

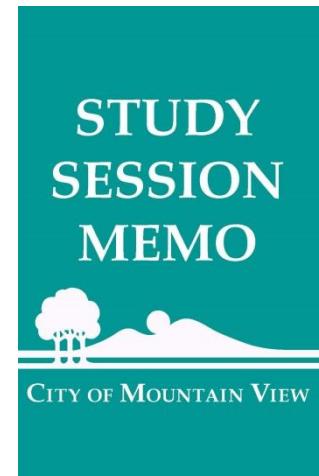
DATE: February 9, 2016

TO: Honorable Mayor and City Council

FROM: Sayed Fakhry, City Traffic Engineer
Michael A. Fuller, Public Works Director

VIA: Daniel H. Rich, City Manager

TITLE: **Modifications to Castro Street between El
Camino Real and Miramonte Avenue –
CIP 14-36**



PURPOSE

The purpose of this Study Session is to provide an overview of the proposed modifications to Castro Street between El Camino Real and Miramonte Avenue and to receive Council input on the project prior to completing design.

BACKGROUND

The project area is an approximately 2,000' segment of Castro Street between El Camino Real and Miramonte Avenue, including the frontage of Graham Middle School. This section of Castro Street connects downtown, El Camino Real, and the residential neighborhoods in the southerly half of the City. In addition to being the primary access route to Graham Middle School, Castro Street is also a route to Huff Elementary School, approximately one-half mile south of Graham Middle School.

Castro Street is a four-lane collector street with two lanes in each direction separated by a raised median. The posted speed limit is 30 miles per hour (mph) and there are no bike lanes. The Average Daily Traffic volume is approximately 6,800 vehicles per day with peak hourly volumes of about 300 to 400 vehicles during morning and afternoon commute times. The morning peak hour in both northbound and southbound coincides with the opening bell at Graham Middle School. The northbound afternoon peak hour coincides with the closing bell at Graham Middle School but the southbound peak hour happens later in the afternoon, between 5:00 p.m. and 6:00 p.m. By comparison, the Average Daily Traffic volume on Castro Street at Mercy Street is approximately 17,000 vehicles per day.

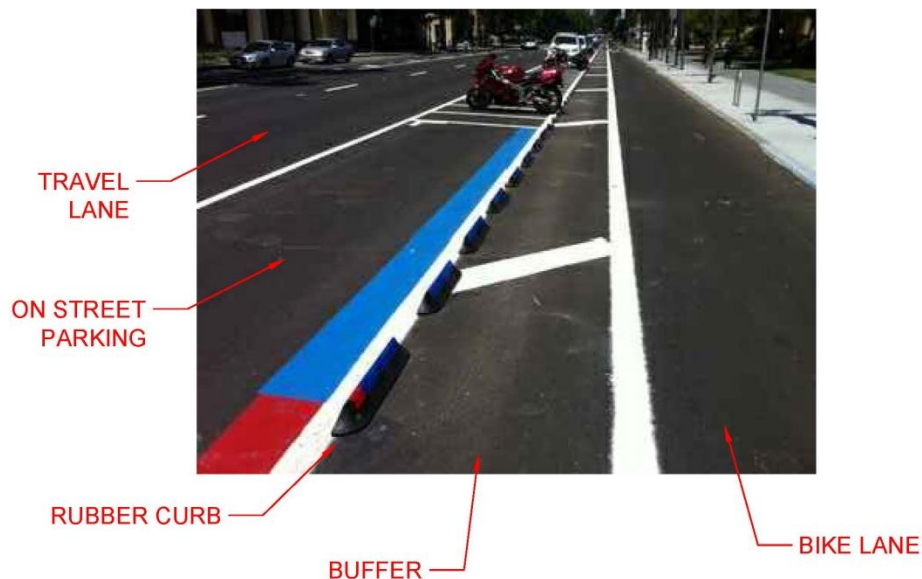
The proposed project includes the following elements:

- Reduction of vehicle lanes from two lanes in each direction to one lane in each direction;
- Buffered bike lanes in both directions;
- Pedestrian bulb-outs with high-visibility crosswalks and in-roadway warning lights (IRWLs); and
- Pedestrian improvements to the intersection of Castro Street and Miramonte Avenue.

These improvements will reduce the number of lanes pedestrians must cross, reduce crossing distances, make pedestrians more noticeable to drivers, and provide a buffer between bicyclists and moving vehicles.

On September 17, 2014, staff presented modifications to Castro Street to the Bicycle/Pedestrian Advisory Committee (B/PAC). The B/PAC preferred a physically raised bicycle buffer over a striped buffer and preferred the bicycle lane located adjacent to the curb with parking (parked cars) as a buffer between the bicycle lane and travel lane (see Attachment 1 – B/PAC Meeting of September 17, 2014 Staff Report and Minutes).

An example of this concept design is installed on 4th Street in downtown San Jose as shown in the photo below:



The proposed design for Castro Street has considered B/PAC comments and includes a 6' wide bike lane next to the curb, a 3-1/2' painted buffer, including a 6" high rubber curb, an 8' wide parking space, a 2' wide door zone, and an 11' wide travel lane as shown in Figures 1 and 2.



Figure 1

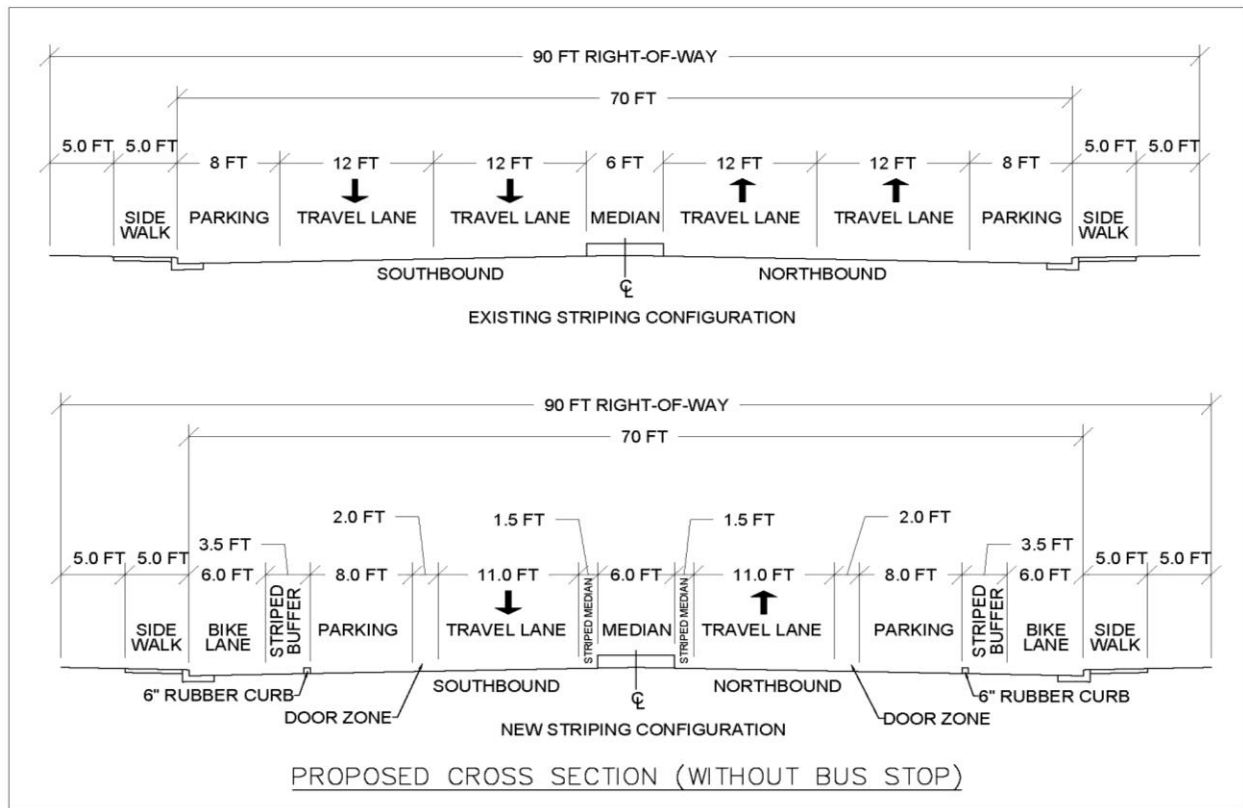


Figure 2

At the bus stops, the 6" high rubber curb and the parking spaces are eliminated to accommodate bus stops as shown in Figures 3 and 4.

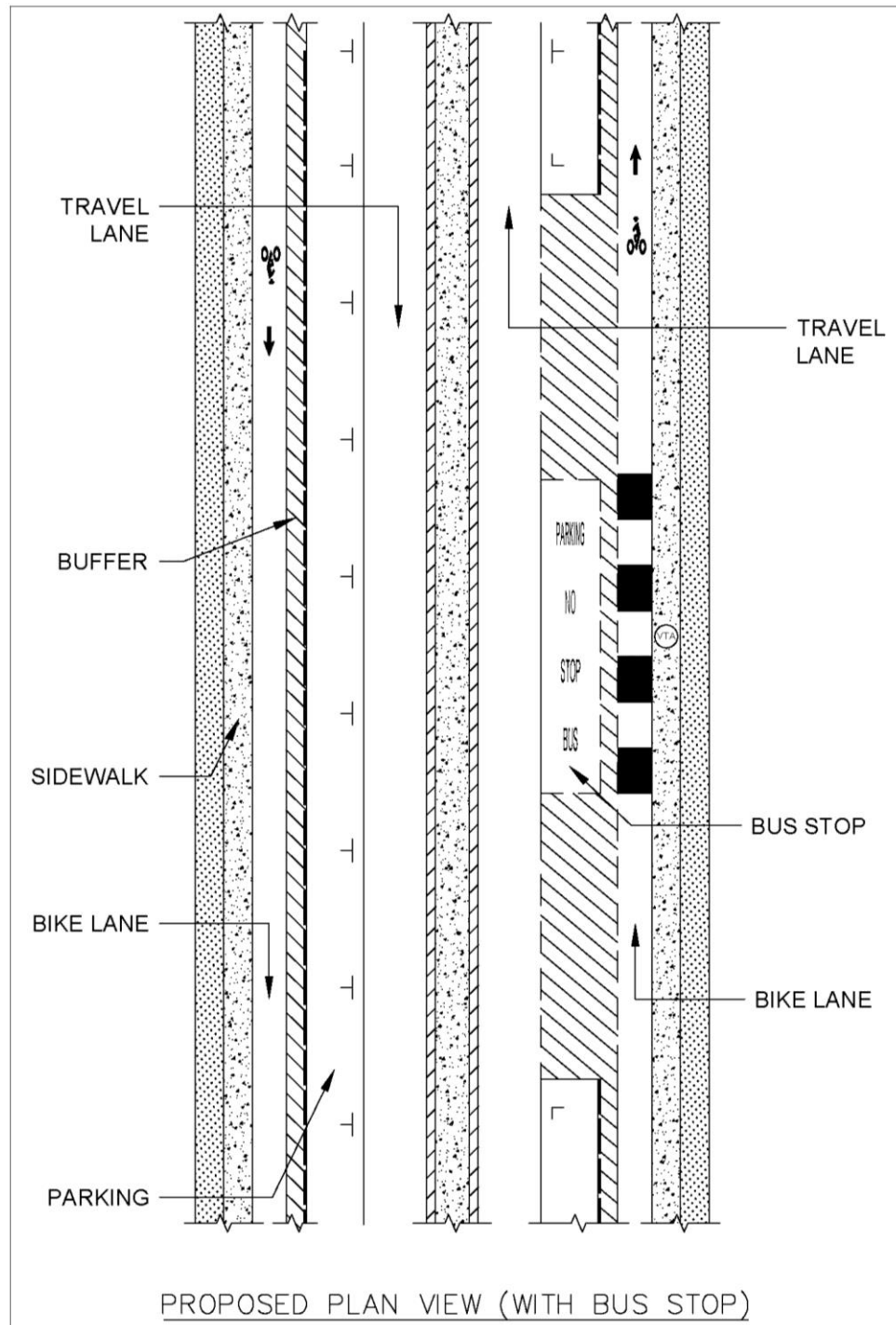


Figure 3

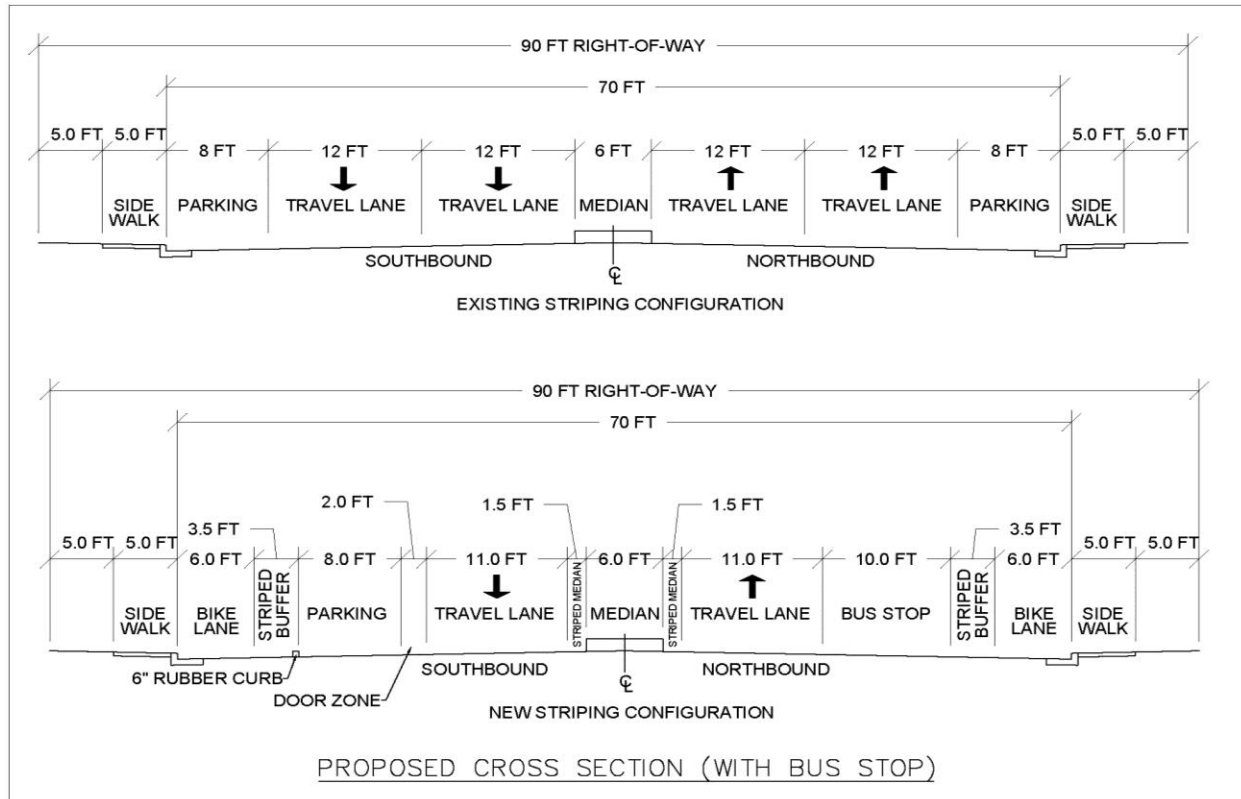


Figure 4

Proposed improvements at the signalized intersection of Castro Street and Miramonte Avenue include protected left-turn phases on Miramonte Avenue and split signal phasing for Castro Street and Marilyn Drive as shown in Figure 6. As a result of these improvements, pedestrian phases at all four quadrants will no longer be in conflict with the left-turn movements. Other improvements include elimination of the free right turn from southbound Castro Street to northbound Miramonte Avenue for vehicles. A separate protected right-turn lane is retained for bikes.

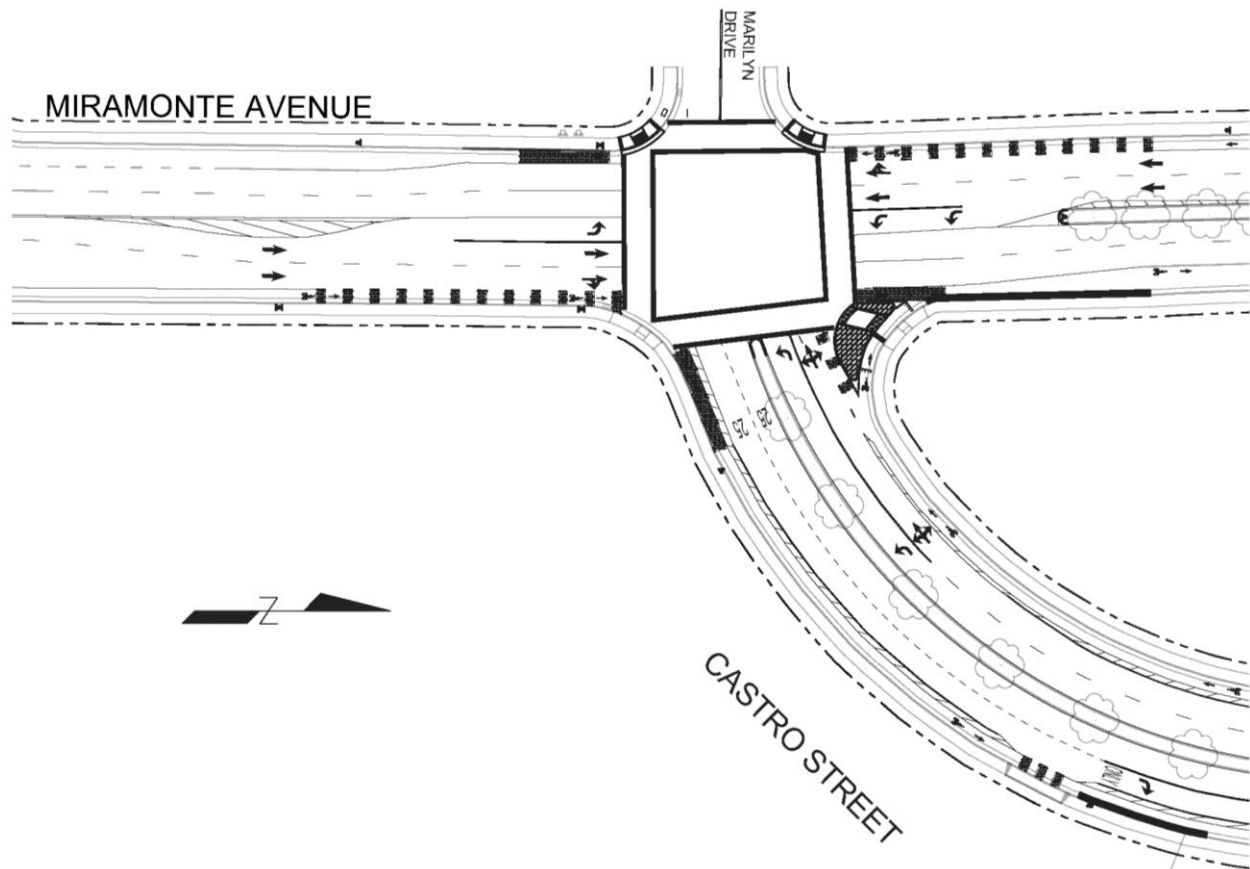


Figure 6

The proposed project has been coordinated with the Greystar development at 801 El Camino Real and the proposed improvements at Graham Middle School, which include eliminating the northerly driveway and constructing a new driveway further north. Attachment 2 shows the overall Castro Street improvements with proposed driveway improvements at Graham Middle School.

The existing number of traffic lanes on Castro Street will not be reduced near the two signalized intersections of El Camino Real and Miramonte Avenue, except the elimination of free right-turn lane at Miramonte Avenue. Therefore, the existing intersection delay and level of service at the two signalized intersections will not change with the project. The current roadway peak-hour traffic volume is between 300 to 400 vehicles per hour in each direction. A single traffic lane in each direction is sufficient for such a volume.

The current posted speed limit on Castro Street is 30 mph. As part of this project, the posted speed limit will be reduced to 25 mph, with a 15 mph speed limit within 500' of the school that will be applicable when children are present. Subsequent to the completion of the improvements, a traffic survey will be performed to document the speed reduction and justification for the reduced speed limit.

Traffic volume during the peak hour on Castro Street may reduce after project implementation as some drivers going north on Miramonte Avenue that are currently using this segment of Castro Street to access El Camino Real may continue using Miramonte Avenue. However, staff does not expect a major shift in traffic volume. There may be some increased traffic congestion on Castro Street near the school during the 15-minute school drop-off and pick-up times. Also, there may be some increased delay exiting the school parking lot in the mornings and afternoons. There may also be an increase in the number of students biking to school because of the buffered bike lane, therefore reducing vehicular volume.

The number of on-street parking spaces between El Camino Real and Miramonte Avenue will be reduced as a result of this project from 56 spaces to 23 spaces. Ten (10) of the eliminated spaces are in front of the Greystar development and the remainder are eliminated to provide an exclusive right-turn lane to the school's most southerly driveway, provide additional sight distance for driveways and side streets due to parking spaces being away from curb, and to meet VTA's requirements for additional no-parking zones near bus stops.

RECOMMENDATION

Provide feedback to staff regarding the proposed design as a whole or some specific elements of the design.

NEXT STEPS

Staff will finalize the design based on the Council feedback and bring the final plans and specifications to Council for approval and advertising for bids in March or April 2016. Depending on funding approval from the State, the project is planned to be constructed during the summer 2016 Graham Middle School break.

PUBLIC NOTICING

In addition to agenda posting, notices of this meeting were mailed to the residents and property owners along Castro Street and the surrounding side streets that feed into this section of Castro Street as shown on the attached Notification Map (Attachment 3).

SF-MAF/7/CAM
902-02-09-16SS-E

- Attachments:
1. [B/PAC Meeting of September 17, 2014 Staff Report and Minutes](#)
 2. Overall Castro Street Improvement
 3. Notification Map