



Town of Moraga	Agenda Item
CONSENT	7.5

Meeting Date: June 26, 2024

TOWN OF MORAGA

STAFF REPORT

To: Honorable Mayor and Councilmembers

From: Shawn Knapp, Public Works Director / Town Engineer
Nate Levine, Senior Engineer
Yao Miao, Assistant Engineer

Subject: Moraga Road and Campolindo Drive Traffic Safety Study Update and Recommended Safety Improvements

Recommendation

Staff recommends that Town Council:

1. Accept the Moraga Road and Campolindo Traffic Safety Study as complete.
2. Approve the following safety improvements identified in the Moraga Road and Campolindo Traffic Safety Study and authorize staff to implement them as part of the 2024 Street Rehabilitation Project (CIP 23-401 & 24-401):
 - A. Restripe Moraga Road from Via Granada to Buckingham Drive, adding bike lane markings, updated lane markings, and traffic calming elements (Attachment B)
 - B. Install Painted Bulb-outs at the intersections of Moraga Road and Buckingham Drive/Woodford Drive, and Campolindo Drive and Calle La Mesa (Attachment C)
 - C. Paint "Keep Clear" pavement markings and trim and/or remove existing shrubs/trees south and north of Corte Santa Clara (Attachment D)

Background

Moraga residents have expressed concerns about potential traffic congestion and safety when using Moraga Road and Campolindo Drive near Campolindo High School, particularly during the high school student pick-up and drop-off periods. Additional concerns included potential traffic impacts from a future Palos Colorados residential development and improving egress from the Corte Santa Clara court onto Moraga Road.

In response, on December 13, 2023, Town Council approved the use of a consultant, Parametrix, Inc. (based in Berkeley, CA), to perform a Moraga Road and Campolindo Drive Traffic Safety Study. Specific goals and objectives for this study were to:

1. Engage the community to understand their traffic congestion and safety concerns.
2. Recommend multi-modal traffic modifications to improve safety, circulation, and access within the project extent along Moraga Road and Campolindo High School drop-off and pick-up areas, parking lot driveways, and adjacent intersections.
3. Recommend measures to improve driver sight distance and/or slow traffic along Moraga Road to improve safety for drivers exiting Corte Santa Clara onto Moraga Road.
4. Conduct a preliminary assessment of potential future Moraga Road impacts from the Palos Colorados 123-home subdivision site sole subdivision ingress and egress via Moraga Road.
5. Identify recommended measures and improvements that can be implemented as part of the 2024 Street Rehabilitation Project.
6. Develop a “tool kit” of traffic improvement measures that could be used by staff within the project area in future projects.

Parametrix has completed a draft study. From the data gathered and based on an evaluation of existing conditions, Parametrix’s study recommends a number of potential near-term to long-term implemented solutions.

2024 Street Rehabilitation Project CIP 23-401 & 24-401

On April 24, 2024, Town Council awarded the 2024 Street Rehabilitation Construction Contract Award to Bay Cities Paving & Grading, Inc. Construction of this project has begun and includes street rehabilitation along Moraga Road (Via Granada/Sky Hy Drive and Buckingham Drive) and on a number of streets within the Campolindo residential sub-division. These rehabilitation projects are part of the Town Council’s Worst First Residential Street (WFRS) Program.

The WFRS Program focused on rehabilitating existing street facilities to better (new) condition. However, this program does not include designing new safety enhancements such as new sidewalks (for gap closures), curb ramps (reconfigured for increased safety), and traffic striping and signage (reconfigured for increased safety). In order to add these types of new street improvements in a cost-effective and timely manner to the 2024 Street Rehabilitation project, staff is developing “in-house” engineering designs based on the study recommendations that are proposed to be included in the WFRS Project.

Discussion

Public Outreach Efforts:

Campolindo Homeowner Association (HOA) Board Meeting

The Campolindo HOA approached Town staff with a request to add “No Parking” (red curb marking and signage) areas along Campolindo Drive at the Paseo Grande/Paseo Del Rio and (particularly at) Calle La Mesa intersections. Their concerns are focused on improving safety for residents and children crossing the street at these busy intersections, particularly for younger children trying to access the community pool.

On April 9, 2024, the Town Engineer spoke at the HOA Board meeting. He provided a presentation of progressive safety improvements that could be incrementally deployed in critical areas based on improvement costs and construction complexity of the safety improvement. Some examples of faster implementation improvements could be added to the 2024 Street Rehabilitation project, including:

- Painting red curbs and “No Parking” signage at crosswalks (completed).
- Quick-build bulb-out intersection corner treatments.
- High visibility crosswalk striping.

The HOA was supportive of this phased approach in implementing the presented traffic safety improvements in order to start addressing their safety concerns.

In response to HOA requests, an initial Stage 1 implementation of safety improvements was identified as painting red curbs for 20 feet in front of and behind the crosswalks, consistent with “No Parking” restrictions near crosswalks per California Assembly Bill No. 413. Twelve Letters of Intent to post “No Parking” signs were sent to affected Campolindo property owners. Town staff received no objections to the painted red curbs and signage by the comment deadline. Town Council approved the “No Parking” safety improvements on April 24, 2024. The Town maintenance crew implemented the red curb striping on the two intersections on May 15, 2024. Photos of the installations can be seen in Attachment E.

Traffic Safety Study Community Zoom Meeting and Community Survey

The Town held a community meeting on May 23, 2024, at 6:30 PM via Zoom. Eight residents attended, and 28 residents completed online survey questions over the following week and a half. In the community meeting, Parametrix provided options with near-term, medium-term, and long-term traffic solutions. The survey questions were posted on the Town project webpage as well as in the recorded presentation. Parametrix incorporated the survey results into the final study report, which is provided in Attachment A. Attachment G provides a summary of the respondent's demographics and priorities. A recording of the meeting and the meeting attachments are available at: https://www.moraga.ca.us/moraga_road_traffic_study_meeting.

Moraga Road and Campolindo Drive Traffic Safety Study Results:

Public Outreach Summary

Town and Parametrix staff participated in several meetings, including site visits and a regular HOA Board meeting, and gathered feedback. The Town hosted a public community meeting about the study with the Campolindo High School Vice Principal and individual residents, and an online survey was conducted. It is important to note that 68% of online survey respondents did not have students at Campolindo High School. However, they articulated concerns with alleged congestion on Moraga Road, alleged speeding in the Campolindo neighborhood, and the need to improve safety for pedestrians and cyclists. Most survey respondents reported the following travel behaviors as either moderately or highly important:

- Traffic safety during drop-off and pick-up times (77%)
- Vehicle congestion on Moraga Road (74%)
- Safety and comfort of existing bicycle facilities (74%)
- Safety and comfort of existing walking facilities (e.g., sidewalks and crosswalks, 74%)
- Traffic safety due to driver behavior and speed (70%)
- Congestion during drop-off and pick-up times (63%)
- Obstacles to turning onto Moraga Road (62%)
- Parent drop-off in the neighborhood (52%)

The study provides recommendations to alleviate identified traffic safety and operational issues. The recommendations were further refined based on community input.

Recommendations are categorized based on need, complexity/time to implement, and cost. Near-term measures are low in cost and can be implemented as part of projects that are currently underway or expected to be completed by the end of the year. Mid-term measures are higher in cost and/or require further site evaluation and resident coordination to implement successfully. Long-term measures require further evaluation, are more complex, need a funding source, and/or are part of future projects.

Moraga Road Recommendations

Moraga Road is a major arterial road connecting Moraga residents, businesses, and Saint Mary's College students/faculty with Lafayette to State Highway 24. It serves as the Town's primary north-south street. Moraga Road experiences a high volume of multi-modal users during school drop-off and pick-up hours. This includes vehicles, pedestrians, bicycles, and buses. The Campolindo High School frontage has extensive short-term traffic activities and congestion during these hours, which has led to residents requesting improvements over the years.

Furthermore, the Moraga Road high-visibility push-button activated flashing beacon crosswalk at Woodford Drive may add to traffic congestion for limited instances when pedestrian crossings are high. The operation of the flashing beacon is not coordinated with adjacent traffic signals, and the flashing beacon essentially becomes a continuous red light, stopping vehicle traffic along Moraga Road and leading to limited periods of vehicle queueing at nearby intersections (north and south).

Replacing the Rectangular Rapid Flashing Beacon (RRFB) with a High-Intensity Activated Crosswalk (HAWK), also known as a Pedestrian Hybrid Beacon, would have significant benefits in reducing congestion during school drop-off and pick-up periods. A HAWK can be coordinated with the adjacent traffic signals as part of the broader Lamorinda Smart Signal Project, synchronizing traffic flows and reducing congestion along Moraga Road. See the attached FHWA Pedestrian Hybrid Beacon for additional information (Attachment H).

The study recommendations for Moraga Road summarized are as follows:

Near-Term Improvements

- Install painted bulb-outs with raised posts at specific crosswalks.
- Restripe Moraga Road for bike lanes, reduce lane widths and update crosswalk markings.

Mid-Term Improvements

- Upgrade Moraga Road/Campolindo Drive traffic signal system.
- Replace the Rectangular Rapid Flashing Beacon (RRFB) with a Pedestrian hybrid Beacon system.

Long-Term Improvements

- Study reconstructing the Moraga Road west side sidewalk via a multi-use path from Campolindo Drive to Rheem Boulevard. This is expected to be evaluated as part of the Livable Moraga Road (LMR) project.

Corte Santa Clara Court Recommendations

Corte Santa Clara Court off Moraga Road is near Campolindo High School. This neighborhood's residents have expressed traffic safety concerns with respect to exiting their court onto Moraga Road and have asked for improvements. These residents feel trapped at times when there is vehicle backup on Moraga Road from Campolindo High and other school congestion, along with commuter traffic, as there is no Moraga Road "KEEP CLEAR" zone in front of their street. The existing Moraga Road pavement width is not sufficient to add a dedicated center turn lane for ingress and egress. Additionally, this street has potential sight distance obstructions from trees and a sloping hillside on Moraga Road, raising more concerns for residents.

In response, the study recommendations for Corte Santa Clara Court are as follows:

Near-Term Improvements

- Install “Keep Clear” markings at the intersection and trim/remove existing shrubs/trees to increase driver sight lines. Further sight line analysis needs to be completed to reduce the number of tree removals to the most necessary, and work will be coordinated with property owners.

Please also refer to the Town Engineer's recommendations below.

Palos Colorados Residential Development Recommendations

The planned Palos Colorados subdivision development is a 123-unit single-family residential subdivision, which may potentially increase traffic along Moraga Road in the future. The subdivision's primary access to the planned Palos Colorados development is off the eastern side of Moraga Road between Via Granada and Corte Santa Clara Court. Per the approved General Plan condition III.3, the developer is required to install a Moraga Road traffic signal at their subdivision's primary entrance as a traffic mitigation to aid traffic flows and provide traffic gaps benefiting the sub-division and adjacent intersections. The separate Precise Plan allows for the developer to analyze if the traffic signal is still needed with the removal of the previously proposed golf course within the development.

To begin understanding potential subdivision traffic impacts on Moraga Road, there was a request for these impacts to be included and evaluated in the Moraga Road and Campolindo Drive Traffic Safety Study. Intersection signalization is not warranted based on the proposed subdivision traffic volumes by itself. However, the Town Engineer believes that a new Moraga Road traffic signal is necessary for current and future road volumes to separately address congestion, traffic flow coordination, and safety concerns. The Town Engineer's recommendations for Palos Colorados subdivision development are summarized as follows:

Mid-Term Improvement

- Further study development of ingress/egress locations to better fit roadway alignment.

Long-Term Improvements

- Install a traffic signal at the Palos Colorados subdivision entrance with Moraga Road.
- Coordinate traffic signals with other signals along Moraga Road to provide travel gaps to allow for easier egress from Corte Santa Clara Court.

Campolindo Drive Recommendations

Campolindo Drive provides access to the Campolindo High School and Campolindo residential area. The neighborhood has expressed concerns about vehicle speeds,

student parking, and safety near the high school and the Campolindo Cabana Swim Club. The existing driveways and crosswalks often experience parked vehicles that can block the line of sight between drivers and pedestrians in the area, creating a hazard. The study's recommendations for Campolindo Drive summarized are as follows:

Near-Term Improvements

- Install painted bulb-outs with raised posts at specific crosswalks.
- Add parking prohibitions and reconstruct curb ramps on Campolindo Drive for improved pedestrian safety.

Mid-Term Improvements

- Upgrade Moraga Road/Campolindo Drive traffic signal system (incorporate with Smart Signals project)
- Develop a travel demand management plan with Campolindo High School Administration.
- Consider a residential parking permit system.

Summary of Study Improvements Recommended to be included in 2024 Street Rehabilitation Project by Change Order

The study identified a number of priority near-term safety improvements that are recommended to be constructed as part of the 2024 Street Rehabilitation Project (CIP 23-401 & 24-401). The 2024 Project has a sufficient approved project contingency of \$534,617 for these change order requests.

Description of Study Recommend Improvements for 2024 Street Rehabilitation Project (CIP 23-401 & 24-401)	Additional Project Costs¹
Restripe Moraga Road adding bike lane markings, updated lane markings, and traffic calming elements	\$5,000
Install Painted bulb-outs at Moraga Road and Buckingham Drive/Woodford Drive	7,500
Remove existing shrubs/trees south and north of Corte Santa Clara ²	16,000
Estimate Change Order Totals	\$28,500

Staff recommends that Council approve the above three improvements and authorize staff to implement them as change orders within the current 2024 Street Rehabilitation project.

Future Safety Improvement Measure Implementation

¹ The 2024 Street Rehabilitation Project (2024 Project) includes replacing existing traffic striping and signage in kind or as is. The draft Traffic Study recommends upgrading, modifying, or adding additional traffic striping and signage in key areas of the 2024 Project. A portion of recommended traffic striping will replace existing contract striping and will be cost-neutral or no cost to the project. The listed additional costs shown are estimated incremental change order costs for the 2024 Project.

² The Parametrix draft Moraga Road and Campolindo Drive Traffic Safety Study identified up to 10 trees for removal to improve sight distance for vehicles leaving Corte Santa Clara court. Town staff will conduct further analysis to prioritize the most necessary tree removals to reduce impacts and costs, as well as coordinate scope and work with property owners. The above table lists the cost to remove 4 to 5 trees; actual removal costs may vary a bit.

The completed Traffic Study provides the basis for many other traffic improvement recommendations in this staff report. There are other recommendations that will require further engineering review, analysis, and development in order to be implemented in future projects. Staff will seek Town Council approval for these projects, identify funding sources, and reengage the community. This will include further community engagement with Campolindo High School and residents on Wimpole Street to address parking concerns and restrictions.

CEQA

Study and Design work are categorically exempt from the California Environmental Quality Act (“CEQA”) pursuant to 14 CCR § 15306 as a preliminary study and other resource evaluation activities which do not result in a serious or major disturbance to an environmental resource and are used strictly for information gathering purposes, or as part of a study leading to an action which a public agency has not yet approved, adopted, or funded.

The recommended street improvements are categorically exempt pursuant to 14 Cal. Code Regs. 15301 (Class 1-Existing Facilities) as they consist of minor alterations to existing facilities.

Fiscal Impact

There is no fiscal impact to the adopted FY 2023/24 budget as the Moraga Road and Campolindo Drive Traffic Safety Study was funded through the Minor Traffic Safety Program (CIP 23-404) of the \$50,000 budget allocated with Measure J Funds. Parametrix's final study services cost, including completing additional community outreach and exhibit support for change orders along with possible additional work to address any Town Council comments, if any, is expected to be \$47,009.

In addition, the three recommended street improvements fall under the previously approved contingency for the 2024 Street Rehabilitation Project.

Alternatives

1. Council Action approving the attached Study and Recommend Near-term Improvements with modifications; or
2. Do not approve the attached Study, Recommend Near-term Improvements, and provide direction to staff.

Next Steps

The 2024 Street Rehabilitation project construction began on June 3, 2024. If approved by Town Council, staff will immediately prepare finalized construction drawings for change order implementation in the 2024 Street Rehabilitation project. The traffic striping and signage improvements are expected to be installed after the pavement resurfacing phase of the project beginning in late November 2024

Attachments

- A.** Moraga Road and Campolindo Drive Traffic Safety Study
- B.** Recommended **Near-term** Safety Improvements for Street Rehabilitation Project (CIP 23-401 & 24-401) – Moraga Rd Striping Improvements
- C.** Recommended **Near-term** Safety Improvements for Street Rehabilitation Project (CIP 23-401 & 24-401) – Buckingham Drive/Woodford Drive Bulb-Outs
- D.** Recommended **Near-term** Safety Improvements for Street Rehabilitation Project (CIP 23-401 & 24-401) – Corte Santa Clara Tree Trimming/Removal
- E.** Campolindo Drive Red Curb and Installation Photos
- F.** Moraga Road Traffic Study Extents Map
- G.** Graphical Survey Results Overview
- H.** Pedestrian Hybrid Beacon (PHB) Countermeasure Tech Sheet