

**PUBLIC TRAFFIC/SAFETY COMMISSION  
AGENDA REPORT**

**TO:** Public/Traffic Safety Commission

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

**DATE:** December 7, 2021

**SUBJECT:** Traffic Calming on Roripaugh Road – Stop Controls Analysis

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**PREPARED BY:** Nick Minicilli, Senior Traffic Engineer  
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**RECOMMENDATION:** That the Public/Traffic Safety Commission:

1. Recommend the City Council adopt a Resolution establishing Multi-Way Stop Controls at the intersection of Roripaugh Road and Swallow Court.
2. Recommend staff implement striped pedestrian crosswalks at intersection of Roripaugh Road and Swallow Court pending City Council adoption of Multi-Way Stop Controls.

**BACKGROUND:** In August of 2021, City of Temecula staff received a request from the Roripaugh Hills HOA to consider the feasibility of implementing a striped pedestrian crosswalk at the intersection of Roripaugh Road and Sanderling Way to provide direct access to the community recreation center and an established pedestrian crossing for students at nearby schools. Upon review of the intersection, it was determined that this would not be an ideal location for a crosswalk due to the roadway curvature creating poor line of sight for vehicles to see pedestrians in the uncontrolled crosswalk. Since the City of Temecula does not typically support the installation of uncontrolled pedestrian crossings, it was coordinated with the Roripaugh Hills HOA that staff could instead consider feasibility of installing all-way stop controls with pedestrian crosswalks at the nearby intersection of Roripaugh Road and Swallow Court (Exhibit A).

Roripaugh Road is a forty-four (44) foot wide residential collector roadway providing access to numerous single-family residences between Winchester Road and Nicolas Road. The posted speed limit on Roripaugh Road is 25 MPH and the Average Daily Traffic (ADT) volume on is approximately 2,700 ADT. Recent speed data collection confirmed an 85<sup>th</sup> percentile speed of 31 MPH for this stretch of Roripaugh Road.

Swallow Court is a forty (40) foot wide local residential roadway that provides access to Roripaugh Road for numerous single-family residences located within the neighborhood. Swallow Court has a speed limit of 25 MPH and carries approximately 97 ADT.

In September 2021, staff collected volume data over a three (3) day period, which included entering volume data and pedestrian/bicycle volume data at the intersection of Roripaugh Road

and Swallow Court. The volume data was used to establish circulation patterns and determine potential “cut-through” traffic volumes. In addition to the data collection, a review of intersection characteristics and conditions was performed, which included an evaluation of sight distance, collision history, and completion of a multi-way stop warrant analysis at the Roripaugh Road at Swallow Court intersection.

An evaluation of sight distance was performed at the intersection of Roripaugh Road and Swallow Court. A minimum unobstructed sight distance of 150 feet is required for the posted 25 mph speed limit on both Roripaugh Road and Swallow Court. The results of the evaluation are shown in the table below:

<i><b>Location</b></i>	<i><b>Sight Distance</b></i>	<i><b>Required Visibility (Posted 25 MPH)</b></i>
<u>Swallow Court (Westbound)</u>		
• Looking South	<b>260’</b>	<b>150’</b>
• Looking North	<b>420’</b>	<b>150’</b>
<u>Swallow Court (Eastbound)</u>		
• Looking South	<b>420’</b>	<b>150’</b>
• Looking North	<b>460’</b>	<b>150’</b>

As shown, the visibility at the intersection is more than adequate for both the westbound and eastbound conditions at Roripaugh Road and Swallow Court.

A review of the collision history for the three (3) year period from November 1, 2018 to October 31, 2021, indicates there were 0 reported collisions at the intersection of Roripaugh Road and Swallow Court.

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. An evaluation of the intersection pedestrian activity determined that, due to the nearby schools and community recreation center, the residential intersection is experiencing approximately 120 pedestrians/bikes per day. Additionally, the closest controlled pedestrian crossing is approximately 1,500' away at the intersection of Winchester Road/Roripaugh Road which is not a reasonably convenient location for residents to cross Roripaugh Road. Due to the high daily pedestrian volume at the intersection and the lack of a nearby controlled pedestrian crossing, it was determined that the need of a controlled pedestrian crossing via an all-way stop application is justified.

Staff recommends establishing all-way stop controls and striped pedestrian crosswalks at the intersection of Roripaugh Road and Swallow Court. HOA representatives were notified, and they have indicated their support this recommendation.

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

**ATTACHMENTS:** Exhibit A - Location Map  
Exhibit B - Multi-Way Stop Warrant Analysis