## DEPARTMENT OF TRANSPORTATION

DISTRICT 3
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Flex your power! Be energy efficient!

October 28, 2010

Jim Goodwin City Manager City of Live Oak 9955 Live Oak Boulevard Live Oak, CA 95953

Dear Mr. Goodwin:

This letter is in response to our telephone conversation concerning the speed limits on State Route (SR) 99 in the City of Live Oak.

At your request, we reexamined our proposals and determined that they are in accordance with the California Vehicle Code (CVC) and are the safest speed limits for the City of Live Oak. Speed zones are governed by the CVC and the California Manual on Uniform Traffic Control Devices (CAMUTCD). These publications define how speed zones are determined. These publications also restrict how speed zones can be set. We find in the CAMUTCD Section 2B.13 that "When a speed limit is to be posted, it shall be established at the nearest 10 km/h (5 mph) increment of the 85th-percentile speed of free-flowing traffic." It further provides for a reduction to the 85th-percentile; "The posted speed may be reduced by 10 km/h (5 mph) from the nearest 10 km/h (5 mph) increment of the 85th-percentile speed, in compliance with CVC Sections 627 and 22358.5." CVC Section 22358.5 outlines things we cannot consider when reducing the 85th-percentile speed; "It is the intent of the Legislature that physical conditions such as width, curvature, grade, and surface conditions, or any other condition readily apparent to a driver, in the absence of other factors, would not require special downward speed zoning, as the basic rule of Section 22350 is sufficient regulation as to such conditions." Accident histories are one of the conditions not readily apparent to a driver. The 5 mph reduction to the 85thpercentile speed for the speed zone from PM 40.02 to 40.50 has been included in our proposal to account for accidents.

When lowering the 85th-percentile speed the CAMUTCD Section 2B.13 cautions us that "The establishment of a speed limit of more than 10 km/h (5 mph) below the 85th percentile speed should be done with great care as studies have shown that establishing a speed limit at less than the 85th percentile generally results in an increase in collision rates." A close example of this can be found in the City of Live Oak. The current 35 mph speed zone came into existence in 2002 as a result of the previous E&TS. Prior to that, it was signed for 40 mph. After the speed reduction from 40 mph to 35 mph, both the accident rate and the prevailing speeds increased for this speed zone. While the applied 5 mph reduction to the 85th-percentile speed was justified at the time, it had negative results.

Jim Goodwin October 28, 2010 Page 2

The CAMUTCD Section 2B.13 states that "A section of highway shall be defined as a speed trap if the prima facie speed limit is not justified by an engineering and traffic survey (E&TS) within five years, and the enforcement of the speed limit involves the use of radar or any other electronic device that measures the speed of moving objects." We can extend it to seven years when the citing officer has had proper training and uses the proper radar equipment. Speed traps are also covered in CVC Section 40802. The previous E&TS for the City of Live Oak was completed in 2002 and has expired. We are allowed to conduct another E&TS anytime before a speed zone expires. If and when a significant change occurs, such as a new signal, we will redo the E&TS twelve months after the change is in place.

If you have any questions regarding this response, please contact Ron Sykes at (530) 741-5747.

Sincerely,

STEVE KIRKPATRICK, P.E.

Steven C. Kirkportrick

Deputy District Director

Maintenance & Traffic Operations

DEPARTMENT OF TRANSPORTATION DISTRICT 3 703 B STREET P. O. BOX 911 MARYSVILLE, CA 95901-0911 PHONE (530) 741-4233 FAX (530) 741-4245 TTY (530) 741-4509



Flex your power! Be energy efficient!

September 15, 2010

Diane Hodges, Mayor City of Live Oak 9955 Live Oak Boulevard Live Oak, CA 95953

Dear Mayor Hodges:

This letter is in response to your August 13, 2010, request to retain the existing speed limits on State Route (SR) 99 in the City of Live Oak.

The establishment of speed limits can be an emotional issue and a rational, objective, defensible determination is necessary to maintain public confidence in the process. The <u>California Vehicle Code</u> (CVC) Section 22349 sets the base speed limit for state highways at 55 mph or 65 mph, depending on the type of facility. CVC Sections 22349 and 22354 provides Caltrans the authority to raise or lower this speed limit based on an engineering and traffic survey (E&TS) made in accordance with established traffic engineering practices. These practices do not allow Caltrans to leave the existing speed zones as is or wait for future construction projects to begin. Speed limits are normally set near the critical (85<sup>th</sup> percentile) speed. This is the speed at or below which 85% of free-flowing traffic is moving and establishes the upper limit of what is considered reasonable and prudent.

Only one of the three speed zones on SR 99 in the City of Live Oak has an accident rate higher than the statewide average and none of them have had any fatalities during the three year accident study period from January 1, 2006, to December 31, 2008. Taking the above average accident history at the current 35 mph speed zone into consideration, our proposed 40 mph speed limit already included the maximum allowed reduction to the 85<sup>th</sup> percentile. We are not allowed to reduce it further.

The current 35 mph speed zone came into existence in 2002 as a result of the previous E&TS and prior to that, it was signed for 40 mph. After the speed reduction from 40 mph to 35 mph, both the accident rate and the prevailing speeds increased for this speed zone. It cannot be assumed that lowering speed limits is the answer to improving safety.

Mrs. Hodges September 15, 2010 Page 2

As with most laws, speed limits need to depend on the voluntary compliance of the greater majority of motorists. It is essential to set speed limits in accordance with the CVC or the California Highway Patrol cannot enforce the speed limit.

If you have any questions regarding this response, please contact me at (530) 741-5747.

Sincerely,

RONALD S. SYKES, P.E.

Chief, Traffic Operations Branch

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