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151 Kalmus Drive, Suite E-200

May 5, 2010

Mr. Russell Barabe California Department of Fish and Game South Coast Region 4949 Viewridge Avenue San Diego, California 92123

VIA EMAIL AND MAIL rbarabe@dfg.ca.gov

Salvage Plan for Native Plants within the East Garden Grove-Wintersburg Channel (C05), Orange County, California, Streambed Alteration Agreement

No. 1600-2009-0331-R5

Dear Mr. Barabe:

The following plan for salvaging native plant material from the East Garden Grove-Wintersburg Channel (Orange County Flood Control District [OCFCD] Facility Number C05) as part of the proposed East Garden Grove-Wintersburg Maintenance and Repair Project (hereafter referred to as "the Project"). The Salvage Plan summarized herein has been developed in compliance with Conditions 6 and 7 of the Streambed Alteration Agreement (SAA) referenced above, and includes the following information: (1) a summary of the project; (2) a summary of the proposed Salvage Plan; (3) a list of parties responsible for the successful implementation of the Salvage Plan; and (4) guidelines for plant collection and transportation. The Plant Salvage Plan was developed as a result of a mutual agreement between the County and the Bolsa Chica Reserve Manager, Kelly O'Reilly. The Bolsa Chica Reserve has an opportunity to obtain salvaged native plant materials that would otherwise be removed by necessary project flood control improvements. These salvaged plant materials would be used by the Bolsa Chica Reserve Manager to solve an existing erosion problem within the Reserve. However, implementation of the native plant materials salvage and transfer activities identified in this plan are contingent upon approval from other regulatory agencies. In the event that the County is denied written approval from all affected regulatory agencies to implement this plan, compliance with Condition 7 of the SAA by the County will no longer be required.

Project Summary and Location

The proposed project consists of constructing channel improvements to a section of the East Garden Grove-Wintersburg Channel that is located within the City of Huntington Beach from just north of Warner Avenue to the Tide Gates located adjacent to Pacific Coast Highway (Exhibit 1). The purpose of these improvements is to upgrade the facility to meet local and federal 100-year flood protection standards. Specific improvements include installation of an earthen buttress and backside sheet pile toe protection; construction of a park trail for coastal access; installation of riprap along the side-slopes for scour protection; and installation of notched retaining walls to accommodate the presence of sewers and other utilities.

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The channel system is mapped on the Seal Beach U.S. Geological Society (USGS) 7.5-minute topographic quadrangle. Native plant material to be salvaged as part of the Mitigation Program is found along the northern bank of the channel, approximately one—quarter mile northeast of Pacific Coast Highway in the City of Huntington Beach.

Proposed Resource Protection Program

Native salt marsh plants have become opportunistically established in scattered patches along an approximate one-quarter mile segment of the East Garden Grove-Wintersburg Channel. Salvage and transplantation of these plants is a required resource protection measure described in Conditions 6 and 7 of the above-referenced SAA. Plant species that are found in this area include pickleweed (*Salicornia virginica*), saltwort (*Batis maritima*), salt grass (*Distichlis spicata*), and alkali heath (*Frankenia salina*). The purpose of the plant salvage program is to collect native plant material for eventual transplantation within the Bolsa Chica Ecological Reserve to assist ongoing habitat restoration activities (Exhibit 2).

Orange County (OC) Public Works is the entity responsible for the successful implementation of this Mitigation Program. A list of the responsible parties associated with this project is included in Table 1.

TABLE 1
RESPONSIBLE PARTIES

| Task/Role | Responsible Parties | | | |
|---|---|----------------|---|----------------|
| | Entity/Company | Contact | Address | Phone Number |
| Project Applicant/ Program Implementation | OC Public Works/ Regulatory Permits | Nardy Khan | 300 N. Flower St Santa Ana, CA 92702 | (714) 834-2300 |
| Regulatory Permitting, Biological Monitoring | Qualified biologist | Gary Medeiros | 151 E. Kalmus Dr, Ste E-200 Costa Mesa, CA 92626 | (714) 444-9199 |
| Section 401 Water Quality Certification | Santa Ana Regional Water Quality Control Board | Mark Brown | 3737 Main St, Ste 500 Riverside, CA 92501 | (951) 321-4584 |
| Section 404 Permitting | U.S. Army Corps of Engineers | Jae Chung | 915 Wilshire Blvd, Ste 1101 Los Angeles, CA 90017 | (213) 452-3292 |
| Section 1600 Permitting | California Department of Fish and Game | Russell Barabe | 4949 Viewridge Ave San Diego, CA 92123 | (858) 987-8176 |
| Plant Collection | County Operations & Maintenance staff or a qualified contractor | Daniel Slinger | 20472 Crescent Bay, Ste 102 Lake Forest, CA 92630 | (949) 705-5800 |
| Plant Installation | Bolsa Chica Ecological Reserve/ California Department of Fish and Game | Kelly O'Reilly | P.O. Box 1879 Huntington Beach, CA 92647 | (714) 840-1959 |

Plant Salvage Methodology

Currently, native salt marsh plants are located at the bottom of the East Garden Grove-Wintersburg Channel's northern side slope, in scattered locations over an approximate quarter—mile segment (Exhibit 3). A qualified biologist will oversee all plant collection activities and will retain a qualified contractor to provide the labor for the collection and transportation of

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the plant material. Plant collection activities are scheduled to take place in fall 2010 when plants are dormant to minimize shock during collection and transport and to maximize their successful establishment within the Bolsa Chica Ecological Reserve.

Using hand tools, a qualified contractor will collect the plant material in deep planting flats (approximately 15 inches by 15 inches by 5 inches deep). The purpose of using deep planting flats is to collect the maximum amount of native soil with the plant material to minimize shock to the plant when transplanted. Upon collection, plant material will be transported to Bolsa Chica Ecological Reserve for installation. Because plant installation will be performed by volunteers, plant collection will be scheduled for a Thursday and/or Friday, so that plants can be immediately installed on a Saturday.

Salvaged plant material will be loaded onto a truck and driven to the Bolsa Chica Ecological Reserve to a location determined by the California Department of Fish and Game (CDFG) (i.e., the Bolsa Chica Ecological Reserve's Land Manager). Upon delivery to the Reserve, a qualified biologist will meet with the Land Manager to review the condition of the plant material. Once it is confirmed by the Land Manager that the plant material is in an acceptable condition, plant survival and establishment will be the responsibility of the CDFG.

Documentation

During plant salvage activities, a qualified biologist will document: (1) the methods used by a qualified contractor to collect plants; (2) the quantity of plant material that is collected; (3) the general condition of plant material before salvage activities; and (4) the general condition of plant material upon delivery to the Bolsa Chica Ecological Reserve. Acceptance of the plant material by the Land Manager at the Bolsa Chica Ecological Reserve will constitute successful completion by OC Public Works of this Plant Salvage Plan.

Please contact Gary Medeiros at (714) 444-9199 or David Hughes at (626) 351-2000 with any questions related to this plan.

Sincerely,

BONTERRA CONSULTING

Gary A. Medeiros Associate Principal David T. Hughes Project Manager

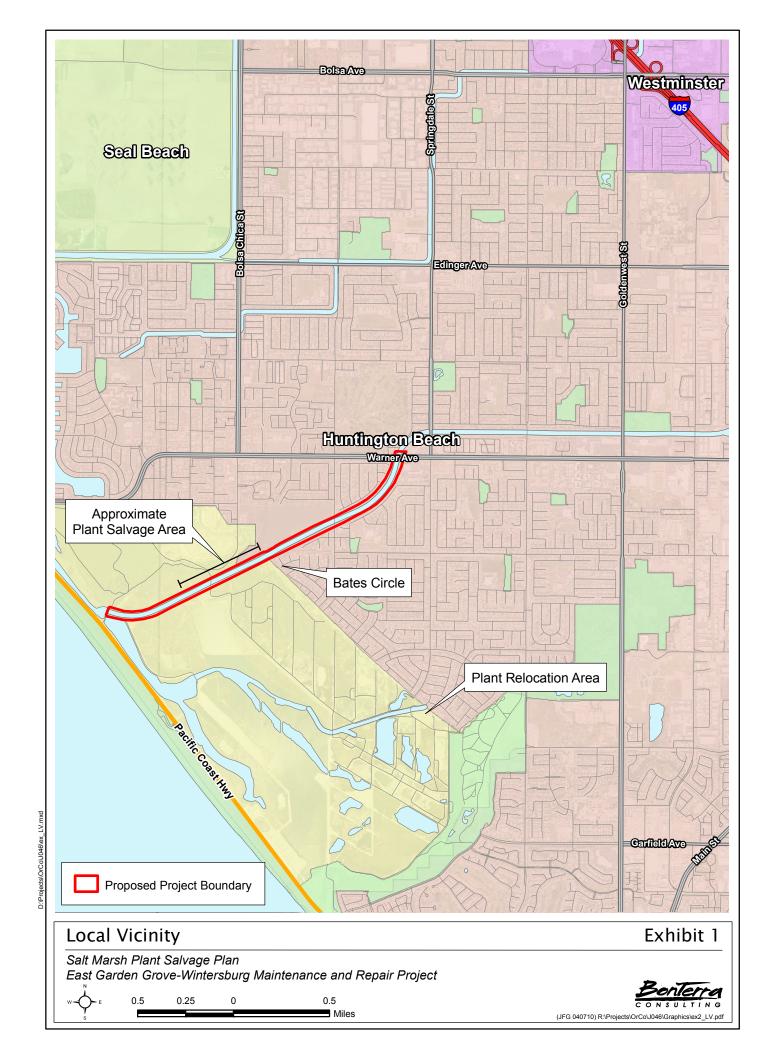
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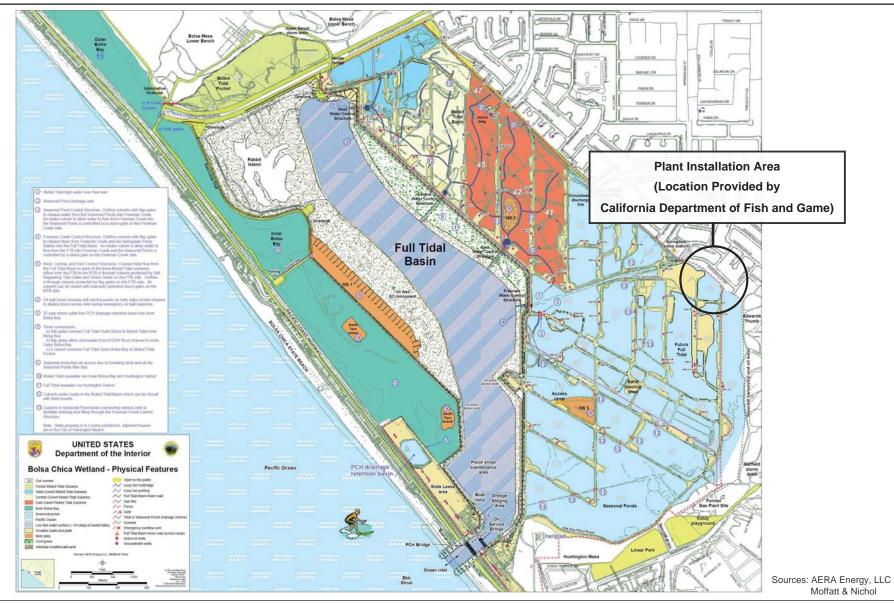
Nardy Khan, Orange County Public Works Sonica Kohl, Orange County Public Works Kelly O'Pailly, California Department of Figh

Kelly O'Reilly, California Department of Fish and Game

Attachments: Exhibits 1 through 3

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Plant Installation Area

Exhibit 2

Salt Marsh Plant Salvage Plan East Garden Grove-Wintersburg Maintenance and Repair Project





Overview of plant salvage site conditions. Plants to be salvaged are located at bottom of slope on opposite side of channel.



Close up view of pickleweed plants to be salvaged.

Site Photographs

Salt Marsh Plant Salvage Plan East Garden Grove-Wintersburg Maintenance and Repair Project



Exhibit 3