replacement of existing private boating facilities (access stairways, platforms and dock guide piles). Approximately 42 palms will be removed and replaced.
Project Approved October 9, 2013	Naples Island Seawall Repair Project - Phase One. Phase One includes the installation of a new steel sheet-pile seawall on the waterside of the existing vertical concrete seawalls along both sides of Rivo Alto Canal (1,915 linear feet), and new guardrails, landscape beds, sidewalks, an improved drainage system, and relocated street lighting along the canal. The new seawall extends eighteen inches beyond the existing seawall into the existing channel resulting in the fill of approximately 1,727 square feet of submerged soft-bottom habitat. The project also includes a mitigation program involving excavation of the northern bank and north arm of Colorado Lagoon to create approximately 20,908 square feet of submerged soft bottom habitat to mitigate for the loss of soft-bottom habitat resulting from this first phase and five future phases of seawall repairs.
Staff Recommendation:	Approve with conditions

SUMMARY OF STAFF RECOMMENDATION

The City of Long Beach requests a permit amendment to implement Phase Two (of six phases) of the Naples Island Seawall Repair Project involving the installation of a new steel sheet-pile seawall on the waterside of the existing seawall along The Colonnade/Boca del Naples (the southern entrance to Naples Canals), the south side and eastern end of Treasure Island, and the western end of the Naples Peninsula. On October 9, 2013, the Commission approved Coastal Development Permit 5-11-085 for the necessary repairs to 1,915 linear feet seawalls along both sides of Rivo Alto Canal (Phase One). The Commission's 2013 action on the coastal development permit approved the first phase of six phases of seawall repairs, but also included the necessary mitigation plans for the impacts of all six phases. Each future phase of seawall repair necessitates a separate Commission action, which involves amendments to the to the underlying coastal development permit.

The submerged portions on the project area are within the Commission's original jurisdiction. Pursuant to the certified City of Long Beach Local Coastal Program (LCP), the portion of the proposed project that is situated inland of the existing seawalls (sidewalks, guardrails, lighting, landscaping and drainage improvements) falls within the City's permitting jurisdiction. The City has requested pursuant to Coastal Act Section 30601.3, that the Commission review the entire project (including the portion within the City's LCP jurisdiction) together as a consolidated coastal development permit application. The Commission's standard of review for a consolidated permit application under section 30601.3(b) is Chapter 3 of the Coastal Act with the City of Long Beach certified Local Coastal Program (LCP) providing guidance.

Staff recommends **approval** of the permit amendment with special conditions. Phase Two of the Naples Island Seawall Repair Project involves the same type of construction method for repair of the seawalls: installation of a new steel sheet-pile seawall on the waterside of the existing seawalls. The underlying permit already requires the appropriate mitigation for the replacement of subtidal areas that will be filled by the added seawalls. The City has provided the necessary mitigation for the filled subtidal areas by creating new soft bottom habitat at Colorado Lagoon in 2017. The City has also mitigated the anticipated impacts to eelgrass beds by growing eelgrass at Colorado Lagoon and Marine Stadium. The special conditions of the underlying permit that require this mitigation are still in effect on this permit amendment.

The underlying permit also established the mitigation plan for impacts to public access, which result from the reduction in width of the canals. The public access mitigation, which have been developed in cooperation with the City, includes the provision of two public access amenities on Naples Island: 1) the improvement of the Sorrento Alamitos Bay Shoreline Trail on the north side of Naples Island (which includes removal of unpermitted private encroachments from the bayfronting public right-of-way), and 2) the provision of at least one public access facility to provide access from Naples Island's vertical seawalls to the waters of Alamitos Bay for swimmers, kayakers, stand-up paddle boards and other small vessels. The underlying permit requires the public access improvements (Shoreline Trail) to be constructed in segments concurrent with the phased construction of the Naples Island Seawall Repair Project. The mitigation plan, as required by **Special Condition Fourteen**, provides for a five-foot wide ADA accessible public walkway along the filled portion of the City's public right-of-way known as the *Alamitos Bay Shoreline Trail*. This walkway would provide for both lateral access along the bayfront and connections to vertical access points from East Sorrento Drive. This walkway will provide for pedestrian access to the public trust lands, including the bay waters and bay

shoreline. A few local residents have registered their opposition to the public access improvements required by **Special Condition Fourteen**.

Special Condition Eighteen is a condition added by this amendment to require the City to provide (in the next phase) public access from Naples Island's vertical seawalls to the waters of Alamitos Bay for swimmers, kayakers, stand-up paddle boards and other small vessels. The Commission has the authority to impose a requirement to provide a public trust use as a condition of approval of the proposed development since the development would be inconsistent with Section 30210 of the Coastal Act without the imposition of such a condition.

The staff recommendation also includes special conditions relating to: protection of water quality, protection of nesting birds, dock leases, no future seaward extension of the development, and the City's assumption of risk. **See Page Six for the Special Conditions.**

The City agrees with the staff recommendation. The **motion to approve** the permit amendment is on **Page Five.**

Procedural Note: The Commission's regulations provide for referral of permit amendment requests to the Commission if:

1) The Executive Director determines that the proposed amendment is a material change,

2) Objection is made to the Executive Director's determination of immateriality, or

3) The proposed amendment affects conditions required for the purpose of protecting a coastal resource or coastal access.

The proposed amendment affects conditions required for the purpose of protecting a coastal resource or coastal access. Therefore, pursuant to Section 13166 of the Commission's regulations, the Executive Director is referring this application to the Commission as a material amendment. If the applicant or objector so requests, the Commission shall make an independent determination as to whether the proposed amendment is material. 14 Cal. Admin. Code 13166.

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EXHIBITS

I. MOTION AND RESOLUTION

Motion:

*I move that the Commission **approve** the proposed amendment to Coastal Development Permit No. 5-11-085 subject to the conditions set forth in the staff recommendation.*

Staff recommends a **YES** vote on the foregoing motion. Passage of this motion will result in conditional approval of the permit amendment and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

Resolution:

The Commission hereby approves the coastal development permit amendment on the ground that the development as amended and subject to conditions, will be in conformity with the policies of Chapter 3 of the Coastal Act. Approval of the permit amendment complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the amended development on the environment, or 2) there are no feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the amended development on the environment.

II. STANDARD CONDITIONS

This permit amendment is granted subject to the following standard conditions:

1. **Notice of Receipt and Acknowledgment**. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.

2. **Expiration**. If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.

3. **Interpretation**. Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.

4. **Assignment**. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.

5. **Terms and Conditions Run with the Land**. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

III. SPECIAL CONDITIONS

NOTE: The original conditions of Coastal Development Permit 5-11-085 still apply. However, updated and revised versions of the special conditions of the underlying permit are imposed pursuant to this permit amendment as follows. The changes to the conditions reflect the fact that this is a permit amendment and also incorporate the revisions necessary to address the specific impacts of the development authorized in Phase Two of the Naples Island Seawall Repair Project and the concurrent phasing of the required mitigation measures. The differences between the conditions imposed pursuant to this permit amendment and the original special conditions are shown below as ~~strikethrough~~ for deleted text, and ***underlined bold*** for added text. One special condition, Special Condition 18, is being added by this permit amendment.

Permit Amendment 5-11-085-A1 is granted subject to the following special conditions:

1. **Permit Compliance**. Coastal Development Permit ***Amendment*** 5-11-085***-A1*** authorizes the implementation of Phase ***Two*** ~~One~~ of the Naples Island Seawall Repair Project for the seawalls ***at The Colonnade/Boca del Naples (the southern entrance to Naples Canals), the south side and eastern end of Treasure Island, and the western end of the Naples Peninsula (as shown on Exhibit 3of the staff report dated March 30, 2018)*** ~~in the segment of Rivo Alto Canal between Ravenna Drive bridge and The Toledo east bridge on Naples Island~~ as expressly described and conditioned herein. Repairs of other seawalls in other locations (i.e., future phases of the project) shall require additional Coastal Commission approval in the form of a new coastal development permit or an amendment to this coastal development permit. Coastal Development Permit 5-11-085 ~~also~~ authorizes the implementation of the Colorado Lagoon Soft Bottom Mitigation Plan, as expressly described and conditioned herein.

   All development must occur in strict compliance with the proposal as set forth in the application for permit, subject to any special conditions. Any deviation from the approved plans must be submitted for review by the Executive Director to determine whether an***other*** amendment to this coastal development permit is required pursuant to the requirements of the Coastal Act and the California Code of Regulations. No changes to the approved development shall occur without a Commission amendment to this coastal development permit or a new coastal development permit, unless the Executive Director determines that no amendment or new permit is required.

2. **Protection of Marine Resources**. In order to minimize adverse environmental impacts and the unpermitted deposition, spill or discharge of any liquid or solid into Alamitos Bay, the applicant shall implement the following demolition, staging, and construction best management practices during the staging and construction of the Naples Island Seawall Repair Project and Colorado Lagoon Soft Bottom Mitigation Plan:

   A. Silt curtains will be utilized to control turbidity during all in-water construction activities, including the placement of sheet piles.
   B. Floating booms shall be maintained around the project site use and around barges containing equipment in order to capture floating debris during all construction phases.
   C. Where permitted, disturbance to the ocean bottom and intertidal areas shall be minimized.
   D. Machinery or construction materials not essential for project improvements are prohibited at all times in the subtidal or intertidal zones.

E. Prior to grading and/or construction, all large motile native marine invertebrates, including mollusks (snails), echinoderms (sea stars, urchins, sea cucumbers), arthropods (crabs), and any other large motile native marine invertebrates found in the area to be disturbed, including seawalls, piles and dock floats, shall be removed from the project site and relocated to another part of the bay.
F. Sand from the beach, cobbles, or shoreline rocks shall not be used for construction material.
G. Netting, sandbags, tarps and/or other forms of barriers shall be installed between the water and all work areas and equipment storage areas to prevent any unpermitted material from entering Alamitos Bay.
H. The storage or stockpiling of soil, silt, other organic or earthen materials, or any materials and chemicals related to the construction shall not occur where such materials/chemicals could pass into the waters of Alamitos Bay or the sea. Stockpiled fill shall be stabilized with geofabric covers or other appropriate cover.
I. Erosion control/sedimentation BMPs shall be used to control sedimentation impacts to coastal waters during project staging and demolition. BMPs shall include a pre-construction meeting to review procedural and BMP guidelines.
J. Spills of construction equipment fluids or other hazardous materials shall be immediately contained on-site and disposed of in an environmentally safe manner as soon as possible. Disposal within the coastal zone shall require a coastal development permit.
K. Construction vehicles operating at the project site shall be inspected daily to ensure there are no leaking fluids. If there are leaking fluids, the construction vehicles shall be serviced immediately. Equipment and machinery shall be serviced, maintained and washed only in confined areas specifically designed to control runoff and prevent discharges into Alamitos Bay or the sea. Thinners, oils or solvents shall not be discharged into sanitary or storm sewer systems.
L. Washout from concrete trucks shall be disposed of at a location not subject to runoff and more than fifty feet away from all storm drains, open ditches and surface waters.
M. All floatable debris and trash generated by construction activities within the project area shall be disposed of as soon as possible or at the end of each day.
N. Divers will recover non-buoyant debris discharged into coastal waters as soon as possible after loss.
O. The applicant shall dispose of all demolition and construction debris resulting from the proposed project at an appropriate location in a timely manner. If the disposal site is located within the coastal zone, a coastal development permit or an amendment to this permit shall be required before disposal can take place.
P. Any wood treatment used shall conform with the specifications of the American Wood Preservation Association for saltwater use. Wood treated with Creosote, CCA (Chromated Copper Arsenate), or ACA (Ammoniacal Copper Arsenate) is prohibited. No wood treated with ACZA (Ammoniacal Copper Zinc Arsenate) shall be used where it could come into direct contact with the water. All treated timber shall be free of chromium and arsenic.
Q. In the event that hydrocarbon-contaminated soils or other toxins or contaminated material are discovered on the site, such matter shall be stockpiled and transported off-site only in accordance with Department of Toxic Substances Control (DTSC) rules and/or Regional Water Quality Control Board (RWQCB) regulations.
R. At the end of the construction period, the applicant shall inspect the project area and ensure that no debris, trash or construction material has been left on the shore or in the water, and that the project has not created any hazard to recreation or navigation.

The applicant shall include the requirements of this condition on all plans and contracts issued for the project. The applicant shall implement and carry out the project staging and construction plan during all demolition, staging, and construction activities.

3. **Eelgrass Mitigation Program**. All direct impacts to eelgrass associated with the Naples Island Seawall Repair Project (Phase ***Two*** ~~One~~) shall be mitigated at the ~~Marine Stadium~~ ***Colorado Lagoon*** Eelgrass Mitigation Site which was constructed pursuant to Coastal Development Permit ~~5-10-263~~ ***5-09-071 and Amendment 5-09-071-A1.*** ~~Colorado Lagoon may be used as an alternative mitigation site if there is not adequate mitigation area at the Marine Stadium Eelgrass Mitigation Site.~~ All direct impacts to eelgrass associated with the Colorado Lagoon Soft Bottom Mitigation Plan required pursuant to **Special Condition Six** shall be mitigated within Colorado Lagoon. All direct impacts to eelgrass shall be mitigated at a minimum ratio of 1.2:1(mitigation:impact) in accordance with the Southern California Eelgrass Mitigation Policy and the following provisions:

   A. Pre-Construction Eelgrass Survey. The applicant shall complete a valid pre-construction eelgrass (*Zostera marina*) survey during the period of active growth of eelgrass (typically March through October). The pre-construction survey shall be valid until the next period of active growth. The survey shall be prepared in full compliance with the "Southern California Eelgrass Mitigation Policy" Revision 8 (except as modified by this special condition) adopted by the National Marine Fisheries Service and shall be prepared in consultation with the California Department of Fish and Wildlife. The applicant shall submit the eelgrass survey for the review and approval of the Executive Director within five (5) business days of completion of the eelgrass survey and in any event no later than fifteen (15) business days prior to commencement of the approved development.

   B. Post Construction Eelgrass Survey. If any eelgrass is identified in the project area by the survey required in Subsection A of this condition above, within one month after the conclusion of construction, the applicant shall survey the project site to quantify the amount of eelgrass that was adversely impacted. The survey shall be prepared in full compliance with the "Southern California Eelgrass Mitigation Policy" Revision 8 (except as modified by this special condition) adopted by the National Marine Fisheries Service and shall be prepared in consultation with the California Department of Fish and Wildlife. The applicant shall submit the post-construction eelgrass survey for the review and approval of the Executive Director within thirty (30) days after completion of the survey. If any eelgrass has been impacted, the applicant shall replace the impacted eelgrass at a minimum 1.2:1 ratio in accordance with the Southern California Eelgrass Mitigation Policy. The exceptions to the required 1.2:1 mitigation ratio found within SCEMP shall not apply.

   ~~C. Marine Stadium Eelgrass Mitigation Site (Coastal Development Permit 5-10-263). The first and highest priority for the use of the eelgrass mitigation site in Marine Stadium shall be to mitigate the eelgrass impacts of the Alamitos Bay Marina Rehabilitation Project (Coastal Development Permit 5-10-263). Additional eelgrass mitigation area in the Marine Stadium Eelgrass Mitigation Site that is not necessary to mitigate the Alamitos Bay Marina rehabilitation project may be used to mitigate the eelgrass impacts of the first phase of the Naples Island Seawall Repair Project.~~

C. Annual Reports - ~~Marine Stadium~~ ***Colorado Lagoon*** Eelgrass Mitigation Site. The applicant shall submit annual eelgrass surveys and monitoring reports (each January), for the review and approval of the Executive Director, that quantify the amount of eelgrass that exists in the ~~Marine Stadium~~ ***Colorado Lagoon*** Eelgrass Mitigation Site. The annual reports shall include an accounting of all mitigation requirements (referenced by coastal development permit numbers) which are permitted/required to be satisfied in the ~~Marine Stadium~~ ***Colorado Lagoon*** Eelgrass Mitigation Site. Monitoring of the ~~Marine Stadium~~ ***Colorado Lagoon*** Eelgrass Mitigation Site shall be carried out in conformance with the ***Habitat Mitigation and Monitoring Plan Naples Island Seawall Repair Phase 1, prepared by Anchor QEA, LLC (Dated June, 2014)*** ~~Eelgrass Field Survey, Impact Assessment, and Mitigation Plan for the Alamitos Bay Marina Renovation Project, prepared by Coastal Resources Management, Inc. (December 15, 2007, revised October 1, 2009).~~

~~E. If Colorado Lagoon is utilized as an alternative mitigation site, a detail Eelgrass Mitigation and Monitoring Plan for Colorado Lagoon shall be submitted to the Executive Director, prior to the completion of the Phase One Naples Seawall Replacement Project approved pursuant to this coastal development permit.~~

4. ***Caulerpa Taxifolia*** **Pre-Construction Survey**. Prior to construction of ***each phase of the Naples Island Seawall Repair Project*** ~~in Rivo Alto Canal and Colorado Lagoon~~, the applicant shall undertake a *Caulerpa Taxifolia* Survey consistent with the following provisions:

A. No earlier than ninety days nor later than thirty days prior to commencement or re-commencement of any development authorized under this coastal development permit (the "project"), the applicant shall undertake a survey of the project area and a buffer area at least ten meters beyond the project area to determine the presence of the invasive alga *Caulerpa taxifolia*. The survey shall include a visual examination of the substrate.

B. The survey protocol shall be prepared in consultation with the Regional Water Quality Control Board, the California Department of Fish and Wildlife, and the National Marine Fisheries Service.

C. Within five business days of completion of the survey, the applicant shall submit the survey for the review and approval of the Executive Director; and to the Surveillance Subcommittee of the Southern California Caulerpa Action Team (SCCAT). The SCCAT Surveillance Subcommittee may be contacted through William Paznokas, California Department of Fish & Wildlife (858/467-4218) or National Marine Fisheries Service (562/980-4043).

D. If *Caulerpa taxifolia* is found within the project or buffer areas, the applicant shall not proceed with the project until: 1) the applicant provides evidence to the Executive Director that all *C. taxifolia* discovered within the project and/or buffer area has been eliminated in a manner that complies with all applicable governmental approval requirements, including but not limited to those of the California Coastal Act, or 2) the applicant has revised the project to avoid any contact with *C. taxifolia*. No revisions to the project shall occur without a Coastal Commission approved amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

5. **Construction and Pile Driving Noise Level Restrictions**. By acceptance of this coastal development permit ***amendment***, the applicant agrees to retain the services of a qualified independent biologist or environmental resources specialist with appropriate qualifications acceptable to the Executive Director, to conduct a biological survey of the trees within five hundred feet of the project site prior (within seven days) to the commencement of construction activities, and once a week upon commencement of construction activities that include use of heavy equipment that can cause excessive noise, odors, or vibrations (e.g., pile driving). The environmental resource specialist shall be directed to conduct the survey in order to determine the presence of black-crowned night herons, great blue herons, snowy egrets, raptors, or other sensitive species within five hundred feet of the work site and immediately report the findings of the survey to the applicants and the Executive Director of the Coastal Commission.

   In the event that the environmental specialist reports any black-crowned night herons, great blue herons, snowy egrets, raptors, or other sensitive species exhibiting reproductive or nesting behavior within five hundred feet of the work site, the following restrictions shall apply:

   A. Construction noise reduction measures such as sound shields made from plywood or sound-board or molded sound shields shall be used and measures shall be taken to minimize loud noise generation to the maximum feasible extent during construction. Permanent lighting shall be shielded and directed downward. Bright upward shining lights shall not be used during construction and construction employees shall not bring pets (e.g. dogs and cats) to the construction site.

   B. Noise generated by construction (including, but not limited to, pile driving) shall not exceed 65 dB at any active nesting site within five hundred feet of project site for black-crowned night herons, snowy egrets, great egrets, great blue herons, raptors, or other sensitive species. If construction noise exceeds 65 dB, then alternative methods of pile driving (including, but not limited to, vibratory pile driving, press-in pile placement, drilling, dewatered isolation casings, etc.) or other sound mitigation measures (including, but not limited to, sound shielding and noise attenuation devices) shall be used as necessary to achieve the required dB threshold levels. If these sound mitigation measures do not reduce noise levels, construction within five hundred feet of the nesting trees shall cease and shall not recommence until either new sound mitigation can be employed or nesting is complete.

6. **Colorado Lagoon Soft Bottom Habitat Mitigation Plan**. ~~Prior to the submittal of the application for the next phase (Phase Two) of the Naples Island Seawall Repair Project, and not later than one year from the date of Commission action on this application (or within such additional time as the Executive Director may grant for good cause), the applicant shall implement the proposed~~ ***The permittee has implemented the*** Colorado Lagoon Soft Bottom Mitigation Plan, which entails the excavation and re-contouring of the northern bank and north arm of Colorado Lagoon in order to create at least 20,908 additional square feet of submerged soft bottom habitat to mitigate (at a minimum ratio of 2:1) the fill of the bay that will result from the implementation of the Naples Island Seawall Repair Project (Phases One through Six). ~~The draft Colorado Lagoon Soft Bottom Habitat Mitigation Plan is attached as Exhibit #8 of the Staff Report dated September 27, 2013.~~

The applicant shall ***continue to*** implement the Colorado Lagoon Soft Bottom Habitat Mitigation Plan and conduct all landscaping consistent with the terms of this condition and the terms of amended Coastal Development Permit 5-09-071:

~~A. Final Plans. The applicant shall submit, for review and approval of the Executive Director, final project plans subsequent to the approval of the project by the appropriate regulatory agencies. The final plans shall include a re-vegetation plan and five-year monitoring plan. The Executive Director shall review the final plans to determine whether there are any substantial changes which may require an amendment to this coastal development permit pursuant to the requirements of the Coastal Act and the California Code of Regulations.~~

~~B. Eelgrass Impacts. The applicant shall conduct pre-construction and post-construction eelgrass surveys for Colorado Lagoon, and submit the surveys for the review and approval of the Executive Director, as required by **Special Condition Three** of this coastal development permit. If any eelgrass is impacted as a result of the implementation of the Colorado Lagoon Soft Bottom Mitigation Plan, the applicant shall submit a detailed Eelgrass Mitigation and Monitoring Plan for Colorado Lagoon, for the review and approval by the Executive Director, within six months of the post-construction eelgrass survey. All direct impacts to eelgrass associated with the Colorado Lagoon Soft Bottom Mitigation Plan shall be mitigated in Colorado Lagoon, consistent with the requirements of **Special Condition Three**, within 36 months of the grading and re-contouring associated with the Colorado Lagoon Soft Bottom Mitigation Plan and maintained through at least sixty months.~~

~~C. Native Vegetation. The proposed project shall not result in a net loss of native vegetation. Prior to commencement of construction, the applicant shall conduct a biological survey and submit the biological survey for the review and approval of the Executive Director. The biological survey shall identify all native vegetation that will be affected by the excavation and re-contouring of the northern bank and north arm of Colorado Lagoon. All affected plants shall be protected and/or transplanted as part of the project.~~

~~D. Erosion Control. Immediately upon completion of the approved excavation and re-contouring of the lagoon's banks, the applicant shall install silt curtains along the entire length of the water's edge to prevent siltation of the lagoon. Jute matting (with no plastic netting) shall be placed on all slopes immediately following the approved excavation and re-contouring of the lagoon's banks. In addition, the applicant shall implement the following temporary erosion control measures during the restoration project: temporary sediment basins (including debris basins, de-silting basins or silt traps), temporary drains and swales, sand bag barriers, and additional silt fencing as needed.~~

A. Re-vegetation. ~~Re-vegetation of the disturbed areas shall commence as soon as possible following the approved excavation and re-contouring of the lagoon's banks.~~ All vegetation planted on the site shall consist of native plants typically found on the banks of Alamitos Bay and the Los Cerritos Wetlands. As much as possible, the seeds and cuttings employed shall be from local sources adjacent to Alamitos Bay and the Los Cerritos Wetlands. The existing native vegetation and all required plantings shall be maintained in good growing condition throughout the life of the project, and whenever necessary, shall be replaced with

new plant materials to ensure continued compliance with the re-vegetation plan. Re-vegetation activities may continue during the least tern nesting season.

B. Invasive Plants. No plant species listed as problematic and/or invasive by the California Native Plant Society (http://www.CNPS.org/), the California Invasive Plant Council (formerly the California Exotic Pest Plant Council) (http://www.cal-ipc.org/), or as may be identified from time to time by the State of California shall be employed or allowed to naturalize or persist on the site. No plant species listed as a "noxious weed" by the State of California or the U.S. Federal Government shall be utilized within the property.

C. Monitoring. The applicant shall actively monitor the site, remove non-natives and reinstall plants that have failed for at least five years following the initial planting, consistent with the final rev-vegetation plan approved by the Executive Director. The applicant shall monitor and inspect the site no less than once each thirty days during the first year that follows the initial planting. Thereafter, the applicant will monitor the site at least once every ninety days or on the City's regular landscape maintenance schedule, whichever is more frequent.

The applicant shall undertake the approved development in accordance with this condition and the final plans approved by the Executive Director. To ensure compliance, the applicant shall include the requirements of this condition on all plans and contracts issued for the project. Any proposed changes to the approved final plans shall be reported to the Executive Director. No changes to the approved final plans shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is required.

7. **Tree Trimming/Removal**. The removal and/or trimming of trees shall not interfere with or disrupt any active birds' nests, and shall comply with the 1918 Migratory Bird Treaty Act. Prior to the removal, transplanting or trimming of trees in the project area, the applicant shall provide documentation, subject to the review and approval of the Executive Director, which demonstrates that a qualified biologist or resource specialist has inspected the trees and confirmed in writing that no active bird nests will be disturbed. In the event that any nests are discovered, or evidence of past or present roosting or nesting, or reproductive or nesting behavior is observed in the trees on the project site, the applicant shall cease all work and immediately notify the Executive Director. The applicant shall submit a request to amend the permit in order to modify the proposed development in order to avoid the disturbance of the trees used by birds or develop mitigation measures to minimize disturbance of the bird habitat. ***Trees removed as a result of the Naples Island Seawall Repair Project shall be replaced at a minimum 1:1 ratio with non-invasive tree species of varying container sizes.***

8. **Dock Float Dimensions.** In order to reduce further encroachment of development into the navigable channel, the dimensions of dock floats in Rivo Alto Canal and Naples Canal shall be restricted to a width of six feet (the width is the dimension of the dock float that is measured seawardly from the inland edge of the float to the seaward edge of the float). All dock floats in Rivo Alto Canal and Naples Canal shall conform to the size limits when they are replaced or substantially repaired, and all docks shall comply with the size limitation no later than December 31, 2028. The City shall include the dock float size limit on all future dock leases and/or permits.

9. **Dock Floats - Temporary Storage.** A) Prior to the issuance of the coastal development permit ***amendment***, the applicant shall submit a float storage plan, subject to the review and approval of the Executive Director, which identifies the proposed location(s) for the temporary storage of the residents' dock floats while the proposed seawalls are being installed. The location(s) of the temporary dock float storage area(s) shall not adversely affect public access to the shoreline, public recreational activities, or sensitive environmental resources (e.g., eelgrass). If the proposed location of any temporary dock float storage area is located in the water, the applicant shall provide a valid eelgrass survey with the float storage plan which clearly demonstrates that no proposed float storage location is located within any area where eelgrass is growing.

   B) The applicant shall inspect each dock float prior to attaching the dock float to the walls of the canal upon completion of the seawall repairs. Any dock float deemed unsafe or in a deteriorated condition by the applicant shall be removed from the water, and shall be disposed of properly in compliance with all environmental regulations. In addition, the applicant shall inventory and measure the dimensions of all dock floats in the canal, record the location of each dock float placed in the canal, and submit a copy of the dock float inventory to the Executive Director within three months of reinstallation.

10. **Dock Float and Pier Leases.** Prior to the placement of any dock floats ~~into Rivo Canal~~ after the completion of the approved Phase ***Two*** ~~One~~ seawall repairs, the applicant shall institute a lease program for the project area (***all phases*** ~~at a minimum, the Phase One area~~), with appropriate prices established in relation to the lease area and temporal length of each lease. The lease program shall allow for the limited-term private use and occupation of state tidelands for development associated with recreational boating activities (i.e., private docks and piers). The money generated by the leases shall be deposited into the City's Tidelands Fund to be utilized for public access improvements, including the public walkway required by Special Condition Fourteen of this coastal development permit, and future seawall repairs.

11. **Public Access.** The applicant and the development shall not interfere with public access and use of the public walkways situated immediately inland of the seawalls ~~of Rivo Alto Canal~~ (except for the temporary disruptions that may occur during the completion of the permitted development).

12. **Development on the ~~Rivo Alto Canal~~ Public Right-of-Way.** Prior to issuance of the coastal development permit ***amendment***, the applicant shall submit, for review and approval of the Executive Director, final project plans for the development proposed on the public property (e.g., sidewalks, benches, and all private encroachments such as walls, yards landscaped areas) located between the ***seawalls*** ~~canal~~ and the private properties ~~that run along both side of the canal~~.

    A. The final plans shall include a public sidewalk at least six feet wide ***within the public right-of-way that runs*** along ***the inland side of the seawalls*** ~~both sides of the canal~~ for the entire length of the project area, and public benches. The sidewalks shall remain open and accessible to the general public 24 hours a day, consistent with the other Naples Island ***and Treasure Island*** public walkways. The Executive Director shall review the final plans to determine whether there are any substantial changes which may require an amendment to

this coastal development permit pursuant to the requirements of the Coastal Act and the California Code of Regulations.

B. No plant species listed as problematic and/or invasive by the California Native Plant Society (http://www.CNPS.org/), the California Invasive Plant Council (formerly the California Exotic Pest Plant Council) (http://www.cal-ipc.org/), or as may be identified from time to time by the State of California shall be employed or allowed to naturalize or persist on the site. No plant species listed as a "noxious weed" by the State of California or the U.S. Federal Government shall be utilized within the property.

The approved development shall be carried out consistent with the final plans approved by the Executive Director.

13. **No Future Seaward Extension of the Shoreline Protective Device**. By acceptance of this coastal development permit ***amendment***, the applicant waives, on behalf of itself and all successors and assigns, any rights that may exist under Public Resources Code Section 30235 to extending development seaward of the shoreline protective device approved as part of Phase ***Two*** ~~One~~ of the Naples Island Seawall Repair Project.

A. By acceptance of this coastal development permit, the applicant agrees, on behalf of itself and all successors and assigns, that: 1) no future repair or maintenance, enhancement, reinforcement, modifications to address rising sea level, increased risk of flooding or other hazards, or any other activity affecting the shoreline protective device approved pursuant to Coastal Development Permit 5-11-085 ***as amended***, shall be undertaken if such activity extends the footprint seaward of the subject shoreline protective device, and 2) no activity (i.e., attaching tiebacks, etc.) affecting the shoreline protective device approved pursuant to Coastal Development Permit 5-11-085 ***as amended*** shall be undertaken if such activity would preclude the requirement for no future seaward extension of the shoreline protective device. All future repair or maintenance, enhancement, reinforcement, or modifications shall be evaluated for compliance with this condition pursuant to a coastal development permit.

B. Prior to issuance of the coastal development permit ***amendment***, the applicant shall provide the Executive Director with evidence that the proposed project does not include any construction barriers that would preclude the requirement for no future seaward extension of the shoreline protective device. This can be demonstrated through identification of the construction steps necessary for the future construction of a shoreline protective device (i.e., new seawall) that is in the same footprint, or inland of, the currently approved development; and submittal of plans that identify all structures that will need to be removed and/or modified in order to ensure that there will be no future seaward extension of the shoreline protection.

14. **Sorrento Alamitos Bay Shoreline Trail.** ***As required by this coastal development permit, the City shall construct the Shoreline Trail improvements in segments concurrent with the phased construction of the Naples Island Seawall Repair Project, as described below. Construction of the Shoreline Trail improvements shall be consistent with the general alignment depicted on Exhibit 10 of the Staff Report dated March 30, 2018 and the***

parameters approved pursuant to Local Coastal Development Permit No. LCDP17-015 (City of Long Beach).

A. Segment One (425 feet) of the Shoreline Trail, between 5425 E. Sorrento Drive (near 2nd Street Bridge) and 5455 E. Sorrento Drive, shall be improved prior to or concurrent with Phase Two of the Naples Island Seawall Repair Project. Segment One shall be completed and open for public use prior to the submittal of the application for the next phase (Phase Three) of the Naples Island Seawall Repair Project.

B. Segment Two (510 feet) of the Shoreline Trail, between 5455 E. Sorrento Drive and 5501 E. Sorrento Drive, shall be improved prior to or concurrent with Phase Three of the Naples Island Seawall Repair Project. Segment Two shall be completed and open for public use prior to the submittal of the application for the next phase (Phase Four) of the Naples Island Seawall Repair Project.

C. Segment Three (565 feet) of the Shoreline Trail, between 5501 E. Sorrento Drive and 5609 E. Sorrento Drive, shall be improved prior to or concurrent with Phase Four of the Naples Island Seawall Repair Project. From 5609 E. Sorrento Drive, the public accessway shall continue east on the sandy beach/mudflat (in an unimproved state) to the vertical accessways adjacent to 5633 and 5617 East Sorrento Drive. Segment Three shall be completed and open for public use prior to the submittal of the application for the next phase (Phase Five) of the Naples Island Seawall Repair Project.

D. The existing vertical access connections between Sorrento Drive and the bay shall be improved prior to or concurrent with the improvement of each Shoreline Trail segment each vertical accessway connects to. The two existing vertical accessways adjacent to 5617 and 5633 E. Sorrento Drive shall be improved prior to or concurrent with Phase Five of the Naples Island Seawall Repair Project.

E. An improved public sidewalk on the northern side of East Sorrento Drive shall be constructed prior to or concurrent with the final phase (Phase Six) of the of the Naples Island Seawall Repair Project. The required sidewalk shall connect the two vertical accessways adjacent to 5617 and 5633 E. Sorrento Drive to East Apian Way.

F. At the time each Shoreline Trail segment is improved, the City shall install Coastal Access signage at key locations: along East Sorrento Drive, at the vertical access points, and along the Shoreline Trail. The required signs shall inform the general public of the public nature of the vertical accessways and the improved Shoreline Trail. The signage shall clearly indicate that the Sorrento Alamitos Bay Shoreline Trail is open to the general public, and that the Shoreline Trail was provided through the cooperative efforts of the City of Long Beach and the California Coastal Commission.

The permittee shall undertake development in accordance with the approved final plans. Any proposed changes to the approved final plans shall be reported to the Executive Director. No changes to the approved final plans shall occur without approval by the Commission of a subsequent amendment to the coastal development permit unless the Executive Director determines that no amendment is legally required

~~14. By acceptance of this coastal development permit, the applicant agrees to propose and act upon a local coastal development permit application for the construction of a public walkway within the fifteen-foot wide public right-of-way (Sorrento-Alamitos Bay Shoreline Trail) that runs along the northwestern shoreline of Naples Island. The City shall design an improved public walkway along the general alignment depicted on **Exhibit #11 of the Staff Report dated September 27, 2013.** The design shall include a public input process and consider the factors which are set forth in Public Resources Code Section 30214(b), and shall also consider the following:~~

~~A. Community Process. Conduct an extensive community input process to include the Sorrento Residents Association, members of the public, and interested stakeholders. Public input meetings will be noticed and open to all interested parties. The purpose of the meetings will be to facilitate participation and feedback on the design and implementation of the public walkway improvements and associated elements.~~

~~B. Trail Alignment. The western end of the improved public walkway will begin in the public right-of-way at 5425 East Sorrento Drive and be extended in a continuous manner to the existing improved walkway and beach stairway that was constructed in the public right-of-way fronting 5609 East Sorrento Drive pursuant to Coastal Development Permit 5-12-088 (City of Long Beach). From 5609 East Sorrento Drive, the public accessway may continue east on the sandy beach/mudflat (in an unimproved state) to the vertical accessways adjacent to 5633 and 5617 East Sorrento Drive. The vertical accessways adjacent to 5633 and 5617 East Sorrento Drive should be connected to East Apian Way via an improved public sidewalk on the northern side of East Sorrento Drive.~~

~~C. Avoid New Fill. Construction of the walkway and supporting walls shall be restricted to existing filled areas (above high tide line) within the fifteen-foot wide public-right-of-way, to the extent feasible.~~

~~D. Privacy Walls. Low scale privacy walls, fences or other separations may be allowed to provide privacy to the residences which abut the improved walkway. Such walls will require review and approval by the City.~~

~~E. Vertical Accessways. All existing vertical public accessways shall be maintained at their existing locations. Consideration should be given to what improvements, if any, should be made to the existing vertical accessways. The Sorrento-Alamitos Bay Shoreline Trail and vertical accessways (which connect the shoreline trail to the sidewalk along the northern side of East Sorrento Drive) shall remain open and accessible to the general public 24 hours a day, consistent with the other Naples Island public walkways.~~

~~F. Signage Plan. Coastal access signage should be installed in key locations along East Sorrento Drive, at the vertical access points, and along the public walkway to inform the general public of the public nature of the vertical accessways and the improved shoreline walkway. The signage should clearly indicate that the Sorrento-Alamitos Bay Shoreline Trail is open to the general public.~~

~~G. Width and Material. As part of the design and community input process, consideration shall be given to the width of the public walkway and the appropriate material and design.~~

~~H. Lighting Plan. The City shall consider whether nighttime lighting should be included along any portion of the public walkway.~~

~~I. ADA Access. The City shall consider whether ADA access along all or part of the existing, or new improved public walkway, is appropriate or may be required by law.~~

~~The City shall prepare construction and phasing plans for the Sorrento Alamitos Bay Shoreline Trail and construct the improvements in phases concurrent with the phased construction of the proposed Naples Island Seawall Repair Project. After approval of the local coastal development permit for the public walkway and associated improvements, the City shall give the Commission a Notice of Final Action on such local coastal development permit. The Sorrento Alamitos Bay Shoreline Trail local coastal development permit shall be acted on by the City of Long Beach prior to the submittal of the application for the next phase (Phase Two) of the Naples Island Seawall Repair Project, and not later than one year from the date of Commission action on this application (or within such additional time as the Executive Director may grant for good cause).~~

15. **Resource Agencies**. The applicant shall comply with all requirements, requests and mitigation measures from the California Department of Fish and Wildlife, Regional Water Quality Control Board, U.S. Army Corps of Engineers, and the U.S. Fish and Wildlife Service with respect to preservation and protection of water quality and marine environment. Any change in the approved project that may be required by the above-stated agencies shall be submitted to the Executive Director in order to determine if the proposed change shall require a permit amendment pursuant to the requirements of the Coastal Act and the California Code of Regulations.

16. **Assumption of Risk, Waiver of Liability and Indemnity Agreement.** By acceptance of this permit ***amendment***, the applicant, on behalf of 1) themselves; 2) their successors and assigns and 3) any other holder of the possessory interest in the development authorized by this permit, acknowledge and agree (i) that the site may be subject to hazards from waves, storm waves, flooding and erosion; (ii) to assume the risks to the applicant and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development; (iii) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; (iv) to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards; and (v) to agree to include a provision in any subsequent sublease or assignment of the development authorized by this permit requiring the sublessee or assignee to submit a written agreement to the Commission, for the review and approval of the Executive Director, incorporating all of the foregoing restrictions identified in (i) through (v).

17. **Liability for Costs and Attorney's Fees**. By acceptance of this coastal development permit ***amendment***, the Applicant/Permittee agrees to reimburse the Coastal Commission in full for all Coastal Commission costs and attorney's fees -- including (1) those charged by the Office of the Attorney General, and (2) any court costs and attorney's fees that the Coastal Commission may

be required by a court to pay -- that the Coastal Commission incurs in connection with the defense of any action brought by a party other than the Applicant/Permittee against the Coastal Commission, its officers, employees, agents, successors and assigns challenging the approval or issuance of this permit. The Coastal Commission retains complete authority to conduct and direct the defense of any such action against the Coastal Commission.

18. ***Public Access to the Water (Naples Island). The City shall prepare an evaluation and community involvement process to identify the appropriate location(s) to incorporate at least one public access facility in the next phase (Phase Three) of the Naples Island Seawall Repair Project to provide access from Naples Island's vertical seawalls to the waters of Alamitos Bay for swimmers, kayakers, stand-up paddle boards and other small vessels. The public access facilities may be in the form of ramps, stairways, gangways, dock floats, or a combination of these and/or similar amenities. The evaluation shall identify potential locations for such facilities, and shall identify at least one feasible location. Potential locations to be considered shall include the seawall at the south end of The Colonnade, the seawall at East Naples Plaza, and other locations acceptable to the Executive Director. The City shall submit the evaluation and a proposed plan for locating and constructing the public access facility to the Executive Director for review and comment.***

Prior to the submittal of the application for the next phase (Phase Three) of the Naples Island Seawall Repair Project, and not later than one year from the date of Commission action on this application (or within such additional time as the Executive Director may grant for good cause), the City shall propose and act upon a local coastal development permit application for at least one public access facility to be constructed concurrent with Phase Three of the Naples Island Seawall Repair Project.

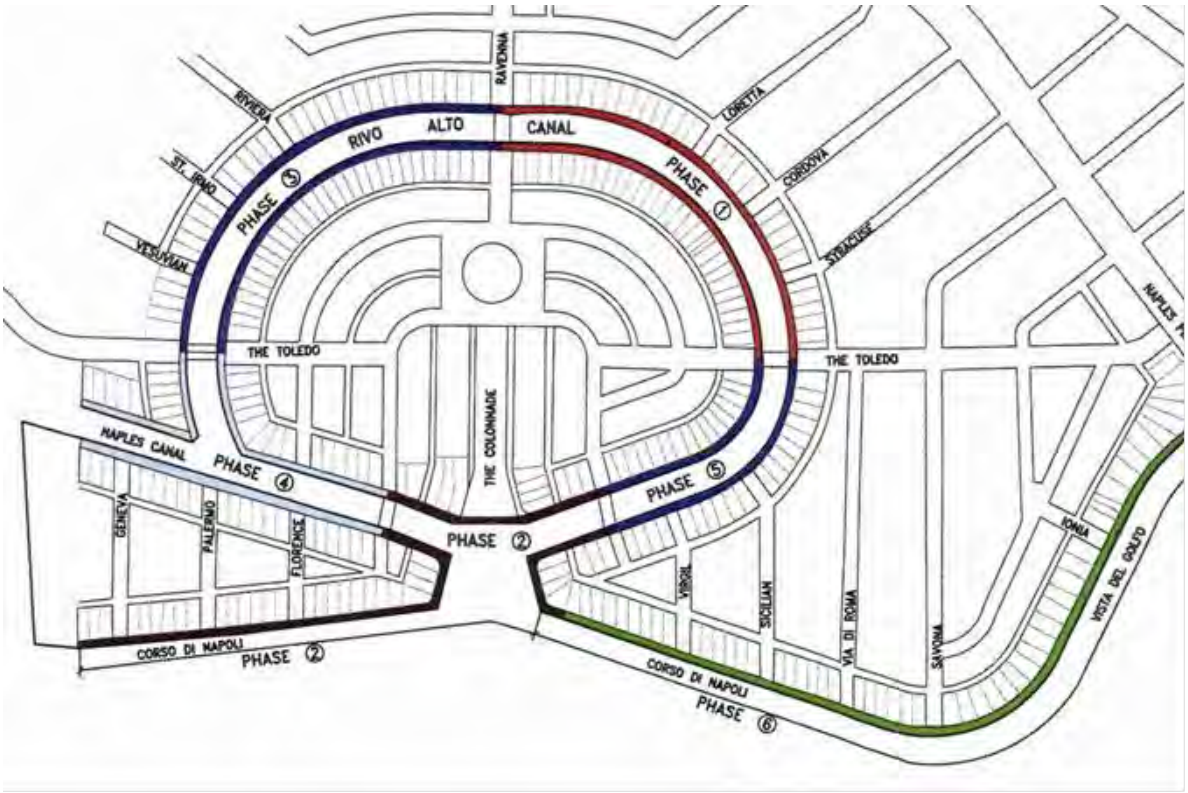
III. FINDINGS AND DECLARATIONS

A. PROJECT DESCRIPTION

The City of Long Beach is proposing to implement Phase Two of the Naples Island Seawall Repair Project on Naples Island in southeast Long Beach **(Exhibit 1).** In 2013, the Commission's approval of the underlying permit, Coastal Development Permit 5-11-085, authorized the City to implement Phase One of the six-phase seawall repair project which ultimately would result in the installation of approximately 11,000 linear feet of new steel sheet-pile seawalls on the water side of the existing concrete seawalls along canal segments and the bayfront surrounding Naples Island. **(Exhibit 1).** The underlying coastal development permit also approved the necessary mitigation plans for the impacts of all six phases, including the mitigation (20,908 square feet) to offset the soft bottom habitat area displaced by the six-phase seawall project.

Each phase of seawall repair project necessitates a separate Commission action, which would involve amendments to the underlying coastal development permit. Phase One involves the repair of the seawalls along a one thousand-foot long segment of Rivo Alto Canal; the segment situated between Ravenna Drive bridge and The Toledo east bridge (Exhibit #3). Phase One has been completed.

Phase Two of the Naples Island Seawall Repair Project involves the installation of a new seawall on the waterside of the existing seawalls at The Colonnade/Boca del Naples (the southern entrance to Naples Canals), the south side and eastern end of Treasure Island, and the western end of the Naples Peninsula **(Exhibit 3)**. The combined length of the seawalls in Phase Two, which are in imminent danger of failing, is 2,148 linear feet.



Phasing Plan, Naples Island Seawall Repair Project, Naples Island, Long Beach, CA

Naples Island (actually three islands) and the Naples Canals (Rivo Alto and Naples Canal) were constructed (dredged and filled) in the early 1900s in the delta of the San Gabriel River, the area that is now Alamitos Bay **(Exhibit 2).** The existing vertical concrete seawalls were built in the late 1930s. The California Coastal Plan (1975) identifies Naples as a special community. Rivo Alto and Naples Canals are currently about seventy feet wide, and the canal entrance (Boca del Naples - south of the Colonnade) is approximately 200 feet wide, and the canals and entrance are about 7-to-14 feet deep, depending on the tide, **(Exhibit 4).** A twenty-foot wide portion of public land (right-of-way) exists on the upland areas along the canals and bayfront, between the existing vertical concrete seawalls and the property lines of the residences.

Over the years, the width of the waterways has been narrowed by about ten feet due to previous repair projects **(Exhibit 7).** The prior repairs include the construction of the existing vertical concrete seawalls after the Long Beach Earthquake of 1933 on the seaward side of the original wooden seawalls. According to the City, the existing vertical concrete seawalls are in a deteriorated condition and are in danger of failing, thereby placing several existing structures and public recreational facilities and public infrastructure in danger from erosion.

The proposed development would occur in coastal waters (water side of the seawalls) and on the public property located immediately inland of the seawalls. The submerged areas of canals and Alamitos Bay are within the Commission's original jurisdiction. Pursuant to the certified City of Long Beach Local Coastal Program (LCP), the portion of the proposed project that is situated inland of the seawalls (sidewalks, guardrails, lighting, landscaping and drainage improvements) falls within the City's permitting jurisdiction. The City has requested that the Commission review the entire project (including the portion within the City's LCP jurisdiction) together as a consolidated coastal development permit application.

Method of Repair – City's Preferred Alternative

As was approved and implement in Phase One of the Naples Island Seawall Repair Project, Phase Two also involves the installation of steel sheet piles on the water side of the existing vertical concrete seawalls in order to support the existing seawalls which are in danger of failing because of their old age. The new sheet-pile seawall will extend 18.84 inches beyond the existing vertical wall, which will remain in place. The new steel sheet piles would be installed on the waterside of the existing vertical concrete seawalls using a hydraulic press (Giken Silent Piler). Interlocking z-piles would be used instead of an H-beam/concrete panel design to reduce footprint of the development in the canal **(Exhibit 6).**

The proposed seawall repairs involve the following construction steps:

- Pressure wash the existing seawall face to remove marine growth and reveal cracks and holes in the existing seawall.

- All private dock floats and guide piles in the way of construction activities will be removed and stored on site.

- Drive a new 2,148 linear foot steel sheet pile wall using the Giken Silent Piler cantilevered above the mudline.

- Grout the gap between the new sheet pile wall and the existing seawall up to the base of the existing cap (tremmie method will be used where grout is placed below water).
- Demolish the existing seawall cap and construct a new cap to encapsulate both the top of the new steel sheet pile wall and the existing concrete sheet piles
- Install new guardrail
- For the portion of the project occurring on the east and west sides of Treasure Island, install new sub-surface drainage (with two small sub-grade pump stations) and connect to Los Angeles County Flood Control Pump Station
- For the portion of the project occurring on the south end of the Colonnade, install sub-surface drainage under the sidewalk to collect and discharge rainwater at a single point along the south wall of the Colonnade Park.
- For the portion of the project occurring on the west end of the Naples Peninsula, install subsurface drainage under the sidewalk to collect and discharge rainwater at a single point at the northern terminus of Lido Lane.
- Repair subsidence areas behind seawall.
- Replace sidewalk with sidewalk, curb and gutter within the public right-of-way inland of the seawall.
- Replace existing street lighting.
- Install new stairways and access platforms.
- Install seven ADA accessible landings **(Exhibit 3)**
- Install public benches
- Finally, re-install the residents' private boating facilities (guide piles and dock floats).

The City anticipates a twelve-month construction period for the completion of Phase Two, beginning in January 2019. Completion of Phases Three through Six is anticipated to be completed within the next ten years dependent upon financing available from the City's Tidelands Funds

Soft Bottom Habitat Mitigation in the Colorado Lagoon

The underlying permit included a habitat restoration component at Colorado Lagoon, which involved the creation of 20,908 additional square feet of submerged soft bottom habitat, which was anticipated to be enough new habitat area to mitigate (at a 2:1 ratio) the loss of habitat for all six phases of the Naples Island Seawall Repair Project (See also amended Coastal Development Permit 5-09-071). Colorado Lagoon, located about one mile northwest of Naples Island, is a 17.7-acre tidal lagoon that is connected to Alamitos Bay (Marine Stadium) through a 933-foot long underground tidal culvert. The lagoon serves three main functions: hosting estuarine habitat, providing public recreation (e.g., swimming), and retaining and conveying storm water drainage. The lagoon is surrounded by 18.5 acres of public parkland managed by the City of Long Beach.

The width of the proposed steel sheet-pile seawall is 1.57 feet (18.84 inches), so the installation of such a seawall on the waterside of the existing seawalls on Phase Two would result in the narrowing of the entrances to Naples Canal and Rivo Alto Canal (by 3.14 feet) from an average width of 69 feet to a reduced width of 65.86 feet (Exhibit 4).

The filling and narrowing of the Rivo Alto Canal in Phase One resulted in the loss of approximately 1,727 square feet of submerged soft-bottom habitat. The new sheet-pile seawall has a zig-zag design, so the displaced area is not a solid rectangular area 18.84 inches wide in front of each existing seawall. The filling and narrowing of the waterways in Phase Two would result in the loss of approximately 1,937 square feet of submerged soft-bottom habitat. This is the area of the canal bottom that would be permanently occupied by the footprint of the new seawalls in Phase Two **(Exhibit 6).** Special Condition Six of the underlying permit requires the displaced soft bottom habitat to be replaced at Colorado Lagoon at a minimum ration of 2:1, which the City has already done for all six planned phases by completing the habitat restoration component at Colorado Lagoon which created 20,908 additional square feet of submerged soft bottom habitat by excavating and re-contouring the northern bank and north arm of the Colorado Lagoon in March 2017 (**Exhibit 8).**

Phase One soft bottom impacts required 3,454 square feet of mitigation in Colorado Lagoon, and Phase Two soft bottom impacts require 3,874 square feet of mitigation area. Therefore, the soft bottom habitat mitigation necessary for Phase One and Two totals 7,328 square feet of a total 20,908 square feet of soft bottom habitat utilized in Colorado Lagoon.

Eelgrass Impacts – Colorado Lagoon

Eelgrass in the project area included in Phase Two would be impacted by the placement of the new steel sheet-pile seawalls (permanent displacement), relocation of dock piles, and by new shading from relocated dock floats which will end up being about eighteen inches further into the canal and/or bay after the project. Based on an Eelgrass Survey conducted on March 4, 2011, the City estimates that 354.2 square feet of eelgrass in the project area will be affected by Phase Two of the Naples Island Seawall Repair Project.

To mitigate the anticipated impacts to eelgrass associated with Phase One of the Naples Island Seawall Repair Project, the City planted a 0.10 acre (4,356 square feet) of eelgrass in the Colorado Lagoon in April 2017, of which 1,966.6 square feet have already been utilized as mitigation for Phase One and other projects. The City proposes to mitigate the Phase Two eelgrass impacts by replacing the affected eelgrass at a 1.2:1 ratio in the Colorado Lagoon, which would require 425.04 square feet of eelgrass mitigation. Since 2,389.4 square feet are still available in the eelgrass set aside in the Colorado Lagoon, there will a sufficient amount of eelgrass to provide all of the necessary eelgrass mitigation to fulfill the mitigation requirement for Phase Two of the project. Final eelgrass impacts of Phase Two will be quantified subsequent to the pre- and post-project eelgrass surveys required by **Special Condition Three**.

B. SHORELINE PROTECTIVE STRUCTURES

Section 30235 of the Coastal Act states:

> *Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Existing marine structures causing water stagnation contributing to pollution problems and fish kills should be phased out or upgraded where feasible.*

Section 30253 of the Coastal Act states, in part:

> *New development shall do all of the following:*
>
> *(a) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.*
>
> *(b) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.*

Section 30233 of the Coastal Act states, in part:

> *(a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:*
>
> *(l) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.*
>
> *(2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.*
>
> *(3) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities.*
>
> *(4) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.*
>
> *(5) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.*
>
> *(6) Restoration purposes.*
>
> *(7) Nature study, aquaculture, or similar resource dependent activities.*

The proposed project, which involves fill of coastal waters, is inconsistent with Section 30233 because the proposed fill is not proposed for one of the seven allowable uses. However, Section 30235 allows seawalls with fill to be permitted even if they cannot be found consistent with Section 30233when the seawall is required to serve coastal-dependent uses or to protect existing structures. As addressed in the Commission's findings for Coastal Development Permit 5-11-085 (the underlying permit), the proposed Naples Island Seawall Repair Project is necessary to protect and provide structural support for existing homes and public facilities on Naples Island. As discussed in the underlying coastal development

permit, a 2009 report by Transystems Corporation concludes that the existing vertical concrete seawalls along Rivo Alto Canal, which were built in the late 1930s, are in a deteriorated condition and are in danger of failing [Naples Seawall Stability Investigation and Repair Recommendations, Long Beach, CA by Transystems Corp., February 25, 2009]. The investigation determined that the existing seawalls exhibit severe corrosion (sulfate deterioration), cracking, pitting, reduced thickness, and spalling. Over 95 percent of the seawall cap is in advanced deterioration. The report recommends reinforcement or replacement of the existing seawalls.

The Naples Island seawalls support the fill upon which public walkways (right-of-way) and private residences exist along the canals and bayfront **(Exhibit 2)**. The underlying soil behind the seawalls is primarily hydraulic fill, which is highly susceptible to liquefaction during earthquakes. The seawalls also protect the structural integrity of the canal banks from tidal activity. If the seawalls were removed and not replaced, gravity and erosion from tidal activity would destabilize the canal banks and endanger the public and private development that exists inland of the seawalls. Therefore, the proposed project is required to protect existing structures, most of which were permitted and built prior to 1977. In addition, if the existing seawalls were to fail, large amounts of fill material would be discharged into the canal causing adverse impacts on coastal resources, including quality of coastal waters, biological productivity of the canal bottom habitat, and coastal-dependent public trust uses associated with public access to and along the shoreline like fishing, swimming and other public trust uses. Thus, the proposed project is also required to serve coastal-dependent uses.

The existing seawalls, in their deteriorated state, pose a significant risk to life and property. The proposed project (Phase Two) will improve the stability of the land (the public right-of-way and the private properties) and the public and private improvements that exist on the land, and will reduce risks to life and property by providing improved structural support. As designed, the proposed project will result in no adverse impacts on local shoreline sand supply as there is no beach in front of these seawalls and the project is inside of Alamitos Bay.

No development near the ocean, however, can be guaranteed to be safe from hazard. In order to minimize risks to life and property, the development has been conditioned to require that the City assume the risk of undertaking the development. The Commission routinely imposes conditions for assumption of risk in areas at high risk from hazards. **Special Condition Sixteen** ensures that the City understands and assumes the potential hazards associated with the development.

As conditioned, the proposed project will not create or contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of additional protective devices that would substantially alter natural landforms along bluffs and cliffs. The project does not involve any landform alteration, and will not have any effect on local shoreline sand supply. Therefore, the Commission finds that the proposed development, as conditioned, conforms with Section 30235 and 30253 of the Coastal Act.

C. MARINE RESOURCES AND WATER QUALITY

The Coastal Act contains policies that address development in or near coastal waters. Phase Two of the proposed Naples Island Seawall Repair Project includes development in the coastal waters of Alamitos Bay **(Exhibit 2)**. In addition, the proposed soft bottom habitat mitigation project is located in the coastal waters of Colorado Lagoon (**Exhibit 2**). The following Coastal Act policies require the protection of water quality and biological productivity, and require that any adverse impacts to marine resources be avoided or adequately mitigated.

The standard of review for development proposed in coastal waters is the Chapter 3 policies of the Coastal Act, including the following marine resource policies. Sections 30230 and 30231 of the Coastal Act require the protection of biological productivity, public recreation and marine resources.

Section 30230 of the Coastal Act states:

> *Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.*

Section 30231 of the Coastal Act states:

> *The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.*

Section 30240 of the Coastal Act states:

> *(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas.*
>
> *(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas.*

1. Filling of Coastal Waters and Loss of Marine Habitat

Phase Two of the Naples Island Seawall Repair Project involves retaining the existing vertical concrete seawalls and constructing a new steel sheet-pile seawall adjacent to, but seaward of, the existing seawall. The steel sheet piles that the City proposes to place on the waterside of the existing seawalls are considered fill because the structure would displace surface water area and submerged bay bottom area. In Phase Two, approximately 1,937 square feet of submerged soft-bottom habitat would be permanently filled by the proposed placement of the steel sheet piles associated with this phase of the project, and the width of the eastern portion of the Naples Canal, and western portion of

the Rivo Alto Canal would be narrowed by 3.14 feet, from an average width of 69 feet to 65.86 feet **(Exhibit 4).**

As explained in the previous section (Shoreline Protective Structures), the proposed seawall repair project to protect existing development meets the requirements of Section 30235. Although the proposed project meets the requirements of Section 30235, it still must be the least environmentally damaging alternative; feasible mitigation measures must be incorporated into the project to minimize adverse environmental effects; and not adversely affect marine resources and biological productivity and quality of coastal waters as required pursuant to Sections 30230 and 30231 of the Coastal Act.

Project Alternatives

The City studied several alternative methods for the necessary seawall repair project. Alternatives to the proposed project include no project, replacement of the seawalls in the same alignment or landward of the existing seawall alignment (the landside option, which would include no fill), and replacement of the seawalls seaward of their existing alignment (within the waterway).

Under the no project alternative, the City could only pursue simple maintenance activity. However, simple maintenance could not feasibly repair the seawalls, nor to bring them up to present engineering, seismic and safety standards. Simple maintenance would only prolong the unsatisfactory condition of the existing seawalls. Ultimately, maintenance efforts would be unable to address the deteriorating seawalls and the structures would eventually fail, likely causing damage to adjacent residences and the habitat in the canal.

Alternative Design – Landside Option

An alternative seawall design considered by the City would involve the removal of the old seawalls and construction of new seawalls in the same footprint as the existing seawalls (or further landward), which would result in no permanent habitat displacement and would maintain the current width of the canal. The City rejected this alternative because it could risk the structural stability of the fill and residences behind the wall (once the old seawall was removed to make room for a new seawall) and much more expensive than the City's preferred alternative. In 2013, the City's estimated cost for the landside option (Phase One only) was approximately $25.3 million, compared to about over $13 million for the proposed waterside option (Phase One, including one-sixth of the estimated 2013 costs of the habitat and public access mitigation measures for all six phases of the project).

Installation of a new seawall on the landside of the existing seawall would require removal of the existing seawall and tiebacks before installation of a temporary shoring wall and a new seawall. Without support of the old seawall and tiebacks, this approach could lead to a temporary unsupported condition of the fill behind the existing seawall. This approach, according to the City, would endanger adjacent properties during construction. This approach is also complicated by the existence of an even older seawall and grout that is buried in the fill behind the existing seawall **(Exhibit 7).** The old buried seawall exists because prior seawall repairs included the construction of the current seawall on the waterside of the older seawall. Past repairs also included mud jacking and soil grouting which has resulted in the fill behind the existing seawalls being comprised of solid chunks of concrete-like material (in contrast to soft mud fill which would be relatively easy to drive sheet piles through). The landside option would also necessitate the removal of landscaping and utilities that occupy the land area immediately inland of the existing seawalls. The very high cost of this alternative caused the City to consider another alternative.

Although more difficult and costly, the landside option would result in no loss of soft bottom habitat, no loss of public trust area, and there would be no requirement to excavate Colorado Lagoon to create additional soft bottom habitat to mitigate for the fill (i.e., footprint of the proposed new seawalls) in the canal. The soft bottom habitat mitigation project at Colorado Lagoon was estimated in 2013 to cost approximately $4.3 million, or about $717,000 for each of the six phases.

City's Preferred Design – Waterside Option

The City's preferred alternative for Phase Two (also utilized for Phase One of the Naples Island Seawall Repair Project), the construction of the new steel sheet-pile seawalls in front of (waterside) of the existing seawalls, has a much lower estimated cost than the landside alternative. The City also significantly reduced the amount of fill in the canal and bay by proposing to use interlocking z-piles to construct the new seawalls instead of a former design alternative that would have utilized an eighteen-inch thick H-beam/concrete panel design. The use of the interlocking z-pile seawall design (with its w-shaped footprint) reduces the footprint of the development in the canal by 32% compared to the rectangular footprint of the H-beam/concrete panel design. For Phase One, the use of the interlocking z-piles design would reduce the permanent displacement of soft bottom habitat loss from 2,553 square feet to 1,727 square feet (compared to the H-beam/concrete panel design). The use of the Giken Silent Piler hydraulic press to install the interlocking z-piles would also result in less noise and vibrations compared with traditional vibratory or impact hammer pile driving techniques used to drive H-beams.

As stated previously, the City's preferred waterside option entails the required soft bottom habitat mitigation project at Colorado Lagoon to compensate for the loss of habitat that would result from the construction of new seawalls within the waterway. Because of the significant costs and risks to property and habitat involved with the no fill alternative, and with the City's proposed soft bottom habitat mitigation project at Colorado Lagoon, the waterside alternative can be considered to be the least environmentally damaging feasible alternative.

Subsequent to the completion of all six phases of the Naples Island Seawall Repair Project, no additional filling of the coastal waters (seaward of the new seawalls) will be permitted. The expected life of the currently proposed steel sheet-pile seawalls is about sixty years. When the time comes to replace the steel sheet-pile seawalls in the future, the seawalls permitted by this application will act as shoring walls which will allow new seawalls to be constructed on the landside, thus avoiding new fill and further narrowing of the canals. The City agrees that installing the new seawalls in front of the existing seawalls would facilitate the eventual replacement of the new seawalls in the future in a more landward location because the new steel sheet-pile seawalls have been designed to be strong enough to provide sufficient support for the weight of the fill and structures on the land once the old seawalls' tiebacks are cut and removed.

Special Condition Thirteen prohibits any future seaward extension of the development (beyond the approved steel sheet-pile seawalls) into coastal waters to avoid future fill of coastal waters. The City shall provide evidence that the proposed project does not include any construction barriers that would preclude the requirement for no future seaward extension of the shoreline protective device. This can be demonstrated through identification of the construction steps necessary for the future construction of a shoreline protective device (i.e., new seawall) that is in the same footprint, or inland of, the currently approved development; and submittal of plans that identify all structures that will need to be

removed and/or modified in order to ensure that there will be no future seaward extension of the shoreline protection.

Soft Bottom Habitat Mitigation Project – Colorado Lagoon

In 2017, the City created new submerged soft-bottom habitat at Colorado Lagoon in order to replace the habitat (at a 2:1 ratio) that would be lost as a result of the use of the waterside option for all six phases of the Naples Island Seawall Repair Project. Even with the use of interlocking z-piles, the width of the proposed steel sheet-pile seawall is 1.57 feet, so the installation of such a wall on both sides of the western portion of Rivo Alto Canal and the eastern portion of the Naples Canal would reduce the width of the canal portions of the waterways (by 3.14 feet) from an average width of 69 feet to a reduced width of 65.86 feet **(Exhibit 4)**. The installation of the new seawalls in Phase Two would result in the loss of approximately 1,937 square feet of submerged soft-bottom habitat. This is the area of the canal and bay bottom that would be permanently occupied by the w-shaped footprint new steel sheet-pile seawalls **(Exhibit 6).**

As required by **Special Condition Six** of Coastal Development Permit 5-11-085, the City created approximately 20,908 additional square feet of submerged soft bottom habitat in 2017 by excavating and re-contouring the northern bank and north arm of the Colorado Lagoon, which was anticipated to be enough new habitat area to mitigate (at a 2:1 ratio) for the loss of habitat in all six phases of the Naples Island Seawall Repair Project (See also amended Coastal Development Permit 5-09-071). **Special Condition Six** of the permit amendment requires the City to continue to monitor and maintain the soft-bottom habitat created at Colorado Lagoon to replace the habitat (at a 2:1 ratio) that is lost as a result of the use of the waterside option for all six phases of the Naples Island Seawall Repair Project.

2. Sensitive Species Impacts – Eelgrass

Eelgrass (Zostera marina) is an aquatic plant consisting of tough cellulose leaves which grows in dense beds in shallow, subtidal or intertidal unconsolidated sediments. Eelgrass is considered worthy of protection because it functions as important habitat and foraging area for a variety of fish and other wildlife, according to the Southern California Eelgrass Mitigation Policy (SCEMP) adopted by the National Marine Fisheries Service (NMFS), the U.S. Fish and Wildlife Service (USFWS), and the California Department of Fish and Wildlife (DFG). For instance, eelgrass beds provide areas for fish egg laying, juvenile fish rearing, and waterfowl foraging. Sensitive species, such as the California least tern, a federally listed endangered species, utilize eelgrass beds as foraging grounds.

Eelgrass beds have been mapped throughout Alamitos Bay, including the Naples Canals. Based on an Eelgrass Survey conducted on March 4, 2011, the City estimates that 754.5 square feet of eelgrass will be affected by Phase Two **(Exhibit 3)**. Eelgrass in the Phase Two project location would be impacted by the placement of the new steel sheet-pile seawalls (permanent displacement), relocation of pier piles, and new shading from relocated dock floats. The dock floats will extend an additional nineteen inches into the canal/bay beyond the existing seawalls with the addition of the new seawalls.

The City proposes to mitigate the eelgrass impacts at a 1.2:1 ratio at the Colorado Lagoon (**Exhibit 8**). In April 2017, the City planted eelgrass, and set aside a 0.10 acre (4,356 square foot) block of it for the Naples Phase One and Phase Two eelgrass mitigation, of which 2,389.4 unencumbered square feet of eelgrass remains. The City estimates that Phase Two will impact approximately 354.2 square feet of eelgrass, and with a mitigation ratio of 1.2:1, approximately 425.04 square feet of migration will be required. Since this number is far below the 2,384.4 square feet available in the 0.10-acre block set

aside in Colorado Lagoon, the available eelgrass in the Colorado Lagoon will be sufficiently mitigate the impacts to eelgrass associated with Phase Two of the project.

Special Condition Three requires the City to conduct new eelgrass surveys in the project location prior to the actual construction of the Phase Two seawalls, and post-construction eelgrass surveys to determine the actual amount of eelgrass impacts and the amount of mitigation that will be required. Pre-construction surveys must be conducted during the active growth phase no earlier than ninety days nor later than thirty days prior to commencement or re-commencement of any development authorized under this coastal development permit. The City is also required to provide annual accounting reports to the Executive Director which demonstrate that the eelgrass mitigation required pursuant to Coastal Development Permit 5-11-085-A1 (Naples Island Seawall Repair Project Phase Two) and is being provided within the Colorado Lagoon Mitigation Site. The annual accounting reports shall quantify how much of the area within the Colorado Lagoon eelgrass mitigation site is unencumbered and remains available to meet the eelgrass mitigation requirements for future phases of the Naples Island Seawall Repair Project after meeting the mitigation requirements for all completed phases. The quantity of available eelgrass mitigation area can be evaluated prior the review and approved of each new phase of the Naples Island Seawall Repair Project.

The City is required to mitigate all eelgrass impacts of the project at a minimum 1.2:1 ratio, consistent with the standards of NOAA's Southern California Eelgrass Mitigation Policy (SCEMP). The proposed eelgrass mitigation program at the Colorado Lagoon is set forth in the Colorado Lagoon Phase 2B Report, prepared by Anchor QEA, LLC (February 1, 2018). Eelgrass impacts are required to be mitigated consistent with SCEMP within 36 months of the impact, and eelgrass mitigation must be maintained through at least sixty months. The proposed eelgrass mitigation program includes a five-year monitoring program to ensure the survival of at least the minimum amount of eelgrass to be mitigated. The total eelgrass mitigation amount resulting from each phase of the Naples Island Seawall Repair Project will be determined from pre-construction, post-construction and control site surveys per the standards in NOAA's Southern California Eelgrass Mitigation Policy (SCEMP). Specific surveys to determine this amount will be conducted phase by phase to determine the correct mitigation requirement per the policy.

Eelgrass beds in Alamitos Bay shall also be protected from adverse impacts associated with the temporary storage of the residents dock floats while construction of new seawalls is occurring in the canals and bayfront. The dock floats in Rivo Alto Canal, Naples Canal, and on the Bayfront, the area subject to Phase Two, will have to be removed for the duration of the seawall construction period, which is expected to take twelve months. The shading caused by the placement of dock floats above eelgrass habitat or potential eelgrass habitat would severely inhibit eelgrass growth. Such a plan could also inhibit the use of the waterway for transportation or water-oriented recreational activities.

Therefore, **Special Condition Nine** requires the City to submit a float storage plan, subject to the review and approval of the Executive Director, which identifies the proposed location(s) for the temporary storage of the residents' dock floats while the proposed seawalls are being installed. The location(s) of the temporary dock float storage area(s) shall not adversely affect public access to the shoreline, public recreational activities, or sensitive environmental resources (e.g., eelgrass). If the proposed location of any temporary dock float storage area is located in the water, the City shall provide a valid eelgrass survey with the float storage plan which clearly demonstrates that no proposed float storage location is located within any area where eelgrass is growing.

As conditioned, the proposed eelgrass mitigation program will provide more than enough habitat area to grow the amount of eelgrass that will be required for the City to meet the minimum ratio of 1.2:1 for Phases One and Two in accordance with the Southern California Eelgrass Mitigation Policy. As conditioned, the proposed project will conform with the Southern California Eelgrass Mitigation Policy and Sections 30230 of the Coastal Act. Only as conditioned does the Commission find that the proposed project conforms with the marine resource provisions of the Coastal Act.

3. Sensitive Species Impacts - Nesting Birds

Various species of herons and other birds often nest in palms and other trees near the water. Nesting birds using the palms along the canals and Alamitos Bay could be adversely affected by construction noise and tree trimming or removal. The City proposes to remove 42 palms as part of the proposed project, and to replace all of the trees with various sized container plantings. A biological survey of the Phase Two project area for roosting or nesting birds in the project area has not yet been conducted, so no nesting trees (which would be considered ESHA) have yet been identified. However special conditions of the amended coastal development permit will protect bird nests and nesting trees (EHSA) from the potential impacts of the proposed development.

Special Condition Seven prohibits the removal and/or trimming of trees that would interfere with or disrupt active birds' nests, and shall comply with the 1918 Migratory Bird Treaty Act. Special Condition Seven also requires the City to demonstrate that a qualified biologist or resource specialist has inspected the trees and confirmed in writing that no active bird nests will be disturbed. In the event that any nests are discovered, or evidence of past or present roosting or nesting, or reproductive or nesting behavior is observed in the trees on the project site, the City shall cease all work and immediately notify the Executive Director. The City shall submit a request to amend the permit in order to modify the proposed development in order to avoid the disturbance of the trees used by birds or develop mitigation measures to minimize disturbance of the bird habitat.

In order to protect nesting birds from noise impacts, **Special Conditions Five** requires the implementation of a specific noise mitigation program. The City shall retain the services of a qualified independent biologist or environmental resources specialist to conduct a biological survey of the trees within five hundred feet of the project site prior (within seven days) to the commencement of construction activities, and once a week upon commencement of construction activities that include use of heavy equipment that can cause excessive noise, odors, or vibrations (e.g., pile driving). The environmental resource specialist shall conduct the survey in order to determine the presence of black-crowned night herons, great blue herons, snowy egrets, raptors, or other sensitive species within five hundred feet of the work site. If the environmental specialist reports any black-crowned night herons, great blue herons, snowy egrets, raptors, or other sensitive species exhibiting reproductive or nesting behavior within five hundred feet of the work site, noise reduction measures (e.g., sound shields made from plywood or sound-board or molded sound shields) shall be used and measures shall be taken to minimize loud noise generation to the maximum feasible extent during construction.

In addition, noise generated by construction (including, but not limited to, pile driving) shall not exceed 65 dB at any active nesting site within five hundred feet of project site for black-crowned night herons, snowy egrets, great egrets, great blue herons, raptors, or other sensitive species. The noise limit (65 decibels) is a standard noise limit for residential areas. If construction noise exceeds 65 dB, then alternative methods of pile driving (including, but not limited to, vibratory pile driving, press-in

pile placement, drilling, dewatered isolation casings, etc.) or other sound mitigation measures shall be used as necessary to achieve the required dB threshold levels.

Based on the noise measurements form Phase One, the use of the press-in pile placement is not expected to exceed the noise limit. If these sound mitigation measures do not reduce noise levels, construction within five hundred feet of the nesting trees shall cease and shall not recommence until either new sound mitigation can be employed or nesting is complete.

Finally, all trees that are removed as a part of the proposed project will be replanted at a 1:1 ratio with non-invasive trees of various sizes to mitigate for the temporal impacts to roosting and/or nesting birds that may be affected by tree removal, as described in **Special Condition Seven.**

Only as conditioned to protect tree used by nesting birds is the proposed development consistent with Section 30240(b), which states: "Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas."

4. Construction Impacts to Water Quality

The construction will occur over and in the water. Construction of any kind adjacent to or in coastal waters has the potential to impact marine environment. Alamitos Bay, including the Naples Canals, provides an opportunity for water oriented recreational activities and also serves as a home for marine habitat. Because of the coastal recreational activities and the sensitivity of the Alamitos Bay habitat, water quality issues are essential in review of this project.

The proposed project involves installation of new steel sheet-pile seawalls. No materials are proposed that would treat and coat any steel sheet piles. Were the City to include such materials, the project would need to be reviewed for water quality impacts because certain substances may have an adverse impact on water quality. In this case, no such coating is proposed.

Due to the project's location near coastal waters, it is necessary to ensure that construction activities will be carried out in a manner that will not adversely affect recreation, water quality or marine resources. The potential adverse impacts to water quality and marine resources include discharges of contaminated runoff into the canal, sedimentation and turbidity during construction of the new seawalls, and the use of heavy equipment (fuel and oil leaks).

The City of Long Beach has certified a Mitigated Negative Declaration for the proposed project (Naples Seawall Interim and Long Range Repair Project, by RBF Consulting, March 2010, SCH#2010-011073) and has incorporated numerous mitigation measures (BMPs) into the proposal in order to minimize the adverse impacts associated with the proposed construction activities. The BMPs include the use of turbidity screens/siltation curtains to isolate work areas during pile removal and installation, floating booms to contain debris or spills, recovery of any non-buoyant debris by divers as soon as possible after loss.

In order to prevent adverse impacts to marine waters from construction activities, the Commission is imposing **Special Condition Two**. This special condition requires the City to utilize specific BMPs, including those described above, to ensure that water quality, biological productivity and marine

resources are protected as required by Sections 30230 and 30231 of the Coastal Act. The required best management practices include provisions to prevent discharges into the water during construction. Only as conditioned will the proposed project ensure the protection of marine resources and water quality as required by Sections 30230 and 30231 of the Coastal Act.

5. Sensitive Species Impacts – Invasive Species

A non-native and invasive aquatic plant species, *Caulerpa taxifolia* (herein *C. taxifolia*), has been discovered in parts of Southern California. *C. taxifolia* is a tropical green marine alga that is popular in the aquarium trade because of its attractive appearance and hardy nature. In 1984, this seaweed was introduced into the northern Mediterranean Sea. From an initial infestation of about one square yard it grew to cover about two acres by 1989, and by 1997, blanketed about 10,000 acres along the coasts of France and Italy. Genetic studies demonstrated that those populations were from the same clone, possibly originating from a single introduction. This seaweed spreads asexually from fragments and creates a dense monoculture displacing native plant and animal species. In the Mediterranean Sea, it grows on sand, mud and rock surfaces from the very shallow subtidal to about 250 feet depth. Because of toxins in its tissues, *C. taxifolia* is not eaten by herbivores in areas where it has invaded. The infestation in the Mediterranean Sea has had serious negative economic and social consequences because of impacts to tourism, recreational diving and commercial fishing.

Because of the grave risk to native habitats *C. taxifolia* was designated a prohibited species in the United States in 1999 under the Federal Noxious Weed Act. In 2001, AB 1334 made it illegal in California for any person to sell, possess, import, transport, transfer, release alive in the state, or give away without consideration various *Caulerpa* species including *C. taxifolia*.

In June 2000, *C. taxifolia* was discovered in Aqua Hedionda Lagoon in San Diego County, and in August of that year an infestation was discovered in Huntington Harbor in Orange County. Genetic studies show that this is the same clone as that released in the Mediterranean. Other infestations may occur. Although a tropical species, *C. taxifolia* has been shown to tolerate water temperatures down to at least 50ºF. Although warmer Southern California habitats are most vulnerable, until better information if available, it must be assumed that all shallow water marine habitats in California are at risk of infestation.

In response to the threat that *C. taxifolia* poses to California's marine environment, the Southern California Caulerpa Action Team, SCCAT, was established to respond quickly and effectively to the discovery of *C. taxifolia* infestations in Southern California. The group consists of representatives from several State, federal, local and private entities. The goal of SCCAT is to locate and completely eradicate all *C. taxifolia* infestations.

The project area was surveyed for eelgrass and *C. taxifolia* in March 2011 and no *C. taxifolia* was found.[1] So far, *C. taxifolia* has not been found anywhere in the Alamitos Bay area. However, to ensure that *C. taxifolia* is not present in the project area before the proposed project commences, the City will conduct another survey. **Special Condition Four** requires the City to survey the project area again no earlier than ninety days nor later than thirty days prior to commencement or re-commencement of any development authorized under this coastal development permit. As

[1] Eelgrass & Caulerpa Survey for Naples North-East Quadrant Permanent Seawall Repairs, City of Long Beach, CA by Tetra Tech, Inc., March 2011.

conditioned, the Commission finds that the proposed project conforms with the marine resource provisions of the Coastal Act.

There are also numerous upland invasive plants that are known to cause adverse impacts to sensitive habitat areas. These problematic and/or invasive plant species are listed by the California Native Plant Society and the California Invasive Plant Council (formerly the California Exotic Pest Plant Council). **Special Condition Twelve** prohibits the use of any plants on this list as part of the proposed project.

Finally, **Special Condition Fifteen** requires the City to comply with all permit requirements and mitigation measures of the California Department of Fish and Wildlife, Regional Water Quality Control Board, U.S. Army Corps of Engineers, and the U.S. Fish and Wildlife Service with respect to preservation and protection of water quality and the environment. Only as conditioned will the proposed project ensure that marine resources and water quality be protected as required by Sections 30230, 30231 and 30240 of the Coastal Act

The proposed development is the improvement of waterway that supports recreational boating and is an encouraged marine related use. The proposed development has been designed to minimize the fill of coastal waters. The proposed development has been conditioned to minimize adverse effects on the marine environment by avoiding or mitigating impacts upon sensitive marine resources, such as eelgrass and to avoid contributing to the dispersal of the invasive aquatic algae, *Caulerpa taxifolia*. As conditioned, there are no feasible less environmentally damaging alternatives available. Therefore, the Commission finds that the proposed development, as conditioned, conforms with Sections 30224, 30230 and 30231 of the Coastal Act.

D. PUBLIC ACCESS AND RECREATION

One of the basic goals stated in the Coastal Act is to *maximize public access* to and along the coast. The public access and recreation policies of the Coastal Act require that maximum access and recreational opportunities shall be provided and that development shall not interfere with such access.

Section 30210 of the Coastal Act states:

> *In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.*

Section 30211 of the Coastal Act states:

> *Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.*

Section 30213 of the Coastal Act states:

> *Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred...*

Section 30221 of the Coastal Act states:

> *Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.*

The Commission is vested with the authority to assure that it acts in a manner consistent with Section 30210 of the Coastal Act which requires the Commission to carry "out the requirement of Section 4 of Article X of the California Constitution" and provide for maximum access and recreational opportunities for all people.

Section 4 of Article X of the California Constitution provides the following:

> *No individual, partnership, or corporation, claiming or possessing the frontage or tidal lands of a harbor, bay, inlet, estuary, or other navigable water in this State, shall be permitted to exclude the right of way to such water whenever it is required for any public purpose, nor to destroy or obstruct the free navigation of such water; and the Legislature shall enact such laws as will give the most liberal construction to this provision, so that access to the navigable waters of this State shall be always attainable for the people thereof.*

This section merges the common law Public Trust Doctrine with the California Constitution. [See Personal Watercraft Coalition v. Marin County Board of Supervisors (2002) 100 Cal.App.4th 129, 144-145.] The Legislature, in furthering the goals of Article X Section 4 of the Constitution, enacted Section 30210 of the Coastal Act to ensure the public can always attain access to navigable waters for recreational purposes. As such, through this legislative mandate, the Commission is charged with the duty of ensuring that proposed development is consistent with Section 30210 of the Coastal Act, and by extension, the Public Trust Doctrine. Therefore, the Commission has the authority to impose a requirement to provide a public trust use as a condition of approval for a development if such development would be inconsistent with Section 30210 of the Coastal Act without the imposition of such a condition.

Under the granted lands statutes, the Legislature granted the tide and submerged lands in Long Beach, including Alamitos Bay and its associated canals, to the City, dictating that such lands shall be used for public trust purposes.[2] The California State Lands Commission has found that uses of public trust lands must "accommodate, promote, foster or enhance statewide public's need for essential commercial services or (the public's) enjoyment of tidelands."[3] Therefore, the proposed project's adverse impacts on public trust resources must be mitigated in a manner to ensure that the mitigation accommodates, promotes and fosters the public's enjoyment of tidelands.

The public currently has unrestricted access along the entire length of the public trust resources along the entrance the Canals and islands, both in the waterway and along the public walkways that run along both sides of the canal. The canal walkways are popular for walking, jogging and sightseeing. The canals are popular for kayaking, paddle boarding, small boating, swimming, and Venice-style

[2] http://www.slc.ca.gov/Granted_Lands/Los_Angeles.html
[3] http://www.slc.ca.gov/Policy_Statements/Public_Trust/Public_Trust_Doctrine.pdf

gondola rides. The waterway and the public walkways on each side of the canal are lower-cost recreational facilities that are protected.

The City of Long Beach certified LCP states that Naples Islands' system of waterfront walkways is a major recreation resource which attracts many strollers and sight-seers (LCP Page III-E-7). The certified LCP also states that the visual resources of Naples are the community itself and the views of the bay and canals attainable from the many public walkways (LCP Page III-E-9). However, public access to the Naples Canals is somewhat limited due to the relative lack of available public parking in the densely populated neighborhood.

The proposed project will create short-term construction impacts. **Special Condition Eleven** prohibits the City and the development from interfering with public access and use of the public walkways situated immediately inland of the seawalls, except for the temporary disruptions that may occur during the completion of the permitted development.

Private encroachments, in the form of landscaping, walls and fences, currently exist within the upland portion of the project area in the public right-of-way that is subject to this permit application. The City intends to allow some of these private encroachments (at least the small landscaped area that runs parallel to the public walkways and the canals and Bayfront) to persist upon completion of the proposed project. As part of the approved project, the City proposes to repair the public sidewalks and maintain public access along the right-of-way that runs along the project area. The City also proposes to set aside part of the public right-of-way, on both sides of the sidewalks, for residents' private landscape areas - leaving the public sidewalks open and unobstructed.

Private encroachments into the right-of-way, if unregulated and uncontrolled, may adversely affect public access. Since detailed plans for the public and private development in the right-of-way have not yet been submitted for review, the Commission imposes **Special Condition Twelve** which requires the City to submit final project plans for the review and approval of the Executive Director. The final project plans shall include a public sidewalk, at least six feet wide, along the waterfront for the entire length of the project area. The provision of an unobstructed six-foot wide sidewalk will provide adequate public access around the perimeter of the islands. The plans shall also include public benches (which the City is proposing) and show all private encroachments such as walls, yards landscaped areas that the City proposes to allow to be located between the seawall and the private properties. Private encroachments are not permitted to obstruct public access along the six-foot wide sidewalks. Only as conditioned to ensure that the private encroachments do not adversely impact public access, is the proposed project consistent with the public access policies of the Coastal Act.

The impacts to public access caused by the proposed project also include the permanent impact on public trust resources, including the narrowing of a portion of the Rivo Alto Canal and Naples Canal, from an average width of 69 feet to a reduced width of 65.86 feet, as described in the previous sections of this staff report **(Exhibit 4)**. The narrowing of the canal will permanently reduce the available space for the public to use public trust resources for boating activities and other public access and recreation activities along the waterway.

Sorrento Alamitos Bay Shoreline Trail Improvements

In order to mitigate for the impacts associated with filling of public trust submerged and historic tideland and narrowing portions of the canals (three feet), which will limit the channel area available

for the public to enjoy public trust lands, in a manner that ensures that the mitigation accommodates, promotes and fosters the public's enjoyment of public trust lands, the Commission staff, in cooperation with the City, developed a public access enhancement and mitigation plan that will improve public access along the northwestern shoreline of Naples Island in an area where private encroachments currently discourage general public use of a public right-of-way that provides access to public trust resources in Alamitos Bay. This public access trail, known as the Sorrento Trail, was required by Special Condition 14 of the underlying permit to be improved in segments concurrent with the phased seawall project **(Exhibit 11)**. As approved, the first step towards the improvement of the Sorrento Alamitos Bay Shoreline Trail (Shoreline Trail) was for the City to design the trail alignment and improvements and to process a local coastal development permit. In 2017 the City issued Local Coastal Development Permit No. LCDP17-015 for the improvement of the Shoreline Trail. The first segment of the Shoreline Trail will be improved concurrently with this phase (Phase Two) of the seawall repair project. The second segment of the Shoreline Trail will be improved concurrently with Phase Three of the seawall repair project, as so forth, as described in **Special Condition Fourteen** of the permit amendment.

The public access mitigation plan, as required by Special Condition Fourteen of the underlying permit, provides for a five-foot wide ADA accessible public walkway along the filled portion of the City's public right-of-way known as the *Alamitos Bay Shoreline Trail*. This walkway was approved to provide for both lateral access along the bayfront and connections to vertical access points from East Sorrento Drive. This walkway will provide for pedestrian access to the public trust lands, including the bay waters and bay shoreline which will, in turn, provide improved access to launch points along the northern bayfront for non-motorized boats such as stand-up paddle boards and kayaks.

The fifteen-foot wide public right-of-way, which exists between the bay and the private properties, is primarily developed with private encroachments like yards, patios and low seawalls or retaining walls. These encroachments have limited and discouraged public access over the City's right-of-way since the area was subdivided over one hundred years ago and, therefore, impacted the public's ability to use and enjoy public trust lands of Alamitos Bay. The Commission has required (through individual permit actions for dock replacement projects in this area) the removal of backyard encroachments from the City's right-of-way in an attempt to keep the Shoreline Trail open and available for general public access. However, without a comprehensive approach to improve the trail through this area, these backyard encroachments will continue to block or impede public access through this area.

The Alamitos Bay Shoreline Trail is technically open for public use along the seaward edge of the yards of the adjacent bay-fronting homes, even though the majority of the trail is partially obstructed by patio furniture and other items belonging to the homeowners. Most of the trail is supported by retaining walls that were constructed many years ago along the seaward edge of the right-of-way. Numerous private piers and docks (one pier for each house) extend into the bay from the fill behind the retaining walls.

In regards to this particular accessway and the public access enhancement approved by the underlying permit and addressed in **Special Condition Fourteen** of the coastal development permit, the certified City of Long Beach (LCP Policy Plan for Area E - Naples) states:

> *Access policies for Naples…. Primary among these is the completion of the public walkways where public land is available for that purpose, especially along the east side of Los Cerritos Chanel between 2nd Street and Appian Way with a connector to the 2nd Street*

> *sidewalk. This walk should be unpaved. Additionally, street ends should be improved to increase public access to the walkways* (LCP Page III-E-11).

The LCP Policy Plan Map for Area E – Naples (LCP Page III-E-11) also states:

> *The emphasis on access in the policy plan is to improve safety and to clarify public rights where private encroachments may have occurred, as well to improve access where possible.*

The Sorrento Alamitos Bay Shoreline Trail, required to be improved is the public right-of-way that runs along the Los Cerritos Channel between East 2nd Street and East Appian Way. It is referenced in the above-stated LCP Policy Plan and identified on the LCP Policy Plan Map (**Exhibit 10**). Therefore, the certified City of Long Beach LCP specifically identifies the project site (the public right-of-way) as a public accessway (Alamitos Bay Shoreline Trail). The Policy Plan Map for Area E (Naples) contained in the LCP calls for the completion of the public walkway. Although the LCP calls for an unpaved trail this policy was developed prior to ADA requirements. The City of Long Beach has indicated it is possible to construct an ADA compliant walk way along the majority of the City's right-of-way fronting the bay. An ADA compliant sidewalk along the majority of the waterfront will allow for disabled persons to easily access this scenic waterfront location.

As approved by the Commission with the underlying permit and addressed by **Special Condition Fourteen**, the City is required to install the improved walkway in six phases that correspond to the six phases of the proposed Naples Seawall Repair Project. Thus far, the City of Long Beach completed the eastern end of the improved shoreline walkway across one lot in front of 5609 East Sorrento Drive, pursuant to Coastal Development Permit 5-12-088 **(Exhibit 10)**. The western end of the improved walkway would abut the 2nd Street Bridge, where there is currently no pedestrian connection between the bridge and the existing unimproved trail **(Exhibit 10).** This western end is the segment that the City has agreed to improve concurrent with Phase Two of the Seawall Repair project. The City will improve additional Shoreline Trail segments from west to east, corresponding with the future phases of the seawall project, as described in **Special Condition Fourteen** of the permit amendment. The Shoreline Trail walkway will be connected to the existing vertical access ways which will provide linkages to the sidewalk adjacent to East Sorrento Drive which provides public access between East 2nd Street and East Appian Way (**Exhibit 10**).

Special Condition Fourteen of the of the permit amendment (and the underlying permit) also require a signage plan to clearly indicate that the Sorrento Alamitos Bay Shoreline Trail is open to the general public. Public access signs, with directions to Sorrento Alamitos Bay Shoreline Trail, shall be posted at the entrance to each vertical accessway along East Sorrento Drive and at the intersections of: 1) East 2nd Street and East Sorrento Drive and 2) East Appian Way and East Sorrento Drive. Public access signage is required to include an acknowledgement that the Sorrento Alamitos Bay Shoreline Trail was provided through the cooperative efforts of the City of Long Beach and the California Coastal Commission.

Residents opposing the public access enhancement required as mitigation for the impacts to the public trust lands and, by extension, the public trust uses of those lands for public access and recreation argue that the improvements will adversely affect habitat values and public safety. However, the entire length of the new walkway would be on existing filled areas that are already being used as private yards, except perhaps for an approximately 100-foot long segment that may have to be spanned by a

five-foot wide boardwalk (or left as sand) in front of 5455, 5459 and 5465 East Sorrento Drive. No wetlands or sensitive habitat areas will be affected. Public safety concerns are real; however, the rest of Naples has open public walkways along every street and canal, just like the rest of the City. Neighborhood residents already enjoy using this trail. In addition, the boundary between the public right-of-way and the abutting private properties would be demarcated by a wall or railing along the inland edge of the fifteen-foot wide right-of-way.

In fact, this segment of the Naples shoreline is one of the last lengths of shoreline right-of-way in the City of Long Beach that has not yet been improved for general public and ADA access. That is why the certified LCP specifically calls for this right-of-way to be improved. The LCP, which was certified in 1980 states, "Complete Public Walkway" **(Exhibit 9)**.

To ensure that the City adheres to the conditions imposed on the underlying permit, **Special Condition Fourteen** is updated to define the different trail segments and the timing of the improvements that the City is required to implement for the Shoreline Trail. The improvements will be undertaken in segments concurrent with the phased construction of the Naples Island Seawall Repair Project. The first segment of the trail, a 425-foot long segment between 5425 E. Sorrento Drive (near the 2nd Street Bridge) and 5455 E. Sorrento Drive, is required by **Special Condition Fourteen** to be improved prior to or concurrent with Phase Two of the Naples Island Seawall Repair Project. **Special Condition Fourteen** also requires Segment One to be completed and open for public use prior to the submittal of the application for the next phase (Phase Three) of the Naples Island Seawall Repair Project.

The rest of the phased improvement of the Shoreline Trail, to be constructed concurrently with the Naples Island Seawall Repair Project are as follows: Segment Two of the Shoreline Trail (between 5455 and 5501 E. Sorrento Drive, shall be improved prior to or concurrent with Phase Three; and Segment Three of the Shoreline trail shall be improved prior to or concurrently with Phase Four of the Naples Island Seawall Repair Project. The existing vertical access connections between Sorrento Drive and the bay shall be improved prior to or concurrently with the improvement of each Shoreline Trail segment, and the two existing vertical accessways adjacent to 5617 and 5633 E. Sorrento Drive shall be improved prior to or concurrent with Phase Five of the Naples Island Seawall Repair Project. An improved sidewalk on the northern side of East Sorrento Drive shall be constructed prior to or concurrent with the final Phase (Phase Six), and will connect to the two vertical accessways adjacent to 5617 and 5633 E. Sorrento Drive to East Appian Way. Only as conditioned to maximize public access and to protect lower cost visitor and recreational facilities is the proposed project consistent with the public access policies of the Coastal Act.

Water Access – Naples Canals

As stated previously, the Naples Canals are popular for kayaking, paddle boarding, small boating, swimming, and Venice-style gondola rides. However, there are no locations along the seawalls of Naples Island for the public to access the waters of the canals, unless one is able to use a private dock and gangway for this purpose. The general public typically accesses the water from a beach on the mainland, from Mothers beach on the north end of Naples, or from a boat launch ramp in Marine Stadium. Young swimmers often jump in the canals from the bridges, then have been seen climbing out onto a private dock. In discussing the limitations on the public's ability to physically access the water in Naples, the City has agreed to study the feasibility of providing public water access to Rivo Alto Canal and/or Naples Canal via a stairway, ramp or gangway as part of the next phases of the

Naples Island Seawall Repair Project. Originally, the seawalls had stairway openings that provided public access to the water, but these stairway accessways no longer exist.

To ensure that this public project provides public access from Naples Island's vertical seawalls to the waters of Alamitos Bay, in a manner similar to the numerous private accessway over the vertical seawalls, **Special Condition Eighteen** requires the City to prepare an evaluation to identify appropriate locations for the construction of at least one facility to provide public water access as part of Phase Three of the Seawall Repair project. Potential locations to be studied include the south end of the Colonnade and East Naples Plaza. The public access facilities may be in the form of ramps, stairways, gangways, dock floats, or a combination of these and/or similar amenities. Prior to the submittal of the application for the next phase of the Naples Seawall Repair Project (Phase Three), the City shall propose and act upon a local coastal development permit for the construction of at least one public access facility. Only as conditioned to maximize public access and to protect lower cost visitor and recreational facilities is the proposed project consistent with the public policies of the Coastal Act. The Commission has the authority to impose requirement to provide a public trust use as a condition of approval of the proposed development since the development would be inconsistent with Section 30210 of the Coastal Act without the imposition of such a condition.

Dock Standards – Naples Canal

In order to maintain a sufficiently wide navigable channel, which is the open water area that exists between the docks and vessels that line both sides of Naples Canal and Rivo Alto Canal, the City has agreed to maintain the pierhead lines in their current location in relation to the centerline of the canal. In addition, to compensate for the reduced width of the canal that will result from the installation of the new seawalls, the size of the resident's dock floats in the canal shall be restricted. The new dock size limitation will be phased in over the next decade as dock floats are replaced, so the navigable channel may have some pinch-points until such time as the wider dock floats are phased out by 2028. There is currently a distance of 46 feet between the pierhead lines in Rivo Alto Canal. The dock floats themselves must not extend over the pierhead line into the navigable channel, but the City permits docked vessels to overhang the pierhead line.

Therefore, **Special Condition Eight** requires that the dimensions of dock floats in Rivo Alto Canal and Naples Canal as part of Phase Two shall be restricted to a width of six feet (the width is the dimension of the dock float that is measured seawardly from the inland edge of the float to the seaward edge of the float). Gangways are not permitted to extend further into the canal than the dock float, and they are required to be aligned parallel to the seawall, rather than perpendicular. All dock floats in Rivo Alto Canal and Naples Canal shall conform to the size limits when they are replaced or substantially repaired. Such restrictions are not necessary in the wider entrance to the Rivo Alto Canal, or along the bayfronting portions of Phase Two of the project, as they do not result in the same narrowing of the open water areas as in the canals. All docks in the Phase Two project area shall conform to the size limits in ten years, no later than December 31, 2028. All docks in the Phase One project area are already required to conform to the size limits no later than December 31, 202, which is 10 years after Phase One was approved. The City shall include the dock float size limit on all future dock leases and/or permits. This six-foot size restriction applies in the canals only. Docks in the bay must comply with current pierhead line limits. As conditioned, the proposed project would not result in the narrowing of the actual open water area in the canals.

Private Lease of State Tidelands

Under the granted lands statutes, the Legislature granted the tide and submerged lands in Long Beach, including Alamitos Bay and its associated canals, to the City, the City of Long Beach. The City of Long Beach, in effect the "landlord", administers the state tidelands on behalf of the State of California. The City has historically allowed residents with waterfront property in Alamitos Bay to build docks and piers on the shoreline in front of their homes.

The certified LCP on Page III-6 states:

> *One of the principal recreation and visitor service element on Naples is the boat berthing capability along the channel and on both sides of the canals. These are in the form of dock and slips which emanate from the public walkway which surrounds most of the islands. Approximately 560 boats are stored in this manner. The docks are usually located directly in front of private homes. Most docks accommodate more than one boat. One of these may belong to the adjacent homeowner who then leases out the remaining slips. If the homeowner has no boat, then he may have leased out all the slips. The owner pays nothing for his slip or use of the waterway, but must agree to annual inspections and make repairs as directed by the Marine Bureau. All vessels are subject to a City fee, assessed annually.*

As described by the certified LCP, private parties have been permitted to occupy and use portions of State Tidelands that exists in front of their homes, at no cost. This practice of allowing the private use of State tidelands at no cost is inconsistent with State law. The State Lands Commission and local jurisdictions responsible for administering State tidelands typically require a lease for private boating facilities in State waters or tidelands. The obligation to charge fair market rental value is based in Section 6 of Article XVI of the California Constitution. State law mandates that the money form the leases shall be used for the maintenance and operation of the tidelands.

Pursuant to Section 6 of Article XVI of the California Constitution, the City of Long Beach is also required to charge fair market rental value for the use of State tidelands. Therefore, **Special Condition Ten** requires the City to institute a lease program for all public seawalls in the project area, (consistent with what has been implemented with Phase One) with appropriate prices established in relation to the lease area and temporal length of each lease. The lease program shall allow for the limited-term private use and occupation of state tidelands for development associated with recreational boating activities (i.e., private docks and piers). The money generated by the leases shall be deposited into the City's Tidelands Fund to be utilized for public access improvements, including the public walkway required by **Special Condition Fourteen** of Coastal Development Permit 5-11-085, and future seawall repairs maintenance and operation of the tidelands.

As conditioned, the proposed project will not adversely impact public access to or along the shoreline and will result the in improvement and enhancement of public access and recreation in the Naples Island Area. Therefore, the Commission finds that, as conditioned, the proposed development will not have any significant adverse impact on public access to the coast or to nearby recreational facilities. Thus, as conditioned, the proposed development conforms with the public access and recreation policies of the Coastal Act.

E. SEA LEVEL RISE

Warming oceans and polar and glacial melting over the last century has contributing to measurable increases in sea levels. Sea level has been rising for many years. Several different approaches have been used to analyze the global tide gauge records in order to assess the spatial and temporal variations, and these efforts have yielded sea level rise rates ranging from about 1.2 mm/year to 1.7 mm/year (about 0.5 to 0.7 inches/decade) for the 20th century, but since 1990 the rate has more than doubled, and the rate of sea level rise continues to accelerate. Since the advent of satellite altimetry in 1993, measurements of absolute sea level from space indicate an average global rate of sea level rise of 3.4 mm/year or 1.3 inches/decade – more than twice the average rate over the 20th century and greater than any time over the past one thousand years.[4] Recent observations of sea level along parts of the California coast have shown some anomalous trends; however, there is unequivocal evidence that the climate is warming, and such warming is expected to cause sea levels to rise at an accelerating rate throughout this century.

The State of California has undertaken significant research to understand how much sea level rise to expect over this century and to anticipate the likely impacts of such sea level rise. In 2013, the Ocean Protection Council adopted the National Research Council (NRC) report, "Sea-Level Rise for the Coasts of California, Oregon, and Washington: Past Present and Future", as best available science for the State of California, and recommended in its 2013 State Sea-Level Rise Guidance that state agencies and others use these projections in their planning processes (the Coastal Commission also adopted the NRC report as best available science its 2015 Sea Level Rise Policy Guidance). This report estimates that sea levels could rise between 1.5 and 5.5 feet by the year 2100[5] for areas south of Cape Mendocino. This projection is given in a range largely because researchers cannot know exactly how much greenhouse gases we will continue to emit over the coming decades – large-scale curtailment of greenhouse gas emissions would keep sea level rise towards the lower end of the projections, while business as usual emissions scenarios would result in the higher end of the projections. Because the world has continued along the "business as usual" scenario (and data suggests temperatures and sea level rise are tracking along the higher projections), OPC and the Natural Resources Agency have continued to recommend that we avoid relying on the lower projections in planning and decision-making processes.

The NRC report also noted that there are additional sources of uncertainty that could result in rates of sea level rise that are outside the projected ranges. One major source of uncertainty is related to the dynamics of ice sheet loss, and this topic has continued to be extensively researched since the NRC report came out. This more recent research informed the April 2017 "Rising Seas in California: An Update on Sea-Level Rise Science" report[6], which is being incorporated into OPC's 2018 update to the State Sea-Level Rise Guidance. The updated projections in the Rising Seas report suggest sea levels could rise between 1.6 and 6.9 feet by 2100, depending on greenhouse gas emissions. The updated science report also includes an extreme scenario (termed the "H++" scenario) of 10.2 feet of sea level rise by 2100 based on recent modelling efforts that look at possible sea level rise associated with rapid ice sheet loss. As our understanding of sea level rise continues to evolve, it is possible that sea level rise projections will continue to change as well (as evidenced by the recent updates to best

[4] http://www.opc.ca.gov/webmaster/ftp/pdf/docs/rising-seas-in-california-an-update-on-sea-level-rise-science.pdf
[5] National Research Council (NRC). 2012. Sea-Level Rise for the Coasts of California, Oregon, and Washington: Past, Present, and Future. Report by the Committee on Sea Level Rise in California, Oregon, and Washington. National Academies Press, Washington, DC. 250 pp. http://www.nap.edu/catalog/13389/sea-level-rise-for-the-coasts-of-california-oregonand-washington.
[6] Griggs, G, Árvai, J, Cayan, D, DeConto, R, Fox, J, Fricker, HA, Kopp, RE, Tebaldi, C, Whiteman, EA (California Ocean Protection Council Science Advisory Team Working Group). Rising Seas in California: An Update on Sea-Level Rise Science. California Ocean Science Trust, April 2017.

available science). While uncertainty will remain with regard to exactly how much sea levels will rise and when, the direction of sea level change is clear and it is critical to continue to assess sea level rise vulnerabilities when planning for future development. Importantly, maintaining a precautionary approach that considers high or even extreme sea level rise rates and includes planning for future adaptation will help ensure that decisions are made that will result in a resilient coastal California.

The proposed seawall has a top elevation of 9.5 feet above MLLW, which is six inches higher than the elevation above the existing seawalls along the Naples Canal, Rivo Alto Canal and Alamitos Bay, and 24 inches above the current highest water levels. Other Southern California cities have set minimum elevation requirements for new seawalls and bulkheads, typically +9 foot MLLW (City of Newport Beach) or +10 foot MLLW (Dana Point and Huntington Harbor).

If sea level rise is at the high end, water levels could be at or above the top of the proposed seawall elevation within the lifetime of the project. With some small waves, water could come over the seawall fairly regularly. The City asserts that the proposed design allows the height of the seawalls to be raised by adding to the pile cap. The City also points out that the height of all the seawalls in Naples would need to be increased to protect the area from flooding, including private and public seawalls, as the system can only provide flood protection to the elevation of the lowest wall. Many of the residents oppose any additional increase in the height/elevation of the pile caps (i.e., top of the seawall) at this time because a higher wall would adversely affect their views of the waterway. Therefore, the City's preliminary sea level rise adaptation plan is to add a higher cap to the seawall (and others) at a later date in the event of overtopping. In addition, to deal with occasional flooding in the project location, the City is proposing to install sub-surface drainage on Treasure Island (connecting to the Los Angeles County Flood Control Pump Station), and under the sidewalk to collect and discharge rainwater at a single point along the south wall of the Colonnade Park, and at the northern terminus of Lido Lane on the Naples Peninsula (Exhibit 2).

The height of the proposed seawall may not be sufficient for the full time that it will be in place. Since it is likely that the height of the proposed seawall will need to be increased in the coming decades to provide flood protection from rising sea level, **Special Condition Thirteen** requires that any future maintenance or work to address changing sea level, increased flooding or other coastal hazards be undertaken on or inland of the proposed development and that there not be any seaward encroachment beyond the location of the seawalls approved as part of Phase One or Two of the Naples Island Seawall Repair Project.

F. LOCAL COASTAL PROGRAM

The proposed development would occur in coastal waters (water side of the seawalls) and on the public property located immediately inland of the seawalls. A coastal development permit is required from the Commission for the proposed development because it is located on tidelands within the Commission's area of original jurisdiction pursuant to Section 30519 of the Coastal Act. The submerged area of the canals and bay is within the Commission's original jurisdiction. Pursuant to the certified City of Long Beach Local Coastal Program (LCP), the portion of the proposed project that is situated inland of the seawalls (sidewalks, landscaping, safety rails and lighting) falls within the City's permitting jurisdiction. The City has requested, pursuant to Coastal Act Section 30601.3, that the Commission review the entire project (including the portion within the City's LCP jurisdiction) together as a consolidated coastal development permit application.

The Commission's standard of review for consolidated coastal development permit applications is the Chapter 3 policies of the Coastal Act. The City of Long Beach certified LCP is advisory in nature and may provide guidance. The Commission certified the City of Long Beach LCP on July 22, 1980.

The Policy Plan Map for Area E (Naples) contained in the LCP (certified in 1980) states that the islands shall not be enlarged by filling the bay: *No further filling of the bay for enlargement of Naples or Treasure Islands shall be permitted* (LCP Page III-E-14). In this case, the purpose of the proposed fill is not to enlarge the islands, but to carry-out the repairs to existing seawalls that are necessary to protect existing structures. The certified LCP does not contain specific policy language or guidance regarding the repair or replacement of seawalls.

Although the certified LCP does not contain specific policy language regarding the repair or replacement of seawalls, the LCP does provide very clear policy direction in regards to the public access improvements that are being proposed or required as mitigation for public access impacts associated with the proposed development.

First, the certified LCP states that Naples Islands' system of waterfront walkways is a major recreation resource which attracts many strollers and sight-seers (LCP Page III-E-7). The certified LCP also states that the visual resources of Naples are the community itself and the views of the bay and canals attainable from the many public walkways (LCP Page III-E-9).

The LCP Policy Plan Map for Area E (Naples) states that: *The emphasis on access in the policy plan is to improve safety and to clarify public rights where private encroachments may have occurred, as well to improve access where possible* (LCP Page III-E-11).

In regards to the Sorrento Alamitos Bay Shoreline Trail, the City of Long Beach certified LCP specifically identifies the project site (the public right-of-way) as a public accessway (Alamitos Bay Shoreline Trail). The Policy Plan Map for Area E (Naples) contained in the LCP calls for the completion of the public walkway **(Exhibit 9).**

The LCP Policy Plan for Area E (Naples) also states that: *Access policies for Naples…. Primary among these is the completion of the public walkways where public land is available for that purpose, especially along the east side of Los Cerritos Chanel between 2nd Street and Appian Way with a connector to the 2nd Street sidewalk. This walk should be unpaved. Additionally, street ends should be improved to increase public access to the walkways* (Page III-E-11). The Sorrento Alamitos Bay Shoreline Trail, required to be improved by **Special Condition Fourteen**, is the public right-of-way that runs along the east side of Los Cerritos Chanel between East 2nd Street and East Appian Way referenced in the above-stated LCP Policy Plan.

The development approved and conditioned herein includes a public access improvement component that will carry out the public access policies set forth in the certified City of Long Beach LCP. Special conditions imposed by the permit will protect and enhance the Naples Islands' system of waterfront walkways which are a major recreation resource. **Special Condition Fourteen** requires the improvement of the public right-of-way that runs along the east side of Los Cerritos Chanel between East 2nd Street and East Appian Way, where several private encroachments have negatively affected the public's ability to use the public right-of-way. **Special Condition Eight** protects the navigable cannel in Rivo Alto and Naples Canals. Over the next five years, the encroaching dock floats must conform to new dock float dimensions that will help to maintain the width of the navigable channel.

Special Conditions Eleven and Twelve protect the existing public access opportunities that exist on the public walkways that run along both side of the canals and the bayfront.

As conditioned, the proposed development is consistent with Chapter 3 of the Coastal Act and does not conflict with the certified LCP for the area.

G. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

Section 13096 of the California Code of Regulations requires Commission approval of coastal development permit application to be supported by a finding showing the application, as conditioned by any conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment.

In this case, the City of Long Beach is the lead agency for purposes of CEQA review of this project. The City issued a CEQA Mitigated Negative Declaration for the Naples Seawall Interim and Long Range Repair Project, by RBF Consulting, March 2010 (SCH#2010-011073). Specific mitigation measures are imposed in the form of special conditions of the coastal development permit.

Mitigation measures, in the form of special conditions, require the City to: a) implement best management practices to minimize adverse impacts to water quality during construction, b) mitigate the impacts to marine resources, including replacement of eelgrass and soft bottom habitat, c) provide improved public access as called for by the Coastal Act and the certified LCP; d) agree to no future seaward extensions of the approved seawalls, e) comply with the requirements of the resource agencies, and f) assume the risks of the development.

As conditioned, there are no feasible alternatives or additional feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment. Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified impacts, is the least environmentally damaging feasible alternative and complies with the applicable requirements of the Coastal Act to conform to CEQA.