

AGENDA

Meeting of the San Marcos Traffic Commission

Meeting Date: October 4, 2017 | **Meeting Time:** 6:00 PM

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

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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 Development Services 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

September 6, 2017

6. OLD BUSINESS

a. None

7. NEW BUSINESS

- a. Request for One-Way STOP Sign at Buckhorn Avenue and Iron Horse Drive

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, Denise Avila, Secretary, San Marcos Traffic Commission, hereby certify that I caused the posting on September 28, 2017 of this agenda in the glass display case at the north entrance of City Hall.

DATED: September 28, 2017



Denise Avila,
Traffic Commission Secretary

MINUTES

Meeting of the San Marcos Traffic Commission

WEDNESDAY, SEPTEMBER 6, 2017 | 6:00 PM

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

CALL TO ORDER: Vice Chairman Rico called the Traffic Commission Meeting to order at 6:06 p.m.

PLEDGE OF ALLEGIANCE: Led by Commissioner Buckley

ROLL CALL:

PRESENT: NICKEL, MAKROGIANNIS, RICO, MUSGROVE, SAVOVIC, BUCKLEY
ABSENT: MASTERSON, COLLINS, HANSEN

ALSO PRESENT: Senior Traffic Engineer, Mike Rafael; Principal Traffic Engineer, Nicholas Abboud; Sheriff Deputy, Mark Foster; and Traffic Commission Secretary, Denise Avila.

ORAL COMMUNICATIONS

Mr. Jack Wright resides at 547 Wildhorse Lane, expressed concerns about the amount of traffic and the safety of children walking to school along Oleander Avenue. Mr. Wright is concerned about the lack of sidewalk and the amount of traffic, specifically of big delivery trucks, that drive on Oleander Avenue at various hours of the day. Mr. Wright mentioned a STOP sign was added at the intersection of Oleander Avenue and Alamitos Way but this new sign has not helped with the safety of the area. He expressed the interest of installing speed bumps and additional speed limit signs to help with the issues.

Engineering staff to report back to the Traffic Commission on findings and recommendations after completion of their investigation.

APPROVAL OF MINUTES – June 7, 2017

Commissioner Buckley makes a motion to accept the minutes as recorded. Commissioner Nickel seconds the motion. Motion carries.

DRAFT

AYES: COMMISSIONERS: NICKEL, MAKROGIANNIS, RICO, MUSGROVE, SAVOVIC, BUCKLEY

NOES: COMMISSIONERS:

ABSTAINS: COMMISSIONER:

6) OLD BUSINESS

- a. None

7) NEW BUSINESS

- a. San Elijo Hills Traffic Safety Proposals (Warren Witt)

City staff conducted a series of engineering investigations to determine the feasibility of implementing Mr. Witt's proposed recommendations:

- **1.** Replace the missing speed limit sign below the Double Peak K-8 school on S. Twin Oaks Valley Road. Staff recommends removal of 50 MPH speed limit sign and installation of new 45 MPH speed limit sign and pavement legends with a new "SCHOOL SPEED LIMIT END" sign.
- **2.** Extend the 25 MPH speed limit zone in the San Elijo Hills Town Center. City staff recommends a longer transition speed zone to effectively reduce the posted speed limit from 45 MPH to 25 MPH into the town center and a new 35 MPH speed zone be set on San Elijo Road between Stephanie Court and Elfin Forest Road.
- **3.** Remove the 25 MPH school speed limit signs located in Eastbound side of San Elijo Road and move westbound school flashing beacon/speed feedback sign on San Elijo Road closer to San Elijo Elementary School. Staff recommends removal of existing 25 MPH school zone sign "WHEN CHILDREN ARE PRESENT" and "END SCHOOL ZONE" signs within the Town Center.
- **4.** Add more 25 MPH speed limit signs in the San Elijo Town Center on both sides of the San Elijo Road to reinforce the speed limit. Staff recommends installation of additional 25 MPH signs at the town center couplet in the northbound direction and relocation of the existing speed feedback sign display on northbound San Elijo Road.

DRAFT

- **5.** Extend the left turn lane on the westbound San Elijo Road at Schoolhouse Way during school-time hours due to the significant block of through traffic. Staff has implemented signal timing adjustments to allow the signal to serve the left turn movements into Schoolhouse Way twice in a signal cycle during the AM peak. Due to video detection issues the City has replaced with high performance thermal cameras which will improve the traffic signal operations at the intersection.
- **6.** Widen the right turn lane on the eastbound side of San Elijo Road turning right into Schoolhouse Way. Right turn volumes are due to school peak traffic during limited times of the day and do not warrant a separate right turn lane based on City design standards.
- **7.** Timing of the crosswalk lights in the San Elijo Hills Town Center delay traffic regardless of whether pedestrians are crossing or not. City staff will also modify the pedestrian signal timing to deactivate pedestrian recall after 7pm and will be reduced the LPI (lead pedestrian interval) to 3 seconds from 5 seconds to continue to serve the purpose of providing advance walk. Staff will continue to monitor the town center's traffic flow and update signal timing in the next few months.
- **8.** Create a safe a passageway for pedestrian traffic on S. Twin Oaks Valley Road by erecting a guardrail from Double Peak K-8 school to S. Village Drive. Based on Caltrans criteria for guardrail installation, guardrails are not warranted for this roadway segment. Staff provided the School District with a recommended safe route to school path that identifies the west side of San Elijo Road as the preferred walking route.
- **9.** Widen the northbound side of Twin Oaks Valley Road at East Barham Drive to create a dedicated right turning lane. City staff to recommend that this improvement be further evaluated and possibly programmed into the CIP budget for the future. In the interim, City staff will continue to monitor and evaluate the traffic signal timing at the intersection and make timing adjustments as needed.
- **10.** Create a bicycle-shared lane on both sides of Melrose Drive between Sparrow Lane and San Elijo Road. Due to the insufficient right-of-way to construct a standard bike lane, Staff recommends the installation of "Bicycles May Use Full Lane" signs on Melrose Drive.

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- **11.** New Right turn lane for High Occupancy Vehicles (HOV) only onto East Highway 78 from northbound TOVR (#3 lane). Caltrans has proposed a modified shared lane configuration, but to allow only HOV vehicles to make the right turn onto the SR-78 on-ramp from the #3 lane. Single-occupancy vehicles could continue to use the #3 lane for northbound through movement.

Additional Information: City staff will survey existing vegetation and trees that are currently blocking existing traffic signs to allow visibility. City Staff does recommend new curve warning and Chevron signs on Southbound Twin Oaks Valley Road approaching South Village Drive will be installed.

Commissioner Buckley makes a motion to accept staff recommendations. Commissioner Makrogiannis seconds the motion. Motion carries.

AYES: COMMISSIONERS: NICKEL, MAKROGIANNIS, RICO, MUSGROVE, SAVOVIC, BUCKLEY

NOES: COMMISSIONERS:

ABSTAINS: COMMISSIONER:

- b. Reevaluation of ALL WAY STOP Controls at Linda Vista Drive and Private Driveway (County of San Diego)

The County of San Diego traffic engineers provided their independent review and assessment of the traffic conditions at the intersection since the conflicting eastbound approach of the intersection falls within their jurisdiction, and concluded that the existing STOP signs should remain per CA MUTCD, Section 2B.07, Option C.

City staff concurs with the County's assessment and thereby recommends that the existing STOP signs remain in operation at this location. City staff also recommends that the Sheriff's Department enforce violations for motorists "running" the existing STOP signs at the intersection.

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Commissioner Musgrove makes a motion to accept staff recommendations. Commissioner Nickel seconds the motion. Motion carries.

AYES: COMMISSIONERS: NICKEL, MAKROGIANNIS, RICO, MUSGROVE, SAVOVIC

NOES: COMMISSIONERS: BUCKLEY

ABSTAINS: COMMISSIONER:

8) REPORTS AND INFORMATION ITEMS

- a. Work Order Updates
- b. San Diego County Sheriff's Department Traffic Collision Summary And Accident Investigation Log - Will be presented in the October 4, 2017 Traffic Commission meeting
- c. Traffic Commission Commentary
- d. Staff Commentary

9) ADJOURNMENT: Vice Chairman Rico adjourned the meeting at 8:05 pm.

Arturo Rico, Vice Chairman
Traffic Commission

ATTEST:

Denise Avila, Secretary
Traffic Commission

DRAFT

AGENDA REPORT

Meeting of the San Marcos Traffic Commission

MEETING DATE: October 4, 2017
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 One-Way STOP Sign at Buckhorn Avenue and Iron Horse Drive

BACKGROUND:

Donna Renteria, a resident of San Marcos, requested City staff to re-evaluate the intersection of Buckhorn Avenue and Iron Horse Drive in the Discovery Hills community. She is concerned about the residential speeding in her neighborhood and limited sight distance at her residence driveway on 918 Iron Horse Drive. She feels that she does not have adequate time to back out of her driveway if a vehicle was to turn right onto Iron Horse Drive from Buckhorn Avenue. She is also concerned about the increase of vehicular traffic in her neighborhood as a result of proposed new developments east of her community (Rancho Tesoro and MU-4 site).

DISCUSSION:

The intersection of Buckhorn Avenue and Iron Horse Drive is within the Discovery Hills residential community of San Marcos. The community is located east of Lakeview Park and Discovery Lake. The community consists of approximately 99 single family residences built in 1993. Foxhall Drive and Santa Barbara Drive currently provide ingress and egress to the community from Craven Road. Santa Barbara Drive has recently been extended south from Orchid Avenue through the new Rancho Tesoro development where it connects to Village Drive.

Buckhorn Avenue and Iron Horse Drive are both two-way residential streets with a curb-to-curb width of 40 feet. There are sidewalks and on-street parking on both sides. There is an existing "YIELD" sign for the northbound approach on Iron Horse Drive at Buckhorn Avenue. This is the only right-of-way control device at the intersection. The speed limit on the residential streets is the *prima facie* speed of 25 MPH per the California Vehicle Code.

City staff conducted an evaluation of the right-of-way controls at the intersection. Based on staff's research of the approved street improvement plans, the northbound approach on Buckhorn Avenue at Iron Horse Drive was previously designed for installation of a one-way STOP. Staff could not locate records that authorized a design or field change from a STOP to a YIELD sign.

Based on the data collected, the traffic volumes on Buckhorn Avenue and Iron Horse Drive were 403 vehicles per day (vpd), northbound on Buckhorn Avenue and 319 vpd, westbound on Iron Horse Drive. The speed data collected showed the 85th percentile speed in the northbound direction to be 22 MPH and in the

westbound direction to be 14 MPH. There were no reported collisions at the intersection within the last 3 years.

Two existing residential properties (916 Iron Horse Drive and 918 Iron Horse Drive) are currently impacted by the YIELD control at the intersection due to their proximity to the intersection. The available stopping sight distances at the two (2) driveways were measured manually by City staff using a rolling tape wheel, and were found to be 50 and 80 feet for the 916 and 918 Iron Horse Drive driveways, respectively (see exhibit and photos). These available stopping sight distances are below the minimum 150-foot sight distance required to satisfy the 25 MPH residential speed limit (see Table 201.1 of the Caltrans Highway Design Manual). Based on the residential speed limit, both driveways (916 and 918 Iron Horse Drive) would have inadequate sight distances to avoid the conflicting traffic traveling from northbound Buckhorn Avenue to eastbound Iron Horse Drive.

The California Manual on Uniform Traffic Control Devices (CA MUTCD), Section 2B.06, STOP Sign Applications, states that, ***"The use of STOP signs on the minor-street approaches should be considered if engineering judgment indicates that a stop is always required because of one or more of the following conditions...A restricted view exists that requires road users to stop in order to adequately observe conflicting traffic on the through street or highway".*** Based on the intersection geometry, Buckhorn Avenue is considered as the minor street in this case. Therefore, Engineering staff recommends installation of a one-way STOP sign for the northbound approach on Buckhorn Avenue at Iron Horse Drive.

With the development of the Rancho Tesoro community in the next few years, traffic volumes are forecasted to increase on these residential streets in Discovery Hills. Currently, the new community is zoned for the existing Discovery Elementary school, and its future residents are likely to "cut through" the Discovery Hills community on Orchid Avenue, Iron Horse Drive, and Buckhorn Avenue to get to and from school. As a result, the Rancho Tesoro development will be responsible for partial funding (10 percent) of a new traffic signal on Craven Road and Santa Barbara Drive which would help deter vehicular traffic away from the Discovery Hills development and improve overall future traffic circulation in the area. The City will likely construct a new traffic signal as part of its Capital Improvement Program when future traffic volume demands warrant it. Staff will continue to monitor traffic volumes and determine if alternative traffic calming measures can also be implemented in the interim.

TRAFFIC VOLUMES:

Buckhorn Avenue/Iron Horse Drive – 722 VPD (2017)

SPEED LIMIT

Prima Facie (25 MPH) – residential streets

ACCIDENT HISTORY (last 3 years):

None

UNUSUAL CONDITIONS:

None.

CONCLUSION AND RECOMMENDATIONS:

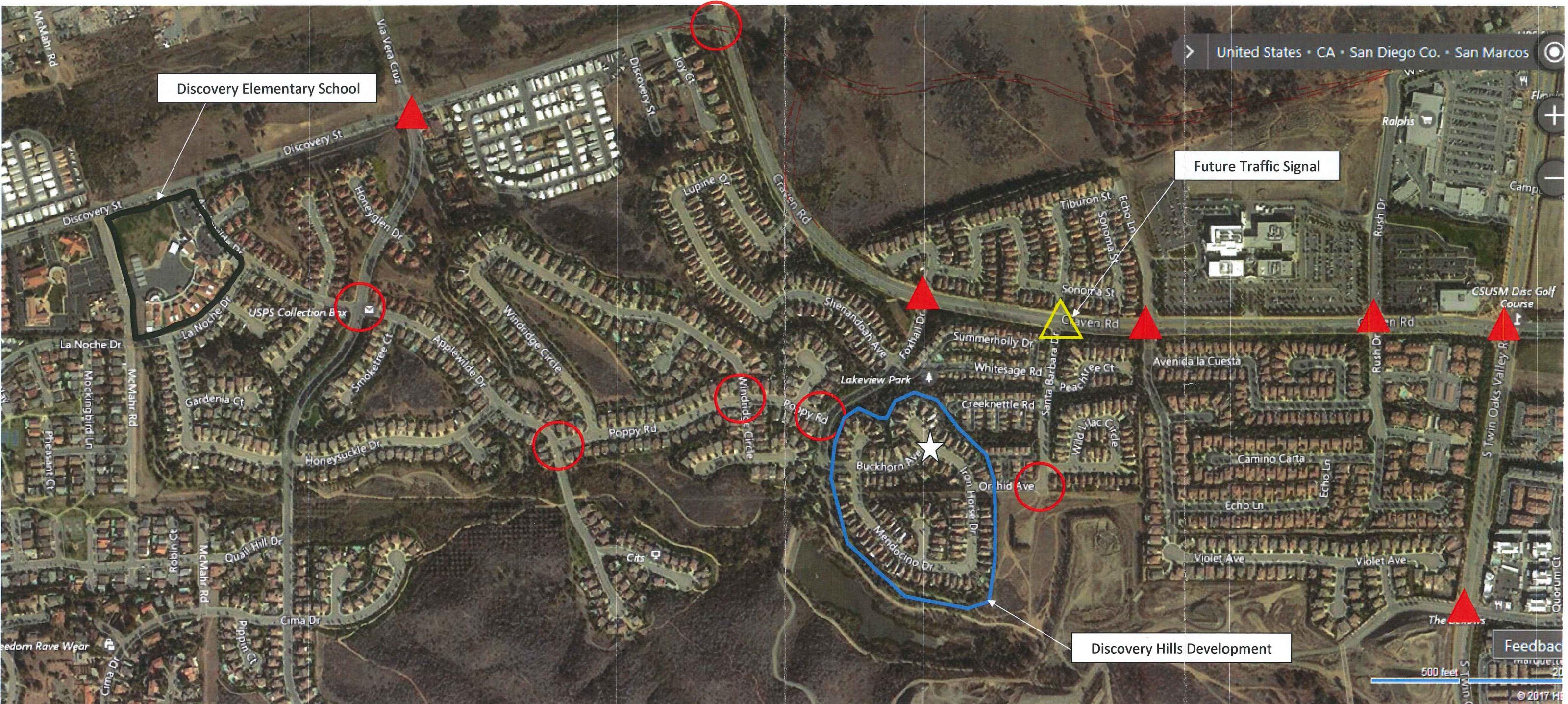
City staff recommends installation of a one-way STOP sign on the northbound approach of Buckhorn Avenue at Iron Horse Drive. Other roadway striping improvements include 50-feet of double yellow lines at all three (3) intersection approaches, and STOP pavement legend and STOP bar along the northbound approach of Buckhorn Avenue.

Attachment(s)

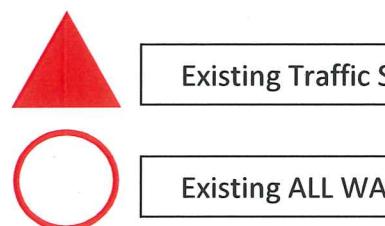
Vicinity Map
Rancho Tesoro Exhibit
Sight Distance Exhibit
Proposed STOP Sign Exhibit
Photos

VICINITY MAP

BUCKHORN AVENUE @ IRON HORSE DRIVE



AGENDA #7A
TRAFFIC COMMISSION MEETING
OCTOBER 4, 2017



Buckhorn Ave@Iron Horse
Drive Intersection



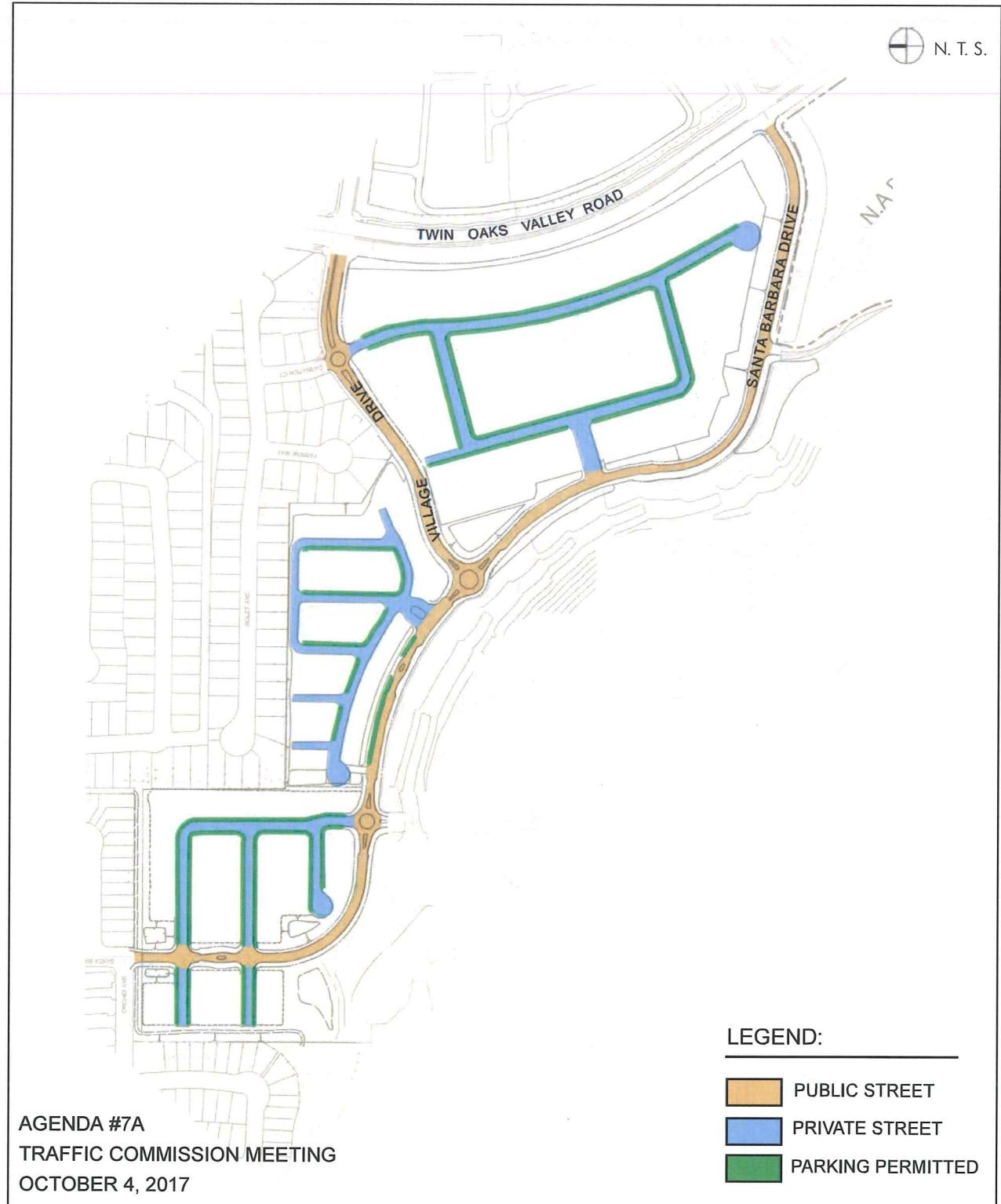
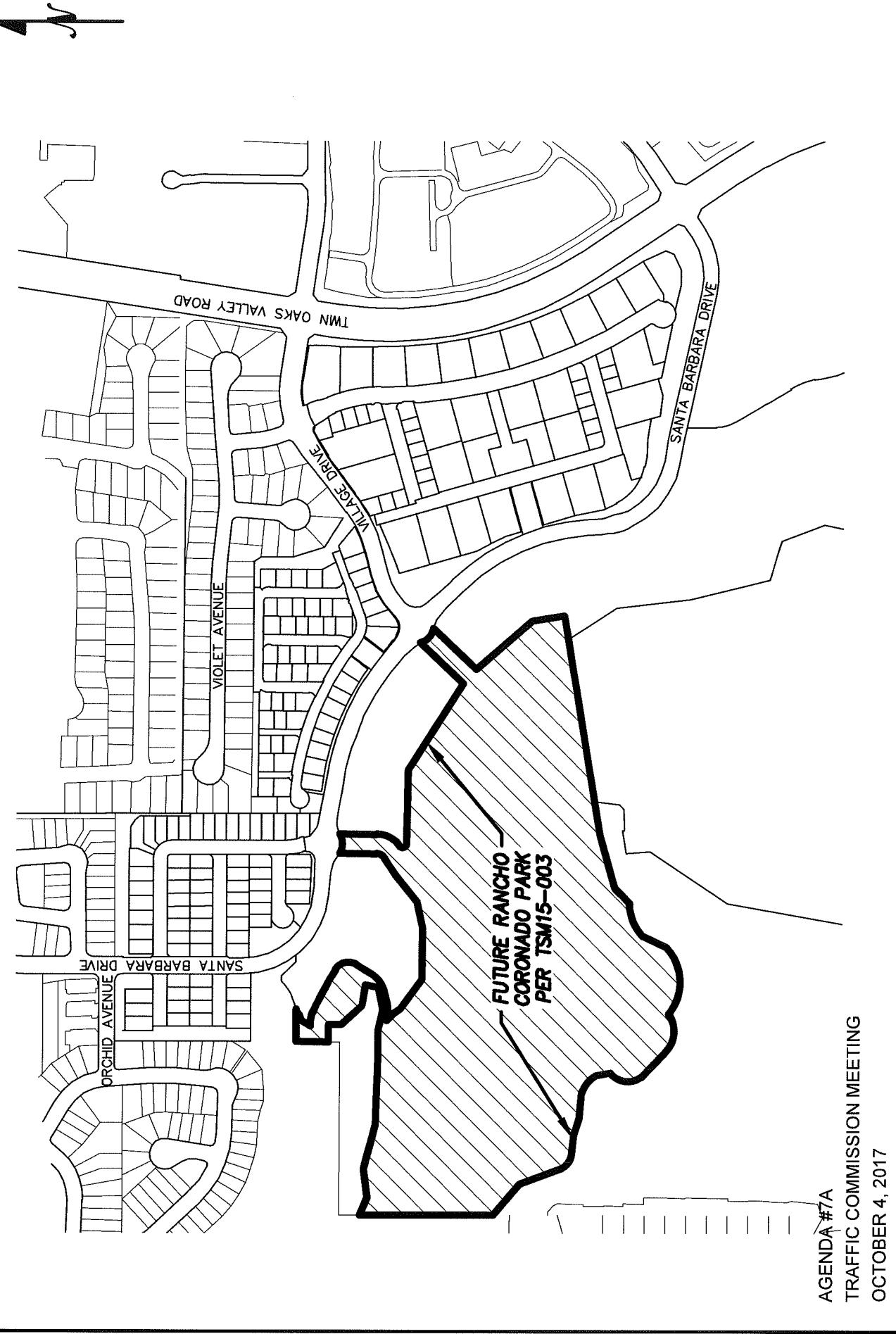


Figure 2.3, Street & Parking Plan

EXHIBIT 'A'

N.T.S.



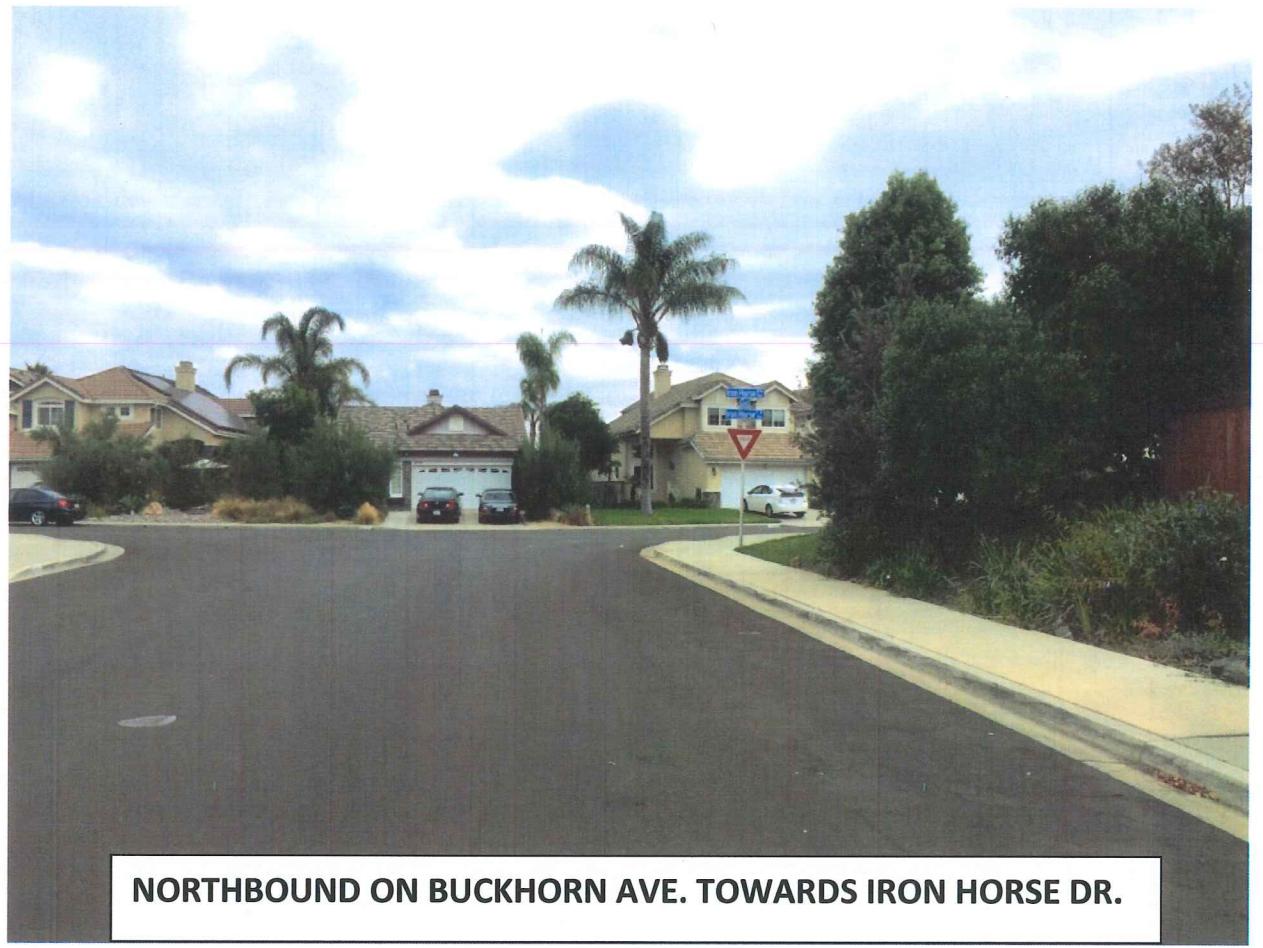
AGENDA #7A
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STOPPING SIGHT DISTANCE EXHIBIT
BUCKHORN AVENUE @ IRON HORSE DRIVE

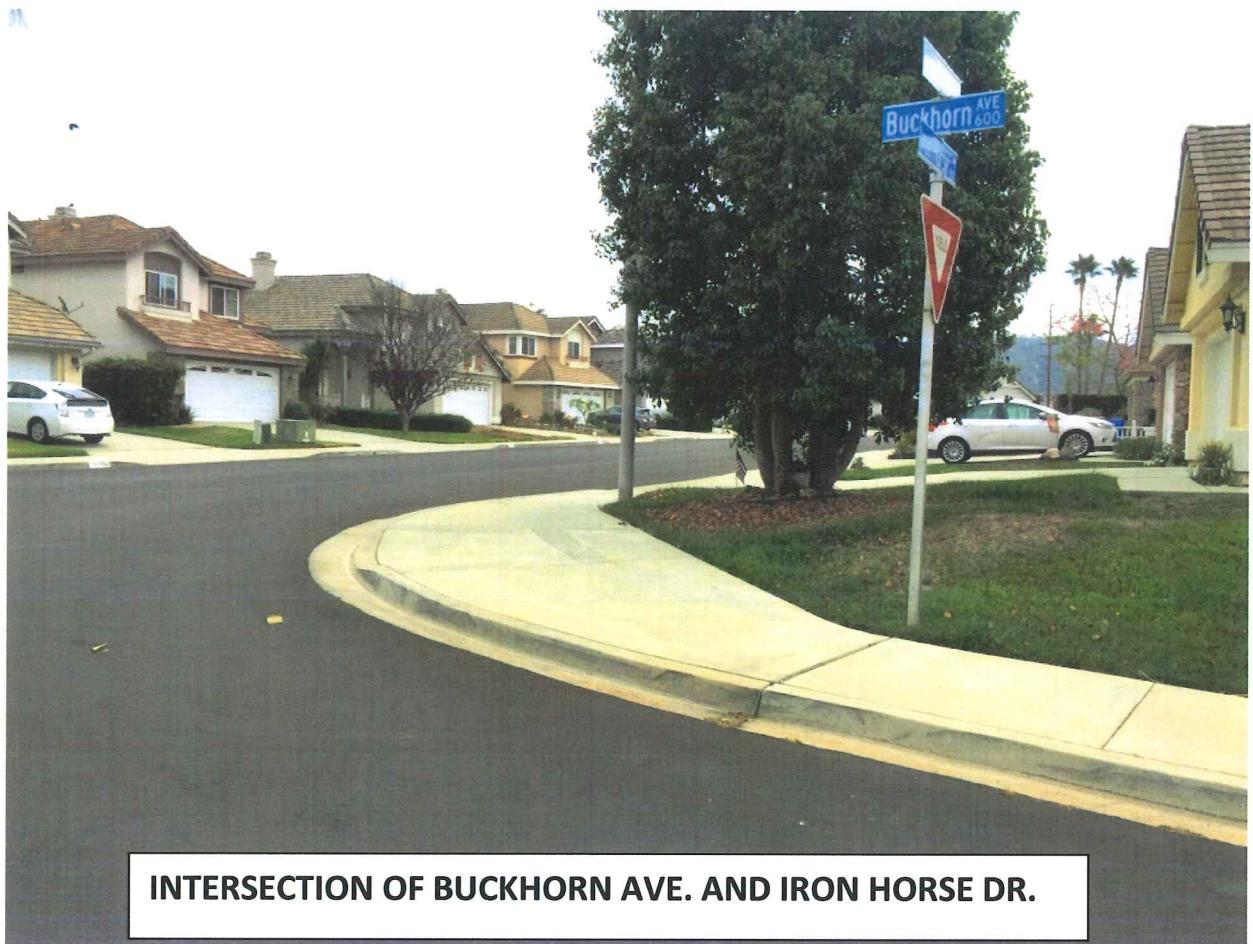




AGENDA #7A
TRAFFIC COMMISSION MEETING
OCTOBER 4, 2017



NORTHBOUND ON BUCKHORN AVE. TOWARDS IRON HORSE DR.



INTERSECTION OF BUCKHORN AVE. AND IRON HORSE DR.



WESTBOUND ON IRON HORSE DR. TOWARDS BUCKHORN AVE.



WESTBOUND ON IRON HORSE DR. TOWARDS BUCKHORN AVE.



916 IRON HORSE DRIVE - LOOKING WEST AT INTERSECTION



918 IRON HORSE DR. - LOOKING WEST AT INTERSECTION