

RDCS LLC Hired for City of San Diego North Torrey Pines Roadway and Median Enhancement Project

Rappoport Development Consulting Services LLC has been hired by the City of San Diego to provide certified arborist consulting services for the North Torrey Pines Road Median and Street Enhancement project. Estrada Land Planning Inc., the project landscape architectural firm, has sub-contracted with RDCS LLC to implement tree protection plans, including tree monitoring, and best management practices. Tree protection plans and best management practices (BMP's), are designed to minimize construction impacts to the existing median and parkway street trees.



Existing Eucalyptus line the median planter

The project encompasses approximately 1.5 miles of construction work along North Torrey Pines Road, adjacent to the Torrey Pines Golf Course. The scope includes street improvements (curb, gutter, guardrail, sidewalk, drainage) as well as landscape and irrigation within the medians and parkways. Palm Engineering is the General Contractor for the project.

Within the project boundaries, north and southbound traffic is separated by a median, varying in width from approximately 3 to 20-feet. The current median landscape consists of moderate to large size Eucalyptus trees with no other understory planting. Previously, RDCS LLC was hired as a certified arborist subconsultant by Estrada Land Planning to develop a tree inventory for a sensitive portion of the project.

The inventory included tree health and when needed, tree risk assessment to determine if certain tree defects created hazardous safety conditions warranting removal.

The trees inventoried were primarily *Eucalyptus cladocalyx*, commonly known as the sugar gum. Smaller caliper trees ranged in age from 20 to 30 years old, while larger trees possibly up to 100 years old.

Eucalyptus trunk cavity



The existing Eucalyptus median trees have grown and acclimated to the site conditions, under non-irrigated conditions. Preparing the trees to survive through the construction process is extremely important. The three parts of the tree requiring protection include the tree crown, tree trunk and tree roots.

Jeremy Rappoport is President of Rappoport Development Consulting Services LLC. His greatest concern centers around tree roots. "Most people think a tree grows a deep taproot straight down into the soil. When they go to excavate around a tree, they soon discover that most trees grow their roots in the upper 24 inches of the soil." Additionally, tree roots grow horizontally toward the outer edge of the tree canopy, often growing 1.5 times the tree crown diameter.



"We knew we would encounter tree roots throughout the median, our goal was to minimize root conflicts and environmental stresses to the trees." Therefore, tree protection best management practices included aerial canopy pruning to remove deadwood from each tree crown, installing construction fencing to protect tree trunks and hand trenching and root pruning to minimize roots conflicting with street improvements.

The concept of root pruning is to trench and locate conflicting roots and hand cut them rather than having a piece of grading equipment ripe or tear the root out of the ground. Hand trenching and root pruning reduces the shock and destruction of small absorbing root hairs caused when heavy equipment rips, tears or cuts roots. Properly implemented, root pruning is an effective arboricultural technique to reduce construction impacts to tree root systems.

Best management practices also include reducing soil compaction by minimizing construction traffic and not allowing staging or parking equipment underneath tree canopies. Although the site is not irrigated, recommendations for weekly construction watering were implemented to help the trees cope with the stresses caused by the construction work.

RDCS will provide consulting services whenever construction work endangers the existing trees. Rappoport stated "We were told to be on call for monitoring services during certain phases of the street improvements and trenching. We have completed the first phase of canopy pruning and expect to provide root pruning on certain trees in the near future".

Rappoport Development Consulting Services LLC provides certified arborist consulting services for infrastructure projects. Certified arborist-consulting services include tree inventories, tree monitoring, tree construction protection plans and best management practices, tree risk assessment, tree health



assessment, tree and landscape appraisal services. Mr. Rappoport is an International Society of Arboriculture certified arborist and certified tree risk assessor, a C-27 California Landscape Contractor and a professional horticulturist. For decades, Mr. Rappoport worked for public and private master sub-division builders as a landscape and grading superintendent, manager and director of land development. More information is available at http://landscapeexpertwitness.com/.