

C.A.



# Memorandum Engineering Division

February 7, 2003

To: Coastal Advisory Committee  
From: William E. Cameron, City Engineer  
Subject: **248 Palizada Storm Drain Project**  
Copies: Bill Humphreys, Marine Safety Captain  
Ben L. Parker, Associate Civil Engineer

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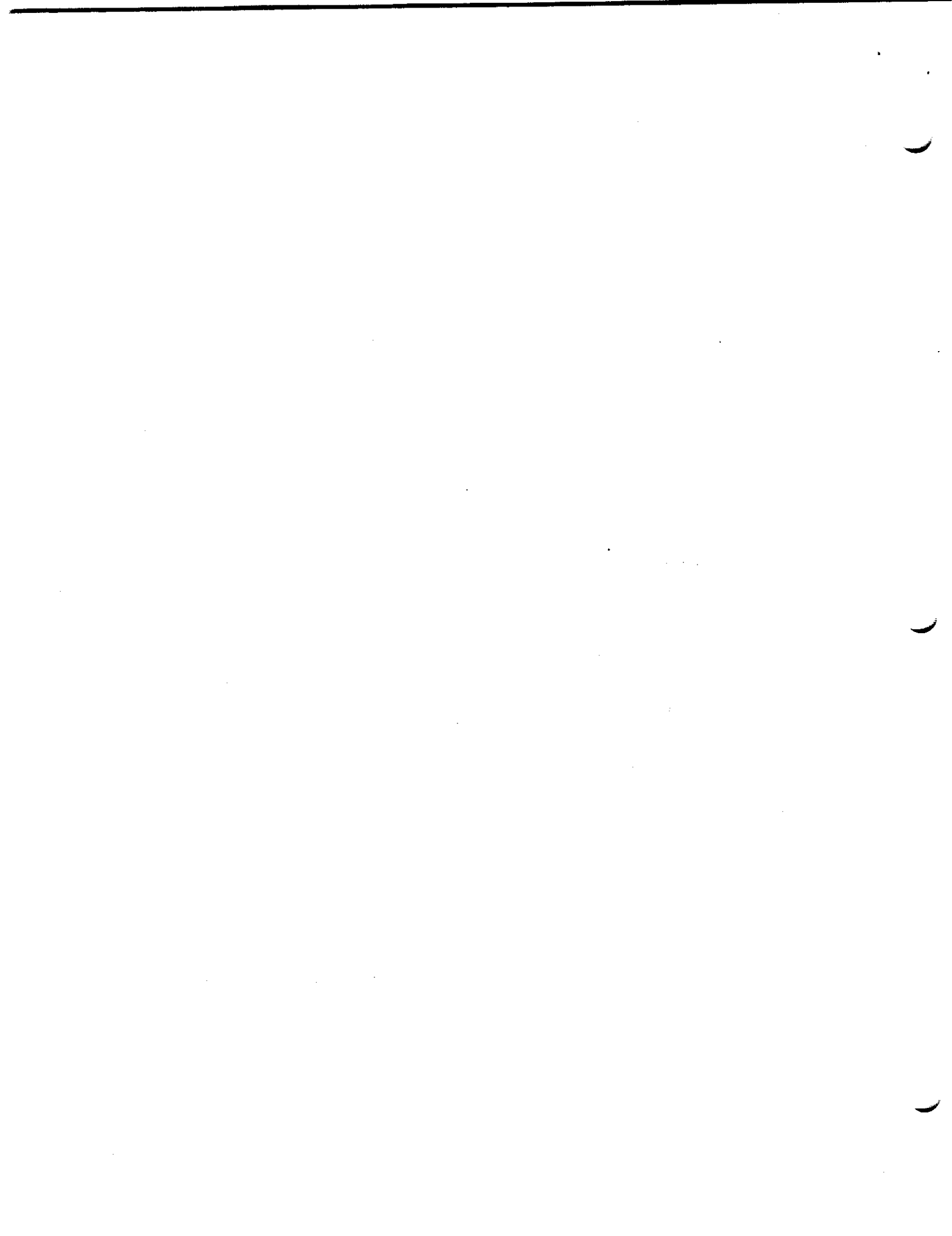
At their January 22, 2003 meeting, the City Council reviewed the Mitigated Negative Declaration for the 248 Palizada Storm Drain Project. Concerns were raised at the Council meeting about the proposal to extend a larger diameter pipe into the canyon behind 248 Palizada. Staff requested that the City Council take immediate action to approve the Mitigated Negative Declaration so that a Coastal Permit Application could be submitted for the project. Flooding of garages at 248 Palizada have occurred during past major storms and is likely to occur again unless a larger diameter pipe is extended from Palizada to an existing 48-inch diameter pipe in the canyon bottom.

The City Council approved the Mitigated Negative Declaration and directed staff to present the proposed project to the Coastal Advisory Committee. Attached is a copy of the staff report to the City Council and the Mitigated Negative Declaration environmental report. Staff and its consultant have attempted to design a project that will impact the area as little as possible and included restoration of vegetation with native plants.

It is intended that the project design be completed, permits be obtained and construction be completed prior to the winter of 2003/04. This is one of the two highest priority drainage improvement projects budgeted for construction this fiscal year.

If anyone has any questions, please feel free to contact me.

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**AGENDA REPORT**  
**SAN CLEMENTE CITY COUNCIL MEETING**  
 Meeting Date: January 8, 2003

Agenda Item 5-C  
 Approvals:  
 City Manager WV  
 Dept. Head WV  
 Attorney MB  
 Accounting \_\_\_\_\_  
 Other \_\_\_\_\_

**Department:** Engineering Division *WEL*  
**Prepared By:** Ben L. Parker, Associate Civil Engineer

**Subject:** PUBLIC HEARING AND APPROVAL OF A MITIGATED NEGATIVE DECLARATION FOR THE 248 WEST AVENIDA PALIZADA STORM DRAIN, PROJECT NO. 10805

**Summary:** The existing storm drain system from West Avenida Palizada to Marquita Canyon was designed and constructed in the 1960s. Its capacity is deficient per today's Orange County Standards. When storms exceed an approximate 25-year design frequency, structures at 248 West Avenida Palizada experience minor flooding. The flooding has also caused erosion to the slope at the rear of the 248 West Avenida Palizada property.

On October 17, 2001, the City Council approved a Professional Services Agreement with Kabbara Engineering for design and environmental documentation to improve the existing facilities. The project consists of installing approximately 300 feet of new reinforced concrete pipe between 24 and 36 inches in diameter. The up-stream end will connect to the existing storm drain in the street at 248 West Avenida Palizada. The pipe will extend through the City-owned lot at 250 West Avenida Palizada and cross the back yard at 252 West Avenida Palizada. It will then turn back onto the 248 West Avenida Palizada property and descend into Marquita Canyon. The new pipe will connect to and terminate at an existing City-owned storm drain in the bottom of Marquita Canyon. That pipe in turn connects to the County of Orange underground Marquita Storm Channel. The project will also include a catch basin, two junction structures and other necessary appurtenances. To improve water quality, a Continuous Deflective Separation (CDS) unit will be installed in the storm drain system. The CDS unit will remove silt and debris during low flow conditions. The device will be installed within the City lot. The existing deficient storm drain will be filled with cement slurry and abandoned in place.

An initial study for this project was prepared in accordance with the California Environmental Quality Act (CEQA). It was determined by the City's environmental consultant that the project, as mitigated, would not have significant environmental impacts and an Environmental Impact Report is not required. A Mitigated Negative Declaration (MND) was completed for the subject project and made available for public review. The public review period for the MND began November 15, 2002 and ended December 16, 2002.

Upon approval of the MND by City Council, staff will apply for a Coast Commission Permit, work with the consultant to finalize the project design and advertise for bidding.

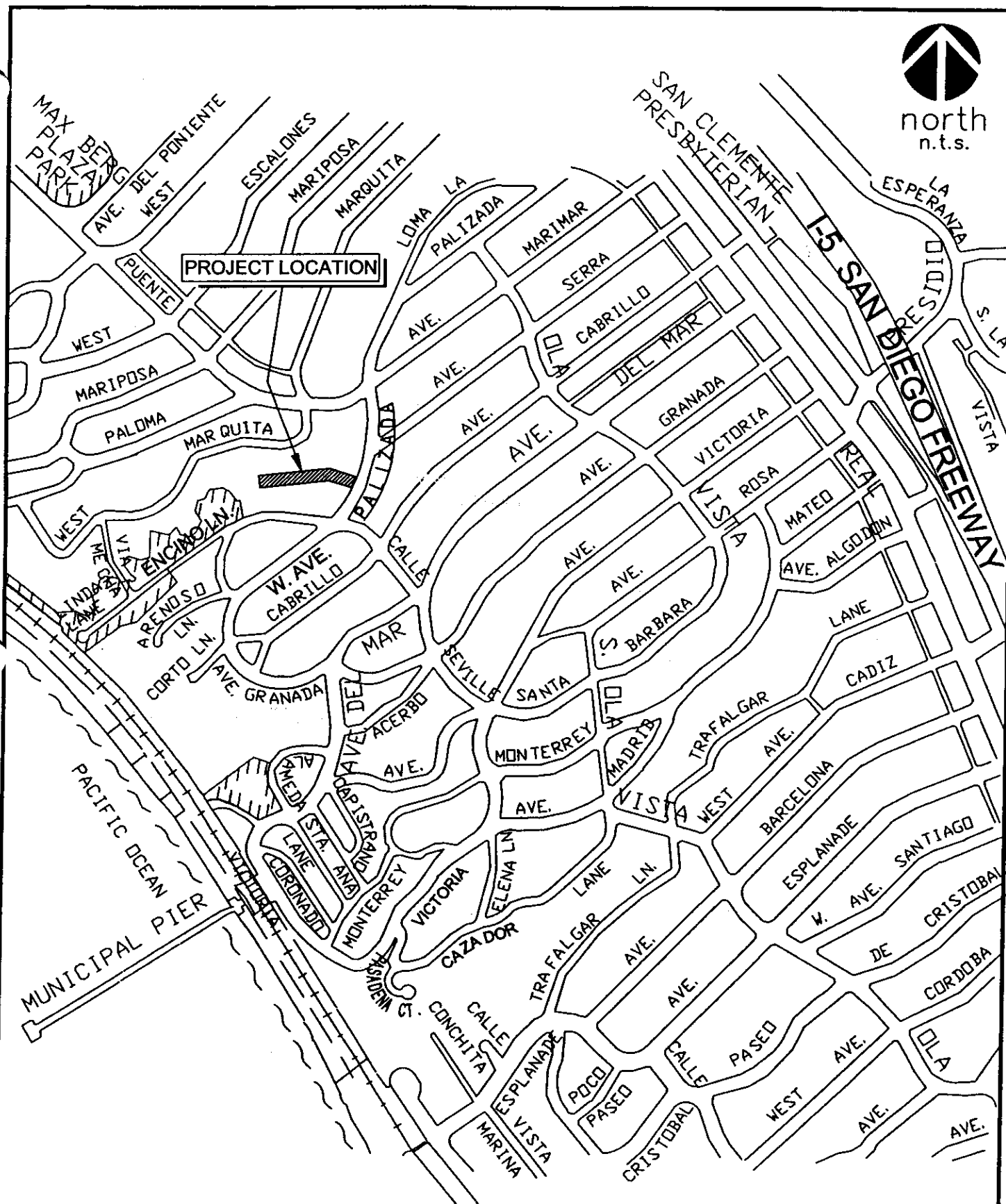
**Recommended**

**Action:**

STAFF RECOMMENDS THAT the City Council Adopt Resolution No. \_\_\_\_\_ entitled "A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SAN CLEMENTE, CALIFORNIA, APPROVING A MITIGATED NEGATIVE DECLARATION FOR PUBLIC HEARING AND APPROVAL FOR THE 248 WEST AVENIDA PALIZADA STORM DRAIN IMPROVEMENTS, PROJECT NO. 10805.

**Fiscal Impact:** No

**Attachments:** Location Map  
Resolution  
Mitigated Negative Declaration



*City of San Clemente*

Engineering Division 910 Calle Negocio  
Suite 100  
San Clemente, CA 92673  
Tel (949)361-6100  
Fax (949) 361-8316

LOCATION MAP

248 W. AVE. PALIZADA S.D. IMPROVEMENT  
Project No. 10805 5C-3

RESOLUTION NO. \_\_\_\_\_

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SAN CLEMENTE, CALIFORNIA, APPROVING A MITIGATED NEGATIVE DECLARATION FOR THE 248 WEST AVENIDA PALIZADA STORM DRAIN IMPROVEMENTS, PROJECT NO. 10805**

WHEREAS, staff processed and completed a Mitigated Negative Declaration for this project in accordance with the California Environmental Quality Act; and

WHEREAS, on January 8, 2003, the City Council held a duly noticed Public Hearing on the subject application and considered evidence presented by the City staff and other interested parties.

NOW, THEREFORE, the City Council of the City of San Clemente does hereby resolve as follows:

**SECTION 1:** The City Council of the City of San Clemente has reviewed the Mitigated Negative Declaration for the 248 West Avenida Palizada Storm Drain Improvements, Project No. 10805 and any comments received on the Mitigated Negative Declaration. After reviewing the foregoing, the City Council has exercised its independent judgment and determined that, as mitigated, there is no substantial evidence that the project may have a significant impact upon the environment. The City Council further determines that after considering the record as a whole, there is no substantial evidence that this project may have an impact on fish or wildlife or the habitat upon which it depends and, for that reason, the City Council finds the project's impacts are de minimus pursuant to Fish and Game Code Section 711.4. Furthermore, the City has, on the basis of substantial evidence, rebutted the presumption of adverse effect contained in Section 753.5(d) of Title 14 of the California Code of Regulations.

**SECTION 2:** The City Council of the City of San Clemente does hereby approve the Mitigated Negative Declaration attached hereto as Exhibit A for the proposed 248 West Avenida Palizada Storm Drain Improvements, Project No. 10805 PASSED AND ADOPTED this \_\_\_ day of \_\_\_\_, 2003.

\_\_\_\_\_  
Mayor of the City of  
San Clemente, California

504

ATTEST:

\_\_\_\_\_  
CITY CLERK of the City of  
San Clemente, California

STATE OF CALIFORNIA            )  
COUNTY OF ORANGE            )  
CITY OF SAN CLEMENTE        )

I, MYRNA ERWAY, City Clerk of the City of San Clemente, California, do hereby certify that Resolution No. \_\_\_ was adopted at a regular meeting of the City Council of the City of San Clemente held on the \_\_\_ day of \_\_\_\_\_ 2003, by the following vote:

AYES:

NOES:

ABSENT:

\_\_\_\_\_  
CITY CLERK of the City of  
San Clemente, California

Approved as to form:

\_\_\_\_\_  
City Attorney

**CITY OF SAN CLEMENTE  
INITIAL STUDY AND MITIGATED NEGATIVE  
DECLARATION**

1. Project Title: 248 W. Avenida Palizada Storm Drain Improvements, Project No. 10805
  
2. Lead Agency Name and Address: City of San Clemente  
910 Calle Negocio, Suite 100  
San Clemente, CA 92673
  
3. Contact Person and Phone Number: Ben Parker, P.E. (949) 361-6138
  
4. Project Location: 248 W. Avenida Palizada from Avenida Palizada to Marquita Canyon
  
5. Project Sponsor's Name and Address: City of San Clemente  
910 Calle Negocio, Suite 100  
San Clemente, CA 92673
  
6. General Plan Designation: Residential
  
7. Zoning: Residential Medium: RM (15 to 24 dwelling units/gross acre)
  
8. Description of the Project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary)  
The proposed project is the replacement of a 24-inch storm drain at West Avenida Palizada. The replacement storm drain will be 24-inches to 30-inches in diameter extending from the right-of-way of West Avenida Palizada extending westerly to a City owned storm drain in the bottom of Marquita Canyon that currently connects to the underground County of Orange Marquita Storm Channel.
  
9. Surrounding Land Uses and Setting: (Briefly describe the project's surroundings)  
Land uses surrounding the site are single-family residential and multi-family residential. The east side of the project is bounded by West Avenida Palizada with an apartment and single-family homes east of the roadway. To the west of the project is Marquita Canyon. Immediately north and south of the project are apartments.
  
10. Other public agencies whose approval is required: (e.g. permits, financing approval, or participation agreement).  
California Coastal Commission



**ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:**

The following Initial Study indicates that the project may result in potential environmental impacts in the following marked categories:

Aesthetics		Agricultural Resources		Air Quality	
Biological Resources	X	Cultural Resources	X	Geology/Soils	X
Hazards/Hazardous Materials		Hydrology/Water Quality	X	Land Use/Planning	
Mineral Resources		Noise	X	Population/Housing	
Public Services		Recreation		Transportation/Traffic	
Utilities & Service Systems		Mandatory Findings of Significance			

**ENVIRONMENTAL DETERMINATION:**

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION has been prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect: (a) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (b) has been addressed by mitigation measures based on the earlier analysis as described on the attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been adequately analyzed in an earlier EIR or Negative Declaration pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or Negative Declaration, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Michael E. Houlihan  
Signature

November 13, 2002  
Date

Michael E. Houlihan  
Printed Name

**INITIAL STUDY  
AND  
MITIGATED NEGATIVE DECLARATION  
FOR THE  
248 WEST AVENIDA PALIZADA STORM DRAIN IMPROVEMENT PROJECT  
IN THE  
CITY OF SAN CLEMENTE**

Prepared for:

City of San Clemente  
910 Calle Negocio, Suite 100  
San Clemente, California 92673  
(949) 361-6138

Contact: Ben Parker, P.E.  
Associate Civil Engineer

Prepared by:

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15901 Red Hill Avenue, Suite 200  
Tustin, California 92780  
(714) 258-8100

Contact: Michael Houlihan, AICP, Project Director  
Michael Hendrix, Project Manager



November 13, 2002

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## 1.0 INTRODUCTION

### 1.1 PURPOSE OF THIS DOCUMENT

The purpose of this initial study is to identify the potential environmental impacts associated with the proposed storm drain replacement and has been prepared in accordance with the California Environmental Quality Act (CEQA), CEQA Guidelines, and the City of San Clemente (City) CEQA procedures. Pursuant to Section 15367 of the State CEQA Guidelines, the City is the lead agency in the preparation of this Mitigated Negative Declaration (MND) and initial study. The City has primary responsibility for approval or denial of the project. The intended use of this initial study is to provide adequate environmental analysis related to project implementation.

### 1.2 PURPOSE AND NEED OF PROJECT

The existing storm drain system in the 200 block of West Avenida Palizada is inadequate to accommodate the existing 100-year frequency storm flows. As a result, storm water has flooded the building at 248 West Avenida Palizada several times in the last ten years. The upper reach of this storm drain system conveys surface flows collected in a catch basin on Avenida Cabrillo approximately 300 feet to the deficient storm drain (lower reach) where surface water collected on West Avenida Palizada joins the system and continues for another 240 feet to join a larger Orange County storm drain facility (Marquita Storm Channel) in the bottom of Marquita Canyon. City records indicate that the lower reach consists of a 24-inch diameter reinforced concrete pipe. It appears that a portion of the storm drain may extend under the existing apartment building at 248 West Avenida Palizada. The purpose of this project is to adequately convey existing 100-year frequency storm flows to the existing County of Orange underground storm channel at the bottom of Marquita Canyon.

### 1.3 PROJECT DESCRIPTION

The project will abandon the deficient existing lower reach storm drain pipe in place. Abandonment would include cutting and plugging with a concrete-brick plug the abandoned portion of the existing storm drain at the upstream and downstream points of contact where a replacement storm drain joins the existing sections of piping. At the time of abandonment of the existing storm drain, the City engineer will determine if the abandoned line requires filling. If filling is necessary, the line will be filled between the two concrete-brick plugs with concrete slurry.

The project includes placement of another storm drain consisting of reinforced concrete pipe between 24-inches and 30-inches in diameter that will connect to the upper reach of the storm drain system within the right-of-way of West Avenida Palizada. The replacement storm drain will extend through a

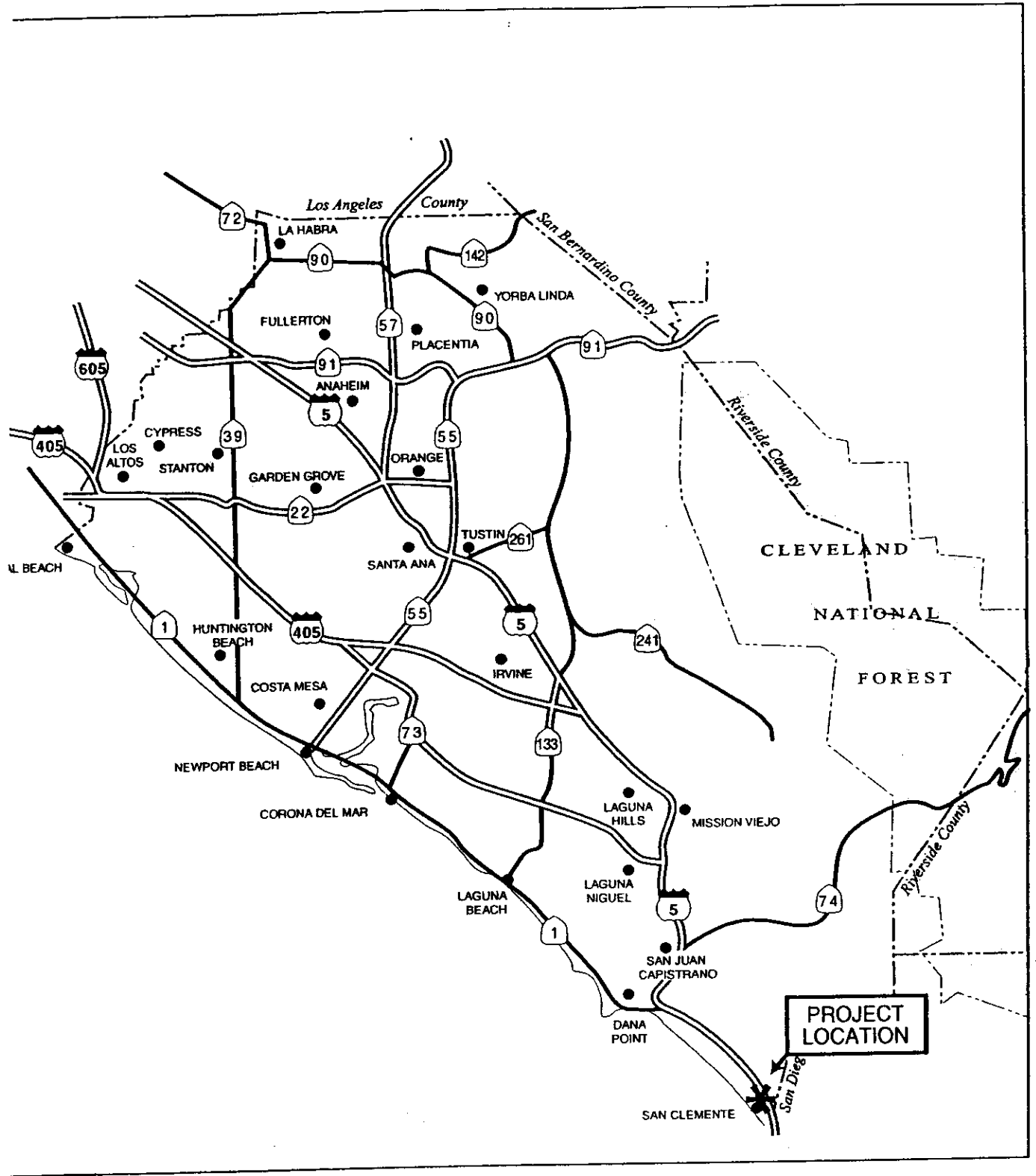
City-owned lot at 250 West Avenida Palizada and within the back yard of the apartment building at 252 West Avenida Palizada. The replacement storm drain will descend into Marquita Canyon, connecting to and terminating at a City-owned storm drain in the bottom of Marquita Canyon that currently connects to the County of Orange underground Marquita Storm Channel.

To improve water quality a Continuous Deflective Separation (CDS) unit will be installed in the storm drain system. The CDS unit will remove silt and debris during low flow conditions. The CDS unit does this by forcing the storm water into a circular flow within the unit depositing debris and sediment into a collection chamber in the center of the unit. Storm water flows through an internal screen and out of the CDS unit. This device will be installed within the City owned lot at 250 West Avenida Palizada.

The City has primary responsibility for approval of the MND, plans and specifications for this project. The City is also responsible for implementation of the proposed project. Additional approvals required for implementation of the project include the issuance of a Coastal Development Permit by the California Coastal Commission, which has responsible agency authority over coastal development within the City including Marquita Canyon. Application for a Coastal Development Permit to the California Coastal commission will contain proposed special conditions placed upon construction of the project to prevent erosion of soil and contamination of receiving waters by siltation or other means. Application for a Coastal Development Permit will also require submittal of a Restoration Plan describing revegetation of the site once construction is completed.

#### **1.4 PROJECT LOCATION**

The project site is within a residential subdivision at 248 West Avenida Palizada in the City of San Clemente (see Exhibits 1 and 2). The proposed storm drain alignment is on the west side and within the right-of-way of West Avenida Palizada. The alignment continues westerly across a vacant City-owned lot at 250 West Avenida Palizada between an apartment complex (248 West Avenida Palizada) and an apartment building at -252 West Avenida Palizada. The alignment crosses the back yard of the apartment building at 252 West Avenida Palizada before descending into Marquita Canyon (see Exhibit 3).



Michael Brandman Associates

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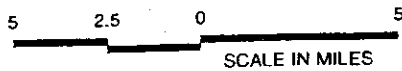
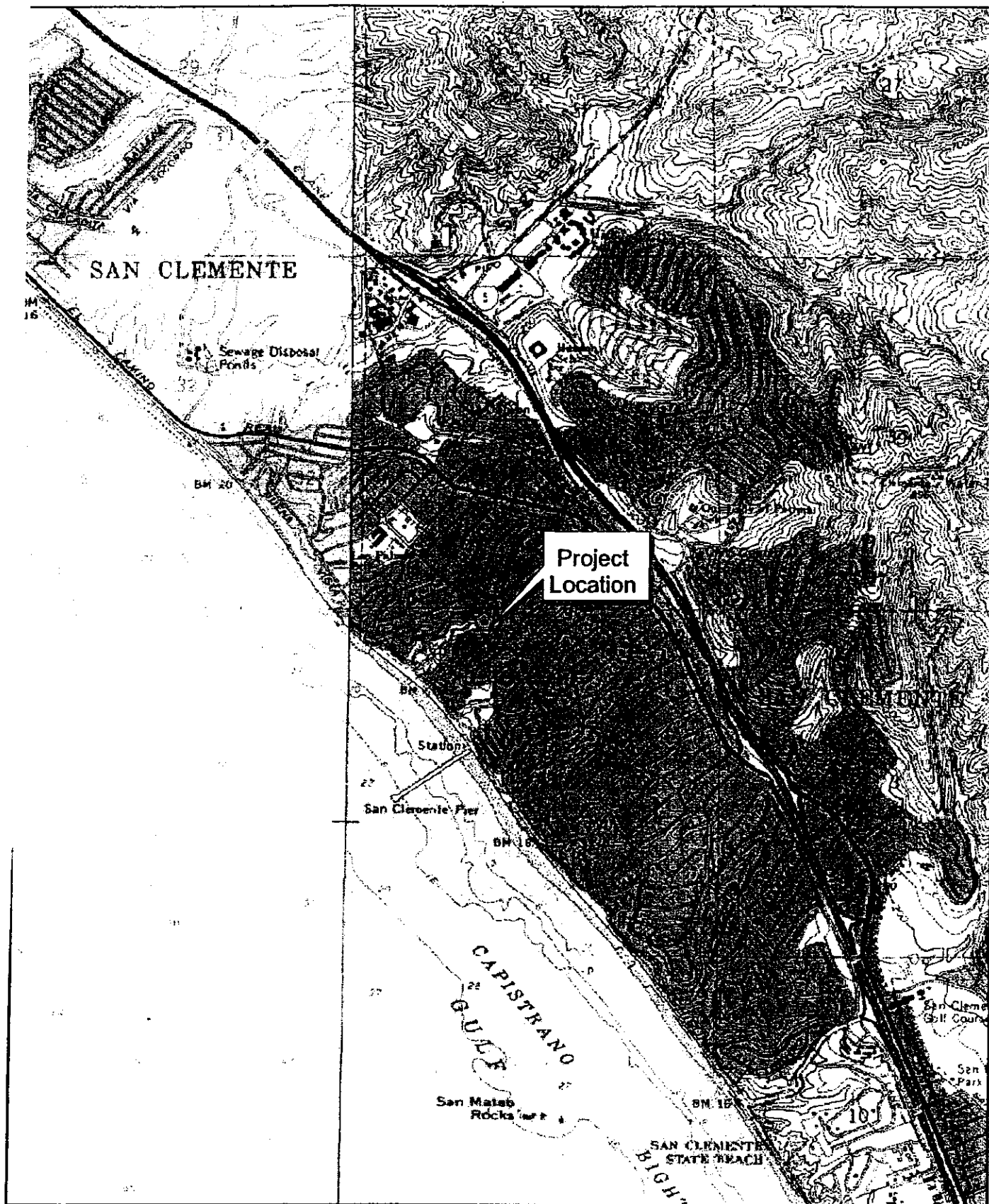


Exhibit 1  
Regional Location Map

248 WEST AVENIDA PALIZADA STORM DRAIN IMPROVEMENT PROJECT • SAN CLEMENTE

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Source: USGS San Clemente 7.5' DRG, 1968 - photo revised 1975.



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248 WEST AVENIDA PALIZADA STORM DRAIN IMPROVEMENT PROJECT • SAN CLEMENTE

Exhibit 2  
Local Vicinity Map

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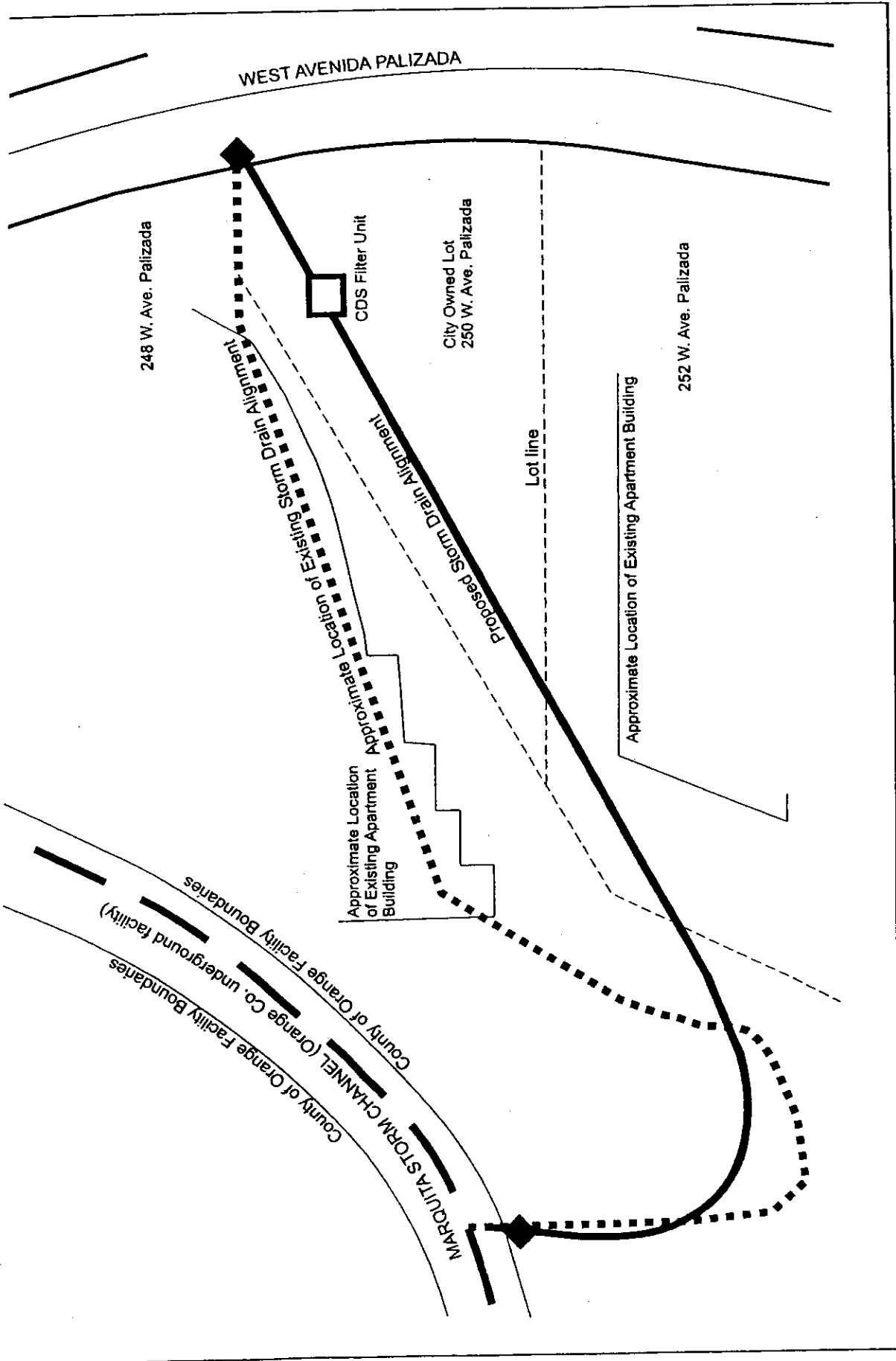


Exhibit 3  
Site Map

248 WEST AVENIDA PALIZADA STORM DRAIN IMPROVEMENT PROJECT • SAN CLEMENTE



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## 1.5 ENVIRONMENTAL SETTING

The project site within the vacant City-owned lot at 250 West Avenida Palizada can be characterized as relatively flat with only ruderal and non-native landscape vegetation. The backyard of the apartment building at 252 West Avenida Palizada is entirely covered in non-native landscape vegetation such as non-native grasses (i.e., sod) and ornamental bushes. Marquita Canyon is considered by the City to be the most biologically sensitive area within the project site.

Marquita Canyon (known by the California Coastal Commission as Palizada Canyon) was originally a coastal canyon. However, the canyon was drastically altered in 1964-1965 when the County of Orange built the Marquita Storm Channel underneath the floor of the canyon. As a result, the canyon no longer contains a definable bed and bank feature in the project area. In addition to the storm channel, the construction of earthen berms in the canyon to support the roadway alignment of Calle Puente and Via Mecha has isolated Marquita Canyon from upstream flows as well as the Pacific Ocean in the area of the canyon in which the project is located. The canyon area within the proposed project alignment is dominated by non-native landscape vegetation including Peruvian peppertree (*Schinus molle*), sea fig (*Carpobrotus chilensis*) and myoporum (*Myoporum laetum*). Two native species were also observed within the project alignment in the canyon—lemonade berry bush (*Rhus integrifolia*) and prickly pear cactus (*Opuntia lateralis*).

Land uses surrounding the proposed project alignment include the two-story 13-unit apartment complex at 248 West Avenida Palizada and the apartment building at 252 West Avenida Palizada previously mentioned. Similar two-story and single-story multi-family and single-family residential uses exist on the east side of West Avenida Palizada across the street from the project site.

## 1.6 EVALUATION OF ENVIRONMENTAL IMPACTS

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e. g. the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g. the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section 17, "Earlier Analyses," may be cross-referenced).
- 5) Earlier analysis may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063 (c) (3) (D). In this case, a brief discussion should identify the following:
  - a) **Earlier Analysis Used.** Identify and state where they are available for review.
  - b) **Impacts Adequately Addressed.** Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards and state whether such effects were addressed by mitigation based on the earlier analysis.
  - c) **Mitigation Measures.** For effects that are "Less Than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g. general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources. A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
  
- 9) The explanation of each issue should identify:
  - a) The significance criteria or threshold, if any, used to evaluate each question; and
  - b) The mitigation measure identified, if any, to reduce the impact to less than significant.

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## 2.0 INITIAL STUDY CHECKLIST

IMPACT CATEGORY	Sources*	Potentially Significant Impact	Less than Significant w/Mitigation Incorporated	Less Than Significant Impact	No Impact
-----------------	----------	--------------------------------	---	------------------------------	-----------

\*See Source References at the end of this Checklist.

### I. AESTHETICS -- Would the project:

a) Have a substantial adverse effect on a scenic vista?	1, 15, 16				X
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	1, 15, 16			X	
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	1, 15, 16			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	15				X

### II. AGRICULTURE RESOURCES (In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland.) Would the project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	1, 6, 7, 18				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	7, 18				X
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?	1, 6, 7, 15, 16, 18				X

### III. AIR QUALITY - (Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.) Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?	1, 2, 3, 6			X	
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	2, 3, 6			X	
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	2, 3, 6			X	
d) Expose sensitive receptors to substantial pollutant concentrations?	2, 3			X	

IMPACT CATEGORY	Sources*	Potentially Significant Impact	Less than Significant w/Mitigation Incorporated	Less Than Significant Impact	No Impact
*See Source References at the end of this Checklist.					
e) Create objectionable odors affecting a substantial number of people?	2, 3			X	

**IV. BIOLOGICAL RESOURCES -- Would the project:**

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	1, 4, 15			X	
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	1, 4, 15			X	
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	1, 4, 15, 16			X	
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	1, 4, 15, 16		X		
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	1, 4, 7, 15, 16			X	
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	1, 4, 15, 16			X	

**V. CULTURAL RESOURCES -- Would the project:**

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5	1, 5, 7, 15, 16			X	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	1, 5, 7, 15, 16		X		
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	1, 5, 7, 15, 16		X		
d) Disturb any human remains, including those interred outside of formal cemeteries?	1, 5, 6			X	

IMPACT CATEGORY	Sources*	Potentially Significant Impact	Less than Significant w/Mitigation Incorporated	Less Than Significant Impact	No Impact
*See Source References at the end of this Checklist.					

**VI. GEOLOGY AND SOILS -- Would the project:**

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:					
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Div. of Mines and Geology Special Pub. 42.)	6, 9, 10, 11, 12, 15, 16			X	
ii) Strong seismic ground shaking?	6, 9, 10, 11, 12, 15, 16			X	
iii) Seismic-related ground failure, including liquefaction?	6, 9, 10, 11, 12, 15, 16			X	
iv) Landslides?	6, 9, 10, 11, 12, 15, 16			X	
b) Result in substantial soil erosion or the loss of topsoil?	6, 9, 10, 11, 13, 15, 16		X		
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	6, 9, 10, 11, 12, 15, 16			X	
d) Be located on expansive soil, as defined in Table 18- 1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	6, 9, 10, 11, 12, 15, 16			X	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	15				X

**VII. HAZARDS AND HAZARDOUS MATERIALS -- Would the project:**

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	15				X
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	15				X
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	15				X

IMPACT CATEGORY	Sources*	Potentially Significant Impact	Less than Significant w/Mitigation Incorporated	Less Than Significant Impact	No Impact
*See Source References at the end of this Checklist.					
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	1, 14, 15				X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	1, 15, 17				X
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	1, 7, 15, 17				X
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	1, 15			X	
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	1, 8, 15, 16			X	

**VIII. HYDROLOGY AND WATER QUALITY -- Would the project:**

a) Violate any water quality standards or waste discharge requirements?	1, 6, 13		X		
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	16				X
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	13, 15, 16			X	
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	15, 16			X	
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	15, 16			X	

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IMPACT CATEGORY	Sources*	Potentially Significant Impact	Less than Significant w/Mitigation Incorporated	Less Than Significant Impact	No. Impact
*See Source References at the end of this Checklist.					
f) Otherwise substantially degrade water quality?	13, 15			X	
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	1, 15, 16				X
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	1, 6, 15, 16				X
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	1, 15, 16				X
j) Inundation by seiche, tsunami, or mudflow?	9, 12, 15, 16				X

**IX. LAND USE AND PLANNING -- Would the project:**

a) Physically divide an established community?	7				X
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	1, 6, 7			X	
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	1, 4, 6			X	

**X. MINERAL RESOURCES -- Would the project:**

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	1, 6				X
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	1, 6				X

**XI. NOISE -- Would the project result in:**

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	1, 7, 8, 15			X	
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	8, 15			X	
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	8, 15, 16				X
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	1, 7, 8, 15		X		

IMPACT CATEGORY	Sources*	Potentially Significant Impact	Less than Significant w/Mitigation Incorporated	Less Than Significant Impact	No Impact
*See Source References at the end of this Checklist.					
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	1, 17				X
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	1, 17				X

**XII. POPULATION AND HOUSING -- Would the project:**

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	15				X
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	15				X
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	15				X

**XIII. PUBLIC SERVICES: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:**

Fire protection?	15				X
Police protection?	15				X
Schools?	15				X
Parks?	15				X
Other public facilities?	15			X	

**XIV. RECREATION:**

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	15				X
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	15				X

IMPACT CATEGORY	Sources*	Potentially Significant Impact	Less than Significant w/Mitigation Incorporated	Less Than Significant Impact	No Impact
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\*See Source References at the end of this Checklist.

**XV. TRANSPORTATION/TRAFFIC -- Would the project:**

a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections?)	1, 15, 16		X		
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	1, 6, 15, 16		X		
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	1, 15, 16				X
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	15, 16		X		
e) Result in inadequate emergency access?	1, 15, 16		X		
f) Result in inadequate parking capacity?	15, 16			X	
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	1				X

**XVI. UTILITIES AND SERVICE SYSTEMS -- Would the project:**

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	15				X
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	15				X
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	15			X	
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	15				X
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	15				X
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	15			X	

IMPACT CATEGORY	Sources*	Potentially Significant Impact	Less than Significant w/Mitigation Incorporated	Less Than Significant Impact	No Impact
*See Source References at the end of this Checklist.					
g) Comply with federal, state, and local statutes and regulations related to solid waste?	1, 15, 16			X	

**XVII. MANDATORY FINDINGS OF SIGNIFICANCE:**

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	1, 4, 5, 6		X		
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	1, 3, 4, 5, 6		X		
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	1, 3, 6, 7, 8, 9, 12, 14, 15			X	

## 2.1 PREVIOUS ANALYSIS

Per CEQA Guidelines Sections 15063 (*Initial Study*), 15152 (*Tiering*), 15153 (*Use of an EIR from an Earlier Project*), and 15168 (*Program EIR*), previous analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, one or more effects have been adequately analyzed in a previous EIR or Negative Declaration. In this case, the following previous CEQA environmental documentation was used to address impacts of the current project:

### SOURCE REFERENCES:

1.	<i>General Plan</i> , City of San Clemente, Adopted May 6, 1993, Updated June 28, 2002
2.	Air Quality Impact Analysis Worksheets for 248 W. Avenida Palizada Storm Drain Improvements October 2002 (Appendix A of Initial Study)
3.	<i>CEQA Air Quality Handbook</i> , South Coast Air Quality Management District, April, 1993
4.	Biological Constraints Analysis Letter Report for 248 W. Avenida Palizada Storm Drain Improvements, City of San Clemente in Orange County. October 10, 2002 (Appendix B of Initial Study)
5.	Cultural Resources Report for 248 W. Avenida Palizada Storm Drain Improvements October 17, 2002 (Appendix C of Initial Study)
6.	<i>General Plan EIR</i> , City of San Clemente, May 6, 1993
7.	<i>Zoning Ordinance and Zoning Map, Title 17 of San Clemente Municipal Code</i> , City of San Clemente
8.	<i>Health and Safety, Title 8 of San Clemente Municipal Code, Chapter 8.48-Noise Ordinance and Chapter 8.22-Very High Fire Hazard Severity Zones</i> , City of San Clemente
9.	<i>Geotechnical Report 248 Palizada Storm Drain Project No. 10805</i> , Southern California Soil & Testing, Inc., January 29, 2002
10.	Report of Geotechnical Investigation, 13 Unit Apartment Building, 248 West Avenida Palizada San Clemente, CA, Southern California Soil & Testing, Inc., January 29, 1986
11.	Engineering Geologic Evaluation of Development Feasibility: Planned 13-Unit Apartment Building at 248 West Avenida Palizada San Clemente, CA, William R. Munson Associates, May 10, 1985
12.	Seismic Hazard Zone Report for the San Clemente 7.5-Minute Quadrangle, Orange County Ca, California Department of Conservation, California Geological Survey. 2002
13.	City of San Clemente Urban Runoff Management Plan, City of San Clemente, Adopted December 2001, Updated June 2002
14.	Facilities Inventory Database for Hazardous Waste and Substances Sites List, Orange County, California Department of Toxic Substances Control, 1998
15.	Site plans and other documents submitted by project engineer

Note: The preceding source documents are available for public review at the City of San Clemente Planning Division, 910 Calle Negocio, Suite 100, San Clemente, CA, unless otherwise noted.	
16.	Field observations of the site and the surrounding area by the environmental consultant Michael Hendrix, Assistant Project Manager, Michael Brandman Associates
17.	The Thomas Guide Orange County, Rand McNally, 2002
18	Important Farmland Map of Orange County, Ca, California Department of Conservation, USDA Soil Conservation Service. August 1982.

### 3.0 EXPLANATIONS OF CHECKLIST RESPONSES

#### I. AESTHETICS

##### Would the project:

- a) *Have a substantial adverse effect on a scenic vista?*

**No impact**—The project site is located between an apartment building and a single-family home and extends into Marquita Canyon. Based on a review of the San Clemente General Plan, the project site as well as the area immediately adjacent to the site are not identified as a scenic vista. Based on a site visit, the project site is also not within views from the nearest state scenic highway (i.e., Pacific Coast Highway). Therefore, construction activities associated with the proposed storm drain would not affect existing scenic vistas. Furthermore, no long-term visual effects would occur because the proposed storm drain would be located underground.

- b) *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

- c) *Substantially degrade the existing visual character or quality of the site and its surroundings?*

**Less Than Significant Impact (b-c)**—During excavation the project will remove several non-native trees within the back yard of the apartment building at 252 West Avenida Palizada and next to the apartment building at 248 West Avenida Palizada. These non-native trees are currently part of the landscaping associated with the existing home and apartment building on either side of the storm drain alignment. However, the removal of these trees will not substantially degrade the visual character of the site and the City will replace these trees with 24-inch box trees of a similar type of tree to those removed.

- d) *Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?*

**No Impact**—The project is a storm drain with no lighting or reflecting mechanisms that could generate light or glare. Therefore, the project would not result in light or glare impacts.

## II. AGRICULTURAL RESOURCES

### Would the project:

- a) *Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*
- b) *Conflict with existing zoning for agricultural use, or a Williamson Act contract?*
- c) *Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?*

**No Impact (a-c)**—The project area has been in residential use for over 40 years and is currently zoned for medium density residential uses. Based on a review of the Important Farmland Map of Orange County prepared pursuant to the Farmland Mapping and Monitoring Program of the California Department of Conservation the storm drain alignment is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. The project site and surrounding properties are also not under a Williamson Act contract.

## III. AIR QUALITY

Significance thresholds established by the South Coast Air Quality Management District was relied upon to make the following determinations.



**Would the project:**

- a) *Conflict with or obstruct implementation of the applicable air quality plan?*

**Less Than Significant Impact**—The proposed project is within the South Coast Air Basin (SCAB). The SCAB and the Air Quality Management Plan (AQMP) for the SCAB are administered by the South Coast Air Quality Management District (SCAQMD). The AQMP sets forth a comprehensive program that will lead the SCAB into compliance with all federal and state air quality standards. The AQMP control measures and related emission reduction estimates are based upon emission projections for a future development scenario derived from land use, population, and employment characteristics defined in consultation with local governments. Accordingly, conformance with the AQMP for development projects is determined by demonstrating compliance with local land use plans and/or population projections. The proposed project, the replacement of the storm drain, will not increase existing population densities. The project is also consistent with the underlying existing general plan designation and zoning, which are consistent with the land use information that was the basis for the current AQMP. It is also noted that a project-specific evaluation (Appendix C) has been conducted and demonstrates that all emissions from the proposed project do not exceed the SCAQMD recommended significance thresholds. For these reasons, the proposed project is in compliance with the AQMP.

- b) *Violate any air quality standard or contribute substantially to an existing or projected air quality violation?*

**Less Than Significant**—The project area is designated as a non-attainment area for ozone, CO, and PM-10. The project-specific evaluation of emissions (Appendix C) shows that all project-generated emissions are all below the SCAQMD thresholds for significance. Therefore, the project is not anticipated to violate any air quality standard and contributions to any current or projected air quality violation are considered less than significant.

- c) *Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?*

**Less Than Significant Impact**—The project area is designated as a non-attainment area for ozone, CO, and PM-10. The project-specific evaluation of emissions presented in Appendix C of this document supports a conclusion that the air quality impacts for the proposed project are less than significant on an individual project basis. CEQA Section 21100 (e) addresses evaluation of cumulative effects allowing the use of approved land use documents in a cumulative impact analysis. In addressing cumulative effects for air quality, the AQMP is the most appropriate document to use because the AQMP sets forth a comprehensive program that will lead the air basin, including the project area, into compliance with all federal and state air quality standards. The program utilizes control measures and related emission reduction estimates based upon emissions projections for a future development scenario derived from land use, population, and employment characteristics defined in consultation with local governments. Since the proposed project is in conformance with the AQMP and the project is not significant on an individual basis, it is appropriate to conclude that the project's incremental contribution to criteria pollutant emissions is not cumulatively considerable.

- d) *Expose sensitive receptors to substantial pollutant concentrations?*

**Less Than Significant Impact**—Residential uses exist adjacent to the storm drain alignment and are considered sensitive receptors. Further, the project has the potential to expose these sensitive receptors to air pollutants during construction of the project. However, the project specific air quality analysis (Appendix C) demonstrates that all projected emissions are below the applicable SCAQMD thresholds of significance during construction of the project. These emissions are anticipated to dissipate quickly as they mix with the surrounding air. Considering the dispersion and quantity of emissions, the project will not expose sensitive receptors to substantial pollutant concentrations.

- e) *Create objectionable odors affecting a substantial number of people?*

**Less Than Significant Impact**—The project presents the potential for generation of objectionable odors in the form of diesel exhaust and fumes from asphalt applications during excavation and paving in the immediate vicinity of construction site. The preceding evaluation of emissions determined that all criteria pollutant emissions are below the SCAQMD thresholds. These emissions are anticipated to dissipate quickly as they mix with the surrounding air. Recognizing the dispersion and quantity of emissions, the project will not subject a substantial number of people to objectionable odors.

#### IV. BIOLOGICAL RESOURCES

This addresses existing conditions and potential impacts to biological resources resulting from the proposed project. The analysis presented is based upon information provided by a site-specific biological constraints report (Appendix A) as well as a current site visit.

##### Would the project:

- a) *Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*
- b) *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?*
- c) *Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

**Less Than Significant (a-c)**—Sensitive species are those species that have special recognition by federal, state, or local conservation agencies and organizations as endangered, threatened, or rare. The California Department of Fish and Game (CDFG), United States Fish and Wildlife Service (USFWS), and special groups like the California Native Plant Society (CNPS) maintain watch lists of such resources. A

field survey of the project site conducted by a qualified biologist did not indicate the presence of any sensitive species. Further, the project location is not likely to support sensitive species due to the disturbed nature of the subject property and lack of suitable habitat. The natural resource element of the City of San Clemente General Plan identifies Marquita Canyon as a coastal canyon with potentially sensitive biological issues. However, Marquita Canyon has been modified to the point that it no longer has a defined bed and bank within the project area (see Appendix A for details). A stream flow that may have once flowed down the canyon is now collected in the underground Marquita Storm Channel beneath the floor of the canyon. Berms have been built in the canyon upstream and downstream of the project location. Currently at the project location, this canyon does not receive any direct surface flows from upstream of the project site, nor convey surface flows downstream. The project site within the canyon is dominated by non-native landscape vegetation with no riparian plant species and is not considered riparian or sensitive habitat. Standing water immediately west of the proposed project alignment lies on top and within the facility boundaries of the underground Marquita Storm Channel. Because the canyon does not contain any connectivity to navigable waters, including the Pacific Ocean at the project location, and the standing water is within a flood control facility, this saturated feature is not considered "Waters of the U.S." as regulated by the United States Army Corps of Engineers (USACE) and defined by Section 401 of the Clean Water Act or "Waters of the State" as regulated by CDFG.

- d.) *Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

**Less Than Significant With Mitigation**—The project site does not contain watercourses that support fish. Wildlife species such as coyotes, skunks, raccoons, and opossums will use urbanized areas for movement, but the project site is not likely to be considered a significant wildlife movement corridor on a regional basis and the project by its nature will not impact the migration of wildlife species in the long-term. Localized ground movement of wildlife and migratory birds may be impeded in the short-term during construction of the project. However, mitigation measures listed in Section 8 a) of this Initial Study limiting storage of construction equipment, materials, and debris to areas outside of the canyon, and the following mitigation measure listed below will reduce impacts to migratory wildlife corridors to less than significant.

**Mitigation Measure No. 1.** If construction activities occur during the bird-nesting season (February 1 through August 31), the City will insure that a breeding bird survey that identifies nesting activities is conducted by a qualified biologist immediately prior to construction of the proposed improvements. If any nests are observed and determined to be active in the breeding bird survey, construction activity will be prohibited within 100 feet of the nest until the nestlings have fledged the nest.

- e) *Conflict with any local applicable policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*
- f) *Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

**Less Than Significant Impact (e-f)**—Although the project site is not within an adopted habitat conservation plan, the natural resource element of the City of San Clemente General Plan identifies Marquita Canyon as a coastal canyon with potentially sensitive biological issues. The General Plan requires that the project include a biological report prepared by a qualified professional that addresses project impacts, identifies mitigation measures necessary to eliminate any significant adverse impacts to sensitive biological resources, and defines a program for monitoring and evaluation of the effectiveness of the specified mitigation measures. Since a biological constraints report prepared by a qualified biologist identifies a specific mitigation measure to avoid or lessen project impacts to less than significant, and a project specific mitigation monitoring program insures that the mitigation measures are monitored and evaluated for effectiveness, this project will not conflict with any natural community conservation plan and impacts as a result of the project are less than significant.

## V. CULTURAL RESOURCES

The analysis presented is based upon information provided by a Cultural Resources Assessment and Paleontological Records Check (Appendix B) and the project-specific geotechnical report (2002).

### Would the project:

- a) *Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?*

**Less Than Significant Impact**—A cultural resources assessment and records search was conducted by MBA in October 2002. No historical resources were detected within the project footprint. The nearest historical resources to the site are the Casa Romantica, the Oscare Easley Block, and the Hotel San Clemente. These sites are located well outside the project footprint approximately ¼ mile or more from the project site. Other properties of historical age but not listed with the State also occur within a ¼ mile radius of the project. These sites are also outside of the project footprint. Records show that the project site was covered with fill dirt in 1955 and again in 1964-1965. The fill dirt is now approximately nine feet in depth at the street and gradually deepening to a depth of 11 feet at the start of the slope that descends down into Marquita Canyon. The cultural resources assessment concluded there is a low likelihood that historic resources will be affected by construction. Therefore, implementation of the proposed project will not result in a substantial adverse change in a historical resource.

- b) *Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*

**Less Than Significant Impact With Mitigation**—The Cultural Resources Assessment of the West Avenida Palizada Storm Drain Improvement Project included a record search and field reconnaissance of the project site. The purpose of the records search was to identify all previously recorded cultural resources (prehistoric and historic archeological sites, historic buildings, structures, objects, or districts). The record search revealed that a prehistoric shell midden was recorded in the project vicinity. In addition, several other isolated archeological sites are known to be near the project area. The field reconnaissance efforts did not find any sign of significant cultural resources. The Cultural Resources Assessment concluded that there is a moderate likelihood that buried prehistoric resources will be affected during construction if excavation occurs below the known fill deposits. Current construction plans require excavation to a depth that will range between 14 feet at the top of the slope descending into Marquita Canyon to 7 ½ feet at the canyon floor. Approximately 30 linear feet of excavation at the top of the slope descending into Marquita Canyon is anticipated to disturb areas below the known fill deposits. However, the following mitigation measures will reduce potential impacts of archaeological resources to less than significant.

**Mitigation Measure No. 2.** A qualified archaeologist will monitor the work during earthmoving, but once the Archaeological monitor determines that there is little chance for impacts to cultural resources, monitoring should be discontinued.

**Mitigation Measure No. 3.** Should any cultural and/or archaeological resources be discovered during construction (excluding isolated artifacts), construction activities shall be moved to other parts of the project site and such localities should be Phase 2 tested for significance prior to continued impact by a qualified archaeologist. If the find is determined to be an historical or unique archaeological resource, as defined in Section 15064.5 of the CEQA Guidelines, avoidance measures or appropriate mitigation shall be implemented as directed by the archaeologist.

- c) *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

**Less Than Significant With Mitigation**—Remnant Pleistocene era beach and near-shore deposits (marine terrace deposits) underlie the site at a depth ranging between approximately 15 feet at the street to a depth of 21 feet at the top of the slope descending into Marquita Canyon. These sediments are conducive to the preservation of marine fossil vertebrates and invertebrates. Boring samples taken during the geotechnical investigation of the site revealed coarse sand and clayey sand containing seashell fragments. Current construction plans require excavation to a depth that will range between 14 feet at the top of the slope descending into Marquita Canyon to 7.5 feet at the canyon floor, and therefore, are not anticipated to intersect these fossil deposits. However, should construction/development activities uncover paleontological resources, work will stop and the lead agency will consult a qualified paleontologist. As a result, potential impacts to paleontological or unique geologic resources are considered less than significant.

**Mitigation Measure No. 4.** Should any paleontological resources be accidentally discovered during construction, construction activities shall be moved to other parts of the project site and a qualified paleontologist shall be contacted to determine the significance of these resources. If the find is determined to be significant, avoidance measures or appropriate mitigation shall be implemented.

- d) *Disturb any human remains, including those interred outside of formal cemeteries?*

**Less Than Significant Impact**—The project site is not expected to contain human remains. No cemetery or burials are known to have existed on the site, and therefore, the implementation of the proposed project is not expected in the disturbance of any human remains. In the event that human remains are found State Health and Safety Code Section 7050.5 dictates that if human remains are unearthed during construction, no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to CEQA regulations and Public Resources Code Section 5097.98.

## VI. GEOLOGY AND SOILS

The following discussions reference the listed material: “Seismic Hazard Zone Report for the San Clemente 7.5-minute quadrangle” published in 2002 by the California Department of Conservation, Division of Mines and Geology evaluates the potential for liquefaction, earthquake-induced landslides, and potential ground shaking in the project area. Three site-specific geotechnical reports were also completed. The first two reports were prepared in conjunction with the construction of the 13-unit apartment building adjacent to the proposed storm drain alignment. These studies are the “Engineering Geologic Evaluation Of Development Feasibility: Planned 13-Unit Apartment Building at 248 West Avenida Palizada, San Clemente, California” by William Munson Associates (1985), and the “Report of Geotechnical Investigation, 13-Unit Apartment Building, 248 West Agenda Palisade, San Clemente, California” by Southern California Soil and Testing, Inc. (1986). A third geotechnical report titled “Geotechnical Report, 248 Palizada Storm Drain Project No. 10805, San Clemente, California” by Southern California Soil and Testing, Inc. (2002) was done specifically for this project. Since the latter report relies upon the 1985 and 1986 reports for particular site evaluations, all of the above referenced material was used.

### Would the project:

- a) *Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:*
- i) *Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.*



ii) *Strong seismic ground shaking?*

**Less Than Significant Impact (i, ii)**—There are no active or potentially active faults that are known to transect the project site. The nearest known major fault is the active Newport-Inglewood Fault approximately 5.5 miles southwest of the project site. The Whittier-Elsinore Fault is approximately 21 miles northeast of the project site and is also an active fault. Both faults have a predicted maximum probable magnitude of 6.5 on the Richter scale. The project area is located in a region that is generally characterized by moderate to high seismic activity, as is the case for most locations in Southern California. The project site is expected to experience ground motions from earthquakes on regional and/or local causative faults. However, since no known faults traverse the site, ground rupture due to faulting is considered unlikely. In either case the proposed project does not expose people or structures to risk of loss, injury, or death as a result of seismic activity because the project does not propose building any inhabitable structures at the site.

iii) *Seismic-related ground failure, including liquefaction?*

**Less Than Significant Impact**—Liquefaction refers to a process by which geologically young, low-density granular deposits (i.e., sands and silty sands) located below the groundwater table lose their load supporting capacity when subjected to intense shaking. The geotechnical report prepared in 1985 and 1986 indicates that the site terrain exhibits no evidence of gross geologic instability indicative of ground failure. Due to the physiographic and geologic setting of the project site, liquefaction is considered unlikely.

iv) *Landslides?*

**Less Than Significant**—The proposed storm drain alignment descends into the Marquita Canyon. The canyon slope along the proposed alignment is at a relatively steep inclination of between ½:1 to 1:1 (horizontal: vertical). The geotechnical report prepared in 1985 indicates that there is no indication of past landslides. Massive landslides are not anticipated along the canyon slopes in the project area due to the neutral to favorable characteristics of the underlying bedrock strata, and the minimization of canyon drainage by the County storm channel construction at the bottom of the canyon. The geotechnical report prepared specifically for this project in 2002 recommends typical trenching, pipe installation, bedding, and backfilling techniques as appropriate for the entire project alignment. Since there is no past or

current evidence of landslide conditions at the project location and the geotechnical report does not recommend additional slope stability measures, impacts related to landslides are considered less than significant.

- b) *Result in substantial soil erosion or the loss of topsoil?*

**Less Than Significant With Mitigation**—Excavation activities that are a part of the project will be carried out pursuant to a National Pollutant Discharge Elimination System (NPDES) permit that requires adoption of appropriate Stormwater Pollution Prevention Plan (SWPPP) and implementation of “Best Management Practices” (BMPs) to reduce erosion. With incorporation of the mitigation measures set forth in item 8 a), any erosion and loss of topsoil impacts potentially associated with the project would be reduced to a level that is less than significant.

- c) *Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?*

**Less Than Significant Impact**—The 2002 geotechnical report indicates that excavation can be performed using standard excavation and backfill practices. Landslides, settlement, lateral spreading, subsidence, liquefaction or collapse are not considered site restraints. No additional factors exist in the site soils that would result in an unstable condition respecting any structures to be constructed thereon.

- d) *Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?*

**Less Than significant Impact**—The 1986 geotechnical report for 248 West Avenida Palizada states that on-site soils were determined to be nonexpansive. The proposed storm drain alignment extends on or near the lot line of the property evaluated in the 1986 geotechnical report and is considered constant with conditions on the proposed storm drain alignment. Therefore, little or no impact from expansive soils is anticipated.

- e) *Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?*

**No Impact**—Since the proposed project will not involve the use of septic tanks or alternative wastewater disposal systems, no project impacts are anticipated.

## VII. HAZARDS AND HAZARDOUS MATERIALS

### Would the project:

- a) *Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*
- b) *Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*
- c) *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

**No Impact (a-c)**—Although the proposed project is within one-quarter mile of two existing schools (Las Palmas Elementary School and St. Michael's Christian School), the project will not involve the use, storage or transport of hazardous substances. The City's Urban Runoff Management Plan (updated June 2002) insures that any storm water flows transported by the storm drain will not contain hazardous emissions, hazardous substances, or hazardous waste.

- d) *Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

**No Impact**—An environmental regulatory database search was performed for the storm drain alignment on the latest available California Department of Toxic Substances Control Facilities Inventory Database for Hazardous Waste and Substances Sites List (1998). The database search includes lists of hazardous

materials sites pursuant to Government Code Section 65962.5. The storm drain alignment was not listed on any environmental regulatory database list.

- e) *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?*
- f) *For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?*

**No Impact (e-f)**—Based on a review of a Thomas Brothers Orange County map (2002), the project is not within the vicinity of a public or private airstrip.

- g) *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

**Less than Significant Impact**—Emergency access to areas affected during project construction will be maintained throughout the construction period through implementation of a traffic control plan. In the finished condition, the proposed storm drain is underground and will not impair the implementation of or physically interfere with an emergency response plan or evacuation plan.

- h) *Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?*

**Less than Significant Impact**—The proposed project is not within a Very High Fire Hazard Severity Zone (VHFHSZ) as defined in the City of San Clemente Title 8 Health and Safety Ordinance (Chapter 8.22). However, there is a potential fire hazard when construction takes place in the bottom of Marquita Canyon due to the vegetation at that location. The contractor(s) in charge of construction will be required to follow fire prevention practices as outlined in Article 87 (fire safety during construction) of the San Clemente Fire Code (Chapter 8.16 of Title 8). Implementation of Article 87 of the City Fire Code reduces fire hazard risks to less than significant.

## VIII. HYDROLOGY AND WATER QUALITY

### Would the project:

- a) *Violate any water quality standards or waste discharge requirements?*

**Less Than Significant With Mitigation**—Implementation of the proposed project will result in excavation during construction activities and surface water quality could be degraded if a storm event occurs during construction of the project.

The Federal Clean Water Act (Section 402(p)) requires discharges of storm water associated with construction activity to be regulated by National Pollutant Discharge Elimination System (NPDES) permits. NPDES compliance involves understanding the nature and feasibility of Best Management Practices (BMPs) for water quality control. Additionally, the BMPs are required within a construction permit issued by the California Coastal Commission.

The following measures will be implemented by the City to reduce potential impacts on surface water quality and water discharge requirements during construction activities.

**Mitigation Measure No. 5.** Specifications for all excavation activities will identify BMPs, such as requiring the use of sand bags and bales where appropriate; to reduce potential erosion and surface water quality impacts during excavation and other construction activities. The BMPs will be incorporated into special conditions within a construction permit issued by the California Coastal Commission. The City will take steps to monitor the actual excavation, and other construction activities to ensure that said work is being carried out in conformance with the BMP specifications.

The review and approval process required to obtain the construction permit for the project from the California Coastal Commission will ensure that the BMPs, adopted and implemented with respect to this project will be sufficient to reduce the potential impacts of the project on surface water quality to a level that is less than significant.

**Mitigation Measure No. 6.** Construction materials, debris, or waste placed onsite will not directly or indirectly contact or enter receiving waters entering the Pacific Ocean (receiving water entering the Pacific Ocean at the project site is water entering

directly or indirectly into the County of Orange Marquita Storm Channel). All construction materials, excluding lumber, shall be covered and enclosed on all sides, and stored as far away from the existing storm drain inlet, excavation and receiving waters as possible.

**Mitigation Measure No. 7.** Construction debris and sediment shall be removed from project construction areas each day that construction occurs to prevent the onsite accumulation of sediment and other debris. Any and all debris resulting from construction activities shall be removed from the project site within 24 hours of completion of the project.

**Mitigation Measure No. 8.** All construction debris resulting from the proposed project shall be disposed of at an approved landfill located outside the coastal zone.

**Mitigation Measure No. 9.** All areas within the project site that are affected by construction activities shall be revegetated for slope stability, erosion control, and habitat enhancement. Plants used for revegetation of the Marquita Canyon (known by the California Coastal Commission and listed in the City of San Clemente Coastal Canyon Element Map as Palizada Canyon) including the canyon slope affected by the project will be selected in consultation with the California Coastal Commission to insure that replacement plants are non-invasive to the coastal canyon, and the Orange County Fire Department to insure that the replacement plants do not present a significant fire fuel load potential. Landscape plants disturbed by construction within the landscaped yards of the apartment buildings at 248 and 252 West Avenida Palizada will be replaced with similar kind including replacement of existing landscape trees removed during construction with 24-inch box trees.

- b) *Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?*

**No Impact**—The project is a storm drain and will not extract groundwater or reduce groundwater recharge.

- c) *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?*
- d) *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?*

**Less Than Significant Impact (c-d)**—Trenching will be required during installation of the storm drain; however, the amount of trenching necessary will not result in substantial alteration to the existing drainage pattern of the project area. In the finished condition, the drainage pattern along the storm drain alignment will be nearly identical to the existing drainage patterns. The proposed storm drain improvements will alleviate existing conditions that periodically flood the apartment building at 248 West Avenida Palizada.

- e) *Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?*

**Less Than Significant Impact**—The project is the installation and operation of a storm water drainage system to replace the undersized system now in place. This project will improve the existing condition by providing adequate capacity for storm water runoff.

- f) *Otherwise substantially degrade water quality?*

**Less Than Significant Impact**—The proposed project is required to comply with all applicable water quality standards. Permitting requirements as identified above, will ensure no substantial degradation to water quality will occur with the proposed project. No other sources that could potentially degrade water quality were identified during construction or operation of the project.

- g) *Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?*

- h) *Place within a 100-year flood hazard area structures, which would impede or redirect flood flows?*

**No Impact (g-h)**—The proposed project site is not within a 100-year flood hazard area as defined within the City of San Clemente General Plan and will not construct houses or other structures.

- i) *Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?*
- j) *Inundation by seiche, tsunami, or mudflow?*

**No Impact (i, j)**—The project site is not located within a potential tsunami hazard area as defined in the City General Plan (Figure 13-1, *City of San Clemente General Plan*, May 6 1993). No facility with the potential for seiche is located within the project vicinity and the project site is not located in an area subject to levee or dam failure.

## IX. LAND USE AND PLANNING

### Would the project:

- a) *Physically divide an established community?*

**No Impact**—The proposed storm drain will be entirely underground and will not physically divide an established community.

- b) *Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the LRDP, general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?*

**No Impact**—The City of San Clemente General Plan and zoning ordinance allows for storm water facilities within all zoning and General Plan land use designations. Therefore, the proposed storm drain is consistent with the applicable General Plan land use designations and zoning ordinance.



- c) *Conflict with any applicable habitat conservation plan or natural community conservation plan?*

**Less Than Significant Impact**—Although the project site is not within an adopted habitat conservation plan, the natural resource element of the City of San Clemente General Plan identifies Marquita Canyon as a coastal canyon with potentially sensitive biological issues. The General Plan requires that the project include a Biological Assessment Report which is prepared by a qualified professional, addresses project impacts, identifies mitigation measures necessary to eliminate any significant adverse impacts to sensitive biological resources, and defines a program for monitoring and evaluation the effectiveness of the specified mitigation measures. Since a biological assessment report prepared by a qualified biologist identifies specific mitigation measures to avoid or lessen project impacts to less than significant, and a project specific mitigation monitoring program insures that the mitigation measures are monitored and evaluated for effectiveness, this project will not conflict with any natural community conservation plan and impacts as a result of the project are less than significant.

## X. MINERAL RESOURCES

### Would the project:

- a) *Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*
- b) *Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?*

**No Impact (a, b)**—The City of San Clemente General Plan, Technical Background Report, Figure 5-3 shows that no known mineral source of great value to the region occurs within the project site. Therefore, the implementation of the proposed project would not result in the loss of a known mineral resource that would be of value to the region.

**XI. NOISE**

**Would the project result in:**

- a) *Exposure of persons to or generation of noise levels in excess of standards established in any applicable plan or noise ordinance, or applicable standards of other agencies?*

**Less Than Significant Impact with Mitigation**—The generation of increased noise associated with the proposed project would occur over the short-term during excavation and construction activities. Ambient noise levels in the project vicinity would increase during the construction phase, but the City recognizes that the control of construction noise is difficult at best and provides for an exclusion from its normal noise guidelines when construction activity is necessary for the installation of City facilities (Municipal Code Section 8.48.060, paragraph J) and is performed during the hours of 7:00 a.m. – 6:00 p.m. Monday through Saturday (Municipal Code Section 8.48.060, paragraph E). Mitigation Measures summarized in the discussion of item 11d) further reduce temporary construction noise impacts to residential uses adjacent to the project to less than significant.

- b) *Exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?*

**Less Than Significant Impact**— Minimal, temporary groundborne vibrations and groundborne noise may be created during trenching and excavation for the storm drain installation, but not to a level that would be considered significant. Excavation work will take place between the hours of 7:30 a.m. and 4:30 p.m. Monday through Saturday in compliance with City Code Section 8.48.060, paragraph E.

- c) *A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?*

**No Impact**—Operation of the storm drain will have no permanent increase in ambient noise levels.

- d) *A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?*

**Less Than Significant With Mitigation**—Noise levels associated with construction activities would be higher than the ambient noise levels in the project area today, but would subside once construction of the proposed project is completed. The local residents would be subject to elevated noise levels due to the operation of on-site construction equipment. Excavation tends to create the highest noise levels, because the noisiest construction equipment is found in the earthmoving equipment category. This category includes backhoes, trenchers, draglines, front loaders, etc. Typical operating cycles may involve 1 or 2 minutes of full power operation followed by 3 to 4 minutes at lower power settings. Ambient noise levels in the project vicinity would increase during the construction phase, but the City recognizes that the control of construction noise is difficult at best and provides for an exclusion from its normal noise guidelines when construction activity is necessary for the installation of City facilities (Municipal Code Section 8.48.060, paragraph J) and is performed during the hours of 7:00 a.m. – 6:00 p.m. Monday through Saturday (Municipal Code Section 8.48.060, paragraph E).

The project will incorporate the following mitigation measures to ensure the potential project construction noise impacts are kept at an acceptable and less than significant level.

**Mitigation Measure No. 10.** During construction of the proposed improvements, mobile construction equipment will be properly maintained at an offsite location and includes proper tuning and timing of engines to minimize noise emissions.

**Mitigation Measure No. 11.** All equipment shall be fitted with properly operating mufflers, air intake silencers and engine shrouds.

**Mitigation Measure No. 12.** All stationary noise sources (e.g., generators and compressors) shall be located as far from residential receptor locations as is feasible.

**Mitigation Measure No. 13.** Construction shall be restricted to between the hours of 7:30 a.m. and 4:30 p.m. on weekdays, including Saturday. No construction shall occur at any time on Sunday or on a federal holiday. These days and hours shall also apply to any servicing of equipment and to the delivery of materials to or from the site.

- e) *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*

**No Impact**—The proposed project is not located within the vicinity of any airport. Therefore, the project will not be subjected to excessive aviation generated noise.

- f) *For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?*

**No Impact**—The proposed project is not located within the vicinity of a known private airstrip. No impacts would result from the implementation of the proposed project and no mitigation measures are necessary.

## XII. POPULATION AND HOUSING

### Would the project:

- a) *Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

**No Impact** —The sizing of the proposed storm drain is designed to adequately accommodate existing storm water flows and will not provide infrastructure able to induce population growth in the project area.

- b) *Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?*
- c) *Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?*

**No Impact (b, c)**—The implementation of the proposed project will not result in the displacement of any individuals or existing residential structures.

### XIII. PUBLIC SERVICES

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

- a) *Fire Protection?*
- b) *Police Protection?*
- c) *Schools?*
- d) *Parks?*
- e) *Other public facilities?*

**No Impact (a-e)**—The proposed project is the replacement of an existing storm drain and will not increase the population of the project area or require additional fire, police, school, park or any other services.

### XIV. RECREATION

Would the project:

- a) *Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*
- b) *Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

**No Impact (a-b)**—The proposed will not result in the increase use or expansion of recreational facilities.

**XV. TRANSPORTATION/TRAFFIC**

**Would the project:**

- a) *Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?*
- b) *Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?*
- d) *Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*
- e) *Result in inadequate emergency access?*

**Less Than Significant With Mitigation (a, b, d, e)**—A small portion of the proposed storm drain alignment will be constructed within the paved right-of-way of West Avenida Palizada, a public roadway. The impacts to traffic resulting from the project will consist of short-term increases in detoured vehicle trips around the project footprint during construction of the project. However, the City will develop a traffic control plan prior to construction within the public roadway. Implementation of a traffic control plan will reduce potential impacts from congested traffic including any deterioration in levels of service and possible traffic hazards or inadequate emergency access as a result of detoured traffic during construction to less than significant. The proposed project will have no long-term effect on the area roadway network or access to the project area.

**Mitigation Measure No. 14.** Prior to construction, the City will develop a traffic control plan that will describe in detail safe detours around the project construction within the public right-of-way of West Avenida Palizada.

**Mitigation Measure No. 15.** The City will contact schools in the project area to advise them of the proposed construction and potential traffic impacts, and request the schools to notify parents of the potential traffic impacts and the detour routes described in the traffic control plan.

- c) *Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?*

**No Impact**—The proposed project is the installation of a storm drain to replace an existing storm drain and will not result in any change of air traffic patterns.

- f) *Result in inadequate parking capacity?*

**Less Than Significant Impact**—The proposed project will not result in the permanent need for parking capacity. Temporary parking of construction workers and equipment are adequately accommodated on the City-owned lot (250 West Avenida Palizada) within the project site.

- g) *Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?*

**No Impact**—The proposed project will have no effect on adopted alternative transportation plans, policies, or programs.

## XVI. UTILITIES AND SERVICE SYSTEMS

### Would the project:

- a) *Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?*
- b) *Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?*
- d) *Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?*
- e) *Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

**Less Than Significant Impact (a, b, d, e)**—The proposed project is the construction and operation of a storm drain and will not result in the need of additional wastewater capacity or water supplies.

- c) *Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?*

**Less Than Significant Impact**—The proposed project is the construction of a storm water drainage facility to replace the existing storm drain that is currently undersized and will not adequately convey existing flows. The proposed project is designed to adequately accommodate existing storm water flows and will not cause significant environmental effects as discussed in this section (Section C) of this Initial Study.

- f) *Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?*
- g) *Comply with applicable federal, state, and local statutes and regulations related to solid waste?*

**Less Than Significant Impact (f, g)**—The nature of the proposed project does not present the potential for generation of solid waste during project operations and the quantity of solid waste generated during construction of the project is both temporary and minimal.

## XVII. MANDATORY FINDINGS OF SIGNIFICANCE

- a) *Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*

**Less Than Significant Impact With Mitigation**—A project specific biological constraints analysis shows that the project site is primarily vegetated with non-native



landscape plants (see Appendix A) and does not contain habitat suitable for a rare or endangered plant or animal species. The proposed project has the potential to affect prehistoric resources, and short-term impacts to migratory birds but with mitigation measures in place, the potential impacts are considered less than significant. (see Item 5a through c).

- b) *Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*

**Less Than Significant Impact With Mitigation**—The City of San Clemente is in the process of renovating several portions of the existing storm drainage system within the City. Several of the potential impacts identified in this Initial Study could degrade the quality of the environment if they were not avoided or sufficiently mitigated. Specifically this proposed project along with other flood control improvements the City is planning could affect cultural resources. However, the City will implement the mitigation measures identified in this Initial Study to ensure no individual or cumulative significant impacts will result from the proposed project. No cumulative impacts associated with past and/or other current projects were identified.

- c) *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

**Less Than Significant Impact**—Implementation of the recommended mitigation measures with the proposed project would reduce adverse impacts on human beings to a less than significant level.

#### **4.0 "DE MINIMIS" FINDING**

Based upon information provided in the site-specific biological constraints report (Appendix A) and the evaluation within this initial study, there is no evidence that the project has a potential for a change that would adversely affect wildlife resources or the habitat upon which wildlife depends. Pending a negative finding in a Nesting Bird Survey if construction will be conducted during the nesting season (February 1 through August 31), the project will have no adverse impacts to wildlife resources. The presumption of adverse effect set forth in 14 CCR 753.5(D) has been rebutted by substantial evidence.

## 5.0 MITIGATION MONITORING PROGRAM

### Mitigation Measure No. 1

**Topic:** Biological Resources

**Date:** November 11, 2002

**Description:** If construction activities occur during the bird-nesting season (February 1 through August 31), the City will insure that a breeding bird survey that identifies nesting activities is conducted by a qualified biologist immediately prior to construction of the proposed improvements. If any nests are observed and determined to be active in the breeding bird survey, construction activity will be prohibited within 100 feet of the nest until the nestlings have fledged the nest.

**Timing:** During nesting season (February 1 to August 31) immediately prior to construction of improvements

**Action Responsibility:** City personnel overseeing construction of project.

\_\_\_\_\_  
Signature (sign and date when completed)

\_\_\_\_\_  
Date

**Verification Method:** Breeding Bird Survey Report

**Verification Responsibility:** City personnel overseeing construction of project.

\_\_\_\_\_  
Signature (sign and date when completed)

\_\_\_\_\_  
Date

**Mitigation Measure No. 2**

**Topic:** Cultural Resources

**Date:** November 11, 2002

**Description:** A qualified archaeologist will monitor the work during earthmoving, but once the archaeological monitor determines that there is little chance for impacts to cultural resources, monitoring should be discontinued.

**Timing:** During Construction of the Project

**Action Responsibility:** City personnel overseeing construction of project.

\_\_\_\_\_  
Signature (sign and date when completed)

\_\_\_\_\_  
Date

**Verification Method:** Archeologist daily log of construction oversight.

**Verification Responsibility:** City personnel overseeing construction of project.

\_\_\_\_\_  
Signature (sign and date when completed)

\_\_\_\_\_  
Date

**Mitigation Measure No. 3**

**Topic:** Cultural Resources

**Date:** November 11, 2002

**Description:** Should any cultural and/or archaeological resources be discovered during construction (excluding isolated artifacts), construction activities shall be moved to other parts of the project site and such localities should be Phase 2 tested for significance prior to continued impact by a qualified archaeologist. If the find is determined to be an historical or unique archaeological resource, as defined in Section 15064.5 of the CEQA Guidelines, avoidance measures or appropriate mitigation shall be implemented as directed by the archaeologist.

**Timing:** During Construction of the Project

**Action Responsibility:** City personnel overseeing construction of project.

\_\_\_\_\_  
Signature (sign and date when completed)

\_\_\_\_\_  
Date

**Verification Method:** Archeologist daily log of construction oversight.

**Verification Responsibility:** City personnel overseeing construction of project.

\_\_\_\_\_  
Signature (sign and date when completed)

\_\_\_\_\_  
Date

**Mitigation Measure No. 4**

**Topic:** Cultural Resources

**Date:** November 11, 2002

**Description:** Should any paleontological resources be accidentally discovered during construction of the project, construction activities shall be moved to other parts of the project site and a qualified paleontologist shall be contacted to determine the significance of the find. If the find is determined to be significant, avoidance measures or appropriate mitigation shall be implemented.

**Timing:** During Construction of the Project

**Action Responsibility:** City personnel overseeing construction of project.

\_\_\_\_\_  
Signature (sign and date when completed)

\_\_\_\_\_  
Date

**Verification Method:** Paleontological log of find if paleontological resources are found during excavation.

**Verification Responsibility:** City personnel overseeing construction of project.

\_\_\_\_\_  
Signature (sign and date when completed)

\_\_\_\_\_  
Date

**Mitigation Measure No. 5**

**Topic:** Hydrology and Water Quality

**Date:** November 11, 2002

**Description:** Specifications for all excavation activities will identify BMPs, such as requiring the use of sand bags and bales where appropriate; to reduce potential erosion and surface water quality impacts during excavation and other construction activities. The BMPs will be incorporated into special conditions within a construction permit issued by the California Coastal Commission. The City will take steps to monitor the actual excavation, and other construction activities to ensure that said work is being carried out in conformance with the BMP specifications.

**Timing:** During Construction of the Project

**Action Responsibility:** City personnel overseeing construction of project.

\_\_\_\_\_  
Signature (sign and date when completed)

\_\_\_\_\_  
Date

**Verification Method:** Construction Permit for the project issued by the California Coastal Commission, and City inspection of construction site.

**Verification Responsibility:** City personnel overseeing construction of project.

\_\_\_\_\_  
Signature (sign and date when completed)

\_\_\_\_\_  
Date

**Mitigation Measure No. 6**

**Topic:** Hydrology and Water Quality

**Date:** November 11, 2002

**Description:** Construction materials, debris, or other waste placed onsite will not directly or indirectly contact or enter receiving waters entering the Pacific Ocean (receiving water entering the Pacific Ocean at this project site is water entering directly or indirectly into the Orange County Marquita Storm Channel). All onsite construction materials excluding lumber, shall be covered and enclosed on all sides, and stored as far away from storm drain inlet, excavation and receiving waters as possible.

**Timing:** During Construction of Project

**Action Responsibility:** City personnel overseeing construction of project.

\_\_\_\_\_  
Signature (sign and date when completed)

\_\_\_\_\_  
Date

**Verification Method:** City inspection of construction site.

**Verification Responsibility:** City personnel overseeing construction of project.

\_\_\_\_\_  
Signature (sign and date when completed)

\_\_\_\_\_  
Date



**Mitigation Measure No. 7**

**Topic:** Hydrology and Water Quality

**Date:** November 11, 2002

**Description:** Construction debris and sediment shall be removed from project construction areas each day that construction occurs to prevent the onsite accumulation of sediment and other debris. Any and all debris resulting from construction activities shall be removed from the project site within 24 hours of completion of the project.

**Timing:** During Construction of the Project.

**Action Responsibility:** City personnel overseeing construction of project.

\_\_\_\_\_  
Signature (sign and date when completed)

\_\_\_\_\_  
Date

**Verification Method:** City inspection of construction site.

**Verification Responsibility:** City personnel overseeing construction of project.

\_\_\_\_\_  
Signature (sign and date when completed)

\_\_\_\_\_  
Date



**Mitigation Measure No. 9**

**Topic:** Hydrology and Water Quality

**Date:** November 11, 2002

**Description:** All areas within the project site that are affected by construction activities shall be revegetated for slope stability, erosion control and habitat enhancement. Plants used for revegetation of the Marquita Canyon (Known by the California Coastal Commission as Palizada Canyon) including the canyon slope affected by the project will be selected in consultation with the California Coastal Commission to insure that replacement plants are non-invasive to the coastal canyon, and the Orange County Fire Department to insure that the replacement plants do not present too great a fire fuel load potential.

**Timing:** Before construction (approved plant list) and before completion of the Project (revegetation activities)

**Action Responsibility:** City personnel overseeing construction of project.

\_\_\_\_\_  
Signature (sign and date when completed)

\_\_\_\_\_  
Date

**Verification Method:** Construction Permit for the project issued by the California Coastal Commission, and City inspection of construction site.

**Verification Responsibility:** City personnel overseeing construction of project.

\_\_\_\_\_  
Signature (sign and date when completed)

\_\_\_\_\_  
Date

**Mitigation Measure No. 10**

**Topic:** Noise

**Date:** November 11, 2002

**Description:** During Construction of the proposed improvements, mobile construction equipment will be properly maintained at an offsite location and includes proper tuning and timing of engines to minimize noise emissions.

**Timing:** During Construction of the Project

**Action Responsibility:** City personnel overseeing construction of project.

\_\_\_\_\_  
Signature (sign and date when completed)

\_\_\_\_\_  
Date

**Verification Method:** City Inspection of equipment

**Verification Responsibility:** City personnel overseeing construction of project.

\_\_\_\_\_  
Signature (sign and date when completed)

\_\_\_\_\_  
Date

**Mitigation Measure No. 11**

**Topic:** Noise

**Date:** November 11, 2002

**Description:** All equipment shall be fitted with properly operating mufflers, air intake silencers and engine shrouds.

**Timing:** During Construction of the Project

**Action Responsibility:** City personnel overseeing construction of project.

\_\_\_\_\_  
Signature (sign and date when completed)

\_\_\_\_\_  
Date

**Verification Method:** City Inspection of equipment.

**Verification Responsibility:** City personnel overseeing construction of project.

\_\_\_\_\_  
Signature (sign and date when completed)

\_\_\_\_\_  
Date

**Mitigation Measure No. 12**

**Topic:** Noise

**Date:** November 11, 2002

**Description:** All stationary noise sources (e.g., generators and compressors) shall be located as far from residential receptor locations as is feasible.

**Timing:** During Construction of the Project.

**Action Responsibility:** City personnel overseeing construction of project.

\_\_\_\_\_  
Signature (sign and date when completed)

\_\_\_\_\_  
Date

**Verification Method:** City inspection of construction site.

**Verification Responsibility:** City personnel overseeing construction of project.

\_\_\_\_\_  
Signature (sign and date when completed)

\_\_\_\_\_  
Date

**Mitigation Measure No. 13**

**Topic:** Noise

**Date:** November 11, 2002

**Description:** Construction shall be restricted to between the hours of 7:30 a.m. and 4:30 p.m. on weekdays, including Saturday. No construction shall occur at any time on Sundays or on federal holidays. These days and hours shall also apply to the delivery of materials to or from the site.

**Timing:** During Construction of the Project.

**Action Responsibility:** City personnel overseeing construction of project.

\_\_\_\_\_  
Signature (sign and date when completed)

\_\_\_\_\_  
Date

**Verification Method:** City inspection of construction site.

**Verification Responsibility:** City personnel overseeing construction of project.

\_\_\_\_\_  
Signature (sign and date when completed)

\_\_\_\_\_  
Date

**Mitigation Measure No. 14**

**Topic:** Transportation

**Date:** November 11, 2002

**Description:** Prior to construction, the City will develop a traffic control plan that will describe in detail safe detours around the project construction within the public right-of-way of West Avenida Palizada.

**Timing:** Prior to and during Construction of the Project.

**Action Responsibility:** City personnel overseeing construction of project.

\_\_\_\_\_  
Signature (sign and date when completed)

\_\_\_\_\_  
Date

**Verification Method:** City Traffic Control Plan and inspection of construction site.

**Verification Responsibility:** City personnel overseeing construction of project.

\_\_\_\_\_  
Signature (sign and date when completed)

\_\_\_\_\_  
Date





**APPENDIX A**

**BIOLOGICAL CONSTRAINTS ANALYSIS REPORT**

October 10, 2002

Mr. Bill Kabbara  
121 North Harwood Street  
Orange, California 92866

**SUBJECT: Biological Constraints Analysis Letter Report for the City of San Clemente in Orange County.**

Dear Mr. Kabbara:

This report contains the findings of Michael Brandman Associates' (MBA) biological constraints investigation of the proposed storm drain improvement project located within the City of San Clemente in Orange County. This report includes a literature review and a site assessment that identifies the potential constraints related to the proposed project development.

#### **PROJECT DESCRIPTION**

It is our understanding that the City of San Clemente is in the process of renovating a large portion of the existing storm drainage system in the City. The City plans to replace portions of the existing 24-inch storm drainpipe and replace it with a new 24 to 30-inch pipe. The site is generally located north of San Clemente Municipal Pier, south of El Camino Real, west of Interstate 5, and east of the Pacific Ocean. The proposed storm drain replacement site is specifically located north of Encino Lane, south of Calle Puente, east of West Marquita, and west of West Avenida Palizada. The project site can be found on the San Clemente 7.5-minute USGS topographic quadrangle in Section 33, Township 8S, Range 7W, and Section 4, Township 9S, and Range 7W.

#### **METHODOLOGY**

A preliminary literature review followed by a field assessment provided information regarding the biological constraints on the property. MBA biologist, Scott A. Crawford, conducted a field survey on October 9, 2002. The objective of the field survey was to document the existing conditions on the property and to evaluate potential project constraints with regard to sensitive biological resources.

#### **Literature Review**

Prior to the survey, a records search was conducted using the current version of the California Natural Diversity Database (CNDDB) for information on sensitive biological resources known to occur in the San Clemente quadrangle and

Mr. Kabbara  
October 10, 2002  
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surrounding areas. These records are organized by U.S. Geological Survey (USGS) 7.5-minute topographic quadrangles. The California Native Plant Society Electronic Inventory (CNPSEI), U.S. Fish and Wildlife Service (USFWS), and California Department of Fish and Game (CDFG) sensitive wildlife lists were also referenced. Special status wildlife species include all federal- and state-listed endangered and threatened species, former federal candidate species, and State of California species of special concern. Field guides and other literature pertinent to the project area were also consulted. Results of this literature review are discussed under the title Potential Project Constraints within this report.

### Regulatory Setting

Federally listed species are protected under the Endangered Species Act (ESA) and are enforced by the USFWS. State listed species are protected under the California Endangered Species Act (CESA) and these regulations are enforced by the CDFG. CDFG may also designate a species as a Species of Special Concern because of local and/or statewide population declines. The USFWS also designates certain species as Migratory Non-game Birds of Management Concern. Guidelines for the implementation of the California Environmental Quality Act (CEQA) provide that a species be considered endangered or "rare" regardless of appearance on a formal list. CEQA requires that any impacts deemed significant must be mitigated.

The Migratory Bird Treaty Act (MBTA) protects all common wild birds found in the United States except the house sparrow, starling, feral pigeon, and resident game birds such as pheasant, grouse, quail and wild turkey. Resident game birds are managed separately by each state. The MBTA makes it unlawful for anyone to kill, capture, collect, possess, buy, sell, trade, ship, import or export any migratory bird including feathers, parts, nests or eggs.

CDFG code 3503 makes it illegal to destroy any birds' nest or any birds' eggs that are protected under the MBTA. Code 3503.5 further protects all birds in the orders Falciformes and Strigiformes (Birds of Prey, such as hawks and owls) and their eggs and nests from any form of take.

The United States Army Corps of Engineers (USACE) and the Regional Water Quality Control Board (RWQCB) regulate discharge of fill into waters of the United States under Section 404 and 401 of the federal Clean Water Act, respectively. The CDFG regulates alterations to stream courses including adjacent riparian habitat areas under Section 1600 of the state Fish and Game Code.

### Field Survey Methods

The biologist conducted a general survey of the entire property by walking along all habitat types. The surveyor focused on sensitive areas of the property that potentially supported sensitive species as well as jurisdictional drainage areas. The surveyor referred to a USGS 7.5-minute topographic quadrangle, as well as an aerial photo for reference while conducting the survey. The

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October 10, 2002  
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survey was conducted to understand the existing project site conditions in order to evaluate possible project constraints.

### EXISTING CONDITIONS

The field survey was conducted on October 9, 2002. The weather conditions during the survey included clear skies with a temperature of 75 degrees Fahrenheit and winds of 1 mph. The property ranges in elevation from 100 to 125 feet above sea level. Surrounding land use includes single family residential and multiple family residential developments in all directions. The existing storm drain is located in the bottom of a small canyon that was likely, at one time, a coastal canyon that supported coastal sage scrub species. The canyon feature has been heavily disturbed during the construction of the adjacent residential developments and no longer supports native vegetation.

The project site is dominated by non-native landscape vegetation including Peruvian peppertree (*Schinus molle*), sea fig (*Carpobrotus chilensis*), and myoporum (*Myoporum laetum*). Two native species were also observed within the project boundary, lemonade berry bush (*Rhus integrifolia*) and prickly pear cactus (*Opuntia lateralis*).

The project site does not contain any native plant communities and there is no suitable habitat for any special status plant or wildlife species.

The majority of the water that historically was contained within this canyon is now contained within the underground storm water drainage system. Currently this canyon area does not receive any direct surface flows from upstream of the project site. Canyon flows are limited to the steep canyons sides immediately adjacent to the proposed project. The canyon no longer contains a definable bed and bank feature. Also, there is a large earthen berm located at the downstream end of the project site. This berm was placed in the canyon in order to construct the adjacent apartment complex and it completely blocks all flows. There is no evidence of any culvert or other device that allows water to flow under the berm. The project site does not contain any connectivity to navigable waters, including the Pacific Ocean and is not considered to be jurisdictional under USACE or CDFG.

### POTENTIAL PROJECT CONSTRAINTS

The literature review and CNDDDB database search indicated that 22 special status species have been reported as occurring within the regional vicinity of the property (5 plants and 17 wildlife species). Of these 22 species, there were no species considered to potentially occur within the project site based on habitat requirements and information concerning land use in the vicinity of the site.

Wildlife species such as coyotes, skunks, raccoons, and opossums will use urbanized areas for movement, but the property is not likely to be considered a significant wildlife movement corridor on a regional basis.

50-75

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October 10, 2002  
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The project site does not contain any "Waters of the U.S." or "Waters of the State" as regulated by CDFG and USACE. There are areas immediately west of the proposed project alignment that contain some standing water. This standing water lies on top and with the facility boundaries of the Marquita storm channel buried below the canyon floor. The water is likely due to urban runoff received from the adjacent residential development and is not properly contained within the storm drain system. Based on current site conditions, these saturated features are considered to be isolated occurrences and are not considered jurisdictional by the USACE. This canyon bottom does not meet the criteria to be considered a streambed and is, therefore, is not under the jurisdiction of the CDFG.

#### **CONCLUSIONS AND RECOMMENDATIONS**

MBA conclusions regarding lack of sensitive biological resources within the property were made based on the literature review and site survey. A biological resources assessment may not be required during the CEQA process due to the disturbed nature of the property. The following recommendations have been made with regard to any potential project constraints potentially affecting the development of the project.

##### **Migratory Bird Treaty Act**

As per the Migratory Bird Treaty Act and CDFG Codes, removal of any trees, shrubs or any other potential nesting habitat, should be conducted outside the nesting season. Immediately prior to grading, the project proponent should have a breeding bird survey conducted by a qualified biologist to identify any nesting activities during the nesting season (February to August). If any nests are observed and determined to be active, construction activity will be prohibited within 100 feet of the nest until the nestlings have fledged the nest.

Please feel free to call me if you have any questions concerning the information in this report. We look forward to continuing to assist you with work on this and other sites.

Sincerely,

MICHAEL BRANDMAN ASSOCIATES

Scott A. Crawford M.A.  
Project Manager

**APPENDIX B**

**CULTURAL RESOURCES ASSESSMENT REPORT**

**ARCHAEOLOGICAL AND PALEONTOLOGICAL RESOURCES ASSESSMENT  
OF THE SAN CLEMENTE STORM DRAIN PROJECT , WEST AVENIDA PALAZADA,  
SAN CLEMENTE, CALIFORNIA**

**FINAL**

Prepared for:

**Kabbara Engineering  
121 North Harwood Street  
Orange, California 92866-1626**

Contact: Mr. Bill Kabbara, PE, PLS

Prepared by:

**Michael Brandman Associates  
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(714) 258-8100**

Contact: Michael Dice, M.A., R.P.A.  
Senior Archaeologist



October 22, 2002

Keywords: San Clemente, Marquita Canyon, CA-ORA-599  
USGS *San Clemente, CA. 7.5' topographic quadrangle map*

5C-98



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ACRONYMS

AIC	Archaeological Information Center, San Bernardino County Museum
ARMR	Archaeological Resource Management Report
CEQA	California Environmental Quality Act
CRHP	California Register of Historic Places
DPR523	California Department of Public Resources Archaeological Recordation Form Set (523)
EIC	Eastern Information Center, University of California, Riverside
NEPA	National Environmental Policy Act
NAHC	Native American Heritage Commission
NHPA	National Historic Preservation Act
SBBM	San Bernardino Base Meridian
SBCM	San Bernardino County Museum
SHPO	State Historic Preservation Office

**SECTION 1  
PUBLIC INFORMATION STATEMENT**

At the request of Mr. Bill Kabbara of Kabbara Engineering, Michael Brandman Associates (MBA) has conducted a Phase 1 cultural resource field survey and paleontological resource evaluation on a 500-foot right-of-way found in Section 33 of T8S R7W, and Section 4 of T9S R7W (San Bernardino Base Meridian), in the City of San Clemente, California. The total amount of land within the right-of-way is less than ½ acre. Located near the center of the City of San Clemente, California, the study area is under City jurisdiction. This report is associated with a plan to remove and replace an existing storm drain.

The purpose of this report is to delineate the location of the study area, identify all potentially significant cultural resources situated within the study area and, if impacted by the proposed development, propose recommendations for mitigation where necessary. Completion of this investigation fulfills the requirements of the California Environmental Quality Act (CEQA), National Environmental Policy Act (NEPA), protocols associated with the National Historic Preservation Act (NHPA) as amended, the Antiquities Act of 1906, and Executive Order 11593 requirements. This report follows the State Historic Preservation Office (SHPO) recommended Archaeological Resource Management Report (ARMR) format. This report also details paleontological mitigation measures should fossils be encountered during construction.

Section 2 presents an introduction and reviews the goals of this study. Section 3 summarizes the environmental and cultural setting. Section 4 presents the investigative methods, while Section 5 reviews any previous cultural resource and paleontological investigations in or near the study area, along with records search results. Cultural resource survey and paleontological results for this project are found in Section 6. Section 7 summarizes the project and provides management recommendations. Section 8 presents a reference list, while Section 9 provides the project certification. Appendix A contains recent photographs of the study area, and Appendix B contains personnel qualifications. Appendix C reprints consultation letters associated with the project.

The author conducted the archaeological record search at the SCCIC on September 23, 2002. One prehistoric archaeological site, one California Point of Historical Interest site, three National Register-listed properties and two isolated properties lay within the ¼-mile search radius. The field survey phase of the project took place on October 3, 2002. During the survey, it was determined that much of the project area exhibits roads, storm drains, and structures that appear less than 45 years old. None of the known historic properties will be directly or indirectly affected by construction. Because of heavy development since the early 1950's, there is a low potential for impacts to historic resources as a result of construction. Lastly, because the project area is down slope from site CA-ORA-599, it is therefore possible that this site will be impacted during construction. Full time cultural resource

*San Clemente Storm Drain Archaeological And Paleontological Project*

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monitoring of the study area is recommended during earthmoving, but once the Archaeological monitor determines that there is little chance for impacts to cultural resources, monitoring should be discontinued.

Should potentially significant cultural resource localities (excluding isolated artifacts) be uncovered during earthmoving, such localities should be Phase 2 tested for *significance* prior to continued impact. In addition, State Health and Safety Code Section 7050.5 dictates that if human remains are unearthed during construction, no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to CEQA regulations and Public Resources Code Section 5097.98.

Because it is not expected that excavation of the storm drain will be deep enough to impact fossiliferous sediments, full-time paleontological monitoring is not recommended. However, should such resources be discovered during construction, construction should avoid further impacts until a qualified paleontologist is able to access the finds.

## SECTION 2 INTRODUCTION

The following archaeological survey report has been prepared for at the request of Mr. Bill Kabbara of Kabbara Engineering. Michael Brandman Associates (MBA) has conducted a Phase 1 cultural resource field survey and paleontological resource evaluation on a 500-foot right-of-way found in the northeast  $\frac{1}{4}$  of the northwest  $\frac{1}{4}$  of Section 4, T9S R4W (San Bernardino base Meridian), in the City of San Clemente, California. Located near central downtown San Clemente (Exhibit 1), the study area is under City of San Clemente jurisdiction. The direct Area of Potential Effect (APE) is located in Exhibit 2. Here, the construction right-of-way is lined in solid black and is termed the "Project Location". This report is associated with a plan to abandon an existing storm drain in place, and then construct a new storm drain near the old storm drain.

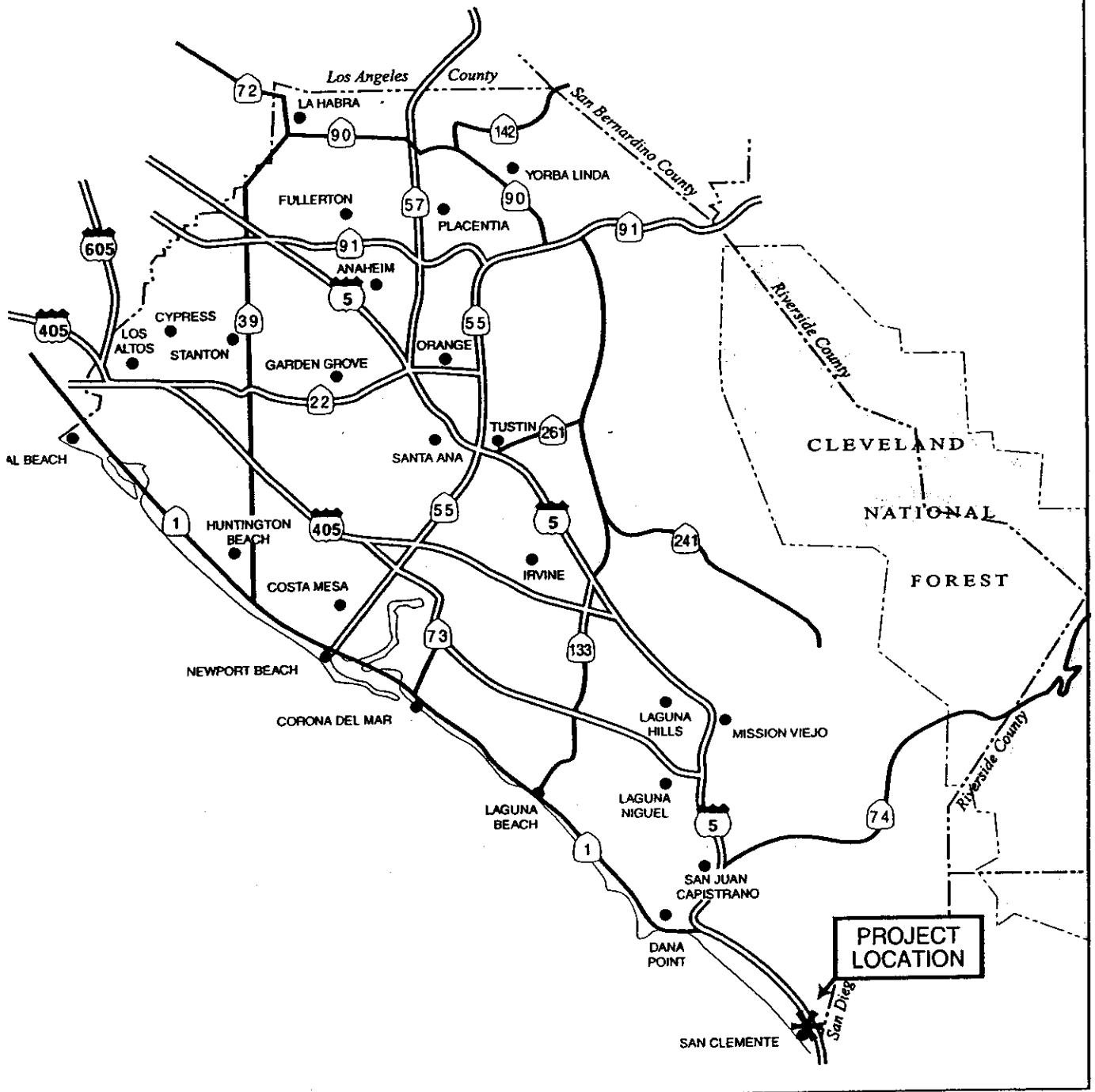
The cultural resource records search took place on September 23, 2002. The cultural resource fieldwork and site recordation took place on October 3, 2002. The project area was surveyed for cultural resources utilizing procedures noted in Section 4.0.

Completion of this investigation fulfills the requirements of the California Environmental Quality Act (CEQA), National Environmental Policy Act (NEPA), protocols associated with the National Historic Preservation Act (NHPA) as amended, the Antiquities Act of 1906, and Executive Order 11593 requirements. This report follows the State Historic Preservation Office (SHPO) recommended Archaeological Resource Management Report (ARMR) format. This report also describes the required paleontological mitigation measures.

### 2.1 CULTURAL AND PALEONTOLOGICAL RESOURCE ASSESSMENT GOALS

The goal of this study was to identify all significant cultural resources situated within the boundaries of the defined study area. The study consisted of six distinct efforts:

1. Cultural resources record search conducted to determine whether any previously recorded cultural materials are present within the boundaries of the study area or within a  $\frac{1}{4}$ -mile radius of the study area.
2. Protocol field reconnaissance in the form of a intensive reconnaissance survey designed to identify any cultural resources within the study area.
3. Examination of archived aerial photographs, topographic maps, and road maps that might reveal historic land use.
4. Recordation, where necessary, of encountered cultural properties.



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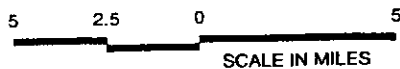
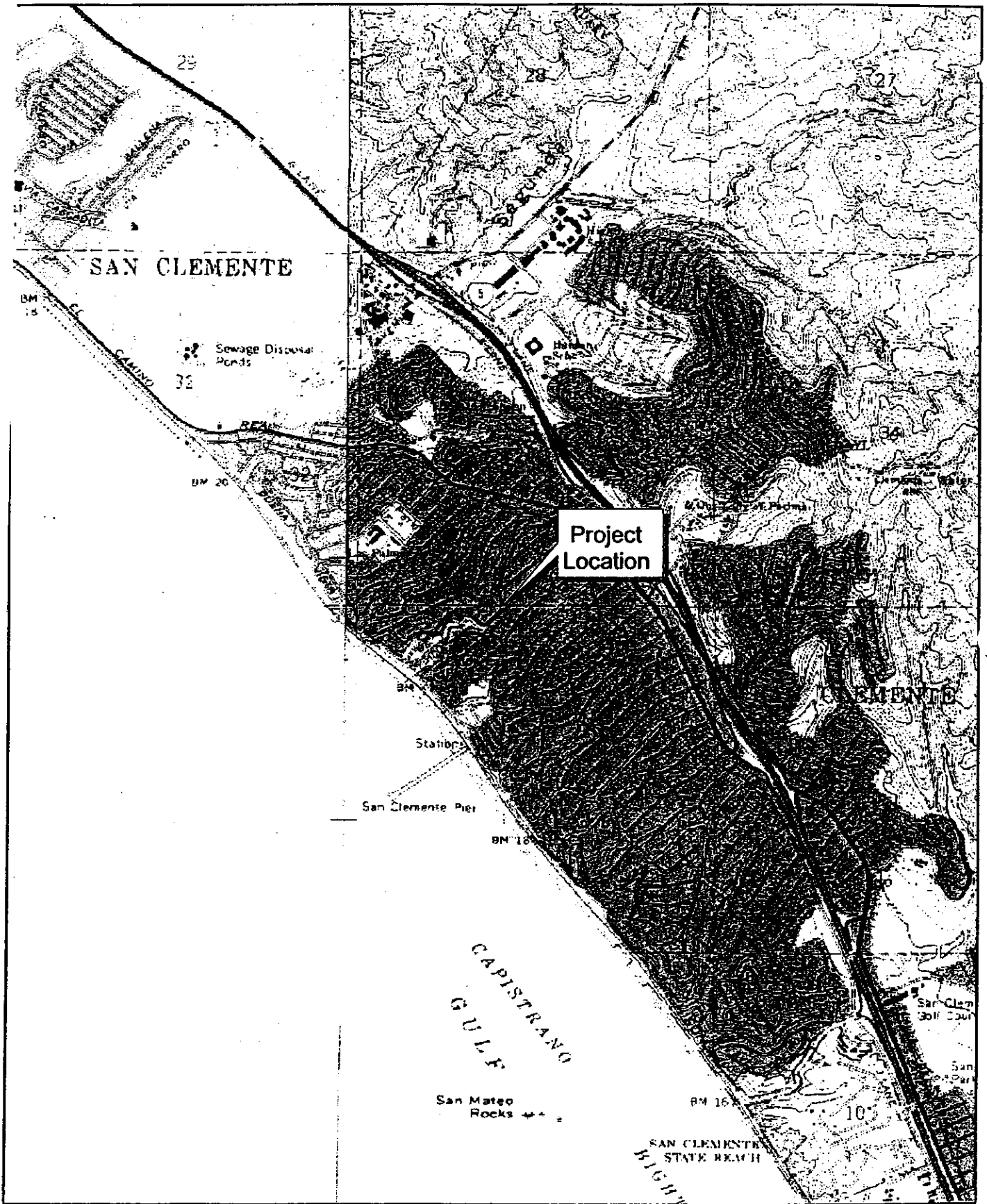


Exhibit 1  
Regional Location Map

SAN CLEMENTE STORM DRAIN • ARCHAEOLOGICAL SURVEY

5085



Source: USGS San Clemente 7.5' DRG, 1968 - photo revised 1975.

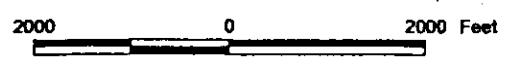


Exhibit 2  
Archaeological Project Area

SAN CLEMENTE STORM DRAIN • ARCHAEOLOGICAL SURVEY

50-86



5. Development of mitigation recommendations associated with any future development.
6. Development of paleontological mitigation measures, if necessary, based on existing paleontological data within the City limits.

Because the study area exhibits buried strata that are well documented from a paleontological and geological standpoint, a re-examination of previous research was limited to a select number of local specific studies.

**SECTION 3  
ENVIRONMENTAL AND CULTURAL SETTING**

**3.1 PROPERTY DESCRIPTION**

The project area consists of a 500-foot right-of-way found in Section 33 of T8S R7W, and Section 4 of T9S R7W (San Bernardino Base Meridian), in the City of San Clemente, California. The total amount of land within the right-of-way is less than ½ acre. Located near the center of the City of San Clemente, the study area is under City jurisdiction.

**3.2 TOPOGRAPHY**

A modern aerial photograph with the project footprint overlaid is shown in Exhibit 3. The study area consists mostly of a sloping mesa that eventually leads to cliffs above the ocean. The mesa has a slope of approximately four to five degrees, with an aspect to the west. The elevation of the study area ranged from 120 to 60 feet above mean sea level.

**3.3 VEGETATION**

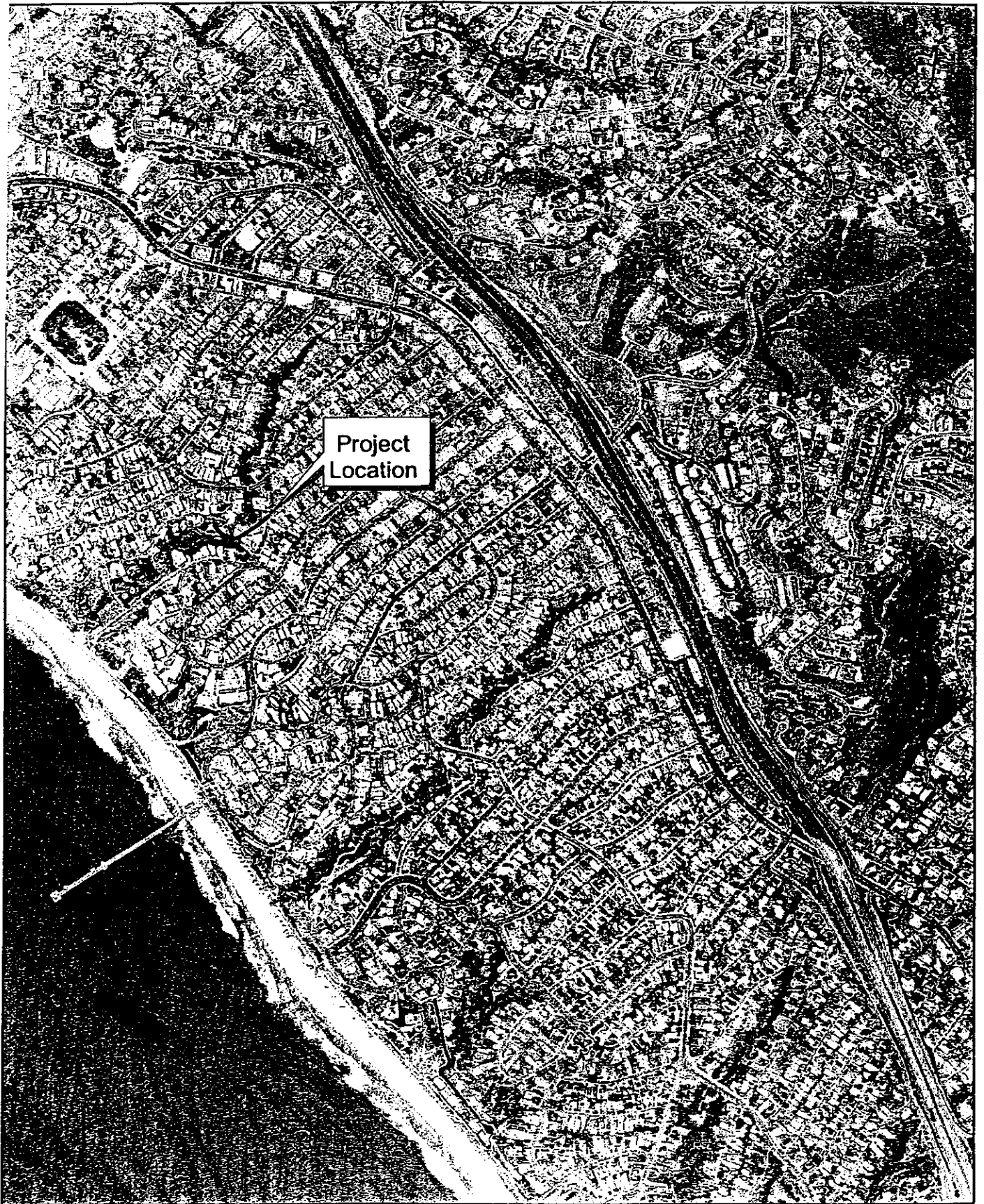
The study area is located in an area dense with ornamental vegetation, paved streets, and parking lots. Lots containing no structures exhibited alien grasses and weeds.

**3.4 GEOLOGY**

Remnant Pleistocene era beach and near-shore deposits (marine terrace deposits) underlie the site at a depth ranging between approximately 15 feet at the street level to a depth of 21 feet at the top of the slope descending into Marquita Canyon. These sediments are conducive to the preservation of marine fossil vertebrates and invertebrates. Boring samples that were obtained during an on-site geotechnical investigation revealed coarse sand and clayey sand containing seashell fragments. Current construction plans require excavation to a depth that will range between 14 feet at the top of the slope and 7.5 feet at the canyon floor.

**3.5 WATER RESOURCES**

The project area is located on a sloping finger mesa above a steep canyon characterized by sporadic and intensive flooding events. No nearby local springs or seeps are indicated on the *San Clemente, CA* topographic map. Fresh water may have been scarce during times of drought.



Source: USGS San Clemente 3.75' DOQQ



Michael Brandman Associates  
23560002 • 10/2002

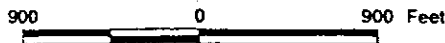


Exhibit 3  
USGS Aerial Photograph

SAN CLEMENTE STORM DRAIN • ARCHAEOLOGICAL SURVEY

56-89

### **3.6 PREHISTORIC AND ETHNOGRAPHIC BACKGROUND**

Moratto (1984) and Chartkoff and Chartkoff (1984) provide recent overviews of California archaeology and historical reviews of the inland southern California coast, among other locales. The most accepted regional chronology for coastal and the southern coast of southern California is from Wallace's four-part *Horizon* format (1955), which was later updated and revised by Warren (1968). Created to place temporal structure upon materialistic phases observed during archaeological syntheses, the advantages and weaknesses of southern California chronological sequences are reviewed by Warren (in Moratto 1984), Chartkoff and Chartkoff (1984), and Heizer (ed. 1978). As of this writing, regional archaeologists generally follow Wallace's (1955) four-part southern California format.

#### **Early Man Horizon**

Spanning the period from approximately 15,000 to 6,000 B.C., archaeological assemblages attributed to this horizon are characterized by large projectile points and scrapers. The limited data available suggests that prehistoric populations focused on hunting and gathering, moving about the region in small nomadic groups. Technologies associated with ocean resource gathering would have likely been utilized.

#### **Millingstone Horizon**

Characterized by the appearance of handstones and millingstones, this horizon tentatively dates to between 6,000 and 1,000 B.C. Assemblages in the early millingstone period reflect an emphasis on plant foods and foraging subsistence systems. For inland locales, it has been assumed that exploitation of grass seeds formed a primary subsistence activity. Artifact assemblages include choppers and scraper planes, but there is a general lack of projectile points in excavated assemblages. The appearance of large projectile points in the late portion of the Millingstone Horizon suggests the development of a more diverse economy. The distribution of Millingstone sites reflects the theory that aboriginal groups may have followed a modified central-based wandering settlement pattern. In this semi-sedentary pattern, a basecamp would have been occupied for a portion of the year, but small population groups seasonally occupied subsidiary camps in order to exploit resources not generally available near the basecamp. Sedentism apparently increased in areas possessing an abundance of resources that were available for longer periods of time. More arid inland regions would have provided a seasonally and aerially dispersed resource base, restricting sedentary occupation.

#### **Intermediate Horizon**

Dating between 1,000 B.C. and A.D. 750, the Intermediate Horizon represents a transitional period. Little is known about the people of this period, especially those of inland southern California. Site

assemblages retain many attributes of the Millingstone Horizon. Additionally, Intermediate Horizon sites contain large-stemmed or notched projectile points and portable mortars and pestles. The mortars and pestles suggest that the aboriginal populations may have harvested, processed and consumed acorns. Due to a general lack of data, neither the settlement and subsistence systems nor the cultural evolution of this period is well understood. It has been proposed that sedentism increased with the exploitation of storable food resources (acorns). The duration and intensity of occupation of basecamps increased during this period, especially in the later part of the horizon.

### **Late Prehistoric Horizon**

Extending from A.D. 750 to Spanish Contact in A.D. 1769, the Late Prehistoric Horizon reflects an increased sophistication and diversity in technology. Assemblages characteristically contain projectile points, which imply the use of the bow and arrow. In addition, assemblages include steatite bowls, asphaltum, grave goods and elaborate shell ornaments. Use of bedrock milling stations was widespread during this horizon. Increased hunting efficiency and widespread exploitation of acorns provided reliable and storable food resources.

### **Historical Aspects of the San Clemente area**

The study area lies within the traditional territory of the Native American group known as the Juaneño, which were Luiseño groups traditionally associated with the Mission San Juan Capistrano (Bean and Shippek 1978). Juaneño population sizes before 1769 are unknown. In 1800, approximately 1,300 Juaneño resided at the Mission, and Mission registers list 4,000 Native Americans interred in the mission cemetery (Englehardt 1922).

The Juaneño spoke a form of the Takic language group, as did the neighboring Gabrielino to the north and the Luiseño to the south. Like their neighbors, the Juaneño were a hunter-gatherer society that seasonally migrated to exploit seasonal food resources. During these migrations, the Juaneño would inhabit temporary basecamps from which they would venture for resource exploitation.

By 1873, only 40 Juaneño were associated with the Mission (Ames 1873). However, a number of villages farther inland remained inhabited (Wheeler 1879). In the 1930's, an estimated 300 Mission-descended Juaneno resided in Orange County (Yorba 1936). Today, small numbers of Juaneño live in the local area and participate in Native American concerns and traditions.

During the 1950's and 1960's, San Clemente was transformed from a sleepy beach community to a high-density population center. Exhibit 4 shows the project area with reference to an February 1952 aerial photograph. Here, the beach houses are located on large lots with dirt roads between. Landscaping was minimal and likely restricted to native vegetation, palms, and eucalyptus. At that



Project Location



Michael Brandman Associates

23560002 • 10/2002

NOT TO SCALE

Exhibit 4  
USDA 2-2-53 Aerial Photograph

SAN CLEMENTE STORM DRAIN • ARCHAEOLOGICAL SURVEY

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*San Clemente Storm Drain Archaeological And Paleontological Project*

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time, Marquita Canyon was a steep-walled and coastal scrub filled drainage relatively unimpacted by the effects of storm drain runoff.

## SECTION 4 INVESTIGATIVE METHODS

Customary procedures were utilized to produce the data for this report. Protocol guidelines for performing the cultural resource field survey and any site or isolates were previously downloaded from Federal and State websites. SHPO-mandated archaeological recordation guidelines and procedures (see OHP 1995, CHRIS 1999) follow National Park Service recordation guidelines (1983, 1985) and CEQA requirements. Any detected sites must be evaluated for significance utilizing National Register of Historic Places (NRHP) and California Register of Historic Places (CRHP) criteria.

### 4.1 CULTURAL RESOURCES RECORD SEARCH PROCEDURE

#### **South Central Coastal Information Center, CSU, Fullerton (SSCIC)**

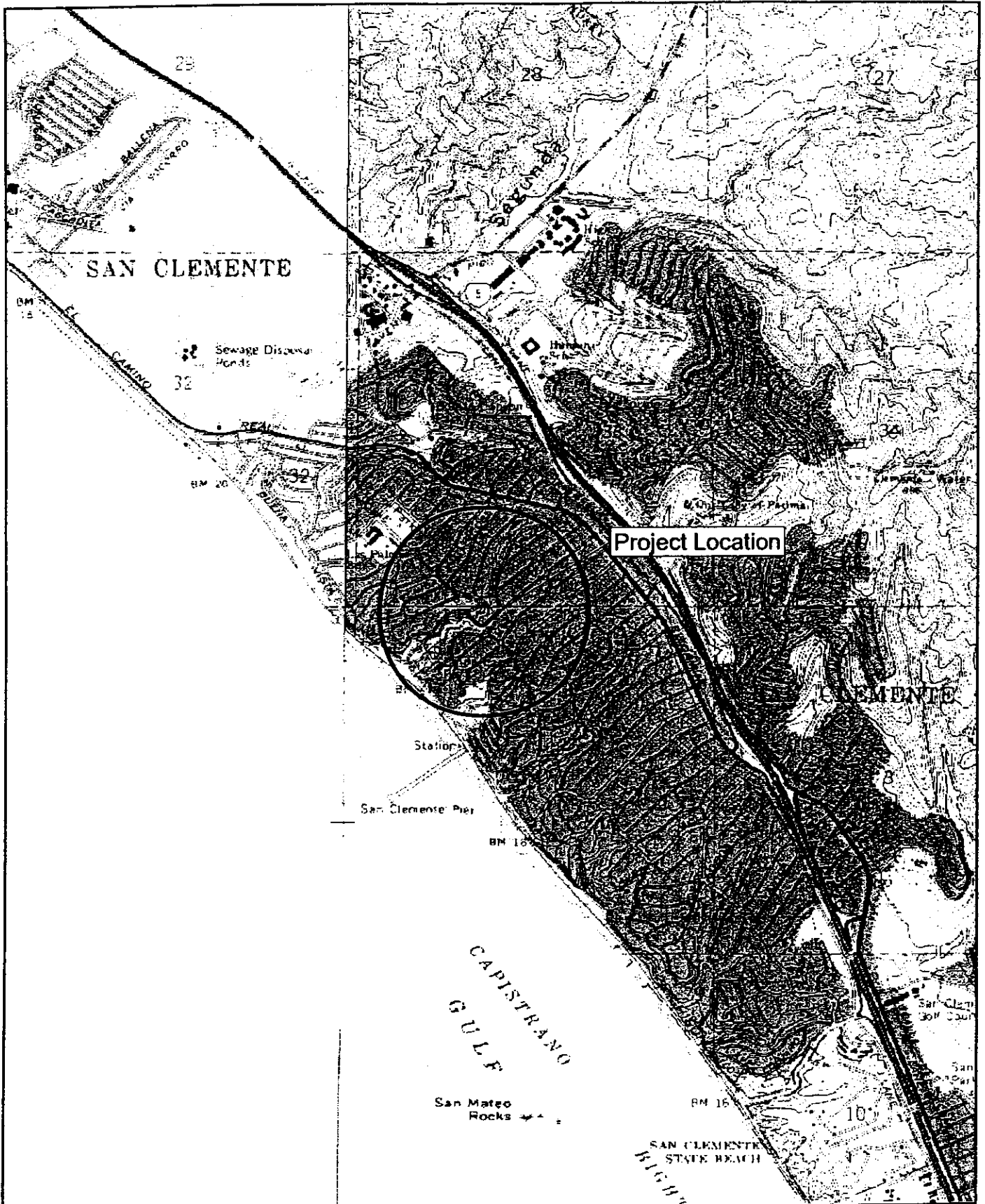
The author conducted the archaeological record search for the San Clemente search radius at the SSCIC on September 23, 2002. This effort consisted of a search for any previously recorded cultural resource sites and/or isolates on or within a ¼-mile radius about the study area. The search radius is found in Exhibit 5. Topographic maps were examined for the locations of previous studies as well as the locations of previously recorded archaeological sites. The California Office of Historic Preservation Directory of Historic Properties was reviewed, along with the current inventories of the NRHP, the California State Historic Landmarks, the California Points of Historic Interest, and the CRHP.

The author undertook a reconnaissance of the study area on October 3, 2002. The SHPO recommends that all potentially significant or important cultural resources (sites or isolates) discovered during a survey be documented utilizing modern State of California Department of Parks and Recreation Archaeological Site Forms (DPR523 series; OHP 1995). For the purposes of this study, the presence of three or more culturally significant artifacts within a 20-meter radius constitutes the minimal definition of the term "site", as would the existence of one or more historically significant surface/subsurface "features". "Isolates" are defined as one or two artifacts within a 20-meter radius without the presence of a "feature". If impacts to sites cannot be avoided by any future development, recorded sites should be assessed using NHPA/NRHP *Significance* criteria (see Archnet 1999, CHRIS 1999, NRHP 1999, OHP 1995) utilizing methods noted below. Site recordation took place on May 14 and 15, 2002.

### 4.2 CULTURAL RESOURCE FIELDWORK PROCEDURE

The author undertook a walkover reconnaissance survey of the study area on October 3, 2002. Because the project is confined to the construction of roughly 500 feet of linear storm drain located





Source: USGS San Clemente 7.5' DRG, 1968 - photo revised 1975.



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23560002 • 10/2002

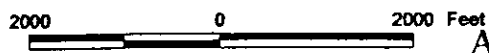


Exhibit 5  
Archaeological Record Search Radius

SAN CLEMENTE STORM DRAIN • ARCHAEOLOGICAL SURVEY

5095

between various parcel lot lines in the area of West Avenida Palazada and Marquita Canyon, the survey consisted of an effort to identify potentially affected historic resources and the location of known prehistoric site CA-ORA-599. The California SHPO recommends that all potentially significant or important cultural resources (sites or isolates) discovered during a survey be documented utilizing modern State of California Department of Parks and Recreation Archaeological Site Forms (DPR523 series; OHP 1995). For the purposes of this study, the presence of three or more culturally significant artifacts within a 20-meter radius constitutes the minimal definition of the term "site", as would the existence of one or more historically significant surface/subsurface "features". "Isolates" are defined as one or two artifacts within a 20-meter radius without the presence of a "feature". If impacts to sites cannot be avoided by any future development, recorded sites should be assessed using NHPA/NRHP *Significance* criteria (see Archnet 1999, CHRIS 1999, NRHP 1999, OHP 1995) utilizing methods noted below.

#### **4.3 PROCEDURES FOR CULTURAL SIGNIFICANCE DETERMINATIONS**

In most cases prior to impact, protocol requires that a cultural resource record search and a Phase I cultural resource survey take place on a property that exhibits some potential for cultural resources. According to federal NHPA/NRHP (ArchNet 1999, CHRIS 1999) and state protocol if such a survey detects cultural sites or artifactual remains, the Lead Agency, whose role is to fulfill Section 106 and CEQA requirements, must be able to determine whether the cultural resources are eligible for inclusion in the National and/or California Registers. At the federal level, a step-by-step "Section 106" process has been developed and implemented per 36 CFR 800 (NHPA 1999). As a part of this procedure, the resource must be evaluated to determine whether it is "historically significant". Federal eligibility must be determined utilizing four evaluative criteria found in implementing regulations 36 CFR part 63. The State eligibility criteria are almost identical to federal protocols (PRC5024.1 – 14 CCR Section 4852). The four State criteria include the following:

- A. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- B. Is associated with the lives of persons important to our past;
- C. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- D. Has yielded, or may be likely to yield, information important to prehistory or history.

If avoidance of a site cannot occur as a result of an action, the project development plans must be evaluated in order to determine whether the action would cause a "substantial adverse change" in the *Significance* of the resource utilizing the criteria above. Under Federal (36CRF800.5) and State

regulations, all archaeological or historical sites must be carefully evaluated relative to the effects of the action, even if they have not been officially listed at the time the proposed action will take place. Although avoidance of cultural resources is always the best choice, where necessary, impacts to previously listed or potentially listed resources will and must be mitigated.

Should it be determined that a cultural resource is or could be potentially listed on the California (or National) Register of Historical Resources, a Phase 2 (testing and/or historical structure evaluation) assessment of the resource must take place prior to impact. Should it be determined that the resource is *Significant* and that impacts *will cause a substantial adverse change in its significance*, that resource must undergo Phase 3 (data collection) prior to impact. Under CEQA, should Phase 2 test results determine that the resource will not qualify for listing in the California (or National) Register of Historical Resources, no further mitigation of any kind is required.

**SECTION 5**  
**PREVIOUS RESEARCH AND CULTURAL RECORDS REVIEW**

The cultural resource records search indicated that one prehistoric archaeological site, one California Point of Historical Interest site, three National Register-listed properties and two isolated properties lay within the ¼-mile search radius. These are described in Table 1 below. According to SCCIC files, two archaeological assessments have taken place within the search radius (Bissell 1995, Brock and Roeder 1985). Since the records search revealed several nearby sites, we have determined that the potential for disturbance of historic and prehistoric resources during construction of the proposed project should be considered "moderate-to-high".

**TABLE 1**  
**KNOWN CULTURAL SITES LOCATED WITHIN ONE MILE OF THE STUDY AREA.**

Site Number	Site Description
CA-ORA-599	Purportedly located on both sides of Marquita Storm Channel between West Marquita and Loma Lane/Palazada.
P#30-162554 (CPHI)	Bartlett Bldg at 100 El Camino Real
P#30-001579	Buried shell deposit off El Camino Real
P#30-100023	Isolated flake near Trafalgar lane
NR listed 12-27-1991	Casa Romantica, 415 Avenida Granada
NR listed 2-17-1983	Oscar Easley Block, 101 El Camino Real
NR listed 8-31-1989	Hotel San Clemente, 114 Avenida Del Mar

Site forms associated with CA-ORA-599 contain data written in 1976 and this form is not complete per modern protocols. If during monitoring the project-related excavation shows that this site runs into the project area, the site form should be updated as a part of the mitigative process. Remnants of this site were not detected during the reconnaissance survey.

## SECTION 6 RESULTS

The cultural resource survey discovered no archaeological sites or isolates within the margins of the proposed project area. Copies of DPR523 site form for CA-ORA-599 are considered Confidential and are not reprinted as a part of this study. The following data was collected during the fieldwork stage of this project.

Although numerous structures are noted in the archival Rupp aerial photograph (Exhibit 3), the reconnaissance showed that all of the structures located adjacent to the proposed storm drain are apartment complexes and residences likely built in the 1960's and after. Few beach houses were noted along West Avenida Palazada, possibly because those built in the 1920's and 1930's were torn down when properties in the area began to escalate in value. The fieldwork showed that no historic structures will be negatively affected by construction of the drain. The Listed National Register sites, noted in Table 1 above, will not be indirectly affected by construction as these are located approximately 1200 feet to the northeast and uphill from the study area.

### 6.1 CA-ORA-599

According to the 1976 site form, this site is a shell midden located within the Marquita Storm Channel (Jertberg 1976). Asphaltum, shell, and discolored soils were noted. Remnants of this shell midden, which was originally detected uphill from the most easterly portion of the project area, could not be observed during the reconnaissance.

### 6.2 PALEONTOLOGICAL RESULTS

According to Brock and Roeder (1985), near-surface geological strata are well documented for the San Clemente area. Quaternary and Tertiary Period strata are represented. From oldest to youngest, the following differentiated strata are noted: Capistrano Formation friable sandstone, Quaternary Marine Terrace deposits and Quaternary Non-marine Terrace deposits. The former dates from roughly 6 M.Y.A., while the latter dates from between 5,000 Y.B.P. to 125,000 Y.B.P. These strata are clearly defined in the bluff overlooking the Pacific Ocean. These strata are likely located within the study area, but the uppermost horizons are likely to be heavily disturbed due to modern construction.

**SECTION 7  
PROJECT SUMMARY AND RESOURCE ASSESSMENT**

**7.1 CULTURAL RESOURCE MANAGEMENT RECOMMENDATIONS**

The results of the analysis indicate that one archaeological resource may be affected by development of the project. It has also been determined that there is a moderate-to-high likelihood that buried unrecorded cultural deposits will be encountered during earthmoving. Therefore, archaeological monitoring should take place when undisturbed earth is impacted by construction. It is possible that potentially significant and previously unrecorded cultural resources will be uncovered during earthmoving. Under CEQA, such sites (excluding isolated artifacts) should be tested for *historical significance* utilizing Criterion A, B, C and/or D prior to continued impact. In addition, California State Health and Safety Code Section 7050.5 dictates that if human remains are unearthed during construction, no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition of such remains pursuant to CEQA regulations and Public Resources Code Section 5097.98.

In general, full time cultural resource monitoring is recommended during all grubbing, grading, and utility trenching until the Project Archaeologist determines that there is little to no chance that excavation will impact cultural resources. Native American tribal monitors (from groups indicated by the NAHC) should be hired by the project proponent and should be on site during grubbing, grading, and trenching phases of the project.

The recommendations outlined below comprise an archaeological resource impact mitigation program intended to reduce the potential adverse environmental impacts of construction to a less than significant level.

1) Archaeological monitoring by a qualified archaeologist of any earthmoving in the undisturbed in-situ soil horizon will be conducted. Monitoring will be conducted on a full-time basis until the project archaeologist determines that cultural resources are not likely to be encountered during the construction process.

2) Prior to issuance of a grading permit, a qualified archaeologist will develop an archaeological mitigation plan and a discovery clause/treatment plan, which will be implemented during earthmoving within the proposed project area. The treatment plan will allow for the recovery and subsequent treatment of any archaeological remains and associated data uncovered by brushing, grubbing, or earth

moving. The treatment plan must also detail procedures to be used for the curation of any detected cultural specimens.

3) The area surrounding CA-ORA-599 lies outside the planned area of grading, but artifacts associated with this site may have fallen into the project area via previous earthmoving or erosion. It is likely that this site is "significant" under CEQA. If the archaeological monitor determines that all or part of site CA-ORA-599 or any unknown buried sites is impacted by the proposed development, Phase 2 testing for the purposes of a significance determination within the area of impact must occur. Therefore, additional mitigation may be required.

4) If cultural deposits are found by the archaeological monitor, earthmoving will be diverted temporarily around the deposits until they have been evaluated, recorded, excavated and/or recovered as necessary, following the prepared recovery plan. Earthmoving will be allowed to proceed through the area when the Project Archaeologist determines the artifacts are recovered and/or site mitigated to the extent necessary.

5) If a previously unknown archaeological site is encountered and it is determined that it will require additional mitigation, a plan or proposal will be submitted to the Proponent outlining the plan of action that needs to be implemented in an attempt to mitigate the site. A significance determination must be made as a part of the implementation of this plan.

6) If human remains are encountered during excavations associated with this project, all work will halt and the County Coroner will be notified (Section 5097.98 of the Public Resources Code). The Coroner will determine whether the remains are of forensic interest. If the coroner, with the aid of the supervising archaeologist, determines that the remains are prehistoric, he/she will contact the Native American Heritage Commission (NAHC). The NAHC will be responsible for designating the most likely descendant (MLD), who will be responsible for the ultimate disposition of the remains, as required by Section 7050.5 of the California Health and Safety Code. The MLD will make his/her recommendations within 24 hours of their notification by the NAHC. This recommendation may include scientific removal and nondestructive analysis of human remains and items associated with Native

American burials (Section 7050.5 of the Health and Safety Code).

7) Any recovered archaeological resources will be identified, sites recorded, mapped, and artifacts catalogued as required by standard archaeological practices. Examination by an archaeological specialist will be included where necessary, dependent upon the artifacts, features, or sites that are encountered. Specialists will identify, date, and/or determine significance potential.

8) A final report of findings will be prepared by the Project Archaeologist for submission to the Proponent, the City of San Clemente, and the South Central Coastal Information Center. The report will describe the history of the project area, summarize field and laboratory methods used, if applicable, and include any testing or special analysis information conducted to support the resultant findings.

## 7.2 NATIVE AMERICAN COMMENTARY

It is assumed that once the environmental document for the project is forwarded to the State environmental clearinghouse, and/or routed by the local agency, local tribal jurisdictions will comment upon these findings. For this reason, Native American comments relative to the study area were not obtained directly as of the date of this study. The Native American Heritage Commission (NAHC) was contacted in writing and this letter is located in Appendix C.

## 7.3 PALEONTOLOGICAL RESOURCE MANAGMENT RECOMMENDATIONS

The project area has a low chance that significant paleontological resources will be impacted during construction, but the possibility remains. With appropriate mitigation, earth moving associated with development of the project could result in beneficial effects, including the recovery of scientifically highly important fossil remains that would not even have been exposed without earthmoving.

1) Paleontological monitoring is not recommended unless fossil resources are accidentally detected during construction. However, should paleontological resources be detected during earthmoving, the earthmoving must cease and paleontological monitoring must then begin. In this case, the approved Project Paleontologist will develop a mitigation plan and a discovery clause/treatment plan to be implemented during earth moving in the project area. The treatment plan will allow for the recovery and subsequent treatment of any fossil remains and associated data uncovered by earthmoving.



2) Should resources be detected, the Project Paleontologist retained by the Proponent and approved by the City will also develop a storage agreement with a museum repository acceptable within the County of Orange to allow for the permanent storage and maintenance of any fossil remains recovered in the project area as a result of the mitigation program, and for the archiving of associated specimen data and corresponding geologic and geographic site data.

3) Prior to any clearing and grubbing and/or earthmoving activities on the project area, a qualified Project Paleontologist retained by the Proponent and approved by the County shall review the approved development and construction plans. The paleontologist shall participate in a pre-construction project meeting with the development staff to ensure an understanding of the mitigation measures required during construction.

4) Paleontologic monitoring of any earthmoving will be conducted by a monitor, under direct guidance of the Project Paleontologist, in areas of the project underlain by previously undisturbed sediments that will be disturbed by earthmoving. Earthmoving in areas of the parcel where previously undisturbed sediments will be buried but not otherwise disturbed will not be monitored.

5) Monitoring will be conducted on a full-time basis in areas of the project underlain by rock units in which there is a high potential for fossil remains being encountered by earthmoving, on a half-time basis in areas in which there is a moderate or an undetermined potential, and on a quarter-time basis in areas in which there is a low potential.

6) If the monitor discovers fossil remains, earthmoving will be diverted temporarily around the fossil site until the remains have been recovered. Earthmoving can then proceed through the area only after approval by the monitor. If fossil remains are found in an area underlain by a rock unit where there is a low or moderate/undetermined potential for fossil remains being encountered by earthmoving, the level of monitoring will be increased to half or full time, respectively. On the other hand, if too few fossil remains are found after 50% of earthmoving in those areas of the parcel underlain a particular rock unit has been

completed, monitoring can be reduced or discontinued in those areas at the project paleontologists direction.

7) In the event that any fossil remains are encountered by earthmoving when the monitor is not present, earthmoving will be diverted around the fossil site and the monitor called to the location immediately to recover the remains.

8) If fossil remains are found, up to 6,000 pounds of fossiliferous sediments will be recovered from the fossil site and processed to allow for the recovery of smaller fossil remains. The total weight of all processed samples from the fossil-bearing rock unit will not exceed 6,000 pounds.

9) Any recovered fossil remains will be prepared to the point of identification and identified to the lowest taxonomic level possible by knowledgeable paleontologists. The remains then will be curated (assigned and labeled with museum repository fossil specimen numbers and corresponding fossil site numbers, as appropriate; placed in specimen trays and, if necessary, vials with completed specimen data cards) and catalogued. Associated specimen data and corresponding geologic and geographic site data will be archived (specimen and site numbers and corresponding data entered into appropriate museum repository catalogs and computerized data bases) at the museum repository by a laboratory technician. The remains then will be accessioned into the museum repository fossil collection, where they will be permanently stored and maintained. The associated specimen and site data will be made available for future study by qualified investigators.

10) A final report of findings will be prepared by the project paleontologist for submission to the City, the Coastal Commission and the museum repository following accessioning of the specimens into the museum repository fossil collection. The report will describe parcel geology/stratigraphy, summarize field and laboratory methods used, include a faunal list and an inventory of curated/catalogued fossil specimens, evaluate the scientific importance of the specimens, and discuss the relationship of any newly recorded fossil site in the parcel to relevant fossil sites previously recorded from other areas.

These recommended mitigation measures would be part of a program that is in compliance with

*San Clemente Storm Drain Archaeological And Paleontological Project*

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Society of Vertebrate Paleontologists' standard guidelines. Implementing and adhering to these guidelines will reduce the potential adverse environmental impacts of construction on paleontologic resources to an insignificant level. The guidelines will also allow acceptance by a museum repository of a fossil collection the result of an impact mitigation program.

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**SECTION 9  
CERTIFICATION**

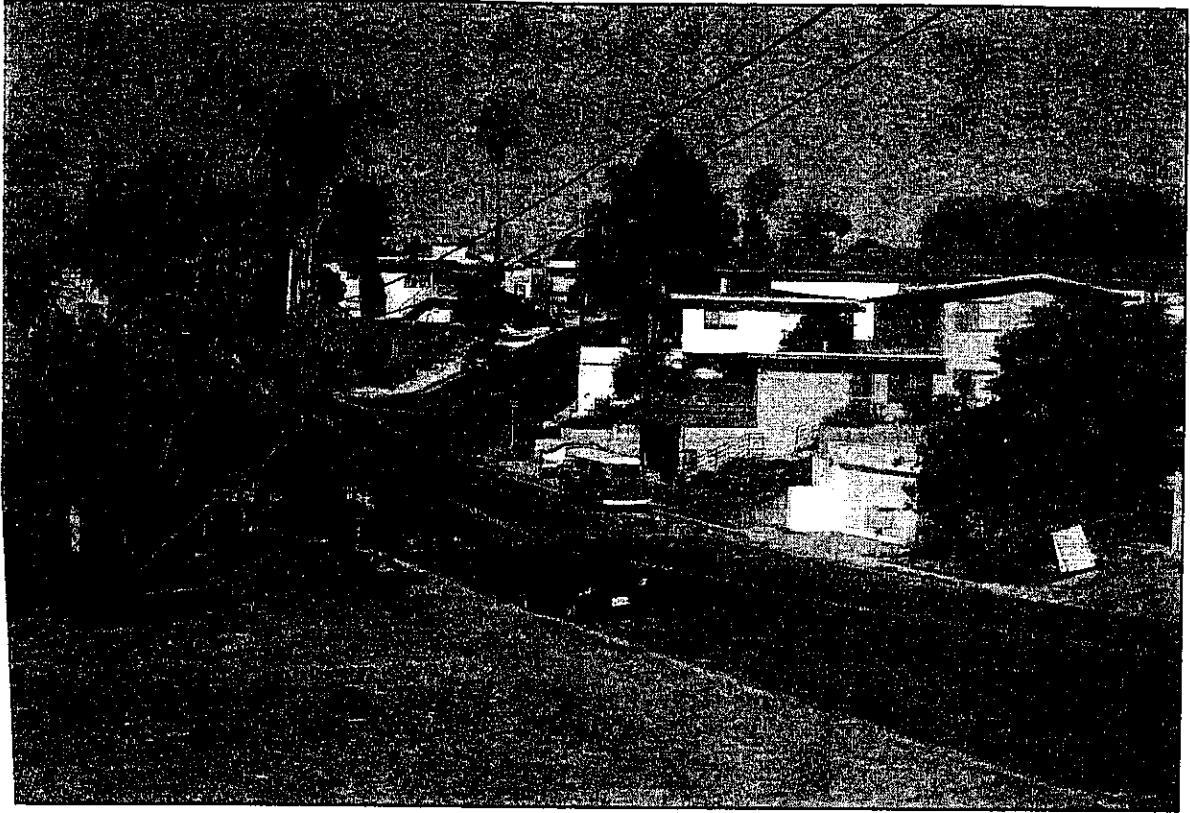
CERTIFICATION: I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this archaeological report, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

DATE: 11/13/02 SIGNED: 

Michael Dice, M.A.

Michael Brandman Associates, Tustin, California

**APPENDIX A**  
**PHOTOPLATES OF THE STUDY AREA**



ew of typical built-up project area along West Avenida Palazada. October 2002.





View of typical built-up project area near West Avenida Palazada. October 2002.

**APPENDIX B  
PERSONNEL QUALIFICATIONS**



MICHAEL H. DICE, M.A.

PROJECT SCIENTIST/SENIOR ARCHAEOLOGIST

EDUCATION

M.A., Anthropology—Arizona State University, Tempe, Arizona  
B.A., Anthropology—Washington State University, Pullman, Washington  
Anthropology Track, University of Washington, Seattle, Washington

PROFESSIONAL AFFILIATIONS

Member, California Historical Society  
Member, National Trust For Historic Preservation  
Registered Professional Archaeologist (RPA 2000)

PROFESSIONAL HISTORY

Michael Brandman Associates, Tustin, California—Senior Archaeologist  
L&L Environmental, Inc. Corona, California—Senior Archaeologist  
National Park Service (Pipe Spring National Monument)—Archaeologist  
National Park Service (Mesa Verde National Park)—Archaeologist  
CRMC, Inc., Farmington, New Mexico—Archaeological Project Manager  
LaPlata Archaeological Consultants, Dolores, Colorado—Archaeologist  
CASA, Inc. Cortez, Colorado—Archaeologist, Human Skeletal Analyst

Mr. Dice is a Certified Archaeologist with more than 16 years of experience performing records searches, archaeological surveys, archaeological site testing (Phase 2) and data collection (Phase 3) projects on private and public lands in the Southwestern United States and Southern California. During his career, he has authored or co-authored more than 50 CEQA and/or NEPA level documents including several manuscripts for the National Park Service. Mr. Dice is a member of the California Historical Society, a Registered Professional Archaeologist (RPA), and is a member of the National Trust For Historic Preservation.

PROFESSIONAL EXPERIENCES

Project Scientist/Archaeologist for CEQA-level Phase 1, Phase 2 and Phase 3 archaeological mitigation for the Temecula Marketplace Project in the City of Temecula, California. Performed the field survey, recorded a large historic ranch complex remnant, developed testing procedures for the historic and prehistoric components of the site, then gathered a crew and performed the Phase 2 test in the field. Responsible for developing the Phase 3 data collection plan.

Project Scientist/Archaeologist for Section 106 level review of archaeological testing at Pipe Spring National Monument, Fredonia, Arizona. Produced complete report synthesizing a series of excavations (1996-1998) on an historic Mormon Fort within the Monument. Also wrote a draft plan for any future archaeological mitigation.

Project Archaeologist/Database Manager for the emergency Chapin-5 Fire Rehabilitation Project, Mesa Verde National Park, Colorado (1996-1999). Began as field crew chief (GS-7) and finished with the Park as a GS-9 Database manager. Created an ACCESS 6.0 database for the recordation or re-recordation of more than 500 archaeological sites within the rehabilitation area.

Project Scientist/Archaeologist for CEQA-level Phase 1 and Phase 4 archaeological mitigation for the "The Club at Big Bear Lake" Project in the City of Big Bear Lake, California. Performed the field survey, recorded a large historic tourist complex remnant, wrote mitigation-monitoring recommendations for the City, then supervised the monitoring, analyzed the historic artifacts and wrote the final report.

Performed more than 40 CEQA-level Phase 1 archaeological surveys in Southern California, which included evaluating more than 30 historic and prehistoric archaeological sites per California SHPO protocol. The reports fulfill ARMOR reporting guidelines, while the County of Riverside reports fulfilled both ARMOR and County of Riverside protocols.

Technical skills include scientific writing, project organization, field management of archaeological personnel, personal computing, database management, and analysis of human remains.

**APPENDIX C**  
**NAHC DOCUMENTS**

50.114



Michael Brandman Associates

# X TRANSMITTAL

TO: Debbie Pilas-Treadway  
Native American Heritage Commission

FAX NO: 916/657-5390

FROM: Michael Dice  
Tustin Office

JN: 23560002

DATE: October 22, 2002

NO. OF PAGES: 1 total  
(1 cover sheet plus 1 map)

SUBJECT: Sacred land files search request

HARD COPY TO FOLLOW VIA MAIL  YES  NO

For Your Request  For Your Information  For Your Review  Fax Back Changes

### OTHER COMMENTS:

Debbie,

Below is the information for a 500-foot linear sewer right-of-way project within the City of San Clemente. A location map for this site has been attached to this transmittal. Please fax the results to our Tustin office and mail the results there as well!

Please call if you have any questions.

Name	Address	Quad Name	Section
Clemente Sewer	250 Block West Avendia Palazada, San Clemente, CA	San Clemente	Section 33 of T8S R7W, and Section 4 of T9S R7W

Thank you,

Michael Dice  
Senior Archaeologist

SAN BERNARDINO

PLEASANTON

TUSTIN

Corporate Office: 15901 Red Hill Avenue, Suite 200, Tustin, CA 92780 (714) 258-8100 FAX (714) 258-8900

www.brandman.com

Email mdice@brandman.com

50-115

NAAC

2/2

San Clemente Storm Drain: USGS 7.5' San Clemente, CA.



TN MN  
13 1/2°

0 1000 FEET 0 500 1000 METERS  
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SOURCE: Topo! ©National Geographic Holdings



Michael Brandman Associates

Exhibit 2

# Archaeological Project Area

23560002 • 10/2002

SAN CLEMENTE STORM DRAIN • ARCHAEOLOGICAL SURVEY

5C-116

**NATIVE AMERICAN HERITAGE COMMISSION**

915 CAPITOL MALL, ROOM 364  
SACRAMENTO, CA 95814  
(916) 653-4002  
Fax (916) 657-5390  
Web Site [www.nahc.ca.gov](http://www.nahc.ca.gov)



November 1, 2002

Michael Dice  
Michael Brandman Associates  
15901 Red Hill Avenue, Suite 200  
Tustin, CA 92780

RE: Proposed Santa Clemente Sewer Line, City of San Clemente, Orange County.

Sent by Fax: 714-258-8900  
Pages Sent: 2

Dear Mr. Dice:

A record search of the sacred lands file has failed to indicate the presence of Native American cultural resources in the immediate project area. The absence of specific site information in the sacred lands file does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Enclosed is a list of Native Americans individuals/organizations who may have knowledge of cultural resources in the project area. The Commission makes no recommendation or preference of a single individual, or group over another. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated, if they cannot supply information, they might recommend other with specific knowledge. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at (916) 653-4040.

Sincerely,

A handwritten signature in cursive script that reads "Rob Wood".

Rob Wood  
Environmental Specialist III

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**NATIVE AMERICAN CONTACTS**  
**Orange County**  
**November 1, 2002**

no Band of Mission Indians Acjachemen Nation  
Belardes, Chairperson  
Via Belardes Juaneno  
San Juan, CA 92675  
493-0959  
493-1601 Fax

no Band of Mission Indians  
Johnston, Chairperson  
Box 25628 Juaneno  
Ana, CA 92799  
841-0441  
jano@gte.net

no Band of Mission Indians  
Espinoza  
Concerto Drive Juaneno  
San Juan, CA 92807  
779-8832

This list is current only as of the date of this document.

The publication of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5094 of the Public Resources Code and Section 5087.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regards to the cultural assessment for the proposed San Clemente Sewer Line, City of San Clemente, Orange County.

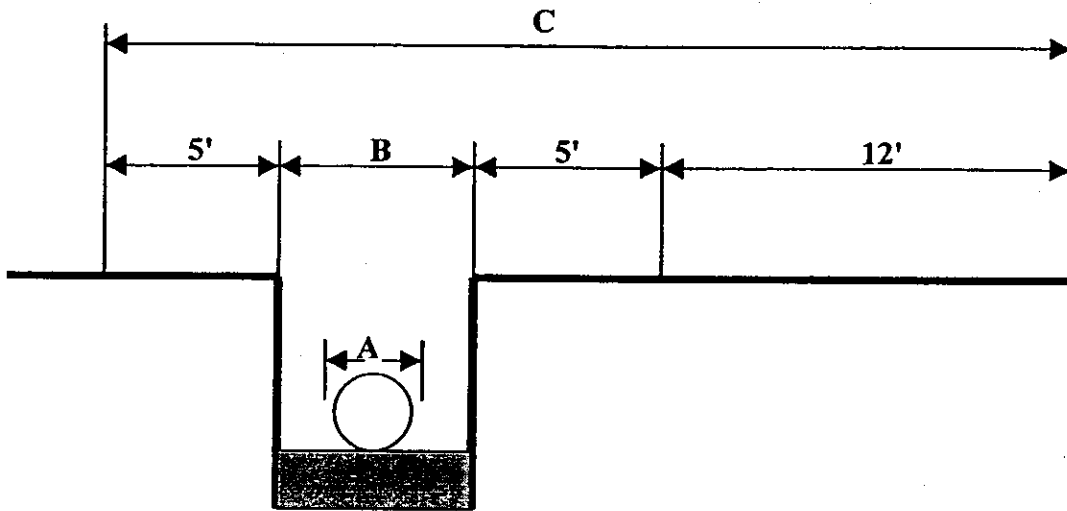
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**APPENDIX C**

**AIR QUALITY ANALYSIS WORKSHEETS**

## ESTIMATING THE STORM DRAIN DISTURBANCE AREA



Pipeline Element	Diameter	Trench Width	Total Disturbance Width	Maximum Daily Rate of Progress <sup>1</sup>	Total Daily Disturbance Area
	A	B	C		
Avenida Palizada Storm Drain	24"-30"	5.5'	27.5'	240'/day	0.15 acres

Notes: <sup>1</sup> Estimated daily rate of progress is entire length of storm drain. Table reflects average disturbance area. Some portions of the site require narrower widths between buildings with equipment and material storage on other portions of the site.

**Storm Drain Disturbance Area**  
**Avenida Palizada Storm Drain Improvements**  
**City of San Clemente**

*50-120*

**Table 1 - ESTIMATED FUGITIVE DUST EMISSIONS  
Associated with Storm Drain Installation**

Pollution Source	Disturbance Area <sup>1</sup> (acres/day)	Emissions Factor <sup>2</sup> (pounds/acre/day)	PM-10 Generation (pounds/day)
Disturbed Soil	0.12	13.2	1.58
Excavation piles/Backfilling	0.03	42.3	1.27
<b>Total</b>	<b>0.15</b>		<b>2.85</b>

Notes: <sup>1</sup> Assumes entire length of trench completed in one day with a trench width of approximately 5 feet, excavation piles approximately 6 feet wide by 4 feet, 2 inches high, 4 feet wide disturbed area where the pipe will be stacked, and a 12-foot-wide area of additional disturbance associated with vehicle and equipment movement.  
<sup>2</sup> Assumes 50% reduction as a result of implementing SCAQMD Rule 403

**Table 2 - ESTIMATED EMISSIONS**

Pollution Source	NO <sub>x</sub>	CO	ROC	SO <sub>x</sub>	PM-10
Excavation	NG <sup>1</sup>	NG <sup>1</sup>	NG <sup>1</sup>	NG <sup>1</sup>	2.85
Mobile Equipment	16.74	30.92 <sup>2</sup>	1.87	1.24	1.52
Vehicle Traffic (two trucks)	0.02	0.03	0.01	NG <sup>2</sup>	NG <sup>1</sup>
Stationary Equipment	0.27	1.65 <sup>2</sup>	0.34	NG <sup>2</sup>	NG <sup>1</sup>
Asphalt Paving	NG <sup>1</sup>	NG <sup>1</sup>	0.02	NG <sup>1</sup>	NG <sup>1</sup>
<b>Maximum Daily Emissions (lbs/day)</b>	<b>17.03</b>	<b>32.60</b>	<b>2.24</b>	<b>1.24</b>	<b>4.37</b>
<b>Emissions Totals<sup>3</sup> (tons/quarter)</b>	<b>0.51</b>	<b>0.98</b>	<b>0.07</b>	<b>0.04</b>	<b>0.13</b>
<b>SCAQMD Thresholds</b>	<b>100 lbs/day 2.5 tons/qtr</b>	<b>550 lbs/day 24.75 tons/qtr</b>	<b>75 lbs/day 2.5 tons/qtr</b>	<b>150 lbs/day 6.75 tons/qtr</b>	<b>150 lbs/day 6.75 tons/qtr</b>

Notes: <sup>1</sup> Criteria pollutants that have estimated negligible values are designated NG (negligible emissions).  
<sup>2</sup> CO emissions for stationary and mobile equipment were calculated from the CEQA Air Quality Handbook.  
<sup>3</sup> Quarterly emission totals for all criteria pollutants reflect a worst-case scenario of 60 workdays of construction activity. The actual number of days to complete the project will likely be less.

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URBEMIS 2001 For Windows 6.2.1

File Name: C:\Program Files\URBEMIS 2001 For  
 Windows\Projects2k\San Clemente.urb  
 Project Name: Avenida Palizada Storm Drain Improvements  
 Project Location: South Coast Air Basin (Los Angeles area)

DETAIL REPORT  
 (Pounds/Day - Summer)

Total Land Use Area to be Developed (Estimated): 0 acres  
 Retail/Office/Institutional Square Footage: 3267  
 Single Family Units: 0 Multi-family Units: 0

CONSTRUCTION EMISSION ESTIMATES

Source	ROG	NOx	CO	PM10	SO2
Demolition	-	-	-	0.00	-
Site Grading	0.00	0.00	-	0.00	0.00
Const. Worker Trips	0.01	0.02	0.03	0.00	-
Stationary Equip	0.34	0.27	-	0.02	0.00
Mobile Equip. - Gas	0.00	0.00	-	0.00	0.00
Mobile Equip. - Diesel	1.87	16.74	-	1.52	1.24
Architectural Coatings	0.00	-	-	-	-
Asphalt Offgassing	0.02	-	-	-	-
TOTALS(lbs/day, unmitigated)	2.23	17.03	0.03	1.54	1.24

Changes made to the default values for Construction

- The demolition option switch changed from on to off.
- The site grading option switch changed from on to off.
- The architectural coating option switch changed from on to off.
- The construction year changed from 2002 to 2003.
- The length of construction period changed from 250 to 60.
- The construction mitigation measure option switch changed from on to off.
- The asphalt acres to be paved changed from 1 to 0.075.
- The mobile diesel fork lift 175 HP total vehicles changed from 8 to 1.
- The mobile diesel fork lift 175 HP hours/day changed from 8 to 1.
- The mobile diesel truck: off hwy total vehicles changed from 8 to 1.
- The mobile diesel truck: off hwy hours/day changed from 8 to 1.
- The mobile diesel wheeled tractor total vehicles changed from 8 to 1.
- The mobile diesel roller total vehicles changed from 8 to 1.
- The mobile diesel roller hours/day changed from 8 to 1.

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**CO EMISSIONS ESTIMATES  
FOR STATIONARY EQUIPMENT**

Construction Period	Emission Factor (lbs/Hp hour)	Horsepower Hours per Day <sup>2</sup>	Number of Pieces of Equip	Daily Emission (lbs/day)
Pipe Installation	0.001	280	2	1.65

Notes: <sup>1</sup> Emission factor from SCAQMD CEQA Air Quality Handbook, Table A9-3-A.  
<sup>2</sup> Reflects power output for each piece of stationary equipment based upon an average power rating of 35 Hp and operating 8 hrs/day.

**CO EMISSIONS ESTIMATES  
FOR MOBILE EMISSION SOURCES**

Equipment	Emission Factor <sup>1</sup> (pounds/hour)	Hours per day <sup>2</sup>	Daily Emissions (pounds/day)
Wheeled Tractor	3.580	8	28.64
Off-Hwy Truck	1.800	1	1.80
Fork Lift (175 Hp)	0.180	1	0.18
Roller	0.300	1	0.30
<b>Total</b>			<b>30.92</b>

Notes: <sup>1</sup> Emission factor from SCAQMD CEQA Air Quality Handbook, Table A9-8-A.  
<sup>2</sup> Reflects daily total operation time for all pieces of equipment of applicable class.

