



**CITY OF LODI
COUNCIL COMMUNICATION**

TM

AGENDA TITLE: Adopt Resolution Approving Updated Engineering and Traffic Surveys on Almond Drive, Crescent Avenue (Kettleman Lane to Lodi Avenue), and Harney Lane (West City Limits to East City Limits) Resulting in No Change to Existing Speed Limits

MEETING DATE: October 20, 2010

PREPARED BY: Public Works Director

RECOMMENDED ACTION: Adopt a resolution approving updated Engineering and Traffic Surveys on Almond Drive, Crescent Avenue (Kettleman Lane to Lodi Avenue), and Harney Lane (west City limits to east City limits) resulting in no change to existing speed limits.

BACKGROUND INFORMATION: Staff recently reviewed Engineering and Traffic Surveys on Almond Drive, Crescent Avenue from Kettleman Lane to Lodi Avenue, and Harney Lane from the west City limits to east City limits. Based on this State-mandated review, staff is recommending no changes to the existing speed limits (Exhibit A).

The Engineering and Traffic Surveys consider three primary factors: prevailing speeds; accident rates; and conditions a driver would not expect. Other characteristics, such as residential density, pedestrian and bicycle safety, and shoulder conditions, are also considered.

The Police Department has not expressed any concerns regarding the proposed speed limits. A map showing speed limits on surveyed streets within the City is attached as Exhibit B.

FISCAL IMPACT: Not applicable.

FUNDING AVAILABLE: Not applicable.

F. Wally Sandelin
Public Works Director

Prepared by Rick S. Kiriou, Senior Engineering Technician

FWS/RSK/pjt

Attachments

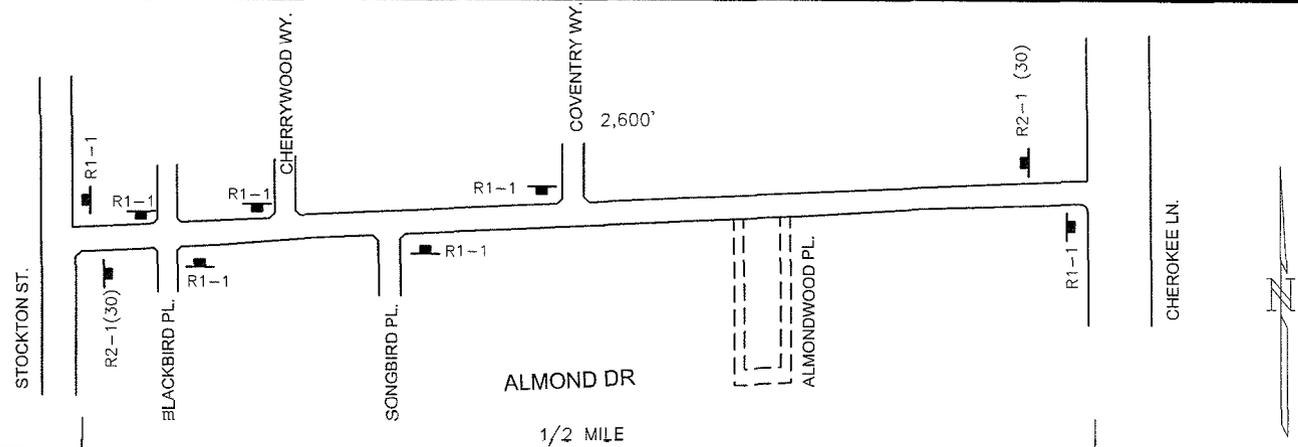
cc: City Attorney
Police Chief
Police Sergeant Jacobsen
Senior Civil Engineer Chang
Streets and Drainage Superintendent

APPROVED:

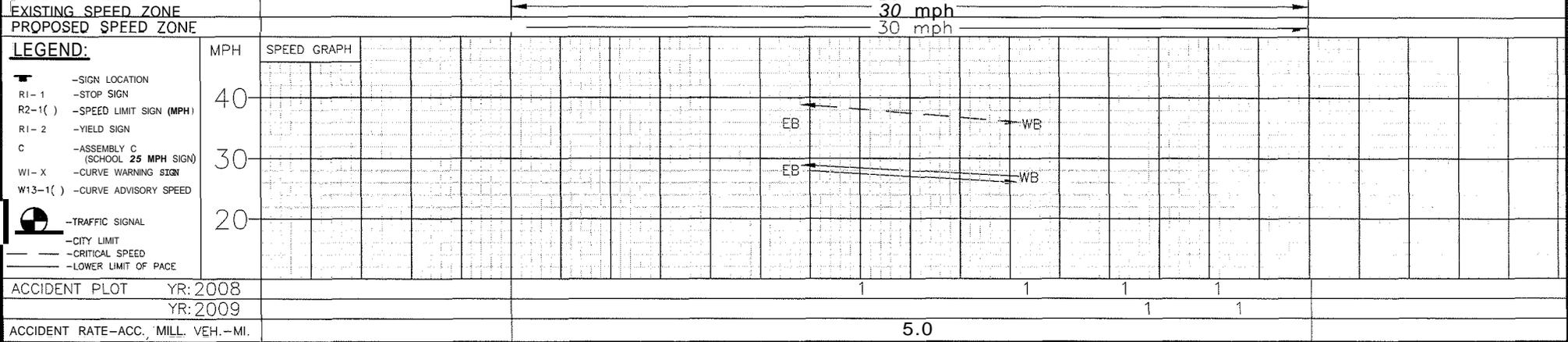
Konradt Bartlam, Interim City Manager

ENGINEERING AND TRAFFIC SURVEY

SEE NARRATIVE FOR BACKGROUND INFORMATION



SPEED TABLE	
ROADWAY WIDTH	44'
NO. OF LANES	2
MEDIAN (NPE)	NONE
TRAFFIC SIGNAL DATA	NONE
AVERAGE DAILY TRAFFIC	3,345
OBS. SPEED - CRITICAL 85th% EB	36
WB	30
- PACE (%) EB	39
WB	36
- MEDIAN 50th% EB	32
WB	31
	33
	31
	28-38(88)
	26-36(74)
	29-39(78)
	27-37(76)



DR: RSK	No.	Date	Revision	APPR	Approved By	CITY OF LODI PUBLIC WORKS DEPARTMENT	ALMOND DR. Stockton to Cherokee	SPEED ZONE SURVEY
CH:					Transportation Mgr/Sr Traffic Engineer Date			
DATE: Oct 2010					TR 1625			

Exhibit A

SPEED ZONE REPORT - Almond Drive

- REFERENCE - Speed zone surveys are performed in the City of Lodi following the California MUTCD in accordance with Section 40802 (b) of the California Vehicle Code.
- STUDY CRITERIA - 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 (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 nearest five mile per hour (mph) increment to 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 mph.

Accidents - Accident records for two 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 (ACCIMVM). The average Citywide accident rate is 3.5 ACCIMVM.

Unexpected Conditions – Highway, traffic, and roadside conditions not readily apparent to the driver were considered. When roadside development results in traffic conflicts and unusual conditions which are not readily apparent to drivers, speed limits below the 85th percentile may be justified.

Other Factors - The following factors were considered: residential density, pedestrian & bicycle safety, 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.

- STUDY RESULT
Four radar surveys were performed and the 85th percentile speeds ranged from 36 to 39 mph as shown below.

<u>Street Segment</u>	<u>Eastbound</u>	<u>Westbound</u>
Stockton Street to Cherokee Lane	36 mph	36-39 mph

Stockton Street to Cherokee Lane

The 85th percentile speeds on this segment range from 36 to 39 mph. The 50th percentile speeds range from 31-33 mph. The accident rate of 5.0 is above the City-wide average and below the 6.0 rate from the 2003 survey. Based solely on the prevailing speeds, the speed limit could be set at 35 mph; however based on the continuing higher than average accident rate, we recommend retaining a 30 mph speed limit on this segment.

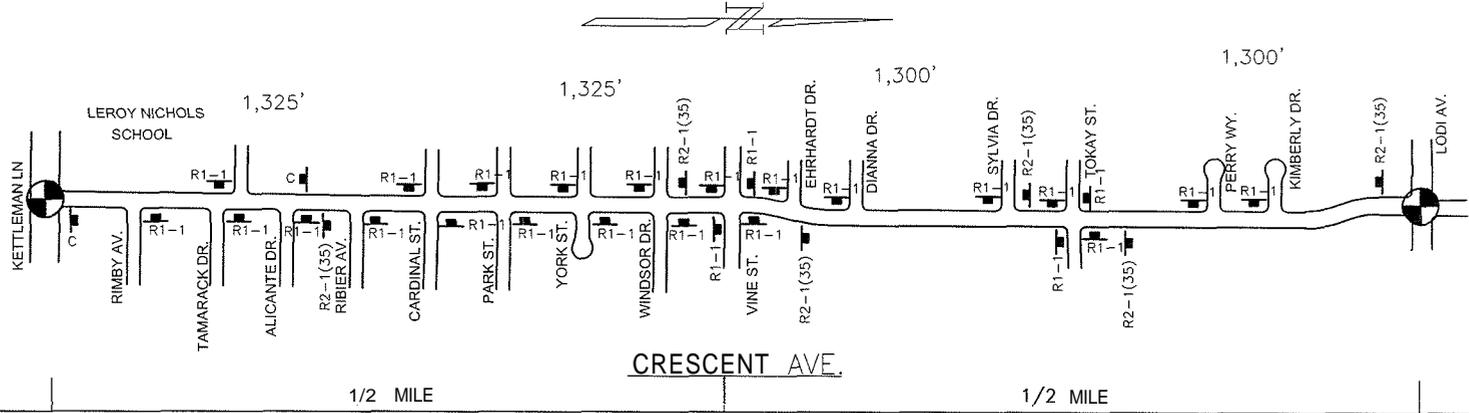
- CONCLUSION
The recommended speed limits are shown below:

<u>STREET SEGMENT</u>	<u>POSTED SPEED LIMIT</u>
Stockton Street to Cherokee Lane	30 mph (no change)

Paula J. Fernandez
Transportation Manager/Senior Traffic Engineer

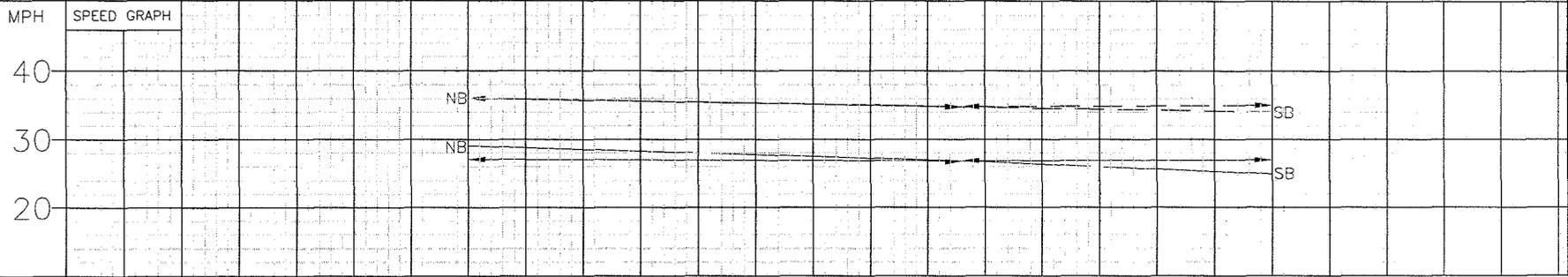
**ENGINEERING
AND TRAFFIC SURVEY**

SEE NARRATIVE FOR
BACKGROUND INFORMATION



SPEED TABLE			
ROADWAY WIDTH		49'	
NO. OF LANES		2 w/Bike Lane	
MEDIAN (TYPE)		NONE	
TRAFFIC SIGNAL DATA	6ø Act		2 ø Act
AVERAGE DAILY TRAFFIC	2,765	2,500	2,310
OBS. SPEED—CRITICAL, 85th% NB	36	35	35
SB	36	35	34
-PACE(%) NB	32	31	31
SB	32	31	30
-MEDIAN, 50th% NB	29-39(83)	27-37(87)	27-37(82)
SB	27-37(86)	27-37(81)	25-35(77)
EXISTING SPEED ZONE		35 mph	
PROPOSED SPEED ZONE		35 mph	

- LEGEND:**
- SIGN LOCATION
 - R1-1 — STOP SIGN
 - R2-1() — SPEED LIMIT SIGN (MPH)
 - R1-2 — YIELD SIGN
 - C — ASSEMBLY C (SCHOOL 25 MPH SIGN)
 - W1-X — CURVE WARNING SIGN
 - W13-1() — CURVE ADVISORY SPEED
 - TRAFFIC SIGNAL
 - CITY LIMIT
 - CRITICAL SPEED
 - LOWER LIMIT OF PACE



ACCIDENT PLOT	YR. 2008	0	1	0
	YR. 2009	1	1	0
ACCIDENT RATE—ACC./MILL. VEH.—MI.		2.0	2.2	0.0

DR: RSK
CH:
DATE: Oct 2010

No.	Date	Revision	Appr	Approved By

Transportation Mgr./Sr Traffic Engineer TR 1625

CITY OF LODI
PUBLIC WORKS DEPARTMENT

CRESCENT AVE.
Lodi Ave. to Kettleman Ln.

SPEED ZONE SURVEY

SPEED ZONE REPORT - Crescent Avenue, Kettleman Lane to Lodi Avenue

- REFERENCE - Speed zone surveys are performed in the City of Lodi following the California MUTCD in accordance with Section 40802 (b) of the California Vehicle Code.
- STUDY CRITERIA - 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 (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 nearest five mile per hour (mph) increment to 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 mph.

Accidents - Accident records for two 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 average Citywide accident rate is 3.5 ACC/MVM.

Unexpected Conditions – Highway, traffic, and roadside conditions not readily apparent to the driver were considered. When roadside development results in traffic conflicts and unusual conditions which are not readily apparent to drivers, speed limits below the 85th percentile may be justified.

Other Factors - The following factors were considered: residential density, pedestrian & bicycle safety, 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.

- STUDY RESULT
Six radar surveys were performed and the 85th percentile speeds ranged from 34 to 36 mph as shown below.

<u>Street Segment</u>	<u>Northbound</u>	<u>Southbound</u>
Kettleman Lane to Vine Street	36 mph	36 mph
Vine Street to Tokay Street	35 mph	35 mph
Tokay Street to Lodi Avenue	35 mph	34 mph

Kettleman Lane to Vine Street

The 85th percentile speed on this segment is 36 mph. The 50th percentile speed is 32 mph. The accident rate of 2.0 is below the Citywide average and lower than the 3.4 rate from the 2003 survey. Based on prevailing speeds and continuing low accident rate, we recommend retaining the 35 mph speed limit on this segment.

Vine Street to Tokay Street

The 85th percentile speed on this segment is 35 mph. The 50th percentile speed is 31 mph. The accident rate of 2.2 is below the Citywide average and lower than the 0.0 rate from the 2003 survey. Based on prevailing speeds and continuing low accident rate, we recommend retaining the 35 mph speed limit on this segment.

Tokay Street to Lodi Avenue

The 85th percentile speeds on this segment range from 34 to 35 mph. The 50th percentile speeds ranged from 30 to 31 mph. The accident rate of 0.0 is below the Citywide average and slightly less than the 2.0 rate from the 2003 survey. Based on prevailing speeds and continuing low accident rate, we recommend retaining the 35 mph speed limit in this segment.

o CONCLUSION

The recommended speed limits are shown below:

<u>Crescent Avenue Segment</u>	<u>Posted Speed Limit</u>
Kettleman Lane to Vine Street	35 mph (no change)
Vine Street to Tokay Street	35 mph (no change)
Tokay Street to Lodi Avenue	35 mph (no change)

Paula J. Fernandez
Transportation Manager/Senior Traffic Engineer

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

- o REFERENCE - Speed zone surveys are performed in the City of Lodi following the California MUTCD in accordance with Section 40802 (b) of the California Vehicle Code.
- o STUDY CRITERIA - 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 (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 nearest five mile per hour (mph) increment to 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 mph.

Accidents - Accident records for two 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 average Citywide accident rate is 3.5 ACC/MVM.

Unexpected Conditions – Highway, traffic, and roadside conditions not readily apparent to the driver were considered. When roadside development results in traffic conflicts and unusual conditions which are not readily apparent to drivers, speed limits below the 85th percentile may be justified.

Other Factors - The following factors were considered: residential density, pedestrian & bicycle safety, 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.

- o STUDY RESULT
Eight radar surveys were performed and the 85th percentile speeds ranged from 45 to 52 mph, as shown below:

<u>Segment</u>	<u>Eastbound</u>	<u>Westbound</u>
West City Limits to Lower Sacramento Rd	N/A	N/A
980' West of Legacy Wy to Hutchins St	49-52 mph	45-50 mph
Hutchins Street to Stockton Street	46 mph	45 mph
Stockton Street to East City Limits	45 mph	45 mph

West City Limits to Lower Sacramento Road

This portion of Harney Lane is a short (660') isolated segment surrounded by portions under San Joaquin County's jurisdiction. Due to its short length and close proximity to the signalized intersection at Lower Sacramento Road it is not possible

to obtain the measurement of vehicle speeds needed to establish an enforceable speed limit. The County is currently reviewing their portion of this segment. Until the County is able to determine an enforceable speed limit, this portion of Harney Lane will remain posted at an unenforceable 25 mile per hour speed limit.

980' West of Legacy Way to Hutchins Street

The 85th percentile speeds on this segment range from 45 to 52 mph. The 50th percentile speeds range from 41 to 46 mph. The accident rate of 2.2 is below the citywide average and slightly higher than the 1.7 rate from the 2003 survey. Based on the prevailing speeds and continuing low accident rate, we recommend retaining the 45 mph speed limit on this segment.

Hutchins Street to Stockton Street

The 85th percentile speeds on this segment are 45 and 46 mph. The 50th percentile speeds are 41 and 42 mph. The accident rate of 3.1 ACC/MVM is slightly below the citywide average and higher than the 1.7 rate from the 2003 survey. Based on the prevailing speeds and reasonable accident rate, we recommend retaining the 45 mph speed limit on this segment.

Stockton Street to East City Limits

The 85th percentile speed on this segment is 45 mph. The 50th percentile speeds are 41 and 42 mph. The accident rate of 1.1 ACC/MVM is below the citywide average and slightly higher than the 0.6 rate from the 2003 survey. Based on the prevailing speeds and continuing low accident rate, we recommend retaining the 45 mph speed limit on this segment.

o CONCLUSION

The recommended speed limits are shown below:

<u>Street Segment</u>	<u>Posted Speed Limit</u>
West City Limits to Lower Sacramento Road	25 mph (unenforceable)
980' West of Legacy Way to Hutchins Street	45 mph (no change)
Hutchins Street to Stockton Street	45 mph (no change)
Stockton Street to East City Limits	45 mph (no change)

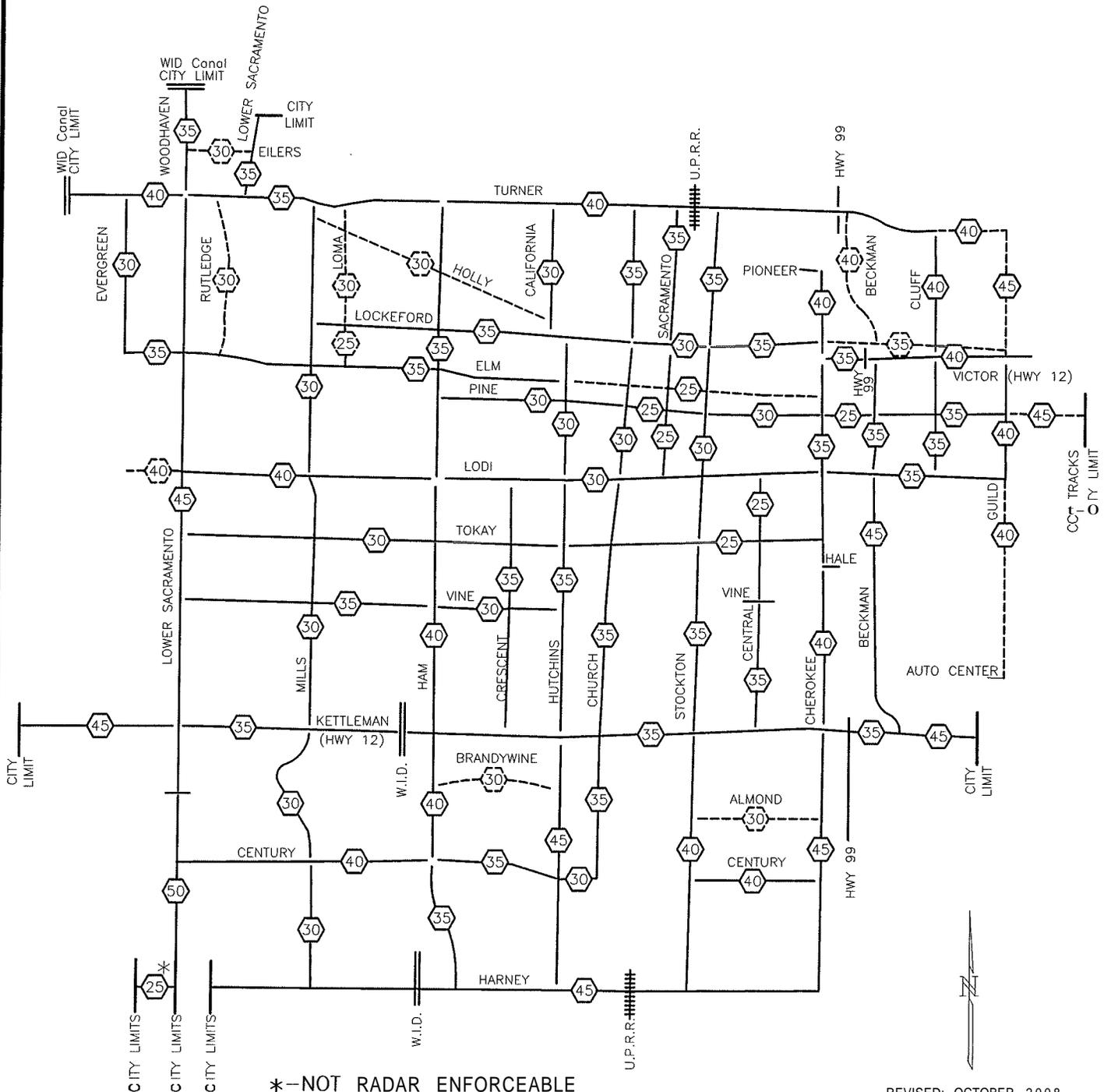
Paula J. Fernandez
Transportation Manager/Senior Traffic Engineer



CITY OF LODI

PUBLIC WORKS DEPARTMENT

POSTED SPEED LIMITS



NOTE: The speed limits shown on this map are in miles per hour. The speed limit on streets within the City not shown on this map are 25 miles per hour.

LEGEND	
	STREET WITH SPEED ZONE (NON-LOCAL STREET)
	"LOCAL" STREET WITH SPEED ZONE (VC 40802)

RESOLUTION NO. 2010-180

A RESOLUTION OF THE LODI CITY COUNCIL APPROVING UPDATED
ENGINEERING AND TRAFFIC SURVEYS ON ALMOND DRIVE,
CRESCENT AVENUE (KETTLEMAN LANE TO LODI AVENUE), AND
HARNEY LANE (WEST CITY LIMITS TO EAST CITY LIMITS) RESULTING
IN NO CHANGE TO EXISTING SPEED LIMITS

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WHEREAS, staff recently reviewed Engineering and Traffic Surveys on Almond Drive, Crescent Avenue (Kettleman Lane to Lodi Avenue), and Harney Lane (west City limits to east City limits). Based on this State-mandated review, staff is recommending no changes to the existing speed limits; and

WHEREAS, the Engineering and Traffic Surveys consider three primary factors: prevailing speeds; accident rates; and conditions a driver would not expect. Other characteristics, such as residential density, pedestrian and bicycle safety, and shoulder conditions, are also considered; and

WHEREAS, the Police Department has not expressed any concerns regarding the proposed speed limits.

NOW, THEREFORE, BE IT RESOLVED that the Lodi City Council does hereby approve the updated Engineering and Traffic Surveys on Almond Drive, Crescent Avenue (Kettleman Lane to Lodi Avenue), and Harney Lane (west City limits to east City limits) and no change to existing speed limits be made.

Dated: October 20, 2010

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I hereby certify that Resolution No. 2010-180 was passed and adopted by the City Council of the City of Lodi in a regular meeting held October 20, 2010, by the following vote:

AYES: COUNCIL MEMBERS – Hansen, Hitchcock, Johnson, Mounce, and Mayor Katzakian

NOES: COUNCIL MEMBERS – None

ABSENT: COUNCIL MEMBERS – None

ABSTAIN: COUNCIL MEMBERS – None



RANDI JOHL
City Clerk