

CALIFORNIA COASTAL COMMISSION

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Staff: KFS-LB
Staff Report: September 20, 2001
Hearing Date: October 8-12, 2001
Commission Action:



RECORD PACKET COPY

STAFF REPORT: REGULAR CALENDAR

APPLICATION: 5-01-020

APPLICANT: Tetra Tech, Inc.

AGENT: Tetra Tech, Inc.: Fernando Pagés and Sarah McFadden

PROJECT LOCATION: East of Pacific Coast Highway and South of Warner Avenue within the Bolsa Chica Ecological Reserve, City of Huntington Beach, Orange County

PROJECT DESCRIPTION: Restoration of 5,358 square feet of wetlands including removal of concrete and debris; grading to match elevation of adjacent wetlands; replacement of two 15 inch pipes with 18 inch pipes to improve tidal exchange; and placement of 30.52 square feet of rip rap for erosion control which will fill 30.52 square feet of wetland. The proposed restoration is mitigation for impacts to wetlands caused by bulkhead reinforcements along Trinidad and Humboldt Islands in Huntington Harbour.

SUMMARY OF STAFF RECOMMENDATION:

The major issues of this staff report relate to the fill of wetlands for purposes of wetland restoration and construction phase impacts upon biological resources and public access. Staff recommends **APPROVAL** of the proposed development with special conditions which require: 1) compliance with plans submitted by the applicant; 2) conformance with specific construction responsibilities to avoid impacts upon wetland habitat and water quality; 3) identification of a debris disposal site; 4) conformance with construction timing requirements designed to protect the California least tern and Western snowy plover as well as public access; 5) conformance with the proposed soft bottom mitigation plan; and 6) a requirement the applicant demonstrates their legal ability to carry out the proposed project and all conditions of approval.

LOCAL APPROVALS RECEIVED: City of Huntington Beach approvals-in-concept dated August 10, 2000; Negative Declaration No. 00-05 approved by the City of Huntington Beach Zoning Administrator on September 13, 2000.

SUBSTANTIVE FILE DOCUMENTS: See Appendix A

I. MOTION, STAFF RECOMMENDATION, AND RESOLUTION OF APPROVAL.

MOTION: I move that the Commission approve Coastal Development Permit No. 5-01-020 pursuant to the staff recommendation.

STAFF RECOMMENDATION OF APPROVAL:

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

RESOLUTION TO APPROVE THE PERMIT:

The Commission hereby approves a coastal development permit for the proposed development and adopts the findings set forth below on grounds that the development as conditioned 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 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 development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

II. STANDARD CONDITIONS:

1. **Notice of Receipt and Acknowledgment.** The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
2. **Expiration.** If development has not commenced, the permit will expire two years from the date this permit is reported to the Commission. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
3. **Interpretation.** Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.
4. **Assignment.** The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
5. **Terms and Conditions Run with the Land.** These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

III. SPECIAL CONDITIONS:

1. COMPLIANCE WITH PLANS SUBMITTED

The permittee shall undertake development in strict conformance with the proposal and plans as set forth in the application for permit, subject to any special conditions set forth in this coastal development permit approval. Any proposed changes to or deviations from the approved plans shall be reported to the Executive Director. No changes to the approved plans shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is required.

2. CONSTRUCTION RESPONSIBILITIES

The permittee shall comply with the following construction-related requirements:

- (a) Construction equipment, materials, and debris shall be stored within the 'temporary contractor staging area' within the parking lot of the Bolsa Chica Ecological Reserve interpretive center as depicted on Figure 2 of the *Biological Assessment* dated August 24, 2001.
- (b) Prior to commencement of construction within or adjacent to wetlands and environmentally sensitive habitats, the work areas shall be identified for the contractor using staking, fencing, or similar means. Work area demarcations shall be inspected and approved by a qualified biologist. All barriers, staking, fencing shall be removed upon completion of construction.
- (c) As proposed, construction equipment access to work areas shall occur via existing paved roads and unpaved unvegetated roads and parking lots. No vegetation impact, including removal or trampling, for purposes of construction access is authorized under this coastal development permit. No new construction access corridors are authorized under this coastal development permit.
- (d) Vegetation removal shall be limited to the impacts described within *Soft Bottom Mitigation Plan, Humboldt Island and Trinidad Island Bulkhead Repair Project, Huntington Beach, California* dated April 2000 prepared by Tetra Tech, Inc. of Pasadena, California; *Wetlands Delineation for the Soft Bottom Mitigation Plan Wetland Improvement Project in Bolsa Chica Ecological Reserve* by Tetra Tech, Inc. of Pasadena, California dated August 24, 2001; and *Biological Assessment for the Soft Bottom Mitigation Plan Wetland Improvement Project in Bolsa Chica Ecological Reserve* by Tetra Tech, Inc. of Pasadena, California dated August 24, 2001. As proposed, the applicant shall salvage and replant within the proposed restoration area any native vegetation removed pursuant to this coastal development permit in an appropriate location to be determined by the project biologist in consultation with the California Department of Fish and Game.
- (e) No construction materials, debris, or waste shall be placed or stored where it may enter a storm drain or be subject to tidal erosion and dispersion;
- (f) Any and all debris resulting from construction activities shall be removed from the project site within 24 hours of completion of construction;
- (g) Best Management Practices (BMPs) and Good Housekeeping Practices (GHPs)

designed to prevent spillage and/or runoff of construction-related materials, and to contain sediment or contaminants associated with construction activity, shall be implemented prior to the on-set of such activity. BMPs and GHPs which shall be implemented include, but are not limited to: stormdrain inlets must be protected with sandbags or berms, all stockpiles must be covered, installation of proper sedimentation control measures, and a pre-construction meeting should be held for all personnel to review procedural and BMP/GHP guidelines. All BMPs shall be maintained in a functional condition throughout the duration of the project.

Construction debris and sediment shall be properly contained and secured on site with BMPs, to prevent the unintended transport of sediment and other debris into wetlands and coastal waters by wind, rain or tracking. Construction debris and sediment shall be removed from construction areas as necessary to prevent the accumulation of sediment and other debris which may be discharged into coastal waters. Debris shall be disposed at a legal disposal site in accordance with Special Condition 3 of this permit.

3. **LOCATION OF DEBRIS DISPOSAL SITE**

PRIOR TO ISSUANCE OF A COASTAL DEVELOPMENT PERMIT, the applicant shall identify in writing, for the review and approval of the Executive Director, the location of the disposal site of the demolition and construction debris resulting from the proposed project. Disposal shall occur at the approved disposal site. If the disposal site is located in the coastal zone, a coastal development permit or an amendment to this permit shall be required before disposal can take place.

4. **TIMING OF CONSTRUCTION – ENVIRONMENTALLY SENSITIVE HABITAT AREA**

To avoid adverse impacts on the California least tern (*Sterna antillarum browni*) and the Western snowy plover (*Charadrius alexandrinus nivosus*) construction shall not occur between March 1 through October 1 of any year.

5. **TIMING OF CONSTRUCTION – PUBLIC ACCESS**

To avoid adverse impacts on public access to the beach and the Bolsa Chica Ecological Reserve, construction shall not occur between the Memorial Day holiday weekend through the Labor Day holiday weekend, inclusive, during any year in which the proposed development is constructed.

6. **COMPLIANCE WITH SOFT BOTTOM HABITAT MITIGATION PLAN**

- A. As proposed, the applicant shall restore 5,358 square feet of wetland at the Bolsa Chica Ecological Reserve. The applicant shall implement and comply with the recommendations and mitigation contained within *Soft Bottom Mitigation Plan, Humboldt Island and Trinidad Island Bulkhead Repair Project, Huntington Beach, California* dated April 2000 prepared by Tetra Tech, Inc. of Pasadena, California; *Wetlands Delineation for the Soft Bottom Mitigation Plan Wetland Improvement Project in Bolsa Chica Ecological Reserve* by Tetra Tech, Inc. of Pasadena, California dated August 24, 2001; *Biological Assessment for the Soft Bottom Mitigation Plan Wetland Improvement Project in Bolsa Chica Ecological Reserve* by Tetra Tech, Inc. of Pasadena, California dated August 24, 2001; *Tidal Analysis*

for Soft Bottom Mitigation Plan Wetland Improvement Project in Bolsa Chica Ecological Reserve dated June 2001 by Tetra Tech, Inc. of Pasadena, California.

- B. The proposed soft bottom mitigation shall be implemented prior to or concurrent with any development commenced pursuant to Coastal Development Permits 5-98-179, 5-98-201, 5-98-443, 5-98-444, 5-99-031, 5-99-032, 5-99-108, 5-99-473, 5-00-389, or 5-00-390.
- C. At minimum, the applicant shall monitor the proposed mitigation for a period of 5 years. At the end of each year of the continuous monitoring program, the applicant shall submit a monitoring report which shall contain the information identified in the mitigation plan identified above for the review and approval of Executive Director of the Commission. The monitoring report shall describe activities associated with the mitigation since the last monitoring report, progress toward meeting the success criteria established in the mitigation plan and any recommended maintenance or implementation of corrective measures to ensure success of the mitigation. At the end of the five-year monitoring period, a comprehensive report describing the results of the plan shall be submitted to the Executive Director for review and approval. The final comprehensive report shall be accompanied by written evidence of review and comment by the California Department of Fish and Game (CDFG). Written comments from CDFG should address whether the mitigation has been successful. If, at the end of the five-year monitoring period the mitigation program is wholly or partially unsuccessful, a follow-up mitigation program shall be implemented by the applicant in order to correct deficiencies of the mitigation program or to provide an alternative mitigation program. Implementation of a follow up program 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.
- D. Any changes to the approved mitigation plan, including but not limited to changes to the monitoring program to ensure success of the mitigation site, shall require an amendment to this permit from the Coastal Commission or concurrence from the Executive Director that the changes do not require a permit amendment.

7. **LEGAL INTEREST**

PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit, for the review and approval of the Executive Director, written documentation demonstrating that it has the legal ability to carry out the proposed project including any grants of access to the property by the property owner and/or lessee and all conditions of approval of this permit.

IV. FINDINGS AND DECLARATIONS:

The Commission hereby finds and declares:

A. Project Description and Location

The proposed project is the restoration of 5,358 square feet of wetlands east of Pacific Coast Highway and south of Warner Avenue, in the City of Huntington Beach, Orange County (Exhibit 1 and 2). The proposed restoration would occur within the Bolsa Chica Ecological Reserve. This land is owned by the California State Lands Commission and leased to the California Department of Fish and Game, both of whom are supportive of the project (see also the section regarding

"Legal Ability to Undertake Development" in these findings). The proposed project would be located adjacent to and within existing wetlands located in the area of the California Department of Fish and Game's interpretive center and parking lot for the reserve. Restoration, described more fully below, would involve two basic activities: 1) removal of concrete and debris from an upland area and grading the area to match the elevation of adjacent wetlands; and 2) replacement of two 15 inch diameter pipes with 18 inch diameter pipes to improve tidal exchange.

Presently, there is a rectangular building foundation (approximately 66'6" x 36'3") adjacent to Pacific Coast Highway which remains from a previously demolished building (demolition date unknown). Debris, including concrete, brick, dirt, dead vegetation, and non-native vegetation are within the old building foundation and strewn around the area of the foundation (Exhibit 2). The applicant is proposing to remove all of the foundation and debris (approximately 60 to 90 cubic yards), except for the portion that is within 15 feet of the edge of the pavement of Pacific Coast Highway (PCH). The applicant proposes to leave the area within 15 feet of PCH in its present condition because disturbance of this part of the foundation could have an impact upon the adjacent roadway. Once the foundation and debris are removed, the foundation area plus a 15 foot wide band adjacent to the foundation, as well as an area north of the existing foundation would be graded to match the elevation of the functioning wetland north of and adjacent to the site (approximately +3 ft NGVD). In total, this portion of the project would restore approximately 5,358 square feet of wetlands.

There are two distinct wetlands within the project area, known as the West Cell wetland and the East Cell wetland which are connected to the main channel of the Bolsa Chica wetlands (herein 'Bolsa Chica Channel') (Exhibit 2). The East Cell wetland receives tidal flushing via an approximately 18 foot long 15 inch diameter corrugated metal pipe that connects the wetland to the Bolsa Chica Channel. The West Cell wetland is connected in tandem to the East Cell via a 46 foot long 15 inch diameter corrugated metal pipe. These existing corrugated metal pipes are rusting and collapsing, restricting tidal exchange to the existing wetlands. These pipes need to be replaced and expanded to improve tidal flushing of the existing wetlands and to provide tidal flushing for the proposed restoration area.

Accordingly, the second element of the project would improve the tidal flushing of the East and West Cell wetlands and provide tidal flushing for the restored wetlands (located in the West Cell) by replacing the existing 15 inch pipes with larger 18 inch diameter high density plastic (HDPE) pipes. The existing 18 foot long pipe between the East Cell and the Bolsa Chica Channel would be replaced by an approximately 14 foot long pipe. A total of 21.9 square feet of rip rap would be placed at the pipe ends to reduce erosion. In addition, the 46 foot long pipe between the East Cell and West Cell would be replaced by an approximately 43 foot long pipe. A total of 8.62 square feet of rip rap would be placed at the pipe ends for erosion control. The total amount of rip rap to be placed by the project would be 30.52 square feet.

The proposed restoration project would serve as mitigation for impacts to wetlands caused by bulkhead reinforcements occurring on Trinidad Island and Humboldt Island in Huntington Harbour, City of Huntington Beach, Orange County (Exhibit 1) approved by the Commission under Coastal Development Permits 5-98-179, 5-98-201, 5-98-443, 5-98-444, 5-99-031, 5-99-032, 5-99-108, 5-99-473, 5-00-389, and 5-00-390. The bulkheads around Trinidad and Humboldt Islands were constructed in the 1960's and have suffered damage due to erosion around the base of the bulkhead and deterioration of the supporting piles. In some cases, reinforcement of these bulkheads requires placing a sheetpile seaward of the existing bulkhead and backfilling the void

between the sheetpile and bulkhead with concrete grout. This repair results in the fill of soft bottom open water wetlands.

Trinidad and Humboldt Islands are located between ½ to 2 miles from the subject restoration site. On-site wetland restoration is not feasible because the impact area is a bulkheaded harbor area where there are no opportunities for restoration. Meanwhile, the subject restoration site is within the Bolsa Chica Ecological Reserve which is an open space area managed as a passive recreation and wildlife habitat area. The impact site and restoration site are hydraulically connected to one another via Huntington Harbour and the Bolsa Chica wetlands complex. The Bolsa Chica Ecological Reserve area contains wetlands and historic wetland habitat that has been impacted over time by human development. Restoration of the wetlands within this area would increase the function and value of the habitat within the reserve. The proposed restoration would mitigate impacts caused by the fill of some open water soft bottom which surrounds Trinidad and Humboldt Islands. The habitat to be impacted around the islands consists of un-vegetated soft bottom containing infaunal clam beds consisting of wavy chione, California chione, and common littlenecks. These species are common to soft bottom habitat throughout the harbor. No sensitive wildlife species are known to occur within this habitat surrounding the islands. Meanwhile, the proposed project would restore wetland habitat in an area known to be high in plant and animal species diversity, including rare and endangered species. Therefore, the restoration of habitat at Bolsa Chica Ecological Reserve would be beneficial to a wide variety of wildlife. Any restored wetland habitat in a bulkheaded harbor area similar to the impact area would not be expected to attract the diversity and abundance of wildlife that the proposed restoration site would. The applicant anticipates a high probability of successful restoration at the site because the project would restore former and degraded wetland areas. Commission staff have reviewed the restoration plan and agree with the applicant's expectation of success. Accordingly, the Commission is requiring a mitigation to impact ratio of 2:1. A higher mitigation ratio, such as 4:1, has not been required due to the anticipated success of the restoration and the high habitat value that the restored wetland area will have compared with the impact area.

The proposed project has been reviewed and approved by the California Department of Fish and Game and the National Marine Fisheries Service (Exhibit 4 and 6). The California Department of Fish and Game determined that the proposed wetlands mitigation is adequate to offset the impacts caused by the bulkhead reinforcement projects on Trinidad and Humboldt Islands.

As of the date of this staff report, the Commission has approved ten coastal development permits covering 42 properties for repairs to the bulkheads on Trinidad and Humboldt Islands which have had an impact upon open water, soft bottom wetlands¹. Issuance of these permits is dependent upon approval of a coastal development permit for the proposed wetlands mitigation. The coastal development permit numbers, associated impacts, and required mitigation are identified in the following table:

(Table printed on following page)

¹Please note that the Commission has approved several other applications for the reinforcement of bulkheads on Trinidad and Humboldt Islands. However, these other coastal development permits did not involve reinforcements which resulted in impacts to open water, soft bottom wetlands.

Regular Calendar
5-01-020 (Tetra Tech, Inc.)
Page 8 of 18

CCC Permit Application Number	Site Address (HI = Humboldt Island) (TI = Trinidad Island)	Applicant	Tract	Lot #	Soft bottom Impacted (ft ²)	Soft bottom mitigated (ft ²)
5-98-179	16581 Carousel Lane, HI	Kompaniez, P. & V.		134	64.6	129.2
5-98-201	16682 Wanderer Lane, HI	Anderson, J.		158	122.7	245.4
5-98-443	16541 Carousel Lane, HI	Whyte, W. & E.		130	81	162
5-98-444	16551 Carousel Lane, HI	Barrad, B.		131	62.3	124.6
5-99-031	16741 Carousel Lane, HI	Lady, Jr., L.		150	67.5	135.0
5-99-031	16742 Wanderer Lane, HI	Zadro, Z.		151	77.9	155.8
5-99-031	16752 Wanderer Lane, HI	Woods, Jr., H.		152	0	0
5-99-032 (was 5-99-008)	16501 Carousel Lane, HI	Yacoel, C. & M.		126	36.3	72.6
5-99-032 (was 5-99-008)	16531 Carousel Lane, HI	McClory, R.		129	57.1	114.2
5-99-032	16601 Carousel Lane, HI	Clark, O. & J.		136	51.9	103.8
5-99-032	16611 Carousel Lane, HI	Baron, R.		137	51.9	103.8
5-99-032	16621 Carousel Lane, HI	Mettler, L.		138	51.9	103.8
5-99-032	16631 Carousel Lane, HI	McGwire, M.		139	51.9	103.8
5-99-032	16641 Carousel Lane, HI	Kao, J. & M.		140	51.9	103.8
5-99-032	16651 Carousel Lane, HI	Appel, A. & S.		141	51.9	103.8
5-99-032	16661 Carousel Lane, HI	Schuster, R. & I.		142	51.9	103.8
5-99-032	16671 Carousel Lane, HI	Faber, B. & S.		143	51.9	103.8
5-99-032	16681 Carousel Lane, HI	Brady, Jr., J.		144	51.9	103.8
5-99-032	16691 Carousel Lane, HI	Goss, J. & J.		145	51.9	103.8
5-99-032	16701 Carousel Lane, HI	Hutton, T. & V.		146	0	0
5-99-032	16711 Carousel Lane, HI	DeAlmeida, G.		147	21.8	43.6
5-99-032	16721 Carousel Lane, HI	Sun, Y. H.		148	0	0
5-99-032	16731 Carousel Lane, HI	Grossman, J.		149	62.3	124.6
5-99-108	16571 Carousel Lane, HI	Pineda, A.		133	51.9	103.8
5-99-473	16575 Ensign Circle, HI	Gelbard, A.		170	18.7	37.4
5-00-389	3801 Ragtime Circle, TI	Dauger, A.	9168	31	16.6	33.2
5-00-389	3751 Nimble Circle, TI	Ashby, R.	9168	41	3.1	6.2
5-00-389	3671 Venture Circle, TI	King, P.	9168	64	53	106
5-00-389	3431 Sagamore Drive, TI	Jan, Jr., A.	9347	73	24.9	49.8
5-00-389	3461 Sagamore Drive, TI	Silverman, L.	9347	76	0	0
5-00-389	3501 Sagamore Drive, TI	Chiu, F.	9347	79	3.1	6.2
5-00-389	3521 Sagamore Drive, TI	Johnson, R. & H.	9347	81	7.3	14.6
5-00-389	3531 Sagamore Drive, TI	Streisfield, G. & I.	9347	82	11.4	22.8
5-00-390	3382 Venture Drive, TI	McInally, T. & L.	8636	10	49.8	99.6
5-00-390	3362 Venture Drive, TI	Kosta, N.	8636	12	31.1	62.2
5-00-390	3352 Venture Drive, TI	Younessi, Y.	8636	13	1	2
5-00-390	16281 Typhoon Lane, TI	Burggraf, R. & M.	8636	23	22.8	45.6
5-00-390	3612 Venture Drive, TI	Rayhan, S.	9168	69	15.6	31.2
5-00-390	3602 Venture Drive, TI	Daniels, D. & L.	9168	70	14.5	29
5-00-390	3582 Venture Drive, TI	Dauger, A.	9335	46	6.2	12.4
5-00-390	3421 Sagamore Drive, TI	Uva, T. & E.	9347	72	12.5	25
5-00-390	3441 Sagamore Drive, TI	Ong, H.	9347	74	64.4	128.8
Total					1,580.4	3,160.8

As noted in the table above, a total of 1,243.1 square feet of wetlands would be impacted around Humboldt Island and a total of 337.3 square feet of wetlands would be impacted around Trinidad Island. In total, as approved under the coastal development permits identified above, 1,580.4 square feet of wetlands would be impacted. The Commission required the applicants for the above identified permits to mitigate the wetland impact at a ratio of 2:1. Accordingly, the total required mitigation would be 3,160.8 square feet of wetland restoration. The proposed project would provide 5,358 square feet of wetland mitigation. Therefore, there would be 2,197.2 square feet of wetland remaining for mitigation of other wetland impacts that the proposed project, or other projects, may have.

The proposed mitigation itself will result in the permanent fill of 30.52 square feet of existing wetland due to the placement of rip rap. Using the 2:1 mitigation ratio established for the bulkhead repair projects, the required mitigation would be approximately 61 square feet of wetland restoration. Subtracting 61 square feet from the 2,197.2 square feet wetland mitigation, leaves approximately 2,136 square feet of mitigation.

There are approximately 1,500 bulkheaded properties in Huntington Harbour which may be subject to damage similar to the type experienced on Trinidad and Humboldt Islands. Since future bulkhead repairs may result in additional impacts upon wetlands, the applicant proposes to reserve the remaining 2,136 square feet of wetland mitigation as a 'mitigation bank' for future impacts.

B. Biological Resources

1. Habitat and Wildlife

The proposed project is occurring adjacent to and within wetlands that are a part of the Bolsa Chica Ecological Reserve. The applicant has prepared a wetlands delineation (*Wetlands Delineation for the Soft Bottom Mitigation Plan Wetland Improvement Project in Bolsa Chica Ecological Reserve* by Tetra Tech, Inc. of Pasadena, California dated August 24, 2001) and a biological assessment (*Biological Assessment for the Soft Bottom Mitigation Plan Wetland Improvement Project in Bolsa Chica Ecological Reserve* by Tetra Tech, Inc. of Pasadena, California dated August 24, 2001) for the project site (Exhibit 3).

The wetlands delineation submitted by the applicant has determined that, using the single criterion method of identifying wetlands (Cowardin 1979), the entire 1.72 acre survey area is considered wetlands (Exhibit 3). These wetlands are tidally influenced salt marsh comprised of a mixture of mudflats, pickleweed, and saltgrass habitats. Plant species present in the area include Alkali heath (*Frankenia salina*), Annual beard grass (*Polypogon monspeliensis*), Bassia (*Bassia hyssopifolia*), Coyote bush (*Baccharis pilularis*), Crystalline or common iceplant (*Mesembryanthemum crystallinum*), Gazania (*Gazania linearis*), Low barley (*Hordeum depressum*), Pickleweed (*Salicornia europaea*), Pickleweed (*Salicornia subterminalis*), Pickleweed (common) (*Salicornia virginica*), Goose grass (*Galium aparine*), Rip gut grass (brome) (*Bromus diandrus*), Saltgrass (*Distichlis spicata*), Salt wort (*Batis maritima*), Sea blite (*Suaeda californica*), Shore grass (*Monanthochloe littoralis*), Slender-leaved iceplant (*Mesembryanthemum nodiflorum*), Southern tarplant (*Centromadia* (or *Hemizonia*) *parryi* ssp. *Australis*), Vetch (*Trifolium* sp.), Western marsh rosemary (*Limonium californicum*), and Wild radish (*Raphanus sativus*). The conclusion of the wetlands delineation states, "...[t]he dominant types of plants present in the survey area are dependent to a degree on periodic inundation from the tide". However, in the area of the old foundation where the debris removal and grading would occur the wetlands delineation states that

"...a larger percentage of non-native and noxious exotic plants characteristic of disturbed environments may be observed." Due to the presence of hydric soil characteristics, the soil under the old foundation could be considered wetlands. Once the foundation and associated debris are removed and tidal flushing is restored and improved, the area is anticipated to provide high quality habitat. Upon completion of the project, the restored area would be "southern coastal salt marsh".

The project area provides habitat for a variety of wildlife. According to the applicant's biological assessment the salt marshes can provide habitat for a variety of bird species including clapper rails (*Rallus longirostris*), Belding's savannah sparrow, California least tern, burrowing owl, plovers, marsh wren (*Cistothorus palustris*), American bittern (*Botaurus lentiginosus*), northern harrier (*Circus cyaneus*), great egret (*Casmerodius albus*), snowy egret (*Egretta thula*), great blue heron (*Ardea herodias*), green heron (*Butorides striatus*), black-crowned night heron (*Nycticorax nycticorax*), sandpipers (*Calidris* sp.), marsh sandpipers (*Tringa* sp.), spotted sandpiper (*Actitis macularia*), curlews (*Numenius* sp.), sandhill crane (*Grus canadensis*), American coot (*Fulica americana*), black-necked stilt (*Himantopus mexicanus*), gulls (*Larus* sp.), and willet (*Catoptrophorus semipalmatus*).

The subject site may also provide habitat for mammals including the San Diego pocket mouse (*Perognathus fallax*), Pacific kangaroo rat (*Dipodomys agilis*), western harvest mouse (*Reithrodontomys megalotis*), California vole (*Microtus californicus*), and the California ground squirrel (*Spermophilus beecheyi*).

While the project site may provide habitat for the species identified above, only American crow (*Corvus brachyrhynchos*), great egret, and great blue heron were present during a reconnaissance of the site. According to the biological report, no federal or state listed, proposed listed, or candidate plant or wildlife species were noted during the reconnaissance-level field survey. However, there are several individuals of southern tarplant, which is included on the California Native Plant Society (CNPS) List 1B, along the northern edge of the east cell of the wetlands. List 1B plants are those which have been identified by CNPS as "rare and endangered".

2. Wetland Fill

One of the main reasons for preserving, expanding, and enhancing Southern California's remaining wetlands is because of their important ecological function. First and foremost, wetlands provide critical habitat, nesting sites, and foraging areas for threatened or endangered species. Wetlands also serve as migratory resting spots on the Pacific Flyway a north-south flight corridor extending from Canada to Mexico used by migratory bird species. In addition, wetlands serve as natural filtering mechanisms to help remove pollutants from storm runoff before the runoff enters into streams and rivers leading to the ocean. Further, wetlands serve as natural flood retention areas.

Another critical reason for preserving, expanding, and enhancing Southern California's remaining wetlands is because of their scarcity. As much as 75% of coastal wetlands in southern California have been lost, and, statewide up to 91% of coastal wetlands have been lost.

The proposed wetlands restoration project includes placing 30.52 square feet of rip rap around the ends of the proposed replacement pipes and grading around the old building foundation in areas documented to be wetlands. The placement of rip rap is fill as defined by Section 30108.2 of the Coastal Act. In addition, the proposed grading which will involve the removal of soil would be considered dredging. Section 30233 of the Coastal Act only allows the dredging or filling of coastal waters or wetlands for eight specified uses and only where feasible mitigation measures have been

provided to minimize adverse environmental effects. Section 30233(a) 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 wetland areas only, entrance channels for new or expanded boating facilities; and in a degraded wetland, identified by the Department of Fish and Game pursuant to subdivision (b) Section 30411, for boating facilities if, in conjunction with such boating facilities, a substantial portion of the degraded wetland is restored and maintained as a biologically productive wetland. The size of the wetland area used for boating facilities, including berthing space, turning basins, necessary navigation channels, and necessary support service facilities, shall not exceed 25 percent of the degraded wetland.

(4) 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.

(5) 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.

(6) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.

(7) Restoration purposes.

(8) Nature study, aquaculture, or similar resource dependent activities.

(b) Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported for such purposes to appropriate beaches or into suitable long shore current systems.

In this case, the proposed dredging and fill would be for the purpose of restoring wetland habitat. These proposed activities are an allowable use pursuant to Section 30233(a)(7) of the Coastal Act.

Section 30233 of the Coastal Act also requires that the proposed fill and dredging be the least environmentally-damaging feasible alternative including the use of feasible mitigation measures to reduce adverse environmental effects. The applicant has proposed measures to ensure that the proposed project is the least environmentally-damaging feasible alternative and has included mitigation measures to avoid adverse effects on the marine environment.

Three alternatives to the proposed fill of wetlands were considered. The first alternative would be to replace the pipes without using rip rap at the ends of the pipes for erosion control. Under this alternative, no fill of wetlands would occur. However, without the rip rap the area around the ends of the pipes would erode. This erosion would cause increased sedimentation within the wetlands, reducing water quality within the wetlands and the overall quality of the wetland habitat. This sedimentation impact would effect the entire wetland (1.72 acres), while the fill from use of rip rap would only effect 30.52 square feet of wetlands. Since the proposed project would minimize or avoid the impact from erosion and have less impact on wetlands than the alternative, the first alternative was rejected.

The second alternative would be to reduce the overall length of the replacement pipes in order that the pipe ends and needed rip rap would be located outside of the wetland boundary. Implementation of this alternative would not be feasible for the pipe located between the East Cell and West Cell because the existing and proposed pipe would pass under a roadway used to access the interpretive center and parking lot. The existing and proposed pipe are as short as feasible in order to pass completely under the road. In addition, reducing the length of the pipe between the East Cell and the Bolsa Chica Channel wouldn't reduce impacts upon wetland because wetland habitat completely surrounds the existing and proposed pipe alignment. There is no pipe configuration or alternative which would avoid wetlands impacts at this location.

The third alternative would be the "no action" alternative. Under this alternative the existing pipes which connect the East and West Cell wetlands to the Bolsa Chica Channel would not be replaced. If the pipes were not replaced they would continue to corrode and collapse, further restricting and ultimately cutting off tidal circulation within the East and West Cell wetlands. Implementation of this alternative would have more impact upon wetlands than the proposed project.

The proposed project would have 30.52 square feet of fill impact due to the placement of rip rap for erosion control. The applicant has minimized the amount of rip rap necessary to provide erosion control at each pipe end. The proposed design would minimize the amount of fill and avoid sedimentation impacts upon the wetlands. Therefore, the proposed project is the least environmentally damaging feasible alternative. In addition, the proposed project would restore 5,358 square feet of wetlands. A portion, 3,160.8 square feet, would be mitigation for impacts to soft bottom wetland habitat caused by bulkhead reinforcement projects at Trinidad and Humboldt Islands. Some of the remaining 2,197.2 square feet of wetlands would provide feasible mitigation for the 30.52 square feet of fill caused by this restoration project. Using the 2:1 mitigation ratio established for the bulkhead repair projects, the required mitigation for the impact of 30.52 square feet of wetlands would be approximately 61 square feet of wetland restoration. The proposed project would include 61 square feet of wetland mitigation for the 30.52 square feet of wetland impact. Therefore, the proposed project provides feasible mitigation measures.

3. Other Impacts

Section 30230 of the Coastal Act requires that marine resources shall be maintained, enhanced, and where feasible, restored. 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 30230 of the Coastal Act requires that marine resources be protected and that the use of the marine environment be carried out in a manner that will sustain the biological productivity of coastal waters. The proposed deposition of material above and below the mean high tide line may impact marine resources. Therefore, mitigation measures are necessary to protect the biological productivity of coastal waters.

In addition, Section 30240 of the Coastal Act requires avoidance of impacts to environmentally sensitive habitat areas. Section 30240 of the Coastal Act states:

Section 30240.

(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those 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 those areas, and shall be compatible with the continuance of those habitat and recreation areas.

Section 30107.5 defines environmentally sensitive habitat area as:

"Environmentally sensitive area" means any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments.

Due to their rarity and special role within coastal ecosystems, wetlands can be considered environmentally sensitive areas. Accordingly, any development, including wetlands restoration, must be carried out in a manner which would prevent impacts that would significantly degrade those areas. In this case, the project would have a direct wetland fill impact as a result of the restoration. However, this fill is allowable under Section 30233(a)(7). In addition, the fill impact would occur to improve tidal circulation and the function of the wetland habitat. Accordingly, the fill would occur to significantly improve, rather than degrade, the wetland habitat. Therefore, the wetland fill would be consistent with Section 30240 of the Coastal Act.

Other impacts to wetland habitat and species are possible. For instance, the proposed project will require the use of construction equipment and will require staging areas to place construction materials and equipment. If these construction corridors and staging areas are not carefully located, impacts upon sensitive species such as the Southern tarplant and sensitive wetland impacts could occur. In addition, construction activity could disturb foraging and nesting activities of sensitive bird species such as the California least tern and western snowy plover. Suitable habitat for these sensitive birds species exist at the project site, however, no individuals were found in the immediate project area during reconnaissance surveys of the site by the applicant.

The applicant is proposing measures to avoid these impacts. In order to avoid construction corridor and staging impacts, the applicant is proposing to only stage construction equipment on

asphalt areas of Pacific Coast Highway, Warner Avenue, and the access road for the interpretive center. The applicant is also proposing to have a qualified biologist present during construction to monitor construction activity and to provide recommendations regarding avoidance of impacts to sensitive species and habitats. The applicant is also proposing to avoid construction during the nesting and breeding season of the least tern and snowy plover. Finally, since some grading of the area around the old foundation may have impacts upon existing native vegetation, the applicant is proposing to salvage and replant this vegetation as part of the restoration. The Commission finds that these proposed measures are necessary to ensure the consistency of the proposed project with Section 30230 and 30240 of the Coastal Act. Therefore, the Commission imposes Special Condition 2 and Special Condition 4.

The applicant has designed the proposed development to minimize impacts upon wetlands and sensitive habitat and species in the project area. The proposed design is depicted upon plans submitted by the applicant. In order to assure that the project is constructed as proposed and that any changes receive review and approval by the Executive Director and/or the Commission, as necessary, the Commission imposes Special Condition 1. Special Condition 1 requires the applicant to conform with plans submitted and to report any changes to the plans to the Executive Director. Any changes to the plans may require an amendment or new permit unless the Executive Director determines that no amendment or new permit is required.

The proposed project involves the removal of building debris and non-native and dead vegetation. The applicant has not identified a debris disposal site. This debris must be disposed in a location which will not have any adverse impact upon coastal resources. In order to assure that debris generated by the project is properly disposed, the Commission imposes Special Condition 3.

The proposed project is mitigation for impacts to wetlands caused by bulkhead reinforcements at Trinidad and Humboldt Islands in Huntington Harbor. In order to assure that the proposed mitigation is undertaken in accordance with the applicant's proposal, the Commission imposes Special Condition 6. Special Condition 6 requires the applicant to carry out the mitigation prior to or concurrent with the commencement of any development authorized under coastal development permits 5-98-179, 5-98-201, 5-98-443, 5-98-444, 5-99-031, 5-99-032, 5-99-108, 5-99-473, 5-00-389, or 5-00-390. Special Condition 6 also requires the applicant to carry out the proposed mitigation in accordance with the mitigation plan and supporting technical documentation. Special Condition 6 also outlines monitoring and reporting requirements and requires the applicant to

As conditioned, the Commission finds the proposed project consistent with Sections 30230 and 30240 of the Coastal Act.

D. Water Quality

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.

The proposed development will occur within and adjacent to coastal waters. Construction will require the use of heavy machinery and require the stockpiling of construction materials. Construction phase impacts include improper storage or placement of construction materials, debris, or waste in a location subject to erosion and dispersion or in a manner which allows such materials to be discharged into wetlands and coastal waters via rain or runoff. These actions would result in adverse impacts upon the marine environment that would reduce the biological productivity of coastal waters. For instance, construction debris entering wetlands or coastal waters may cover and displace soft bottom habitat. Sediment discharged to wetlands or coastal waters may cause turbidity which can shade and reduce the productivity of marine vegetation and foraging avian and marine species' ability to see food in the water column.

In order to protect the marine environment from degradation, Special Condition 2 requires that construction materials, debris, or waste be placed or stored where it will not enter storm drains or be subject to tidal erosion and dispersion; removal of debris within 24 hours of completion of construction; implementation of Best Management Practices (BMPs) and Good Housekeeping Practices (GHPs) designed such that construction debris and sediment are properly contained and secured on site and to prevent the unintended transport of sediment and other debris into coastal waters by wind, rain or tracking. Therefore, as the conditioned, the Commission finds the proposed development is consistent with Section 30231 of the Coastal Act.

E. Public Access

Section 30210 of the Coastal Act requires that maximum public access and recreation opportunities be provided. Section 30210 states as follows:

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 30212 of the Coastal Act states, in relevant part:

- (a) *Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where:*
 - (2) *adequate access exists nearby.*

The subject site is located within the Bolsa Chica Ecological Reserve. The reserve is a popular passive recreation area due to the availability of trails and wildlife viewing opportunities. The development will involve staging and use of equipment on the roadway and parking lot used to access the interpretive center and the reserve. In addition, the proposed development will require the staging of equipment on Pacific Coast Highway and Warner Avenue, which are major coastal access thoroughfares. These elements would result in adverse impacts upon public access to the coast and to the ecological reserve. However, upon completion of the project, existing access would be restored to pre-project conditions. Furthermore, the enhancement of the wetland in the project area would allow greater wildlife viewing opportunities. Also, the close proximity of the

wetland restoration to the interpretive center, which is often visited by schools and other educational groups, will provide excellent educational benefits.

The heaviest public access use period occurs between Memorial Day and Labor Day weekends (i.e. between late May and early September). Accordingly, access impacts would be minimized by implementing the project outside the heaviest use period. Therefore, the Commission imposes Special Condition 5 which prohibits construction between Memorial Day and Labor Day inclusive. As conditioned, the Commission finds that no public access is necessary with the proposed development and that the proposed project is consistent with section 30212 of the Coastal Act.

F. Legal Ability to Undertake Development

Section 30601.5 of the Coastal Act requires states in part,

...prior to the issuance of a coastal development permit, the applicant shall demonstrate the authority to comply with all conditions of approval.

The proposed project would occur in the Bolsa Chica Ecological Reserve. The reserve is owned by the California State Lands Commission whom leases the site to the California Department of Fish and Game. The CSLC has reviewed the project and stated that no additional authorization is required from CSLC and any further approvals must come from the CDFG (Exhibit 5). Meanwhile, the California Department of Fish and Game has approved the proposed mitigation. However, CDFG has not yet formally granted access to the site to the applicant. In order to assure compliance with Section 30601.5 of the Coastal Act, the Commission imposes Special Condition 7 which requires the applicant to submit evidence that they have been granted access to the site and have the legal ability to undertake the mitigation at the subject site.

As conditioned the Commission finds the proposed project is consistent with Section 30601.5 of the Coastal Act.

G. Local Coastal Program

The City of Huntington Beach local coastal program ("LCP") is effectively certified. However, the proposed project is within Bolsa Chica, an uncertified area. Therefore, pursuant to Section 30519 of the Coastal Act, the LCP does not apply to the proposed project. However, the certified LCP may be used for guidance in evaluating the proposed project for consistency with the Chapter 3 policies of the Coastal Act.

The City's LCP contains policies regarding the protection of water quality and marine resources, including incorporation of Sections 30230, 30231, 30233 and 30235 of the Coastal Act. In addition, the City's LCP has policies protecting environmentally sensitive habitat areas. The Commission has found that the project, as conditioned, is consistent with the Chapter 3 policies of the Coastal Act. Since the same policies are incorporated in the City's LCP, the project as conditioned is consistent with the LCP.

H. California Environmental Quality Act

Section 13096 of the Commission's regulations requires Commission approval of Coastal Development Permit applications to be supported by a finding showing the application, as

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

The project is located in an open space area which contains sensitive habitat and species. The proposed project would improve wildlife habitat. In addition, the proposed development has been conditioned to assure the proposed project is consistent with the resource protection policies of the Coastal Act. The conditions also serve to mitigate significant adverse impacts under CEQA. The conditions are: 1) compliance with plans submitted by the applicant; 2) conformance with specific construction responsibilities to avoid impacts upon wetland habitat and water quality; 3) identification of a debris disposal site; 4) conformance with construction timing requirements designed to protect the California least tern and Western snowy plover as well as public access; 5) conformance with the proposed soft bottom mitigation plan; 3) and a requirement the applicant demonstrates their legal ability to carry out the proposed project and all conditions of approval. There are no other feasible alternatives or mitigation measures available which will lessen any significant adverse impact the activity would have on the environment. Therefore, the Commission finds that the proposed project, as conditioned, can be found consistent with the requirements of CEQA.

Biological Surveys and Mitigation Plans

- *Soft Bottom Mitigation Plan, Humboldt Island and Trinidad Island Bulkhead Repair Project, Huntington Beach, California* dated April 2000 prepared by Tetra Tech, Inc. of Pasadena, California
- *Wetlands Delineation for the Soft Bottom Mitigation Plan Wetland Improvement Project in Bolsa Chica Ecological Reserve* by Tetra Tech, Inc. of Pasadena, California dated August 24, 2001
- *Biological Assessment for the Soft Bottom Mitigation Plan Wetland Improvement Project in Bolsa Chica Ecological Reserve* by Tetra Tech, Inc. of Pasadena, California dated August 24, 2001
- *Tidal Analysis for Soft Bottom Mitigation Plan Wetland Improvement Project in Bolsa Chica Ecological Reserve* dated June 2001 by Tetra Tech, Inc. of Pasadena, California

Local Government Approvals

- *Negative Declaration No. 00-05 for the Humboldt Island and Trinidad Island Seawall (Bulkhead) Repairs* prepared by the City of Huntington Beach and Tetra Tech, Inc. of Pasadena, California

California Department of Fish and Game Letters and Approvals

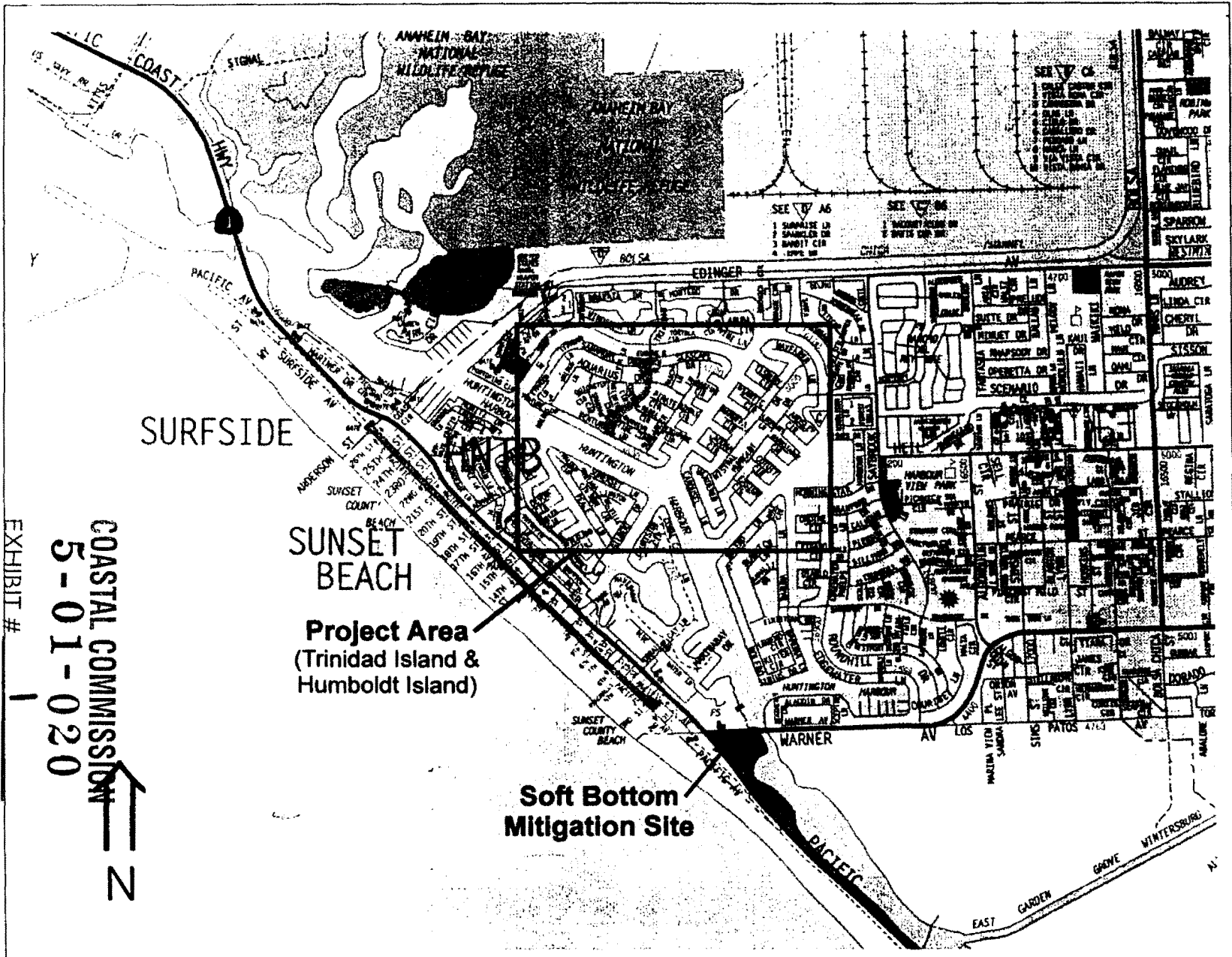
- Memorandum from California Department of Fish and Game to the California Coastal Commission titled *Humboldt Island Homeowners Association Bulkhead Repair* dated July 6, 1999
- Letter from California Department of Fish and Game to City of Huntington Beach dated August 31, 2000 approving the Soft Bottom Mitigation Plan and Eelgrass Mitigation and Eelgrass Transplant Report cited above
- Memorandum from the California Department of Fish and Game to the California Coastal Commission titled *Coastal permit application 5-01-020 concerning implementation of the soft-bottom mitigation for bulkhead repairs at Humboldt and Trinidad Islands* dated July 18, 2001.

Other Agency Approvals and Correspondence

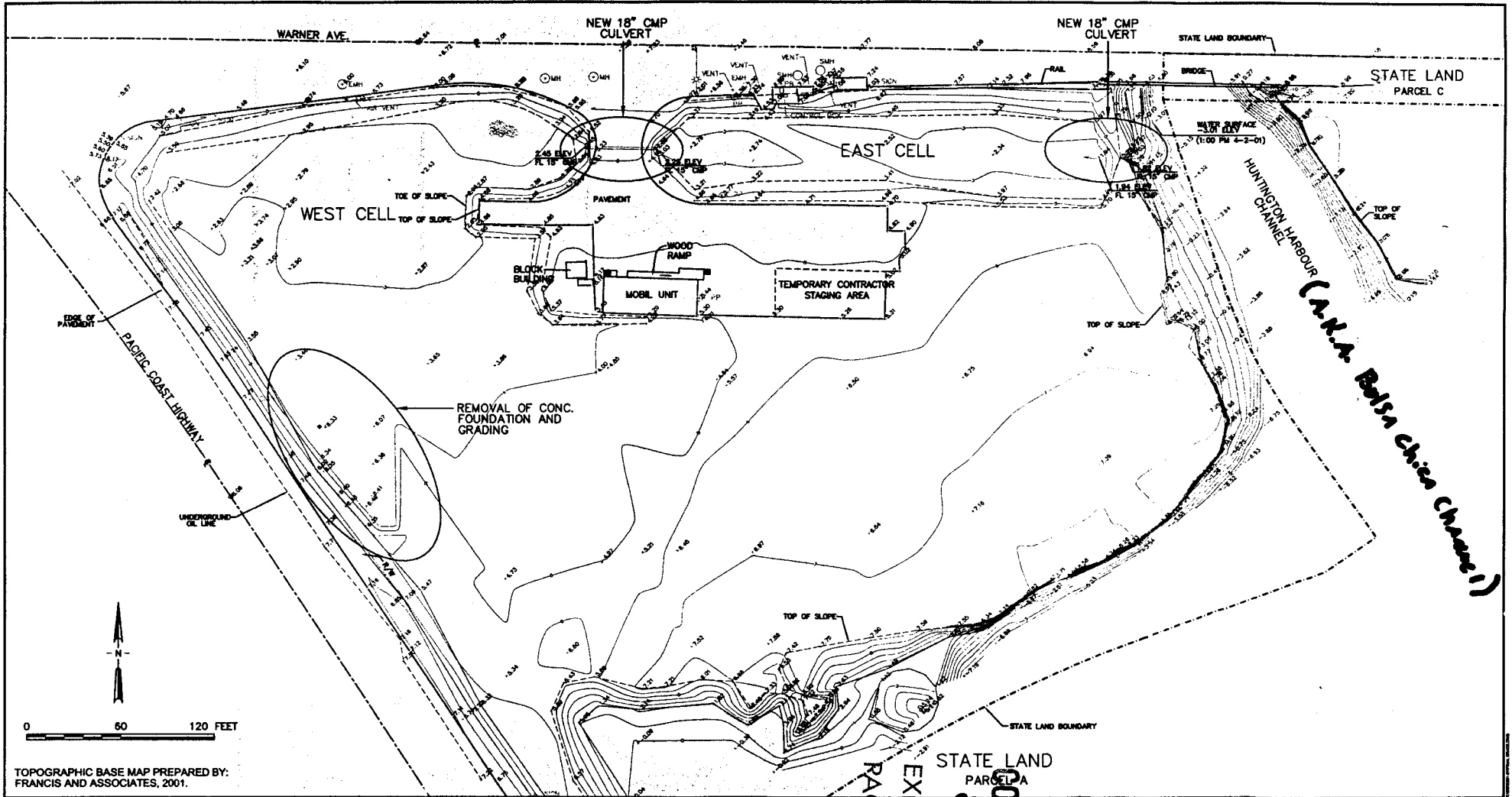
- Letter from the California State Lands Commission to Tetra Tech, Inc. dated May 23, 2000, titled *Soft Bottom Mitigation Plan for Humboldt Island and Trinidad Island Bulkhead Repair Projects, Huntington Harbor, Orange County*.
- Letter from the California State Lands Commission to Tetra Tech, Inc. dated March 28, 2001, titled *Soft Bottom Mitigation Project Land Ownership Determination, Bolsa Chica, Orange County*.
- Letter from the National Marine Fisheries Service to Tetra Tech, Inc. dated May 8, 2000, approving the Soft Bottom Mitigation Plan cited above.

Coastal Development Permits

- Emergency Coastal Development Permit 5-00-403-G
- Humboldt Island Bulkhead Reinforcements: 5-97-223 (Shea/Albert); 5-98-179 (Kompaniez), 5-98-201 (Anderson), 5-98-443 (Whyte), 5-98-444 (Barrad), 5-99-005 (Dea), 5-99-006 (Fernbach & Holland), 5-99-007 (Aranda et al.), 5-99-008 (Yacoel et. al.), 5-99-030 (Johnson), 5-99-031 (Lady, Jr./Zlatko/Woods), 5-99-032 (Yacoel et al), 5-99-108 (Pineda). 5-98-471 (Maginot), 5-99-472 (Bjork), 5-99-473 (Gelbard)
- Trinidad Island: 5-00-389 (Ashby et. al.); 5-00-390 (Burggraf et. al.); 5-00-401 (Baghdassarian et. al.); 5-00-402 (Buettner et. al.)



Source: Thomas Bros. Maps



TOPOGRAPHIC BASE MAP PREPARED BY:
FRANCIS AND ASSOCIATES, 2001.

- LEGEND**
- Roadway Centerline
 - Property Boundary
 - Elevation Contours

- Notes:**
1. Vertical Datum: NAGV 29, 1995 OCS ADJ.
 2. Horizontal Datum: Los Patos RM2
 3. State Lands Parcel Identification: 110-017-01 & 110-017-02

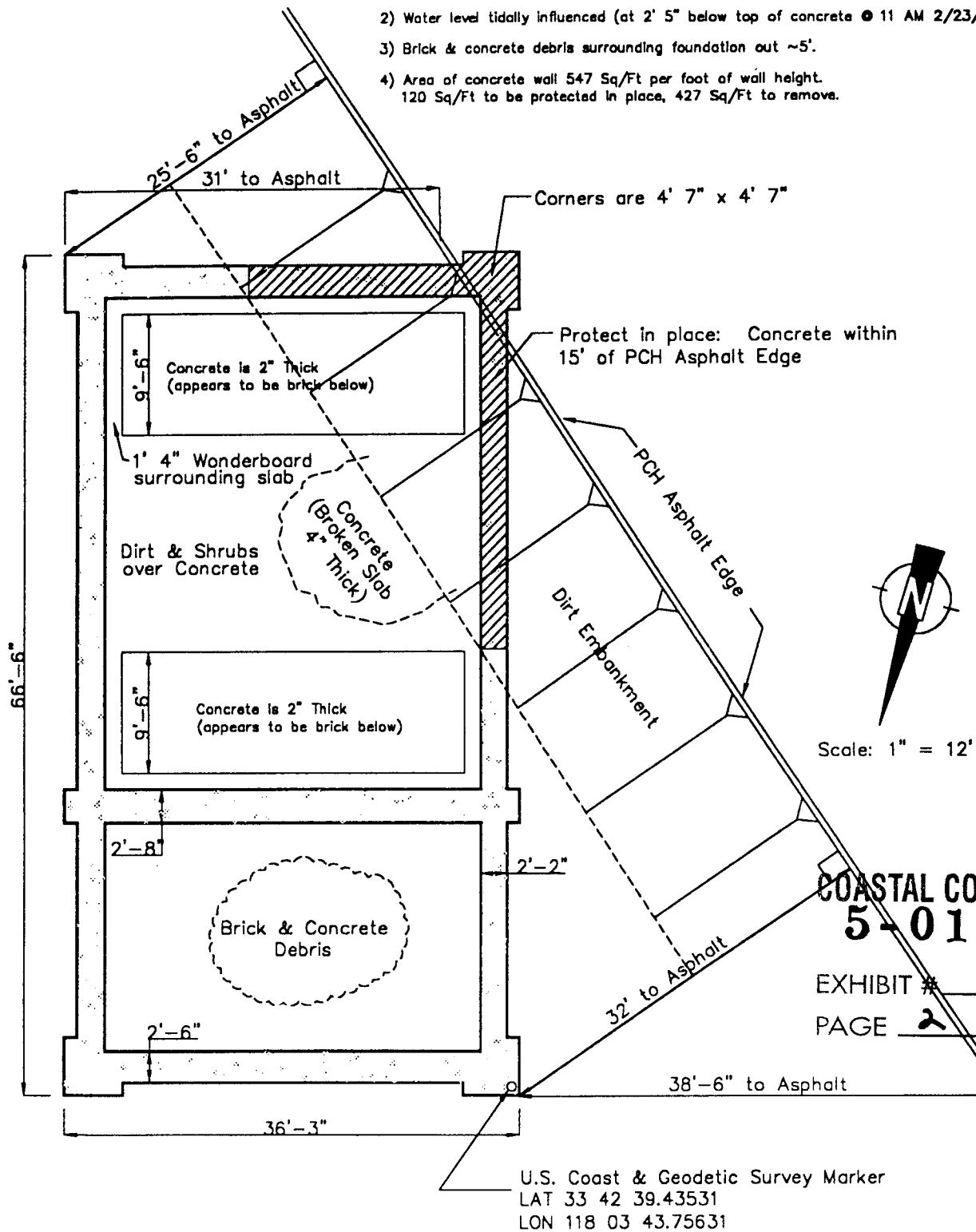
COASTAL COMMISSION
 EXHIBIT # 5-01-020
 PAGE 1 OF 5

**Proposed Improvements & Final Grading Plan
Bolsa Chica Ecological Reserve**

Figure 2 Tetra Tech, Inc.

NOTES:

- 1) Concrete wall at least 3' in height.
- 2) Water level tidally influenced (at 2' 5" below top of concrete @ 11 AM 2/23/00).
- 3) Brick & concrete debris surrounding foundation out ~5'.
- 4) Area of concrete wall 547 Sq/Ft per foot of wall height.
120 Sq/Ft to be protected in place, 427 Sq/Ft to remove.



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5-01-020
 EXHIBIT # 2
 PAGE 2 OF 5

cad1/projects/e501/e501-debris.dwg



TETRA TECH, INC.
 670 North Rosemead Blvd.
 Pasadena, California 91107

Concrete Debris Removal
 Humboldt/Trinidad Mitigation
 Bolsa Chica Ecological Reserve

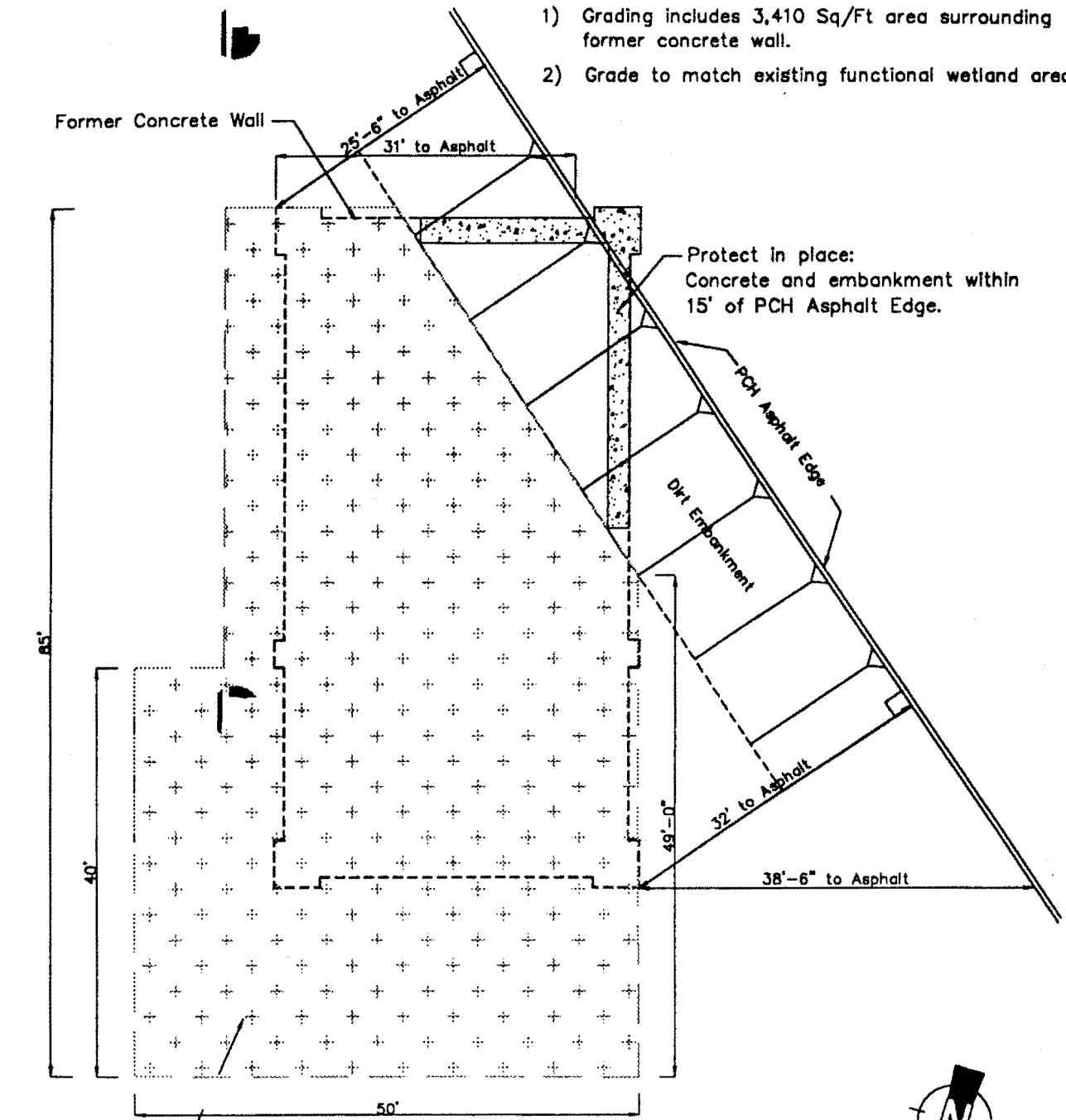
FIGURE 4

Date: 2/25/00

TC E-501

NOTES:

- 1) Grading includes 3,410 Sq/Ft area surrounding former concrete wall.
- 2) Grade to match existing functional wetland area.



Grade Area to +1.0 to +5.0 ft MLLW

Existing Wetland Area

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5-01-020

EXHIBIT # 2
PAGE 3 OF 5

Scale: 1" = 15'



cad://projects/e501/e501-grade.dwg



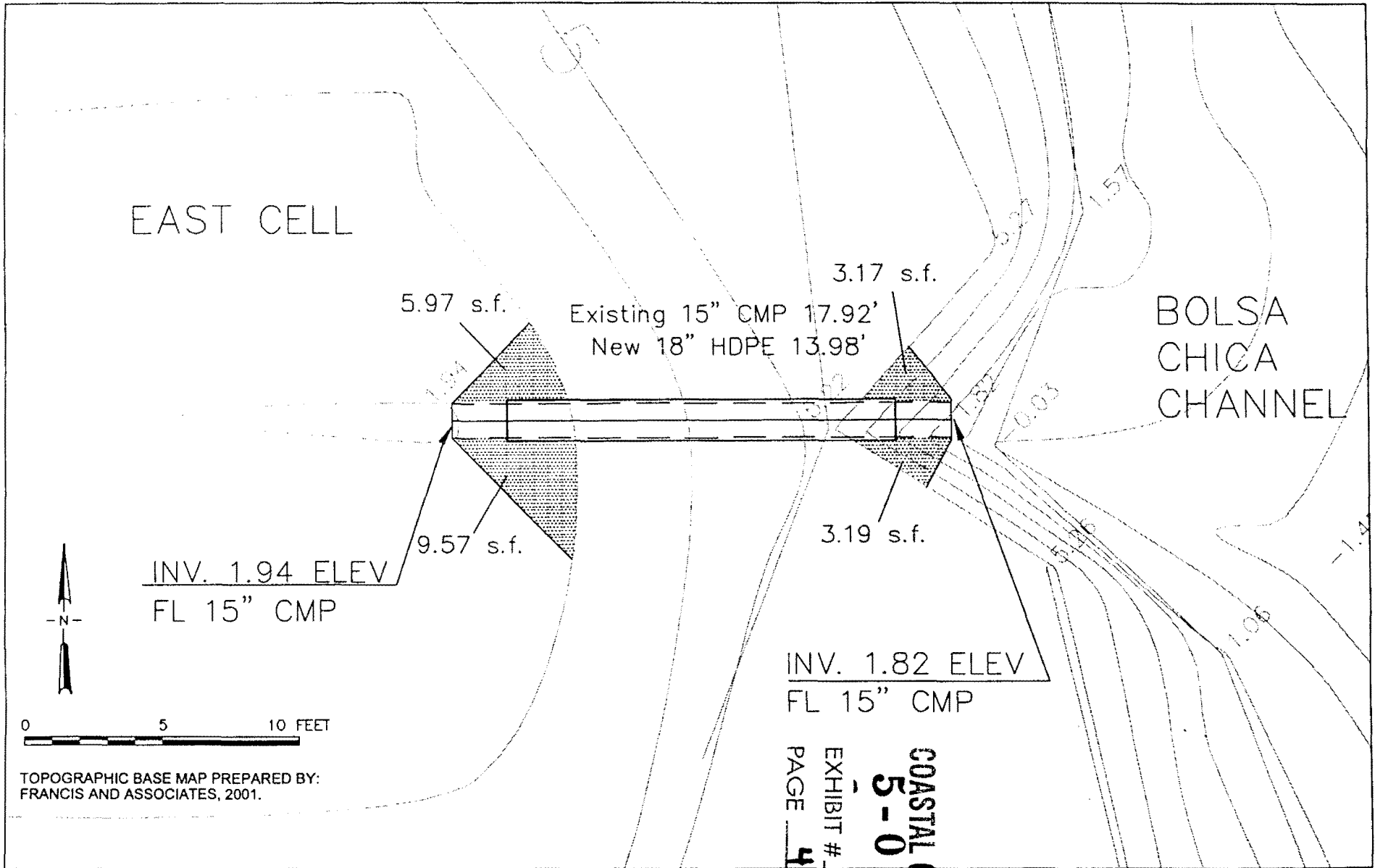
TETRA TECH, INC.
670 North Rosemead Blvd.
Pasadena, California 91107

Wetland Improvement Plan
Humboldt/Trinidad Mitigation
Bolsa Chica Ecological Reserve

FIGURE 5

Date: 2/25/00

TC E-501



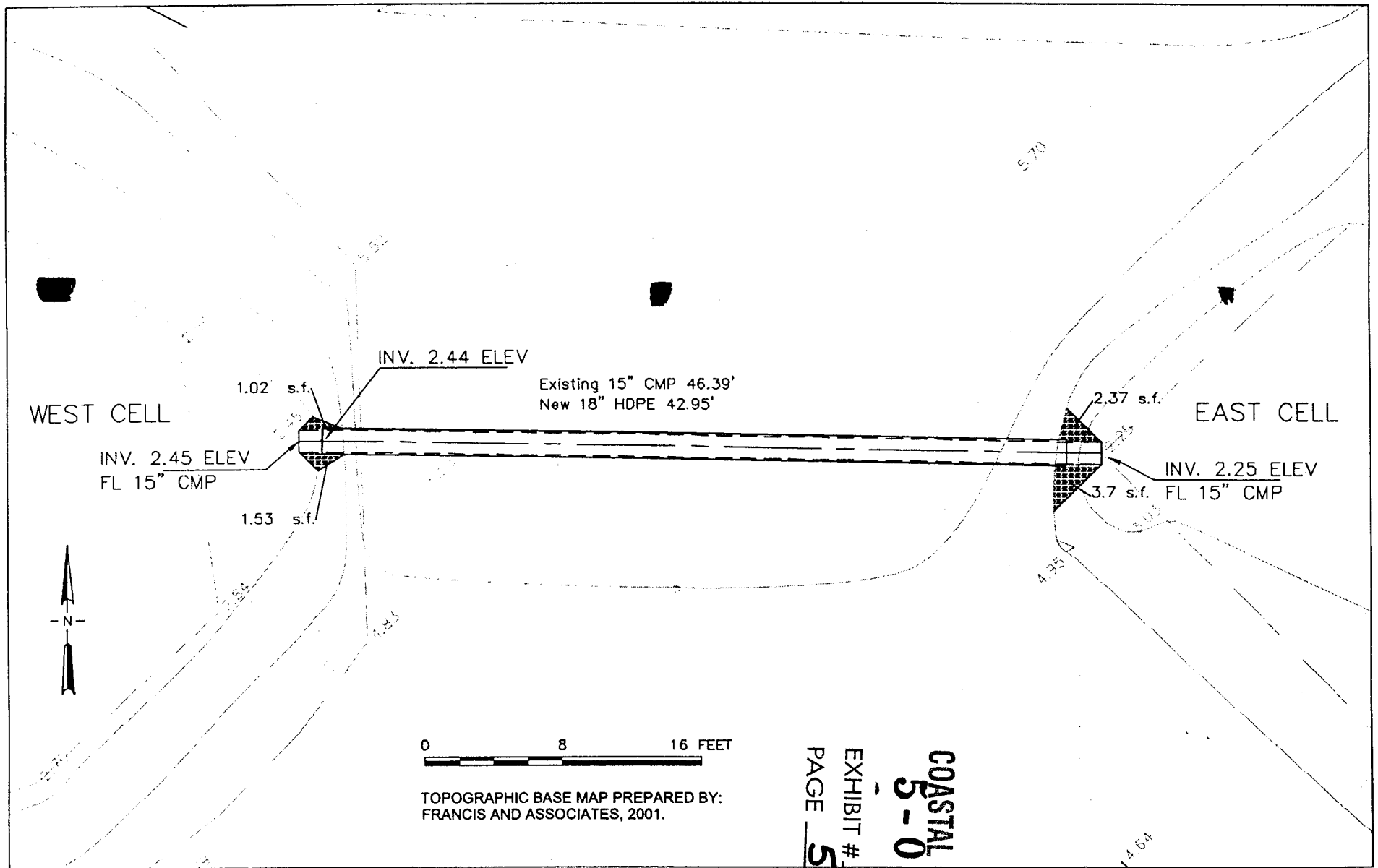
LEGEND

- | | | | |
|-----|--------------------|---|----------------------|
| --- | Existing 15" CMP |  | Rip-rap Installation |
| — | New 18" HDPE | | |
| --- | Elevation Contours | | |

COASTAL COMMISSION
5-01-020
EXHIBIT # 3
PAGE 4 OF 5

Conduit Replacement Between East Cell and Bolsa Chica Channel

Figure 3



LEGEND

- Existing 15" CMP
- New 18" HDPE
- - - Elevation Contours
-  Rip-rap Installation

TOPOGRAPHIC BASE MAP PREPARED BY:
FRANCIS AND ASSOCIATES, 2001.

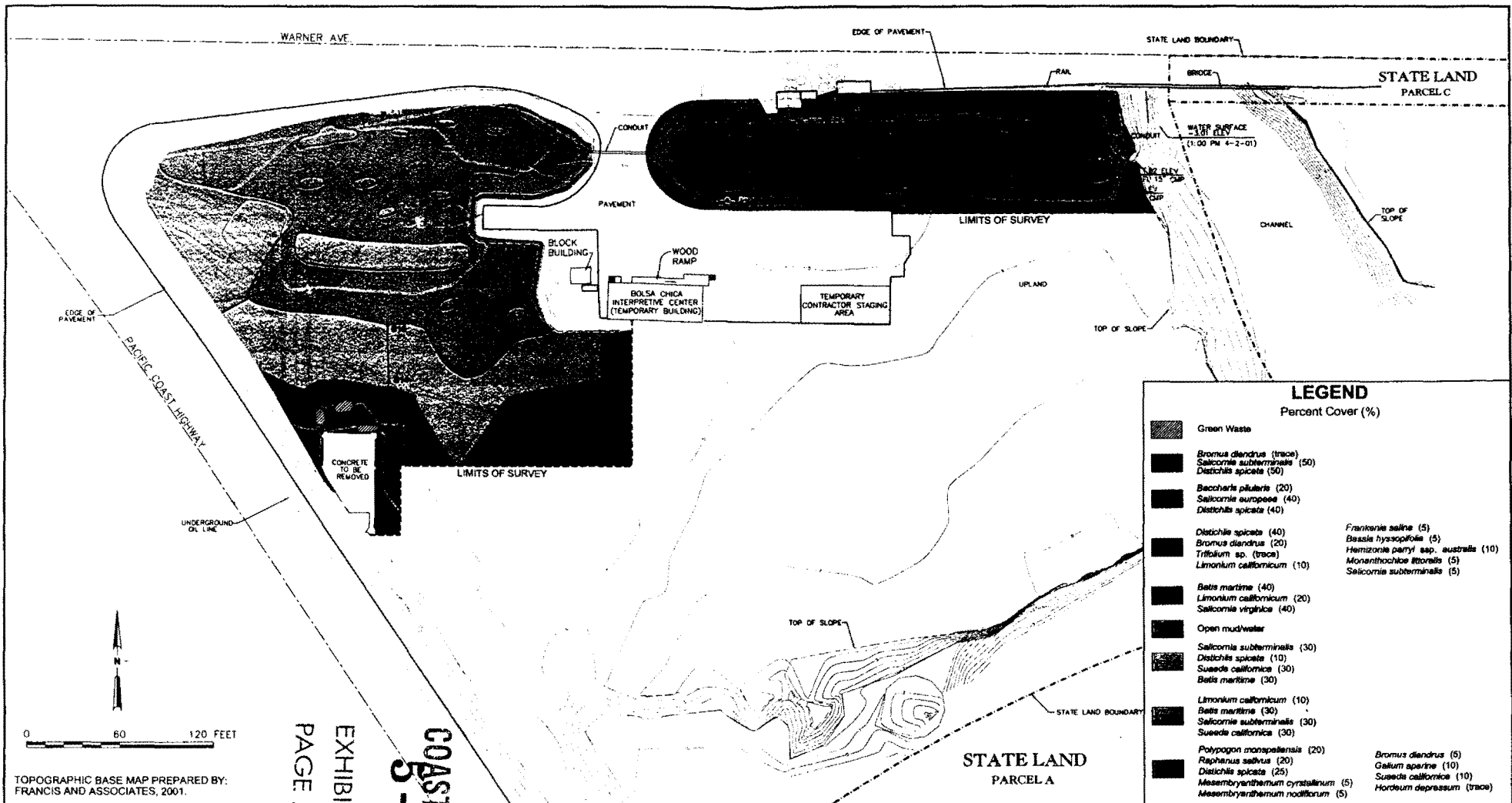
EXHIBIT # 5-01-020
PAGE 5 OF 5

COASTAL COMMISSION

Conduit Replacement Between West Cell and East Cell

Figure 4

Tetra Tech, Inc. 



0 60 120 FEET

TOPOGRAPHIC BASE MAP PREPARED BY:
FRANCIS AND ASSOCIATES, 2001.

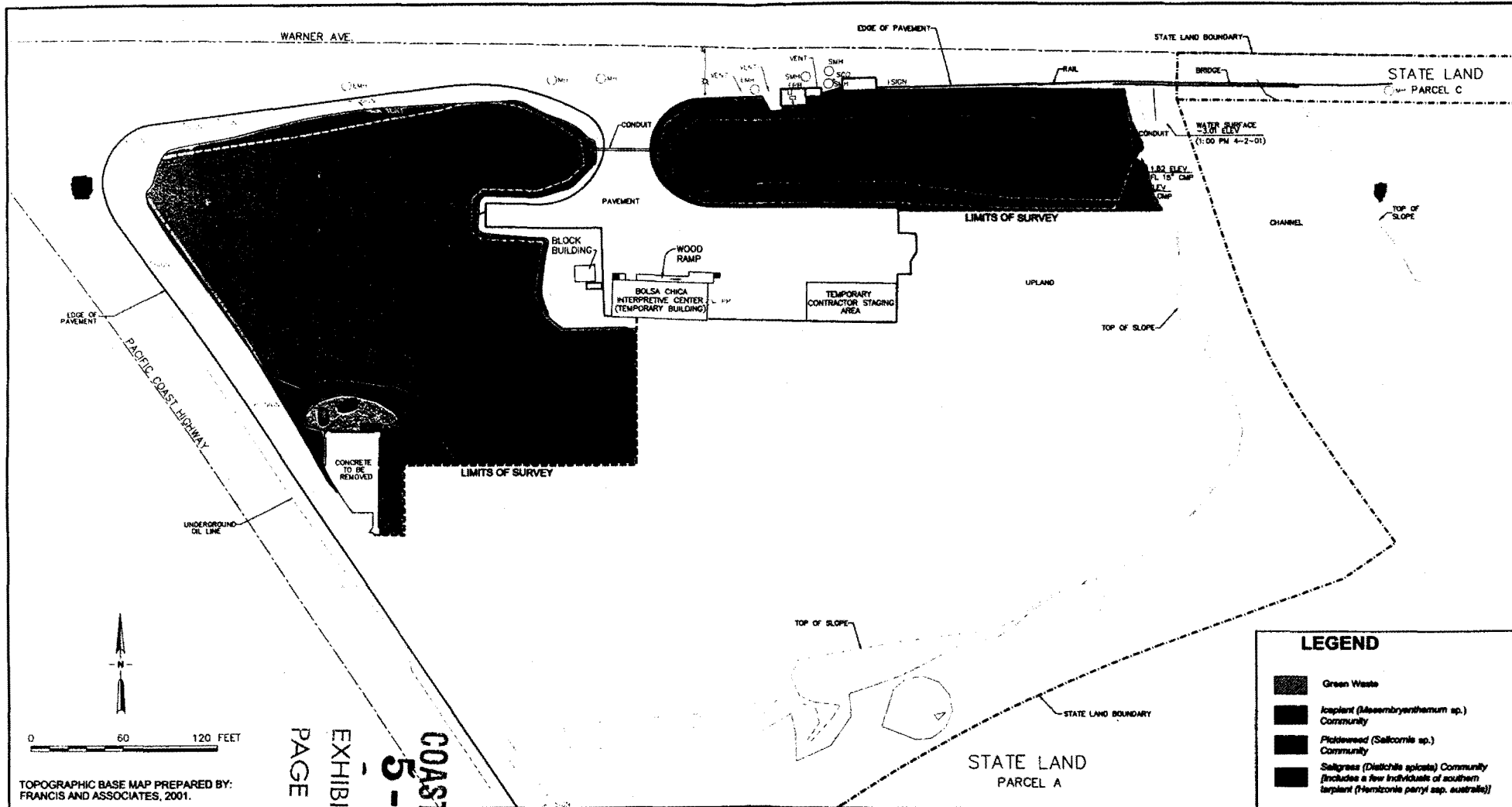
- LEGEND**
- +— Transect
 - Roadway Centerline
 - - - Property Boundary
 - - - Limits of Survey

- Notes:**
1. Vertical Datum: NAGV 29, 1995 OCS ADJ.
 2. Horizontal Datum: Los Patos RM2
 3. State Lands Parcel Identification: 110-017-01 & 110-017-02

**Wetland Delineation
Bolsa Chica Ecological Reserve**

Figure 2

COASTAL COMMISSION
 EXHIBIT # 03
 PAGE 1 OF 2
 5-01-020



LEGEND	
	Green Waste
	<i>Icaplant</i> (<i>Aesembryanthemum</i> sp.) Community
	<i>Pikileweed</i> (<i>Salicornia</i> sp.) Community
	<i>Saligrae</i> (<i>Distichlis spicata</i>) Community (Includes a few individuals of southern <i>isplant</i> (<i>Hemizonia parryi</i> sp. <i>australis</i>))

LEGEND	
	Roadway Centerline
	Property Boundary
	Limits of Survey

- Notes:
1. Vertical Datum: NAGV 29, 1995 OCS ADJ.
 2. Horizontal Datum: Los Patos RM2
 3. State Lands Parcel Identification: 110-017-01 & 110-017-02

Plant Communities within the Project Area

Figure 2

COASTAL COMMISSION
 EXHIBIT # 03
 5-01-020
 PAGE 2 OF 2

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Page: 1 of 2

DEPT. FISH AND GAME ID:619-467-4235

MAY 23'00 10:22 No.006 P.01

STATE OF CALIFORNIA-THE RESOURCES AGENCY

GRAY DAVIS, Governor

DEPARTMENT OF FISH AND GAME

Marine Region
4949 Viewridge Avenue
San Diego, CA 92123
(858) 467-4231

Ms. Sarah McFadden
Environmental Scientist
Tetra Tech, Inc.
670 North Rosemead Blvd.
Pasadena, California 91107

Post-It* Fax Note 7671
Date 5/23 # of pages 2
To Sarah McFadden From M. Fluharty
Co./Dept. Tetra Tech Co.
Phone # Phone #
Fax # 801-362-7694 Fax #



JAN 18 2001

Dear Ms. McFadden:

CALIFORNIA
COASTAL COMMISSION

May 16, 2000

Department of Fish and Game (Department) personnel have reviewed the Soft Bottom Mitigation Plan for the Humboldt Island and Trinidad Island Bulkhead Repair Project, Huntington Beach, California, prepared by Tetra Tech, Inc.. The proposed mitigation plan has been developed to offset the unavoidable loss of 1,584 square feet of soft-bottom marine habitat from bulkhead repair projects at 39 residences in Huntington Harbor.

The mitigation plan is designed to restore and create tidal influence to existing wetland areas located in the Bolsa Chica Ecological Reserve, managed by the Department, in an area bordered by Pacific Coast Highway and Warner Avenue. The mitigation site is 0.5- to 1.2-miles southwest of the bulkhead projects. There are several elements of the mitigation plan. First, Tetra Tech will replace a corroded 12-inch conduit (the conduit connects the channel to a wetland area) with an 18-inch conduit, install rip-rap to protect it, and restore the eroded embankment to previous dimensions. The enlarged, restored conduit will inundate the adjacent wetland. Second, approximately 60 to 90 cubic yards of concrete and associated debris will be removed (offsite) from an area west of the conduit and the area will be re-graded to match elevations of the functioning wetland to the north. Pickleweed plants within the project area will be salvaged and transplanted when possible and any impacted pickleweed will be replaced with either adjacent pickleweed or with pickleweed purchased from a nursery.

Mitigation tasks will consist of: 1) obtaining required permits for the proposed work; 2) completing a contract with the Department to work on State managed land; 3) conducting the mitigation project; 4) conducting monitoring surveys to evaluate success; and 5) conducting remedial work if the project does not meet success criteria. The Department will be notified prior to any on-site work. Field survey reports will be submitted to the Department and other relevant agencies within 30 days of the surveys.

The Department believes that the proposed mitigation plan will adequately offset impacts to soft-bottom marine habitat from the bulkhead repair projects. If you have any questions please call either myself at (858) 467-4231, or Mr. Erick Burres, Associate Wildlife Biologist, Bolsa Chica Ecological Reserve Manager, at (714) 377-0684.

Sincerely,

Marilyn J. Fluharty

Marilyn J. Fluharty
Environmental Specialist
Marine Region
California Coastal Commission
South Coast District Office

APPROVED
Permit No.

By:

EFFECTIVE

Date:

COASTAL COMMISSION
5-01-020

EXHIBIT # 4

PAGE 1 OF 4

DEPARTMENT OF FISH AND GAME

MARINE REGION
411 BURGESS DRIVE
MENLO PARK, CA 94025
(650) 688-6340



RECEIVED

SEP 05 2000

Department of Planning

August 31, 2000

Ms. Mary Beth Broeren
Senior Planner
City of Huntington Beach
2000 Main Street
Huntington Beach, California 92648

Dear Ms. Broeren:

Department of Fish and Game (Department) personnel have reviewed the Draft Negative Declaration/ Environmental Assessment No. 00-05 for the Humboldt Island and Trinidad Island Seawall Repairs (No. 00-05). The proposed project will repair and renovate existing bulkheads at 40 properties on Humboldt Island and 64 properties on Trinidad Island, Huntington Harbor, Huntington Beach, Orange County, California. It is anticipated that 24 properties will require removal and/or repair of damaged piles. At 44 properties, vinyl sheet-pile will be installed 1-foot, 7-inches seaward of the bulkheads. At all properties, a protective rip-rap footing comprised of quarry waste material, ranging from sand to 8-inch fragments, will be placed at the bulkheads. The footing will extend a maximum of 11 feet from the bulkheads. Sheet-pile installation will eliminate soft bottom habitat while slope protection will impact eelgrass (*Zostera marina*) habitat.

Tetra Tech, Inc., the property owners' authorized agents, have prepared two separate mitigation plans to compensate for loss of soft bottom habitat and impacts to eelgrass. The "Soft Bottom Mitigation Plan," describes procedures to restore and create tidal influence to existing wetland areas located in the Bolsa Chica Ecological Reserve, managed by the Department, in an area bordered by Pacific Coast Highway and Warner Avenue, approximately 0.5- to 1.2-miles southwest of the bulkhead projects. The "Eelgrass Mitigation and Eelgrass Transplant Report," describes procedures for eelgrass transplant at a site delineated for eelgrass mitigation by Orange County, approximately 1 mile northwest of the impact area. Tetra Tech, Inc., transplanted 3,600 square feet of eelgrass in June 2000.

The Department has reviewed the mitigation plans and finds them adequate compensation for project induced losses. Thus, we conclude that the project, as currently proposed, would not have a significant adverse impact upon the existing marine environment provided the described mitigation plans are carried out in full.

COASTAL COMMISSION

5-01-020

EXHIBIT # 4

PAGE 2 OF 4

SENT BY:

9-18-00 12:03PM :

TETRA TECH. → 365-7694 eFax.com;# 9/ 9



As always, Department personnel are available to discuss our comments, concerns, and recommendations in greater detail. To arrange for a discussion, please contact Ms. Marilyn Fluharty, Environmental Specialist, California Department of Fish and Game, 4949 Viewridge Avenue, San Diego, CA 92123, telephone (858) 467-4231.

Sincerely,

Robert N. Tasto, Supervisor
Project Review and Water Quality Program
Marine Region

cc: Ms. Marilyn Fluharty
Department of Fish and Game
San Diego, CA

COASTAL COMMISSION
5-01-020

EXHIBIT # 4

PAGE 3 OF 4

State of California

M e m o r a n d u m

To : Mr. Karl Schwing
California Coastal Commission
200 OceanGate Ave., Suite 1000
Long Beach, California 90802

RECEIVED
JUL 23 2001
CALIFORNIA
COASTAL COMMISSION

Date: July 18, 2001

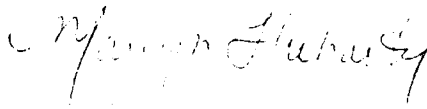
From : Department of Fish and Game

Subject: Coastal permit Application 5-01-020 concerning implementation of the soft-bottom mitigation for bulkhead repairs at Humboldt and Trinidad Islands

This memo is in response to a request by Ms. Sarah McFadden, representing Tetra Tech, Inc. (Tetra Tech), concerning your letter dated February 16, 2001. The subject of this memo concerns item number 5. The mitigation program for the loss of soft bottom habitat is to be conducted at the corner of Warner Avenue and Pacific Coast Highway in the Bolsa Chica Ecological Reserve, managed by the Department of Fish and Game (Department). As part of the mitigation program, Tetra Tech is responsible for obtaining any required permits for the proposed work. The Department has notified Tetra Tech that we did not wish to be a co-applicant on the required coastal commission permit for this endeavor. This memo supports that Tetra Tech has fulfilled their obligation to invite the Department to participate as a co-applicant for coastal permit no. 5-01-020.

If you have any further questions please call me at telephone (858) 467-4231.

Sincerely,



Marilyn J. Fluharty
Environmental Specialist
Marine Region

cc: Ms. Sarah McFadden

COASTAL COMMISSION
5-01-020

EXHIBIT # 4
PAGE 4 OF 4

STATE OF CALIFORNIA

GRAY DAVIS, Governor

CALIFORNIA STATE LANDS COMMISSION
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202



RECEIVED
California Repair Service From TDD Phone 1-800-735-2922
South Coast Region from Voice Phone 1-800-735-2929
JAN 18 2001
Contact Phone: (916) 574-1892
Contact FAX: (916) 574-1925
CALIFORNIA
COASTAL COMMISSION

PAUL D. THAYER, Executive Officer

(916) 574-1800 FAX (916) 574-1810

California Repair Service From TDD Phone 1-800-735-2922

from Voice Phone 1-800-735-2929

Contact Phone: (916) 574-1892

Contact FAX: (916) 574-1925

May 23, 2000

File Ref: PRC 4734

Sarah E. McFadden
Tetra Tech, Inc.
670 North Rosemead Blvd.
Pasadena, CA 91107

Dear Ms. McFadden:

SUBJECT: · Soft Bottom Mitigation Plan for Humboldt Island and Trinidad Island Bulkhead Repair Projects, Huntington Harbour, Orange County

Staff of the California State Lands Commission (CSLC) has reviewed the subject plan. The plan was prepared at the request of the State Department of Fish and Game (DFG) to compensate for the loss of soft bottom habitat in Huntington Harbour. As we understand it, the State Department of Fish and Game (DFG) has identified an existing wetland area adjacent to the southeast corner of Pacific Coast Highway and Warner Avenue within the Bolsa Chica Ecological Reserve as a proposed mitigation site. As you are aware, we are processing numerous applications for those bulkhead repair projects that will involve sovereign lands under the jurisdiction of the CSLC.

The proposed mitigation project will involve conduit restoration to create a tidal influence in the existing and proposed wetland area, concrete debris removal, and regrading of the mitigation area to elevations matching the functioning wetland area immediately to the north. The mitigation site is within the area leased by the CSLC to DFG for management of the ecological reserve. Therefore, no further authorization from the CSLC is required. We would, however, appreciate receiving copies of the field survey reports when they become available.

Sincerely,

Jane E. Smith
Public Land Management Specialist
Southern California Region

cc: Terri Stewart, DFG
Erick Burres, DFG
Marilyn Fluharty, DFG
Karl Schwing, CCC/Long Beach

COASTAL COMMISSION
5-01-020

EXHIBIT # 5

PAGE 1 OF 3

CALIFORNIA STATE LANDS COMMISSION
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202



PAUL D. THAYER, Executive Officer
(916) 574-1800 FAX (916) 574-1810
California Relay Service From TDD Phone 1-800-735-2922
from Voice Phone 1-800-735-2929

Contact Phone: (916) 574-1892
Contact FAX: (916) 574-1925

APR 2 2001
CALIFORNIA
COASTAL COMMISSION

March 28, 2001

File Ref: PRC 4733

Ms. Sarah McFadden
Tetra Tech, Inc.
670 North Rosemead Blvd.
Pasadena, CA 91107

Dear Ms. McFadden:

**SUBJECT: Soft Bottom Mitigation Project Land Ownership Determination,
Bolsa Chica, Orange County**

This is in response to your request for a determination of ownership over two parcels located at the corner of Warner Avenue and Pacific Coast Highway. Those parcels are more specifically identified as APNs 110-017-01 (5.87± acres) and 110-017-02 (0.25 acres). The parcels are the subject of a wetland restoration project required and approved by the Department of Fish and Game (DFG), to mitigate for soft bottom impacts from various bulkhead repair projects in Huntington Harbour.

Based on our review, it appears that the parcels are in fact owned by the State of California, pursuant to the following:

- o A deed between the Bolsa Land Company and the Los Angeles Inter-Urban Railway Company was recorded on September 10, 1904, in Book 108, Pages 200-201, Orange County Records. That deed included a statement that in the event the land was no longer used for railroad purposes, the title reverted to Bolsa Land Company, its successors or assigns.
- o A Boundary Settlement and Land Exchange Agreement was entered into between the State of California and Gulf Oil Corporation, recorded on June 18, 1973 in Book 10755, pgs. 535, et seq. That agreement provided, in part, that Gulf acquire and convey to the State an approximately 6.11-acre area located between Warner Avenue and Pacific Coast Highway in Bolsa Chica. Quitclaim deeds to the State were recorded by both Gulf Oil and Signal Bolsa Corporation on August 17, 1973, (Book 10855, pgs. 524-529; pgs. 531-537). The California State Lands Commission (CSLC) issued two 66-year leases (PRC 4733 for the subject 6.11± acres and PRC 4734 for the remaining 300± acres)

COASTAL COMMISSION
5-01-020

EXHIBIT # 5

PAGE 2 OF 3

effective August 17, 1973, to the DFG for management of the Bolsa Chica Ecological Reserve.

Therefore, it is the position of CSLC staff that the mitigation project will be undertaken on lands owned by the CSLC and leased to the DFG pursuant to Lease PRC 4733. As such, no further authorization from the CSLC is required.

If you have any questions, please feel free to call me at (916) 574-1892.

Sincerely,



Jane E. Smith
Public Land Management Specialist
Southern California Region

cc: Karl Schwing, CCC/LB
Terri Stewart, DFG
Marilyn Fluharty, DFG

COASTAL COMMISSION
5-01-020

EXHIBIT # 5
PAGE 3 OF 3



**UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE**

**Southwest Region
501 West Ocean Boulevard, Suite 4200
Long Beach, California 90802-4213**

MAY - 8 2000

F/SWR4:RSH

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South Coast Region

JAN 18 2001

CALIFORNIA
COASTAL COMMISSION

Ms. Sarah McFadden
Environmental Scientist
Tetra Tech, Inc.
670 North Rosemead Blvd.
Pasadena, California 91107

Dear Ms. McFadden:

I have reviewed the Soft Bottom Mitigation Plan for Bulkhead Repair Projects in Huntington Harbour. The National Marine Fisheries Service (NMFS) believes the proposed mitigation program is satisfactory provided:

- 1) Any concrete or other regraded material is removed and disposed of off site.
- 2) NMFS will be provided copies of the annual mitigation monitoring reports.

Should you have any questions, please contact me at 562-980-4043.

Sincerely,

Robert S. Hoffman
Southern California Environmental
Coordinator

cc:
CDFG - San Diego (Marilyn Fluharty)

COASTAL COMMISSION
5-01-020



EXHIBIT # 6
PAGE 1 OF 1