



MEMORANDUM

Public Works Department

DATE: September 8, 2021

TO: Parks and Recreation Commission

FROM: Andy Chang, Senior Civil Engineer
Dawn S. Cameron, Public Works Director

SUBJECT: **Shoreline Boulevard Interim Bus Lane and Utility Improvements, Project 18-43 – Heritage Tree Removal and Mitigation**

RECOMMENDATION

Review the proposed Heritage tree removals and mitigation for Shoreline Boulevard Interim Bus Lane and Utility Improvements, Project 18-43, and forward a recommendation to the City Council to approve the staff-recommended removal and mitigation for 11 Heritage trees with a 2-to-1 tree replacement ratio with 24" box trees.

BACKGROUND

In 2014, the Shoreline Boulevard Transportation Corridor Study (Corridor Study) evaluated various strategies to address mobility issues on Shoreline Boulevard and provided a phased implementation program for transportation improvements. The Corridor Study identified a dedicated transit lane in the median on Shoreline Boulevard as well as other pedestrian and bicycle facilities to enhance the safety and mobility for all modes of travel. Shoreline Boulevard Interim Bus Lane, Project 18-48, was adopted and approved for funding by the City Council in 2017. The project will construct a 12' wide, dedicated, center-running bus lane on Shoreline Boulevard, between Middlefield Road and Pear Avenue, replacing the existing two-way left-turn lane and landscaped median. The project will also construct protected bicycle lanes, pedestrian, traffic signal, and utility facilities.

To date, the Parks and Recreation Commission (PRC) has recommended the removal of a total of 16 Heritage trees for this project. On April 18, 2018, 11 Heritage trees were recommended, and on December 12, 2018, five Heritage trees were recommended. On September 3, 2019, Council approved the removal of those 16 Heritage trees (four on West Middlefield Road), and on December 3, 2019, Council approved the plans and specifications for the construction project. On December 8, 2020, Council awarded the

construction contract to Granite Rock Company, and the Notice to Proceed was issued to start work on March 15, 2021.

ANALYSIS

West Middlefield Turn Lanes

The addition of a second left-turn lane in both directions on West Middlefield Road at Shoreline Boulevard was identified as a traffic impact mitigation for the adoption of the North Bayshore Precise Plan (NBPP). The NBPP Environmental Impact Report (EIR) Mitigation Monitoring and Reporting Program identified this mitigation as included in the Shoreline Interim Bus Lane Project.

The traffic analysis conducted for the NBPP reviewed the existing traffic conditions based on the demand volumes to determine if any additional improvements are necessary to reduce or mitigate impacts to traffic signal operations. The existing conditions analysis showed significant delays in both directions from the West Middlefield Road left-turn movements (a.m. peak hour delays of 80.3 seconds eastbound, 93.6 seconds westbound), and the overall Level of Service (LOS) at the Shoreline Boulevard/West Middlefield Road intersection of “E” was below the minimum threshold required (LOS D). Additionally, the intersection is oversaturated during the peak periods, and the maximum queue length exceeds the left-turn pocket storage length, creating further congestion in the through movement. The results of the traffic analysis after adding the second left-turn lanes showed increased intersection throughput and reduced delays, queuing, and vehicle emissions.

Although traffic patterns have subsided due to the COVID-19 pandemic, many roads and freeways in the area are already experiencing a growth in traffic levels with the Shelter-in-Place restrictions lifted and more employees returning to work sites. Staff’s professional opinion is that traffic patterns will continue to return to pre-COVID levels over the next year. While employers in the area have identified a hybrid remote/return-to-office model that may carry into the near future, they have also noted the need to have all employees on-site at the same time two to three days of the week. The left-turn lanes are needed to address the traffic patterns expected to return and the future development growth identified.

For these reasons, the West Middlefield Road left-turn lanes are an essential part of the project.

Heritage Trees

During the project’s design phase, staff’s goal was to minimize tree removals and impacts. While staff did identify existing trees in direct conflict with the proposed improvements, trees that had improvements in close proximity and within the root structure of the tree were not initially identified as staff believed these trees could have been protected in place. The project is in construction, and the contractor, design consultant, City arborist, and staff conducted a field review to coordinate the work limits and protection of adjacent trees. During this review, the City arborist determined 11 additional Heritage trees that were in conflict with the project improvements and identified their removal due to the close proximity with the West Middlefield Road turn lane improvements and Shoreline Boulevard protected bicycle lane and sidewalk improvements. While these trees are not directly impacted by the project, it was determined that the excavation work for improvements would compromise too much of root structure of the identified trees. This would cause the trees to become unstable over time and potentially uproot and fall over into traffic. Due to this considerable safety concern, these trees have been identified for removal.

Table 1 lists the additional 11 Heritage trees proposed for removal, and Figure 1 shows the locations of the trees. Ten (10) trees are located in the West Middlefield Road median, and one is located on private property at 883 North Shoreline Boulevard.

Table 1: Additional Heritage Tree Removal

No.	Tree ID	Tree Diameter at 54" Above Grade	Tree Type
1	18367	5"	Coast redwood
2	18368	19"	American sweet gum
3	18377	21"	American sweet gum
4	18427	18"	Southern magnolia
5	18429	24"	Coast redwood
6	18431	27"	Coast redwood
7	45462	5"	Coast redwood
8	45464	6"	Coast redwood
9	45465	6"	Coast redwood
10	45466	5"	Coast redwood
11	122	33"	Coast redwood



Figure 1: Locations of Additional Heritage Tree Removal

Mitigation

Staff recommends replanting at a 2-to-1 ratio with 24" box trees as mitigation for the removal of the additional 11 Heritage trees. The species of the new trees to be planted include Chinese evergreen, valley oak, and Coast live oak. Except for 883 North Shoreline Boulevard, planting areas for the new trees are outside the project site, generally in the West Middlefield Road median and at San Veron Park. At 883 North Shoreline Boulevard, two new trees will be planted on-site. Please refer to Attachment 1, which illustrates identified areas for replanting locations of new trees for mitigation purposes.

The Urban Forestry Board's recommendation for Heritage tree mitigation will be forwarded to the City Council for approval, anticipated in October 2021.

FISCAL IMPACT

The construction of Shoreline Boulevard Interim Bus Lane and Utility Improvements, Project 18-43, is funded with \$14,482,286. Funding sources for the project come from the Shoreline Community Fund, Water Fund, Wastewater Fund, and bond proceeds.

The removal of 11 Heritage trees and the replanting mitigation measures are estimated to cost \$60,000, which will be funded by the construction of Shoreline Boulevard Interim Bus Lane and Utility Improvements, Project 18-43.

PUBLIC NOTICING

In addition to agenda posting, staff posted notices on the Heritage trees proposed to be removed and provided information for attending the virtual meeting. Information related to the tree removal was also posted on the City's Parks Division webpage under "Heritage Trees."

AC-DSC/AF/6/PWK
913-09-08-21M

Attachment: 1. General Planting Areas

cc: CSD, PWD, APWD – Arango, FRM, PCE – Gonzales, CTE, SCE – Chang, File