**CALIFORNIA COASTAL COMMISSION**
South Coast Area Office
200 Oceangate, Suite 1000
Long Beach, CA 90802-4302
(562) 590-5071

# W9a

| | |
|---|---|
| Filed: | 2/27/2012 |
| 180th Day: | 8/25/2012 |
| Staff: | Charles Posner – LB |
| Staff Report: | 7/25/2012 |
| Hearing Date: | August 8, 2012 |

## STAFF REPORT: PERMIT AMENDMENT

**Application No:** 5-95-055-A12

**Applicants:** City of Long Beach & Aquarium of the Pacific

**Agents:** Johnny Vallejo, Project Manager, City of Long Beach Public Works
Barbara Long, Vice President, Aquarium of the Pacific

**Project Location:** 100 Aquarium Way, Downtown Shoreline area, City of Long Beach.

**Description of Original Permit Approval 5-95-055 (May 10, 1995):**

Construction of the Long Beach Aquarium of the Pacific. [See Appendix B for descriptions of the eleven prior permit amendments for aquarium-related projects.]

**Description of Permit Amendment Request 5-95-055-A12:**

Install a seawater intake system between the Los Angeles River Estuary and the aquarium holding tanks, consisting of a 250-foot long underground pipeline extension and a submersible pump attached to an existing fishing pier. The system will pump about 50,000 gallons of seawater per day, and no more than fifteen million gallons per year.

**Staff Recommendation: Approval with conditions**

## SUMMARY OF STAFF RECOMMENDATION

Although the City of Long Beach has a certified Local Coastal Program (LCP), the Commission has permit jurisdiction over the proposed development because the aquarium and the proposed seawater intake system are situated on State Tidelands within the Commission's area of original jurisdiction. Pursuant to Section 30519 of the Coastal Act, any development located within the Commission's original jurisdiction requires a coastal development permit from the Commission. The Commission's standard of review for the proposed event is the Chapter 3 policies of the Coastal Act.

Staff is recommending that the Commission **APPROVE** the permit amendment for the proposed development with special conditions relating to the protection of marine resources, water quality, and public access, and the permittees' assumption of risk. The applicants agree with the recommendation. **See Page Three for the Motion** to carry out the staff recommendation.

# TABLE OF CONTENTS



## APPENDICES



## EXHIBITS



## 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.

In this case, the Executive Director has determined that the proposed amendment is a material change to the previously approved project. If the applicant or objector so requests, the Commission shall make an independent determination as to whether the proposed amendment is material. [l4 California Code of Regulations 13166].

# I. MOTION AND RESOLUTION

**Motion:** *I move that the Commission **approve** the proposed amendment to Coastal Development Permit 5-95-055 pursuant to the staff recommendation.*

The staff recommends a **YES** vote. Passage of the motion will result in approval of the permit amendment as conditioned and adoption of the following resolution and findings. The motion passes only by an affirmative vote of a majority of 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 and will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3. 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. SPECIAL CONDITIONS OF PERMIT AMENDMENT 5-95-055-A12

Note: The original special conditions of Coastal Development Permit 5-95-055 and prior permit amendments are still in effect.

1. **Approved Development - Permit Compliance.** All development must occur in strict compliance with the proposal as set forth in the application for permit amendment, subject to the special conditions of this amended permit. Any proposed change or deviation from the approved plans shall be submitted to the Executive Director to determine whether another permit amendment is necessary pursuant to the requirements of the Coastal Act and the California Code of Regulations. No changes to the approved plans shall occur without a permit amendment unless the Executive Director determines that no permit amendment is required.

2. **Use of Seawater.** The approved development is for the sole purpose of supplying the aquarium with seawater for on-site use in its animal tanks and displays. Commercial sale and/or off-site transport (other than disposal in the sanitary sewer) of the seawater is not permitted. No change in the approved use shall occur without a permit amendment unless the Executive Director determines that no permit amendment is required.

3. **Public Access - Shoreline Park.** Public access to Shoreline Park peninsula and the public's use of the Shoreline Park parking lot shall not be restricted by the proposed project. Pursuant to this requirement, bicycle and pedestrian access shall be provided and maintained to and through Shoreline Park during the entire construction phase. A temporary detour of the bicycle path is permitted in order to maintain access to the park while the pipeline and conduit are being installed underneath the concrete bicycle path. Public use of the fishing pier on which the seawater pump is attached shall not be interrupted, suspended, or otherwise restricted during pumping episodes.

4. **Construction Responsibilities and Debris Removal.** By acceptance of this permit amendment, the permittees agree that the permitted development shall be conducted in a manner that protects water quality pursuant to the implementation of the following BMPs:

   A. No construction materials, equipment, debris, or waste shall be placed or stored where it may be subject to wave, wind, or rain erosion or dispersion.

   B. Any and all construction material shall be removed from the site as soon as possible (within two days of completion of construction) and disposed of at an appropriate location. 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.

   C. All trash generated by construction activities within the project area shall be disposed of at the end of each day, or sooner if possible.

   D. All grading and excavation areas shall be properly covered and sandbags and/or ditches shall be used to prevent runoff from leaving the site, and measures to control erosion must be implemented at the end of each day's work.

   E. Washout from concrete trucks shall be disposed of at a controlled location not subject to runoff into coastal waters or onto the beach, and more than fifty feet away from a storm drain, open ditch or surface waters.

   F. Erosion control/sedimentation Best Management Practices (BMPs) shall be used to control sedimentation impacts to coastal waters during construction. BMPs shall include, but are not limited to: placement of sand bags around drainage inlets to prevent runoff/sediment transport into the sea.

   G. All construction equipment and materials shall be stored and managed in a manner to minimize the potential for discharge of pollutants. Any 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.

   H. During construction of the proposed project, no runoff, site drainage or dewatering shall be directed from the site into any bay, harbor, street or drainage unless specifically authorized by the California Regional Water Quality Control Board.

   I. 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.

   The permittees shall undertake the approved development in accordance with this condition.

5. **Conformance with the Requirements of the Resource Agencies.** The permittees shall comply with all permit requirements and mitigation measures of the California Department of Fish and Game, 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 which is 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.

6. **Assumption of Risk, Waiver of Liability and Indemnity Agreement.** By acceptance of this permit amendment, the applicants 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; and (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.

## III. FINDINGS AND DECLARATIONS

### A. AMENDMENT DESCRIPTION

On May 10, 1995, the Commission approved Coastal Development Permit 5-95-055 for the construction of the Long Beach Aquarium of the Pacific on a 5.89 acre site in Shoreline Park (Exhibit #3). The aquarium opened to the public on June 19, 1998. The aquarium is located on the western edge of Rainbow Harbor, which was completed in the summer of 1998 (Coastal Development Permit 5-96-124).

The co-applicants (City of Long Beach and Aquarium of the Pacific) propose to install a seawater intake system between the Los Angeles River Estuary and the aquarium holding tanks (See Exhibits). The proposed project involves the installation of a new six-inch diameter underground pipeline between the estuary and the aquarium's existing underground water pipeline in the Shoreline Park parking lot, which was installed as part of the original aquarium construction. In order to pump the water into the new pipeline, one submersible 16hp electric-powered pump will be attached onto an existing fishing pier in the estuary (Exhibit #3). The stainless steel submersible pump will be supported (underwater) by a 2'x 2' mounting bracket attached to a pier support pile, and enclosed within a stainless steel and wire mesh box (Exhibit #4). No fill or disturbance of the bottom sediments is proposed. The pump and its enclosure will be supported three feet above the mudline. Also included in the proposed project is a 400-foot long underground power conduit, a new 6'x'6' underground vault in the parking lot (for the water pipe junctions), and a small electrical panel and disconnect switch on the pier deck.

Rainbow Harbor and Aquarium of the Pacific, Long Beach (2012) Copyright © 2012 Microsoft Corp.

Since the aquarium's opening in 1998, salt water has been delivered to the aquarium by either barge or tanker truck. The aquarium has purchased an estimated ten million gallons of seawater each year, at an annual cost of $200,000 to $500,000, for use in its tanks and exhibits. Used water is discharged only

into the sanitary sewer, under a County of Los Angeles permit. The proposed system would pump about 50,000 gallons per day, and no more than fifteen million gallons per year. The pump would run intermittently up to five hours a day, at times of high tide only.

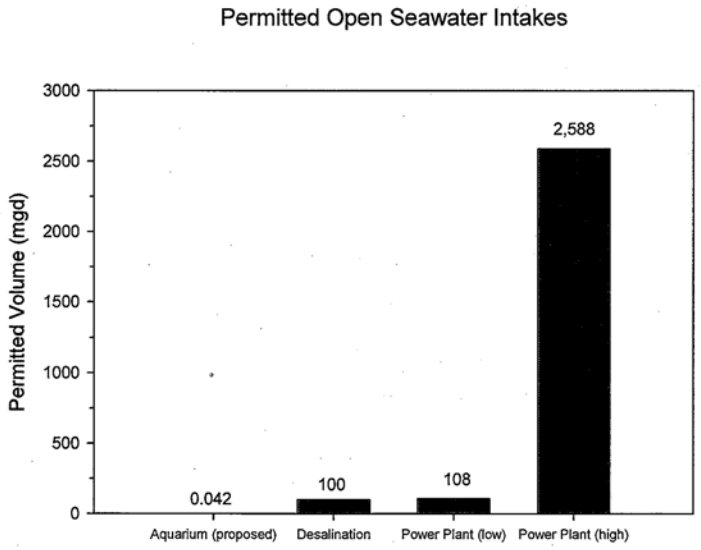



Figure 7. Comparison of permitted seawater intake volumes with the proposed seawater intake.

The benefits of directly pumping seawater from the estuary using the proposed system include lower costs and the elimination of approximately 1,100 diesel truck round trips each year. Water testing indicates that the quality of the estuary water, which is primarily Pacific Ocean water, is acceptable with filtering and pre-treatment. The aquarium's water filtering and treatment system already exists on the aquarium grounds. There is no outfall structure or any discharge associated with the proposed project.

The underground pipeline and power conduit will be installed in shallow trenches dug with a backhoe. The pipe and conduit will be placed under the bicycle path without breaking or cutting the concrete (Exhibit #3). The submersible pump and its steel and wire mesh screen enclosure will be lowered from the pier and attached to the pier support (underwater) by divers. No welding will occur in the water, as the pump and its support will be attached to the pier using clamps. The staging area will occupy a portion of the public parking lot in Shoreline Park. The applicants propose to implement specific BMPs to prevent any discharges into the sea and to minimize any disruption to the public's use of Shoreline Park, where the entire project is located. The construction of the proposed system, which will occur in at least two consecutive phases (land phase and pier/pump phase), is anticipated to last about ninety days.

**B. 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.*

Sections 30230 and 30231 of the Coastal Act require the protection of water quality and biological resources. The proposed project will be occurring in coastal waters and along the shoreline of a developed area (Shoreline Park) that is heavily used by the public. The shoreline at the project site is armored with large rocks that were placed there in the 1950s as part of a massive landfill project (Tidelands Filling Project). Since the proposed project does not include any new fill or bottom disturbance, no eelgrass beds or bottom habitat will be disturbed. However, due to the project's location 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. In addition, Section 30231 requires the proposed project to minimize adverse effects of entrainment.

Entrainment is the term used when tiny organisms (small fish and plankton such as fish and shellfish eggs and larvae) in seawater get sucked into a pump or a seawater intake like the proposed project. Entrainment typically results in the destruction of the organisms. In this case, any organism sucked into the proposed intake system would be killed by the water filter and treatment process. The applicant's estimated anticipated entrainment impacts are approximately 61,000 fish larvae and 29,000 shellfish larvae per year, or 167 fish larvae and eighty shellfish larvae per day [Seawater Intake Entrainment and EFH Analysis, by MBC Applied Environmental Sciences, June 1, 2009]. No threatened or endangered fish or invertebrate species would be affected by the proposed intake.

As noted above, the proposed seawater intake system would pump up to about 50,000 gallons for up to five hours per day during high tides (resulting in a maximum flow rate of about 0.37 cubic feet per second). At the direction of Commission staff, the applicants have designed the proposed project to minimize entrainment. The applicants considered other intake methods, such as a deep well and a shallow subsurface intake, though those were determined to be infeasible due to poor subsurface water quality and due to the relatively silty substrate along the river bottom. The applicants have instead proposed to reduce entrainment by enclosing the seawater intake (the pump) with a fine wire mesh screen enclosure with two millimeter-wide openings. This will prevent any organism larger than 2mm

from getting into the system. This type of screen has been shown in several similar applications to reduce entrainment – for example, the West Basin Water District and the City of Santa Cruz Water Department have conducted pilot studies with different types of screens to determine their feasibility and effectiveness in the marine environment. The mesh screen will be cleaned by hand at regular intervals to keep it free of algae, trash, silt and organisms.

The proposed design will also include a pumping rate that ensures through-screen water velocities that are at or below 0.5 feet per second (fps). This is the rate considered by both the U.S. EPA and California State Water Resources Control Board as resulting in *de minimis* levels of impingement. Impingement occurs when marine organisms larger than the mesh screen openings are pulled onto the screen and are injured or killed.

With the proposed design, the proposed project's effects on marine habitats and communities resulting from entrainment and impingement have been minimized as required and are expected to be minimal and of short duration. The California Department of Fish and Game (Bill Paznokas, January 6, 2012) has reviewed the proposed project and has no objection. It is noted that the applicants' current method of receiving seawater at the aquarium via barge or tanker truck entails larval fish losses.

In order to further minimize the amount of entrainment and impingement, **Special Condition Two** restricts the use of the approved seawater for the sole purpose of supplying the aquarium for on-site use in its animal tanks and displays. Commercial sale and/or off-site transport (other than disposal in the sanitary sewer) of the seawater is not permitted. As conditioned, the proposed project complies with Sections 30230 and 30231 of the Coastal Act.

The potential adverse impacts to water quality and marine resources also include discharges of contaminated runoff and sedimentation during construction and as a result of excavation and installation of the pipeline, conduit and pump enclosure, and the use of heavy equipment (fuel and oil leaks). There is no outfall structure or any discharge associated with the proposed project. In order to prevent adverse impacts to marine waters from construction activities, the Commission is imposing **Special Condition Four** which requires that specific mitigation measures be implemented (e.g., erosion control, equipment storage) in order to ensure that water quality, biological productivity and marine resources are protected as required by Sections 30230 and 30231 of the Coastal Act.

**Special Condition Five** requires the applicants to comply with all permit requirements and mitigation measures of the California Department of Fish and Game, 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 and 30231 of the Coastal Act.

## C. Public Access and Recreation

The proposed project and the Aquarium of the Pacific are situated within Shoreline Park. Shoreline Park and all land located south of the Chapter 138 Line is comprised of State Tidelands. These waterfront areas, which the City holds in trust for the people of California, provide the general public with public shoreline access and numerous recreational opportunities. The existing public access and recreational opportunities shall be protected.

The Coastal Act contains several policies which address the issues of public access and recreation along the coast. The proposed amendment must conform to the following Coastal Act policies:

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, in part:

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

Section 30220 of the Coastal Act states:

> *Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.*

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.*

Section 30223 of the Coastal Act states:

> *Oceanfront Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.*

The protection of public access and recreational opportunities on State Tidelands is an issue of primary importance to the Commission. Public access issues were particularly important in the Commission's

approval of the underlying permit (Coastal Development Permit 5-95-055) because the aquarium is situated in a public park located on State Tidelands. The construction of the proposed project will have temporary impacts on public access and recreation.

**Special Condition Three** requires that public access to Shoreline Park peninsula and the public's use of the Shoreline Park parking lot shall not be restricted by the proposed project. Pursuant to this requirement, bicycle and pedestrian access shall be provided and maintained to and through Shoreline Park during the entire construction phase. A temporary detour of the bicycle path is permitted in order to maintain access to the park while the pipeline and conduit are being installed underneath the concrete bicycle path. Public use of the fishing pier on which the seawater pump is attached shall not be interrupted, suspended, or otherwise restricted during pumping episodes.

Therefore, as conditioned, the Commission finds that the proposed project and amendment request will not adversely impact public access to the water, will not significantly adversely impact public recreational use of a public park or beach, and will be consistent with the public access and recreation policies of the Coastal Act.

## D. Visual Resources

Section 30251 of the Coastal Act states:

> *The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas...*

The proposed development is all underground except for the portion of the project that will be attached to the existing fishing pier. The visible part of the project (on the pier) will not obstruct any public views or otherwise adversely affect scenic resources. Therefore, the Commission finds that the proposed project is consistent with Section 30251 of the Coastal Act.

## E. Hazards

The Coastal Act states that new development must minimize risks to life and property and not create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area.

Section 30253 of the Coastal Act states, in part:

> *New development shall:*
>
> *(l) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.*
>
> *(2) 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.*

The project does not involve any landform alteration. 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 protective devices that would substantially alter natural landforms along bluffs and cliffs. No development in the ocean or near the shoreline can be guaranteed to be safe from hazard, however. All development located in or near the ocean have the potential for damage caused by wave energy, floods, seismic events, storms and erosion. The proposed project is located on the shoreline and is susceptible to natural hazards. The Commission routinely imposes conditions for assumption of risk in areas at high risk from hazards. **Special Condition Six** ensures that the permittees understand and assume the potential hazards associated with the development. As conditioned, the Commission finds that the proposed project is consistent with Section 30253 of the Coastal Act.

## F. Local Coastal Program

A coastal development permit (amendment) must be obtained 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 Commission's standard of review for the proposed development 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. As conditioned, the proposed development will be consistent with the certified LCP. As conditioned, the proposed development will be consistent with Chapter 3 of the Coastal Act.

## G. California Environmental Quality Act

Section 13096 of the California Code of Regulations requires Commission approval of a 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.

The City of Long Beach is the lead agency for the purposes of California Environmental Quality Act review of the proposed project. On February 28, 2011, the City of Long Beach issued CEQA Categorical Exemption No. CE-87-11 for the proposed seawater intake system in accordance with State CEQA Guidelines Section 15303, Class 3 (New Construction or Conversion of Small Structures).

Furthermore, the proposed project has been conditioned in order to be found consistent with the Chapter 3 policies of the Coastal Act. 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 and amendment, 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.

# Appendix A - Substantive File Documents

1. City of Long Beach Certified Local Coastal Program (LCP), 7/22/80.

2. Amended Coastal Development Permit 5-95-055 (Aquarium of the Pacific).

3. Seawater Intake Entrainment and EFH Analysis, by MBC Applied Environmental Sciences, June 1, 2009.

4. Sizing of Screened Pump Intake for the Aquarium of the Pacific Seawater Intake, by Moffatt & Nichol, July 3, 2012.

5. U.S. Army Corps of Engineers Permit No. SPL-2011-01139-GS, April 20, 2012.

6. California Regional Water Quality Control Board, Water Quality Certification, File No. 11-96. April 30, 2012.

# Appendix B – Prior Permit & Amendment Approvals

**Project Originally Approved on May 10, 1995 (5-95-055):** Construction of the Long Beach Aquarium of the Pacific including: 1) demolition of a 70-space recreation vehicle park; 2) demolition of the Queensway Bay Bridge ramps that connect to Shoreline Drive; 3) construction of new Queensway Bay Bridge ramps that connect to Shoreline Drive; 4) construction of new signalized intersection at Shoreline Drive and Chestnut Place; 5) construction of a new parking lot (approximately 434 spaces); 6) installation of parking meters on all parking spaces for aquarium and Shoreline Park; 7) construction of aquarium access roads and new signalized intersection at Shoreline Drive; 8) construction of new pedestrian and bicycle accessways; 9) construction of the 125,000 square foot aquarium building; 10) construction of a pipeline to convey barged ocean water to the aquarium from an existing dock at Catalina Landing; and 11) associated landscaping.

**5-95-055-A1:** Approve a Waived Tentative Parcel Map establishing two subdivision parcels for the development of the Long Beach Aquarium of the Pacific. [Approved October 11, 1995].

**5-95-055-A2:** Erect a 16-foot bronze dolphin sculpture (three jumping dolphins) in the center of the traffic circle adjacent to the Long Beach Aquarium of the Pacific on Aquarium Way. [Approved April 1998].

**5-95-055-A3:** Establish a United States Weather Bureau data collection station within the grounds of the Long Beach Aquarium of the Pacific. [Approved June 2000].

**5-95-055-A4:** Reconfigure existing outdoor "Kids Cove" area to include 20-foot high walk-through aviary, 6,000 square foot touchpool with 30-foot high shipwreck theme, and 13,800 square foot amphitheater and seating area. [Approved April 10, 2001].

**5-95-055-A5:** Installation of a 24-foot high, two-story, 880 square foot prefabricated structure to be used as a shop (first floor) and staff office (second floor). The structure would be placed within the facility's existing rear utility area (west side). [Approved October 2001].

**5-95-055-A6:** Revised plans for the reconfiguration of the existing outdoor "Kids Cove" area. The plans previously approved by permit amendment 5-95-055-A4 included a 20-foot high walk-through aviary, a 6,000 square foot touchpool with 30-foot high shipwreck theme, and a 13,800 square foot amphitheater and seating area. The revised plans proposed by this amendment (5-95-055-A6) include the 20-foot high walk-through aviary, a 3,200 square foot touchpool with 25-foot high shade structure, and a 16,800 square foot amphitheater and seating area. The shipwreck structure and theme are being deleted from the plan. The proposed development is situated entirely within the boundaries of the previously approved Aquarium of the Pacific lease parcel. [Approved December 2001].

**5-95-055-A7:** Installation of a 1.35-megawatt cogeneration plant to provide the facility with electric power. The plant would be placed within the facility's existing rear utility area (west side), entirely within the boundaries of the previously approved Aquarium of the Pacific lease parcel. [Approved June 2002].

**5-95-055-A8:** Installation of a fourteen-foot high, 800 square foot (20'x 40') shade structure, with no sides and six vertical steel poles, near the main aquarium entrance. And, placement of two

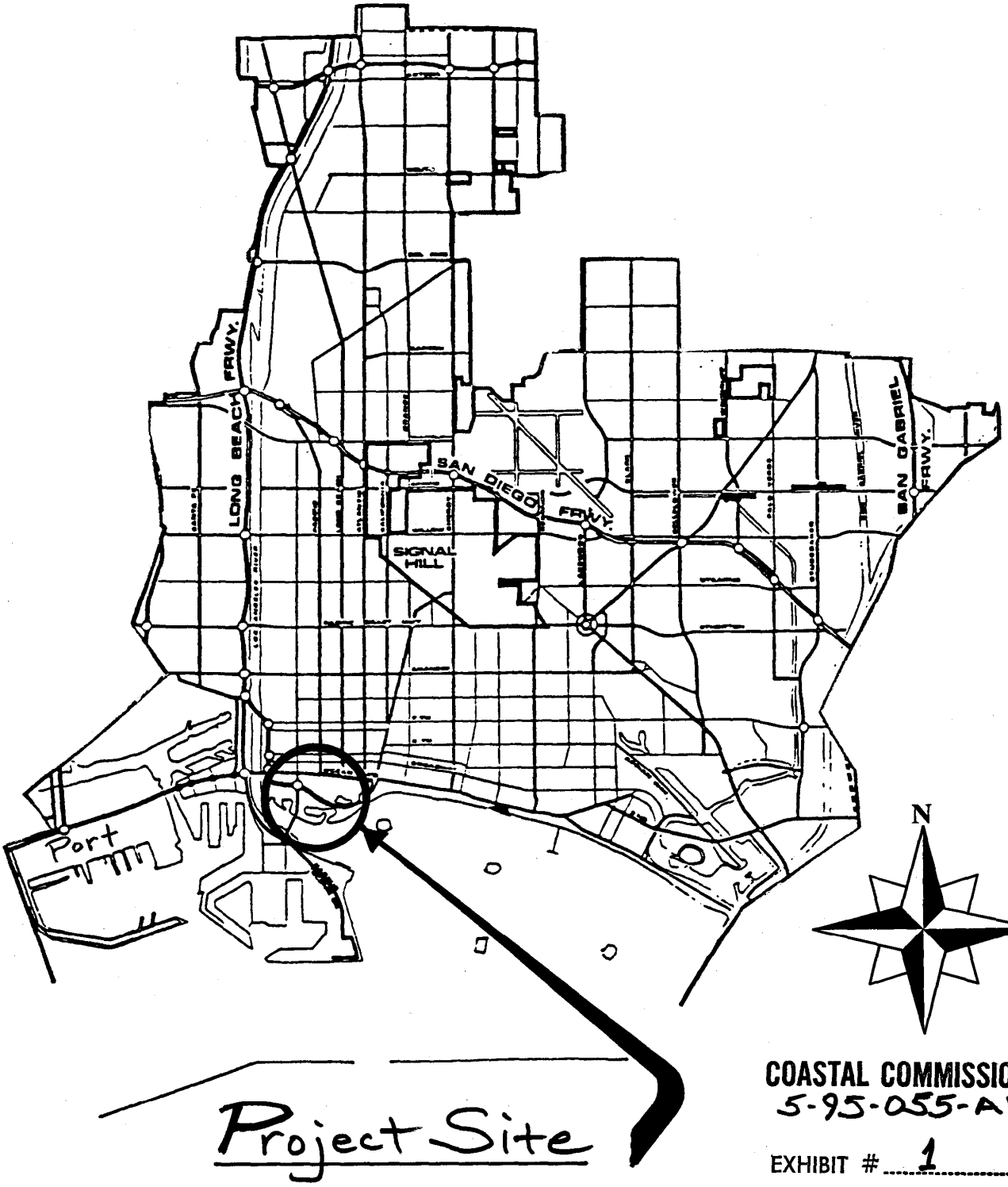
twenty-foot high poles next to the shade structure to hang the aquarium's seasonal promotional banner signs. [Approved June 2003].

**5-95-055-A9:** Expand the footprint and facilities of the existing aquarium use in Shoreline Park, including construction of a new watershed exhibit, classroom, animal care facility, and southern perimeter fence. [Approved November 2007].

**5-95-055-A10:** Enclose 1,800 square feet of the Harbor Terrace area of the main aquarium building in order to create a new gallery to exhibit the "Science-on-a-Sphere" geographic education attraction. The sixteen-foot high roof of the new enclosure will be used as an outdoor dining deck (114 seats) for the aquarium's cafeteria (Café Scuba). [Approved November 2009].

**5-95-055-A11:** Expand footprint and facilities of the existing aquarium use in Shoreline Park for construction of a 23,330 square foot "Pacific Visions" aquarium expansion project. [Approved April 2011].

# City of Long Beach




COASTAL COMMISSION
5-95-055-A12

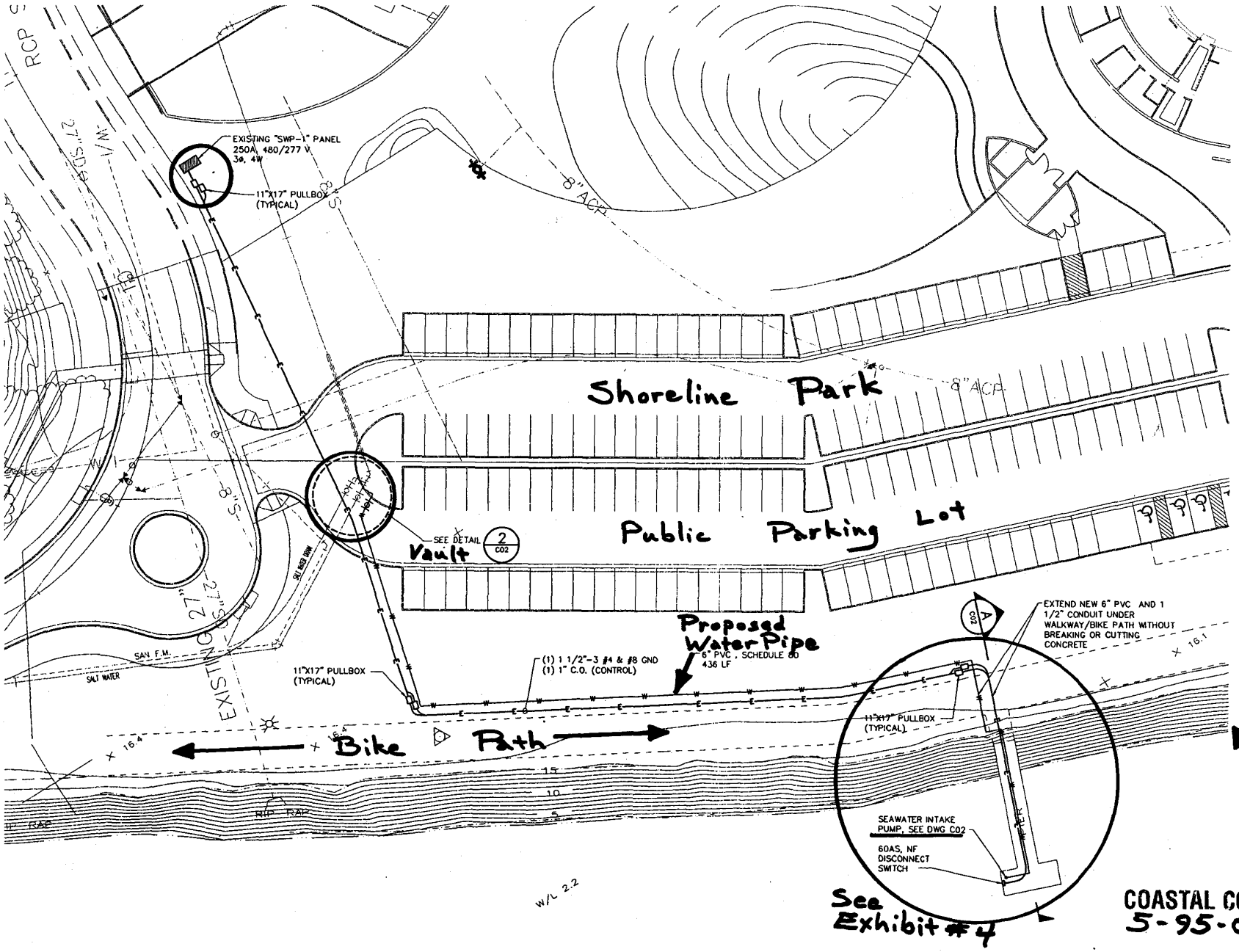
EXHIBIT # 1

PAGE 1 OF 1

COASTAL COMMISSION
5-95-055-A12

EXHIBIT # 2

PAGE 1 OF 1



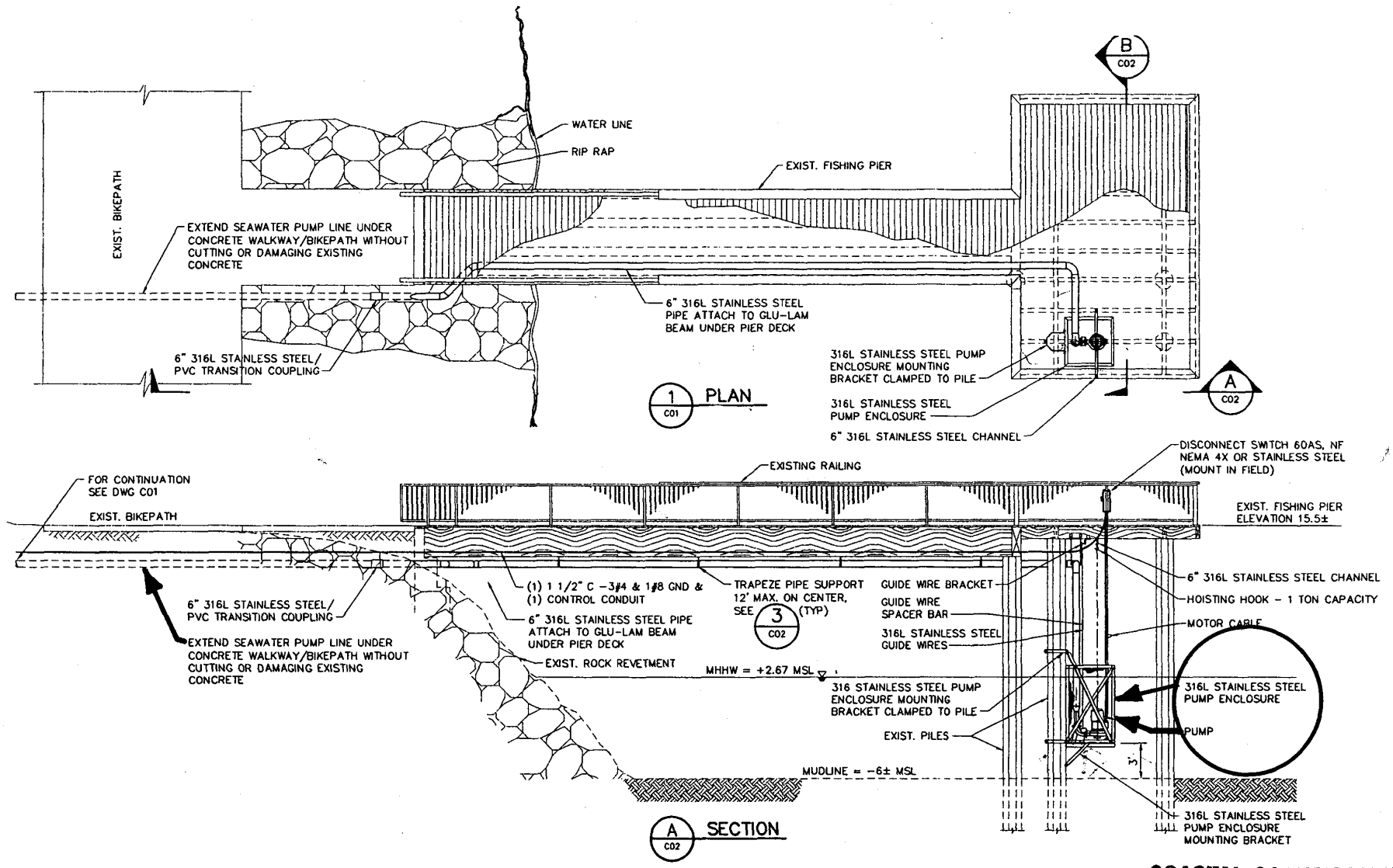

See Exhibit #4

Los Angeles River

COASTAL COMMISSION
5-95-055-A12

EXHIBIT # 3

PAGE 1 OF 1




# Existing Pier - Proposed Pump

COASTAL COMMISSION
5-95-055-A12

EXHIBIT # 4

PAGE 1 OF 1