

*CL 48 h pg 367*

4-WAY STOP SIGNS  
ESTABLISHED AT  
BECKMAN AND LODI  
AVENUE AND BECKMAN  
AND PINE STREETS

Agenda item e-1-L - "Adopt Resolution establishing 4-way stops at Beckman and Lodi Avenue, Beckman and Pine and Stockton and Pine: was introduced by Public Works Director Ronsko who apprised the Council that in April, 1983, the Engineering Department conducted traffic studies with results that showed 4-way stops were not warranted at either of the Beckman Road locations. At that time, in an effort to reduce accidents, approach warning signs were installed, additional pavement markings were added, and measures were taken to improve intersection visibility.

The Engineering Department has recently completed a follow-up study to determine whether the corrective measures have reduced accidents, or if other traffic conditions now exist to warrant the installation of 4-way stops as shown on Exhibits presented to Council for perusal. The study showed that although traffic volumes on Beckman Road, Lodi Avenue and Pine Street have not increased, the number of accidents per year correctable by 4-way stop signs have increased from 4 accidents to 7 at Lodi Avenue, and from 3 to 5 at Pine Street.

It does not appear that there are any changes at the intersection that would appreciably decrease the number of accidents and that the best way to reduce the number and severity of the accidents is with a 4-way stop.

The intersection of Stockton and Pine has warranted signals for several years. Because of the number and severity of

accidents at that location, it appears that the installation of a 4-way stop as an interim measure would be very beneficial. The accident record for the last several years was presented for Council's information.

A lengthy discussion followed with questions regarding the subject being directed to Staff.

RES. NO. 85-21

Following discussion, on motion of Mayor Snider, Hinchman second, Council adopted Resolution No. 85-21 establishing 4-way stops at Beckman and Lodi Avenue and Beckman and Pine Street. Further, Council continued to the Regular Meeting of February 20, 1985, consideration of establishing a 4-way stop at Stockton Street and Pine Street.

RESOLUTION NO. 85-21

RESOLUTION ESTABLISHING FOUR WAY STOPS AT BECKMAN  
AND LODI AVENUE AND BECKMAN AND PINE STREET

RESOLVED that the City Council of the City of Lodi does  
hereby establish four way stop signs at Beckman and Lodi Avenue and  
Beckman and Pine Street.

Dated: February 6, 1985

I hereby certify that Resolution No. 85-21  
was passed and adopted by the City Council  
of the City of Lodi in a regular meeting  
held February 6, 1985 by the following vote:

Ayes: Council Members - Hinchman, Olson, Reid,  
and Snider (Mayor)

Noes: Council Members - None

Absent: Council Members - Pinkerton

*Alice M. Reimche*  
Alice M. Reimche  
City Clerk



# CITY OF LODI

PUBLIC WORKS DEPARTMENT

EXHIBIT A

FOUR-WAY STOP SIGN  
WARRANTS

INTERSECTION OF PINE ST and BECKMAN RD.

DATE Jan 29 & 30 1985 BY MED

Any of the following conditions may warrant a 4-way stop sign installation.

- 1. Where traffic signals are warranted and the need is urgent, the four-way stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the signal installation.

Satisfied \_\_\_\_\_ Not Satisfied

- 2. An accident problem, as indicated by five or more reported accidents of a type susceptible of correction by a four-way stop installation in a 12-month period. Types of accidents susceptible of correction include right angle and left turn collisions. (Exhibit B)

Number of accidents 5  
Satisfied  Not Satisfied \_\_\_\_\_

- 3a. The total vehicular volume entering the intersection from all approaches must average at least 500 vehicles per hour for any eight hours of an average day (Exhibit C), and

Highest 8 hours 10 a.m. to 6 p.m.  
Total volume 4061 vehicles  
Average per hour 508 vehicles

- 3b. The combined vehicular and pedestrian volume from the minor street or highway must average at least 200 units per hour for the same eight hours with an average delay to minor street vehicular traffic of at least 30 seconds per vehicle during the maximum hour.

Highest 8 hours 10 a.m. to 6 p.m.  
Average per hour 1894 vehicles  
Average per hour 0 pedestrians (EST.)  
Average units per hour 237  
Satisfied  Not Satisfied \_\_\_\_\_

- 4. When the 85-percentile approach speed of the major street traffic exceeds 40 miles per hour, the minimum vehicular volume warrant is 70 percent of the above requirements. (Exhibit D)

85-percentile speed 34 MPH  
Satisfied \_\_\_\_\_ Not Satisfied

A four-way stop sign installation is a useful traffic control measure when other available means of control are not adequate. It should not be used unless the volume of traffic on the intersecting roads is about equal and is undesirable at low volume intersections.

% Traffic major street 52 % PINE ST.  
% Traffic minor street 48 %

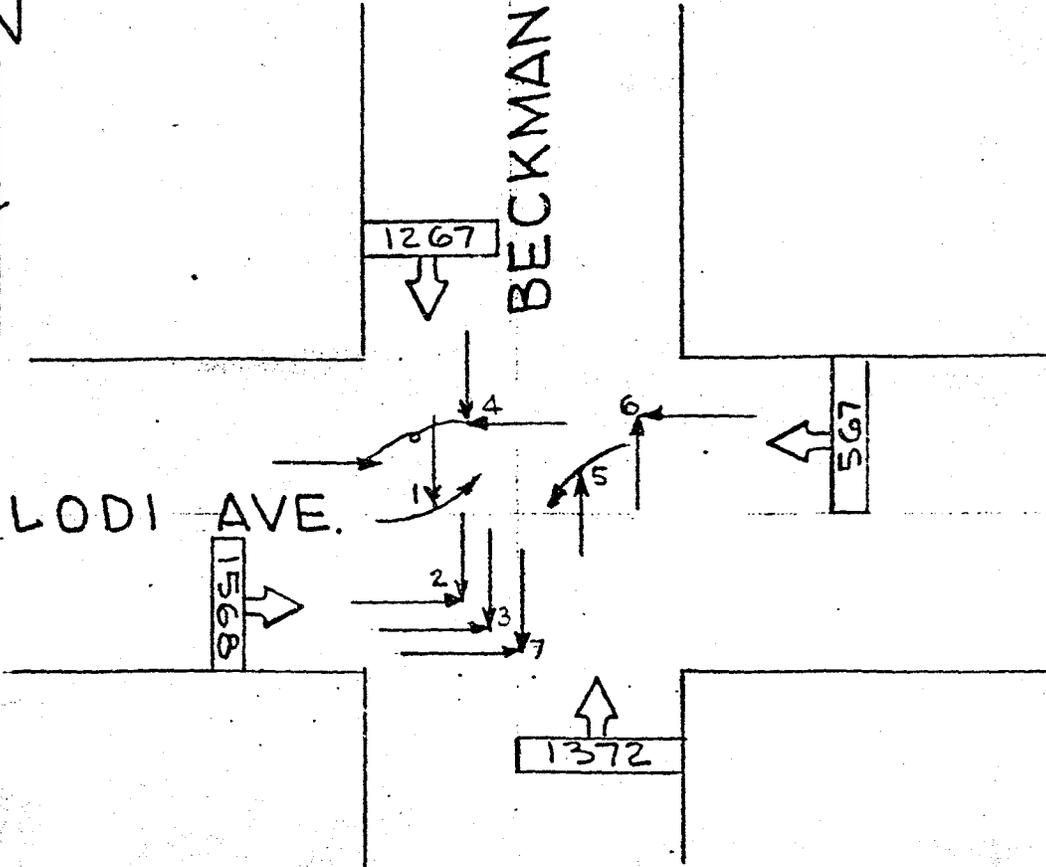
EXHIBIT B



# CITY OF LODI

PUBLIC WORKS DEPARTMENT

## ACCIDENT DIAGRAM INTERSECTION OF BECKMAN RD. & LODI AVE 1984 -



| NO. | DATE     | TIME | DAMAGE      | INJURED | APPARENT CAUSE           |
|-----|----------|------|-------------|---------|--------------------------|
| 1   | 1-5-84   | 1048 | mod-none    | 0       | FAIL TO YIELD AFTER STOP |
| 2   | 1-9-84   | 1439 | mod-maj.    | 3       | " " " "                  |
| 3   | 3-21-84  | 1433 | mod-tot     | 0       | R/W VIOLATION / HER      |
| 4   | 9-27-84  | 1212 | min-min-min | 0       | FAIL TO STOP             |
| 5   | 10-4-84  | 0658 | min-maj     | 2       | FAIL TO YIELD AFTER STOP |
| 6   | 10-16-84 | 0945 | maj.-mod    | 0       | " " " " "                |
| 7   | 1-9-85   | 1540 | mod-mod     | 0       | " " " " "                |

Drawn MED

No. Date

Approved

Approved By

Checked

Date JAN. '85

Public Works Director  
RCE

Date

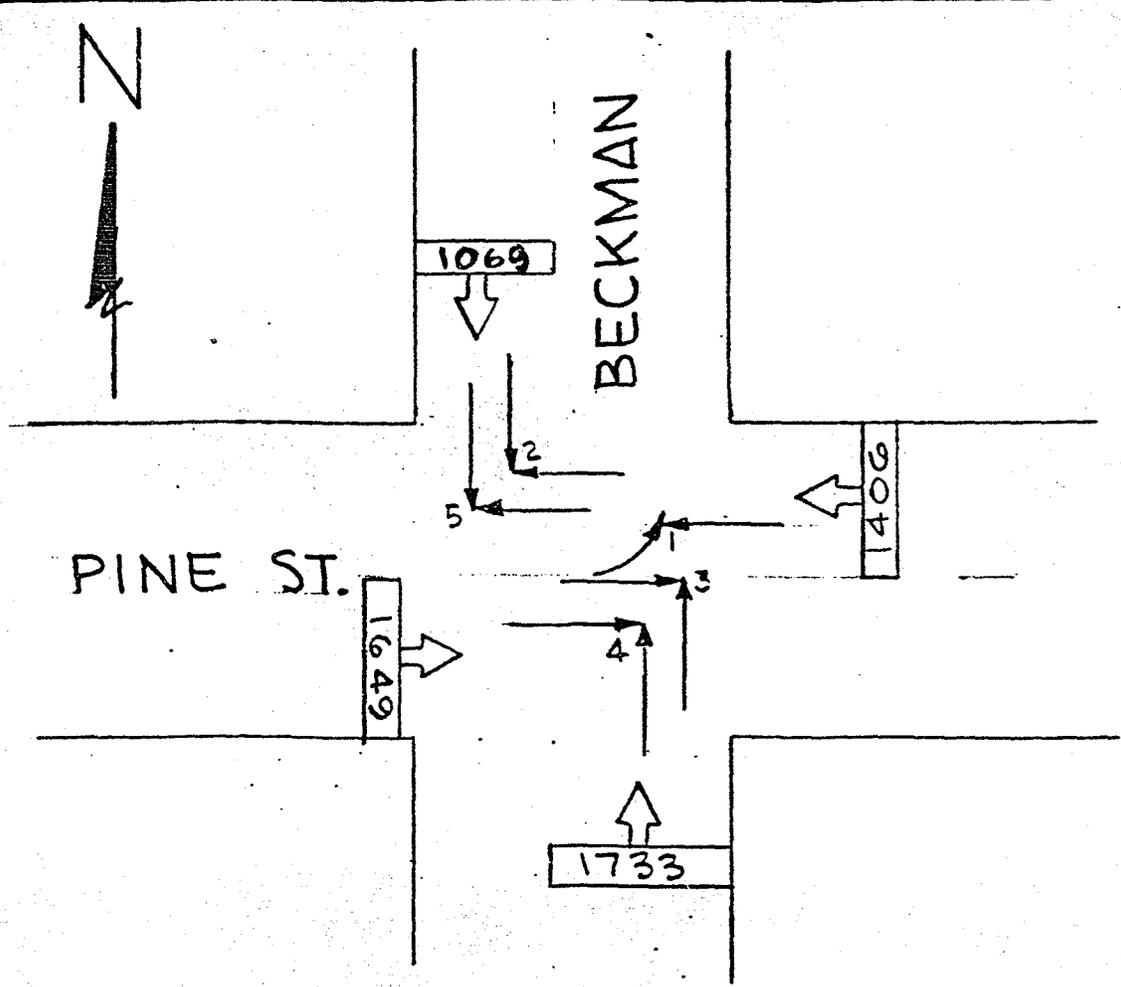
### EXHIBIT C



# CITY OF LODI

PUBLIC WORKS DEPARTMENT

## ACCIDENT DIAGRAM INTERSECTION OF BECKMAN RD. & PINE ST. 1984-



| NO. | DATE     | TIME | DAMAGE  | INJURED | APPARENT CAUSE           |
|-----|----------|------|---------|---------|--------------------------|
| 1   | 2-3-84   | 1018 | mod-mod | 0       | INATTENTION              |
| 2   | 6-19-84  | 1205 | mod-min | 0       | FAIL TO YIELD AFTER STOP |
| 3   | 6-28-84  | 1703 | maj-mod | 0       | " " " " "                |
| 4   | 12-12-84 | 1609 | mod-mod | 0       | " " " " "                |
| 5   | 1-12-85  | 1813 | min-mod | 0       | FAIL TO STOP             |

|              |     |      |          |                              |
|--------------|-----|------|----------|------------------------------|
| Drawn MED    | No. | Date | Approved | Approved By                  |
| Checked      |     |      |          |                              |
| Date JAN '85 |     |      |          | Public Works Director<br>RCE |
|              |     |      |          | Date                         |

EXHIBIT D

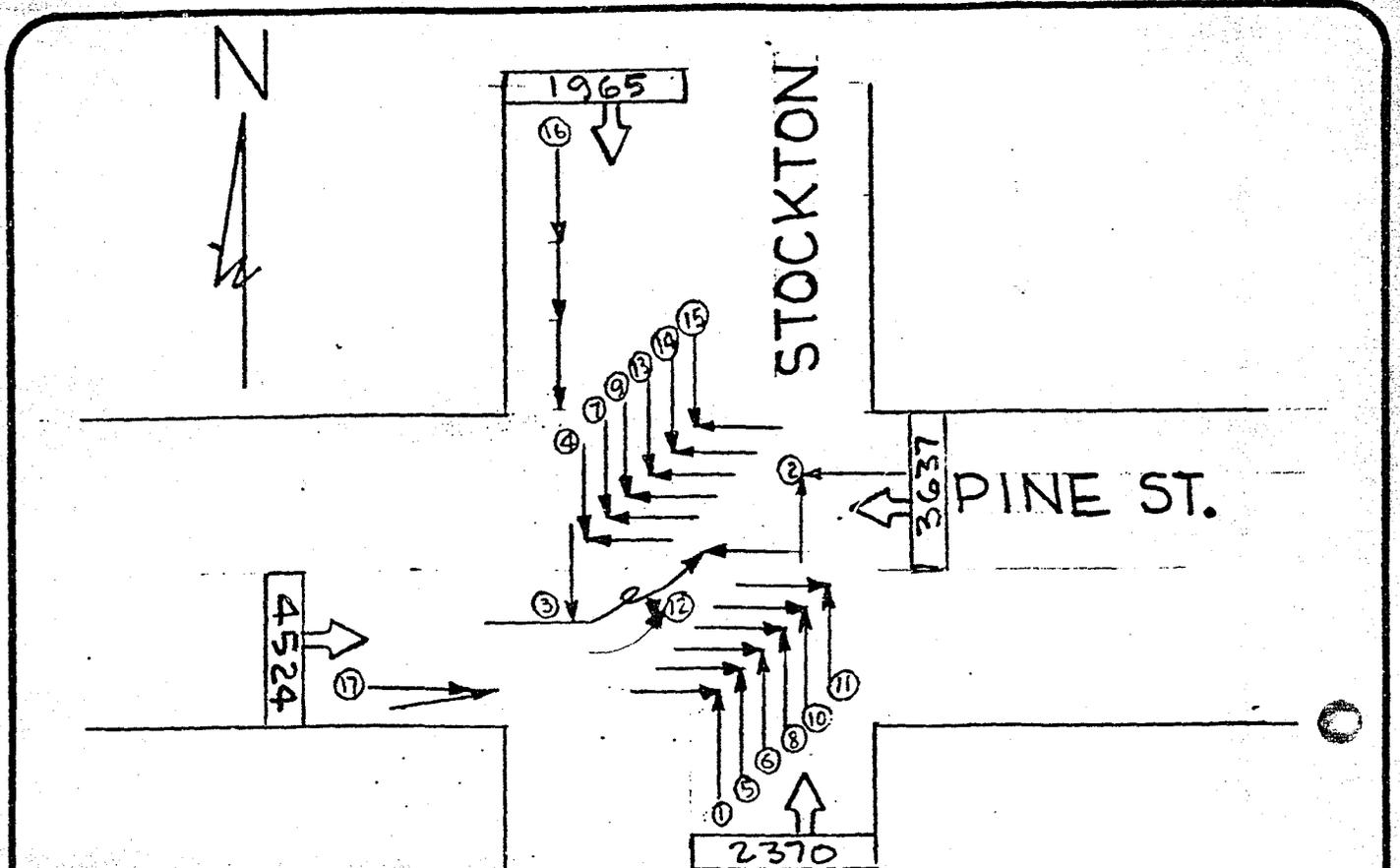


# CITY OF LODI

PUBLIC WORKS DEPARTMENT

## ACCIDENT DIAGRAM INTERSECTION OF STOCKTON & PINE

10-1-80 to



| NO. | DATE     | TIME | DAMAGE      | INJURED | APPARENT CAUSE |
|-----|----------|------|-------------|---------|----------------|
| 1   | 10-14-80 | 1713 | MAJ-MOD     | 0       | FAIL TO YIELD  |
| 2   | 2-13-81  | 1353 | MAJ-MOD     | 0       | " " "          |
| 3   | 5-8-81   | 2202 | MOD-MIN-MIN | 0       | " " "          |
| 4   | 7-10-81  | 1359 | MAJ-MAJ     | 0       | FAIL TO STOP   |
| 5   | 7-18-81  | 1510 | NONE-MIN    | 1       | FAIL TO YIELD  |
| 6   | 12-8-81  | 1340 | MIN-MOD     | 0       | " " "          |
| 7   | 12-10-81 | 1235 | MOD-MOD     | 0       | " " "          |
| 8   | 2-22-82  | 1809 | MOD-MIN     | 0       | " " "          |
| 9   | 5-12-82  | 0843 | MOD-MOD     | 0       | " " "          |
| 10  | 11-9-82  | 1419 | MAJ-MAJ     | 2       | FAIL TO STOP   |
| 11  | 4-13-83  | 1402 | MIN-MOD     | 1       | FAIL TO YIELD  |
| 12  | 8-1-83   | 1344 | MIN-MOD     | 0       | " " "          |
| 13  | 2-8-84   | 2143 | MIN-MIN     | 1       | " " "          |
| 14  | 4-10-84  | 1823 | MOD-MOD     | 0       | " " "          |
| 15  | 5-16-84  | 1926 | MAJ-MOD     | 3       | FAIL TO STOP   |
| 16  | 7-26-84  | 2135 | MAJ-MOD-MOD | 1       | H. B. D.       |
| 17  | 1-12-85  | 1641 | MIN-MOD     | 0       | INATTENTION    |

|                      |    |      |                              |             |
|----------------------|----|------|------------------------------|-------------|
| Drawn <b>MED</b>     | No | Date | Approved                     | Approved By |
| Checked              |    |      |                              |             |
| Date <b>JAN. '85</b> |    |      |                              |             |
|                      |    |      | Public Works Director<br>RCE | Date        |

**EXHIBIT E**