



South La Cumbre Road

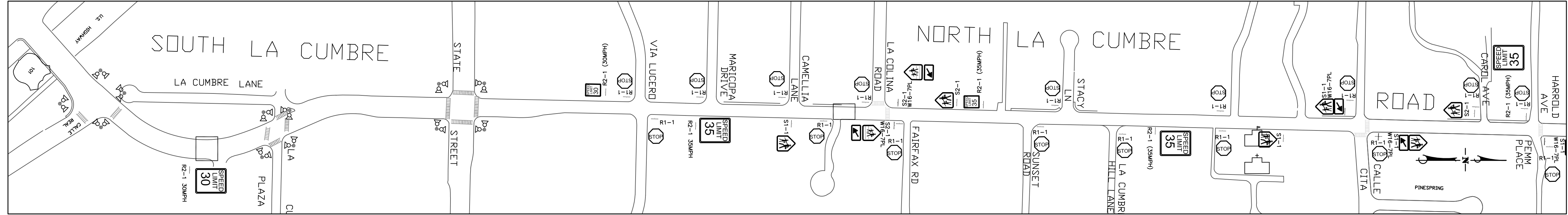
Engineering & Traffic Survey (E&TS) Summary

| | |
|--|--|
| From /To | Southerly City limits (US 101) to Via Lucero |
| FAU Classification | Minor Arterial |
| Width | 64 feet |
| Length | 2,350 feet |
| Striping, Parking and Land Use | Double yellow center line, bike lane lines and median, dash white lane lines. Business |
| Existing Posted Speed Limit | 30 mph |
| 85th Percentile Speed | 32 mph |
| Pace | 24 to 34 mph |
| Average Daily Traffic | 15,008 |
| Engineer's Determination of Speed Limit | <u>30 mph</u> |
| Justification | 85 th Percentile Speed |
| Speed Survey Expiry Date | 10/16/2022 |
| Date Prepared | 10/16/2015 |

City of Santa Barbara
Behdad Gharagozli, P.E.
Project Engineer II
Registered Civil Engineer Number C 82051



| | | |
|----------------------|----------|-------------|
| GRADIENT | | |
| ROADSIDE DEVELOPMENT | BUSINESS | RESIDENTIAL |
| REMARKS: | | |



CITY OF SANTA BARBARA



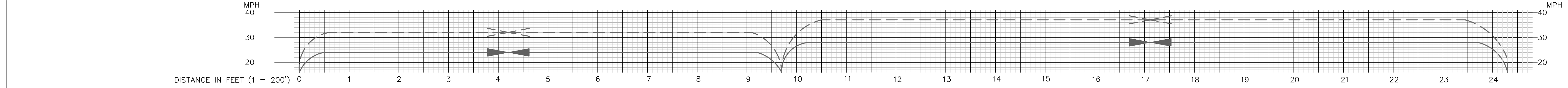
**SPEED ZONE SURVEY
LA CUMBRE ROAD**

FROM _____ US 101
 TO _____ Northerly City Limits (Pemm Place)
 SCALE: _____ SCALE - 1" = 200'
 DATE: _____ October 1, 2015
 PREPARED BY: _____ J.Rousseau

LEGEND

- ROAD SIGNS
- REGULATORY & WARNING (CODE NO.)
- TRAFFIC SIGNALS
- SENIOR CENTERS
- SCHOOLS
- CHURCHES
- STUDY LOCATION

| | | |
|----------------------------|---|---|
| ROADWAY WIDTH | 64 FEET | 40 FEET |
| AVERAGE DAILY TRAFFIC | 15,008 | 5,478 |
| NO. OF STRIPED LANES | FOUR LANES | TWO LANES |
| TYPE OF DIVISION STRIPE | DOUBLE YELLOW CENTER LINE AND MEDIAN- DASH WHITE LANE LINES | DOUBLE YELLOW CENTER LINE |
| OBSERVED SPEED CRITICAL | 32 MPH - OBSERVED 85th PERCENTILE SPEED | 37 MPH - OBSERVED 85th PERCENTILE SPEED |
| OBSERVED SPEED 10 mph PACE | 24 to 34 MPH - OBSERVED 10mph PACE | 28 to 38 MPH - OBSERVED 10mph PACE |
| EXISTING SIGNED ZONE | 30 MPH - EXISTING SIGNED ZONE | 35 MPH - EXISTING SIGNED ZONE |
| PROPOSED SPEED LIMIT | 30 MPH | 35 MPH |



| | | |
|------------------------|---|--|
| SEGMENT COLLISION RATE | 2.93 acc/MVM | 1.35 acc/MVM |
| | 2009 DISTRICT 5 URBAN 4+ UND (2.19 acc/MVM) | 2009 DISTRICT 5 URBAN 2 and 3LN (1.59 acc/MVM) |
| | 2009 STATEWIDE 3 yr 4+ UND (2.09 acc/MVM) | 2009 STATEWIDE 3 yr 2 and 3LN (1.42 acc/MVM) |

CRITICAL SPEED - 85% _____
 LOWER LIMIT OF 10mph PACE _____

VEHICLE SPEED SURVEY SHEET

Location: S. La Cumbre Rd n/o Calle Real Date: October 7, 2015
 Weather: Clear/Dry Posted Speed: 35 Recorded By: BG
 Start Time: 9:05 AM End Time: 9:50 AM Checked By: JR

| MPH | Number of Vehicles | | | | | | | | | | | | | | | Total | Cumulative Total | | | | | | | | | | |
|-----|--------------------|---|---|---|---|---|---|----|---|---|---|----|---|---|---|-------|------------------|----|--|--|--|----|--|--|----|-----|--|
| | | | | 5 | | | | 10 | | | | 15 | | | | | | 20 | | | | 25 | | | | 30 | |
| 59 | | | | | | | | | | | | | | | | | | | | | | | | | 0 | | |
| 58 | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | |
| 57 | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | |
| 56 | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | |
| 55 | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | |
| 54 | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | |
| 53 | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | |
| 52 | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | |
| 51 | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | |
| 50 | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | |
| 49 | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | |
| 48 | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | |
| 47 | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | |
| 46 | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | |
| 45 | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | |
| 44 | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | |
| 43 | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | |
| 42 | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | |
| 41 | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | |
| 40 | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | |
| 39 | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | |
| 38 | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | |
| 37 | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | |
| 36 | X | | | | | | | | | | | | | | | | | | | | | | | | 1 | 100 | |
| 35 | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | |
| 34 | X | X | X | X | | | | | | | | | | | | | | | | | | | | | 4 | 99 | |
| 33 | X | X | X | X | X | X | X | | | | | | | | | | | | | | | | | | 7 | 95 | |
| 32 | X | X | X | X | X | X | X | X | X | X | | | | | | | | | | | | | | | 10 | 88 | |
| 31 | X | X | X | X | X | X | X | X | X | X | X | X | X | | | | | | | | | | | | 13 | 78 | |
| 30 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | | | | | | | | | 15 | 65 | |
| 29 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | | | | | | | | | 15 | 50 | |
| 28 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | | | | | | | | | | 13 | 35 | |
| 27 | X | X | X | X | X | X | X | X | X | X | | | | | | | | | | | | | | | 10 | 22 | |
| 26 | X | X | X | X | | | | | | | | | | | | | | | | | | | | | 4 | 12 | |
| 25 | X | X | X | X | X | X | X | | | | | | | | | | | | | | | | | | 7 | 8 | |
| 24 | X | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1 | |
| 23 | | | | | | | | | | | | | | | | | | | | | | | | | 0 | | |
| 22 | | | | | | | | | | | | | | | | | | | | | | | | | 0 | | |
| 21 | | | | | | | | | | | | | | | | | | | | | | | | | 0 | | |
| 20 | | | | | | | | | | | | | | | | | | | | | | | | | 0 | | |
| 19 | | | | | | | | | | | | | | | | | | | | | | | | | 0 | | |
| 18 | | | | | | | | | | | | | | | | | | | | | | | | | 0 | | |
| 17 | | | | | | | | | | | | | | | | | | | | | | | | | 0 | | |
| 16 | | | | | | | | | | | | | | | | | | | | | | | | | 0 | | |
| 15 | | | | | | | | | | | | | | | | | | | | | | | | | 0 | | |

85th Percentile Calculation

Step 1: Number of Free Flowing Vehicles: 100
 Step 2: Determine 85th percentile vehicle: Total number of cars (Step 1) times 0.85: 85
 Step 3: # to count up (step 2 rounded to nearest whole number if decimal): 85

85th Percentile Speed 32 mph **Average Speed** 29.5 mph **10 MPH Pace Speed** 24 to 34 mph

La Cumbre Road

Southerly City Limits (US-101) to Via Lucero

2012-2013

| | | |
|----------------------------------|-------------|---------|
| Segment length in feet | 2,300 | |
| Number of collisions = | 14 | |
| AADT | 15,008 | |
| Time period in years = | 2 | |
| Segment Collision Rate = | 2.93 | ACC/MVM |
| 2009 District 5 3 yr 4+ LN Und = | 2.19 | ACC/MVM |
| 2009 Statewide 3 yr, 4+ LN Und = | 2.09 | ACC/MVM |

| <u>CASE ID</u> | <u>STREET 1</u> | <u>STREET 2</u> | <u>Date</u> | <u>Distance From Intersection</u> | <u>Direction From Intersection</u> |
|----------------|-----------------|--------------------|-------------|-----------------------------------|------------------------------------|
| 5597248 | LA CUMBRE RD | LA CUMBRE PLAZA LN | 4/16/2012 | 0 | Not stated |
| 5664881 | LA CUMBRE RD | LA CUMBRE PLAZA LN | 6/4/2012 | 0 | Not stated |
| 5675793 | LA CUMBRE RD | STATE ST | 7/1/2012 | 88 | North |
| 5811629 | STATE ST | LA CUMBRE RD | 10/14/2012 | 12 | North |
| 5999855 | LA CUMBRE RD | RT 101 | 11/3/2012 | 0 | Not stated |
| 5935542 | LA CUMBRE RD | CALLE REAL | 12/14/2012 | 0 | Not stated |
| 6000893 | LA CUMBRE RD | LA CUMBRE PLAZA LN | 1/30/2013 | 0 | Not stated |
| 5998512 | LA CUMBRE RD | RT 101 | 3/22/2013 | 0 | Not stated |
| 6162225 | STATE ST | LA CUMBRE RD | 7/8/2013 | 0 | Not stated |
| 6218716 | LA CUMBRE RD | LA CUMBRE PLAZA LN | 9/13/2013 | 0 | Not stated |
| 6249490 | LA CUMBRE RD | LA CUMBRE PLAZA LN | 10/12/2013 | 0 | Not stated |
| 6278417 | LA CUMBRE RD | RT 101 | 11/11/2013 | 0 | Not stated |
| 6283025 | LA CUMBRE RD | RT 101 | 11/15/2013 | 0 | Not stated |
| 6311736 | LA CUMBRE RD | LA CUMBRE PLAZA LN | 12/20/2013 | 195 | South |

Average Daily Traffic Volumes Quality Traffic Data, LLC

| | | | |
|-----------------|-----------------------|------------------|---------------------------|
| QTD PROJ/LOC #: | 2015140 - 014 | GPS COORDINATES: | 0 |
| ON STREET: | La Cumbre Road South | START DATE: | Wednesday, April 08, 2015 |
| CROSS STREETS: | South of State Street | VICINITY: | Santa Barbara, CA |

| AM COUNTS | | | | | PM COUNTS | | | | |
|----------------|-------------|-------------|-----|-------------|----------------|-------------|-------------|-----|-------------|
| | NB | SB | EB | WB | | NB | SB | EB | WB |
| 00:00 | 11 | 5 | | | 12:00 | 130 | 123 | | |
| 00:15 | 10 | 3 | | | 12:15 | 123 | 132 | | |
| 00:30 | 12 | 5 | | | 12:30 | 135 | 128 | | |
| 00:45 | 8 | 41 | 4 | 17 | 12:45 | 113 | 501 | 126 | 509 |
| | | | | 58 | | | | | 1010 |
| 01:00 | 3 | 0 | | | 13:00 | 144 | 126 | | |
| 01:15 | 7 | 2 | | | 13:15 | 120 | 113 | | |
| 01:30 | 8 | 5 | | | 13:30 | 129 | 110 | | |
| 01:45 | 4 | 22 | 6 | 13 | 13:45 | 117 | 510 | 125 | 474 |
| | | | | 35 | | | | | 984 |
| 02:00 | 6 | 2 | | | 14:00 | 129 | 100 | | |
| 02:15 | 3 | 4 | | | 14:15 | 154 | 129 | | |
| 02:30 | 4 | 3 | | | 14:30 | 158 | 124 | | |
| 02:45 | 6 | 19 | 2 | 11 | 14:45 | 167 | 608 | 123 | 476 |
| | | | | 30 | | | | | 1084 |
| 03:00 | 3 | 3 | | | 15:00 | 159 | 113 | | |
| 03:15 | 1 | 5 | | | 15:15 | 172 | 114 | | |
| 03:30 | 1 | 12 | | | 15:30 | 206 | 126 | | |
| 03:45 | 5 | 10 | 6 | 26 | 15:45 | 199 | 736 | 112 | 465 |
| | | | | 36 | | | | | 1201 |
| 04:00 | 6 | 9 | | | 16:00 | 199 | 106 | | |
| 04:15 | 4 | 19 | | | 16:15 | 193 | 99 | | |
| 04:30 | 3 | 20 | | | 16:30 | 212 | 86 | | |
| 04:45 | 6 | 19 | 22 | 70 | 16:45 | 186 | 790 | 103 | 394 |
| | | | | 89 | | | | | 1184 |
| 05:00 | 3 | 32 | | | 17:00 | 228 | 94 | | |
| 05:15 | 7 | 41 | | | 17:15 | 222 | 91 | | |
| 05:30 | 6 | 52 | | | 17:30 | 213 | 99 | | |
| 05:45 | 14 | 30 | 61 | 186 | 17:45 | 206 | 869 | 93 | 377 |
| | | | | 216 | | | | | 1246 |
| 06:00 | 10 | 83 | | | 18:00 | 192 | 99 | | |
| 06:15 | 21 | 111 | | | 18:15 | 142 | 86 | | |
| 06:30 | 29 | 128 | | | 18:30 | 126 | 61 | | |
| 06:45 | 33 | 93 | 153 | 475 | 18:45 | 116 | 576 | 56 | 302 |
| | | | | 568 | | | | | 878 |
| 07:00 | 39 | 160 | | | 19:00 | 97 | 44 | | |
| 07:15 | 31 | 194 | | | 19:15 | 104 | 34 | | |
| 07:30 | 40 | 245 | | | 19:30 | 112 | 30 | | |
| 07:45 | 49 | 159 | 225 | 824 | 19:45 | 90 | 403 | 35 | 143 |
| | | | | 983 | | | | | 546 |
| 08:00 | 66 | 226 | | | 20:00 | 95 | 41 | | |
| 08:15 | 76 | 217 | | | 20:15 | 79 | 44 | | |
| 08:30 | 84 | 164 | | | 20:30 | 93 | 27 | | |
| 08:45 | 57 | 283 | 192 | 799 | 20:45 | 86 | 353 | 22 | 134 |
| | | | | 1082 | | | | | 487 |
| 09:00 | 56 | 132 | | | 21:00 | 71 | 26 | | |
| 09:15 | 63 | 126 | | | 21:15 | 59 | 28 | | |
| 09:30 | 69 | 140 | | | 21:30 | 58 | 22 | | |
| 09:45 | 90 | 278 | 126 | 524 | 21:45 | 44 | 232 | 28 | 104 |
| | | | | 802 | | | | | 336 |
| 10:00 | 94 | 133 | | | 22:00 | 39 | 20 | | |
| 10:15 | 72 | 130 | | | 22:15 | 36 | 16 | | |
| 10:30 | 88 | 123 | | | 22:30 | 28 | 14 | | |
| 10:45 | 90 | 344 | 145 | 531 | 22:45 | 27 | 130 | 11 | 61 |
| | | | | 875 | | | | | 191 |
| 11:00 | 106 | 150 | | | 23:00 | 23 | 8 | | |
| 11:15 | 101 | 140 | | | 23:15 | 25 | 11 | | |
| 11:30 | 98 | 126 | | | 23:30 | 18 | 10 | | |
| 11:45 | 111 | 416 | 145 | 561 | 23:45 | 8 | 74 | 7 | 36 |
| | | | | 977 | | | | | 110 |
| TOTALS: | 1714 | 4037 | | 5751 | TOTALS: | 5782 | 3475 | | 9257 |

| SPLIT | 29.8% | 70.2% | 38.3% | SPLIT | 62.5% | 37.5% | 61.7% |
|-----------|-------|-------|-------|-----------|-------|-------|-------|
| PEAK HOUR | 11:45 | 07:30 | 07:30 | PEAK HOUR | 17:00 | 12:15 | 17:00 |
| PH VOLUME | 499 | 913 | 1144 | PH VOLUME | 869 | 512 | 1246 |
| PHF | 0.92 | 0.93 | 0.98 | PHF | 0.96 | 0.97 | 0.97 |

| DAY'S TOTAL | | | | |
|-------------|------|----|----|-------|
| NB | SB | EB | WB | TOTAL |
| 7496 | 7512 | | | 15008 |



QUALITY TRAFFIC DATA, LLC

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