



CITY OF LODI

COUNCIL COMMUNICATION

AGENDA TITLE: Amend Traffic Resolution to Adopt Speed Limit Modifications on Harney Lane and Turner Road

MEETING DATE: November 18, 1998

PREPARED BY: Public Works Director

RECOMMENDED ACTION: That the City Council adopt the attached resolution amending Traffic Resolution #97-148 by approving the speed limit modifications on portions of Harney Lane and Turner Road as shown on the attached Engineering and Traffic Surveys (Exhibits A and B).

BACKGROUND INFORMATION: The Public Works Department recently performed Engineering and Traffic Surveys on the following seven streets:

- Almond Drive
- Century Boulevard - Stockton Street to Cherokee Lane
- Crescent Avenue - Kettleman Lane to Lodi Avenue
- Harney Lane
- Lower Sacramento Road - South City Limits to Turner Road
- Turner Road
- Woodhaven Lane

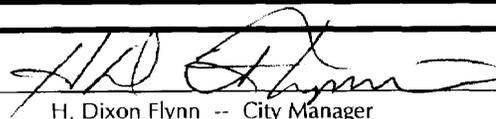
Per Section 40802(b) of the California Vehicle Code, Engineering and Traffic Surveys must be updated a minimum of every five years on "non-local" streets. "Non-local" streets are collector and arterial streets included in the Federal Aid System. Speed limits on streets where surveys are older than five years cannot be enforced using radar.

Engineering and Traffic Surveys are performed using State of California Department of Transportation (Caltrans) guidelines. The surveys include a map of the street showing the physical characteristics of the roadway, such as roadway width, number of through lanes, and traffic controls. Traffic volumes, prevailing speeds, and accident rates are analyzed and the results are shown in a written narrative for each street. Accident rates, determined by the number of accidents occurring within a segment of roadway and the traffic volume within that segment, are shown in accidents-per-million-vehicle-miles (ACC/MVM). The average citywide accident rate is 4.5 ACC/MVM.

Three factors should be considered when determining the speed limit most appropriate to facilitate the orderly and reasonably safe movements of traffic: prevailing speeds, unexpected conditions to drivers, and accident records. Reasonable speeds conform to the actual behavior of the majority of motorists and, by measuring motorists' speeds, one can select a speed limit that is both reasonable and effective. Speed limits should normally be established at the first five-mile-per-hour (mph) increment below the 85th percentile speed. However, engineering judgment may indicate the need for a further reduction of 5 mph.

STUDY RESULTS: Of the roadways surveyed, the following segments are being recommended for speed limit changes:

APPROVED: _____



H. Dixon Flynn -- City Manager

<u>STREET SEGMENT</u>	<u>EXISTING</u>	<u>PROPOSED</u>
Harney Lane from West City Limits to WID Canal	55 mph	45 mph
Turner Road from Evergreen Drive to Lower Sacramento Road/Woodhaven Lane	55 mph	40 mph
Turner Road from Lower Sacramento Road/Woodhaven Lane to Mills Avenue	40 mph	35 mph
Turner Road from Stockton Street to East City Limits	45 mph	40 mph

Harney Lane from West City Limits to WID Canal - The 85th percentile speed on the segment between the west City limits and WID Canal are 51 mph (westbound) and 54 mph (eastbound). The 50th percentile speeds are 45 mph (westbound) to 49 mph (eastbound). There have been no accidents occurring within this segment during the survey period. The length of this segment is approximately one-half mile long. The speed limit on the adjacent segments of Harney Lane is 45 mph. Although, based on prevailing speeds the speed limit could be set at 50 mph, considering the relatively short length of this segment, staff recommends reducing the speed limit on this segment to 45 mph.

Turner Road from Evergreen Drive to Lower Sacramento Road/Woodhaven Lane - The 40-mph speed limit on this approximate 1,450-foot segment is a transition area between the 55-mph speed limit to the west and 35-mph speed limit to the east. Turner Road from Lower Sacramento Road/Woodhaven Lane to Mills Avenue - The 85th percentile speeds on this segment are 37 mph (westbound) and 38 mph (eastbound). The 50th percentile speed is 33 mph. The accident rates of 0.6 and 1.8 are far below the citywide average. Due to the reduction of prevailing speeds and continuing low-accident rate, staff recommends a 35-mph speed limit on this segment.

Turner Road from Stockton Street to East City Limits - The 85th percentile speeds on this segment are 41 mph (westbound) and 45 mph (eastbound). The 50th percentile speeds are 38 mph (westbound) and 39 mph (eastbound). The accident rate of 3.0 on this segment is below the citywide average. Although the accident rate continues to be below the citywide average, staff recommends a 40-mph speed limit on this segment due to the reduction of prevailing speeds. The reduction of prevailing speeds along the segment east of Highway 99 could be a result of traffic lane line striping modifications performed since the previous survey.

FUNDING: Costs to modify speed limit signs and legends from the Street Maintenance Account at an approximate cost of \$900.

Wes Fujitani
 For: Richard O. Prima, Jr.
 Public Works Director

Prepared by Rick S. Kiri, Senior Engineering Technician
 RCP/RSK/lm

Attachments

- cc: City Attorney
- Police Chief
- City Engineer
- Street Superintendent
- Associate Traffic Engineer
- Casa de Lodi - Richard Warner
- San Joaquin County Supervisor George Barber

SPEED ZONE REPORT - Harney Lane, West City Limits to East City Limits

◦ REFERENCE

Speed zone surveys are performed in the City of Lodi following State of California Department of Transportation (Caltrans) guidelines in accordance with Section 40802 (b) of the California Vehicle Code. These guidelines are outlined in Chapter 8 of the Caltrans Traffic Manual.

◦ STUDY

Important factors to consider in determining the speed limit which is most appropriate to facilitate the orderly movement of traffic and that is reasonably safe are prevailing speeds, unexpected conditions to drivers, and accident records.

Prevailing Speeds (85th Percentile Speeds) - Reasonable speed limits conform to the actual behavior of the majority of motorists, and by measuring motorists' speeds, one will be able to select a speed limit that is both reasonable and effective. Speed limits should normally be established at the first five-mile-per-hour increment below the 85th percentile speed. However, in matching existing conditions with the traffic safety needs of the community, engineering judgment may indicate the need for a further reduction of five miles per hour.

Three radar surveys were performed and the 85th percentile speeds ranged from 46 to 54 mph, as shown below:

<u>Segment</u>	<u>Westbound</u>	<u>Eastbound</u>
West City Limits to WID Canal	51 mph	54 mph
WID Canal to Hutchins Street	46 mph	50 mph
Hutchins Street to East City Limits	51 mph	49 mph

Unexpected Conditions

When roadside development results in traffic conflicts and unusual conditions which are not readily apparent to drivers, speed limits below the 85th percentile are warranted. The following factors were considered: roadway design speed, safe stopping sight distance, superelevation, shoulder conditions, profile condition, intersection spacing and offsets, commercial driveway characteristics, and pedestrian traffic in the roadway without sidewalks.

There were no unexpected conditions observed on these segments of Harney Lane.

Accidents

Accident records of the two most recent years were considered in determining the speed zones. Accidents on segments of roadways are classified by their accident rate. Accident rates are determined by the number of accidents occurring within a segment of roadway and the traffic volume within that segment. Accident rates are

shown in accidents-per-million-vehicle miles (ACC/MVM). The accident rates ranged from 2.2 to 4.7 ACC/MVM on Harney Lane. The average citywide accident rate is 4.5 ACC/MVM.

- CONCLUSION

West City Limits to WID Canal

The 85th percentile speed on the segment between the west City limits and WID Canal are 51 and 54 mph. The 50th percentile speeds are 45 to 49 mph. There have been no accidents occurring within this segment during the survey period. The length of this segment is approximately one-half mile long. The speed limit on the adjacent segments of Harney Lane is 45 mph. Although based on prevailing speeds the speed limit could be set at 50 mph, considering the relatively short length of this segment, staff recommends reducing the speed limit on this segment to 45 mph.

WID Canal to Hutchins Street

The 85th percentile speeds on this segment are 46 and 50 mph. The 50th percentile speeds are 31 and 32 mph. The accident rate of 3.8 ACC/MVM is slightly below the citywide average and higher than the 2.1 rate from the 1993 survey. Based on the prevailing speeds and reasonable accident rate, staff recommends retaining the 45 mph speed limit on this segment.

Hutchins Street to East City Limits

The 85th percentile speeds on this segment are 51 and 49 mph. The 50th percentile speeds is 44 mph. The accident rate of 4.7 ACC/MVM is slightly above the citywide average and more than the 3.6 rate from the 1993 survey. Although based on prevailing speeds this segment could be considered for a 50-mph speed limit, since the accident rate is slightly higher than the average and has increased from the previous survey, staff recommends retaining the 45-mph speed limit on this segment.

The recommended speed limits are shown below:

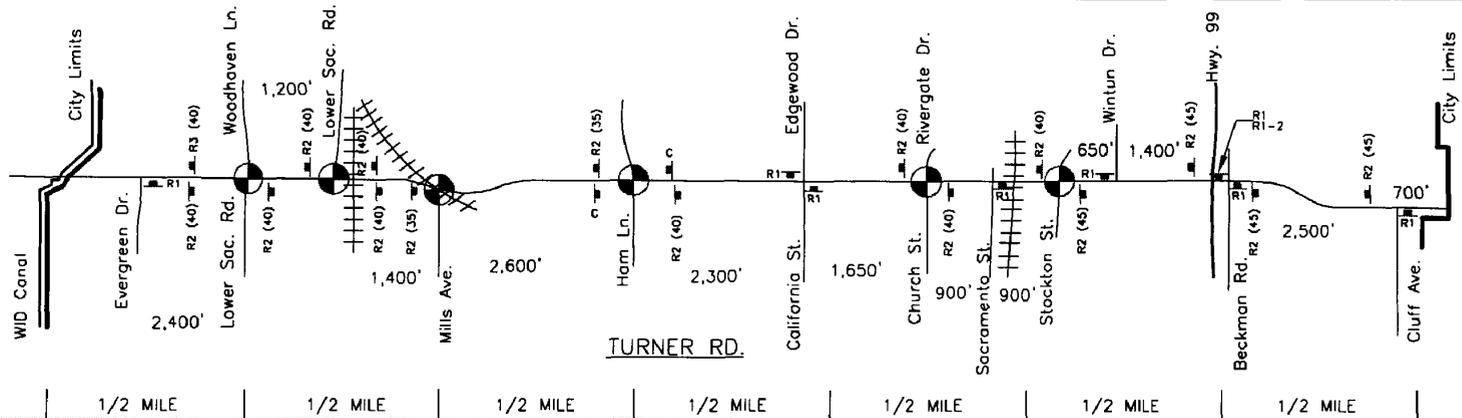
<u>Street Segment</u>	<u>Posted Speed Limit</u>
West City Limits to WID Canal	55 to 45 mph
WID Canal to Hutchins Street	45 mph (no change)
Hutchins Street to East City Limits	45 mph (no change)

Robert K. Murdoch
City Engineer

RKM/RSK/lm

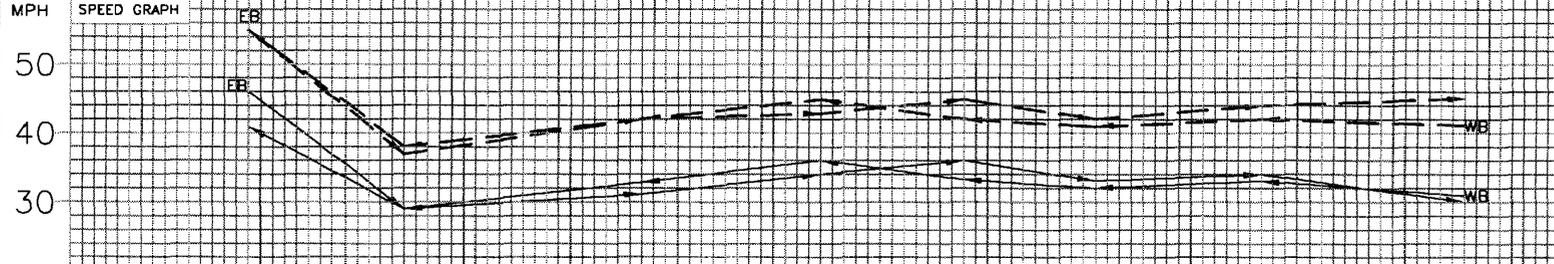
ENGINEERING AND TRAFFIC SURVEY

SEE NARRATIVE FOR BACKGROUND INFORMATION



SPEED TABLE		1/2 MILE		1/2 MILE		1/2 MILE		1/2 MILE		1/2 MILE		1/2 MILE	
ROADWAY WIDTH		21'		60'-64' (Varies)									
NO. OF LANES		2		4									
MEDIAN (TYPE)				NONE									
TRAFFIC SIGNAL DATA		8 ø Act		6 ø Act		2 ø Act		6 ø Act		6 ø Act		6 ø Act	
AVERAGE DAILY TRAFFIC		4,470		9,950		17,490		17,240		14,300 (14,400)		14,500 12,650	
OBS. SPEED-CRITICAL, 85th% WB		55		38		42		45		42		41	
EB		55		37		42		43		45		42	
-PACE(%) WB		41-51(49)		29-39(79)		33-43(76)		36-46(82)		33-43(76)		32-42(78)	
EB		46-56(54)		29-39(83)		31-41(80)		34-44(76)		36-46(75)		33-43(71)	
-MEDIAN, 50th% WB		46		33		37		40		38		37	
EB		48		33		37		43		40		38	
EXISTING SPEED ZONE		55 mph		55 mph		40 mph		35 mph		40 mph		45 mph	
PROPOSED SPEED ZONE		55 mph		55 mph		40 mph		35 mph		40 mph		45 mph	

- LEGEND:**
- SIGN LOCATION
 - R1 — STOP SIGN
 - R2 () — SPEED LIMIT SIGN (MPH)
 - RT-2 — YIELD SIGN
 - C — INSTALLATION C [SCHOOL 25 MPH SIGNS, WES, R2(25), R72]
 - ⊙ — TRAFFIC SIGNAL
 - CITY LIMIT
 - CRITICAL SPEED
 - LOWER LIMIT OF PACE



ACCIDENT PLOT	YR: 1996	0	1	3	4	6	6	5
	YR: 1997	0	0	5	6	11	11	11
ACCIDENT RATE-ACC./MILL. VEH.-MI.		0.0	1.8	0.6	2.3	6	3.5	4.0

DR: TJ/RSK
 DATE: _____
 No. _____ Date _____ Revision _____
 Appr. Approved By _____
 City Engineer RCE NO. 47844 Date _____



CITY OF LODI
PUBLIC WORKS DEPARTMENT

TURNER RD.
W City Limits to E City Limits

SPEED ZONE SURVEY

EXHIBIT B

SPEED ZONE REPORT - Turner Road

- REFERENCE - Speed zone surveys are performed in the City of Lodi following State of California Department of Transportation (Caltrans) guidelines in accordance with Section 40802 (b) of the California Vehicle Code. These guidelines are outlined in Chapter 8 of the Caltrans Traffic Manual.
- STUDY

Important factors to consider in determining the speed limit which is most appropriate to facilitate the orderly movement of traffic and that is reasonably safe are prevailing speeds, unexpected conditions to drivers, and accident records.

Prevailing Speeds (85th Percentile Speeds) - Reasonable speed limits conform to the actual behavior of the majority of motorists, and by measuring motorists' speeds, one will be able to select a speed limit that is both reasonable and effective. Speed limits should normally be established at the first five-mile-per-hour increment below the 85th percentile speed. However, in matching existing conditions with the traffic safety needs of the community, engineering judgment may indicate the need for a further reduction of five miles per hour.

Sixteen radar surveys were performed and the 85th percentile speeds ranged from 37 to 55 mph as shown below:

<u>Street Segment</u>	<u>Westbound</u>	<u>Eastbound</u>
WID Canal to Lower Sacramento Road/Woodhaven Lane	55 mph	55 mph
Lower Sacramento Road/Woodhaven Lane to Mills Avenue	38 mph	37 mph
Mills Avenue to Ham Lane	42 mph	42 mph
Ham Lane to Church Street	42-45 mph	43-45 mph
Church Street to Stockton Street	41 mph	42 mph
Stockton Street to Cluff Avenue	41-42 mph	43-45 mph

Unexpected Conditions

When roadside development results in traffic conflicts and unusual conditions which are not readily apparent to drivers, speed limits below the 85th percentile are warranted. The following factors were considered: roadway design speed, safe stopping sight distance, superelevation, shoulder conditions, profile condition, intersection spacing and offsets, commercial driveway characteristics, and pedestrian traffic in the roadway without sidewalks.

As described in the conclusion, with the exception of the segment between Mills Avenue and Loma Drive, there were no unexpected conditions observed along Turner Road.

Accidents

Accident records of the two most recent years were considered in determining the speed zones. Accidents on segments of roadways are classified by their accident rate. Accident rates are determined by the number of accidents occurring within a segment of roadway and

SPEED ZONE REPORT - Turner Road

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the traffic volume within that segment. Accident rates are shown in accidents-per-million-vehicle-miles (ACC/MVM). The accident rate ranged from 0.0 to 4.0 ACC/MVM. The average citywide accident rate is 4.5 ACC/MVM.

◦ CONCLUSION

West City Limits to Evergreen Drive

The 85th percentile speed on this segment is 55 mph. The 50th percentile speeds are 46 and 48 mph. There have been no accidents within this segment during the two-year survey period. Based on recent prevailing speeds and continuing low accident rate, staff recommends retaining a 55-mph speed limit on this segment.

Evergreen Drive to Lower Sacramento Road/Woodhaven Lane

The 40-mph speed limit on this approximately 1,450-foot segment is a transition area between the 55-mph speed limit to the west and 35-mph speed limit to the east.

Lower Sacramento Road/Woodhaven Lane to Mills Avenue

The 85th percentile speeds on this segment are 37 and 38 mph. The 50th percentile speed is 33 mph. The accident rates of 0.6 and 1.8 are far below the citywide average. Due to the reduction of prevailing speeds and continuing low accident rate, staff recommends a 35-mph speed limit on this segment.

Mills Avenue to Ham Lane

The 85th percentile speed on this segment is 42 mph. The 50th percentile speed is 37 mph. The accident rate of 2.3 is lower than the citywide average. Although based on prevailing speeds and accident rate the speed limit on this segment could be posted at 40 mph, the following unexpected conditions were considered.

Some areas along the south side of Turner Road between Mills Avenue and Loma Drive have no sidewalks and there is pedestrian activity in the area due to the close proximity to Lodi Lake Park. In addition, the entrance to Lodi Lake Park and pedestrian crossing is located along a short tangent section between two reverse curves. Although the Park entrance is expected, stopped vehicles waiting behind turning cars and pedestrians are unexpected as evidenced by the number of rearend accidents occurring in front of the Park. Based on the unexpected conditions caused by these speed-related accidents, staff recommends a 35-mph speed limit on this segment.

Ham Lane to Church Street

The 85th percentile speeds on this segment range from 42 to 45 mph. The 50th percentile speeds range from 38 to 43 mph. The accident rate of 3.5 on this segment is below the citywide average and slightly above the 2.8 rate from the 1993 survey. Based on prevailing speeds and continuing low accident rate, staff recommends retaining the speed limit of 40 mph on this segment.

Church Street to Stockton Street

The 85th percentile speeds on this segment are 41 and 42 mph. The 50th percentile speeds are 37 and 38 mph. The accident rate of 4.0 is slightly below the citywide average. Although the accident rate continues to be below the citywide average, due to the reduction of prevailing speeds, staff recommends a 40-mph speed limit on this segment.

Stockton Street East City Limits

The 85th percentile speeds on this segment are 41 and 45 mph. The 50th percentile speeds are 38 and 39 mph. The accident rate of 3.0 on this segment is below the citywide average. Although the accident rate continues to be below the citywide average, due to the reduction of prevailing speeds, staff recommends a 40-mph speed limit on this segment. The reduction of prevailing speeds along the segment east of Highway 99 could be a result of traffic lane line striping modifications performed since the previous survey.

The recommended speed limits are shown below:

STREET SEGMENT

POSTED SPEED LIMIT

West City limits to Evergreen Drive	55 mph (no change)
Evergreen Drive to Lower Sacramento Road/Woodhaven Lane	40 and 55 mph to 40 mph
Lower Sacramento Road/Woodhaven Lane to Mills Avenue	40 to 35 mph
Mills Avenue to Ham Lane	35 mph (no change)
Ham Lane to Church Street	40 mph (no change)
Church Street to Stockton Street	45 to 40 mph
Stockton Street to East City Limits	45 to 40 mph

Robert K. Murdoch
City Engineer

RKM/RSK/lm

RESOLUTION NO. 98-169

A RESOLUTION OF THE LODI CITY COUNCIL APPROVING
SPEED LIMIT MODIFICATIONS ON HARNEY LANE AND
TURNER ROAD, AND THEREBY AMENDING TRAFFIC
RESOLUTION NO. 97-148

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WHEREAS, speed zone surveys are performed in the City of Lodi following State of California Department of Transportation (Caltrans) guidelines in accordance with Section 40802(b) of the California Vehicle Code, which are outlined in Chapter 8 of the Caltrans Traffic Manual.

WHEREAS, per §40802(b) of the California Vehicle Code, Engineering and Traffic Surveys must be updated a minimum of every five years on "non-local" streets. "Non-local" streets are collector and arterial streets included in the Federal Aid System, and speed limits on streets where surveys are older than five years cannot be enforced using radar; and

WHEREAS, the Public Works Department recently performed Engineering and Traffic Surveys on the following streets: Almond Drive, Century Boulevard – Stockton Street to Cherokee Lane, Crescent Avenue – Kettleman Lane to Lodi Avenue, Harney Lane, Lower Sacramento Road – South City Limits to Turner Road, Turner Road and Woodhaven Lane; and

WHEREAS staff recommends the speed limit modifications on portions of Harney Lane and Turner Road as shown as follows:

- 1.) Harney Lane from West City Limits to WID Canal from 55 mph to 45 mph; and
- 2.) Turner Road from Evergreen Drive to Lower Sacramento Road/Woodhaven lane from 55 mph to 40 mph; and
- 3.) Turner Road from Lower Sacramento Road/Woodhaven Lane to Mills Avenue from 40 mph to 35 mph; and
- 4.) Turner Road from Stockton Street to East City Limits from 45 mph to 40 mph.

NOW, THEREFORE, BE IT RESOLVED, that the City Council of the City of Lodi does hereby approve the speed limit modifications on portions of Harney Lane and Turner Road as follows:

- 1.) Harney Lane from West City Limits to WID Canal from 55 mph to 45 mph; and
- 2.) Turner Road from Evergreen Drive to Lower Sacramento Road/Woodhaven lane from 55 mph to 40 mph; and
- 3.) Turner Road from Lower Sacramento Road/Woodhaven Lane to Mills Avenue from 40 mph to 35 mph; and
- 4.) Turner Road from Stockton Street to East City Limits from 45 mph to 40 mph.

BE IT FURTHER RESOLVED, that the City of Lodi Traffic Resolution No. 97-148, Section 7 "Speed Limits" is hereby amended by designating speed limit modifications as shown above.

Dated: November 18, 1998

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I hereby certify that Resolution No. 98-169 was passed and adopted by the City Council of the City of Lodi in a regular meeting held November 18, 1998, by the following vote:

AYES: COUNCIL MEMBERS – Johnson, Land, Mann, Pennino and Sieglock
(Mayor)

NOES: COUNCIL MEMBERS – None

ABSENT: COUNCIL MEMBERS – None

ABSTAIN: COUNCIL MEMBERS – None


ALICE M. REIMCHE
City Clerk

CITY COUNCIL

JACK A. SIEGLOCK, Mayor
KEITH LAND
Mayor Pro Tempore
ROBERT J. JOHNSON
STEPHEN J. MANN
PHILLIP A. PENNINO

CITY OF LODI

CITY HALL, 221 WEST PINE STREET
P.O. BOX 3006
LODI, CALIFORNIA 95241-1910
(209) 333-6706
FAX (209) 333-6710

November 12, 1998

H. DIXON FLYNN
City Manager
ALICE M. REIMCHE
City Clerk
RANDALL A. HAYS
City Attorney

Mr. Richard Warner
Casa de Lodi
15 Rio Vista Drive
Lodi, CA 95240

The Honorable George Barber
San Joaquin County Board of Supervisors
222 East Weber Avenue, Room 701
Stockton, CA 95202

SUBJECT: Amend Traffic Resolution to Adopt Speed Limit Modifications on
Harney Lane and Turner Road

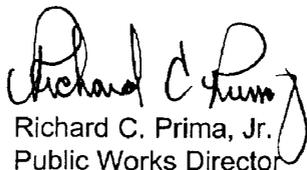
Enclosed is a copy of background information on an item on the City Council agenda of Wednesday, November 18, 1998. The meeting will be held at 7 p.m. in the City Council Chamber, Carnegie Forum, 305 West Pine Street.

This item is on the consent calendar and is usually not discussed unless a Council Member requests discussion. The public is given an opportunity to address items on the consent calendar at the appropriate time.

If you wish to write to the City Council, please address your letter to City Council, City of Lodi, P. O. Box 3006, Lodi, California, 95241-1910. Be sure to allow time for the mail. Or, you may hand-deliver the letter to City Hall, 221 West Pine Street.

If you wish to address the Council at the Council Meeting, be sure to fill out a speaker's card (available at the Carnegie Forum immediately prior to the start of the meeting) and give it to the City Clerk. If you have any questions about communicating with the Council, please contact Alice Reimche, City Clerk, at 333-6702.

If you have any questions about the item itself, please call Rick Kiriu at 333-6800, ext. 668.


Richard C. Prima, Jr.
Public Works Director

RCP/lm

Enclosure

cc: City Clerk ✓

CASA DE LODI
Mobile Homeowners Assn.
812 E. Turner Road
Lodi, CA 95240

November 16, 1998

CITY OF LODI
CITY HALL, 221 WEST PINE STREET
LODI, CALIFORNIA, 95240

RECEIVED

NOV 16 1998

ATTENTION:

RICHARD C. PRIMA JR.

PUBLIC WORKS DIRECTOR



SUBJECT:

AMEND TRAFFIC RESOLUTION TO ADOPT SPEED LIMIT
MODIFICATIONS ON HARNLEY LANE AND TURNER ROAD

REFERENCE:

YOUR LETTER OF NOVEMBER 12, 1998 - WITH ENCLOSURES
OF COUNCIL COMMUNICATION FOR MEETING OF
NOVEMBER 18, 1998

DEAR MR. PRIMA:

THIS ACKNOWLEDGES THE RECEIPT OF THE SUBJECT
CORRESPONDANCE BY THE SECRETARY OF THE
CASA DE LODI MOBILE HOMEOWNERS ASSOCIATION.

WE DEFINATELY ARE IN FAVOR OF YOUR RECOMMENDAT-
IONS FOR THE TURNER ROAD - WEST CITY LIMITS
TO EAST CITY LIMITS. AND SPECIFICIALLY THAT AREA
STOCKTON STREET TO CLIFF AVENUE. AS INDICATED
FROM OUR PREVIOUS REQUESTS

WE ARE PLANNING TO HAVE A REPRESENTATIVE
IN ATTENDANCE AT THE COUNCIL MEETING - MAINLY
TO COMMUNENT YOUR ORGANIZATION FOR THE COMPLETE-
NESS AND THOROUGHNESS OF OUR REQUESTED SAFETY
MEASURES TO OUR SATISFACTION

Richard G. Warner
SECRETARY CASA DE LODI
MOBILE HOMEOWNERS ASSOCIATION