County of Ventura
Public Works Agency
Transportation Department
MEMORANDUM

DATE: **January 10, 2019**

TO: **File**

FROM: **Norman Baculinao, Traffic Section**

SUBJECT: **STOP SIGN INSTALLATION ON SANTA PAULA STREET AT THE INTERSECTION WITH BRIGGS ROAD**

Santa Paula Street is a two-lane off-system minor collector roadway that stretches for 1.95 miles from Peck Road to Cummings Road, west of the City of Santa Paula. The segment east of Briggs Road is posted with a prima facie speed limit of 55 mph. Annual Daily Traffic (ADT) volumes are not obtained for Santa Paula Street, but can be assumed to be less than 1500 vpd.

Briggs Road is a two-lane on-system collector roadway that stretches for 1.44 miles from State Route 126 to Foothill Road, west of the City of Santa Paula. Near the intersection with Santa Paula Street, it is an unposted prima facie 55 mph zone. Annual Daily Traffic (ADT) volumes for the road were 1500 vpd in 2017.

Santa Paula Street is intersected by Briggs Road. At this intersection, Briggs Road is stop-controlled, and Santa Paula Street has no stop control. The adjacent land use is agricultural, with large orchards and sparse residences.

Section 2B.07 of the CA MUTCD lists the criteria for the consideration of multi-way stop applications. This criterion includes collision histories, volumes on both roadways, sight distance issues, and the comparison of similar roadway characteristics.

Section 2B.07.b states that multi-way stop may be appropriate if there are **five or more** reported collisions in a 12-month period that are susceptible to correction by a multi-way stop installation. There were 14 collisions on Santa Paula St and Briggs Road in the past 10 years, 11 of which or 79% are the type deemed correctable by a stop sign, for an average of about one correctable collision per year. The most number of correctable collisions in a recent 12-month period were three in 2017. However, of these 11 total collisions, 6 were injury collisions and two were fatal collisions, resulting in three fatal victims. The minimum number of correctable collisions is not met.

Section 2B.07.c1 states that multi-way stop may be appropriate if the vehicular volume entering the intersection from the major street approaches averages at least 300 vehicles per hour for any

Exhibit 2

8 hours of an average day. This would require a minimum volume of 2400 vpd, much less than the assumed volume for Santa Paula Street.

Section 2B.07.c2 states that multi-way stop may be appropriate if the combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches averages at least 200 units per hour for the same 8 hours. This would require a minimum volume of 1600 units. It can be assumed that pedestrians and bicyclists are negligible on Briggs Road, and the recorded ADT was 1500 vpd in 2017. Therefore, this criterion is not met.

Other criteria that may be considered include locations where a road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection unless conflicting cross traffic is also required to stop; and an intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics where multi-way stop control would improve traffic operational characteristics of the intersection.

The adjacent land use is agricultural, with mainly citrus trees. These trees will intermittently grow to a point where sight distance becomes an issue at this intersection. Continuous trimming to maintain sight distance can be problematic. There is a history of collisions due to reduced sight distance at this intersection which may be corrected with a multi-way stop control.

Although neither of these streets are residential neighborhood collectors, they are both of a similar design: 2-lane roadways with narrow pavement widths with no paved shoulders set among agricultural fields. There are no visual cues that would suggest that one roadway should be considered “major” and the other “minor.” Their operating characteristics are also similar.

In conclusion, none of the minimum standard warrants for the installation of four-way stop were met in the subject intersection. However, the combination of several stated findings such as the overrepresented number of broad-side collisions or approximately 78% of all crashes, the high operating speeds of vehicles in the area which increases the likelihood of a serious or fatal injury should a collision occur as already depicted in the crash history, the almost equal traffic volumes between Santa Paula Street and Briggs Road, the chronic vegetation overgrowth that would require regular trimming, and the three fatal victims at this intersection are justification factors for requiring Santa Paula Street traffic to comply with stop control at the intersection.

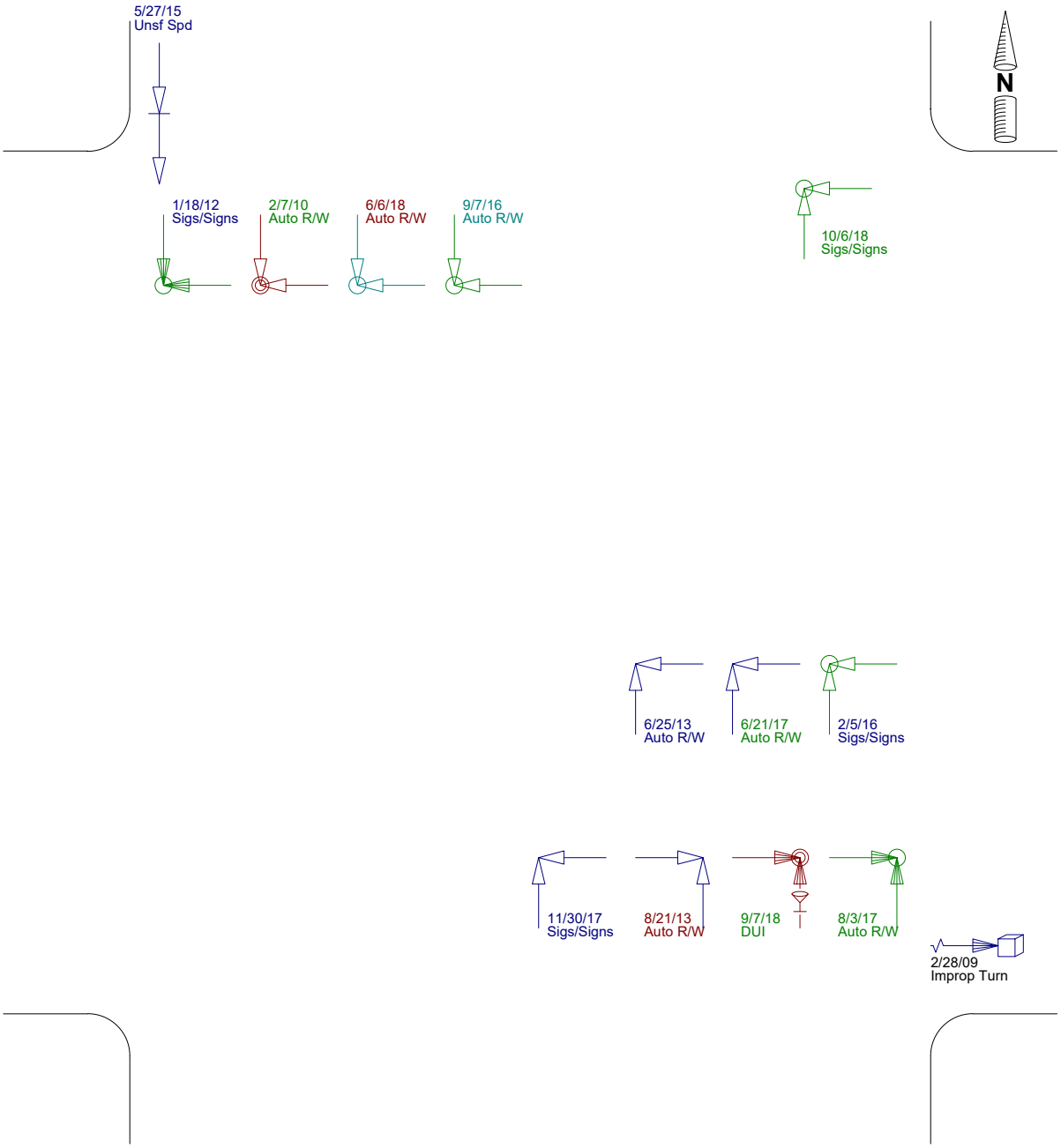
It is my recommendation that, based on these findings, stop signs should be installed on the Santa Paula Street approaches to Briggs Road in order to make this intersection all-way stop controlled.

Norman Baculinao
Traffic Engineering Manager

Collision Diagram

Horizontal Street: SANTA PAULA ST **From: 1/1/2009** **To: 12/31/2018**

Vertical Street: BRIGGS RD **Date Prepared: 2/5/2019**



Number of Collisions

6	Property Damage Only
6	Injury Collisions
2	Fatal Collisions
14	Total Collisions

Legend

- Moving Vehicle
- Stopped Vehicle
- Backing Vehicle
- Ran Off Road
- Movement Unknown
- Right Turn
- Left Turn
- Sideswipe
- Day
- Night
- Pedestrian
- Fixed Object
- Bicycle
- DUI
- Injury
- Fatal

Color Legend - Highest Degree of Injury

Maroon = Fatal

Purple = Severe Injury

Green = Other Visible Injury

Teal = Complaint of Pain

Dark Blue = Property Damage Only