



SPEED ZONE SURVEY

APACHE AVENUE

(No. 2016)

FROM US HIGHWAY 50 NORTH TO EAST SAN BERNARDINO AVENUE (No. 2252B)

Reviewed by the Traffic Advisory Committee on SEP 05 2019

COMMITTEE APPROVED STAFF'S RECOMMENDATION.

COMMITTEE REQUESTED FURTHER ACTION.

Action: Traffic Advisory Committee voted unanimously to lower the speed on Apache Avenue from 30 mph to 25 mph, radar enforced, Prima Facie "Residential District," after the discussion that Apache Avenue meets CVC 515 "Residential District" speed zone criteria. (Other applicable CVC codes also, CVC 22352)

DEPARTMENT OF TRANSPORTATION
ENGINEERING AND TRAFFIC SURVEY

Location: Apache Avenue (No. 2016) from US 50 to East San Bernardino Avenue (No. 2252B)
Subject: Speed Zone Survey Update
Date: June 14, 2019

2019 ENGINEERING AND TRAFFIC SURVEY FOR SPEED LIMITS

1. INTRODUCTION

The California Vehicle Code, Section 22358, allows local authorities to establish speed limits based on an “Engineering and Traffic Survey”. The Vehicle Code goes on, in Section 40801 to prohibit the use of “speed traps” for the purpose of speed enforcement and, in Section 40802, defines “speed trap”. Section 40802 also indicates that an “Engineering and Traffic Survey” is required where speed enforcement involves the use of radar and establishes the frequency with which surveys must be conducted for continued radar enforcement. In order to comply with the provisions of the Vehicle Code, and insure that radar enforced speed zones are based on recent data, the County of El Dorado has established a practice of conducting engineering and traffic survey updates based on a cycle length of five (5) years or less.

In Section 627, the Vehicle Code provides a definition for “Engineering and Traffic Survey”, and states that an “Engineering and Traffic Survey” shall include:

1. Prevailing speeds as determined by traffic engineering measurements.
2. Accident records.
3. Highway, traffic, and roadside conditions not readily apparent to the driver.

In addition, the 2001 edition of the Vehicle Code added that residential density, pedestrian, and bicycle safety may be considered.

While the California Vehicle Code is silent regarding the relationship of the 85th percentile speed to the posted speed, the California Manual on Uniform Traffic Control Devices (CAMUTCD), Section 2B.13, “Speed Limit Sign”, “Engineering and Traffic Survey”, states in part:

“When a speed limit is to be posted, it shall be established at the nearest 5 mph increment of the 85th percentile speed of free-flowing traffic, . . . [except] the posted speed may be reduced by 5 mph from the nearest 5 mph increment of the 85th percentile speed . . .”

Section 2B.13 further states in part:

“If the speed limit to be posted has had the 5 mph reduction applied, then an E&TS shall document in writing the conditions and justification for the lower speed limit and be approved by a registered Civil or Traffic Engineer. The reasons for the lower speed limit shall be in compliance with CVC Sections 627 and 22358.5.

All “Engineering and Traffic Surveys “performed by the El Dorado County Department of Transportation for establishing speed limits, stop controlled intersections, crosswalks, painted traffic curbs, regulatory traffic signage, and other traffic control devices, use the current publications of the California Vehicle Code, CAMUTCD, California Manual for Setting Speed Limits, applicable County Ordinance Code, and other Civil Engineering publications and California Codes pertaining to the establishment and placement of traffic control devices.

2. NO CHANGES TO EXISTING SPEED LIMIT ON APACHE AVENUE (No. 2016) FROM US 50 TO EAST SAN BERNARDINO AVENUE (No. 2252B) (MILEPOST 0.00 – 0.40)

The existing speed limit on Apache Avenue, Milepost 0.00 – 0.40, is sanctioned by Resolution No. 247-81, which states:

“(a) Apache Avenue (No. 2016) thirty (30) miles per hour between U.S. Highway 50 and San Bernardino Avenue”

Data indicates that 1 of 1 road segments on Apache Avenue (MP 0.00-0.40) is recommended for no change in posted speed limit. The reason centers on the fact that newly measured values of the 85th percentile and the 10 MPH pace are still within the parameters of the existing speed limit. Hence, the current postings should remain as is. Those locations and data are listed below:

Segment 1: Apache Avenue (No. 2016) from US 50 to East San Bernardino Avenue (No. 2252B) (Segment Length 0.40 mi.) (MP 0.00-0.40)

This segment of Apache Avenue is a two lane, Major Collector Road that is 0.40 miles in length and serves an average of 1,388 vehicles per day. There has been one (1) collision (DUI, Hit Object) with zero (0) injuries and zero (0) fatalities in the past three years, resulting in a collision rate of 1.64 Collisions per Million Vehicle Miles. This segment functions as an access road for the Lake Tahoe Environmental Science Magnet School, the Tahoe Paradise Park as well as several residential neighborhoods. The adjoining terrain is flat.

- 85th percentile speed of 34 miles per hour was recorded.
- The calculated average daily traffic volume was 1,388 vehicles per day.
- There has been no appreciable change to the configuration or physical alignment during the past five (5) years.
- Roadway is straight with a level grade.
- There are six (6) intersecting County roads.
- There was one (1) collision reported on Apache Avenue from MP 0.00 to 0.40 for the three (3) year period from January 1, 2016, through December 31, 2018 with a collision rate of 1.64 Collisions per Million Vehicle Miles. This collision rate is slightly lower than the countywide benchmark of 1.70 collisions per Million Vehicle Miles.

- Staff observed zero (0) bicyclists, and zero (0) pedestrians utilizing this segment of Apache Avenue during the field review that lasted approximately one (1) hour.
- The existing 85th percentile speed of 34 mph justifies, in accordance with the CAMUTCD, a radar enforced 35 mph speed zone. However, due to, meeting the residential density requirements to establish a “Prima Facia 25 Miles per Hour Residential District”, the proximity of the Lake Tahoe Environmental Science Magnet School, numerous road intersections, and few pedestrian facilities, staff recommends the need for a further reduction of five (5) miles per hour to thirty (30) miles per hour.

<i>2019 SITE LOCATION</i>	<i>MILE POST</i>	<i>EXISTING SPEED LIMIT</i>	<i>85% SPEED</i>	<i>10 MPH PACE (%)</i>	<i>% IN PACE SPEED</i>
<i>South of Arrowhead Avenue</i>	<i>0.27</i>	<i>30 mph</i>	<i>34 mph</i>	<i>25-34 mph</i>	<i>79.2%</i>

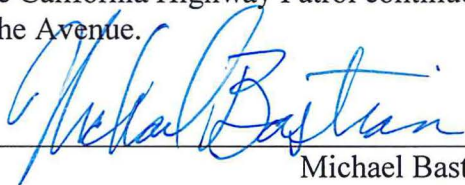
RECOMMENDATION:

1. Based on the findings of this survey it is recommended that the Traffic Advisory Committee retain the existing speed zone:

“(a) Apache Avenue (No. 2016) thirty (30) miles per hour between U.S. Highway 50 and San Bernardino Avenue”

2. That the California Highway Patrol continues to utilize radar enforcement in this speed zone on Apache Avenue.

Prepared by: _____



Michael Bastian
Senior Engineering Technician

APPROVED BY: _____



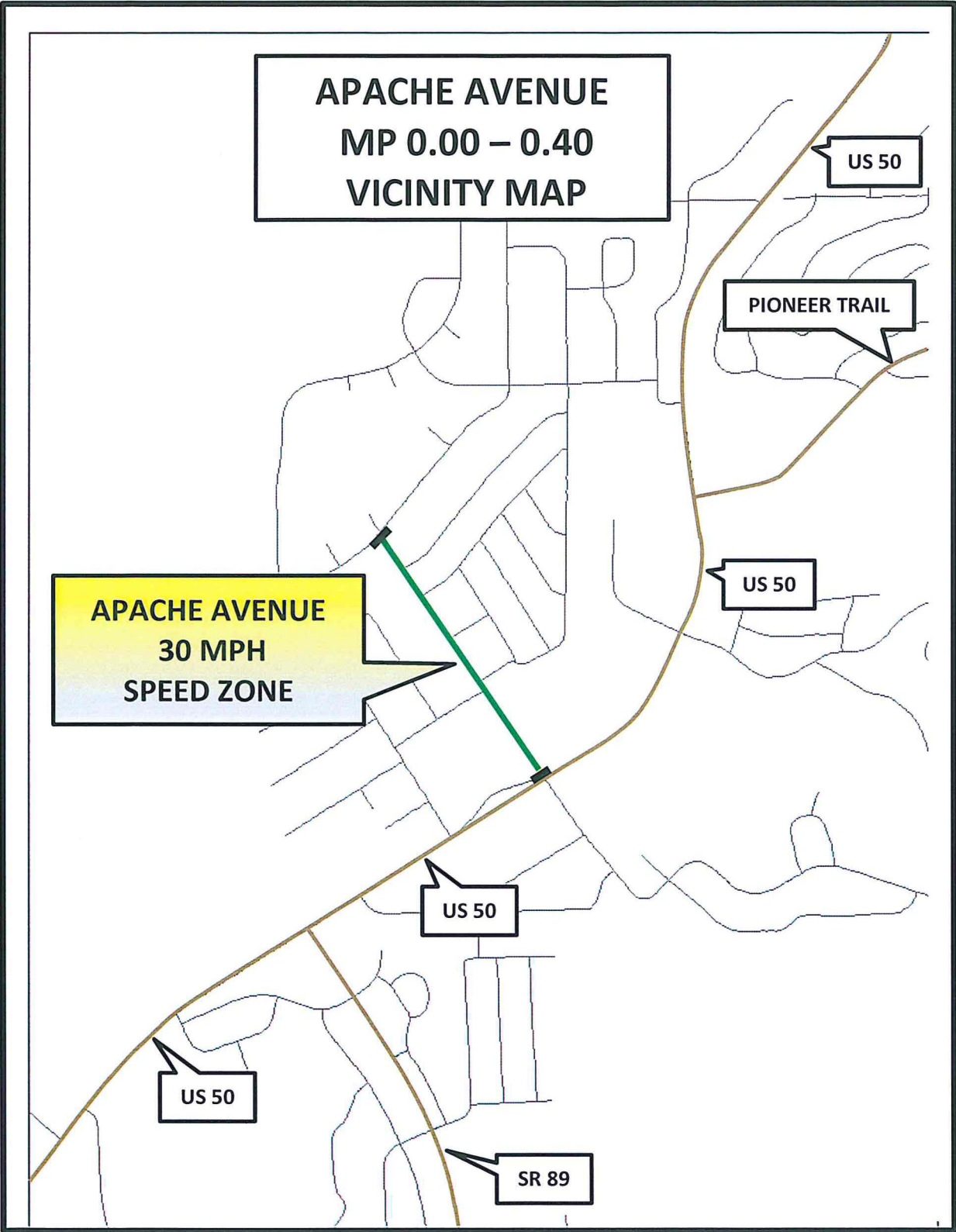
Rafael Martinez, T.E., Director
Community Development Services
Department of Transportation

on _____

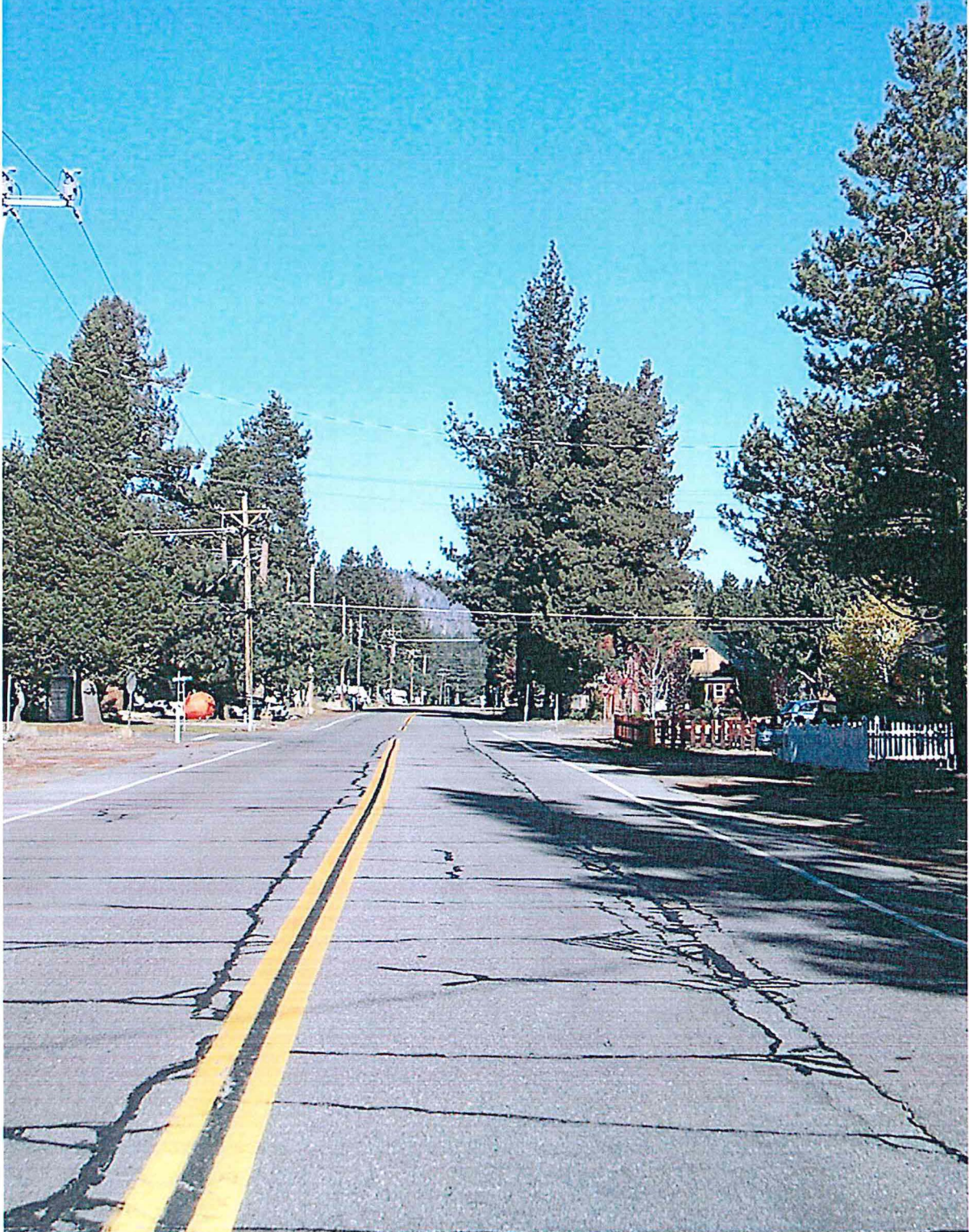
7/15/19
Date

Attachments:

- Vicinity Map (1 page)
- Photo (1 page)
- Speed Survey (1 pages)



**APACHE AVENUE
SOUTH OF ARROWHEAD AVE
LOOKING NORTH**

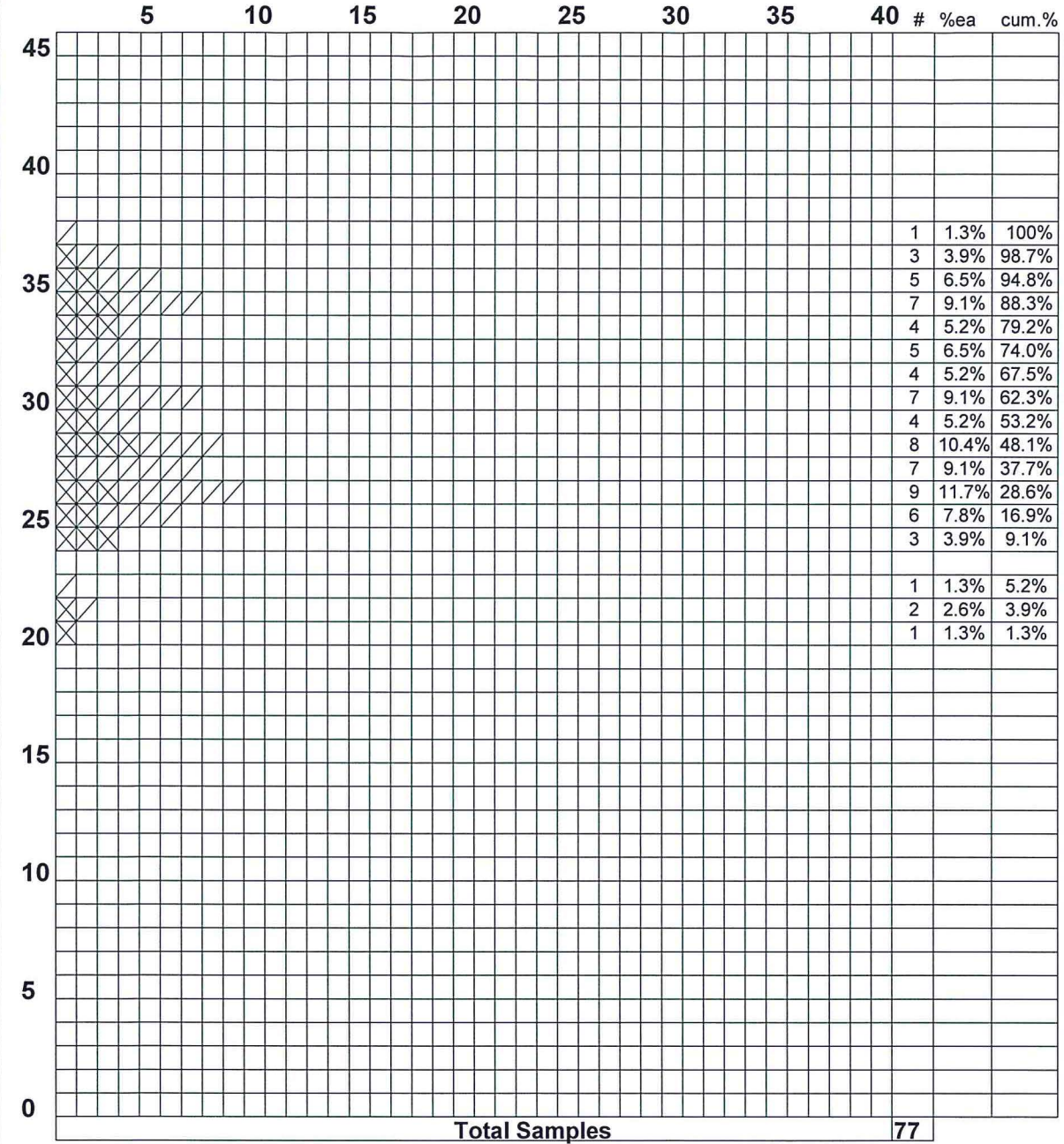


**County of El Dorado
Transportation Division**

Street Name: APACHE AVENUE 2019
Limits: US 50 to ARROWHEAD AVENUE

Radar Survey Sheet

X=North /=South



85th Percentile Speed: 34
50th Percentile Speed: 29
15th Percentile Speed: 25
10 MPH Pace: 25-34
Number in Pace: 61
Percent in Pace: 79.2%

Date of Survey: 5/7/2019 Start Time: 9:00
Weather: CLEAR 45 DEG End Time: 10:00
Road Condition: FAIR Posted Speed: 30
Street Class.:
Observer: M. BASTIAN
Conditions not ZERO PEDS, ZERO BIKES
Apparent: