

**CITY OF TEMECULA  
AGENDA REPORT**

**TO:** City Manager/City Council

**FROM:** Patrick Thomas, Director of Public Works/City Engineer

**DATE:** February 13, 2024

**SUBJECT:** Establish All-Way Stop Control at the Intersection of Camino Piedra Rojo and Parown Drive/Avenida Bicicleta

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**PREPARED BY:** Nick Minicilli, Senior Traffic Engineer  
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**RECOMMENDATION:** That the City Council adopt a resolution entitled:

RESOLUTION NO.

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF TEMECULA, ESTABLISHING AN ALL-WAY STOP CONTROL AT THE INTERSECTION OF CAMINO PIEDRA ROJO AND PAROWN DRIVE/AVENIDA BICICLETA AND FINDING THAT THE ACTION IS EXEMPT FROM CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) UNDER SECTION 15301(C) OF THE CEQA GUIDELINES

**BACKGROUND:** In late 2022, City of Temecula staff received a public comment at Traffic Safety Commission meeting with a request to consider the feasibility of implementing all-way stop controls to address concerns of excessive speeding and pedestrian crossing conditions at the intersection of Camino Piedra Rojo and Parown Drive/Avenida Bicicleta (Exhibit A). The citizen referenced concerns with speeding and uncontrolled pedestrian crossings at this intersection specifically during pickup and drop-off times for nearby middle school as there are no convenient controlled pedestrian crossings nearby. The request for an all-way stop and pedestrian controls at the intersection of Camino Piedra Rojo and Parown Drive/Avenida Bicicleta would provide additional controlled access for students heading to/from Vail Ranch Middle School. In 2023, several field reviews were performed by staff at this intersection and, based on vehicular and pedestrian activity observed, it was determined that the intersection of Camino Piedra Rojo and Parown Drive/Avenida Bicicleta warranted further analysis for stop and pedestrian controls.

Camino Piedra Rojo is a forty-four (44) foot wide residential collector roadway providing access to numerous single-family residences between Butterfield Stage Road and Vail Ranch Parkway. The posted speed limit on Camino Piedra Rojo is 25 MPH due to several residential homes fronting this roadway and the Average Daily Traffic (ADT) volume on is approximately 4,380 ADT.

Recent speed data collection confirmed an 85<sup>th</sup> percentile speed of 33 MPH for this stretch of Camino Piedra Rojo.

Parown Drive is a forty (40) foot wide local residential roadway that provides access to Camino Piedra Rojo for numerous single-family residences located within the area. Parown Drive has a speed limit of 25 MPH and carries approximately 278 ADT.

Avenida Bicicleta is a forty (40) foot wide local residential roadway that provides access to Camino Piedra Rojo for numerous single-family residences located within the neighborhood. Avenida Bicicleta has a speed limit of 25 MPH and carries approximately 201 ADT.

In August 2023, staff generated speed and volume data during the school semester from January 2023 through May 2023 using Streetlight Data software. Over this five (5) month period, review of prevailing (85<sup>th</sup> percentile) speeds indicates that speeds vary from 30 to 33 miles per hour during peak AM and PM hours on posted 25 MPH segments of Camino Piedra Rojo. The results of the speed data review indicate that most speeding is occurring during peak AM and PM hours.

The collected volume data was used to evaluate entering volumes and prevailing speeds for the intersection of Camino Piedra Rojo and Parown Drive/Avenida Bicicleta. In addition to the data collection, a review of intersection characteristics and conditions were performed, which included an evaluation of sight distance, collision history, and completion of a multi-way stop warrant analysis at both intersections.

An evaluation of sight distance was performed at the intersection of Camino Piedra Rojo and Parown Drive/Avenida Bicicleta. A minimum unobstructed sight distance of 150 feet is required for the posted 25 mph speed limit on Camino Piedra Rojo. The results of the evaluation are shown in the table below:

<i>Location</i>	<i>Sight Distance</i>	<i>Required Visibility (Posted 25 MPH)</i>
<u>Parown Drive (Southbound)</u>		
• Looking East	<b>300'</b>	<b>150'</b>
• Looking West	<b>220'</b>	<b>150'</b>
<u>Avenida Bicicleta (Northbound)</u>		
• Looking East	<b>225'</b>	<b>150'</b>
• Looking West	<b>200'</b>	<b>150'</b>

As shown, the visibility at the intersection of Camino Piedra Rojo and Parown Drive/Avenida Bicicleta is more than adequate for the posted speed limit.

A review of the collision history for the three (3) year period from June 1, 2020 to May 31, 2023, indicates there were no (0) reported collisions at the intersection of Camino Piedra Rojo and Parown Drive/Avenida Bicicleta.

The Multi-Way Stop Sign Installation Policy for Residential Streets' warrant criteria was used to evaluate the need for multi-way stop signs at the intersection. The warrants allow for the installation of multi-way stop signs when the following conditions are satisfied:

1. Minimum Traffic Volumes

- a. The total vehicular volume entering the intersection from all approaches is equal to or greater than three hundred (300) vehicles per hour for any eight (8) hours of an average day; and
- b. The combined vehicular volume and pedestrian volume from the minor street is equal to or greater than one hundred (100) per hour for the same eight (8) hours.

2. Collision History

- a. Three (3) or more reported collisions within a twelve (12) month period of a type susceptible to correction by a multi-way stop installation. Such accidents include right and left-turn collisions as well as right-angle collisions.

3. Roadway Characteristics

- a. The traffic volume on the uncontrolled street exceeds two thousand (2,000) vehicles per day,
- b. The intersection has four (4) legs, with the streets extending 600 feet or more away from the intersection on at least three (3) of the legs.
- c. The vehicular volumes on both streets are nearly equal to a forty/sixty percent (40/60%) split; and
- d. Both streets are 44 feet wide or narrower.

Warrants for Minimum Traffic Volumes, Collision History and Roadway Characteristics must be met to justify the installation of a multi-way stop. Other criteria that may be considered when evaluating the need for multi-way stop signs include:

4. Visibility

- a. The intersections sight distance is less than:
  - 150 feet for 25 MPH
  - 200 feet for 30 MPH
  - 250 feet for 35 MPH

5. The need to control left-turn conflicts.

6. The need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes such as schools, parks and activity centers.

7. The roadways and intersection appear on a Suggested Route to School plan.

8. There are no traffic signals or all-way stop controls located within 600 feet of the intersection.
9. The installation of multi-way stop signs is compatible with overall traffic circulation needs of the residential area.

The multi-way stop warrant analysis performed found that the required Warrants 1, 2 & 3 were not satisfied and all-way stop controls are not justified at the intersection based on quantitative data.

The Policy does however provide the flexibility to consider the need to control vehicle and pedestrian conflicts near locations that generate high pedestrian volumes such as schools, parks and activity centers. During field reviews, staff noticed elevated amounts of vehicular and pedestrian traffic at the existing uncontrolled striped crosswalk at the intersection of Camino Piedra Rojo and Parown Drive/Avenida Bicicleta which provides access to Vail Ranch Middle School. Staff observed that many of these school age pedestrians were crossing the uncontrolled crosswalk without an available crossing guard and were dependent on vehicles yielding for them to cross safely. Staff observed elevated speeds and volumes on Camino Piedra Rojo during morning school drop-off and afternoon pickup while witnessing several close calls with distracted pedestrians. Based on the review of the intersection under these criteria, and the fact that it acts as a suggested school route to a school for residents in the area, staff has determined there is justification for all-way stop controls at the intersection of Camino Piedra Rojo and Parown Drive/Avenida Bicicleta.

At the meeting on October 26, 2023, the Traffic Safety Commission considered the all-way stop with striped pedestrian crosswalks and approved (5-0) the staff recommendation that the City Council adopt an Ordinance establishing the all-way stop at the intersection of Camino Piedra Rojo and Parown Drive/Avenida Bicicleta.

Staff recommend establishing all-way stop controls and striped pedestrian crosswalks at the intersection of Camino Piedra Rojo and Parown Drive/Avenida Bicicleta.

**FISCAL IMPACT:** Minor cost associated with the recommended action.

**ATTACHMENTS:**

1. Resolution
2. Exhibit A - Location Map
3. Multi-Way Stop Warrant Analysis