November 2023

Nancy Kent
City of Piedmont
120 Vista Avenue
Piedmont CA 94611

Subject: Sweetgum assessment
37 Mesa Ave. on Park Way

Dear Ms. Kent:

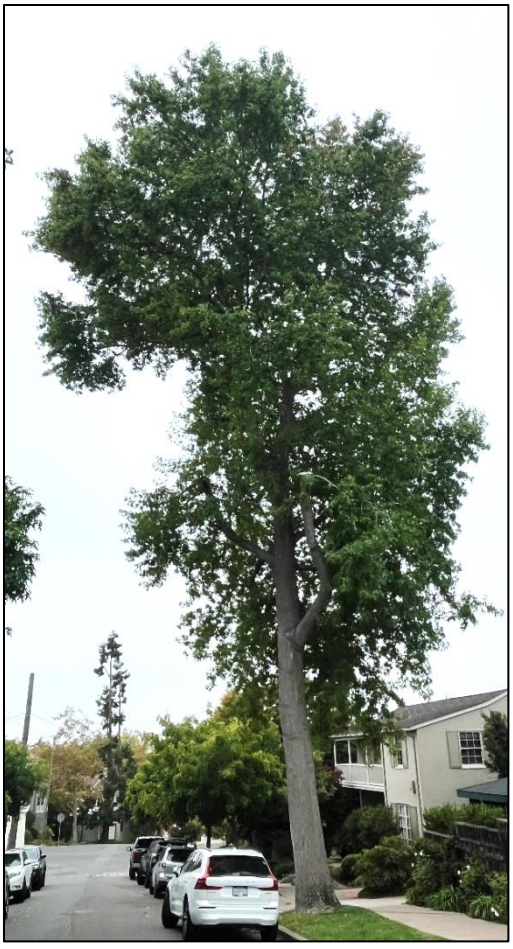
You requested that I evaluate the health and structural condition of a sweetgum (*Liquidambar styraciflua*) located on the Park Way side of 37 Mesa Ave. I visited the site on October 16, 18, and 20 to review tree conditions and observe an aerial inspection performed by The Davey Tree Expert Company. The tree was pruned on October 18th. This letter summarizes my observations, assessment, and recommendation.

Background

The subject tree has been evaluated by several arborists. HortScience, Inc. (now HBC) inspected it in 2012. Subsequent to that, five reports have been prepared by other arborists and submitted to the City.

Description of the Trees

The tree was located in a 7 ft. wide, well-maintained parkway between sidewalk and curb (Photo 1). This is a large mature tree, approximately 80 ft. tall with a trunk diameter of 38 in. Overall vigor was good with few dead or dying branches. Tree structure, however, was poor. Over time, lower branches were removed. Scaffold and lateral branches had been reduced in length. Both topping and lions-tail pruning have also occurred. As a result, there are few options for additional reduction and structural pruning.



Photos 1. The sweetgum was pruning on October 18th leaving few branches on the street side.

The tree lost a limb in early October during an unseasonably high-temperature day. The failed limb was approximately 3 inches in diameter. As it broke, a 2 ft. long wound was created on the underside of the parent stem.

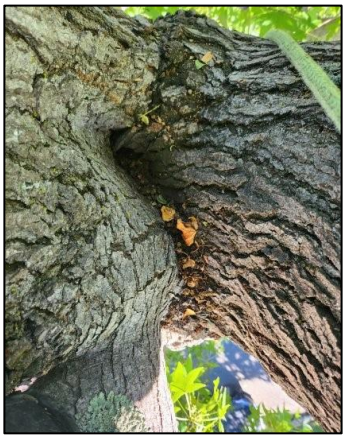
In response to the limb failure, the City worked with a climber to prune the tree and perform the aerial inspection. The purpose of the inspection was to identify defects not visible from the ground. The primary pruning objective was to identify and reduce the length of structurally unsound damaged branches.

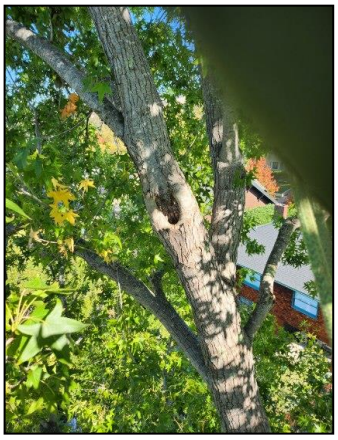
Three limbs were pruned: 1) the branch from which the October 2023 failure originated, 2) a partially attached branch that was resting on top of another limb, and 3) a structurally unsound limb with decay was reduced (Photo 2) with a heading cut. Neither branch #2 nor 3 were visible from the ground.

Pruning of these three limbs created the one-sided crown Photo 1). Additional removal and reduction pruning would likely compromise crown structure.

The climber also identified several branch unions with included bark and at least one cavity (Photos 3 and 4). These defects were not addressed in the October 18th pruning. But should be addressed if the tree is going to be preserved.

Photos 2. Branch that was headed should be removed further raising the lowest branch.





Photos 3 and 4. Two examples of cavities were identified by the climber. Cavities create weak points along the branch.

Large trees provide the most environmental benefits and are therefore some of the most important trees in the urban forest. However, because of their large size, they have the potential to cause the most damage. Management must balance these factors. City officials and arborists are working toward the goal of striking a balance between safety and the high-value environmental benefits that mature, and specifically large, trees provide.

Summary and Recommendation

Based on current structural condition and the history of failure, I recommend removal of the tree. Additional pruning would further compromise the structural integrity. Decay will only worsen, increasing the likelihood of failure over time. Removal and replacement is a prudent management option.

Sincerely,

Darya Barar, Managing Consulting Urban Forester
ISA Certified Arborist No. WE-6757A
Registered Consulting Arborist #693
ISA Tree Risk Assessment Qualified