

AGENDA

Meeting of the San Marcos Traffic Commission

Meeting Date: September 2, 2020 | **Meeting Time:** 6:00 PM

Location: City Council Chambers, 1 Civic Center Drive, San Marcos CA 92069

Pursuant to Governor Newsom's Executive Order N-29-20 dated March 17, 2020, and Executive Order N 33-20 dated March 19, 2020, issued with respect to the COVID-19 pandemic, this Traffic Commission meeting will be conducted utilizing teleconferencing and electronic means. In the interest of reducing the spread of COVID-19, members of the public may only call in to hear the meeting and may not be present in the Council Chamber. The public will dial using your phone to 1-877-309-2073 and enter Access Code: 343-861-549

Public Comment: To submit a public comment at the Traffic Commission meeting, please email avelasquez@san-marcos.net and write "Public Comment" in the subject line, or identify the number of the Agenda item on which you are commenting. In the body of the email, include the item number and/or title of the item as well as your comments. Email comments on matters not on the agenda must be submitted prior to the time the Chair calls the Oral Communications Item. Email comments on any agenda item must be submitted prior to the time the Chair closes public comments on the agenda item. Please be advised that all emailed comments are subject to the same rules as would otherwise apply to speaker comments at any Traffic Commission meeting, and that electronic comments on agenda items for this meeting may only be submitted by email. Comments via text message and/or social media (Facebook, Twitter, Instagram, etc.) will not be accepted.

The Traffic Commission Secretary will read all email comments, provided that the reading will not exceed five (5) minutes, or such other time as the Chair may provide, consistent with its ability to set time parameters for public comment at the Traffic Commission meeting. If persons submitting comments do not want their comment to be read out loud at the meeting (not to exceed five minutes), they should write "Do Not Read Out Loud at Meeting" at the top of the email. All emailed comments received by 4:00 pm will be provided to the Traffic Commission members and included as "Supplemental Information" on the City's website prior to the meeting. Those comments received after 4:00 pm and prior to the close of public comment on the applicable agenda item will be added to the record and will be shared with the Traffic Commission members at the meeting.

Americans with Disabilities Act: If you need special assistance to participate in this meeting, please contact the City Clerk Department at (760) 744-1050, ext. 3105. Notification 48 hours in advance will enable the City to make reasonable arrangements to ensure accessibility to this meeting. Assisted listening devices are available for the hearing impaired. Please see the City Clerk if you wish to use this device.

Agendas: Agenda packets are available for public inspection 72 hours prior to scheduled meetings at the Information Desk counter located on the first floor of City Hall, 1 Civic Center Drive, San Marcos, during normal business hours or online at www.san-marcos.net.

Agenda-related writings or documents provided to a majority of the Commission after distribution of the agenda packet will be available for public inspection at the time of distribution at the Information Desk counter located on the first floor of City Hall, 1 Civic Center Drive, San Marcos, CA, during normal business hours.

1. CALL TO ORDER - 6:00 P.M.

2. PLEDGE OF ALLEGIANCE

3. ROLL CALL

Anyone wishing to speak to the Commission on any item must first complete a Request to Speak form and turn it in to the secretary

4. ORAL COMMUNICATIONS

Persons wishing to speak on a matter not on the agenda may be heard at this time; however, no action will be taken until placed on a future agenda.

5. APPROVAL OF MINUTES

July 1, 2020

6. OLD BUSINESS

a. None

7. NEW BUSINESS

a. Request for ALL WAY STOP control at the intersection of Shirley Drive and Vineyard Road

8. REPORTS AND INFORMATION ITEMS

a. Work Order Updates

b. San Diego County Sheriff's Department Traffic Collision Summary And Accident Investigation Log

c. Traffic Commission Commentary

d. Staff Commentary

ADJOURNMENT

AFFIDAVIT OF POSTING

STATE OF CALIFORNIA)
COUNTY OF SAN DIEGO) ss.
CITY OF SAN MARCOS)

I, Aurelia Velasquez, Secretary, San Marcos Traffic Commission, hereby certify that I caused the posting on August 26, 2020 of this agenda in the glass display case at the north entrance of City Hall.

DATED: August 26, 2020

Aurelia
Velasquez

Digitally signed by Aurelia Velasquez
City of San Marcos
aurelia.velasquez@sanmarcos.ca.net
Date: 2020-08-27 00:38:54 -0700

Aurelia Velasquez,
Traffic Commission Secretary

MINUTES

Meeting of the San Marcos Traffic Commission

WEDNESDAY, JULY 1, 2020 | 6:00 PM

City Council Chambers, 1 Civic Center Drive, San Marcos, CA 92069

CALL TO ORDER:

Chairman Rico called the Traffic Commission Meeting to order at 6:01 p.m.

PLEDGE OF ALLEGIANCE:

Led by Commissioner Kirk Erickson

ROLL CALL:

PRESENT: COMMISSIONERS: RICO*, MASTERSON*, ERICKSON*, BRIDGE* AND HANSEN*

ABSENT: COMMISSIONERS: COLLINS

LATE: COMMISSIONERS: Hoaglin*, Carroll*

*Members of the Traffic Commission attending the meeting via teleconference pursuant to Governor Newsom's Executive Order N-25-20.

ALSO PRESENT:

Senior Traffic Engineer, Mike Rafael; Principal Traffic Engineer, Nicholas Abboud; Sargent, Chuck Morreale; and Traffic Commission Secretary, Aurelia Velasquez & Danielle Norris.

ORAL COMMUNICATIONS:

None

APPROVAL OF MINUTES – MARCH 4, 2020

Commissioner Masterson makes a motion to accept the minutes as recorded. Commissioner Hansen seconds the motion. Motion carries.

AYES: COMMISSIONERS: BRIDGE, ERICKSON, HANSEN, MASTERSON AND RICO

NOES: COMMISSIONERS:

ABSTAINS: COMMISSIONERS:

OLD BUSINESS

None

NEW BUSINESS

A. La Sombra Drive-Residential Speeding Concerns

Engineering staff received traffic safety concerns from San Marcos residents living adjacent to La Sombra Drive. Residents reported residential speeding along La Sombra Drive between Discovery Street and Quail Hill Drive. City Staff have deployed their mobile speed radar trailers in the past to help reduce residential speeding. However, residents feel that the speed radar trailers did not have enough impact to slow down motorists.

Residents have suggested the following solutions to City staff for reducing vehicular speeds on La Sombra Drive:

- 1) Installation of additional 25 MPH speed limit signs.
- 2) Increase speed enforcement.
- 3) Installation of an all-way STOP sign at the intersection of La Sombra Drive and Quail Hill Drive.
- 4) Installation of Speed bumps/cushions.

Based on the resident's concerns, Engineering staff initiated a traffic safety evaluation of La Sombra Drive, between Jugador Court and Discovery Street, to determine if traffic calming alternatives would be warranted.

Conclusion and Recommendations:

Engineering staff recommends the following improvements:

- 1) Installation of edge line striping consisting of a four-inch white line on La Sombra Drive between Quail Hill Drive and Discovery Street as an effective traffic calming measure.
- 2) Installation of new speed limit signs (25 MPH) on La Sombra Drive between La Noche Drive and Valencia Avenue to inform motorist of the residential 25MPH zone.
- 3) Install new intersection warning sign (W2-2) to inform motorist in advance of the intersection of Quail Hill Drive and La Sombra Drive in the northbound direction.

- 4) Installation of new double yellow centerline from Valencia Avenue to La Noche Drive due to the curvilinear alignment of the roadway and to help motorists stay in their lane as they navigate through the existing roadway curves.
- 5) Deployment of the City's mobile speed radar trailers to help build and reinforce speed compliance on La Sombra Drive.

AYES: COMMISSIONERS: BRIDGE, ERICKSON, HANSEN, MASTERSON AND RICO

NOES: COMMISSIONERS:

ABSTAINS: COMMISSIONERS:

REPORTS AND INFORMATION ITEMS

A. Engineering Staff Updates:

New ALL-WAY Stop control at Knob Hill Road and Matin Circle.

B. San Diego County Sheriff's Department Traffic Collision Summary And Accident Investigation Log:

(20) DUI/Alcohol Arrest

(10) DUI Accidents

(1) Fatal

(22) Injury Collisions

(36) Non Injury Collisions

(32) Persons Injured

(2) Bicyclist Collisions

(2) Bicyclist Injured

C. Traffic Commission Commentary: N/A

D. Staff Commentary:

Traffic Management Center

Speed Cushion Pilot Project

Traffic Calming Program

Creek Project



City of San Marcos
1 Civic Center Drive
San Marcos, CA 92069

Slurry Seal Project- Twin Oaks Valley Road and San Elijo Road

ADJOURNMENT:

Chairman Rico adjourned the meeting at 6:51 pm.

Arturo Rico, Chairman
Traffic Commission

ATTEST:

Aurelia Velasquez, Secretary
Traffic Commission

AGENDA REPORT

Meeting of the San Marcos Traffic Commission

MEETING DATE: September 2, 2020
AGENDA ITEM NO: 7A
SUBMITTED BY: Michael Rafael, P.E. – Senior Civil Engineer
APPROVED BY: Nic Abboud, P.E. – Principal Civil Engineer
SUBJECT: Request for ALL WAY STOP control (AWSC) at intersection of Shirley Drive and Vineyard Road

BACKGROUND:

Engineering staff received traffic safety concerns from San Marcos residents at the intersection of Shirley Drive and Vineyard Road. Residents feel unsafe in turning out from Shirley Drive to Vineyard Road due to the presence of parked vehicles which obstruct the line of sight at the intersection. Residents feel that an ALL WAY STOP control (AWSC) would provide a safe option for residents turning into and out of Shirley Drive, and would help bring down vehicle speeds on Vineyard Road. Based on the residents' concerns, Engineering staff initiated a traffic safety evaluation at the intersection of Shirley Drive and Vineyard Road to determine if an AWSC or other alternative traffic safety measures would be warranted.

DISCUSSION:

The study area is located at the intersection of Shirley Drive and Vineyard Road in the City of San Marcos (see attached Vicinity Map). Vineyard Road between Woodward Street and Mulberry Drive is classified as a two-lane collector street with a curb-to-curb width of 46 feet and approximately one (1) mile in length, based on the City's Urban Street Design criteria. On-street parking is allowed only on the north side of Vineyard Road and there are 5-foot bike lanes and sidewalks on both sides. The posted speed limit is 40 MPH based on the latest Engineering and Traffic Survey (ET&S) in 2016. The slope of the street is relatively flat. Travel lanes have been narrowed down to 10-feet as a traffic calming measure to reduce vehicle speeds. The corridor also include a high number of private driveways and public street crossings due to the dense existing single/multi-family communities. Shirley Drive is classified as a residential street and also serves as access to the Tuscany Hills rental home community. The posted speed limit is 25 MPH.

Engineering staff reviewed residents' request for an ALL WAY STOP (AWSC) control at the intersection of Shirley Drive and Vineyard Road to improve traffic safety operations. Per the California Manual on Uniform Traffic Control Devices (CAMUTCD), AWSC at intersections is intended to assign traffic movement right-of-way at locations where traffic volumes are approximately equal from all approaches, and is not intended for speed control. Other criteria used for warranting an ALL-WAY STOP control

include the following: history of five (5) or more reported crashes in a year, need to control left-turn conflicts, high pedestrian volumes at the study intersection, sight distance limitations, and an intersection of two residential through-streets of similar design and operating characteristics where an AWSC should be considered. Staff observed heavy usage of on-street parking adjacent to the study intersection which impacts the line of the sight for motorists exiting Shirley Drive. According to the Caltrans Highway Design Manual (HDM), the recommended intersection sight distance (ISD) for a 40 MPH speed limit is 440 feet to the left and 380 feet to the right of the intersection. Implementing the HDM-recommended ISD would require limiting the existing on-street parking area by installation of red curbs. (see attached sight distance exhibit).

Engineering staff reviewed the AWSC criteria for the intersection and found the traffic volumes along the intersection approaches to be unequal (Vineyard Road ADT is 3,533), the ISD to be sufficient with the proposed red curb installation, no significant history of reported collisions, and low pedestrian volumes at the intersection. Therefore, based on staff's evaluation of the uncontrolled intersection, AWSC is not warranted at this time based on the CAMUTCD criteria.

Engineering staff collected both traffic speed and volume data for a mid-week day at midblock. Staff observed that the majority of motorists traveling southbound on Vineyard Road between Woodward Street and Mulberry Drive were traveling at slower speeds, likely due to friction with parked vehicles. The 85th percentile speeds and average daily traffic (ADT) volumes are summarized in the attached table.

Engineering staff also reviewed the collision history for the last three (3) years and found a total of six (6) reported collisions along Vineyard Road between Woodward Street and Mulberry Drive. The types of reported collisions included rear-end, sideswipe, pedestrian, broadside (angle), and hit-and-run collisions. All of the reported collisions may have been attributed to unsafe speeding along the corridor. The collision rate was calculated and determined to be above the State's average rate (1.63 versus 1.03). The higher collision rate prompted staff to re-evaluate the 40 MPH posted speed limit on Vineyard Road and conducted a new Engineering and Traffic Survey (ET&S). The previous ET&S conducted in 2016 on Vineyard Road established the current posted speed limit of 40 MPH based on an 85th percentile speed of 42 MPH. New speed data collected by City staff determined a similar 85th percentile speed of 42 MPH (see attached ET&S documents), consistent with the posted speed limit of 40 MPH. However, with the newly-calculated high-collision rate, the posted speed limit may be reduced to 35 MPH according to the CAMUTCD and California Vehicle Code (CVC). Therefore, Engineering staff recommends a new speed limit of 35 MPH be established on Vineyard Road between Woodward Street and Mulberry Drive.

At this time, no additional traffic calming measures are proposed to reduce speeding on Vineyard Road. Engineering staff will continue to monitor the vehicle speeds after approval and implementation of the proposed 35 mph speed limit change, and will coordinate with the Sheriff's Department on speed enforcement activities. Future traffic calming measures such as permanent

speed radar feedback signs, traffic circles, or other alternative road diet measures, may be considered and evaluated, if the need arises.

CONCLUSION AND RECOMMENDATIONS:

Engineering staff request that the Traffic Commission accept staff's recommendations for the following improvements (see attached exhibits):

- Installation of red curb at the intersection of Shirley Drive and Vineyard Road to improve line of sight at the intersection.
- Installation of new speed limit signs (35 MPH) on Vineyard Road between Woodward Street and Mulberry Drive based on a new ET&S .

Engineering staff also recommends the following public outreach and enforcement activities:

- Speed awareness education campaigns (currently being developed by City staff)
- Deployment of the City's mobile speed radar trailers to help build compliance with and reinforce speed limit.
- Selective speed enforcement by the Sheriff's Department.

TRAFFIC DATA/ROADWAY INFORMATION:

Traffic Volumes:

Vineyard Road, Woodward Street and Mulberry Drive – 3,533 VPD (vehicles per day, April 2019).

Speed Limit:

40 MPH, posted.

Accident History (last 3 years):

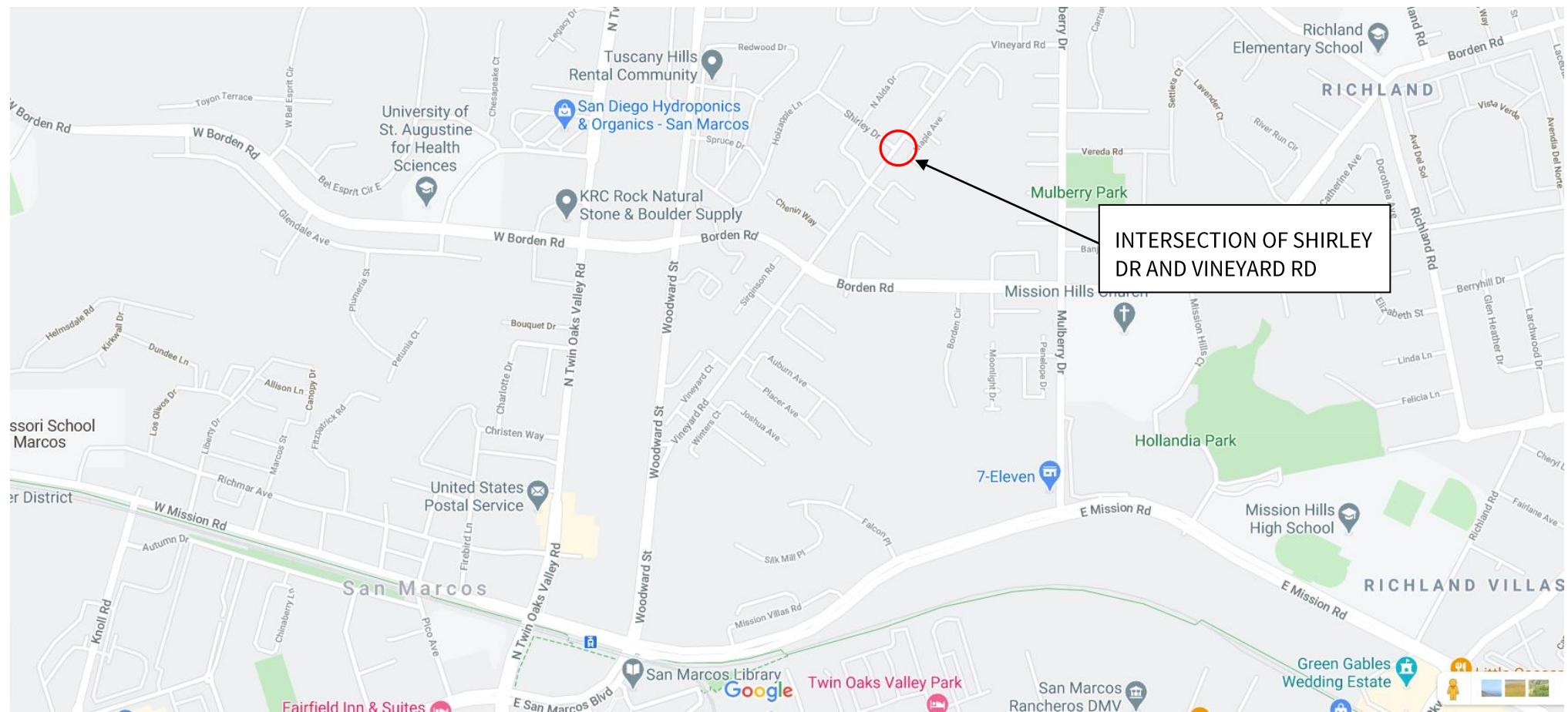
- 02/10/17, 10:37 PM, Vineyard Rd – 155' west of Vineyard/Mulberry, V1 hits parked vehicle – eastbound
- 06/03/17, 12:11 AM, Vineyard Rd @ Chenin Way, Sideswipe, V1 pulls out of Chenin Way and strikes V2 heading eastbound
- 11/16/17, 10:32 AM, Vineyard @ Shirley Drive, Pedestrian (P1-skateboarder) on Shirley Drive collides with V2 on Vineyard Rd.
- 02/26/18, 7:25 PM, Vineyard @ Borden Rd, Rear-end, V1 strikes V2 heading northbound
- 08/12/18, 10:22 PM, Vineyard @ Borden Rd, Broadside, V1 runs red light signal and strikes V2
- 01/11/2020, 10:47 AM, Vineyard @ Poplar Avenue, Sideswipe, V1 hits parked vehicle - southbound



City of San Marcos
1 Civic Center Drive
San Marcos, CA 92069

ATTACHMENT(S)

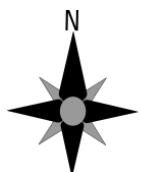
Vicinity Map
Intersection Sight Distance Exhibit
Proposed Red Curb Exhibit
Proposed Speed Limit Change Exhibit
Updated Engineering and Traffic Survey (ET&S)
Traffic Volume and Speed Data Sheet
Photos



VICINITY MAP

INTERSECTION OF SHIRLEY DRIVE AND VINEYARD ROAD

AGENDA ITEM #7A – SEPTEMBER 2020



*NOT TO SCALE

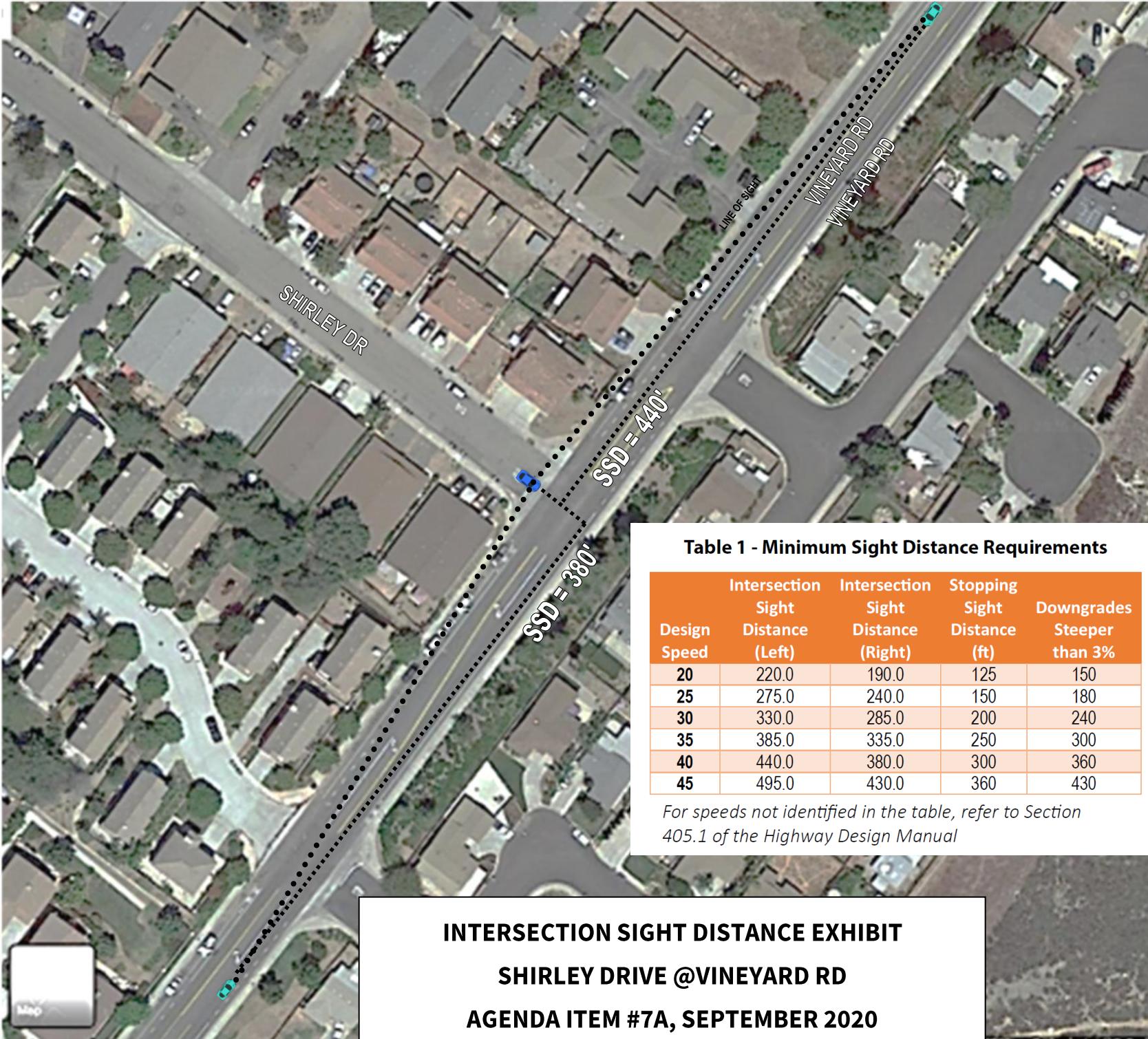


Table 1 - Minimum Sight Distance Requirements

Design Speed	Intersection Sight Distance (Left)	Intersection Sight Distance (Right)	Stopping Sight Distance (ft)	Downgrades Steeper than 3%
20	220.0	190.0	125	150
25	275.0	240.0	150	180
30	330.0	285.0	200	240
35	385.0	335.0	250	300
40	440.0	380.0	300	360
45	495.0	430.0	360	430

For speeds not identified in the table, refer to Section 405.1 of the Highway Design Manual



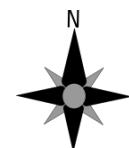
*NOT TO SCALE



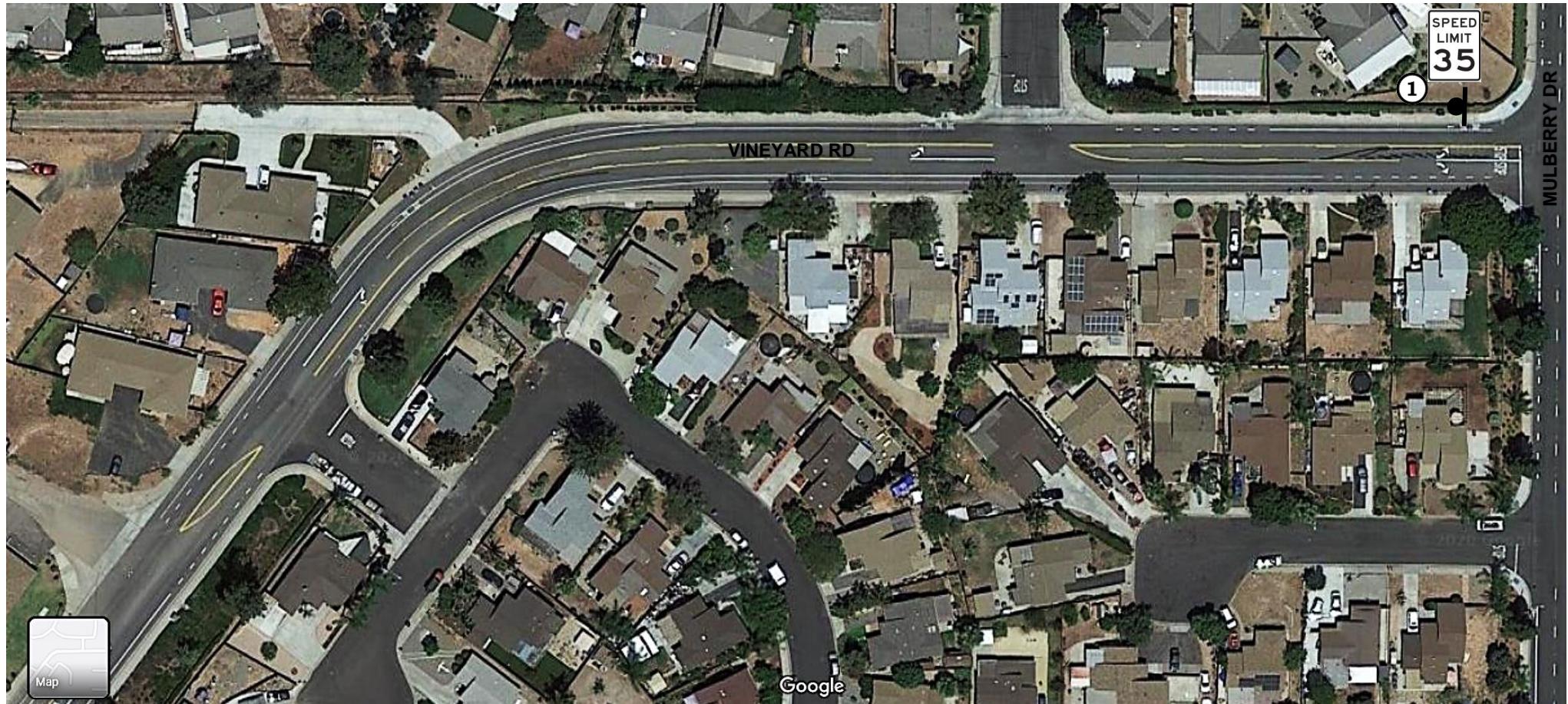
CONSTRUCTION NOTES:

- ① INSTALL RED CURB (~95 FEET).
- ② INSTALL RED CURB (~95 FEET).

**VINEYARD RD @ SHIRLEY DRIVE
PROPOSED RED CURB INSTALLATION
AGENDA ITEM #7A – SEPTEMBER 2020**



*NOT TO SCALE

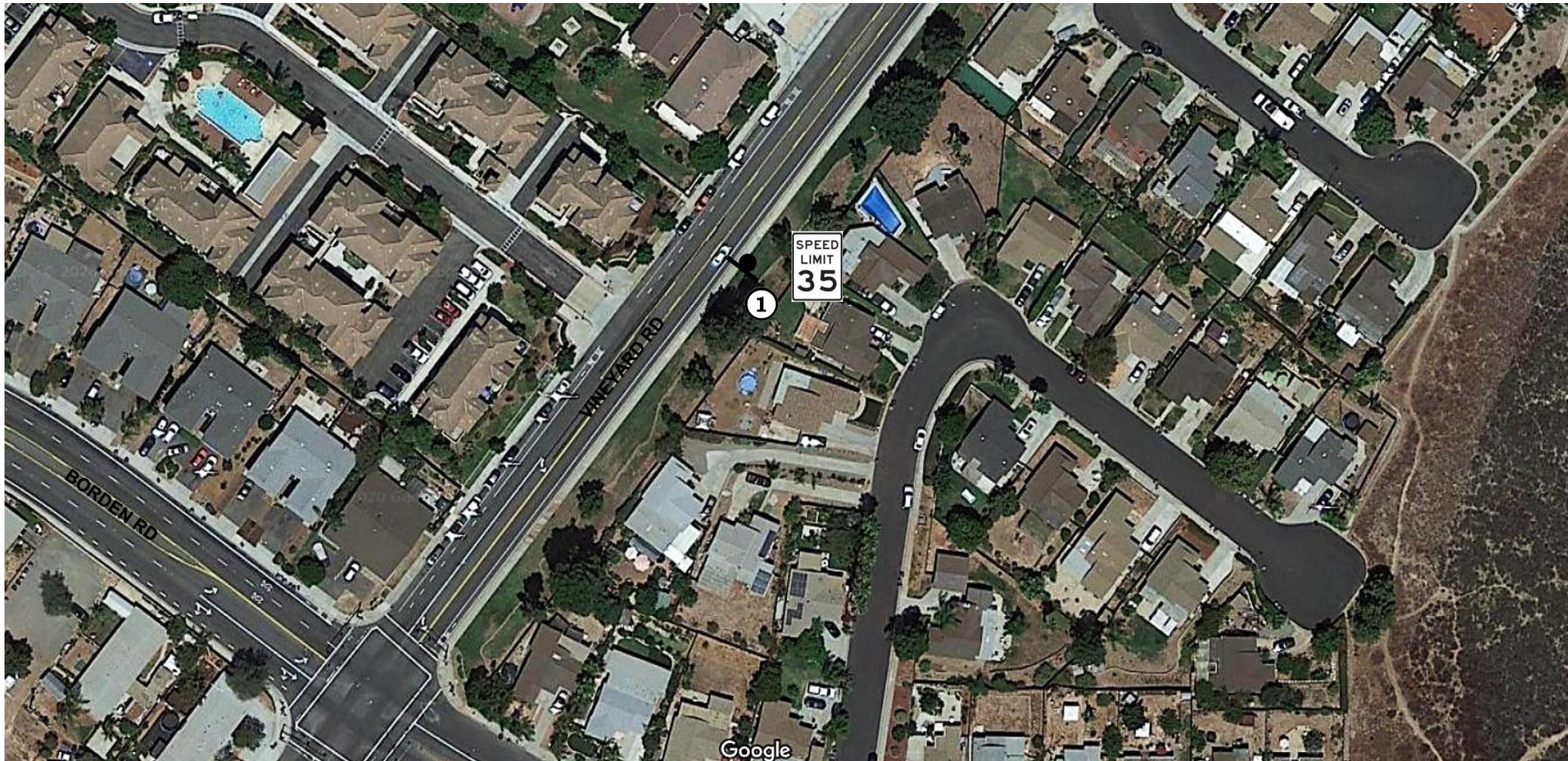


**VINEYARD ROAD (WEST OF MULBERRY DRIVE)
PROPOSED SPEED LIMIT CHANGE
AGENDA ITEM #7A, SEPTEMBER 2020**

CONSTRUCTION NOTES:

① INSTALL NEW R2-1 (35 MPH, 30"x36", HI-INTENSITY) SIGN ON NEW BREAKAWAY POST.

*NOT TO SCALE

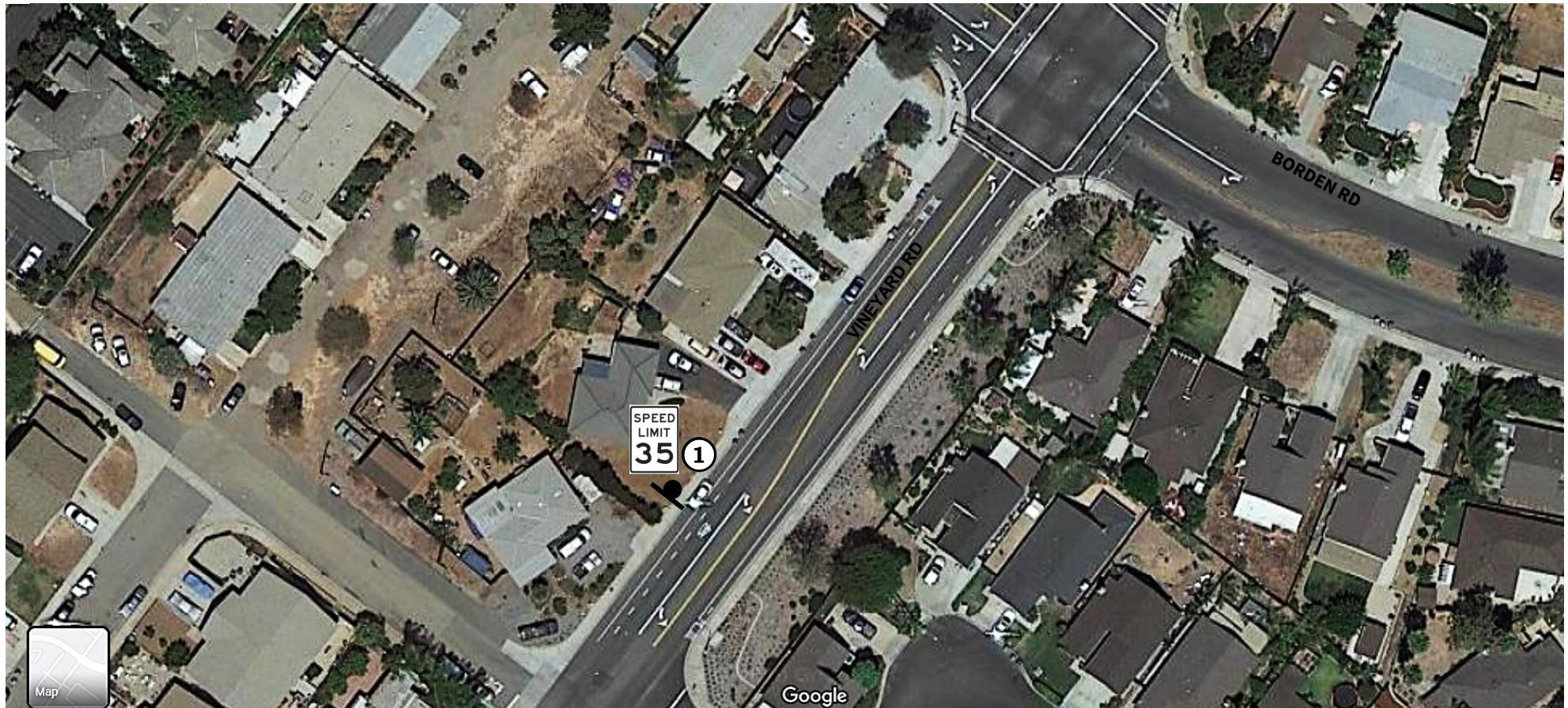


*NOT TO SCALE

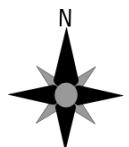
**VINEYARD ROAD (EAST OF BORDEN RD.)
PROPOSED SPEED LIMIT CHANGE
AGENDA ITEM #7A, SEPTEMBER 2020**

CONSTRUCTION NOTES:

1 REMOVE/SALVAGE EXISTING 40 MPH SIGN;
GRIND/SANDBLAST EXISTING 40 MPH SPEED
LEGEND; INSTALL NEW R2-1 (35 MPH, 30"x 36",
HI-INTENSITY) SIGN ON NEW BREAKAWAY
POST.



**VINEYARD ROAD (WEST OF BORDEN RD.)
PROPOSED SPEED LIMIT CHANGE
AGENDA ITEM #7A, SEPTEMBER 2020**



*NOT TO SCALE

CONSTRUCTION NOTES:

1 REMOVE/SALVAGE EXISTING 40 MPH SIGN;
GRIND/SANDBLAST EXISTING 40 MPH SPEED
LEGEND; INSTALL NEW R2-1 (35 MPH, 30"x 36",
HI-INTENSITY) SIGN ON NEW BREAKAWAY
POST.

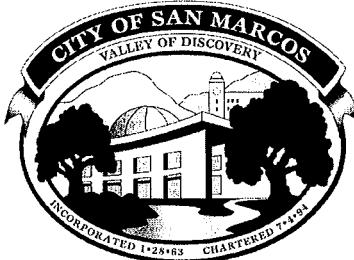


*NOT TO SCALE

**VINEYARD ROAD (EAST OF WOODWARD ST.)
PROPOSED SPEED LIMIT CHANGE
AGENDA ITEM #7A, SEPTEMBER 2020**

CONSTRUCTION NOTES:

① REMOVE/SALVAGE EXISTING 40 MPH SIGN;
GRIND/SANDBLAST EXISTING 40 MPH SPEED
LEGEND; INSTALL NEW R2-1 (35 MPH, 30"x 36",
HI-INTENSITY) SIGN ON EXISTING BREAKAWAY
POST.



CITY OF SAN MARCOS ENGINEERING AND TRAFFIC SURVEY

STREET: VINEYARD ROAD

LIMITS: MULBERRY DRIVE AND WOODWARD STREET

DATE OF SURVEY: 11/7/16

PREPARED BY: R. GARCIA

REVIEWED BY: M.RAFael

A. PREVAILING DATA:

DIRECTIONS: : NORTH/SOUTH
WEATHER CONDITION: : SUNNY, CLEAR
LOCATION OF SURVEY: : MID-BLOCK
85TH PERCENTILE: : 42 MPH
10 MPH PACE: : 33-42 MPH
PERCENT IN PACE: : 83%
POSTED SPEED LIMIT (ON DATE OF SURVEY): 40 MPH
SPEED LIMIT CHANGE: : NO
RECOMMENDED SPEED LIMIT: : N/A

B. ACCIDENT HISTORY:

NO. OF MONTHS COVERED: : 36
TOTAL ACCIDENTS: : 1
COLLISION RATE: : 0.28 ACCIDENTS/MILLION VEHICLE MILES (MVM)
CALIFORNIA STATEWIDE COLLISION RATE: 1.03 ACCIDENTS/MVM
(2010, DISTRICT 11, URBAN, 2 AND 3 LANES)

C. TRAFFIC FACTORS:

AVERAGE DAILY TRAFFIC: : 3453 VEHICLES PER DAY (VPD)
LENGTH OF SEGMENT: : 0.96 MILES
LANE CONFIGURATION: : 2 LANES DIVIDED

D. EXISTING ROAD CONDITIONS:

X-WALKS - CNTRL/UNCNRL: : YES/NO HORIZONTAL ALIGNMENT: STRAIGHT
PEDESTRIANS/BICYCLES: : MODERATE/MODERATE VERTICAL ALIGNMENT: LOW GRADES
SIDEWALKS/BIKE LANES: : YES/YES INTERSECTIONS: MODERATE
ON-STREET PARKING: : YES DRIVEWAYS: MODERATE
OTHER (SPECIFY): : NONE

E. ADJACENT LAND USE:

SINGLE & MULTI-FAMILY RESIDENCES

F. TRAFFIC ENGINEER'S RECOMMENDATION:

THIS SPEED ZONE SATISFIES THE CONDITIONS OF SECTION 627 OF THE CALIFORNIA VEHICLE CODE AND HAS BEEN PREPARED AND EVALUATED IN ACCORDANCE WITH THE CALIFORNIA MANUAL OF TRAFFIC CONTROL DEVICES, SECTION 2B.13 (2014). A SPEED LIMIT POSTING OF 40 MPH IS FOUND TO BE APPROPRIATE AND JUSTIFIED BASED ON THE NEAREST 5 MPH INCREMENT OF THE 85TH PERCENTILE SPEED BEING 42 MPH.

APPROVED AND CERTIFIED BY:

CITY ENGINEER, MATT LITTLE

2/6/17
DATE



VEHICLE SPOT SPEED STUDY

SPEED RANGES	NUMBER OF VEHICLES	PERCENT OF TOTAL	PERCENT ACCUMULATION
20	0	0.0%	0%
21	0	0.0%	0%
22	0	0.0%	0%
23	0	0.0%	0%
24	0	0.0%	0%
25	0	0.0%	0%
26	0	0.0%	0%
27	0	0.0%	0%
28	0	0.0%	0%
29	0	0.0%	0%
30	0	0.0%	0%
31	1	1.0%	1%
32	4	3.9%	5%
33	5	4.9%	10%
34	7	6.8%	17%
35	11	10.7%	27%
36	6	5.8%	33%
37	7	6.8%	40%
38	8	7.8%	48%
39	10	9.7%	57%
POSTED SPEED	40	9.7%	67%
41	11	10.7%	78%
42	10	9.7%	87%
43	2	1.9%	89%
44	4	3.9%	93%
45	4	3.9%	97%
46	2	1.9%	99%
47	1	1.0%	100%
48	0	0.0%	100%
49	0	0.0%	100%
50	0	0.0%	100%
51	0	0.0%	100%
52	0	0.0%	100%
53	0	0.0%	100%
54	0	0.0%	100%
55	0	0.0%	100%
56	0	0.0%	100%
57	0	0.0%	100%
58	0	0.0%	100%
59	0	0.0%	100%
60	0	0.0%	100%
61	0	0.0%	100%
62	0	0.0%	100%
63	0	0.0%	100%
64	0	0.0%	100%
65	0	0.0%	100%
66	0	0.0%	100%
67	0	0.0%	100%
68	0	0.0%	100%
69	0	0.0%	100%
70	0	0.0%	100%
71	0	0.0%	100%
72	0	0.0%	100%
73	0	0.0%	100%
74	0	0.0%	100%
75	0	0.0%	100%
TOTAL VEHICLES:	103		

RECORDER: RAISA G.

LOCATION:

VINEYARD RD FROM MULBERRY DR TO WOODWARD ST

APPROACH: NB/SB

SURFACE: DRY

WEATHER: CLEAR, SUNNY

DATE: 11/7/16

TIME: 2:30-3:01 PM

SURVEY STATISTICS

POSTED SPEED:	<u>40</u> MPH
AVERAGE SPEED:	<u>39</u> MPH
MEDIAN SPEED:	<u>38</u> MPH
(50th PERCENTILE)	
MODAL SPEED:	<u>35</u> MPH
85TH PERCENTILE SPEED:	<u>42</u> MPH
10 MPH PACE:	<u>33 - 42</u> MPH
PERCENT IN PACE:	<u>83%</u>
PERCENT ENFORCEABLE:	<u>0%</u>

COMMENTS:



RADAR SPOT SPEED STUDY FIELD SHEET

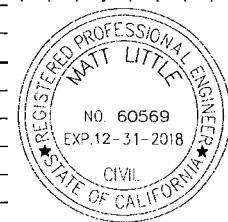
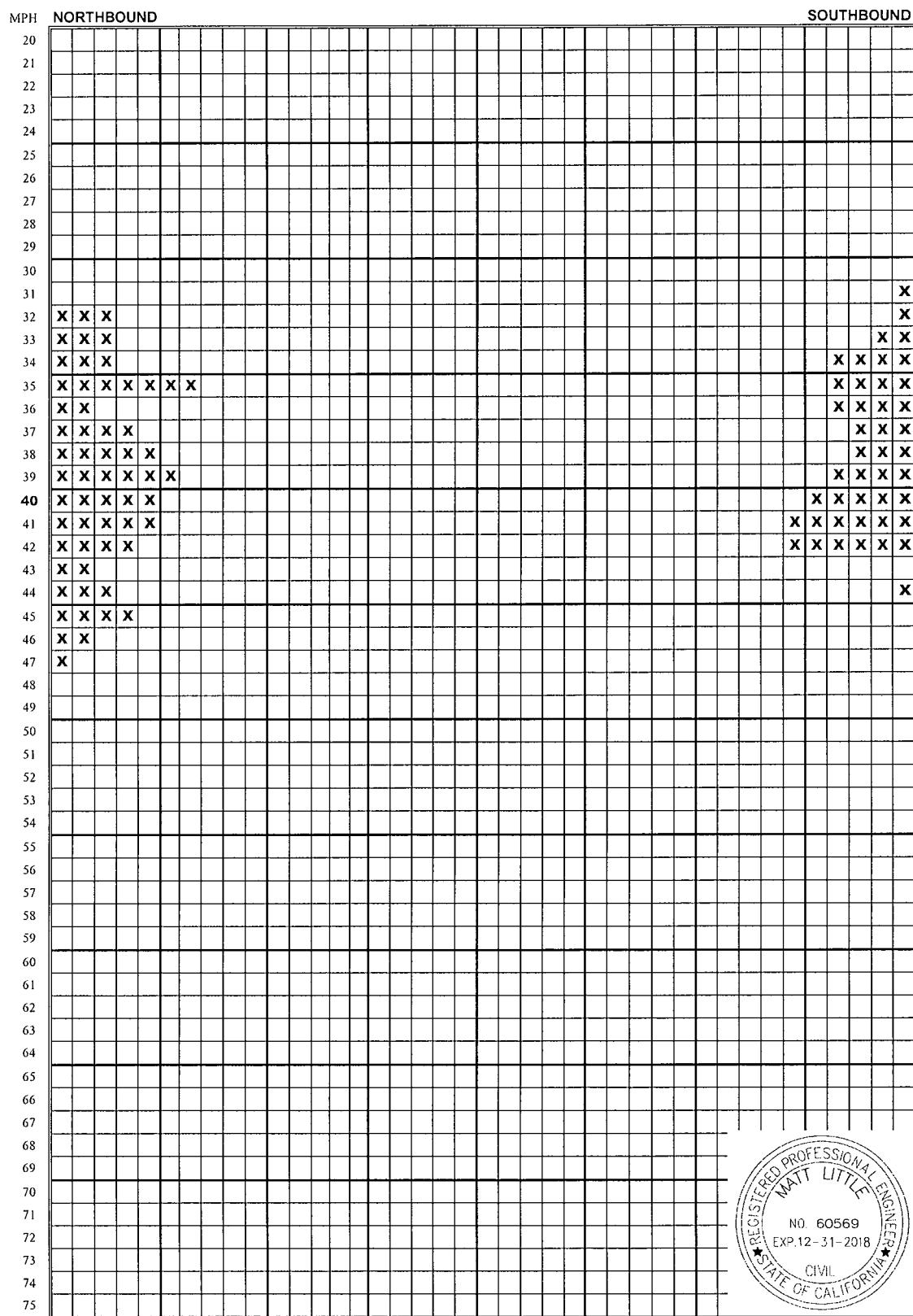
LOCATION: VINEYARD RD FROM MULBERRY DR TO WOODWARD ST APPROACH: NB/SB SURFACE: DRY

DATE: 11/7/16 TIME: 2:30-3:01 PM WEATHER: CLEAR, SUNNY POSTED SPEED: 40 RECORDER: RAISA G.

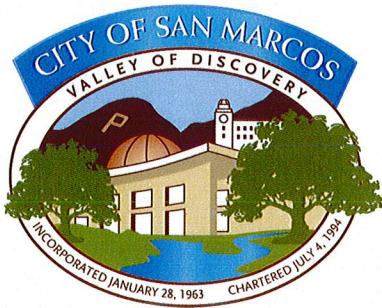
"X" = PASSENGER CARS

"B" = BUSES

"T" = TRUCKS



COMMENTS:

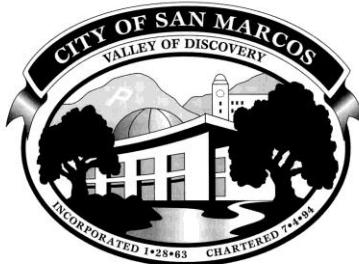


STATE OF CALIFORNIA)
COUNTY OF SAN DIEGO) SS.
CITY OF SAN MARCOS)

I, Phillip Scollick, City Clerk, for the City of San Marcos, California, hereby certify, under penalty of perjury, that the attached and foregoing is a true and correct copy of the ENGINEERING AND TRAFFIC SURVEY SUMMARY, dated November 7, 2016 for VINEYARD ROAD, FROM MULBERRY DRIVE TO WOODWARD STREET.

Phillip Scollick
City Clerk
City of San Marcos

2/9/2017



CITY OF SAN MARCOS ENGINEERING AND TRAFFIC SURVEY

STREET: VINEYARD ROAD

DATE OF SURVEY: 08/20/20

LIMITS: MULBERRY DRIVE AND WOODWARD STREET

PREPARED BY: M.RAFAEL

REVIEWED BY: N.ABOUD

A. PREVAILING DATA:

DIRECTIONS: : NORTH/SOUTH
WEATHER CONDITION: : SUNNY, CLEAR
LOCATION OF SURVEY: : MID-BLOCK
85TH PERCENTILE: : 42 MPH
10 MPH PACE: : 34-43 MPH
PERCENT IN PACE: : 76%
POSTED SPEED LIMIT (ON DATE OF SURVEY) : 40 MPH
SPEED LIMIT CHANGE: : YES
RECOMMENDED SPEED LIMIT: : 35 MPH

B. ACCIDENT HISTORY:

NO. OF MONTHS COVERED: : 36
TOTAL ACCIDENTS: : 6
COLLISION RATE: : 1.63 ACCIDENTS/MILLION VEHICLE MILES (MVM)
CALIFORNIA STATEWIDE COLLISION RATE: 1.03 ACCIDENTS/MVM
(2010, DISTRICT 11, URBAN, 2 AND 3 LANES)

C. TRAFFIC FACTORS:

AVERAGE DAILY TRAFFIC: : 3,533 VEHICLES PER DAY (VPD IN 2019)
LENGTH OF SEGMENT: : 0.96 MILES
LANE CONFIGURATION: : 2 LANES DIVIDED

D. EXISTING ROAD CONDITIONS:

X-WALKS - CNTRL/UNCNRL: : YES/NO HORIZONTAL ALIGNMENT: STRAIGHT
PEDESTRIANS/BICYCLES: : MODERATE/MODERATE VERTICAL ALIGNMENT: LOW GRADES
SIDEWALKS/BIKE LANES: : YES/YES INTERSECTIONS: MODERATE
ON-STREET PARKING: : YES (ONE-SIDE) DRIVEWAYS: HIGH
OTHER (SPECIFY): : NONE

E. ADJACENT LAND USE:

SINGLE & MULTI-FAMILY RESIDENCES

F. TRAFFIC ENGINEER'S RECOMMENDATION:

THIS SPEED ZONE SATISFIES THE CONDITIONS OF SECTION 627 OF THE CALIFORNIA VEHICLE CODE AND HAS BEEN PREPARED AND EVALUATED IN ACCORDANCE WITH THE CALIFORNIA MANUAL OF TRAFFIC CONTROL DEVICES, SECTION 2B.13 (2014). A SPEED LIMIT POSTING OF 40 MPH IS FOUND TO BE APPROPRIATE AND JUSTIFIED BASED ON THE NEAREST 5 MPH INCREMENT OF THE 85TH PERCENTILE SPEED BEING 42 MPH. HOWEVER, DUE TO THE HIGH COLLISION RATE ON THE CORRIDOR, IT IS RECOMMENDED THAT DOWNWARD SPEED ZONING APPLY IN COMPLIANCE WITH CVC 22358.5. THEREFORE, THE POSTED SPEED LIMIT SHALL BE REDUCED TO 35 MPH.

APPROVED AND CERTIFIED BY:

CITY ENGINEER, MATT LITTLE

DATE



Spot Speed Study

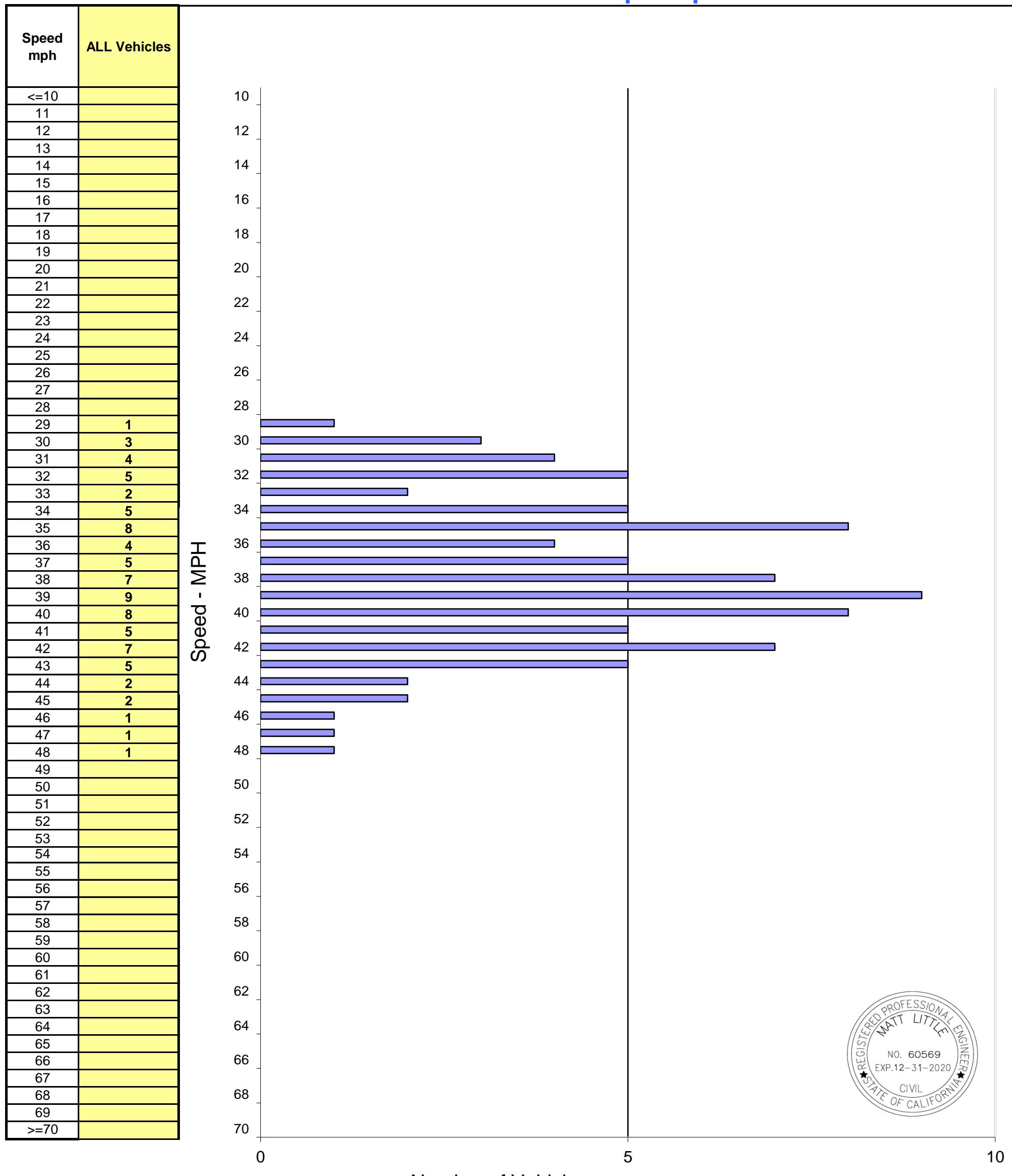
Prepared by: National Data & Surveying Services

City of San Marcos

DATE: 8/20/2020
TIME: 5:00-6:00pm

Location: Vineyard Rd @ Auburn Ave. (midblock between Woodward St. and Borden Rd.)
Posted Speed: 40 MPH Weather-Clear/Dry

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	85	29 - 48	38 mph	42 mph	34 - 43	63	74%	17% / 15	9% / 7



Spot Speed Study

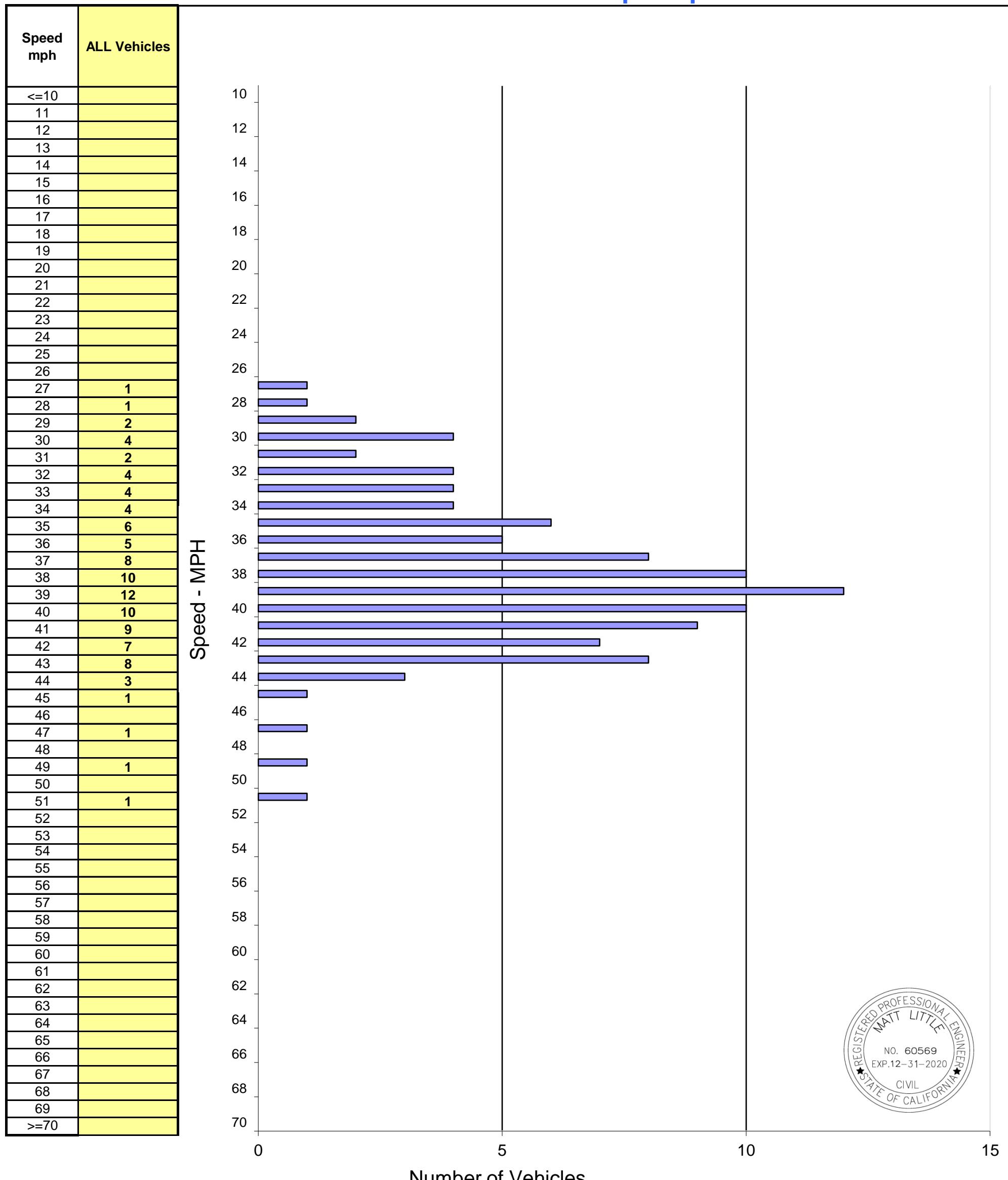
Prepared by: National Data & Surveying Services

City of San Marcos

DATE: 8/20/2020
TIME: 4:00-5:00PM

Location: Vineyard Rd - 145' north of Hickory Rd. (midblock btwn Mulberry Dr and Borden Rd)
Posted Speed: 40 MPH Weather-Clear/Dry

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	104	27 - 51	39 mph	42 mph	34 - 43	79	76%	17% / 18	7% / 7

SPEED

Vineyard Rd Bet. Borden Rd & Woodward St

Day: Tuesday

Date: 8/18/2020

City: San Marcos

Project #: CA20-40178-001

Summary

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	0	0	0	1	3	4	5	1	0	0	0	0	0	14
01:00	0	0	1	0	3	4	6	0	0	0	0	0	0	14
02:00	0	0	0	1	1	2	0	0	1	0	0	0	0	5
03:00	0	0	0	1	1	3	2	1	0	0	0	0	0	8
04:00	0	0	0	0	1	3	2	3	3	1	0	0	0	13
05:00	0	1	0	2	13	11	8	3	2	0	0	0	0	40
06:00	0	0	4	7	19	32	24	3	0	0	0	0	0	89
07:00	0	0	2	6	20	51	39	18	5	1	0	0	0	142
08:00	1	1	3	9	31	38	42	10	3	0	0	0	0	138
09:00	1	0	1	5	27	27	36	13	3	0	0	0	0	113
10:00	3	0	6	8	26	38	29	8	3	0	0	0	0	121
11:00	0	0	3	4	31	61	40	10	1	0	0	0	0	150
12:00 PM	3	1	1	7	27	66	39	18	3	1	0	0	0	166
13:00	2	2	4	10	22	34	47	11	2	0	0	0	0	134
14:00	1	3	1	8	26	52	49	11	0	1	0	0	0	152
15:00	4	2	2	9	32	68	43	16	5	1	0	0	0	182
16:00	3	2	3	7	33	80	54	22	5	0	0	0	0	209
17:00	3	2	4	8	48	78	64	19	8	0	0	0	0	234
18:00	3	1	4	13	35	48	48	16	0	0	0	0	0	168
19:00	3	0	5	8	30	67	33	12	1	0	0	0	0	159
20:00	0	1	5	10	24	47	33	10	0	1	0	0	0	131
21:00	1	0	3	7	16	34	26	7	1	0	0	0	0	95
22:00	0	1	1	5	12	20	20	6	0	0	0	0	0	65
23:00	0	0	0	2	11	22	9	5	0	0	0	0	0	49
Totals	28	17	53	138	492	890	698	223	46	6				2591
% of Totals	1%	1%	2%	5%	19%	34%	27%	9%	2%	0%				100%

AM Volumes	5	2	20	44	176	274	233	70	21	2	0	0	0	847
% AM	0%	0%	1%	2%	7%	11%	9%	3%	1%	0%				33%
AM Peak Hour	10:00	05:00	10:00	08:00	08:00	11:00	08:00	07:00	07:00	04:00				11:00
Volume	3	1	6	9	31	61	42	18	5	1				150
PM Volumes	23	15	33	94	316	616	465	153	25	4	0	0	0	1744
% PM	1%	1%	1%	4%	12%	24%	18%	6%	1%	0%				67%
PM Peak Hour	15:00	14:00	19:00	18:00	17:00	16:00	17:00	16:00	17:00	12:00				17:00
Volume	4	3	5	13	48	80	64	22	8	1				234
Directional Peak Periods			AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Speeds			Volume	%	Volume	%	Volume	%	Volume	%	Volume	%	Volume	%
			280	11%	300	12%	443	17%	1568	61%				

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Vineyard Rd	Summary	32	38	38	44	48	2591

SPEED

Vineyard Road between Borden Road and Mulberry Drive

Day: Monday

Date: 8/24/2020

City: San Marcos

Project #: CA20-40178-001

Summary

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	0	0	0	0	3	2	0	0	0	0	0	0	0	5
01:00	0	0	0	0	0	0	2	0	0	0	0	0	0	2
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	1	3	1	1	1	0	0	0	0	0	7
04:00	1	0	0	1	1	2	1	0	0	1	0	0	0	7
05:00	0	0	2	5	3	4	4	5	0	1	0	0	0	24
06:00	2	0	3	8	10	7	5	6	3	0	0	0	0	44
07:00	2	0	3	9	13	25	10	7	3	1	0	0	0	73
08:00	3	0	1	8	21	21	12	5	2	0	0	0	0	73
09:00	2	0	4	3	11	11	11	5	1	0	0	0	0	48
10:00	0	0	0	2	13	15	20	10	3	0	0	0	0	63
11:00	3	0	4	11	21	30	31	14	5	1	0	0	0	120
12:00 PM	1	0	1	8	13	31	17	8	3	1	0	0	0	83
13:00	2	0	3	7	11	31	23	8	5	1	0	0	0	91
14:00	1	0	1	8	13	29	25	13	3	2	0	0	0	95
15:00	1	1	0	11	16	24	26	15	2	0	0	0	0	96
16:00	2	2	4	8	32	22	32	23	2	1	0	0	0	128
17:00	0	2	5	12	27	33	36	17	3	0	0	0	0	135
18:00	1	0	2	12	22	21	11	9	1	0	0	0	0	79
19:00	1	0	4	8	20	23	10	3	1	0	0	0	0	70
20:00	1	0	1	5	12	17	11	6	2	0	0	0	0	55
21:00	0	1	1	10	9	8	4	1	2	0	0	0	0	36
22:00	0	1	1	6	11	6	3	3	0	0	0	0	0	31
23:00	0	0	1	0	1	6	4	0	0	0	0	0	0	12
Totals	23	7	41	143	286	369	299	159	41	9				1377
% of Totals	2%	1%	3%	10%	21%	27%	22%	12%	3%	1%				100%

AM Volumes	13	0	17	48	99	118	97	53	17	4	0	0	0	466
% AM	1%		1%	3%	7%	9%	7%	4%	1%	0%				34%
AM Peak Hour	08:00		09:00	11:00	08:00	11:00	11:00	11:00	11:00	04:00				11:00
Volume	3		4	11	21	30	31	14	5	1				120
PM Volumes	10	7	24	95	187	251	202	106	24	5	0	0	0	911
% PM	1%	1%	2%	7%	14%	18%	15%	8%	2%	0%				66%
PM Peak Hour	13:00	16:00	17:00	17:00	16:00	17:00	17:00	16:00	13:00	14:00				17:00
Volume	2	2	5	12	32	33	36	23	5	2				135
Directional Peak Periods			AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Speeds			Volume	%	Volume	%	Volume	%	Volume	%	Volume	%	Volume	%
			146	11%	174	13%	263	19%	794	58%				

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Vineyard Rd	Summary	30	38	37	45	49	1377

Looking northbound on Vineyard Rd @ Shirley Drive



Looking southbound on Vineyard Rd @ Shirley Drive



Southbound Vineyard Rd. @ Shirley Drive



Southbound Vineyard Rd. @ Syrah Lane



Northbound on Vineyard Road @ Auburn Ave.



Northbound Vineyard Road @ Chenin Way

