CC-43(a)

CITY COUNCIL MEETING

March 4, 1981

INSTALLATION OF 4-WAY STOP SIGNS AT INTERSECTIONS OF FAIRMONT AVE. AND TOKAY STREET, AND FAIRMONT AVENUE AND VINE STREET

RES. NO. 81-20

Council was apprised that the City has received a request from Bainbridge and Sternfels, Attorneys at Law, whose office is at Fairmont Avenue and Tokay Street, for a 4-way stop installation at that intersection, and a request from Dennis Swanson, D. C. and Wayne B. McAllister, D. C., whose offices are at Fairmont Avenue and Vine Street, for a 4-way stop installation at that intersection.

Following receipt of a Staff report and on recommendation of the City Manager, Council adopted the following resolution:

RESOLUTION NO. 81-20

RESOLUTION APPROVING THE INSTALLATION OF 4-WAY STOP SIGNS AT THE INTERSECTION OF FAIRMONT AVENUE AND TOKAY STREET, AND FAIRMONT AVENUE AND VINE STREET, AND THE MODIFICATION OF THE "NO PARKING" LIMITS AT BOTH INTERSECTIONS.

CITY OF LODI

PUBLIC WORKS DEPARTMENT

COUNCIL COMMUNICATION

TO: City Council

FROM: City Manager

DATE: February 26, 1981

SUBJECT: Installation of 4-way Stop Signs at Intersections of Fairmont Avenue and Tokay Street, and Fairmont Avenue and Vine Street.

RECOMMENDED ACTION: That the City Council, by resolution, approve the installation of 4-way stop signs at the intersection of Fairmont Avenue and Tokay Street, and Fairmont Avenue and Vine Street, and the modification of the "No Parking" limits at both intersections.

BACKGROUND INFORMATION: The City of Lodi has received a request from Bainbridge & Sternfels, Attorneys at Law, whose office is at Fairmont Avenue and Tokay Street, for the installation at that intersection, and a request from Dennis Swanson, D.C. and Wayne B. McAllister, D.C., whose offices are at Fairmont Avenue and Vine Street, for the installation at that intersection.

FAIRMONT AND TOKAY

This intersection meets four of the six conditions suggested for 4-way stops. Any one of the conditions shown on Exhibit A is sufficient to warrant the installation. Conditions met are:

Warrant #2 - There have been 5 accidents in the past year of a type that might have been avoided with 4-way stops. Four people were injured in these accidents;

Warrant #3 - Approximately 600 vehicles per hour enter the intersection on an averyage day between 10:00 a.m. and 6:00 p.m. The minimum warrant is 500 vehicles per hour for any 8 hour period;

Warrant #4 - The combined vehicular and pedestrian volume from the minor street (Tokay Street) averages 267 units per hour for the same 8 hour period. The suggested minimum warrant is 200 units;

Warrant #6 - The traffic volumes entering the intersection from Fairmont Avenue and from Tokay Street are about equal (57% from Fairmont and 43% from Tokay).

FAIRMONT AND VINE

Traffic conditions at this intersection are almost identical to those at Fairmont Avenue and Tokay Street and three of the six warrants for 4-way stops are met.

Warrant #2 - There have been 5 accidents of a type susceptible of correction by 4-way stops. Two people were injured in these accidents;

APPROVED:

HENRY A. GLAVES, City Manager

FILE NO.

Warrant #3 - The vehicular volume entering the intersection from 10:00 a.m. to 6:00 p.m. averages over 500 vehicles per hour (576);

Warrant #4 - The combined vehicular and pedestrian volumes from the minor street (Vine Street) averages over 200 units per hour for the same 8 hour period (230).

Copies of the traffic counts and accident diagrams for each of the intersections are attached. The persons requesting this action have been sent copies of this communication.

1. At the present time, there are marked crosswalks on the south and west legs of the Fairmont Avenue and Vine Street intersection, and on the west leg of the Fairmont Avenue and Tokay Street intersection.

In conjunction with the 4-way stop installations, crosswalks would be painted on all four legs of both intersections.

2. At both intersections, the City has previously prohibited some curb parking to provide sight visibility for drivers entering or crossing Fairmont Avenue.

The installation of 4-way stop signs at the intersections will enable the City to convert these areas back to on-street parking.

Sincerely,

Jack L. Ronsko
Public Works Director

cc: Bainbridge & Sternfels, Attorneys at Law
Dennis Swanson, D.C.
Wayne B. McAllister, D.C.

JLR:MED:dw

Encl.

CITY OF LODI

PUBLIC WORKS DEPARTMENT

FOUR WAY STOP SIGN WARRANTS

INTERSECTION OF VINE ST and FAIRMONT AVE.

DATE _____ BY _____

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 X

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 X Not Satisfied _____

3. 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)

   Highest 8 hours 10 a.m. to 6 p.m.
   Total volume 4592 vehicles
   Average per hour 574 vehicles
   Satisfied X Not Satisfied _____

4. 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.
   Total vehicles volume 1685
   Total pedestrian volume 160 estimate
   Average units per hour 230
   Satisfied X Not Satisfied _____

5. 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 30 MPH
   Satisfied _____ Not Satisfied X

6. 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 63 %
   % Traffic minor street 37 %
   Satisfied _____ Not Satisfied X

CITY OF LODI

PUBLIC WORKS DEPARTMENT

FOUR WAY STOP SIGN WARRANTS

INTERSECTION OF VINE ST and FAIRMONT AVE

DATE _____ BY _____

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 X

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 X Not Satisfied _____

3. 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)

   Highest 8 hours 10 a.m. to 6 p.m.
   Total volume 4590 vehicles
   Average per hour 574 vehicles
   Satisfied X Not Satisfied _____

4. 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.
   Total vehicles volume 11085
   Total pedestrian volume 160 estimate
   Average units per hour 2330
   Satisfied X Not Satisfied _____

5. 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 30 MPH
   Satisfied _____ Not Satisfied X

6. 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.

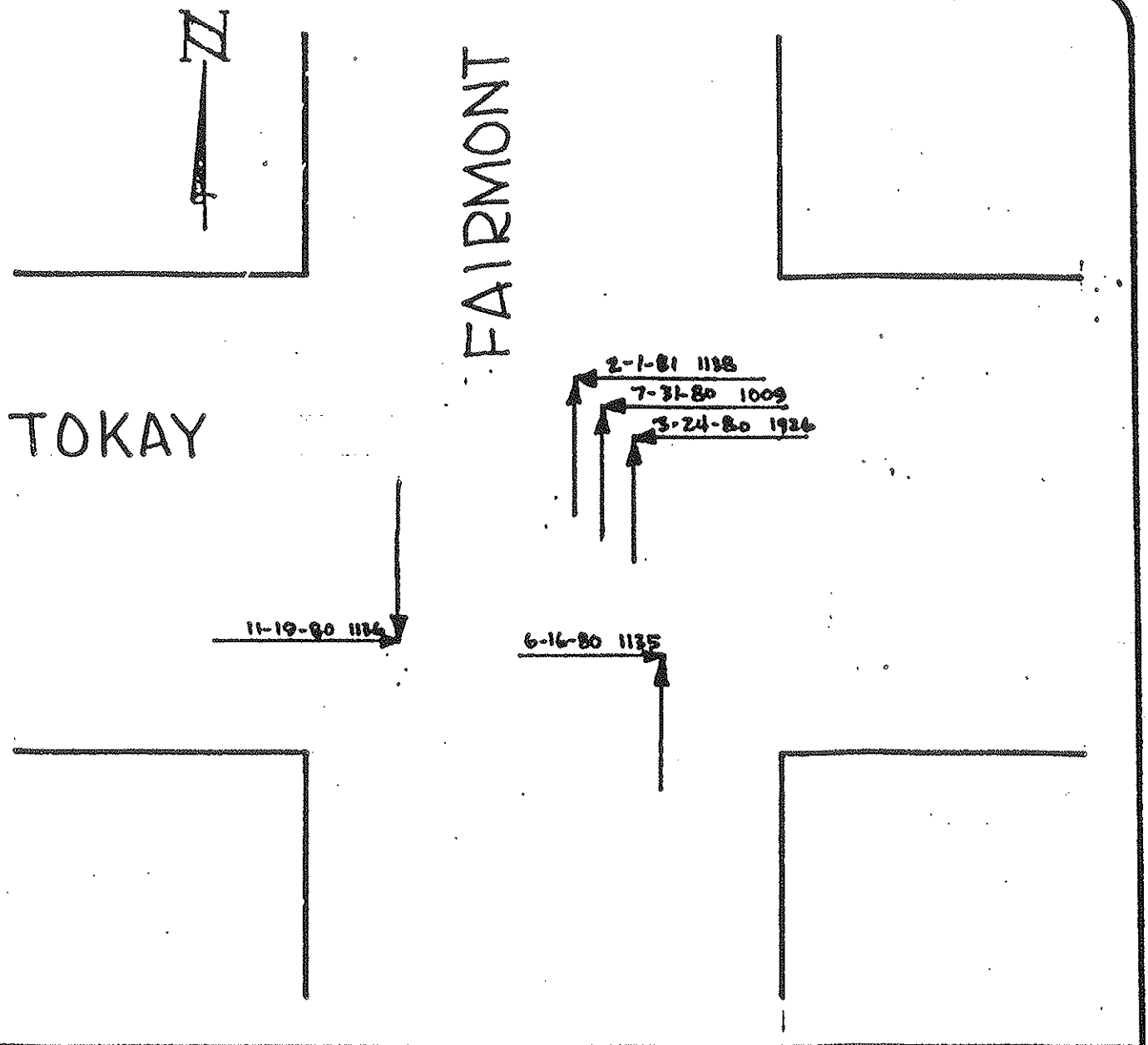
   % Traffic major street 63 %
   % Traffic minor street 37 %
   Satisfied _____ Not Satisfied X

CITY OF LODI

PUBLIC WORKS DEPARTMENT

COLLISION DIAGRAM

INTERSECTION OF FAIRMONT AND TOKAY



LEGEND:

PATH OF MOVING VEHICLE	——→	FIXED OBJECT	▭
PEDESTRIAN PATH	- - - -→	OVERTURNED	∿→
REAR END COLLISION	——→|—→	OUT OF CONTROL	∿∿→
PARKED VEHICLE	▨	SIDESWIPE	⟹

Drawn MED	No.	Revised	By	Approved By	EXHIBIT B
Checked					
Date 2-11-81				Public Works Director RCE 10720	

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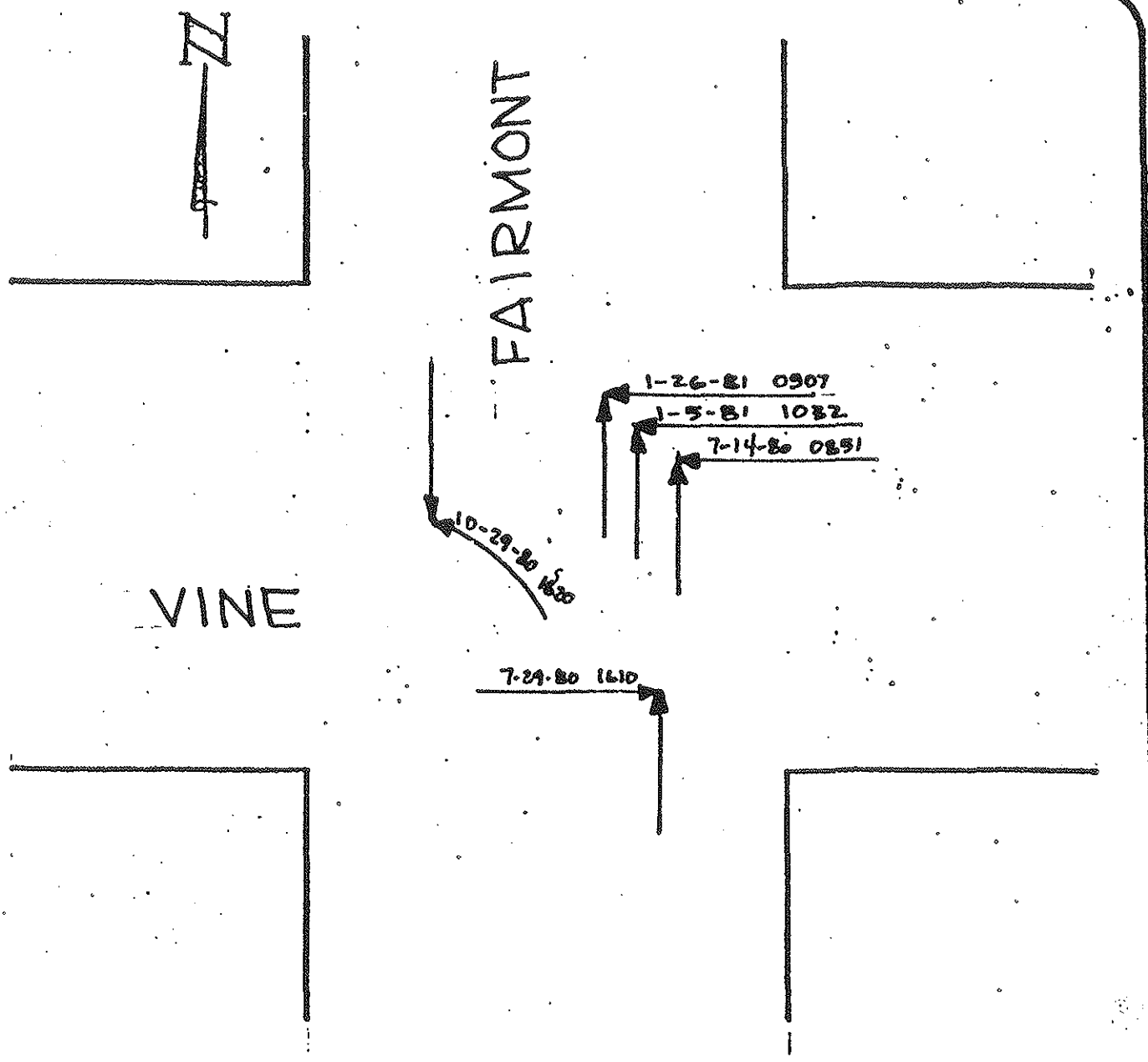
CITY OF LODI

PUBLIC WORKS DEPARTMENT

COLLISION DIAGRAM

INTERSECTION OF FAIRMONT AND VINE



LEGEND:

PATH OF MOVING VEHICLE	——→	FIXED OBJECT	▭
PEDESTRIAN PATH	- - - -→	OVERTURNED	⌒→
REAR END COLLISION	——→|→	OUT OF CONTROL	∿→
PARKED VEHICLE	▨	SIDESWIPE	⇉

Drawn MED	No.	Revised	By	Approved By	EXHIBIT B
Checked					
Date 2.11.81				Public Works Director RCE 10720	

9/71

CITY OF LODI
PUBLIC WORKS DEPARTMENT

INTERSECTION COUNTS

INTERSECTION OF ~~[illegible]~~ VINE ST & FAIRMONT AVE

DATE 1-20-81 DAY OF WEEK TUES.

DIRECTION	NORTHBOUND	SOUTHBOUND	EASTBOUND	WESTBOUND	TOTAL
2400-0100	8	3	9	3	23
0100-0200	3	4	3	5	15
0200-0300	2	6	3	3	14
0300-0400	9	3	2	7	21
0400-0500	3	5	2	7	17
0500-0600	21	17	24	21	83
0600-0700	32	53	38	28	151
0700-0800	113	115	107	83	418
0800-0900	135	108	104	76	423
0900-1000	152	126	94	62	434
1000-1100	139	158	86	71	454 x
1100-1200	151	146	109	71	477 x
1200-1300	150	141	111	79	481 x
1300-1400	216	187	122	89	614 x
1400-1500	201	190	171	84	646 x
1500-1600	226	207	141	114	688 x
1600-1700	215	197	137	84	633 x
1700-1800	197	184	125	91	597 x
1800-1900	87	88	82	94	351
1900-2000	73	55	61	73	262
2000-2100	77	50	49	69	245
2100-2200	69	30	48	33	180
2200-2300	33	19	27	17	96
2300-2400	28	19	26	11	84
24 HOUR TRAFFIC	2340	2111	1681	1275	7407

HIGHEST 8 HOURS MAJOR STREET 2905 avg/hr 363

HIGHEST 8 HOURS MINOR STREET 1685 avg/hr 210

HIGHEST 8 HOURS TOTAL 4590 avg/hr 573

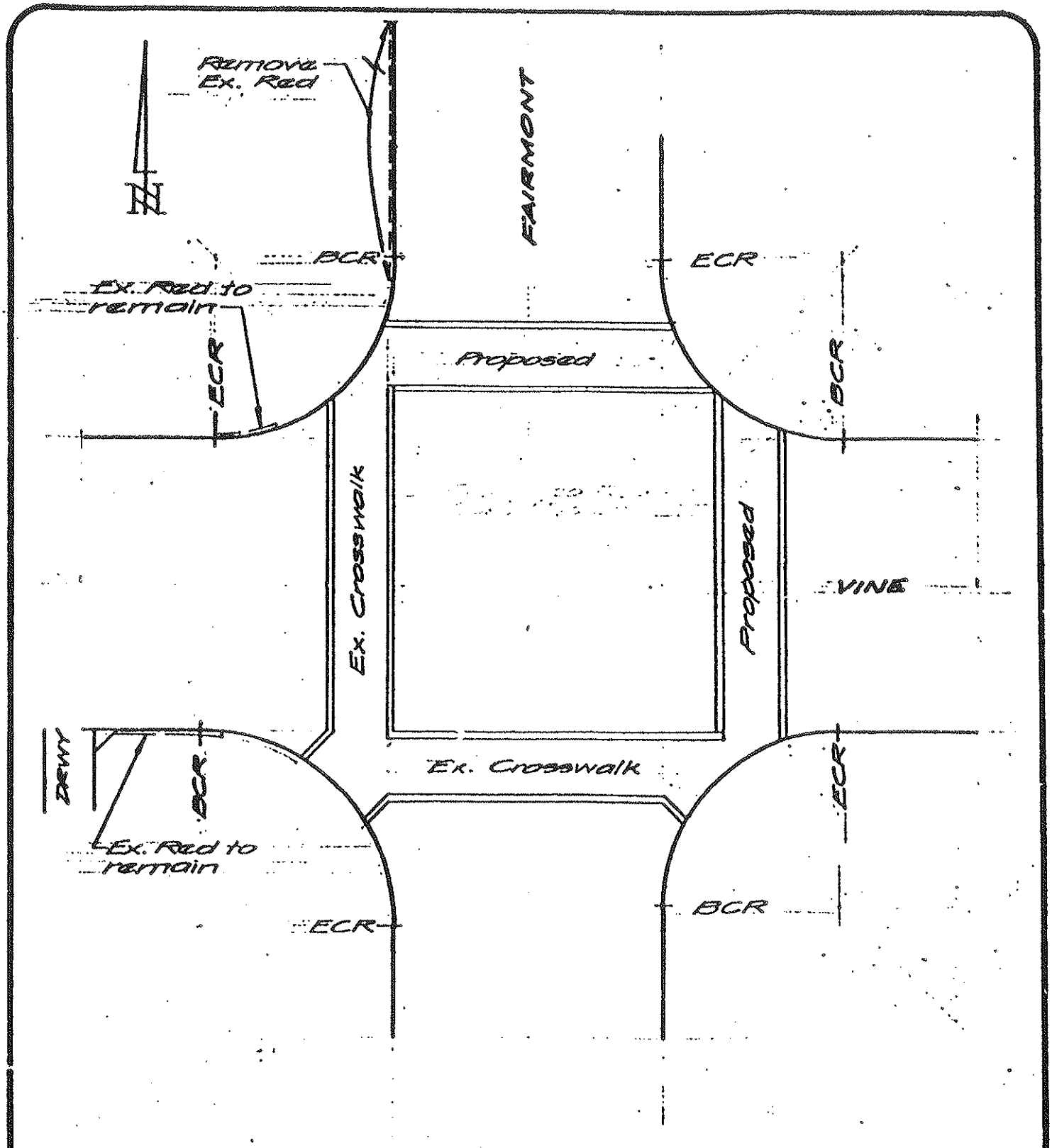
TOTAL 24-HOURS ADT _____

EXHIBIT C

CITY OF LODI

PUBLIC WORKS DEPARTMENT

VINE AND FAIRMONT



Drawn	DM
Checked	MED
Date	FEB, '81

No.	Revised	By

Approved By

Public Works Director
RCE 17509

CITY OF LODI

PUBLIC WORKS DEPARTMENT

FOUR WAY STOP SIGN WARRANTS

INTERSECTION OF TOKAY ST and FAIRMONT AVE

DATE _____ BY _____

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 X

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 X Not Satisfied _____

3. 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)

   Highest 8 hours 10 a.m. to 6 p.m.
   Total volume 4766 vehicles
   Average per hour 596 vehicles
   Satisfied X Not Satisfied _____

4. 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.
   Total vehicles volume 2015
   Total pedestrian volume 120 estimate
   Average units per hour 267
   Satisfied X Not Satisfied _____

5. 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 30 MPH
   Satisfied _____ Not Satisfied X

6. 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 57 %
   % Traffic minor street 43 %
   Satisfied X Not Satisfied _____

CITY OF LODI
PUBLIC WORKS DEPARTMENT

INTERSECTION COUNTS

INTERSECTION OF TOKAY ST & FAIRMONT AVE

DATE 2/10/81 DAY OF WEEK TUES.

DIRECTION	NORTHBOUND	SOUTHBOUND	EASTBOUND	WESTBOUND	TOTAL
2400-0100	7	5	3	7	22
0100-0200	7	3	1	4	15
0200-0300	3	2	2	0	7
0300-0400	4	5	0	3	12
0400-0500	1	5	2	3	11
0500-0600	11	13	5	11	40
0600-0700	40	39	27	30	136
0700-0800	75	89	75	110	349
0800-0900	104	120	94	98	415
0900-1000	141	123	89	107	460
1000-1100	164	144	76	114	498 x
1100-1200	180	145	85	139	549 x
1200-1300	180	149	75	162	566 x
1300-1400	148	175	101	145	569 x
1400-1500	153	159	114	170	596 x
1500-1600	238	207	133	182	760 x
1600-1700	231	179	107	192	709 x
1700-1800	178	121	82	138	519 x
1800-1900	94	59	48	101	302
1900-2000	97	47	46	70	260
2000-2100	66	34	26	45	171
2100-2200	35	28	27	35	125
2200-2300	24	22	12	26	84
2300-2400	19	14	5	6	44
24 HOUR TRAFFIC	2200	1887	1235	1898	7220

HIGHEST 8 HOURS MAJOR STREET 2751 avg/hr 344

HIGHEST 8 HOURS MINOR STREET 2015 avg/hr 252

HIGHEST 8 HOURS TOTAL 4766 avg/hr 596

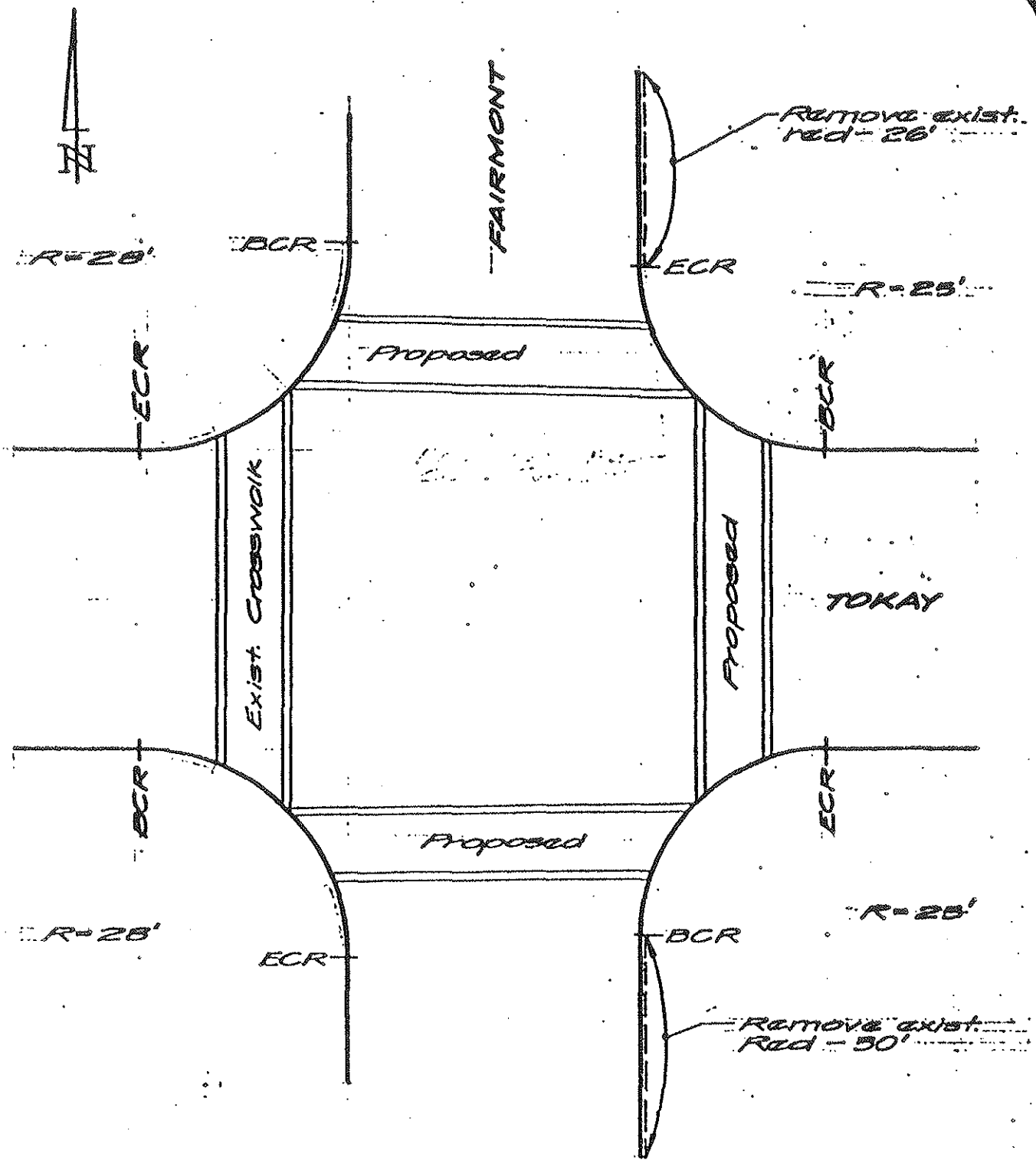
TOTAL 24-HOURS ADT _____

EXHIBIT C

CITY OF LODI

PUBLIC WORKS DEPARTMENT

TOKAY AND FAIRMONT



Drawn DM	No.	Revised	By	Approved By
Checked MED				
Date FEB, '81				Public Works Director RCE 17509

9/91