Erik/File

# COUNTY OF LOS ANGELES

## DEPARTMENT OF PUBLIC WORKS

*"To Enrich Lives Through Effective and Caring Service"*

GAIL FARBER, Director

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100
http://dpw.lacounty.gov

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

RECEIVED
APR 15 2014
CITY OF ROLLING HILLS ESTATES

April 9, 2014

IN REPLY PLEASE
REFER TO FILE: T-3
T20110838

Mr. Greg Grammer
Assistant City Manager
City of Rolling Hills Estates
4045 Palos Verdes Drive North
Rolling Hills Estates, CA 90274

Dear Mr. Grammer:

**CRENSHAW BOULEVARD**
**BETWEEN PALOS VERDES DRIVE NORTH AND SILVER SPUR ROAD**
**ENGINEERING AND TRAFFIC SURVEY**

Public Works conducted a study for continuing radar use on Crenshaw Boulevard between Palos Verdes Drive North and Silver Spur Road. Based on the results of the study, the speed limit is to remain at 45 mph between the aforementioned limits. We have enclosed a certified copy of the Engineering and Traffic Survey for your records.

If you have any questions regarding this survey, please contact Mr. Loren Tiede of Traffic and Lighting Division, Traffic Investigations Section I, at (626) 300-4862.

Very truly yours,

GAIL FARBER
Director of Public Works

DEAN R. LEHMAN
Assistant Deputy Director
Traffic and Lighting Division

LT:dj
P:\tlpub\invest\inv\radar\chpletter\crenshaw blvd-rhe.doc

Enc.

This is a true copy and presentation of the original speed zone survey.

I hereby attest to this:

Engineer: Loren Tiede

Date: 4-7-14

March 19, 2014

**CRENSHAW BOULEVARD**
**BETWEEN PALOS VERDES DRIVE NORTH AND SILVER SPUR ROAD**
**ENGINEERING AND TRAFFIC SURVEY**

Background

This Engineering and Traffic (E&T) Survey has been conducted to determine the appropriate speed limit for radar speed enforcement on Crenshaw Boulevard between Palos Verdes Drive North and Silver Spur Road. Pursuant to California Vehicle Code (CVC) Section 40802(c)(2)(B)(i), one of the criteria for the legal use of radar equipment on County roads is that a current E&T survey exists reflecting current conditions of the roadway. This E&T Survey must be updated every seven years in order to continue the use of radar speed enforcement. This study provides a current engineering analysis of the traffic conditions on Crenshaw Boulevard and evaluates the appropriateness of the existing speed limit.

Limits of the Study

This E&T Survey was conducted on Crenshaw Boulevard between Palos Verdes Drive North and Silver Spur Road. Crenshaw Boulevard, between Palos Verdes Drive and 330 feet south of Palos Verdes Drive, is under the joint jurisdiction of the City of Rolling Hills Estates and the County of Los Angeles. The City of Rolling Hills Estates is also located on Crenshaw Boulevard between Silver Spur Road and 240 feet north of Silver Spur Road. The remaining section of Crenshaw Boulevard is under the jurisdiction of the County of Los Angeles.

Existing Conditions

**A Type of Facility**

Crenshaw Boulevard, between Palos Verdes Drive North and Silver Spur Road, is classified as a Minor Arterial on the Functional Classification System Maps on file with the Federal Highway Administration.

**B Roadway Geometry and Improvements**

Crenshaw Boulevard, between Palos Verdes Drive North and Silver Spur Road, has two travel lanes in each direction separated by a 3-foot high median barrier wall. Two median openings are provided within the limits of this study. There are curb and gutter but no sidewalk along both sides of the roadway. The roadway alignment along Crenshaw Boulevard is winding and graded with a series of horizontal and vertical curves.

This is a true copy and presentation of the original speed zone survey.

I hereby attest to this:

Engineer: Lora Tiede

Date: 4-7-14

## C Fronting Development

Crenshaw Boulevard, between Palos Verdes Drive North and Silver Spur Road, is fronted by mostly open space with some general commercial developments near Palos Verdes Drive North.

## D Traffic

Machine traffic counts were taken on Crenshaw Boulevard in December 2013. The locations and average daily traffic volumes are shown below in vehicles per day.

| Location | Volume |
|---|---|
| South of Palos Verdes Drive North | 30,175 |
| Approximately 3,700 feet South of Palos Verdes Drive North | 29,292 |
| North of Silver Spur Road | 29,480 |

## E Existing Speed Zone

The posted speed limit on Crenshaw Boulevard, between Palos Verdes Drive North and Silver Spur Road, is 45 mph. However, in the northbound and downhill direction, the posted speed limit for trucks is 25 mph. A series of 'Curve" warning signs with suggested speed of 40 mph are also posted in the downhill direction.

## F Collision Rate

Collision information was compiled for Crenshaw Boulevard for the two-year period ending April 30, 2013. The collision rate is shown below in comparison to the Countywide expected rate expressed in collisions per million vehicle miles (C/MVM).

| Location | Actual C/MVM | Expected C/MVM |
|---|---|---|
| Between Palos Verdes Drive North and Silver Spur Road | 0.63 | 0.84 ± 0.27 |

## G Enforcement Jurisdiction

Enforcement of the CVC for this segment of Crenshaw Boulevard is under the jurisdiction of the South Los Angeles Office of the California Highway Patrol.

This is a true copy and presentation of the original speed zone survey.

I hereby attest to this:

Engineer: Loren Tiede

Date: 4-7-14

## H Speed Survey Data

Radar speed checks were taken on Crenshaw Boulevard in December 2013. The locations and findings are listed below:

| Location | Posted Speed Limit | 85th Percentile Speed | Pace Speed |
|---|---|---|---|
| South of Palos Verdes Drive North | 45 mph | 45 mph | 36-45 mph |
| Approximately 3,700 feet South of Palos Verdes Drive North | 45 mph | 53 mph | 41-50 mph |
| North of Silver Spur Road | 45 mph | 47 mph | 37-46 mph |
| | Average | 48 mph | |

Conclusions and Recommendations

**Crenshaw Boulevard**
**Between Palos Verdes Drive North and Silver Spur Road**

The posted speed limit on Crenshaw Boulevard is 45 mph between Palos Verdes Drive North and Silver Spur Road. The collision rate within the limits of this study is 0.63 C/MVM, which is within the range of the countywide expected rate of 0.84 ± 0.27 C/MVM. Radar speed checks taken in December 2013 revealed an average 85th percentile speed of 48 mph. The nearest 5 mph increment of the 85th percentile speed of 48 mph would be rounded up to 50 mph. However, CVC Section 21400(b), allows a local authority to round down speed limits as long as no further reduction is taken. Therefore, we recommend rounding down the 85th percentile speed and the posted speed limit will remain 45 mph.

| Summary of Recommendations | Existing | Proposed |
|---|---|---|
| Crenshaw Boulevard between Palos Verdes Drive North and Silver Spur Road | 45 mph | 45 mph |

Accepted: City of Rolling Hills Estates

3/20/2014
Date

Benjamin K Chan
Project Engineer

4/3/2014
Date

REGISTERED PROFESSIONAL ENGINEER
BENJAMIN K. CHAN
No. C 37957
EXP. 3/31/15
CIVIL
STATE OF CALIFORNIA

This is a true copy and presentation of the original speed zone survey.

I hereby attest to this:

Engineer: [illegible]

Date: 4-7-14

Paul J. Barbe
County Radar Coordinator

4/7/2014
Date

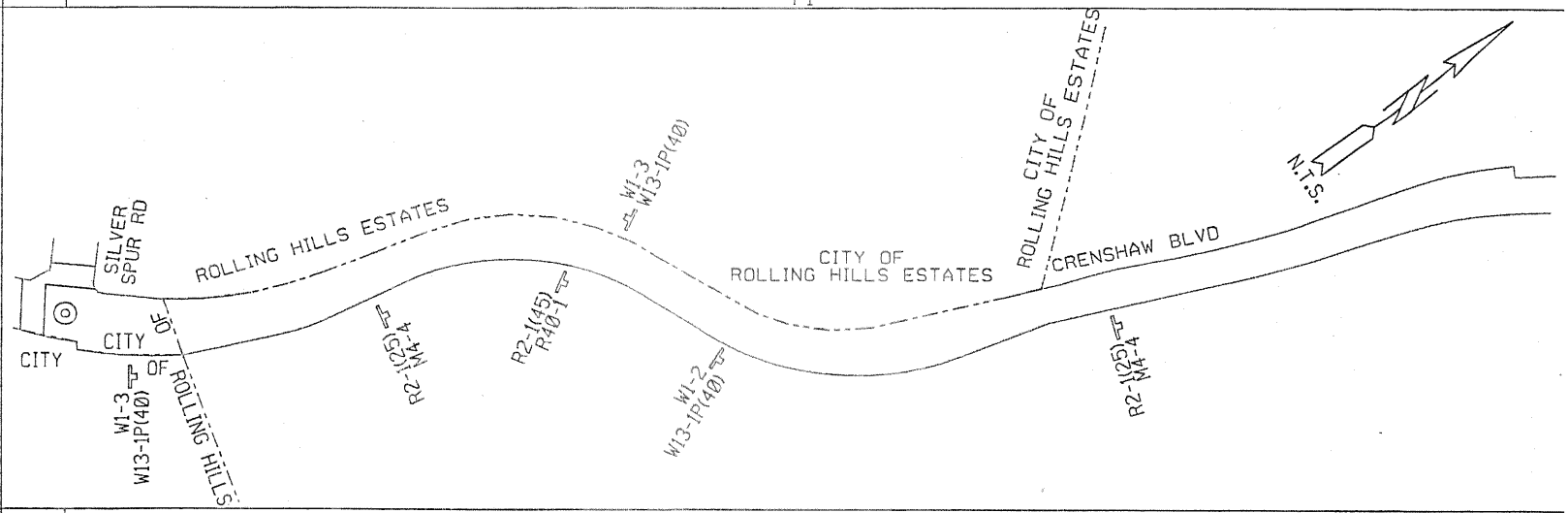
# ENGINEERING AND TRAFFIC SURVEY

STREET CRENSHAW BOULEVARD FROM SILVER SPUR ROAD TO 0.61 MI N/O SILVER SPUR ROAD

| | | |
|---|---|---|
| FRONTING DEVELOPMENT | D7 | D2 |
| IMPROVED (SW, C & G) | C & G | |
| PARKING RESTRICTIONS | P1 | |

**MAP SYMBOLS**

- SCHOOL
- SIGNAL
- R1-1 — R1-1 STOP
- R2-1(SPEED) — R2-1 SPEED LIMIT
- SR4-1(SPEED) — SR4-1 SPEED LIMIT
- CROSSING GUARD & SIGNAL
- G — CROSSING GUARD
- S — SCHOOL CROSSWALK
- CROSSWALK




| | | |
|---|---|---|
| PARKING RESTRICTIONS | P1 | |
| IMPROVED(SW, C & G) | C & G | |
| FRONTING DEVELOPMENT | D2 | |
| NO. LANES & MEDIAN | L10 | L20 |
| VERTICAL ALIGNMENT | DOWNHILL NORTHBOUND | |
| ROADWAY WIDTH | CURB TO CURB 35' (NB AND SB), MEDIAN 14' | |
| DISTANCE | 0.61 MI (AS PART OF 1.25 MI IN THE ENTIRE PROJECT) | |

| | | |
|---|---|---|
| AVERAGE DAILY TRAFFIC | 29,480 | 29,292 |
| SPEED CHECK DATA (DATE & LOC.) | 12/2013, N/O SILVER SPUR | 12/2013, 3700 FT S/O PALOS VERDES |
| 85TH PERCENTILE SPEED | 47 | 53 |
| AVERAGE SPEED | 39.4 | 45.7 |
| 10 MILE PACE SPEED | 37-46 | 41-50 |

| | |
|---|---|
| COLLISION DATA(2 YRS TO 04/30/13) | |
| TOTAL MIDBLOCK COLLISIONS | 17 |
| NO. WITH SPEED VIOLATIONS | 8 |
| PREDOMINATE TYPE | MIDBLOCK FIXED OBJECT |
| HBD | 0 |
| COLLISION RATE (C/MVM) | 0.63 |
| COUNTY AVERAGE (C/MVM) | 0.84 +/- 0.27 |

This is a true copy and presentation of the original speed zone survey,

I hereby attest to this:

Engineer: Lam Tieh

Date: 4-7-14

REMARKS:

D2: NON-FRONTING RESIDENTIAL
D7: PUBLIC
P1: NO STOPPING ANYTIME
L10: TWO LANES IN EACH DIRECTION SEPARATED BY RAISED MEDIAN ISLAND
L20: TWO LANES IN EACH DIRECTION SEPARATED BY RAISED MEDIAN WITH CONCRETE BARRIER

| | |
|---|---|
| EXISTING SPEED LIMIT | 45 |
| PROPOSED SPEED LIMIT | 45 |

ENGINEER: BC DATE: 4/3/14
DRAWN BY: ALBERT

COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS
P:\tlpub\INVEST\INV\radar\ETsketch\

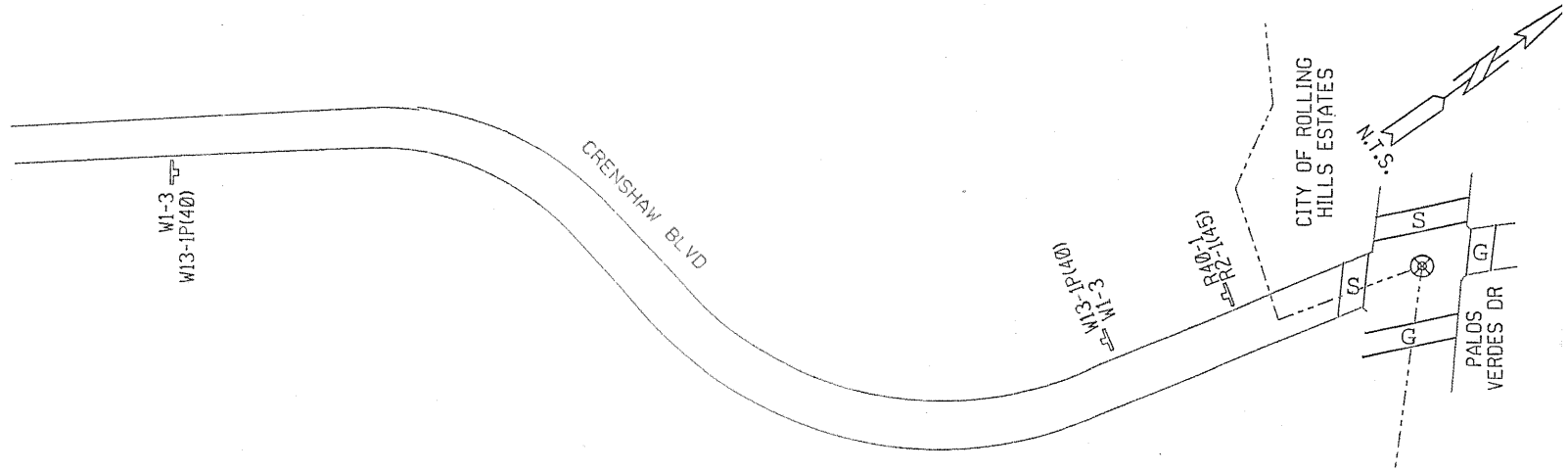
# ENGINEERING AND TRAFFIC SURVEY

STREET CRENSHAW BL FROM 0.64 MI S/O PALOS VERDES DR NORTH TO PALOS VERDES DR NORTH

| | | | |
|---|---|---|---|
| FRONTING DEVELOPMENT | D2 | D4 | |
| IMPROVED (SW, C & G) | C & G | | |
| PARKING RESTRICTIONS | P1 | | |

**MAP SYMBOLS**

- S — SCHOOL
- SIGNAL
- R1-1 — R1-1 STOP
- R2-1(SPEED) — R2-1 SPEED LIMIT
- SR4-1(SPEED) — SR4-1 SPEED LIMIT
- CROSSING GUARD & SIGNAL
- G — CROSSING GUARD
- S — SCHOOL CROSSWALK
- CROSSWALK




| | | | |
|---|---|---|---|
| PARKING RESTRICTIONS | P1 | | |
| IMPROVED(SW, C & G) | C & G | | |
| FRONTING DEVELOPMENT | D2 | D18 | |
| NO. LANES & MEDIAN | L20 | L10 | |
| VERTICAL ALIGNMENT | DOWNHILL NORTHBOUND | SLIGHTLY DOWNHILL NORTHBOUND | |
| ROADWAY WIDTH | CURB TO CURB 35' (NB AND SB), MEDIAN 14' | | |
| DISTANCE | 0.64 MI (AS PART OF 1.25 MI IN THE ENTIRE PROJECT) | | |
| | | | |
| AVERAGE DAILY TRAFFIC | 29,292 | 30,175 | |
| SPEED CHECK DATA (DATE & LOC.) | 12/2013, 3700 FT S/O PALOS VERDES | 12/2013, S/O PALOS VERDES | |
| 85TH PERCENTILE SPEED | 53 | 45 | |
| AVERAGE SPEED | 45.7 | 39.9 | |
| 10 MILE PACE SPEED | 41-50 | 36-45 | |
| | | | |
| COLLISION DATA(2 YRS TO 04/30/13) | | | |
| TOTAL MIDBLOCK COLLISIONS | 17 | | |
| NO. WITH SPEED VIOLATIONS | 8 | | |
| PREDOMINATE TYPE | MIDBLOCK FIXED OBJECT | | |
| HBD | 0 | | |
| COLLISION RATE (C/MVM) | 0.63 | | |
| COUNTY AVERAGE (C/MVM) | 0.84 +/- 0.27 | | |

This is a true copy and presentation of the original speed zone survey.

I hereby attest to this:

Engineer: [signature]

Date: 4-7-14

REMARKS:

D2: NON-FRONTING RESIDENTIAL
D4: COMMERCIAL
D18: MEDICAL
P1: NO STOPPING ANYTIME
L10: TWO LANES IN EACH DIRECTION SEPARATED BY RAISED MEDIAN
L20: TWO LANES IN EACH DIRECTION SEPARATED BY RAISED MEDIAN WITH CONCRETE BARRIER

| | |
|---|---|
| EXISTING SPEED LIMIT | 45 |
| PROPOSED SPEED LIMIT | 45 |

ENGINEER: BC DATE: 4/3/14
DRAWN BY: ALBERT

COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS

P:\tlpub\INVEST\INV\radar\ETsketch\