



CITY OF LAGUNA HILLS TRAFFIC COMMISSION

REGULAR MEETING AGENDA Wednesday, July 19, 2017 – 7:00 PM

Mark Jones - Chair

Larry Woodruff - Vice Chair

Greg Staar - Commissioner

Len Herman - Commissioner

David Wheeler - Commissioner

Location: City Council Chamber, 24035 El Toro Road, Laguna Hills, CA 92653

Any person wishing to address the Traffic Commission on any matter, whether or not it appears on this Agenda, is asked to complete a "Request to Speak" form available on the table at the back of the Chamber. The completed form is to be submitted to the Recording Secretary prior to an individual being heard by the Traffic Commission. Completion of the form is voluntary. All persons may attend the meeting regardless of whether this form is completed.

Members of the public wishing to address the Traffic Commission can do so during the Public Comments portion of the Agenda with a time limitation of three minutes per person, an overall time limit of ten minutes for any one subject, and a total time limit of thirty minutes for Public Comments. If you are commenting on an Agenda item, your comments will be heard at the time that item is scheduled on the Agenda. If you are addressing the Commission on an item not listed on the Agenda, the Traffic Commission is prohibited by law from discussing or taking any action on that item.

CALL TO ORDER

Resolution No. 96-04-09-1 established rules of decorum for public meetings held by the City of Laguna Hills. Resolution No. 96-04-09-1 is available on the table at the back of the City Council Chamber.

PLEDGE OF ALLEGIANCE

ROLL CALL OF COMMISSION MEMBERS

1. PUBLIC COMMENTS

This is the time to address the Traffic Commission on any matter not listed on this Agenda that is within the subject matter jurisdiction of the Traffic Commission. Public Comments are limited to three minutes per person, an overall time limit of ten minutes for any one subject, and a total time limit of thirty minutes.

2. MINUTES

2.1 Minutes

Recommendation: That the Traffic Commission Approve the Minutes of May 17, 2017.

3. PRESENTATIONS

3.1 Presentation of the Alicia Parkway Regional Traffic Signal Synchronization Project (RTSSP)

Recommendation: That the Traffic Commission Receive and File this Report.

3.2 Presentation of the Moulton Parkway & El Toro Road Regional Traffic Signal Synchronization Project (RTSSP)

Recommendation: That the Traffic Commission Receive and File this Report.

4. ADMINISTRATIVE REPORTS

4.1 Sight Distance Analysis - Paseo De Valencia at Alisal Avenue

Recommendation: That the Traffic Commission Receive and File this Report.

4.2 Review of Traffic Speed Conditions on Mustang Drive at Appaloosa Place

Recommendation: That the Traffic Commission Receive and File this Report.

5. INFORMATIONAL ITEMS

5.1 Radar Speed Trailer

Recommendation: That the Traffic Commission Receive and File this Report.

6. COMMISSIONER COMMENTS

7. ADJOURNMENT

The next Regular Meeting of the Traffic Commission will be September 20, 2017, at 7:00 PM in the City Council Chamber, located at 24035 El Toro Road, Laguna Hills California.

CERTIFICATION

I, KENNETH H. ROSENFELD, Director of Public Services/City Engineer of the City of Laguna Hills, do hereby certify that a copy of the foregoing Agenda was posted at

Laguna Hills City Hall, Laguna Hills Community Center, and the Courtyard at La Paz Center by July 14, 2017, at 5:00 pm.



Director of Public Services/City Engineer

July 14, 2017

Date

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, you should contact the office of the City Engineer at (714) 707-2650. Notification 48 hours prior to the meeting will enable the City to make reasonable arrangements to assure access.

Materials related to an item on this Agenda submitted to the Commission after distribution of the Agenda packet are available for public inspection in the Public Services Department at 24035 El Toro Road, Laguna Hills, California, during normal business hours.



City of Laguna Hills

Traffic Commission

Staff Report

DATE: July 19, 2017
TO: Traffic Commissioners
FROM: Kenneth H. Rosenfield P.E.
Director of Public Services/City Engineer
ISSUE: Minutes

RECOMMENDATION: That the Traffic Commission Approve the Minutes of May 17, 2017.

ATTACHMENTS:

- Minutes

**CITY OF LAGUNA HILLS
TRAFFIC COMMISSION MEETING
REGULAR MEETING MINUTES
MAY 17, 2017**

CALL TO ORDER

The Regular Meeting of the Traffic Commission of the City of Laguna Hills, California, was called to order by Chair Jones at 7:00 PM in the Laguna Hills City Council Chamber, 24035 El Toro Road, Laguna Hills, California.

PLEDGE OF ALLEGIANCE

The Pledge of Allegiance was led by Chair Jones.

ROLL CALL OF COMMISSION MEMBERS

Present: Chair Mark Jones, Vice Chair Larry Woodruff, Commissioner Len Herman, Commissioner Greg Staar, and Commissioner Larry Woodruff.

1. PUBLIC COMMENTS

There were no Public Comments.

2. MINUTES

**THE TRAFFIC COMMISSION APPROVED THE MINUTES OF THE MARCH 15, 2017, REGULAR MEETING, BY M/COMMISSIONER HERMAN, S/COMMISSIONER STAAR.
APPROVED BY A VOTE OF 5-0**

3. PRESENTATIONS

There were no Presentations.

4. ADMINISTRATIVE REPORTS

4.1 REQUEST FOR THE ESTABLISHMENT OF NO PARKING DURING STREET SWEEPING HOURS ON VARIOUS STREETS IN THE NORTH LAGUNA HILLS MIXED USE ZONE

Associate Civil Engineer Amber Shah, indicated the Traffic Commission was contacted by a Business Owner located on El Pacifico Drive and Verdugo Drive, regarding undesired truck and long-term parking on El Pacifico Drive, creating conflicts with street sweeping operations. The Business Owner also questioned the appropriateness of vehicles parked on the street in conflict with street sweeping operations, long-term vehicle parking on the street, and the Business

Attachment: Minutes (1345 : Minutes)

**CITY OF LAGUNA HILLS
TRAFFIC COMMISSION MEETING
REGULAR MEETING MINUTES
MAY 17, 2017**

Owner thought vehicle parking on the street was a detriment to the aesthetics of the of the mixed use zone.

Staff conducted site visits to assess the parking conditions in the mixed use zone. Parking is currently allowed along the entire block of El Pacifico Drive, La Cadena Drive, Plaza Pointe Drive, Terra Drive and Verdugo Drive, except at previously designated no parking zones at fire hydrant and corner locations.

In order to address the long-term parking concern, enhance the aesthetics of the mixed use zone and further support the goals of the National Pollutant Discharge Elimination System (NPDES) program for water quality, by ensuring regular street sweeping operations, Staff recommended the establishment of a No Parking during Street Sweeping Hours on Mondays from 2:00 a.m. to 6:00 a.m. in the North Laguna Hills Mixed Use Zone.

Nina De la Torre, Business Owner of Golden Touch Auto and Laguna Hills Resident, spoke in favor of implementing no parking on the streets in the mixed use zone.

THAT THE TRAFFIC COMMISSION RECOMMEND TO THE CITY COUNCIL ESTABLISHMENT OF NO PARKING DURING STREET SWEEPING HOURS ON MONDAYS FROM 2:00 A.M. TO 6:00 A.M. IN THE NORTH LAGUNA HILLS MIXED USE ZONE. M/COMMISSIONER HERMAN, S/CHAIR JONES. APPROVED BY A VOTE OF 5-0

4.2 DRAFT LOCAL SIGNAL SYNCHRONIZATION PLAN (LSSP) UPDATE

Associate Civil Engineer Amber Shah, indicated the Local Signal Synchronization Plan (LSSP) is a planning document to implement and maintain coordination of traffic signals within our City and beyond our borders on a corridor approach basis that optimizes the performance of traffic signals based on existing traffic patterns. The LSSP is required to ensure consistency with the Regional Traffic Signal Synchronization Program (RTSSP) and to have the City remain eligible for Measure M2 funding. Ms. Shah indicated the traffic engineers at Hartzog & Crabill, Inc., have recently updated the LSSP and the 2017 Draft LSSP is required to be approved by the City Council prior to the end of this fiscal year.

THAT THE TRAFFIC COMMISSION REVIEW THE 2017 LOCAL SIGNAL SUNCHRONIZATION PLAN AND RECOMMEND APPROVAL BY THE CITY COUNCIL. M/COMMISSIONER STAAR, S/COMMISSIONER HERMAN, APPROVED BY A VOTE OF 5-0

Attachment: Minutes (1345 : Minutes)

**CITY OF LAGUNA HILLS
TRAFFIC COMMISSION MEETING
REGULAR MEETING MINUTES
MAY 17, 2017**

5. INFORMATIONAL ITEMS

5.1 SHERIFF'S DEPARTMENT VERBAL REPORT

Sergeant Prince had a prior commitment and was unable to attend the meeting.

5.2 RADAR SPEED TRAILER

Staff submitted the schedule for the radar trailer.

6. COMMISSIONER COMMENTS

Commissioner Staar recommended the Sheriff's allocate additional parking enforcement in the north Laguna Hills mixed use zone.

Commissioner Herman commented the traffic signal he reported to Associate Engineer Shah is now working properly.

Commissioner Wheeler apologized for not attending the previous meeting, as he was in China, and commended Ms. Shah for her exemplary work in answering his questions before the meeting, and commended Ms. Shah and Mr. Rosenfield on explaining the Traffic Commission Handbook to him. Commissioner Wheeler also commented on his various activities.

Vice Chair Woodruff commented on his various activities.

7. ADJOURNMENT

There being no further business before the Traffic Commission at this session, Vice Chair Jones declared the meeting adjourned at 7:26 p.m.

Prepared By:

Amber Shah, P.E.
Associate Civil Engineer

Approved By:

Chair Mark Jones

Attachment: Minutes (1345 : Minutes)



City of Laguna Hills

Traffic Commission

Staff Report

DATE: July 19, 2017
TO: Traffic Commissioners
FROM: Kenneth H. Rosenfield P.E.
Director of Public Services/City Engineer
ISSUE: Presentation of the Alicia Parkway Regional Traffic Signal Synchronization Project (RTSSP)

RECOMMENDATION: That the Traffic Commission Receive and File this Report.

SUMMARY:

A representative of Albert Grover Associates will present to the Traffic Commission an overview of the Alicia Parkway Regional Traffic Signal Synchronization Project (RTSSP). The Alicia Parkway Corridor, between Crown Valley Parkway in the City of Laguna Niguel, and Rustic Oak in the City of Mission Viejo, is approximately 10.6 miles long and includes 40 traffic signals controlled by Caltrans and the cities of Laguna Niguel, Aliso Viejo and Laguna Hills. The street is generally a six-lane facility, and carries daily traffic volumes ranging between 40,000 and 50,000 vehicles per day.

The overall goal of the project is to reduce stops, delays and overall travel times by improving traffic flow operations throughout the Alicia Parkway Corridor via traffic signal synchronization and minor traffic signal system related capital improvements. The project includes the coordination timing plan development, implementation, fine tuning, and monitoring of the traffic signals along the Alicia Parkway Corridor.

There are two planned traffic signal construction modifications in the City of Laguna Hills. The modifications planned for the traffic signals at both Alicia Parkway/Hon Avenue and at Alicia Parkway/Community Center Drive involve the removal of the side street northbound left-turn arrow so that minor street traffic can be served more quickly. Pedestrian crossings in this direction of movement will coincide with the “green ball” through/left turn movements from the side street. This change will allow the traffic signal

Presentation of the Alicia Parkway Regional Traffic Signal Synchronization Project (RTSSP)

July 19, 2017

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controller to better optimize the allocation of green time to reduce traffic congestion on Alicia Parkway. The Project is currently under design, and is expected to complete construction by June 2018.

This is an informational presentation and no action is required by the Traffic Commission.



City of Laguna Hills

Traffic Commission

Staff Report

DATE: July 19, 2017
TO: Traffic Commissioners
FROM: Kenneth H. Rosenfield P.E.
Director of Public Services/City Engineer
ISSUE: Presentation of the Moulton Parkway & El Toro Road Regional Traffic Signal Synchronization Project (RTSSP)

RECOMMENDATION: That the Traffic Commission Receive and File this Report.

SUMMARY:

A representative of Iteris, Inc. will present to the Traffic Commission an overview of the Moulton Parkway and EL Toro Road Regional Traffic Signal Synchronization Projects (RTSSP). As part of the Renewed Measure M (M2) Regional Traffic Signal Synchronization Program (RTSSP or Project P), the City of Laguna Woods, as lead agency, is in collaboration with the Cities of Laguna Hills, Lake Forest, Laguna Niguel, Aliso Viejo and Caltrans to improve signal timing operations and enhance traffic signal synchronization along Moulton Parkway / Street of the Golden Lantern and along El Toro Road.

The Moulton Parkway Corridor, between Moulton Parkway/Lake Forest Drive in City of Laguna Hills and Golden Lantern/Camino del Avion in City of Laguna Niguel, is approximately 11 miles long and includes 37 traffic signals controlled by Caltrans and cities of Laguna Hills, Laguna Woods, and Laguna Niguel. The street is generally a six-lane facility, and carries daily traffic volumes ranging between 16,000 and 41,000 vehicles per day.

The El Toro Road Corridor, between The Club Drive/Bells Vireo Lane in City of Aliso Viejo and I-5 NB-SB On Ramps/Bridger Road in City of Lake Forest, is approximately 3 miles long and includes 15 traffic signals controlled by cities of Aliso Viejo, Laguna Woods, Laguna Hills, and Lake Forest. The street is generally a six-lane facility, and carries daily traffic volumes ranging between 26,000 and 64,000 vehicles per day.

Presentation of the Moulton Parkway & El Toro Road Regional Traffic Signal Synchronization Project

July 19, 2017

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The overall goal of these projects is to provide better regional movement of traffic by reducing stops, delays and overall travel times while improving safety for all modes of transportation via traffic signal synchronization and minor traffic signal system related capital improvements.

The project includes the coordination timing plan development, implementation, fine tuning, and monitoring of the traffic signals along both corridors. There is one planned traffic signal modification in the City of Laguna Hills, for traffic signal cabinet upgrade at the intersection of Moulton Parkway and Glenwood Drive/Indian Creek Lane. The Project is currently ongoing, and is expected to be completed by December 2017.

This is an informational presentation and no action is required by the Traffic Commission



City of Laguna Hills

Traffic Commission

Staff Report

DATE: July 19, 2017
TO: Traffic Commissioners
FROM: Kenneth H. Rosenfield P.E.
Director of Public Services/City Engineer
ISSUE: Sight Distance Analysis - Paseo De Valencia at Alisal Avenue

RECOMMENDATION: That the Traffic Commission Receive and File this Report.

SUMMARY:

Staff was contacted by a resident regarding concerns of sight distance and collisions on Paseo de Valencia at Alisal Avenue and made a request for a traffic signal installation. Based upon the resident's concern, staff initiated a review of the location including the traffic collision history and a sight distance evaluation of the intersection of Paseo de Valencia and Alisal Avenue. The sight distance analysis, performed by Hartzog & Crabill, Inc., attached, determined:

- The field measurements/observations confirmed adequate visibility (or minimum stopping sight distance of 425 feet) was met;
- Intersection collision history showed there was only one collision reported at/near this intersection during the most recent 6-year period; and
- No traffic collision history susceptible to correction by a traffic control device, such as a traffic signal.

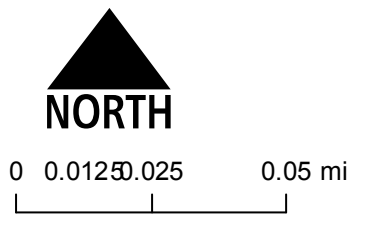
Based upon the findings in the report, staff recommends the Traffic Commission "Receive and File" this report.

ATTACHMENTS:

- Vicinity Map
- Sight Distance Analysis on Paseo de Valencia at Alisal Ave



Attachment: Vicinity Map (1343 : Sight Distance Analysis - Paseo De Valencia at Alisal Avenue)



VICINITY MAP - PASEO DE VALENCIA AT ALISAL AVENUE





Trammell Hartzog, President
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May 26, 2017

Mr. Kenneth H. Rosenfield, P.E.
 Director of Public Services
City of Laguna Hills
 24045 El Toro Road
 Laguna Hills, CA 92653

Subject: Sight Distance Analysis on Paseo de Valencia at Alisal Avenue

Dear Mr. Rosenfield:

Pursuant to your request, Hartzog & Crabill, Inc. (HCI) has completed our field review and evaluation regarding the issue of sight distance at the intersection of Paseo de Valencia and Alisal Avenue. Our field observations confirmed that a driver's visibility from the side-street (Alisal Avenue) looking at oncoming traffic along Paseo de Valencia is not restricted, and there are no other recommendations at this time.

Our approach to the evaluation included field measurements of actual driver's sight distance and review of intersection collision history as detailed below:

Sight Distance Field Measurements

As our initial task, HCI staff field-reviewed the T-intersection location on Thursday, May 25, 2017 to measure actual driver sight distance for on-coming traffic from each approach on Paseo de Valencia. The posted speed limit is 45 MPH on Paseo de Valencia; however, our staff measured the minimum stopping sight distance for a 50 MPH speed based upon the 85th-percentile speed of 49 MPH. For a 50 MPH speed, 425 feet is recommended as listed in the State of California Manual on Uniform Traffic Control Devices (California MUTCD) attachment.

More specifically, 425 feet was field-measured from a typical stopped vehicle location on Alisal Avenue towards the near-side lanes of on-coming traffic from both approaching directions on Paseo de Valencia. An orange cone was set on the lane line at this distance. A photograph was then taken from the vehicle location (driver's perspective) looking both ways verifying that a driver's visibility was not restricted when looking from/to the intersection (see attached stopping sight distance photo exhibit).

Table 1 on the next page summarizes our sight distance verification.

Mr. Kenneth H. Rosenfield, P.E.

May 26, 2017

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Sight Distance Field Measurements (continued)

Table 1

Intersection	Posted Speed Limit (mph)	85 th Percentile Speed (mph)	California Minimum Stopping Sight Distance for Higher Speed (feet)	Minimum Stopping Sight Distance Satisfied (Yes or No)	Comments
Paseo de Valencia at Alisal Avenue	45	49	425	Yes	The minimum stopping sight distance was field-verified as being satisfied from the side-street location of Alisal Avenue looking at oncoming traffic along Paseo de Valencia (see attached exhibit). There are 'NO PARKING ANYTIME ENTIRE BLOCK' signs posted along Paseo de Valencia which restrict on-street parked vehicles and helps ensure a driver's visibility is not restricted.

Intersection Collision History

The most recent 6-year intersection collision history was collected from the i-SWITRS website for this intersection (attached). As summarized below, the collision listing contained only one (1) collision that was reported at/near the intersection in the past 6-year period:

<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
0	0	1	0	0	0	0

The one reported collision in 2013 was a rear-end type. It should be mentioned, rear-end type collisions are typically not considered susceptible to correction by a traffic control device such as a traffic signal.

Findings & Conclusion:

- Field measurements/observations confirmed adequate visibility (or a minimum stopping sight distance of 425 feet) was met when looking from the side-street (Alisal Avenue).
- Intersection collision history showed there was only one collision reported at/near this intersection during the most recent 6-year period. This 2013 collision was a rear-end type.
- Based on the above evaluation, it is recommended that the City of Laguna Hills continue to allow all unrestricted movements in and out of the side-street of Alisal Avenue at Paseo de Valencia. There are no further recommendations at this time.

Mr. Kenneth H. Rosenfield, P.E.

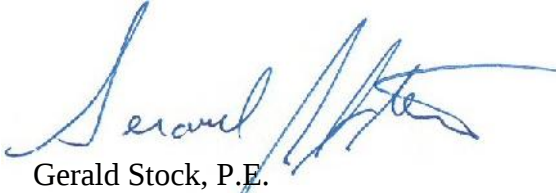
May 26, 2017

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We look forward to your acceptance of our analysis findings and to any additional services the City of Laguna Hills may request. If you have any questions or need more information please call me at (714) 731-9455. Thank you again for the opportunity to serve your community.

Sincerely,

HARTZOG & CRABILL, INC.

A handwritten signature in blue ink, appearing to read "Gerald Stock", with a stylized flourish extending to the right.

Gerald Stock, P.E.

Executive Vice President

City & Traffic Engineering Services

Attachments: Minimum Stopping Sight Distance Table (California MUTCD)
 Sight Distance Photo Exhibit
 Intersection Collision History

STOPPING SIGHT DISTANCE (CALIFORNIA MUTCD)

Table 6C-1. Recommended Advance Warning Sign ~~Minimum~~ Spacing

Road Type	Distance Between Signs**		
	A	B	C
Urban (low speed) - 25 mph or less***	100 feet	100 feet	100 feet
Urban - more than 25 mph to 40 mph***	250 feet	250 feet	250 feet
Urban (high speed) - more than 40 mph***	350 feet	350 feet	350 feet
Rural	500 feet	500 feet	500 feet
Expressway / Freeway	1,000 feet	1,500 feet	2,640 feet

* ~~Speed category to be determined by the highway agency.~~

** The column headings A, B, and C are the dimensions shown in Figures 6H-1 through 6H-46. The A dimension is the distance from the transition or point of restriction to the first sign. The B dimension is the distance between the first and second signs. The C dimension is the distance between the second and third signs. (The "first sign" is the sign in a three-sign series that is closest to the TTC zone. The "third sign" is the sign that is furthest upstream from the TTC zone.)

*** Posted speed limit, off-peak 85th-percentile speed prior to work starting, or other anticipated operating speed in mph.

Table 6C-2. Stopping Sight Distance as a Function of Speed on Level Roads.
(Used as suggested longitudinal buffer space length or location for flagger station)

Speed*	Distance
20 mph	115 feet
25 mph	155 feet
30 mph	200 feet
35 mph	250 feet
40 mph	305 feet
45 mph	360 feet
50 mph	425 feet
55 mph	495 feet
60 mph	570 feet
65 mph	645 feet
70 mph	730 feet
75 mph	820 feet

* Posted speed, off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph.

Table 6C-3. Taper Length Criteria for Temporary Traffic Control Zones

Type of Taper	Taper Length
Merging Taper	at least L
Shifting Taper	at least 0.5 L
Shoulder Taper	at least 0.33 L
One-Lane, Two-Way Traffic Taper	50 feet minimum, 100 feet maximum
Downstream Taper	50 feet minimum, 100 feet maximum

Note: Use Table 6C-4 to calculate L

SIGHT DISTANCE PHOTO EXHIBIT

**STOPPING SIGHT DISTANCE
(MAY 25, 2017)**



**STOPPING SIGHT DISTANCE
(MAY 25, 2017)**



NB ALISAL AVENUE (LOOKING EAST) @ WB PASEO DE VALENCIA TRAFFIC



WB PASEO DE VALENCIA LOOKING AT ALISAL AVENUE

INTERSECTION COLLISION HISTORY

CITY OF LAGUNA HILLS
SWITRS COLLISION DATABASE
INTERSECTION OF PASEO DE VALENCIA AND ALISAL AVENUE
JAN. 1, 2011 - MAR. 31, 2017

<u>CASE ID</u>	<u>COLLISION DATE</u>	<u>COLL. TIME</u>	<u>PRIMARY ROAD</u>	<u>SECONDARY ROAD</u>	<u>DIST.</u>	<u>DIR.</u>	<u>INTER.</u>	<u>WEATH.</u> <u>1</u>	<u>COLL.</u> <u>SEVERITY</u>	<u>PRIM.</u> <u>COLL. FACT.</u>	<u>PCF</u> <u>VIOL. CAT.</u>	<u>PCF</u> <u>VIOL.</u>	<u>HIT</u> <u>AND RUN</u>	<u>TYPE</u> <u>OF COLL.</u>	<u>MOTOR</u> <u>VEHICLE INVOLVED</u> <u>WITH</u>	<u>ROA</u> <u>SURF</u>
6230851	20130911	1612	PASEO DE VALENCIA	ALISAL AV	22	N	N	A	3	A	3	22350	N	C	C	A

NOTES:

Weather 1	Collision Severity	Primary Collision Factor	PCF Violation Category	Hit and Run	Type of Collision
A - Clear	1 - Fatal	A - (Vehicle) Code Violation	01 - Driving or Bicycling Under Influence	F - Felony	A - Head-On
B - Cloudy	2 - Injury (Severe)	B - Other Improper Driving	02 - Impeding Traffic	M - Misdemeanor	B - Sideswipe
C - Raining	3 - Injury (Other Visible)	C - Other Than Driver	03 - Unsafe Speed	N - Not Hit & Run	C - Rear-End
D - Snowing	4 - Injury (Complaint of Pain)	D - Unknown	04 - Following Too Closely		D - Broadside
E - Fog	0 - PDO (Property Damage Only)	E - Fell Asleep	05 - Wrong Side of Road		E - Hit Object
F - Other		-- Not Stated	06 - Improper Passing		F - Overturned
G - Wind			07 - Unsafe Lane Change		G - Vehicle/Pedestrian
-- Not Stated			08 - Improper Turning		H - Other
			09 - Automobile ROW		-- Not Stated
			10 - Pedestrian ROW		
			11 - Pedestrian Violation		
			12 - Traffic Signals and Signs	Road Surface	
			13 - Hazardous Parking	A - Dry	
			14 - Lights	B - Wet	
			15 - Brakes	C - Snowy or Icy	
			16 - Other Equipment	D - Slippery	
			17 - Other Hazardous Violation	-- Not Stated	
			18 - Other Than Driver (or Ped)		
			19 -		
			20 -		
			21 - Unsafe Starting or Backing		
			22 - Other Improper Driving		
			23 - Pedestrian or "Other" Under the Influence		
			24 - Fell Asleep		
			00 - Unknown		
			-- Not Stated		

Motor Vehicle Involved With:

A - Non-Collision
 B - Pedestrian
 C - Other Motor Vehicle
 D - Motor Vehicle on Other Roadway
 E - Parked Motor Vehicle
 F - Train
 G - Bicycle
 H - Animal
 I - Fixed Object
 J - Other Object
 -- Not Stated



City of Laguna Hills

Traffic Commission

Staff Report

DATE: July 19, 2017
TO: Traffic Commissioners
FROM: Kenneth H. Rosenfield P.E.
Director of Public Services/City Engineer
ISSUE: Review of Traffic Speed Conditions on Mustang Drive at Appaloosa Place

RECOMMENDATION: That the Traffic Commission Receive and File this Report.

SUMMARY:

Staff was recently contacted by a resident regarding concerns of speeding on Mustang Drive at Appaloosa Place. Based upon the resident's concern and in accordance with the Residential Streets Management Policy, staff initiated a review of the travel speeds on Mustang Drive on either side of Appaloosa Place.

The speed survey, performed by Hartzog & Crabill, Inc., attached, determined the 85th percentile speeds on Mustang Drive as 34.2 mph and 31.2 mph, west of and east of Appaloosa Place, respectively. While the regulatory speed limit on a residential streets is 25 mph, Staff experience has found the typical prevailing speed range on residential streets in the City as being between 32 and 34 mph, without adverse traffic collision history. The 85th percentile speeds determined in this speed survey are consistent with our experience. However, the study also determined 19.8% of the vehicles on Mustang Drive west of Appaloosa Place were exceeding the upper limit of the 10 mph pace of 33 mph, which is a slightly higher percentage than expected (15%). Accordingly, Police enforcement of driver behavior is the best and appropriate remedy for this location and issue of concern. Staff will work with the Sheriff's Department on enforcement activity in this area and Staff will post the radar trailer in this area to increase driver education as to the appropriate speed on Mustang Drive.

Review of Traffic Speed Conditions on Mustang Drive at Appaloosa Place

July 19, 2017

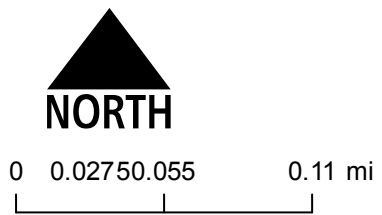
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ATTACHMENTS:

- Vicinity Map
- Speed Survey Report



Attachment: Vicinity Map (1346 : Review of Traffic Speed Conditions on Mustang Drive at Appaloosa Place)



VICINITY MAP - MUSTANG DRIVE AT APALOOSA PLACE





Trammell Hartzog, President
 Jerry Crabill, P.E. (Retired)
 Gerald J. Stock, P.E., T.E.,
 Executive Vice President

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July 7, 2017

Mr. Ken Rosenfield, P.E.
 Director of Public Services/City Engineer
City of Laguna Hills
 24035 El Toro Road
 Laguna Hills, California 92653

**Subject: Letter of Opinion – Speeding Concerns – Mustang Drive
 On Both Sides of Appaloosa Place**

Dear Mr. Rosenfield:

Pursuant to your request, Hartzog & Crabill, Inc. (HCI) has prepared this letter of opinion accompanied by specific recommendations regarding resident concerns of vehicular speeding on Mustang Drive at/near Appaloosa Place.

Background

Mustang Drive is a local street with a prima facie speed limit of 25 mph. This segment of Mustang Drive has areas of limited sight distance as a result of the curvilinear character of the roadway. Adjacent land uses are residential with a high density of fronting driveways. Sidewalks are provided along the north side of the street.

Radar Speed Surveys

To determine travel speeds on Mustang Drive, on both sides of Appaloosa Place, a certified radar technician using a calibrated radar gun conducted two radar speed surveys – one on each side of Appaloosa Place.

Both surveys were performed on Wednesday, June 14, 2017. The segment west of Appaloosa Place was performed between 9:15am - 11:00am, and the segment east of Appaloosa Place (east of Red Corral Road) was performed between 3:00pm - 4:30pm.

Table 1 below on the next page summarizes the results of the speed surveys:

Mr. Ken Rosenfield, P.E.
 July 7, 2017
 Page 2

TABLE 1

Radar Speed Survey Summary	Mustang Drive (W/o Appaloosa Pl)	Mustang Drive (E/o Appaloosa Pl)
85th Percentile Speed	34.2 mph	31.2 mph
Median Speed	28.1 mph	27.4 mph
15th Percentile Speed	24.7 mph	24.4 mph
10 MPH Pace	24 to 33 mph	23 to 32 mph
Percent in 10 MPH Pace	76.9%	86.0%

Source: Hartzog & Crabill, Inc., 2017.

As shown above, the 85th percentile speeds on Mustang Drive are 34.2 mph and 31.2 mph, west of and east of Appaloosa Place, respectively. The data shows that travel speeds do not differ significantly between the two surveys. However, the data does suggest that vehicular speeding is occurring above the prima facie 25 mph residential street speed limit along this segment of Mustang Drive.

Recommendations

Therefore, it is recommended that an incremental approach be taken to slow travel speeds. Initial steps include increased law enforcement, use of a portable radar speed feedback trailer, and posting of 25 mph speed limit signs. Should these initial recommendations be implemented, a follow-up survey should be conducted to quantify the benefits of these speed reduction measures.

It has been our pleasure to prepare this letter of opinion for your review. If you have any questions or need additional information, please call us at (714) 731-9455.

Very Truly Yours,
HARTZOG & CRABILL, INC.


 Gerald Stock, P.E.
 Executive Vice President
 City & Traffic Engineering Services

Attach: (2) Speed Survey Field Sheets



RADAR SPEED DISTRIBUTION SHEET

CITY OF LAGUNA HILLS

MUSTANG DRIVE

DATE: 6/14/2017

TIME: 9:15 AM - 11:00 AM

WEST OF APPALOOSA

SURVEY BY: C. BUENDIA

CHECKED BY: JERRY STOCK

[illegible]

	TOTAL VEHICLES	MPH
UPPER LIMIT 10 MPH PACE:	33	MPH
LOWER LIMIT 10 MPH PACE:	24	MPH
PERCENT OVER PACE:	19.8	%
PERCENT IN PACE:	76.9	%
PERCENT UNDER PACE:	3.3	%

85th PERCENTILE SPEED:	34.2	MPH
MEDIAN SPEED:	28.1	MPH
15th PERCENTILE SPEED:	24.7	MPH

Radar Speed Survey Field Sheet

HARTZOG AND CRABILL I

Consulting Traffic Engineers
17522 Van Ness Blvd., Suite 122, San Francisco, CA 94142
(415) 731-3452

AGENCY: CITY OF LAGUNA HILLS
 STREET: MUSTANG DRIVE
 LOCATION: WEST OF APPALOOSA

WEATHER: SUNNY DATE: 06/14/17
 ROAD CONDITION: DRY START TIME: 9:15 AM
 OBSERVER: CATHY BUENDIA END TIME: 10:45 AM VHL

DIRECTION: <u>WESTBOUND</u>											
MPH	NUMBER OF VEHICLES										TOTAL
	5	10	15	20	25	30					
60											
59											
58											
57											
56											
55											
54											
53											
52											
51											
50											
49											
48											
47											
46											
45											
44	/										1
43	/										0
42	/										0
41	/										0
40											0
39											0
38	/										0
37											0
36	/	/									2
35	/	/									2
34	/	/									2
33	/	/									2
32	/	/	/								4
31	/	/	/								2
30	/	/	/								3
29	/	/	/	/							5
28	/	/	/	/	/						7
27	/	/	/	/	/						4
26	/	/	/	/	/						5
25	/	/	/	/	/						3
24	/	/	/	/	/						1
23											
22											
21											
20											
19											
18											
17											
16											
15											

AVERAGE SPEED: _____ CRITICAL SPEED: _____ PACE SPEED: _____

CUMULATIVE (BOTH DIRECTIONS) _____

DIRECTION: <u>EASTBOUND</u>											
MPH	NUMBER OF VEHICLES										TOTAL
	5	10	15	20	25	30					
60											
59											
58											
57											
56											
55											
54											
53											
52											
51											
50											
49											
48											
47	/										1
46											0
45											0
44											0
43											0
42	/										0
41	/										0
40	/										1
39	/										0
38	/										0
37	/	/									2
36	/	/									2
35	/	/									2
34	/	/									2
33	/	/									2
32	/	/	/								3
31	/	/	/								0
30	/	/	/								4
29	/	/	/	/							5
28	/	/	/	/	/						5
27	/	/	/	/	/						3
26	/	/	/	/	/						4
25	/	/	/	/	/						6
24	/	/	/	/	/						5
23	/	/	/	/	/						4
22	/	/									2
21											
20											
19											
18											
17											
16											
15											

AVERAGE SPEED: _____ CRITICAL SPEED: _____ PACE SPEED: _____

CUMULATIVE TOTAL	MPH
	60
	59
	58
	57
	56
	55
	54
	53
	52
	51
	50
	49
	48
1	47
0	46
0	45
0	44
0	43
0	42
0	41
0	40
1	39
0	38
2	37
2	36
2	35
4	34
2	33
7	32
2	31
7	30
10	29
10	28
8	27
11	26
8	25
5	24
5	23
2	22
	21
	20
	19
	18
	17
	16
	15



RADAR SPEED DISTRIBUTION SHEET

CITY OF LAGUNA HILLS

MUSTANG DRIVE

DATE: 6/14/2017

TIME: 3:00 PM - 4:30 PM

EAST OF RED CORAL RD

SURVEY BY: C. BUENDIA

CHECKED BY: JERRY STOCK

[illegible]

UPPER LIMIT 10 MPH PACE: 32 MPH

LOWER LIMIT 10 MPH PACE: 23 MPH

PERCENT OVER PACE: 11.0 %

PERCENT IN PACE: 86.0 %

PERCENT UNDER PACE: 3.0 %

85th PERCENTILE SPEED: 31.2 MPH

MEDIAN SPEED: 27.4 MPH

15th PERCENTILE SPEED: 24.4 MPH

Radar Speed Survey Field Sheet

HARTZOG AND CRABILL I

Consulting Traffic Engineers
17522 Irvine Blvd., Suite 122, Irvine, CA, 926
(714) 731-9452

AGENCY: CITY OF LAGUNA HILLS
 STREET: MUSTANG DRIVE
 LOCATION: EAST OF RED CORAL RD

WEATHER: SUNNY DATE: 6/14/17
 ROAD CONDITION: DRY START TIME: 3:00 PM
 OBSERVER: CATHY BUENDIA END TIME: 4:30 PM VGL

DIRECTION: <u>WEST BOUND</u>											
MPH	NUMBER OF VEHICLES										TOTAL
	5	10	15	20	25	30					
60											
59											
58											
57											
56											
55											
54											
53											
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43											
42											
41											
40											
39											0
38											0
37											0
36											0
35											0
34											1
33											1
32											3
31											2
30											5
29											4
28											6
27											8
26											4
25											4
24											1
23											3
22											1
21											
20											
19											
18											
17											
16											
15											

AVERAGE SPEED: _____ CRITICAL SPEED: _____ PACE SPEED: _____
 CUMULATIVE (BOTH DIRECTIONS) _____

DIRECTION: <u>EAST BOUND</u>											
MPH	NUMBER OF VEHICLES										TOTAL
	5	10	15	20	25	30					
60											
59											
58											
57											
56											
55											
54											
53											
52											
51											
50											
49											
48											
47											
46											
45											
44											
43											
42											
41											
40											0
39											0
38											1
37											0
36											0
35											2
34											2
33											3
32											2
31											4
30											5
29											6
28											8
27											4
26											5
25											5
24											2
23											2
22											2
21											
20											
19											
18											
17											
16											
15											

AVERAGE SPEED: _____ CRITICAL SPEED: _____ PACE SPEED: _____

CUMULATIVE TOTAL	MPH
	60
	59
	58
	57
	56
	55
	54
	53
	52
	51
	50
	49
	48
	47
	46
	45
	44
	43
	42
	41
	40
0	39
2	38
0	37
0	36
2	35
3	34
2	33
5	32
6	31
10	30
16	29
24	28
32	27
36	26
41	25
43	24
45	23
47	22
49	21
49	20
49	19
49	18
49	17
49	16
49	15



City of Laguna Hills

Traffic Commission

Staff Report

DATE: July 19, 2017
TO: Traffic Commissioners
FROM: Kenneth H. Rosenfield P.E.
Director of Public Services/City Engineer
ISSUE: Radar Speed Trailer

RECOMMENDATION: That the Traffic Commission Receive and File this Report.

ATTACHMENTS:

- Radar Trailer July

CITY OF LAGUNA HILLS

JULY 2017

RADAR TRAILER SCHEDULE (RAINY DAYS EXCLUDED)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2	3	4 HOLIDAY	5 Nellie Gail E/O Empty Saddle 25 MPH	6 San Remo Mid-block 30 MPH	7	8
9	10	11	12	13	14	15
16	17	18 Lost Colt E/O Beargrass 25 MPH	19 Bridlewood S/O Laurel Crest 25 MPH	20 Rapid Falls W/O Sundowner 25 MPH	21	22
23	24	25	26	27	28	29
30	31					

CITY OF LAGUNA HILLS

AUGUST 2017

RADAR TRAILER SCHEDULE (RAINY DAYS EXCLUDED)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1	2	3	4	5
6	7	8 Woodbluff W/O Middleridge 25 MPH	9 Lost Colt E/O Beargrass 25 MPH	10 Glen Canyon W/O Nellie Gail 25 MPH	11	12
13	14	15	16	17	18	19
20	21	22 Alameda S/O El Prado 25 MPH	23 Nellie Gail E/O Empty Saddle 25 MPH	24 San Remo Mid-block 30 MPH	25	26
27	28	29	30	31		

CITY OF LAGUNA HILLS

SEPTEMBER 2017

RADAR TRAILER SCHEDULE (RAINY DAYS EXCLUDED)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
3	HOLIDAY	4 Rapid Falls W/O Sundowner 25 MPH	5 Bridlewood S/O Laurel Crest 25 MPH	6 Alameda W/O El Prado 25 MPH	7	8
9						
10	11	12	13	14	15	16
17	18	19 Glen Canyon W/O Nellie Gail 25 MPH	20 Nellie Gail E/O Empty Saddle 25 MPH	21 Lost Colt 27251 E/O Beargrass 25 MPH	22	23
24	25	26	27	28	29	30