

**APPENDIX A**  
**TRAFFIC IMPACT ANALYSIS**

**SORRENTO HILLS**

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*Traffic Impact Analysis*

# Torrey Hills

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## SECTION 1

### INTRODUCTION

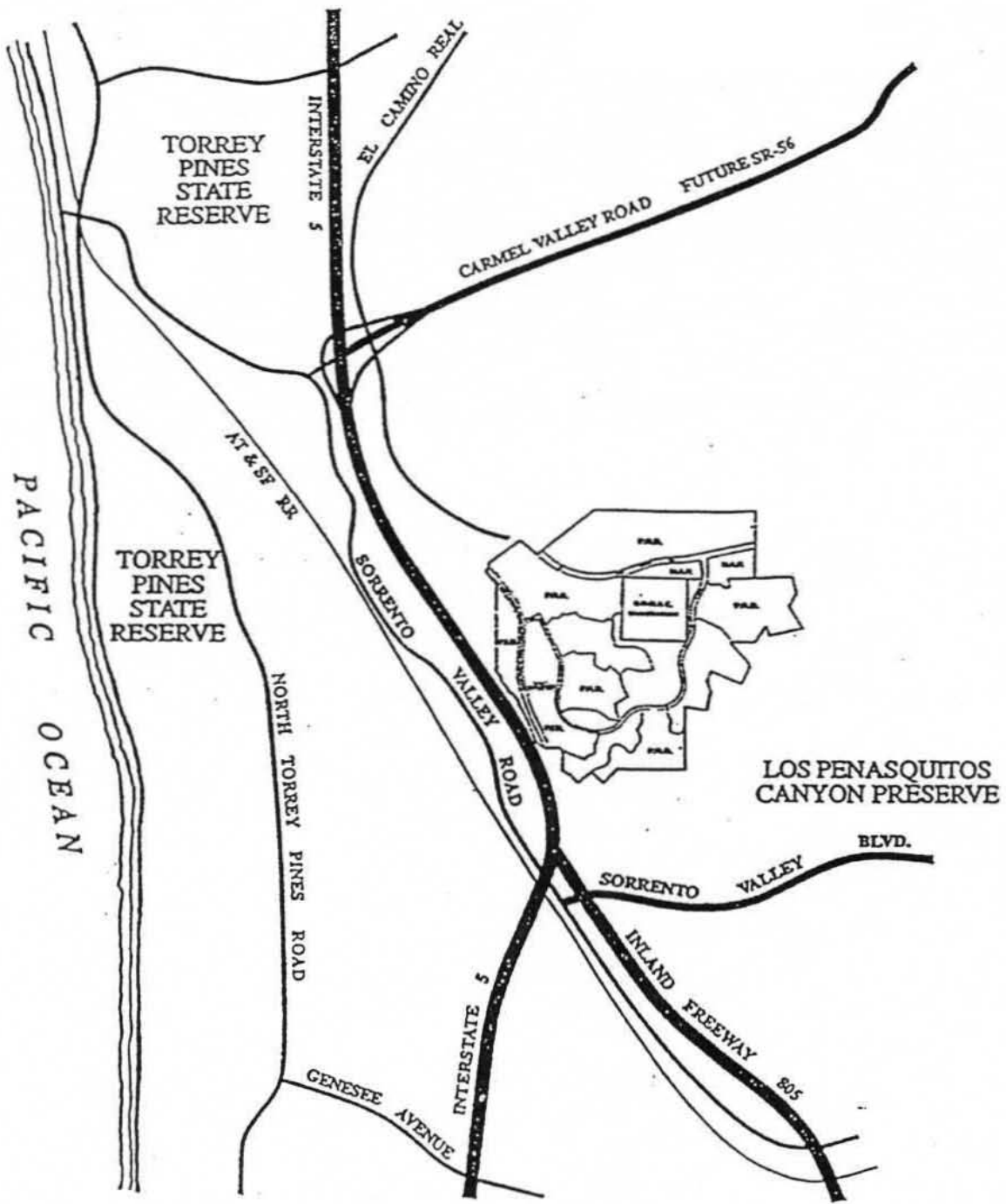
This report documents the methods and findings of a traffic impact analysis conducted by Kimley-Horn and Associates, Inc., to evaluate the long-term future traffic conditions in the Sorrento Hills Community resulting from revised land use types and intensities within the Torrey Hills project.

#### 1.1 PROJECT DESCRIPTION

The Torrey Hills project is a major multi-use development that comprises the largest part of the future Sorrento Hills Community. The project is located east of I-5, between Carmel Valley Road and Sorrento Valley Boulevard. Figure 1.1-1 depicts the location of the project in a regional context. The Torrey Hills development would take its primary access to/from I-5 via Carmel Mountain Road, a portion of which is already under construction. The project is proposed to include office, residential, industrial, commercial, educational and recreational uses. This traffic study was conducted to identify the community-wide traffic impacts resulting from land use changes within the Torrey Hills project. The analysis takes into account both the Torrey Hills project and the remaining elements of the Sorrento Hills Community.

Sorrento Hills land uses (including the Torrey Hills project) will generate 65,123 cumulative daily trips when fully built out, including 6,374 during the morning peak hour and 7,853 during the afternoon peak hour. The approved Sorrento Hills Community Plan would generate 6,800 more daily trips (including 1,600 more during the morning peak hour alone) than proposed land uses. This decrease is due to revised land uses within the Torrey Hills project. Proposed land uses feature a greater proportion of single-family dwelling units, as compared to multifamily residences, than the approved plan. Because of the lower density of single-family residential developments, this land use type will generate fewer trips per acre of coverage than multifamily uses. The proposed plan also has much reduced industrial land use intensity than the approved plan; approved industrial land uses would have generated 14,000 more trips than proposed industrial uses. The industrial uses in the approved plan are replaced by retail uses in the proposed plan. This land use substitution results in much greater "capture" of project-generated traffic because a high concentration of industrial uses would tend to attract traffic from throughout the region, while retail uses of the type proposed would be oriented toward fulfilling the shopping needs of Sorrento Hills and the surrounding residential development.

The Sorrento Hills Community Plan was adopted in December, 1994. Kimley-Horn's traffic study for the Torrey Hills project (formerly known as Torrey Reserve Heights), completed in September, 1994, provided a comprehensive analysis of future Sorrento Hills traffic conditions. (Portions of this study are reproduced in the appendices to the current study.) The findings of this study indicated adequate daily roadway segment and peak hour intersection Level of Service (LOS). The current proposal provides for improved internal circulation, reduced project trip generation, more internal capture of project-related trips, and a better peak hour directional split



NO SCALE



Kimley-Horn  
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TORREY HILLS  
GENERAL LOCATION MAP

FIG. 1.1-1

of project traffic. As a result, traffic conditions are expected to be improved over conditions expected with the approved plan.

## **1.2 STUDY SCOPE AND PURPOSE**

This traffic study has been conducted in order to evaluate the long-term future impacts of land use and transportation network changes within Torrey Hills. This analysis focuses on the Sorrento Hills Community Plan area only, since the proposed project represents a reduction from the recently approved project. The scope and methodology were developed in consultation with City of San Diego staff.

Peak hour traffic conditions at the following 12 intersections were analyzed in this study:

- Carmel Mountain Road/Sorrento Valley Road
- Carmel Mountain Road/I-5 southbound ramps
- Carmel Mountain Road/I-5 northbound ramps
- Carmel Mountain Road/Vista Sorrento Parkway
- Carmel Mountain Road/El Camino Real/Carmel Creek Road
- Carmel Mountain Road/"C" Street
- Carmel Mountain Road/Shopping Center Access
- Vista Sorrento Parkway/"A" Street
- Vista Sorrento Parkway/"B" Street
- "B" Street/"C" Street
- "A" Street/"C" Street
- Carmel Mountain Road/"HH" Street

Street segments along the following roadways were also analyzed:

- Carmel Mountain Road
- Vista Sorrento Parkway
- "A" Street
- "B" Street
- "C" Street
- El Camino Real

### **1.2.2 TIME PERIODS ANALYZED IN THIS STUDY**

Street segments were evaluated based on forecasted average daily traffic volumes, based on City of San Diego daily Level of Service (LOS) standards. Intersections and freeway ramps were evaluated during the morning and afternoon peak hours. The analysis concentrates on peak hours since these typically represent periods when congestion would likely occur.

### **1.2.3 TRAFFIC SCENARIOS ANALYZED IN THIS STUDY**

This study provides a qualitative evaluation of existing conditions in the study area and a quantitative analysis of long-term future (year 2010) of traffic conditions. Improvements are suggested at locations where significant impacts were anticipated.

### **1.3 ORGANIZATION OF THIS REPORT**

Section 2 describes the existing circulation system and briefly discusses traffic conditions in the vicinity of the proposed project. Section 3 analyzes long-term future (year 2010) traffic conditions on study area street segments, freeway ramps, and intersections. Section 4 compares the proposed project to the approved land uses. Section 5 analyzes project phasing and Section 6 summarizes the key findings and conclusions of the foregoing analysis.