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

F10b

Click here to go to original staff report

ADDENDUM

May 11, 2015

TO: Coastal Commissioners and Interested Parties

FROM: South Coast District Staff

RE: **Permit Amendment Request No. 5-09-071-A2 (City of Long Beach) Colorado Lagoon Restoration Project.**

Corrections to Staff Report

The calculations contained in the staff report dated April 23, 2015 for the area of impact resulting from the placement of piles are incorrect. The revisions to the staff report are shown below. Text to be deleted is shown in ~~strikethrough~~; added text appears in **bold underline**.

Corrections in the second paragraph on Page 2:

> The **sixteen 20-inch diameter piles** required to support the expanded foot bridge will result in fill of approximately **35** ~~83~~ square feet of subtidal and intertidal soft bottom habitat. The piles are allowable under Section 30233(a)(3) of the Coastal Act because they are necessary to support a public recreational facility – the pedestrian bridge over the lagoon which will provide public views of the habitat area and enhance public access through the restoration site and surrounding parkland. The impact of the fill of approximately **35** ~~83~~ square feet of the soft bottom of the lagoon will be mitigated by the surface area of the piles and by the elimination of the 135-foot long observation pier and associated piles from the approved project. The thirty 12-inch steel piles approved by the underlying permit would have filled **23.5** ~~94~~ square feet of soft bottom habitat, which will now be preserved. The replacement fencing will not result in any new impacts to coastal resources. The removal of non-native trees, planting of native trees, and relocation of electric lines and associated infrastructure further from the habitat area will enhance the habitat potential of the lagoon and the surrounding parkland.

Corrections in the last paragraph on Page 16:

> The **sixteen** proposed new **20-inch diameter** concrete piles will result in fill of approximately **35** ~~83~~ square feet of soft bottom habitat area. The majority of the area where the new piles will be located is currently filled with sediment and will be established as subtidal and intertidal habitat once the re-contouring is complete. Therefore, the piles will not

impact existing sensitive habitat area; they will merely take up space where new habitat could have been established. The piles are allowable under Section 30233(a)(3) of the Coastal Act because they are necessary to support a public recreational facility. The pedestrian bridge over the lagoon will provide public views of the restored and enhanced habitat area and the bridge will enhance public access through the restoration site and recreational parkland. The impact of the fill of approximately **35** ~~83~~ square feet of the soft bottom of the lagoon will be mitigated in part by the surface area of the piles and in part by the City's proposal to eliminate the 135-foot long observation pier and associated piles from the approved project. The thirty 12-inch steel piles approved by the underlying permit would have filled **23.5** ~~94~~ square feet of soft bottom habitat, which will now be preserved. In order to preserve water quality, **Special Condition 4** of the underlying coastal development permit requires the permittee to refrain from using timber treated with harmful chemicals – which applies to any exposed wood on the pedestrian foot bridge that could come into contact with the water.

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Filed:	3/5/15
180th Day:	7/11/15
Staff:	Z. Rehm-LB
Staff Report:	4/23/15
Hearing Date:	5/15/15

STAFF REPORT: PERMIT AMENDMENT

Application No.:	**5-09-071-A2**
Permittee:	**City of Long Beach**
Location:	Colorado Lagoon (5119 E. Colorado Street), City of Long Beach, Los Angeles County.
Description of Amendment:	Extend floating pedestrian foot bridge over re-contoured lagoon by approximately 150 feet with sixteen new 20-inch concrete piles, transplant eelgrass from donor sites to shallow subtidal potential eelgrass habitat area within Colorado Lagoon, remove existing chain link fencing and replace with new fencing in similar alignment, remove non-native trees and plant native trees, relocate electric line and associated infrastructure further away from restored and enhanced habitat area. The amendment request also changes the approved project to eliminate a 135-foot long observation pier with thirty 12-inch steel piles which was never constructed.
Description of Project Originally Approved August 14, 2009 and Amended September 7, 2011:	Colorado Lagoon Restoration Project (Phase One) which includes: 1) dredging and removal of 72,000 cubic yards of sediment, 2) re-contouring the lagoon banks, 3) diversion of low-flows from storm drains into the sanitary sewer, 4) installation of trash collection devices in three major storm drains, 5) creation of two vegetated bioswales between the water and the adjacent golf course, 6) clearing of the tidal culvert connecting the lagoon to Alamitos Bay, 7) demolition of the northern paved parking lot, access road, and restroom, 8) re-vegetating the former parking area and lagoon banks with native plants, 9) construction of public access trails, and 10) construction of a 135-foot long observation pier with thirty piles (to replace the existing pier).
Staff Recommendation:	Approval as submitted.

SUMMARY OF STAFF RECOMMENDATION

The City of Long Beach requests an amendment to Coastal Development Permit 5-09-071 for the Colorado Lagoon Restoration Project. The Commission approved the original permit for restoration of the Colorado Lagoon in 2009 and the permit was amended in 2011 to include additional dredging of the lagoon. Additional re-contouring of the northern lagoon bank was approved in 2013 pursuant to Coastal Development Permit 5-11-085 (City of Long Beach) as mitigation for the Naples Island Seawall Repair Project. The subject amendment request includes an extension of a pedestrian foot bridge over the western arm of the lagoon, additional eelgrass transplant into the western and northern arms of the lagoon, fence replacement, removal of non-native trees and planting of native trees, and electric line and associated infrastructure relocation. The amendment request also changes the approved project to eliminate a 135-foot long observation pier with thirty 12-inch steel piles which was authorized by the underlying permit but never constructed.

The piles required to support the expanded foot bridge will result in fill of approximately 83 square feet of subtidal and intertidal soft bottom habitat. The piles are allowable under Section 30233(a)(3) of the Coastal Act because they are necessary to support a public recreational facility – the pedestrian bridge over the lagoon which will provide public views of the habitat area and enhance public access through the restoration site and surrounding parkland. The impact of the fill of approximately 83 square feet of the soft bottom of the lagoon will be mitigated by the surface area of the piles and by the elimination of the 135-foot long observation pier and associated piles from the approved project. The thirty 12-inch steel piles approved by the underlying permit would have filled 94 square feet of soft bottom habitat, which will now be preserved. The replacement fencing will not result in any new impacts to coastal resources. The removal of non-native trees, planting of native trees, and relocation of electric lines and associated infrastructure further from the habitat area will enhance the habitat potential of the lagoon and the surrounding parkland.

Staff recommends **approval** of the permit amendment request as submitted by the City of Long Beach because the special conditions already imposed by the underlying Coastal Development Permit 5-09-071 are adequate to protect coastal resources. The conditions require the permittee to implement construction best management practices, provide mitigation for all impacts to eelgrass beds, complete a pre-construction survey for toxic algae (Caulerpa), refrain from using timber treated with harmful chemicals, re-use excess dredged soils on-site or on City beaches, comply with landscape and tree-trimming requirements agreed to by the permittee, and comply with the requirements of the resource agencies.

Procedural Notes:

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.

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.

The proposed project is a material change from that previously approved. Therefore, pursuant to Section 13166 of the Commission's regulations, the Executive Director is referring this application to the Commission.

Pursuant to Section 30519 of the Coastal Act, development located within the Commission's area of original jurisdiction requires a coastal development permit from the Commission. The Commission's area of original jurisdiction includes tidelands, submerged lands, and public trust lands, whether filled or unfilled. The proposed project is situated on submerged lands and on filled tidelands within the Commission's area of original jurisdiction. The Commission's standard of review for the proposed development in its area of original jurisdiction is the Chapter 3 policies of the Coastal Act. The City of Long Beach certified LCP is advisory in nature and may provide guidance.

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Exhibit 2 – Restoration Phase Summary Matrix
Exhibit 3 – Site Plans

I. MOTION AND RESOLUTION

Motion:

*I move that the Commission **approve** the proposed amendment to Coastal Development Permit 5-09-071-A2 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 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. 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 permittees 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 of 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 permittees to bind all future owners and possessors of the subject property to the terms and conditions.

III. SPECIAL CONDITIONS

Permit Amendment 5-09-071-A2 is subject to the following special conditions imposed by the Commission's approval of Coastal Development Permit 5-09-071, as amended:

1. **Protection of Marine Resources.** The permittee shall implement the following project staging and construction best management practices in order to minimize adverse environmental impacts and the unpermitted deposition, spill or discharge of any liquid or solid into Colorado Lagoon or Alamitos Bay:

   A. During dredging, clams and other native mollusks shall be relocated to another part of the lagoon when possible.

   B. Netting, sandbags, tarps and/or other forms of barriers shall be installed between the water and work areas and equipment storage areas to prevent any unpermitted material from entering Colorado Lagoon or Alamitos Bay.

   C. Floating booms shall be maintained around the coffer dams and pier construction in order to capture floating debris during all demolition and construction phases.

   D. Machinery or construction materials not essential for project improvements are prohibited at all times in the subtidal or intertidal zones.

   E. If turbid conditions are generated during dredging and construction, silt curtains shall be utilized to control turbidity.

   F. 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 Colorado Lagoon or Alamitos Bay. Stockpiled fill shall be stabilized with geofabric covers or other appropriate cover.

   G. 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.

   H. 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 Colorado Lagoon or Alamitos Bay. Thinners, oils or solvents shall not be discharged into sanitary or storm sewer systems.

I. 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.

J. 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.

K. 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.

L. In the event that lead-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.

M. The permittee shall dispose of all demolition and construction debris resulting from the proposed project 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.

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

2. **Eelgrass Survey and Mitigation Plan.**

A. Pre Construction Eelgrass Survey. Prior to commencement of any disturbance of the lagoon intertidal or subtidal areas authorized under this coastal development permit, a valid pre-construction eelgrass (*Zostera marina*) survey shall be completed during the period of active growth of eelgrass (typically March through October). The pre-construction survey shall be completed prior to the beginning of dredging and pier construction and 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 Game. The permittee shall submit the eelgrass survey for the review and approval of the Executive Director within five (5) business days of completion of each eelgrass survey and in any event no later than fifteen (15) business days prior to commencement of any disturbance of the lagoon intertidal or subtidal areas.

B. Post Construction Eelgrass Survey. If any eelgrass is identified in the project area by the survey required in Section A of this condition above, within one month after the conclusion of construction, the permittee shall survey the project site to determine if any eelgrass 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 Game. The permittee 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 permittee shall replace the impacted eelgrass at a minimum 1.2:1 ratio on-site, or at another location in Alamitos Bay, in accordance with the Southern California Eelgrass Mitigation Policy. All impacts to eelgrass habitat shall be mitigated at a minimum ratio of 1.2:1 (mitigation:impact). The exceptions to the required 1.2:1 mitigation ratio found within SCEMP shall not apply. Implementation of mitigation shall require an amendment to this permit or a new coastal development permit unless the Executive Director determines that no amendment or new permit is required.

3. **Caulerpa Taxifolia (Toxic Algae) Pre-Construction Survey.**

A. Not earlier than 90 days nor later than 30 days prior to commencement or re-commencement of any disturbance of the lagoon intertidal or subtidal areas authorized under this coastal development permit, the permittee 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 Game, and the National Marine Fisheries Service.

C. Within five (5) business days of completion of the survey, the permittee 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 & Game (858/467-4218) or Robert Hoffman, National Marine Fisheries Service (562/980-4043).

D. If *Caulerpa taxifolia* is found within the project or buffer areas, the permittee shall not proceed with the project until 1) the permittee 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 permittee 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.

4. **Timber Treatment.** Wood treated with Creosote, CCA (Chromated Copper Arsenate), ACA (Ammoniacal Copper Arsenate) or ACZA (Ammoniacal Copper Zinc Arsenate) is prohibited. Treated timber shall be free of chromium and arsenic and completely sealed in epoxy resin. No exposed wood shall be used where it could come into contact with the water.

5. **Dredge Spoils.** Dredge spoils suitable for beach replenishment shall be transported for such purposes to appropriate beaches. The permittee shall test the dredge spoils to determine if they are suitable for beach nourishment, and shall provide the test results for the review and approval of the Executive Director within five days after testing. The placement of suitable sand on City beaches is authorized pursuant to the terms of Coastal Development Permit 5-08-356 (City of Long Beach).

6. **Landscaping Plan.** The permittee shall conduct all landscaping consistent with the terms of this condition:

   A. Prior to the removal of non-native vegetation, a qualified biologist shall survey the project site and identify with flags all areas of existing native vegetation. The permittee shall ensure that the areas of existing native vegetation, except for those areas where re-contouring or public access improvements are permitted, are protected from disturbance during the implementation of the approved project, and that adequate water is provided to keep the plants healthy. Native vegetation that is removed from the areas where disturbance is permitted shall be transplanted elsewhere within the project area.

   B. Prior to weed abatement and removal of any plant material, a qualified biologist or ornithologist shall survey the project site to detect bird nests and submit a survey report to the permittee and the Executive Director of the Coastal Commission. The survey report shall include identification of all known nests. The permittee shall maintain a database of survey reports that includes a record of nests that is available as public information and to be used for future vegetation removal decisions. No bird nests shall be disturbed. Weed abatement and removal of any plant material may not proceed within 300 feet (500 feet for raptors) of a nest where evidence of courtship or nesting behavior is observed. In the event that any birds continue to occupy nests during the non-nesting season, work shall not take place until a qualified biologist or ornithologist has assessed the site, determined that courtship behavior has ceased, and given approval to proceed within 300 feet (500 feet for raptors) of any nest.

   C. Erosion Control. Prior to removing the non-native plants and preparation of the soil, the permittee 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 removal of the existing plant cover. In addition, the permittee shall implement the following temporary erosion control measures during the restoration project: temporary sediment basins (including debris basins, desilting basins or silt traps), temporary drains and swales, sand bag barriers, and additional silt fencing as needed

   D. All vegetation planted on the site will 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.

E. 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.

F. Re-vegetation shall commence as soon as possible following removal of the existing vegetation and preparation of the soil. 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 landscape plan. Re-vegetation activities may continue during the least tern nesting season.

G. Planting shall maintain views of the water from the public areas.

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

The permittee shall undertake the approved development in accordance with this condition and the final plans approved by the Executive Director. To ensure compliance, the permittee 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 and Maintenance of Colorado Lagoon Park.** Tree trimming, non-native tree removal, and ongoing maintenance of Colorado Lagoon Park shall be conducted consistent with the terms of this condition in order to ensure the protection of wildlife habitat and the long-term protection of breeding, roosting, and nesting habitat of state and federally listed bird species, California bird species of special concern, and bird species that play an especially valuable role in the ecosystem.

A. Tree trimming and non-native tree removal shall take place only outside of bird breeding and nesting season, which is January 1 through September 30.

B. The trimming or removal of any tree that has been used for breeding and nesting within the past five years is prohibited. Prior to tree trimming or removal of any tree, a qualified biologist or ornithologist shall survey the trees to be trimmed or removed to detect nests and submit a survey report to the permittee, a representative of the Audubon Society, and the Executive Director of the Coastal Commission. The survey report shall include identification of all trees with nests. The permittee shall

maintain a database of survey reports that includes a record of nesting trees that is available as public information and to be used for future tree trimming and removal decisions.

C. No bird nests shall be disturbed. Trimming may not proceed if a nest is found and evidence of courtship or nesting behavior is observed at the site. In the event that any birds continue to occupy trees during the non-nesting season, trimming shall not take place until a qualified biologist or ornithologist has assessed the site, determined that courtship behavior has ceased, and given approval to proceed within 300 feet of any occupied tree.

D. No California native trees shall be removed. All existing native vegetation shall be protected.

8. **Conformance with the Requirements of the Resource Agencies.** The permittee 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. 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.

IV. FINDINGS AND DECLARATIONS

A. PROJECT LOCATION AND DESCRIPTION

The City of Long Beach proposes to amend a previously issued coastal development permit that permitted a restoration of Colorado Lagoon, in southern Long Beach **(Exhibit 1)**.

Colorado Lagoon, which was historically part of the Los Cerritos Wetlands, 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 is listed as an impaired water body pursuant to the Clean Water Act as a result of elevated levels of lead, zinc, chlordane, and polycylic aromatic hydrocarbons (PAHs) in the sediment, and chlordane, dichloro-diphenyl-tricloroethane (DDT), dieldrin, and polychlorinated biphenyls (PCBs) in fish and mussel tissue. Bacterial contamination of the lagoon water is also a continuing problem that has adversely affected recreational activities. The lagoon is surrounded by 18.5 acres of public parkland managed by the City of Long Beach.

On August 14, 2009, the Commission approved Coastal Development Permit 5-09-071 for Phase One of a major habitat restoration project at Colorado Lagoon. The permit approved: 1) dredging and removal of 32,500 cubic yards of sediment, 2) re-contouring the lagoon banks, 3) diversion of low-flows from storm drains into the sanitary sewer, 4) installation of trash collection devices in three major storm drains, 5) creation of two vegetated bioswales between the water and the adjacent

golf course, 6) clearing of the tidal culvert connecting the lagoon to Alamitos Bay, 7) demolition of the northern paved parking lot, access road and restroom, 8) re-vegetating the former parking area and lagoon banks with native plants, 9) construction of public access trails, and 10) construction of a 135-foot long observation pier with thirty piles (to replace the existing pier).

The City vested the coastal development permit in November 2009 when it constructed a vegetated bioswale near the western arm of the lagoon. In November 2010, the City constructed the low-flows diversion system and cleared the tidal culvert that connects the lagoon to Alamitos Bay. The permit was amended (5-09-071-A1) on September 7, 2011 to increase the amount of authorized dredging from 32,500 cubic yards of sediment to 72,000 cubic yards of sediment. The increase in dredging was required to meet water and sediment quality standards set by the State Water Resources Control Board pursuant to the requirements of the Clean Water Act. The City has completed the dredging and re-used the dredged material at the Middle Harbor Development within the Port of Long Beach.

Phase Two of the restoration includes the development proposed by the subject permit amendment request (5-09-071-A2), as well as additional re-contouring of the northern lagoon bank authorized by Coastal Development Permit 5-11-085 (City of Long Beach). CDP 5-11-085 requires the City to establish a minimum of 20,908 square feet of new soft bottom habitat as mitigation for the Naples Island Seawall Repair Project by re-contouring that portion of the lagoon. The City proposes to move the material excavated from the northern lagoon bank to the western and northern arms of Colorado Lagoon to reduce the depth in those two areas. Raising the bottom elevation of those arms of the lagoon will make each area more conducive to eelgrass growth (i.e., make it shallower so that more sunlight will reach the bottom). **Exhibit 2** is a matrix which details development completed during each phase of the restoration, as well as new development proposed by the subject permit amendment request.

Coastal Development Permit Amendment request 5-09-071-A2 includes a 150 foot extension of an existing pedestrian foot bridge which spans the western arm of Colorado Lagoon. The bridge serves a public access function, allowing visitors to view the water and restored and enhanced habitat from above and access parkland on either side of the lagoon. The bridge extension is necessary because the re-contouring of the northern bank of the lagoon (authorized by Coastal Development Permit 5-11-085) will expand the total water coverage and the habitat area on the northern bank. The bridge must be lengthened to cross over the entire portion of water and minimize foot traffic on sensitive upland buffer habitat. The southern approach to the bridge is proposed to be modified to provide a transition from an existing pathway over the restored and enhanced upland buffer to the existing bridge. The bridge extension will require sixteen 20-inch diameter concrete piles to support the new span **(Exhibit 3)**.

The subject amendment request also includes authorization to transplant eelgrass to the northern and western arms of the lagoon, which will be made shallower with the material excavated from the northern bank. The northern arm of the lagoon will also be made shallower with excess material. Combined the re-contouring and re-use of material as fill will establish an approximately 6.3-acre shallow subtidal potential eelgrass habitat area in the western and northern arms of the lagoon. The permittee would transplant eelgrass from donor sites within Alamitos Bay and install it in the lagoon at a depth of approximately 4 to 9 feet (NGVD29); see **Exhibit 3**. Divers would use the anchor/bundle technique, which is the standard for eelgrass mitigation in Southern California. They would collect eelgrass by hand, deliver it to Colorado Lagoon, bundle it, and plant eelgrass bundles one meter apart throughout the approximately 6.3-acre transplant zone. Transplants would occur

daily for a six-week period in late spring or early summer. The bridge construction and eelgrass planting would occur after the re-contouring and fill is completed.

In order to enhance the upland buffer habitat of the lagoon and the potential habitat of the park, the City proposes to replace an approximately six-foot high chain link fence which separates a City-operated public golf course from the northern side of Colorado Lagoon. The fence would be removed prior to restoration of the adjacent habitat and replaced in kind following restoration. Its primary function would be to prevent golfers from entering and potentially impacting the habitat area during the course of play. Additionally, the City proposes the construction of a new short split-rail fence along the trail entrance to Colorado Lagoon from 6th Street. That wood and cable, approximately 42-inch high fence would serve as an access and orientation marker, not a physical barrier **(Exhibit 3)**.

Additional development proposed by the subject amendment includes relocated electric lines, electric poles, and electric meter pedestals. This infrastructure would be moved away from the restored and enhanced habitat, nearer to the fence and golf course **(Exhibit 3)**. Finally, the amendment request includes the removal of non-native trees and the planting of native trees. The permittee indicates that non-native trees to be removed include Mexican Fan Palms, eucalyptus, and coral trees. Any replacement trees would be required to be consistent with the landscaping plan approved under the original permit, detailed in **Special Condition 6** and **Special Condition 7**. The construction staging area would be sited in parkland between the northern bank of the lagoon and the golf course.

The amendment request also changes the approved project to eliminate a 135-foot long observation pier with thirty 12-inch steel piles which was authorized by the underlying permit but never constructed. That pier would have replaced a similar pier previously located northeast of the approach to the pedestrian foot bridge, which deteriorated and has been removed from the lagoon. The pedestrian foot bridge serves a similar purpose to the pier and the permittee has agreed that elimination of the pier from the approved project will enhance the value of the restored habitat.

B. PROJECT HISTORY

The Colorado Lagoon Restoration Project was developed with input from multiple stakeholders, including the California Coastal Conservancy, the San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy, U.S. Army Corps of Engineers, National Marine Fisheries Service, Regional and State Water Resources Control Boards, and the Friends of Colorado Lagoon. Phase One of the restoration project has already removed contaminated sediments, improved water quality, restored and enhanced native habitat, prevented recontamination and sedimentation, and enhanced public recreational opportunities. The project is partially funded by a $3.2 million grant distributed by the State Water Board as part of the American Recovery and Reinvestment Act (Federal Stimulus Bill.

The permittee is also pursuing a proposal that would allow a portion of the habitat restoration of the Colorado Lagoon to be used as mitigation for future impacts to habitat in Long Beach. Through a mitigation bank, the City would sell credits to interested parties who could use the credits as mitigation for future impacts to various habitat types. The City would use money from the sale of credits to fund future phases of the restoration, including a plan to construct an open channel to replace the culvert that connects Colorado Lagoon to Alamitos Bay. The details of the mitigation bank, habitat classifications, and crediting scheme are being considered by an interagency review

team in collaboration with City staff. The mitigation bank proposal is not subject to this permit amendment request. The proposal would be required to be approved by the Commission prior to any future sale of mitigation credits.

Finally, the City has already promised to establish a minimum of 2,908 square feet of new submerged soft bottom habitat as mitigation for permanent fill of coastal waters caused by the Naples Island Seawall Repair Project (Coastal Development Permit 5-11-085). Soft bottom habitat impacts from the Naples Island Seawall Repair Project must be mitigated at a 2:1 ratio and eelgrass impacts must be mitigated at a 1.2:1 ratio. The eelgrass mitigation for the Naples Island Seawall Repair Project may be provided in Colorado Lagoon or in the Marine Stadium Eelgrass Mitigation Site. Any soft bottom or eelgrass mitigation for impacts of the Naples Island Seawall Repair Project provided within Colorado Lagoon cannot be counted as credit under any future mitigation bank proposal.

While the Colorado Lagoon Restoration Project may be connected to a future mitigation bank proposal and has been identified as a mitigation site for impacts from the Naples Island Seawall Repair Project, which is already underway, neither the subject coastal development permit amendment nor the underlying Coastal Development Permit 5-09-071 authorize a mitigation bank or related crediting scheme. The development proposed by the subject amendment consists of an expanded bridge, eelgrass transplant, fence replacement, tree replacement, and power line relocation.

C. ENVIRONMENTALLY SENSITIVE HABITAT

The Coastal Act contains policies that address development in or near coastal waters. The proposed project is located in and adjacent to coastal waters that are part of Alamitos Bay. The standard of review for development proposed in coastal waters is the Chapter 3 policies of the Coastal Act. Sections 30230 and 30231 of the Coastal Act require the protection of biological productivity, coastal water quality, and marine resources. Section 30233 restricts the fill of coastal waters. Section 30240 requires that environmentally sensitive habitat areas (ESHA) like Colorado Lagoon shall be protected against significant disruption of habitat values, and only uses dependent on such resources shall be allowed. Also, development adjacent to ESHA shall prevent impacts that would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas.

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 30233 of the Coastal Act states:

(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:

1) 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.

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.

Colorado Lagoon is a 17.7-acre body of tidal water that serves as the natural low-point in the local watershed area of approximately 1,172 acres. The lagoon serves three main functions: hosting estuarine habitat, providing public recreation, 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 approved Colorado Lagoon Restoration Project includes several improvements that have already been completed and enhanced water quality, biological productivity, public recreation, and marine resources including: 1) the removal of contaminated sediments and deepening of the lagoon by dredging, 2) clearing of the tidal culvert that connects the lagoon to the bay, 3) removal of paved vehicular areas from the north shore, and 4) installation of low-flow diversions and trash separation devices in the storm drains. The Commission, on August 14, 2009, found that the proposed restoration project (including the dredging) will result in significant improvement of the water quality, biological productivity, and public recreation in Colorado Lagoon consistent with the requirements of the marine resource policies of the Coastal Act. In a letter dated September 22, 2009, the National Marine Fisheries Service concluded that the impacts of the restoration project would be temporary and the project would have long-term benefits to Essential Fish Habitat.

The special conditions imposed by the underlying Coastal Development Permit 5-09-071 are adequate to protect coastal resources during the proposed second phase of restoration, which includes fill of the western and northern arms of the lagoon with sediment recovered from the re-contouring of the northern bank. Approval of the subject permit amendment is subject to the special conditions imposed by the Commission's approval of the underlying permit. **Special Condition 1** of the underlying permit requires the permittee to comply with a set of construction and post-construction best management practices to preserve water quality.

Coastal Development Permit Amendment request 5-09-071-A2 includes a 150 foot extension of an existing pedestrian foot bridge which spans the western arm of Colorado Lagoon. The bridge extension is necessary because the re-contouring of the northern lagoon bank authorized by the underlying permit and the Naples Island Seawall Repair Project (Coastal Development Permit 5-11-085) will expand the total water coverage and the habitat area on the northern bank. The bridge must be lengthened to cross over the entire portion of water and minimize foot traffic on sensitive upland buffer habitat along the northern bank. The southern approach to the bridge is proposed to be modified to provide a transition from an existing walkway over the restored and enhanced upland buffer to the existing bridge. The bridge extension requires sixteen 20-inch diameter concrete piles to support the new span **(Exhibit 3)**.

The proposed new concrete piles will result in fill of approximately 83 square feet of soft bottom habitat area. The majority of the area where the new piles will be located is currently filled with sediment and will be established as subtidal and intertidal habitat once the re-contouring is complete. Therefore, the piles will not impact existing sensitive habitat area; they will merely take up space where new habitat could have been established. The piles are allowable under Section 30233(a)(3) of the Coastal Act because they are necessary to support a public recreational facility. The pedestrian bridge over the lagoon will provide public views of the restored and enhanced habitat area and the bridge will enhance public access through the restoration site and recreational parkland. The impact of the fill of approximately 83 square feet of the soft bottom of the lagoon will be mitigated in part by the surface area of the piles and in part by the City's proposal to eliminate the 135-foot long observation pier and associated piles from the approved project. The thirty 12-inch steel piles approved by the underlying permit would have filled 94 square feet of soft bottom habitat, which will now be preserved. In order to preserve water quality, **Special Condition 4** of the

underlying coastal development permit requires the permittee to refrain from using timber treated with harmful chemicals – which applies to any exposed wood on the pedestrian foot bridge that could come into contact with the water.

The subject amendment request includes the creation of an approximately 6.3-acre shallow subtidal potential eelgrass habitat area within Colorado Lagoon. The filling required to create the shallow subtidal area is already authorized by Coastal Development Permit 5-11-085. The permittee would plant the eelgrass in the large area using the anchor/bundle technique, as detailed in Section A of this staff report. The permittee would conduct a survey of eelgrass and toxic algae in the lagoon prior to the next phase of construction, and another survey following construction and eelgrass transplant, as required by **Special Condition 2** and **Special Condition 3** of the underlying permit. Additionally, should the City request to use any of the approximately 6.3 acres of potential new eelgrass habitat as mitigation credit for eelgrass impacts caused by future development, it would be required to complete thorough monitoring of the transplant site over five years, as detailed in a separate proposal not subject to this coastal development permit amendment. Any portion of the established soft bottom habitat which is covered by the new piles for the pedestrian foot bridge would not be allowed to be counted again for future mitigation credits.

The proposals to replace a section of chain link fence, remove non-native trees and plant native trees, and relocate electric lines and associated infrastructure will enhance the habitat potential of the upland buffer areas surrounding the lagoon and park **(Exhibit 3)**. Any replacement trees must be consistent with the landscaping plan approved under the original permit, detailed in **Special Condition 6** and **Special Condition 7**. In order to protect birds who may be nesting in the existing habitat areas, **Special Condition 6** further requires the City to protect areas of existing native vegetation during eradication of the non-native plants, and that the work areas be surveyed for bird nests prior to any disturbance. No bird nests are permitted to be disturbed. **Special Condition 7** requires that tree trimming, non-native tree removal, and ongoing maintenance of Colorado Lagoon Park shall be conducted in a manner that protects wildlife habitat and the long-term protection of breeding, roosting, and nesting habitat of state and federally listed bird species, California bird species of special concern, and bird species that play an especially valuable role in the ecosystem. Finally, to protect the environmentally sensitive habitat and the adjacent coastal waters, the permittee proposes construction best management practices for the installation of the bridge, new fencing, and relocated electric lines and associated infrastructure.

The resource agencies may require further mitigation measures to minimize or avoid impacts to marine resources. Therefore, **Special Condition 8** requires the permittee 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 marine environment. Any change in the approved project which may be required by the above-stated agencies shall be submitted to the Executive Director in order to determine if the proposed changes shall require a permit amendment pursuant to the requirements of the Coastal Act and the California Code of Regulations.

Therefore, as conditioned by the underlying coastal development permit, the proposed permit amendment is consistent with Sections 30230, 30231, 30233, and 30240 of the Coastal Act.

D. PUBLIC ACCESS AND RECREATION

One of the basic goals stated in the Coastal Act is to maximize public access and recreation along the coast. The proposed project must conform with the following Coastal Act policies which protect and encourage public access and recreational use of coastal areas.

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 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.*

Colorado Lagoon is surrounded by 18.5 acres of public parkland managed by the City of Long Beach. Existing improvements in Colorado Lagoon Park consist of restroom facilities, a lifeguard station, the Wetland and Marine Science Education Center, a preschool and model boat shop building, playground equipment, picnic tables, and a metered parking lot parallel to Appian Way. The central lagoon, provides a popular beach and water play area.

The proposed project will provide for the public's continuing recreational use of the recreational facilities at Colorado Lagoon. Swimming and water play will be permitted only at the beach at the southern central part of lagoon. The beach and water play area will benefit from the project's expected improvement of water quality. The proposed pedestrian foot bridge extension will provide improved recreational opportunities for wildlife viewing and nature study. New and improved walking trails will provide for public pedestrian access along the northern, eastern, and southern banks of the lagoon. The replacement fencing will prevent visitors from trampling the sensitive habitat areas.

Although the project will temporarily impact the use of some portions of the lagoon and park during the completion of the proposed restoration project, the public benefits of the project outweigh the inconveniences of the construction. The completion of the proposed project will result in a substantially improved public recreation area. Therefore, the proposed project and the permit amendment will not have a substantial negative effect on the public's ability to access the coast, and is consistent with the public access and recreation policies of the Coastal Act.

E. LOCAL COASTAL PROGRAM

Pursuant to Section 30519 of the Coastal Act, development located within the Commission's area of original jurisdiction requires a coastal development permit from the Commission. The Commission's area of original jurisdiction includes tidelands, submerged lands, and public trust lands, whether filled or unfilled. The proposed project is situated on submerged lands and on filled tidelands within the Commission's area of original jurisdiction.

The Commission's standard of review for the proposed development in its area of original jurisdiction 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 City of Long Beach LCP was certified by the Commission on July 22, 1980.

The proposed project generally conforms with the provisions of the City of Long Beach certified LCP. Colorado Lagoon has a zoning designation of Park (P) and designated as a Special Use Park. The certified LCP policies for Colorado Lagoon, as set forth in the LCP's Resource Management Plan, state:

A. General Policy

Use of Colorado Lagoon should be primarily recreational. However, presence of its unique clam population requires strong conservational considerations. Commercial use other than food services and beach equipment should not be allowed. Educational uses should be encouraged.

B. Guidelines

1. Management Responsibility

Overall management of Colorado Lagoon will be vested in the Marine Department (see Alamitos Bay).

2. Water Quality

a. The major storm drains presently emptying into the west and north arms of the lagoon should be diverted to the ocean or the San Gabriel River.
b. Sediments deposited by the storm drains should be removed and replaced by sand. Clams should be re-bedded. Entire process should be supervised by Department of Fish and Game.

3. Public Access

a. When recreational use conflicts with maintenance of the clam population, controls must exists in favor of the latter.
b. Public health and safety must be assured during major maintenance activities and periods of poor water quality or exposed sediments.
c. Provide directive signs and other amenities to encourage maximum use of the north beach and parking lot.

d. Health Department should monitor clams to preclude human ingestion of toxic metals.
e. A children's play module should be provided on the south shore.

4. Maintenance

Prepare a plan for upgrading and maintaining the appearance of lagoon area. This plan should include improved landscaping, grass picnic areas (especially at the northwest end), erosion control, and increased beach area. The plan should be in two phases, recognizing the impact of Guidelines 2a and b.

As conditioned, the proposed development is consistent with Chapter 3 of the Coastal Act and with the certified LCP for the area.

F. CALIFORNIA ENVIRONMENTAL QUALITY ACT

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 accordance with the guidelines for implementation of the California Environmental Quality Act, the Long Beach City Council certified an Environmental Impact Report on October 14, 2008 for the Colorado Lagoon Restoration Project (EIR 30-07, SCH No. 2007111034). The EIR determined that all potentially significant adverse environmental impacts could be mitigated to a less than significant level except for short-term construction air quality impacts related to vehicle emissions and dredged material odors, cumulative air quality impacts, short-term construction noise impacts, and cumulative noise impacts. A Statement of Overriding Considerations prepared in accordance with CEQA determined that specific project benefits outweigh these unavoidable adverse effects and therefore the adverse effects are considered an acceptable part of this project. The project benefits include improved lagoon water quality, improved lagoon water circulation with tidal connection to Alamitos Bay, restored and enhanced estuarine habitats, and enhanced public recreational opportunities.

On November 16, 2010, the Long Beach City Council certified an addendum to the EIR for the revised Colorado Lagoon Restoration Project, which includes the increase in the amount of dredging (to 72,000 cubic yards) associated with the project. The City Council found that the revised project will not result in any additional significant impacts, nor would it increase the severity of the previously anticipated impacts.

The proposed project, as revised by this permit amendment, 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 the permit 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, July 22, 1980.

2. Final Environmental Impact Report Addendum for the Colorado Lagoon Restoration Project, Long Beach, CA. September 2010 (SCH No. 2007111034).

3. Coastal Development Permit 5-11-085 (City of Long Beach), Naples Island Seawall Repair Project.

4. Coastal Development Permit 5-10-263 (City of Long Beach), Alamitos Bay Marina Rehabilitation Project.

Vicinity Map: Colorado Lagoon, Long Beach

Application No. 5-09-071-A2: Exhibit 1

City of Long Beach - Colorado Lagoon Restoration Phase 2B
CDP 5-09-071

SUMMARY MATRIX: PHASE 2B - COLORADO LAGOON PROPER

	PROJECT COMPONENTS	5-09-071	5-09-071-A1	NOTES	5-09-071 Project Components to be Completed as part of Phase 2B Restoration	5-11-085 (Naples)
1	Dredging & Removal of 32,500 cubic yards **A1**: Increase the amount of dredging for the Colorado Lagoon Restoration Project from 32,500 cubic yards to 72,000 cubic yards	COMPLETED	COMPLETED	Sediment was removed and was beneficially reused at the Middle Harbor Development in the Port of Long Beach	Will continue as part of Phase 2B restoration. Cutting of north shore/banks and beneficially reusing material to lift elevations in both north and west arms for habitat restoration	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 the fill of the bay that will result from the implementation of the Naples Island Seawall Repair Project (Phase One through Six).
2	Re-contouring the lagoon banks	COMPLETED	n/a	Creation of shallow subtidal habitat through re-contouring of the lagoon banks is also authorized by CDP 5-11-085.	Will continue as part of Phase 2B restoration. Cutting of north shore/banks and beneficially reusing material to lift elevations in both north and west arms for habitat restoration	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...
3	Diversion of low-flows from storm drains into the sanitary sewer	COMPLETED	n/a	n/a	n/a	n/a
4	Installation of trash collection devices in three major storm drains	COMPLETED	n/a	n/a	n/a	n/a
5	Creation of two vegetated bioswales between the water and the adjacent golf course	COMPLETED	n/a	One vegetated bioswale is not functioning correctly.	Will continue as part of Phase 2B restoration. The City proposes to extend an existing bioswale around the perimeter of the golf course/lagoon fence line to improve its function.	Conduct all landscaping consistent with the terms of this condition and the terms of amended CDP 5-09-071.
6	Clearing of the tidal culvert connecting the lagoon to Alamitos Bay	COMPLETED	n/a	n/a	n/a	n/a
7	Demolition of the northern paved parking lot, access road and restroom	2 of 3 COMPLETED	n/a	Access road was not demolished; parking lot and restroom were removed.	Will continue as part of Phase 2B restoration. The City will demolish the existing paved access road.	n/a
8	Re-vegetating the former parking area and lagoon banks with native plants	NOT COMPLETED	n/a	Will construct as part of Phase 2B construction efforts. FOCL revegetated Western Arm and portions of North Arm	Will be implemented as part of Phase 2B restoration.	Conduct all landscaping consistent with the terms of this condition and the terms of amended CDP 5-09-071.
9	Construction of public access trails	NOT COMPLETED	n/a	Will construct as part of Phase 2B construction efforts	Will be implemented as part of Phase 2B restoration.	n/a
10	Construction of a 135-foot long observation pier with thirty piles (to replace existing pier).	NOT COMPLETED	n/a	Eliminated due to cost	n/a	n/a
PROPOSED ADDITIONAL PROJECT COMPONENTS VIA PERMIT AMENDMENT NO. 2 (5-09-071-A2)						

Application No. 5-09-071-A2
Exhibit 2
Page 1 of 3

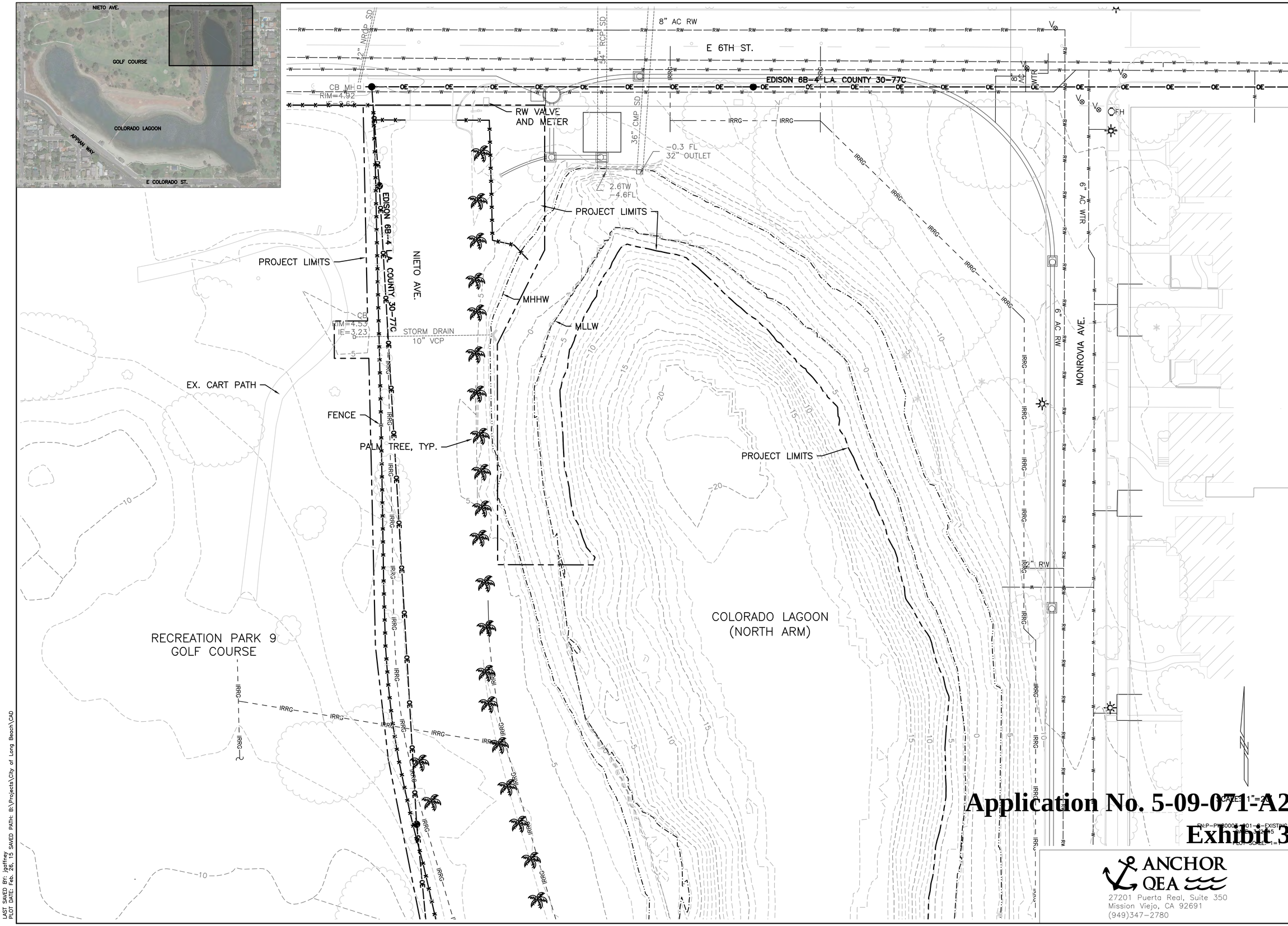
City of Long Beach - Colorado Lagoon Restoration Phase 2B
CDP 5-09-071

SUMMARY MATRIX: PHASE 2B - COLORADO LAGOON PROPER

	PROJECT COMPONENTS	5-09-071	5-09-071-A1	NOTES	5-09-071 Project Components to be Completed as part of Phase 2B Restoration	5-11-085 (Naples)
11	Extend existing floating bridge to traverse expanded lagoon	n/a	n/a	Creation of additional intertidal and subtidal habitat requires extension of the existing footbridge in the same alignment.	Will be implemented as part of Phase 2B restoration.	n/a
12	Transplant eelgrass in Northern Arm and northern shallow subtidal areas	n/a	n/a	Eelgrass will be established as part of the habitat restoration component of Phase 2B. Establishment of eelgrass as mitigation for the Naples Seawall Repair Project is authorized by CDP 5-11-085.	Will be implemented as part of Phase 2B restoration.	Colorado Lagoon may be used as an alternative mitigation site if there is not adequate mitigation area at Marine Stadium Eelgrass Mitigation Site.
13	Remove and install new fence between golf course and lagoon property	n/a	n/a	Existing fence is in need of replacement and the new fence will be consistent with the habitat restoration goals of the project.	Will be implemented as part of Phase 2B restoration.	n/a
14	Remove non-native trees including Mexican fan palms; eucalyptus, and coral trees	n/a	n/a	Non-native trees will be replaced with native trees as part of the habitat restoration project.	Will be implemented as part of Phase 2B restoration.	Special Condition 6F states that no plants species listed as problematic or invasive may be allowed to naturalize or persist at the site.
15	Relocate overhead utility line, utility poles inland towards the golf course; replace electrical dropbox, and install secondary dropbox	n/a	n/a	A portion of the existing electrical utility infrastructure will be relocated to facilitate restoration plantings and bioswale.	Will be implemented as part of Phase 2B restoration.	n/a
ADMINISTRATIVE & CONSTRUCTION REQUIREMENTS APPLICABLE TO COLORADO LAGOON BY CDP NO. 5-11-085						
i.						**Mitigation & Monitoring Plan**. If Colorado Lagoon is utilized as an alternative mitigation site, a detailed Eelgrass Mitigation & Monitoring Plan for Colorado Lagoon shall be submitted to the Executive Director, prior to the completion of the Phase One Naples Seawall Replacement Project. **Submitted by Eric Lopez on October 1, 2014, Habitat Mitigation and Monitoring Plan for Colorado Lagoon.**
ii.						**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. **To be submitted.**

SUMMARY MATRIX: PHASE 2B - COLORADO LAGOON PROPER

	PROJECT COMPONENTS	5-09-071	5-09-071-A1	NOTES	5-09-071 Project Components to be Completed as part of Phase 2B Restoration	5-11-085 (Naples)
iii.						**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. 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 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 Condition Three within 36 months of the grading and re-contouring...
iv.						**Erosion Control**
v.						**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.
vi.						**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 re-vegetation plan approved by the Executive Director.



Application No. 5-09-071-A2
Exhibit 3

ANCHOR QEA
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691
(949)347-2780

REVISIONS

No.	DATE	SHEET	APPROVAL	DESCRIPTION

AS-BUILT:

REF. DWG. X-XXXX DWG. X-XXXX
DWG. X-XXXX

DESIGNED BY: K.KETTERIDGE
DRAWN BY: E.PIPKIN
DESIGN CHECK BY: M.WHELAN
DRAFTING CHECK BY: K.KETTERIDGE

REGISTERED PROFESSIONAL ENGINEER MICHAEL P. WHELAN No. C69833 Exp. 6/30/16 CIVIL STATE OF CALIFORNIA

COLORADO LAGOON PHASE 2B DESIGN

EXISTING CONDITIONS 1 OF 7

GRAPHIC SCALE 0 1 2 3

PAGE X.X.X.
FIELD BOOK X.X.X.

JOB NO. PW800-03
NO. R- 6996
SHEET 4 OF 68
DRAWING NO. C-2

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PLOT DATE: Feb. 26, 15 SAVED PATH: B:\Projects\City of Long Beach\CAD

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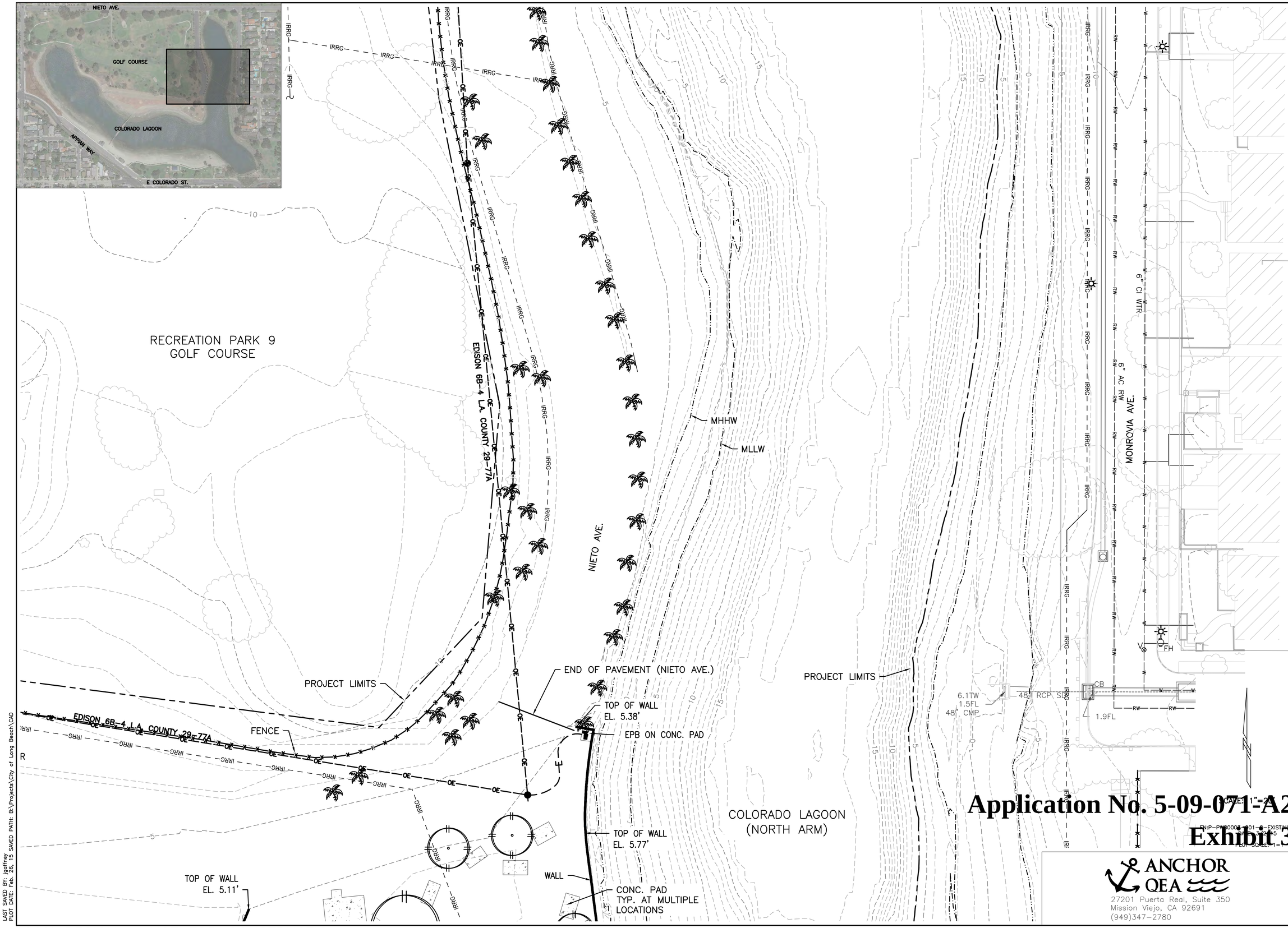

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REVISIONS

No.	DATE	SHEET	APPROVAL	DESCRIPTION

AS-BUILT:

REF. DWG. X-XXXX DWG. X-XXXX
DWG. X-XXXX

DESIGNED BY: K.KETTERIDGE
DRAWN BY: E.PIPKIN
DESIGN CHECK BY: M.WHELAN
DRAFTING CHECK BY: K.KETTERIDGE

REGISTERED PROFESSIONAL ENGINEER MICHAEL P. WHELAN No. C68833 Exp. 6/30/16 CIVIL STATE OF CALIFORNIA

COLORADO LAGOON PHASE 2B DESIGN

EXISTING CONDITIONS 2 OF 7

GRAPHIC SCALE 0 1 2 3

PAGE X.X.X.

FIELD BOOK X.X.X.

JOB NO. PW800-03

NO. R- 6996

SHEET 5 OF 68

DRAWING NO. C-3

PROJECT LIMITS

END OF PAVEMENT (NIETO AVE.)

PROJECT LIMITS

EDISON 6B-4 L.A. COUNTY 29-77A

FENCE

ROCK WEIR

TOP OF WALL
EL. 5.38'

EPB ON CONC. PAD

6.1TW
1.5FL
48" CMP

48" RCP SD

CB

1.9FL

COLORADO LAGOON
(NORTH ARM)

TOP OF WALL
EL. 5.77'

WALL

CONC. PAD
TYP. AT MULTIPLE
LOCATIONS

TOP OF WALL
EL. 5.11'

MHHW

TOP OF WALL
EL. 5.75'

MLLW

TOP OF WALL
EL. 5.77'

TOP OF WALL
EL. 5.75'

TOP OF WALL
EL. 5.77'

TOP OF WALL
EL. 5.81'

COLORADO LAGOON

PROJECT LIMITS

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100% DESIGN – NOT FOR CONSTRUCTION

Application No. 5-09-071-A2

Exhibit 3

ANCHOR QEA
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691
(949)347-2780

REVISIONS				
No.	DATE	SHEET	APPROVAL	DESCRIPTION
AS-BUILT:				REF. DWG. X-XXXX DWG. X-XXXX DWG. X-XXXX

DESIGNED BY: K.KETTERIDGE
DRAWN BY: E.PIPKIN
DESIGN CHECK BY: M.WHELAN
DRAFTING CHECK BY: K.KETTERIDGE

REGISTERED PROFESSIONAL ENGINEER MICHAEL F. WHELAN No. C68933 Exp. 6/30/16 CIVIL STATE OF CALIFORNIA

COLORADO LAGOON PHASE 2B DESIGN

EXISTING CONDITIONS 3 OF 7

GRAPHIC SCALE 0 1 2 3

PAGE X.X.X.

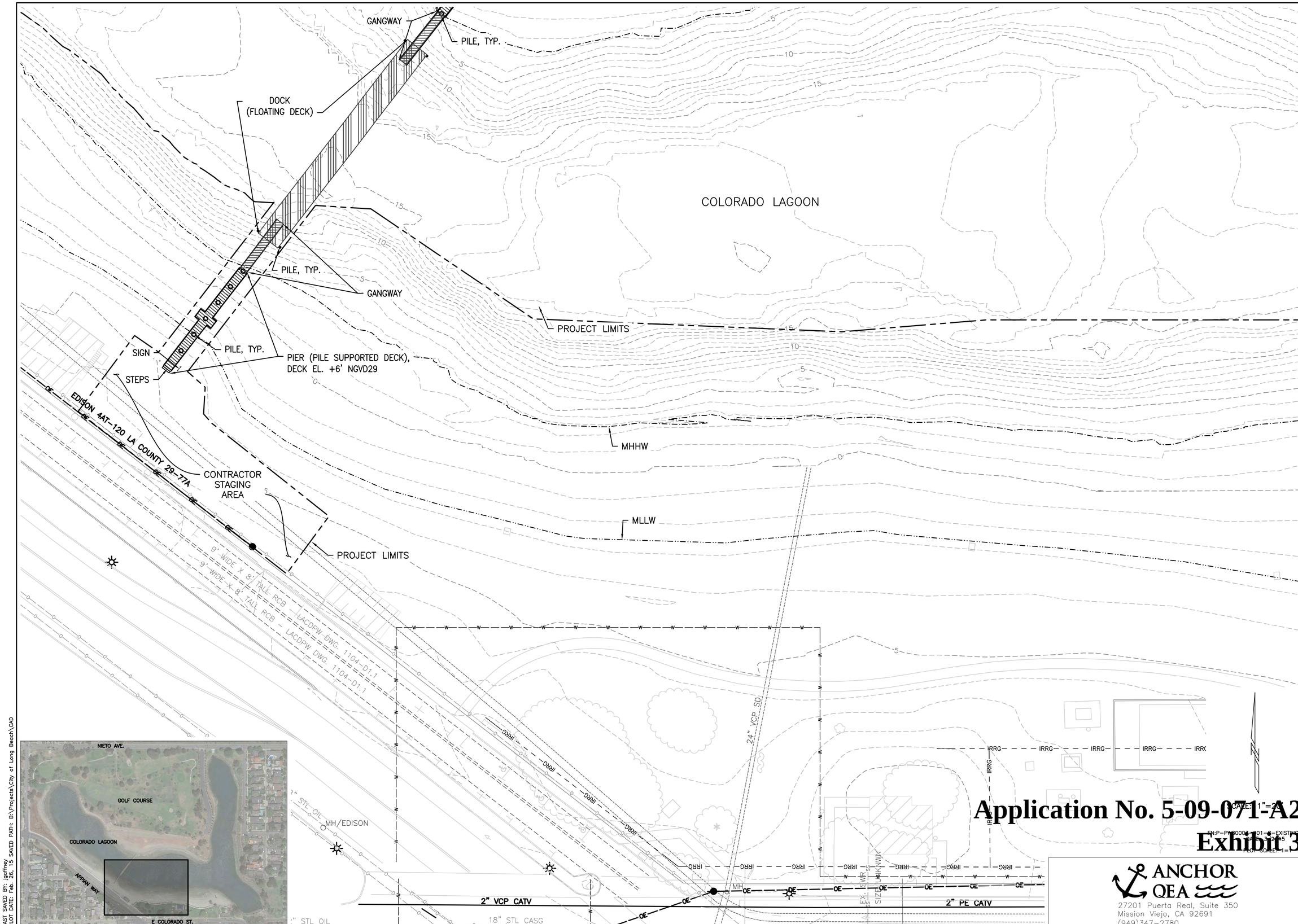
FIELD BOOK X.X.X.

JOB NO. PW800-03

NO. R- 6996

SHEET 6 OF 68

DRAWING NO. C-4



Application No. 5-09-071-A2
Exhibit 3

ANCHOR QEA
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691
(949)347-2780

REVISIONS

No.	DATE	SHEET	APPROVAL	DESCRIPTION

AS-BUILT:

REF. DWG. X-XXXX DWG. X-XXXX
DWG. X-XXXX

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DRAWN BY: E.PIPKIN
DESIGN CHECK BY: M.WHELAN
DRAFTING CHECK BY: K.KETTERIDGE

REGISTERED PROFESSIONAL ENGINEER MICHAEL P. WHELAN No. C69833 Exp. 6/30/16 CIVIL STATE OF CALIFORNIA

COLORADO LAGOON PHASE 2B DESIGN

EXISTING CONDITIONS 5 OF 7

GRAPHIC SCALE 0 1 2 3

PAGE X.X.X.

FIELD BOOK X.X.X.

JOB NO. PW800-03
NO. R- 6996
SHEET 8 OF 68
DRAWING NO. C-6

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EPB ON CONC. PAD
GATE
WIRE FENCE
EXISTING BIOSWALE DRAINAGE TRENCH
OUTFALL, 20" DIA. I.E. 4.19'
DRAINS EXISTING BIOSWALE
POWER POLE
OUTFALL, 20" DIA.
I.E. 3.05'
FENCE
PROJECT LIMITS
SWALE CHANNEL
ROCK WEIR
ROCK WEIR
SIGN
MHHW
MLLW
COLORADO LAGOON
(WEST ARM)
SIGN
STEPS
PIER (PILE SUPPORTED DECK),
DECK EL. +6' NGVD29
PILE, TYP.
PROJECT LIMITS
GANGWAY
PILE, TYP.
DOCK
(FLOATING DECK)
PILE, TYP.
GANGWAY

Application No. 5-09-071-A2
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REVISIONS				
No.	DATE	SHEET	APPROVAL	DESCRIPTION
AS-BUILT:			REF. DWG. X-XXXX DWG. X-XXXX	

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COLORADO LAGOON PHASE 2B DESIGN

EXISTING CONDITIONS 6 OF 7

GRAPHIC SCALE 0 1 2 3

PAGE X.X.X.
FIELD BOOK X.X.X.

JOB NO. PW800-03
NO. R- 6996
SHEET 9 OF 68
DRAWING NO. C-7

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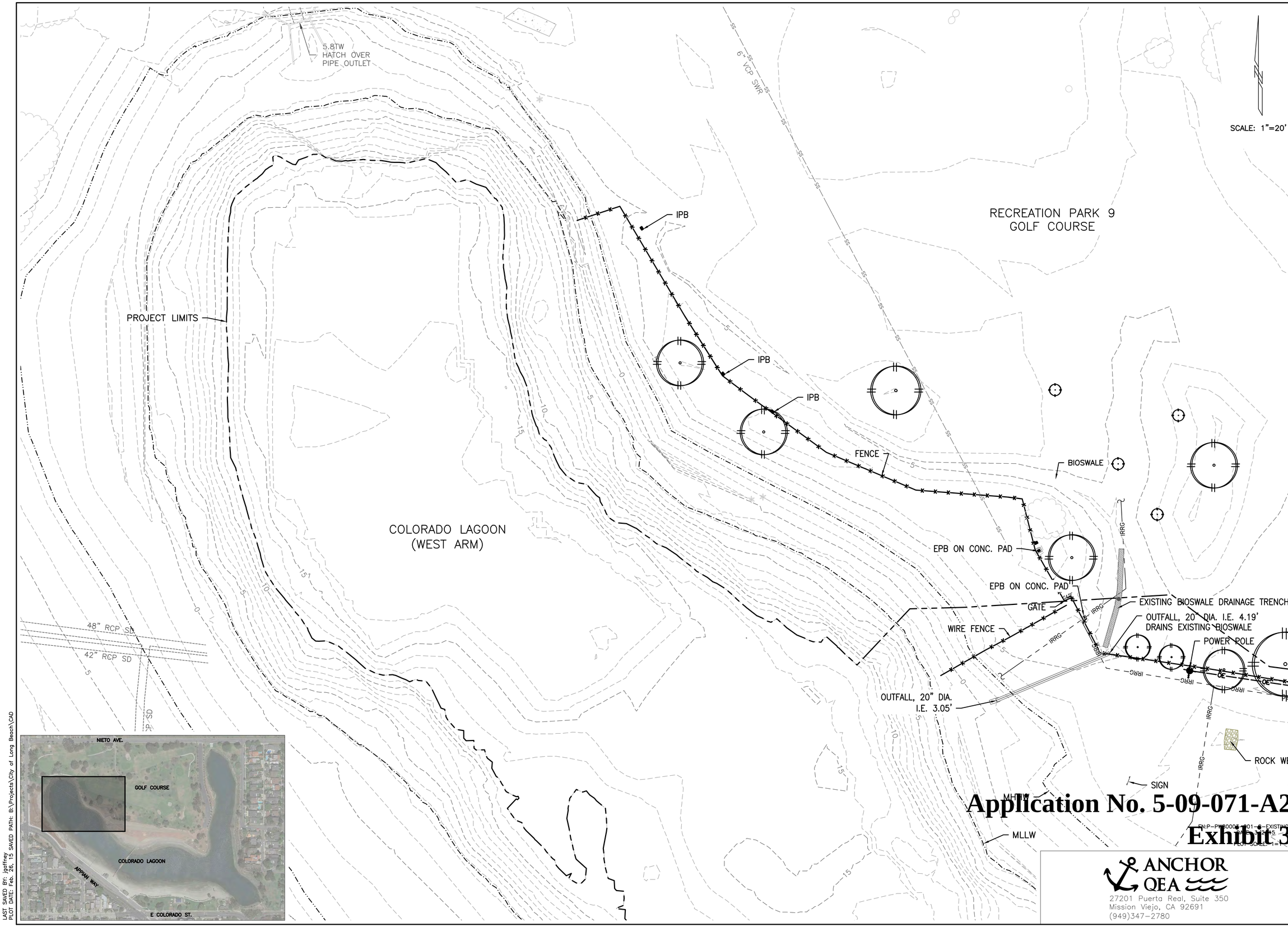

Application No. 5-09-071-A2

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REVISIONS

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REGISTERED PROFESSIONAL ENGINEER
MICHAEL P. WHELAN
No. C69833
Exp. 6/30/16
CIVIL
STATE OF CALIFORNIA

COLORADO LAGOON PHASE 2B DESIGN

EXISTING CONDITIONS 7 OF 7

GRAPHIC SCALE 0 1 2 3

PAGE X.X.X.

FIELD BOOK X.X.X.

JOB NO. PW800-03
NO. R- 6996
SHEET 10 OF 68
DRAWING NO. C-8

CONTROL POINTS		
POINT #	NORTHING	EASTING
51	1739955.9	6521273.2
52	1739867.5	6521275.3
53	1739685.7	6521279.4
54	1739630.0	6521285.7
55	1739476.6	6521316.1
56	1739366.4	6521309.4
57	1739310.1	6521252.8
58	1739384.5	6520681.2
59	1739953.2	6521274.3
60	1739948.5	6521288.5
61	1739948.5	6521316.5
62	1739948.5	6521351.5
63	1739908.5	6521351.5
64	1739901.5	6521358.6

Application No. 5-09-071-A2
Exhibit 3

SCALE: 1" = 20'
FN:P-PW800003007-C-FENCING
PLOT DATE: 6/30/15
PLOT SCALE: 1=1

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No.	DATE	SHEET	APPROVAL	DESCRIPTION

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REF. DWG. X-XXXX DWG. X-XXXX
DWG. X-XXXX

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REGISTERED PROFESSIONAL ENGINEER
MICHAEL P. WHELAN
No. C68833
Exp. 6/30/16
CIVIL
STATE OF CALIFORNIA

COLORADO LAGOON PHASE 2B DESIGN

FENCING PLAN

GRAPHIC SCALE 0 1 2 3

PAGE X.X.X.
FIELD BOOK X.X.X.

JOB NO. PW800-03
NO. R- 6996
SHEET 32 OF 68
DRAWING NO. C-30

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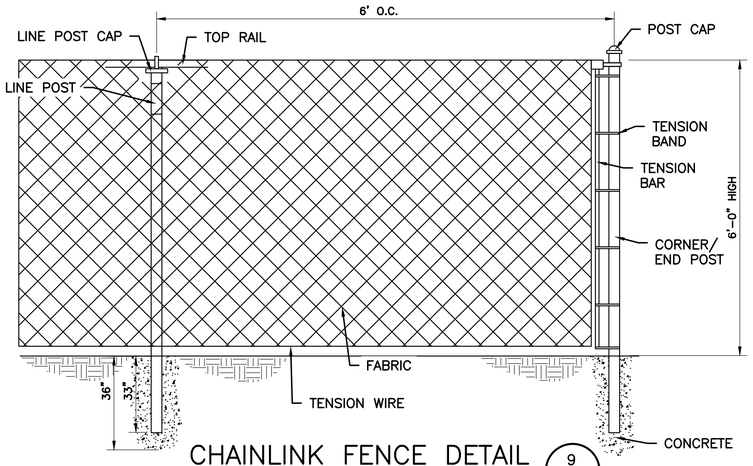
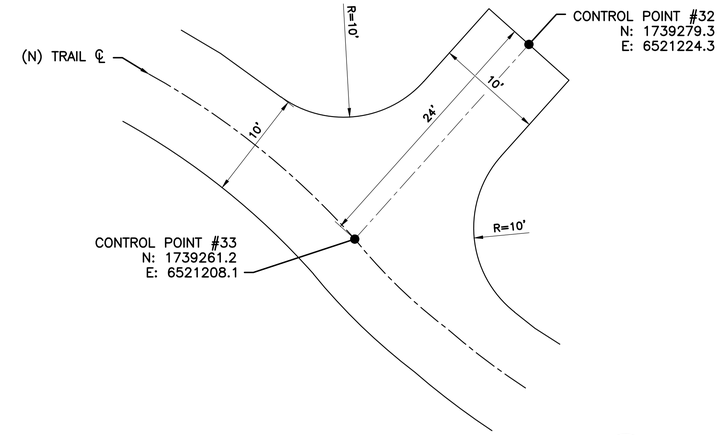


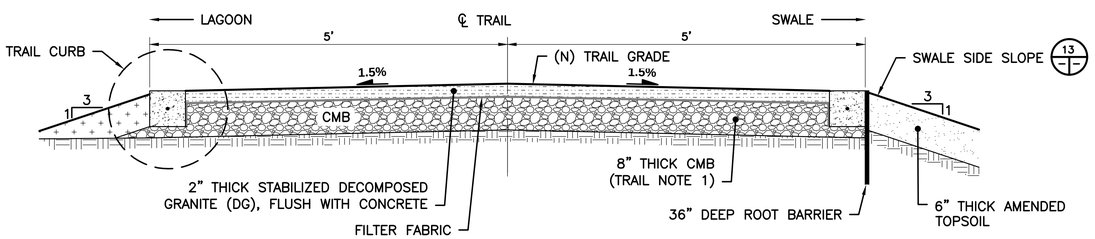
CHAINLINK FENCE DETAIL (9 / 32|35)

SCALE: N.T.S.



TRUCK TURNAROUND DETAIL (10 / 18|35)

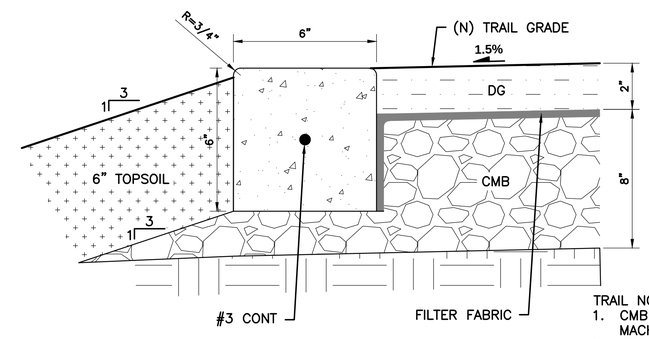
SCALE: N.T.S.



NOTE: FOR TRAIL AND BIOSWALE STATION SPECIFIC CROSS SECTION DETAILS, SEE SHEET 27

TRAIL DETAIL (11 / 34|35)

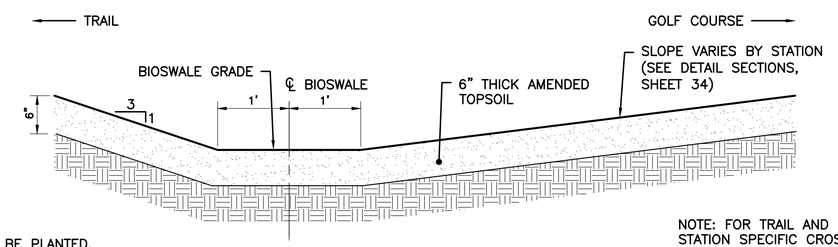
SCALE: N.T.S.



TRAIL NOTES:
1. CMB TO BE GENERATED FROM ON-SITE CRUSHING MACHINE TO A 3-INCH MINUS GRADING.
2. TRAIL SUBGRADE, CMB BASE, AND DG TO BE COMPACTED TO 90% RELEVATIVE.

TRAIL CURB DETAIL (12 / –|–)

SCALE: N.T.S.

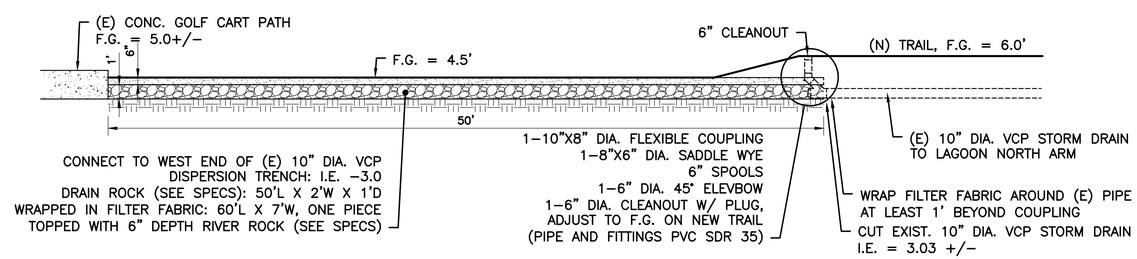


BIOSWALE NOTES:
1. BIOSWALE TO BE PLANTED. SEE SHEETS 52–61.

NOTE: FOR TRAIL AND BIOSWALE STATION SPECIFIC CROSS SECTION DETAILS, SEE SHEET 27

BIOSWALE DETAIL (TYP.) (13 / 34|35)

SCALE: N.T.S.



BIOSWALE CONNECTION (17 / 35)

SCALE: N.T.S.

Application No. 5-09-071-A2

Exhibit 3

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DESIGNED BY: K.KETTERIDGE
DRAWN BY: E.PIPKIN
DESIGN CHECK BY: M.WHELAN
DRAFTING CHECK BY: K.KETTERIDGE

REGISTERED PROFESSIONAL ENGINEER MICHAEL P. WHELAN No. C68933 Exp. 6/30/16 CIVIL STATE OF CALIFORNIA

COLORADO LAGOON PHASE 2B DESIGN

TYPICAL DETAILS 2

GRAPHIC SCALE 0 1 2 3

PAGE X.X.X.
FIELD BOOK X.X.X.

JOB NO. PW800–03
NO. R– 6996
SHEET 35 OF 68
DRAWING NO. C–32

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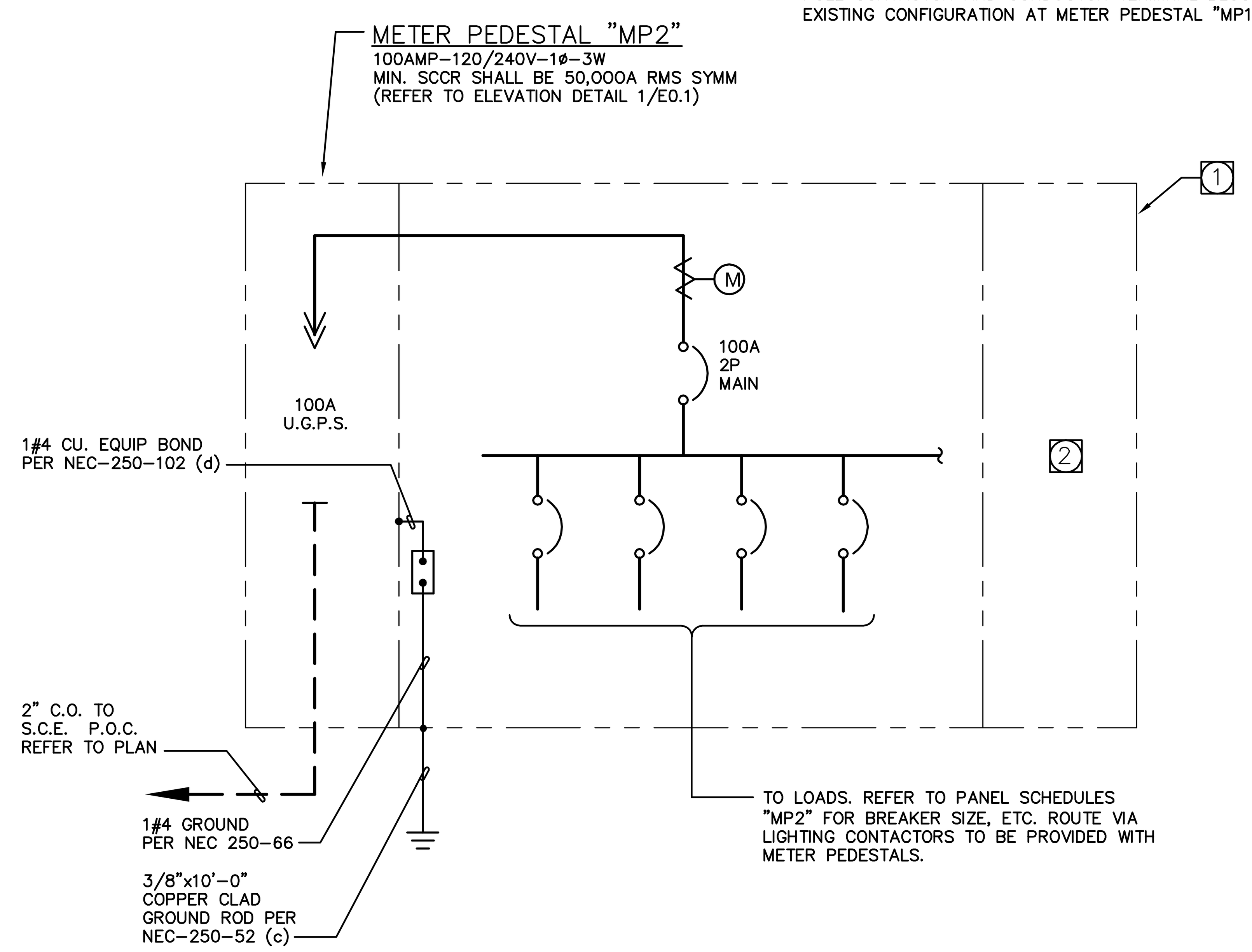
1. METER PEDESTAL TO BE COMBINATION PEDESTAL WITH SEPARATE AUXILIARY COMPARTMENT.
2. CONTRACTOR SHALL PROVIDE AND INSTALL INTERMATIC #T101 TIME CLOCK, 2-POLE FUSE BLOCK WITH 60A FUSES, SQUARE D 60 AMP 2 POLE CONTACTOR AND CONDUCTOR TERMINAL BLOCK TO MATCH EXISTING CONFIGURATION AT METER PEDESTAL "MP1".



GENERAL NOTES

1. PROVIDE ALL MATERIALS AND LABOR AS REQUIRED TO ACHIEVE A COMPLETE AND OPERATIONAL SYSTEM.
2. COORDINATE AND OBTAIN APPROVALS FROM ALL RESPECTIVE UTILITY COMPANIES AS REQUIRED FOR A COMPLETE AND FUNCTIONAL INSTALLATION.
3. INSTALL RACEWAY SYSTEMS AS FOLLOWS:
   a. USE RIGID GALVANIZED STEEL IN ALL AREAS EXPOSED TO WEATHER OR PHYSICAL DAMAGE.
   b. USE FLEXIBLE METALLIC CONDUIT ONLY IN AREAS AS PERMITTED BY LOCAL CODE AUTHORITY.
   USE SEAL–TITE IN AREAS EXPOSED TO WEATHER.
   c. USE COMPRESSION TYPE FITTINGS FOR ELECTRICAL METALLIC TUBING WHERE UTILIZED.
   d. USE P.V.C. CONDUIT UNDERGROUND WITH CODE SIZED GROUND. CONDUIT RISERS AND STUBS ABOVE GRADE SHALL BE I.M.C. WITH HALF–LAPPED TAPE COVERING.
   e. EXPOSED CONDUITS SHALL BE PVC COATED RGS EM.
4. ALL NEW WIRING SHALL BE COPPER TYPE "THHN/THWN" – U.O.N..
9. THESE DRAWINGS ARE DIAGRAMMATIC AND REPRESENT THE INTENT OF EQUIPMENT, DEVICES, ETC... TO BE CONNECTED AND THE CIRCUITS TO WHICH THEY ARE TO BE CONNECTED TO. CONTRACTOR SHALL INSTALL ALL CONDUIT, J–BOXES, ETC... AS REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM.
10. ALL EXTERIOR EQUIPMENT SHALL BE WEATHERPROOF.
11. ELECTRICAL CONTRACTOR SHALL PERFORM ALL WORK IN STRICT ACCORDANCE WITH ALL LOCAL, STATE, AND NATIONAL GOVERNING CODES.
12. ALL EQUIPMENT SHALL BE NEW AND BEAR A "UL" LABEL – U.O.N..
13. ELECTRICAL CONTRACTOR SHALL SECURE AND PAY FOR ALL NECESSARY BUILDING PERMITS.
14. COMPLETE ELECTRICAL INSTALLATION SHALL BE GUARANTEED IN WRITING FOR A PERIOD OF (1) YEAR – U.O.N..
15. ELECTRICAL CONTRACTOR SHALL VISIT SITE PRIOR TO BID DATE, TO VERIFY ALL EXISTING CONDITIONS TO BE ENCOUNTERED IN THE INSTALLATION OF ALL NEW EQUIPMENT, FIXTURES, DEVICES, FEEDERS, ETC.. EXACT INSTALLATION METHOD AND REQUIREMENTS SHALL BE VERIFIED AND DETERMINED PRIOR TO BID DATE. CONTRACTORS SHALL IMMEDIATELY NOTIFY THIS ENGINEER OF ANY REQUIRED MODIFICATIONS WHICH ARE NOT SHOWN ON THESE DRAWINGS. SUBMITTAL OF BID INDICATES CONTRACTOR IS AWARE OF ALL JOB SITE CONDITIONS AND WORK TO BE PERFORMED.
16. ALL ELECTRICAL EQUIPMENT CHARACTERISTICS, LOCATIONS, AND CONNECTION REQUIREMENTS SHALL BE VERIFIED PRIOR TO ANY ROUGH–IN WORK.
17. ELECTRICAL CONTRACTOR SHALL FURNISH THE FOLLOWING SHOP DRAWINGS FOR PRIOR APPROVAL:
   a. ALL SUBSTITUTED LIGHT FIXTURES.
   b. ALL ELECTRICAL SERVICE EQUIPMENT, DISTRIBUTION EQUIPMENT AND PANELBOARDS.
   c. OTHER ITEMS AS SPECIFICALLY INDICATED.

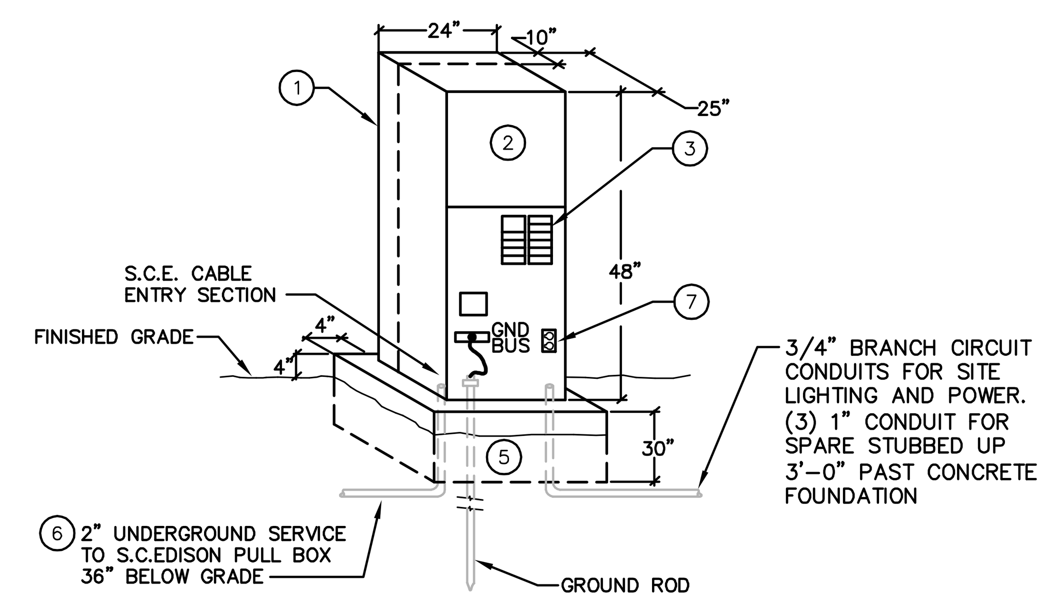
   THESE ITEMS SHALL BE APPROVED BY THIS OFFICE PRIOR TO ANY COMMENCEMENT OF PLACING ORDERS OR PERFORMING ANY ROUGH–IN WORK.
18. COMPLETE ELECTRICAL SYSTEM SHALL BE GROUNDED IN ACCORDANCE WITH THE PRESENTLY ADOPTED EDITION OF THE N.E.C. ART. 250.
19. PENETRATIONS OF ALL FIRE RATED WALLS OR CEILINGS SHALL BE FIRE RATED IN ACCORDANCE WITH ALL LOCAL, STATE, AND NATIONAL CODES.
20. PROVIDE ENGRAVED PLASTIC NAMEPLATES FOR ALL MAJOR ELECTRICAL EQUIPMENT.
21. ALL DISCONNECT SWITCHES TO BE PROVIDED WITH REJECTION TYPE FUSE HOLDERS.

ELECTRICAL SYMBOLS LIST:

Symbol	Description
Ⓙ	JUNCTION BOX. SIZED BY THE CONTRACTOR PER ACTUAL NUMBER OF CONDUITS AND/OR CONDUCTORS PASSING THRU.
○	IN–GRADE LIGHT FIXTURE.
◁	FLOOD LIGHTING FIXTURE.
●□	POLE MOUNTED H.I.D. LIGHTING FIXTURE.
φ	STANDARD 20A, 120V–1ø GROUNDING TYPE "GROUND FAULT INTERRUPTER" (G.F.I.) RECEPTACLE MOUNTED ON POLE – U.O.N.
▬	BRANCH CIRCUIT PANELBOARD. FLUSH OR SURFACE MTD. AS INDICATED.
—///—	CONDUIT CONCEALED WITHIN BUILDING WALLS OR CEILING SPACE. TICK MARKS INDICATE QUANTITY OF #12 THHN / THWN CONDUCTORS – U.O.N.. CONDUIT SHOWN WITH NO TICK MARKS INDICATE 2 #12 THHN / THWN CONDUCTORS – U.O.N.. CONDUIT SHALL BE 3/4" MINIMUM – U.O.N..
– –///– –	CONDUIT ROUTED BELOW FINISHED GRADE AND / OR CONCRETE SLAB. TICK MARKS INDICATE QUANTITY OF #12 THHN / THWN CONDUCTORS – U.O.N.. CONDUITS SHOWN WITH NO TICK MARKS INDICATE 2 #12 THHN / THWN CONDUCTORS – U.O.N.. CONDUIT SHALL BE 3/4" MINIMUM – U.O.N.. INCLUDE CODE SIZED COPPER BOND CONDUCTOR (NOT SHOWN ON PLAN) IN ALL NON–METALLIC CONDUIT RUNS.
—L—	INDICATES GREEN CODE SIZE EQUIPMENT GROUNDING CONDUCTOR.
——►	HOMERUN TO DESTINATION AS INDICATED. REFER TO CONDUIT SYMBOL ABOVE.
——●	INDICATES CONDUIT DROP WITHIN BUILDING WALL. REFER TO CONDUIT SYMBOL ABOVE.
——○	INDICATES CONDUIT RISER WITHIN BUILDING WALL. REFER TO CONDUIT SYMBOL ABOVE.
—E—	EXISTING CONDUIT AND CONDUCTORS TO REMAIN.
—EA—	EXISTING CONDUCTORS TO BE REMOVED AND CONDUIT TO BE ABANDONED IN PLACE.
—EX—	EXISTING CONDUIT TO REMAIN AND CONDUCTORS TO BE REMOVED.
—EN—	EXISTING CONDUIT WITH NEW CONDUCTORS.
*	PROVIDE PULL ROPE, END TO END, WITH IDENTIFICATION TAGS FOR ALL EMPTY CONDUIT INSTALLED.

REFERENCES & ABBREVIATIONS:

A/60	LIGHTING FIXTURE DESIGNATION	(ER)	EXISTING TO BE RELOCATED
1/E-1	DETAIL REFERENCE	(X)	EXISTING TO BE DEMOLISHED
1	KEYNOTE REFERENCE	G	GROUND
(123)	KITCHEN EQUIPMENT DESIGNATION	GFI	GROUND FAULT INTERRUPTER
A	AMPS	MCB	MAIN CIRCUIT BREAKER
AFC	ABOVE FINISHED COUNTER	MLO	MAIN LUGS ONLY
AFF	ABOVE FINISH FLOOR	NL	NIGHT LIGHT
C	CONDUIT	OC	ON CENTER
CO	CONDUIT ONLY W/PULL ROPE	UON	UNLESS OTHERWISE NOTED
CU	COPPER	V	VOLTS
(E)	EXISTING TO REMAIN	VL	VERIFY LOCATION
EM	EMERGENCY	WP	WEATHER PROOF
		(N)	NEW



NOTES:

1. METER PEDESTAL, 120/240V–1ø–3W, STAINLESS STEEL FINISH ENCLOSURE WITH ASSOCIATED CONCRETE MOUNTING BASE, NEMA 3R CONSTRUCT PER S.C.E. STANDARDS.
2. METER
3. LOAD CENTERS WITH MAIN BREAKERS AND BRANCH CIRCUIT BREAKER SPACES. REFER TO PANEL SCHEDULE FOR BREAKER CONFIGURATION.
4. PROVIDE HINGED DEADFRONT DOOR (OMITTED FOR CLARITY) WITH METER READING WINDOW. PADLOCK HASP WITH VANDAL RESISTANCE PAD LOCK COVERS TO BE PROVIDE FOR BOTH DEAD FRONT DOOR AND METER WINDOW.
5. PROVIDE CONCRETE FOUNDATION PER MANUFACTURER'S SPECIFICATIONS. VERIFY EXACT SIZE OF FOUNDATION WITH MANUFACTURER AND STRUCTURAL ENGINEER PRIOR TO ROUGH–IN. PROVIDE PAD MOUNTED BASE WITH ANCHOR BOLTS EMBEDDED IN CONCRETE SUPPLIED WITH PEDESTAL
6. CONTRACTOR TO VERIFY EXACT S.C.E. SERVICE CONNECTION POINTS PRIOR TO INSTALLATION.
7. WEATHER–PROOF GFI TYPE RECEPTACLE.

METER PEDESTAL "MP2" ONLY

METER PEDESTAL ELEVATION 120/240V | N.T.S. | 1

MOUNTING : SURFACE NEMA 3R — EXISTING PANEL "MP1" — MAIN 70A
240 / 120 VOLTS — 1 PHASE — 3 WIRE — A.I.C. RATING : ______ — BUS 100A

DESCRIPTION	VOLT AMPS Ø A	VOLT AMPS Ø B	LTG	REC	MISC	BRK	CIRC	CIRC	BRK	MISC	REC	LTG	VOLT AMPS Ø A	VOLT AMPS Ø B	DESCRIPTION
SERVICE DISCONNECT					1	70	1	2	15/1	1			500		IRRIGATION "A"
SERVICE DISCONNECT					1	2	3	4	15/1	1				500	IRRIGATION "B"
TIMECLOCK	500				1	15/1	5	6	15/1						SPARE
SPARE						15/1	7	8	15/1						SPARE
SPARE						15/1	9	10	60			1	5000		X-MAS TREE LIGHTS
SPARE						15/1	11	12	2			1		5000	X-MAS TREE LIGHTS

VA Ø A = 6,000 — Ø B = 5,500
TOTAL VA = 11,500 + LCL = 14,000 VA — AMPS = 58.3 — LCL = 10,000 — x 25% = 2,500 VA
HIGH PH. VA (ØA) = 6,000 + LCL = 7,250 VA — HIGH PH. AMPS = 60.4 — HIGH PH. LCL = 5,000 — x 25% = 1,250 VA

MOUNTING : SURFACE NEMA 3R — NEW PANEL "MP2" — MAIN 100A
240 / 120 VOLTS — 1 PHASE — 3 WIRE — A.I.C. RATING : ______ — BUS 100A

DESCRIPTION	VOLT AMPS Ø A	VOLT AMPS Ø B	LTG	REC	MISC	BRK	CIRC	CIRC	BRK	MISC	REC	LTG	VOLT AMPS Ø A	VOLT AMPS Ø B	DESCRIPTION
TIMECLOCK	500				1	20/1	1	2	20/1						SPARE
SPARE						20/1	3	4	20/1						SPARE
SPARE						20/1	5	6	20/1						SPARE
SPARE						20/1	7	8	20/1						SPARE
SPARE						20/1	9	10	60			1	5000		X-MAS TREE LIGHTS
SPARE						20/1	11	12	2			1		5000	X-MAS TREE LIGHTS

VA Ø A = 5,500 — Ø B = 5,000
TOTAL VA = 10,500 + LCL = 13,000 VA — AMPS = 54.2 — LCL = 10,000 — x 25% = 2,500 VA
HIGH PH. VA (ØA) = 5,500 + LCL = 6,750 VA — HIGH PH. AMPS = 56.3 — HIGH PH. LCL = 5,000 — x 25% = 1,250 VA

FEEDER SCHEDULE

AMPS NOM.	3 - PHASE, 3 WIRE SYMBOL	3 - PHASE, 3 WIRE CONDUCTOR	3 - PHASE, 4 WIRE SYMBOL	3 - PHASE, 4 WIRE CONDUCTOR	EQUIPMENT GROUND
20	023	3/4"C–3#12 AWG	024	3/4"C–4#12 AWG	#12
30	033	3/4"C(3)#10 AWG	034	3/4"C(4)#10 AWG	#10
40	043	3/4"C(3)#8 AWG	044	1"C(4)#8 AWG	#10
50	053	1–1/4"C(3)#6 AWG	054	1–1/4"C(4)#6 AWG	#10
60	063	1–1/4"C(3)#4 AWG	064	1–1/4"C(4)#4 AWG	#10
70	073	1–1/4"C(3)#4 AWG	074	1–1/4"C(4)#4 AWG	#8
90	093	1–1/4"C(3)#2 AWG	094	1–1/2"C(4)#2 AWG	#8
100	103	1–1/2"C(3)#1 AWG	104	1–1/2"C(4)#1 AWG	#8
125	123	1–1/2"C(3)#1/0 AWG	124	2"C(4)#1/0 AWG	#6
150	153	1–1/2"C(3)#1/0 AWG	154	2"C(4)#1/0 AWG	#6
175	173	2"C(3)#2/0 AWG	174	2"C(4)#2/0 AWG	#6
200	203	2"C(3)#3/0 AWG	204	2"C(4)#3/0 AWG	#6
225	223	2"C(3)#4/0 AWG	224	2–1/2"C(4)#4/0 AWG	#4
250	253	3"C(3)#250KCMIL	254	3"C(4)#250KCMIL	#4
300	303	4"C(3)#350KCMIL	304	4"C(4)#350KCMIL	#4
350	353	4"C(3)#500 KCMIL	354	4"C(4)#500 KCMIL	#2
400	403	4"C(3)#600 KCMIL	404	4"C(4)#600 KCMIL	#2
450	453	(2)2"C(3)#4/0 AWG	454	(2)2–1/2"C(4)#4/0 AWG	#2
500	503	(2)3"C(3)#250 KCMIL	504	(2)3"C(4)#250 KCMIL	#2
600	603	(2)4"C(3)#350KCMIL	604	(2)4"C(4)#350KCMIL	#1
700	703	(2)4"C(3)#500 KCMIL	704	(2)4"C(4)#500 KCMIL	#1/0
800	803	(2)4"C(3)#600 KCMIL	804	(2)4"C(4)#600 KCMIL	#1/0
1000	1003	(3)4"C(3)#400 KCMIL	1004	(3)4"C(4)#400 KCMIL	#2/0
1200	1203	(3)4"C(3)#600 KCMIL	1204	(3)4"C(4)#600 KCMIL	#3/0
1600	1603	(4)4"C(3)#600 KCMIL	1604	(4)4"C(4)#600 KCMIL	#4/0
2000	2003	(5)4"C(3)#600 KCML	2004	(5)4"C(4)#600 KCML	250
2500	2503	(6)4"C(3)#600 KCML	2504	(6)4"C(4)#600 KCML	350
3000	3003	(8)4"C(3)#600 KCML	3004	(8)4"C(4)#600 KCML	400
4000	4003	(10)4"C(3)#600 KCML	4004	(10)4"C(4)#600 KCML	500

Application No. 5-09-071-A2

Exhibit 3

PLOT SCALE: 1=1

REVISIONS: No. | DATE | SHEET | APPROVAL | DESCRIPTION

REF. DWG. X–XXXX DWG. X–XXXX
DWG. X–XXXX

AS–BUILT:

DESIGNED BY: MWK
DRAWN BY: MG
DESIGN CHECK BY: JCO
DRAFTING CHECK BY: MWK

REGISTERED PROFESSIONAL ENGINEER JEFFREY C. OVERMYER No. E8964 Exp. 03/31/16 ELECTRICAL STATE OF CALIFORNIA

COLORADO LAGOON PHASE 2B DESIGN

GENERAL NOTES, 1-LINE, SCHEDULE

GRAPHIC SCALE 0 1 2 3

PAGE X.X.X.

FIELD BOOK X.X.X.

OMB ELECTRICAL ENGINEERS, INC.
8825 Research Drive
Irvine, CA 92618
(949) 753–1553 Fax (949) 753–1992
E–Mail: mail@ombengrs.com
OMB #14374

ANCHOR QEA
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691
(949)347–2780

JOB NO. PW800–03

NO. R– 6996

SHEET 36 OF 68

DRAWING NO. E–0.1

50% DESIGN — NOT FOR CONSTRUCTION

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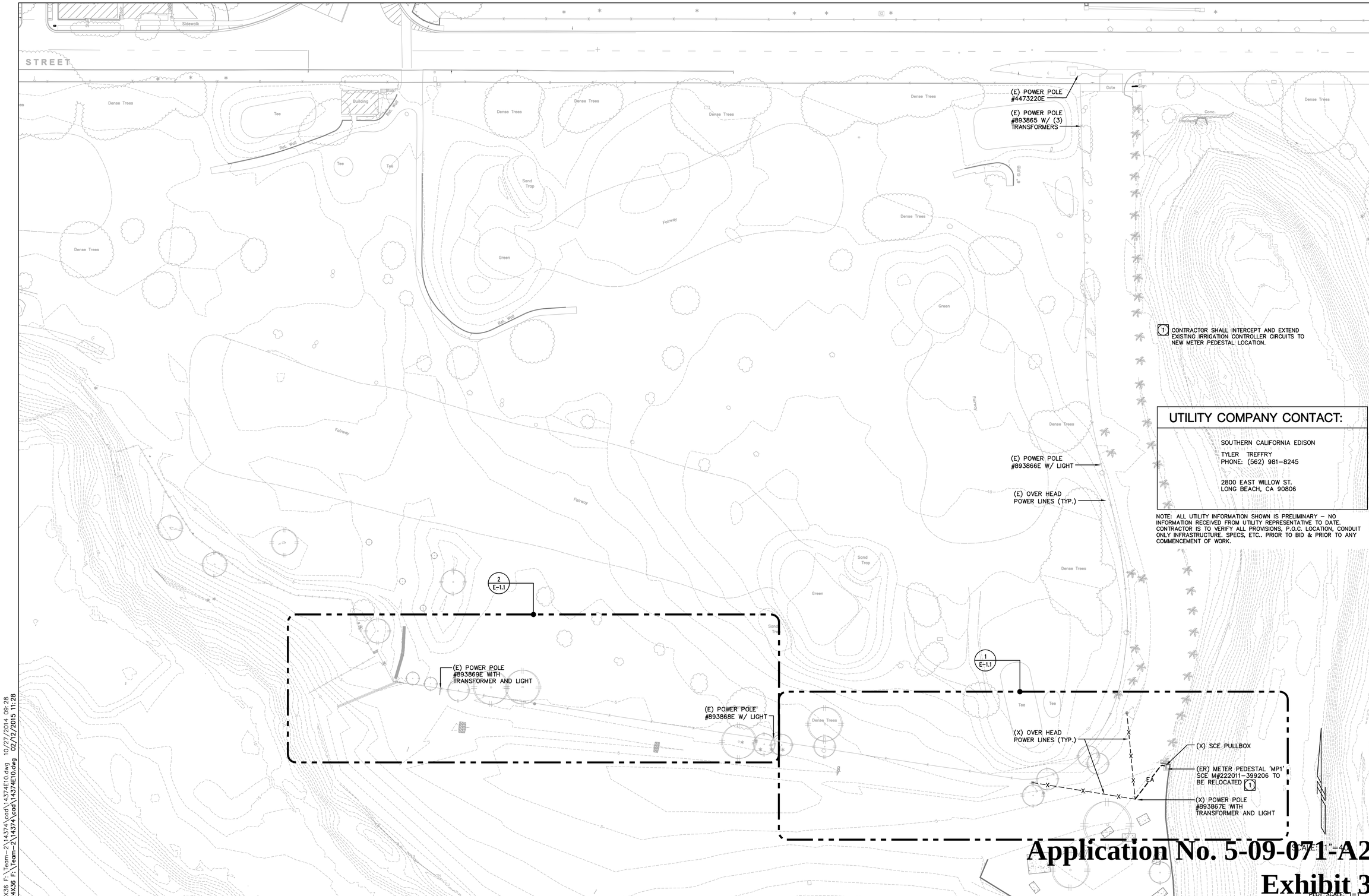

1 CONTRACTOR SHALL INTERCEPT AND EXTEND EXISTING IRRIGATION CONTROLLER CIRCUITS TO NEW METER PEDESTAL LOCATION.

UTILITY COMPANY CONTACT:

SOUTHERN CALIFORNIA EDISON
TYLER TREFFRY
PHONE: (562) 981-8245

2800 EAST WILLOW ST.
LONG BEACH, CA 90806

NOTE: ALL UTILITY INFORMATION SHOWN IS PRELIMINARY – NO INFORMATION RECEIVED FROM UTILITY REPRESENTATIVE TO DATE. CONTRACTOR IS TO VERIFY ALL PROVISIONS, P.O.C. LOCATION, CONDUIT ONLY INFRASTRUCTURE. SPECS, ETC.. PRIOR TO BID & PRIOR TO ANY COMMENCEMENT OF WORK.

Application No. 5-09-071-A2
Exhibit 3

50% DESIGN – NOT FOR CONSTRUCTION

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8825 Research Drive
Irvine, CA 92618
(949) 753-1553 Fax (949) 753-1992
E-Mail: mail@ombengrs.com
OMB #14374

ANCHOR QEA
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691
(949)347-2780

REVISIONS				DESCRIPTION
No.	DATE	SHEET	APPROVAL	
AS-BUILT:			REF. DWG. X-XXXX DWG. X-XXXX	
			REF. DWG. X-XXXX DWG. X-XXXX	

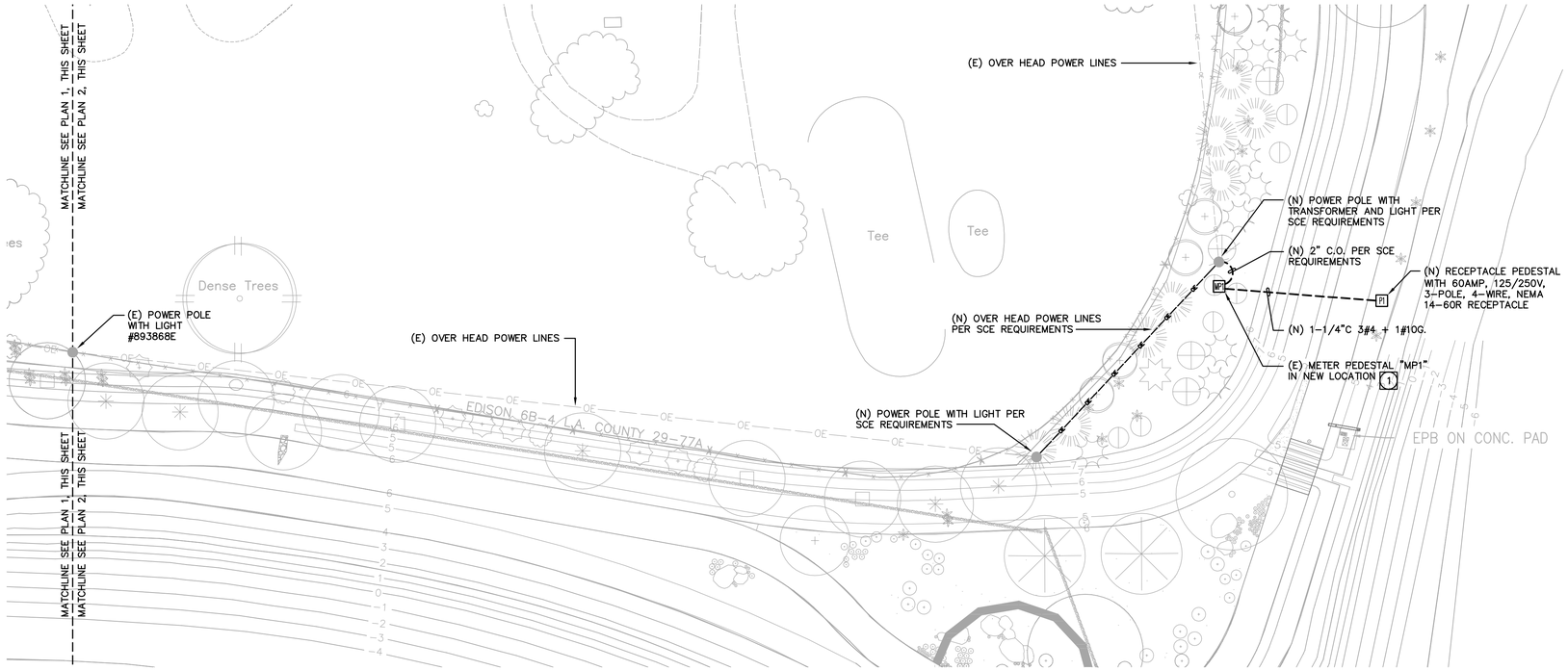
DESIGNED BY: MWK
DRAWN BY: MG
DESIGN CHECK BY: JCO
DRAFTING CHECK BY: MWK

REGISTERED PROFESSIONAL ENGINEER
JEFFREY C. OVERMYER
No. E8964
Exp. 03/31/16
ELECTRICAL
STATE OF CALIFORNIA

COLORADO LAGOON PHASE 2B DESIGN
OVERALL ELECTRICAL PLAN

GRAPHIC SCALE 0 1 2 3
PAGE X.X.X.
FIELD BOOK X.X.X.

JOB NO. PW800-03
NO. R- 6996
SHEET 37 OF 68
DRAWING NO. E-1.0



1 CONTRACTOR SHALL INTERCEPT AND EXTEND EXISTING IRRIGATION CONTROLLER CIRCUITS TO NEW METER PEDESTAL LOCATION.

1 / E-1.1 ENLARGED ELECTRICAL PLAN "A"
SCALE: 1" = 20'-0"

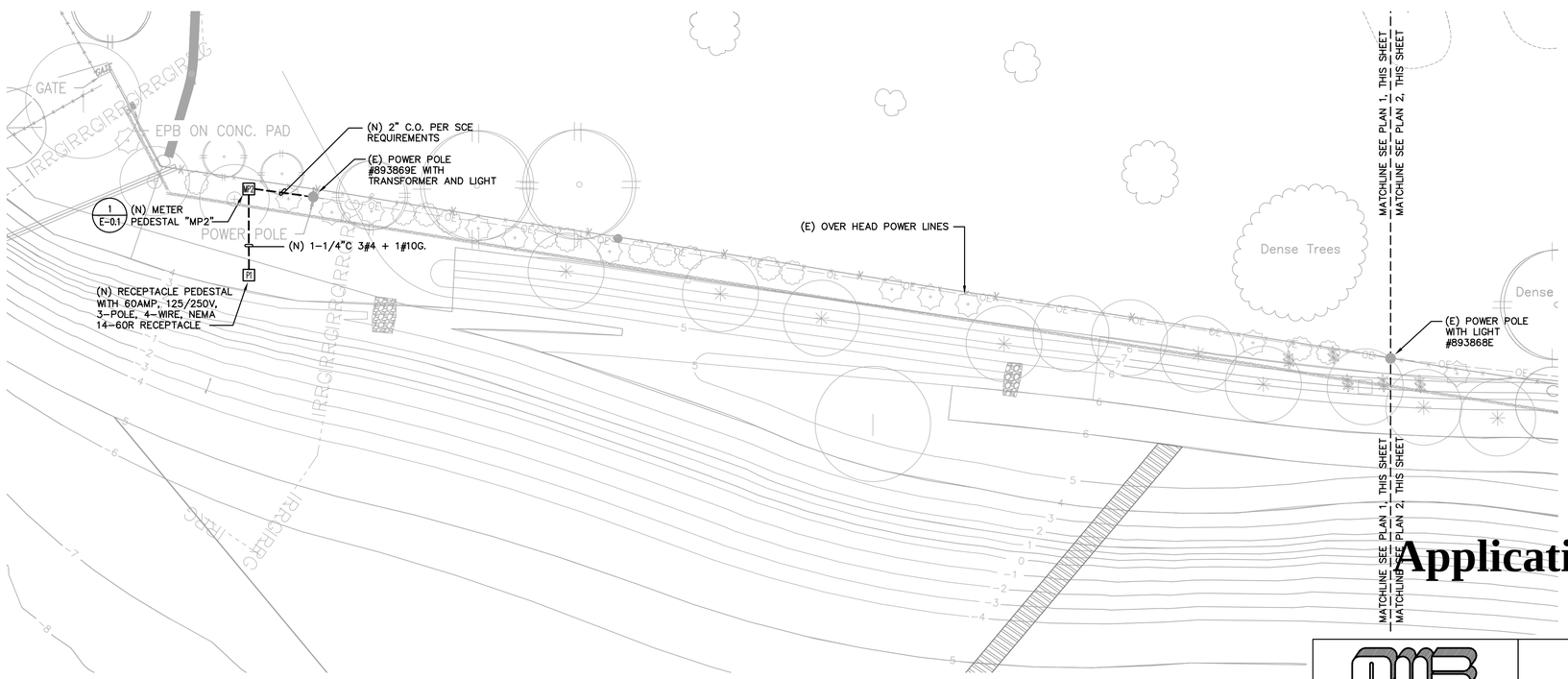
UTILITY COMPANY CONTACT:

SOUTHERN CALIFORNIA EDISON

TYLER TREFFRY
PHONE: (562) 981-8245

2800 EAST WILLOW ST.
LONG BEACH, CA 90806

NOTE: ALL UTILITY INFORMATION SHOWN IS PRELIMINARY – NO INFORMATION RECEIVED FROM UTILITY REPRESENTATIVE TO DATE. CONTRACTOR IS TO VERIFY ALL PROVISIONS, P.O.C. LOCATION, CONDUIT ONLY INFRASTRUCTURE. SPECS, ETC.. PRIOR TO BID & PRIOR TO ANY COMMENCEMENT OF WORK.



2 / E-1.1 ENLARGED ELECTRICAL PLAN "B"
SCALE: 1" = 20'-0"

SCALE: 1" = 20'

PLOT SCALE: 1=1

Application No. 5-09-071-A2
Exhibit 3

50% DESIGN – NOT FOR CONSTRUCTION

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REVISIONS				
No.	DATE	SHEET	APPROVAL	DESCRIPTION
AS-BUILT:			REF. DWG. X-XXXX DWG. X-XXXX	
			DWG. X-XXXX	

DESIGNED BY: MWK
DRAWN BY: MG
DESIGN CHECK BY: JCO
DRAFTING CHECK BY: MWK

REGISTERED PROFESSIONAL ENGINEER
JEFFREY C. OVERMYER
No. E8964
Exp. 03/31/16
ELECTRICAL
STATE OF CALIFORNIA

COLORADO LAGOON PHASE 2B DESIGN

ENLARGED ELECTRICAL PLAN

GRAPHIC SCALE 0 1 2 3

PAGE X.X.X.

FIELD BOOK X.X.X.

JOB NO. PW800-03

NO. R- 6996

SHEET 38 OF 68

DRAWING NO. E-1.1

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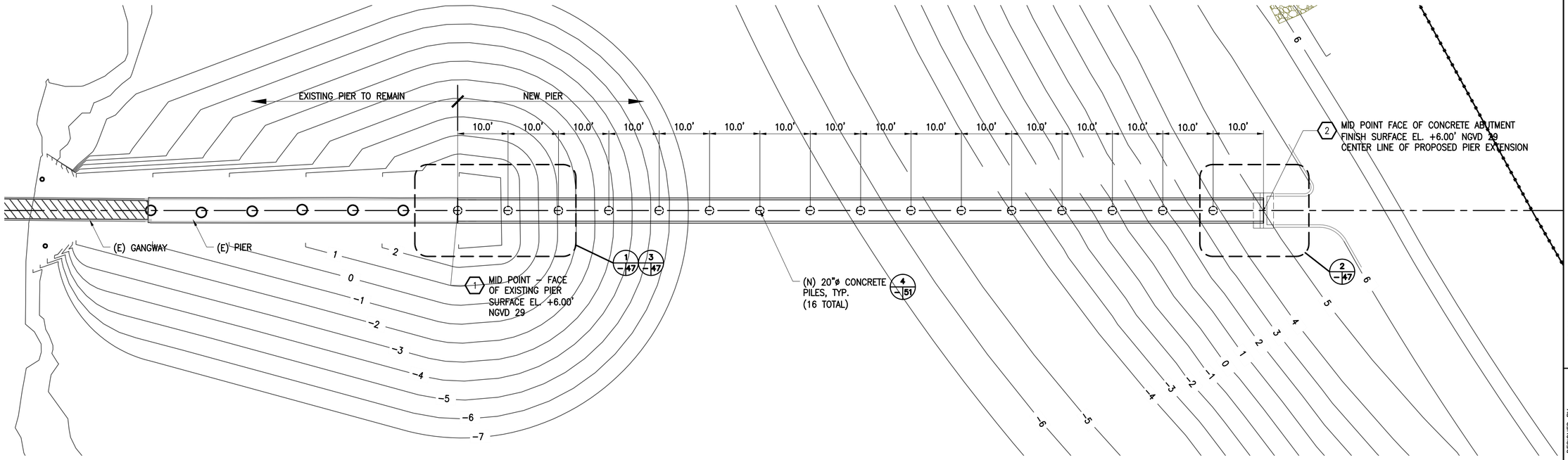
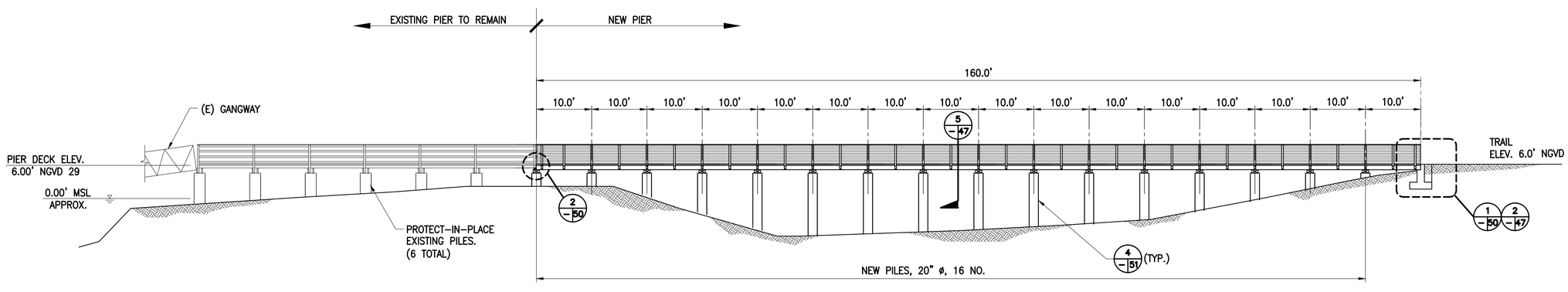
8825 Research Drive
Irvine, CA 92618
(949) 753-1553 Fax (949) 753-1992
E-Mail: mail@ombengrs.com
OMB #14374

ANCHOR QEA
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691
(949)347-2780



PIER EXTENSION PLAN 1/44
SCALE: 1"=10'

HORIZONTAL CONTROL POINTS		
POINT #	NORTHING	EASTING
1	1739173.8873	6520804.8180
2	1739300.2430	6520902.9721



ELEVATION 2/44
SCALE: 1"=10'

Application No. 5-09-071-A2

Exhibit 3

URS
310 Golden Shore, Suite 100
Long Beach, CA 90802
(562) 308-2300
JOB NO: 30990482

ANCHOR QEA
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691
(949)347-2780

COLORADO LAGOON PHASE 2B DESIGN
PIER EXTENSION PLAN AND ELEVATION

DESIGNED BY: PT
DRAWN BY: RC
DESIGN CHECK BY: BRE
DRAFTING CHECK BY: BRE

REVISIONS: No. | DATE | SHEET | APPROVAL | DESCRIPTION
AS-BUILT:
REF. DWG. X-XXXX DWG. X-XXXX DWG. X-XXXX

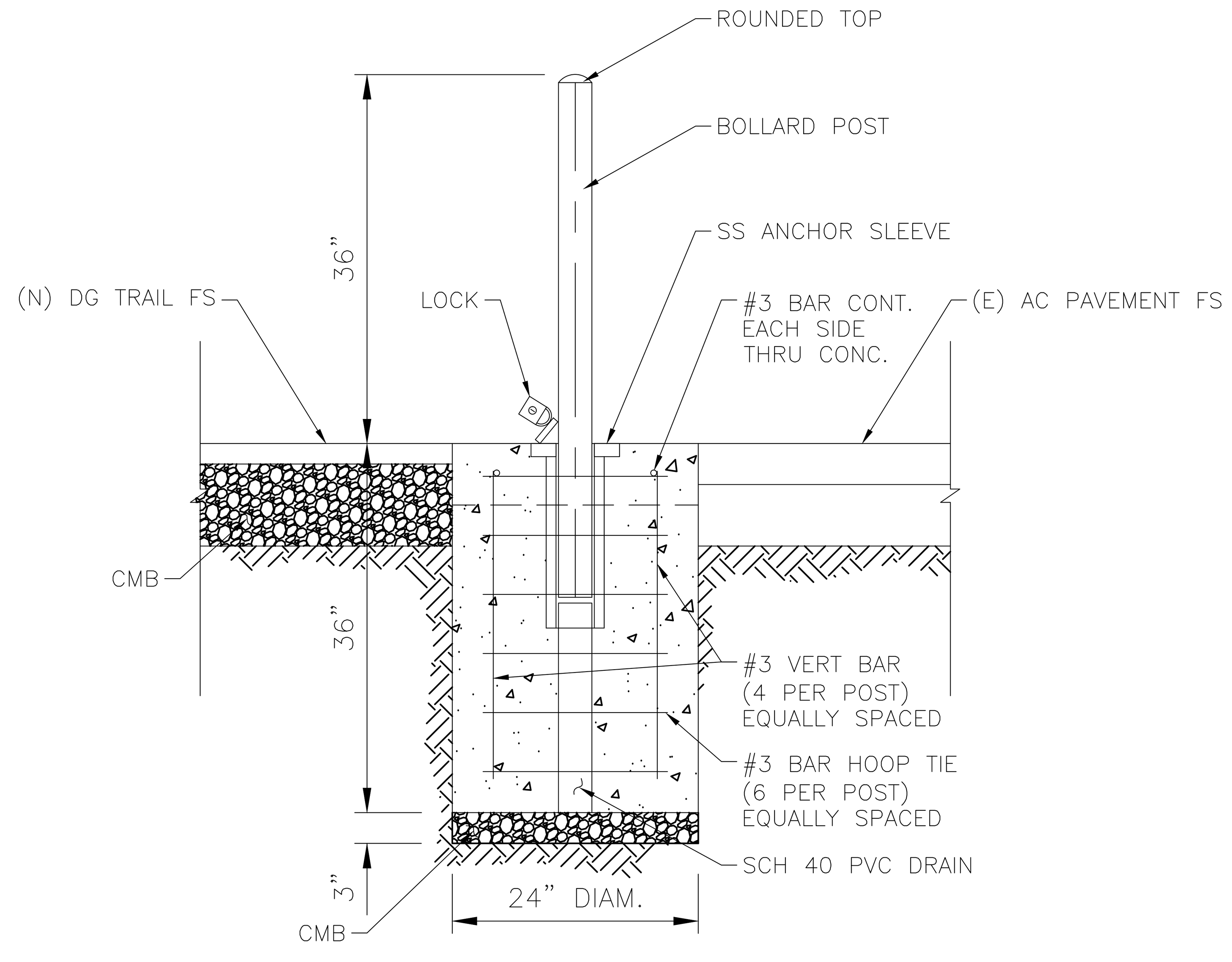
GRAPHIC SCALE 0 1 2 3
PAGE X.X.X.
FIELD BOOK X.X.X.

JOB NO. PW800-03
NO. R- 6996
SHEET 44 OF 68
DRAWING NO. B-4629-S-1

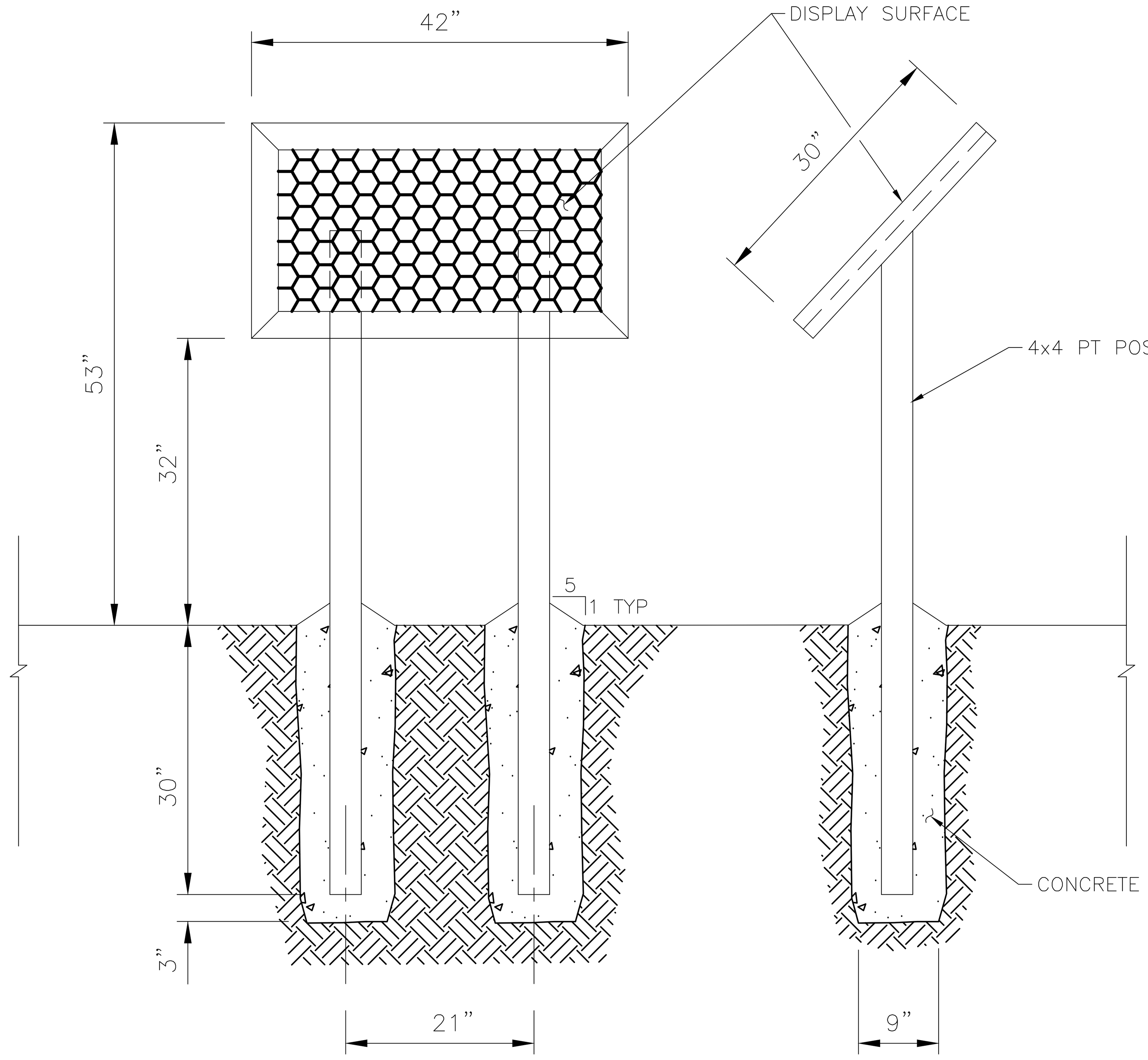
LAST SAVED BY: prabin_tuladhar
PLOT DATE: Feb. 12, 15 SAVED PATH: G:\Projects\IDS\30990482 Colorado Lagoon\500 Drawings

REMOVABLE BOLLARD NOTES:

1. SEE SPECIFICATIONS FOR BOLLARD MANUFACTURER AND MODEL NUMBER.



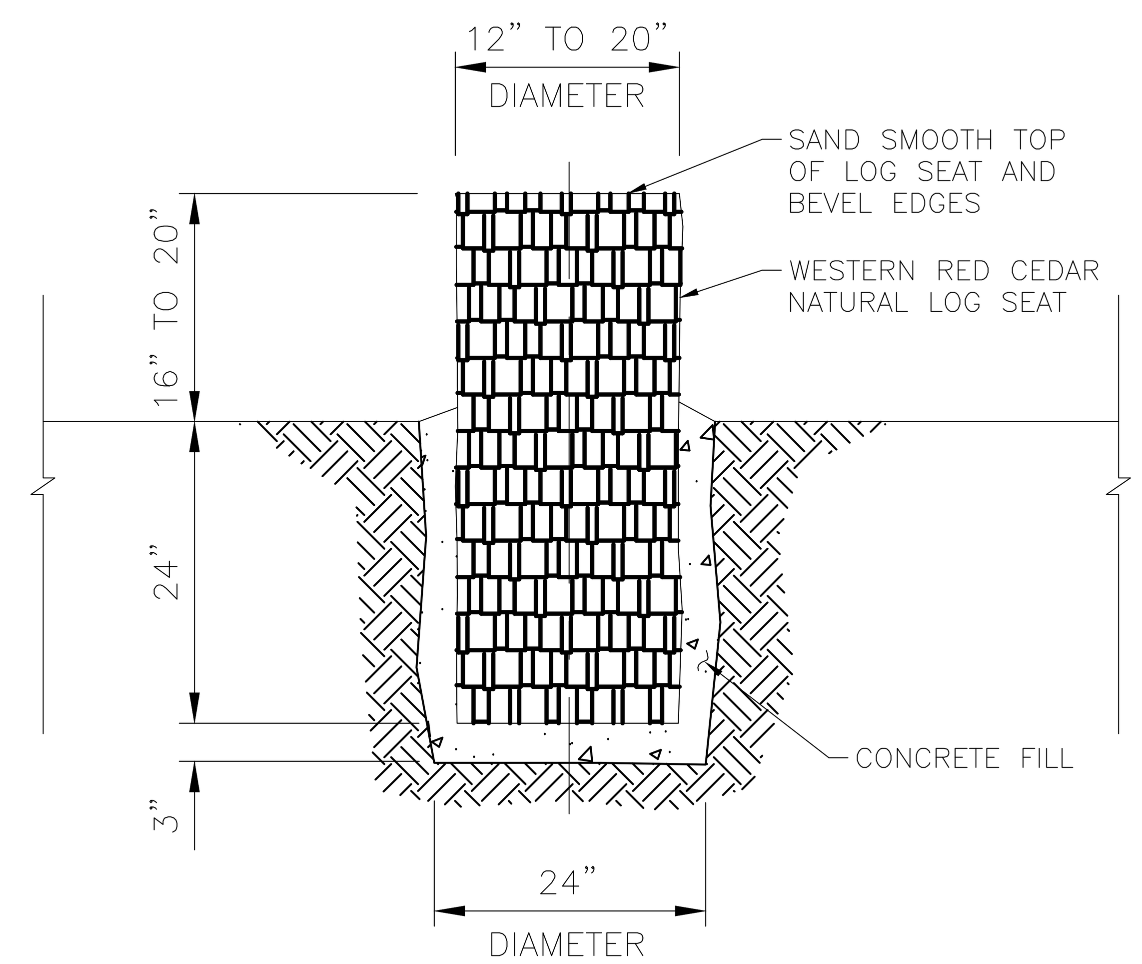
REMOVABLE BOLLARD
SCALE: N.T.S.
1 61|68



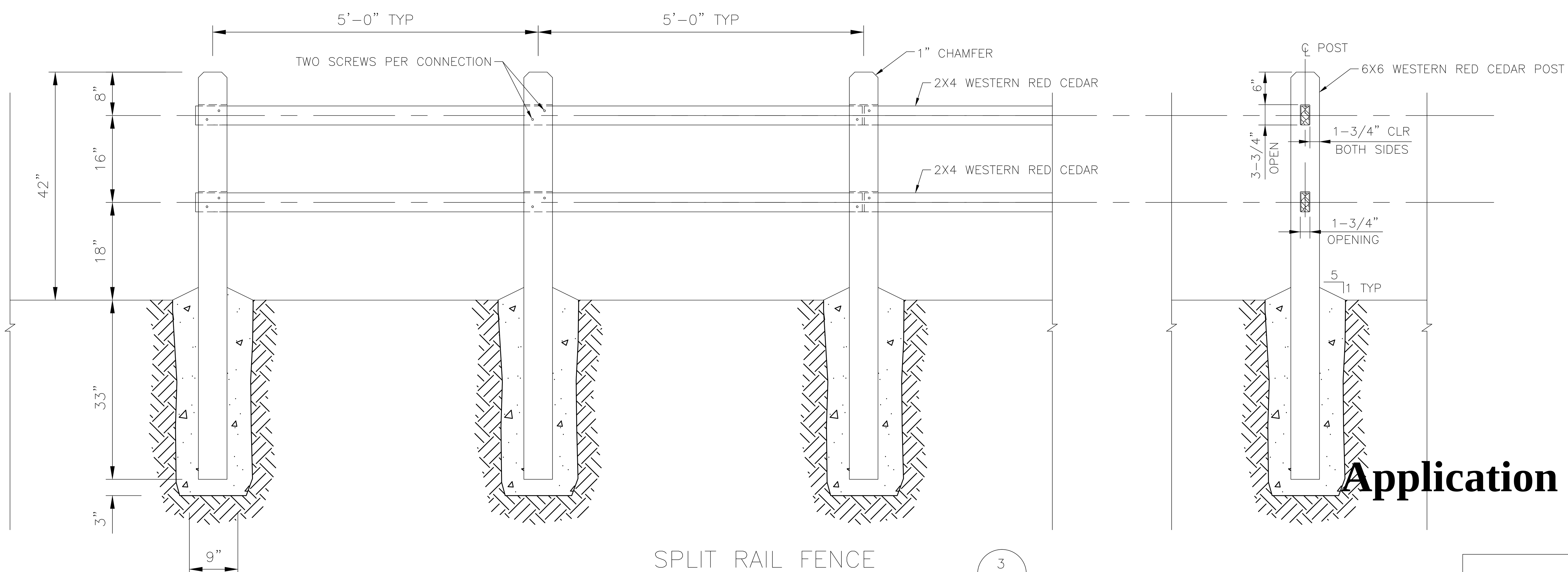
DISPLAY PODIUM
SCALE: N.T.S.
2 61|68
62,63

DISPLAY PODIUM NOTES:

1. PAINT PODIUM WOOD TO MATCH PIER RAILING.
2. PODIUM CONSTRUCTION AND DIMENSION TO MATCH EXISTING ON SITE. 'FRIENDS OF COLORADO LAGOON' WILL PROVIDE DISPLAYS.



NATURAL LOG SEAT
SCALE: N.T.S.
4 63|68



SPLIT RAIL FENCE
SCALE: N.T.S.
3 61|68

SPLIT RAIL FENCE NOTES:

1. 2x4 RAILING TO BE SECURED TO POSTS WITH #12 x 3-1/2" LONG CEDAR/TAN COLOR POLYMER COATED EXTERIOR SCREWS.

Application No. 5-09-071-A2

Exhibit 3

FN:P-PW80003-002-C-LANDSCAPE
DATE: 8/19/14
PLOT SCALE: 1=1

ANCHOR QEA
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691
(949)347-2780

REVISIONS: No. | DATE | SHEET | APPROVAL | DESCRIPTION

REF. DWG. X-XXXX DWG. X-XXXX DWG. X-XXXX

AS-BUILT:

DESIGNED BY: K.KETTERIDGE
DRAWN BY: E.PIPKIN
DESIGN CHECK BY: M.WHELAN
DRAFTING CHECK BY: K.KETTERIDGE

REGISTERED PROFESSIONAL ENGINEER MICHAEL P. WHELAN No. C69833 Exp. 6/30/16 CIVIL STATE OF CALIFORNIA

COLORADO LAGOON PHASE 2B DESIGN

LANDSCAPE DETAILS

GRAPHIC SCALE 0 1 2 3

PAGE X.X.X.

FIELD BOOK X.X.X.

JOB NO. PW800-03

NO. R- 6996

SHEET 68 OF 68

DRAWING NO. L-17

LAST SAVED BY: epipkin SAVED PATH: B:\Projects\City of Long Beach\CAD\Orig\AQ\P-PW80003-002-C-LANDSCAPE - Standard
PLOT DATE: Mar. 2, 15