



# CITY OF LODI

PUBLIC WORKS DEPARTMENT

## COUNCIL COMMUNICATION

TO: City Council  
FROM: City Manager  
MEETING DATE: July 1, 1987  
AGENDA TITLE: Review of Lakeshore Drive Traffic Study

RECOMMENDED ACTION: That the City Council approve the following traffic controls at Lakeshore Village:

1. Adopt a resolution establishing Mills Avenue as a through street;
2. Approve the installation of two-way stop signs on Timberlake Circle at Lakeshore Drive;
3. Approve the installation of a yield sign on Newport Drive at Lakeshore Drive; and
4. Approve centerline striping on Lakeshore Drive.

BACKGROUND INFORMATION: At the regular Council meeting of June 3, 1987, the City Council received the attached request for various traffic controls at Lakeshore Village (see Exhibit A). At the request of the City Council, staff performed a traffic control study in the residential area.

The study included 24-hour vehicle counts, radar speed surveys, safe approach studies, and an accident review (see Exhibit B).

The Caltrans multi-way stop warrants were used to evaluate proposed multi-way intersections.

There are no guidelines in the Caltrans Traffic Manual to evaluate one- and two-way yield and stop intersections. Many agencies (including Lodi) use the safe approach methods from the Federal Highway Administration (FHWA), Manual on Uniform Traffic Control Devices.

The following study includes the safe approach method and another FHWA method for determining right-of-way controls on low volume streets. The majority of the streets intersecting Lakeshore Drive are low volume streets (less than 500 vehicles per day).

The results of the study are as follows:

APPROVED:

  
THOMAS A. PETERSON, City Manager

FILE NO.

Study 1 - Request for four-way stop signs at Lakeshore Drive and Timberlake Circle

RESULTS: Multi-way stop signs are not warranted as shown in Exhibit C.

Two-way stop signs on Timberlake Circle at Lakeshore Drive are justified using the safe approach and low volume methods.

Study 2 - Request for three-way stop signs at Lakeshore Drive and Newport Drive

RESULTS: Multi-way stop signs are not warranted as shown in Exhibit D.

A yield sign on Newport Drive at Lakeshore Drive is justified using the safe approach method.

Study 3 - Request for speed limit signs on Mills Avenue S/Kettleman Lane and Lakeshore Drive S/Kettleman Lane and E/Mills Avenue

RESULTS: The City's policy has been to post streets with speed zones other than 25 mph unless the speed limit is 25 mph resulting from a speed survey study.

Both of these streets have prima facie speed limits of 25 mph. To be consistent with the rest of the city, staff does not recommend installing speed limit signs.

Staff received complaints from residents regarding high speed vehicles occurring Friday and Saturday evenings. The Police Officers have increased enforcement on both streets and they noticed the majority of the speeders are residents returning home from work.

Study 4 - Request for three-way stop signs at Mills Avenue and Lakeshore Drive

RESULTS: Multi-way stop signs are not warranted as shown in Exhibit E.

Because of the volumes and design of the streets in the area, staff recommends establishing Mills Avenue as a through street from Kettleman Lane to Harney Lane. City Council adopted the Specific Plan for Mills Avenue from Kettleman Lane to Harney Lane by Ordinance No. 1218. This ordinance adopted Mills Avenue as a collector street (street width - 44 feet curb-to-curb). Mills Avenue has a traffic volume of 3,100 vehicles per day. By establishing Mills Avenue as a through street, the Public Works Director can install stop signs on the minor streets intersecting Mills Avenue without further City Council approval.

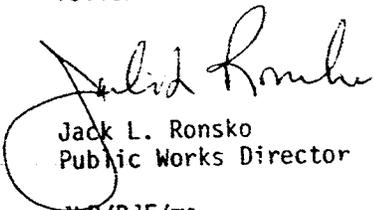
City Council  
July 1, 1987  
Page 3

Study 5 - Request for yield signs on the following streets:

Willow Point Court at Lakeshore Drive  
Windjammer Court at Lakeshore Drive  
Cape Code Circle (both) at Lakeshore Drive

RESULTS: Yield signs are not justified at the above locations due to the low street volumes, no accidents, and no apparent sight problems.

Lakeshore Drive - General - The accident and speed data do not indicate a serious problem on Lakeshore Drive. However, due to the volumes and the street curvature, it is recommended a centerline be installed with the next striping contract. This may slightly reduce speeds as drivers will tend to follow the centerline rather than cutting across the curves.



Jack L. Ronsko  
Public Works Director

JLR/PJF/ma

Attachments

cc: Street Superintendent  
Police Chief  
Lakeshore Homeowners Association

# ORIGINAL

## AGENDA

### ISSUE

- Speed of traffic and reckless driving and its impact on Lakeshore Village residents.

### CONCERNS

- Potential fatality and/or serious bodily injury to Lakeshore Village residents.
- Public awareness with regard to traffic laws.
- Property damage.
- Congestion.

### RECOMMENDATION

- The following traffic control signs should be installed:
  - 4-way stop at Timberlake Circle and Lakeshore Drive
  - 3-way stop at Newport Drive and Lakeshore Drive
  - Speed limit signs south of Highway 12 on Lakeshore Drive and on Mills Avenue
  - 3-way stop at south Mills Avenue and Lakeshore Drive
  - Yield signs at:
    - Willow Point Court entering Lakeshore Drive
    - Windjammer Court entering Lakeshore Drive
    - Cape Cod Circle entering Lakeshore Drive (both entries)

### DISCUSSION

- Viewpoints of Lakeshore Village residents.

### CONCLUSION

P E T I T I O N

WE, THE RESIDENTS OF LAKESHORE VILLAGE, PETITION THE CITY COUNCIL OF LODI AS FOLLOWS:

A drastic and dangerous condition exists, namely, speeding, reckless and dangerous driving on the streets in our community, a condition which endangers the lives of the members of our community and a condition which needs to be remedied immediately.

Some of the incidents which have resulted from this reckless driving are as follows:

In April, a Volkswagen traveling north on Lakeshore Drive at a speed of at least 45 mph quickly overtook a much slower vehicle, and the driver passed by moving into the southbound lane. Oncoming traffic forced him back to his own lane, but he was unable to negotiate the second curve, rammed into the corner curb, and blew out both tires on his right side. Fortunately, he missed a family with young children playing on the sidewalk. (A three-way stop sign at Newport and Lakeshore Drive would have prevented this careless driver from building up to the dangerous speed he did.)

In May, a woman attempting to cross Cape Cod Circle had to pull her two children back from a curb to avoid being hit by two speeding cars. The cars were apparently playing "chase". Had she not pulled her children back, she and her children would have been seriously injured by the speeding vehicles.

A resident on Lakeshore Drive has seen cars coming toward his home at such high rates of speed that he and persons in his home have been forced to literally jump up from the comfort of their own living room and run for safety to another area of their home.

In May, this same resident witnessed a car traveling in an easterly direction on Lakeshore Drive. The car was traveling at such a high rate of speed that it was unable to negotiate the curve on Lakeshore Drive near its intersection with Newport that the car did a complete spin-around and landed in a nearby neighbor's yard.

The area surrounding Lakeshore Village is growing rapidly, resulting in increased traffic on the streets running into Lakeshore Village.

We, as a community, cannot tolerate the dangerous condition this reckless driving creates. A fatal accident is imminent.

We are desperately concerned particularly in light of the large number of children in our area. Our sidewalks are not safe for children riding their bicycles and walking on the sidewalks because of the speed at which some of the vehicles are traveling on our streets.

PETITION  
Page Two

The high rate of speed on Lakeshore Drive is largely due to the fact that there are no stop signs posted on the entirety of Lakeshore Drive, enabling automobiles to reach high rates of speed. This problem is compounded by the fact that Lakeshore Drive is a curved street, thus forcing speeding vehicles onto the sidewalks and lawns of residents of Lakeshore Drive. This creates a critically dangerous condition for residents using the sidewalks on Lakeshore Drive.

We feel that signs should be placed at the intersections of:  
Mills and Lakeshore Drive -- a 3-way stop sign  
Newport and Lakeshore Drive -- a 3-way stop sign  
Timberlake and Lakeshore -- a 4-way stop sign  
Cape Cod Circle (both entries) -- yield signs or stop signs  
Willow Point Court -- yield sign or stop sign  
Windjammer Court -- yield sign or stop sign.

We feel also that speed limit signs should be posted as follows:  
Lakeshore Drive (both entrances)  
Mills Street entering Lakeshore Village.

THANK YOU FOR YOUR TIME AND CONSIDERATION.

PETITION TO CITY COUNCIL OF LODI REGARDING LAKESHORE VILLAGE

# of kids	Date	Name	Address	Phone
1-0-	5/13/87	Fred E Knief	1749 Cape Cod Circle	368-2228
2-0-	5/13/87	Kathleen M. Knief	1749 Cape Cod Cir	368-2228
3	5-13-87	Patricia Cascard	1756 " " "	334-4187
3	5-13-87	Thomas Thompson	1765 Cape Cod Cir	369-7292
3	5-13-87	Carol Thompson	" " "	369-7292
6-0	5-15-87	Michael Deacony	1740 Cape Cod Cir	368-4941
7-0	5-16-87	Dixie Deacony	1740 Cape Cod Cir	368-4941
8-2	5-16-87	Rita Deacony	1748 CAPE COD CIR	337-6161
9-0	5-16-87	Marion Umada	1752 Cape Cod	334-3000
10	5-16-87	James T. Conard	1756 Cape Cod	334-4667
11-1	5-16-87	Russell Vargas	1757 Cape Cod Cir	368 5609
12	5/16	Cheryl Lawrence	1812 Cape Cod	334-3855
13	5/16	Grey Cervantes	1805 Cape Cod Cir	369-7238
14	5/16	Dorothy Cervantes	" " " "	"
15	5/16	Richard Marks	1808 Cape Cod Circle	334-2930
16	5/16	Ramela Faught	1784 Cape Cod	333-2917
17	"	Michael Faught	" " "	"
18	5-16	Lucia Williams	1760 CAPE COD	334-2537
19	5-16	Thomas M. Williams	1760 Cape Cod	334-2537
20	5/16	John Williams	1757 CAPE COD	368 5609
21	5/16	Glenn Obuse	1828 Cape Cod	369-6802
22	5/16	Noble Abuter	1878 Cape Cod Cir	369-6802
23	5/16	Dale J. Kelly	1820 Cape Cod Cir	334-1395
24	5/16	May Kelly	1820 Cape Cod Cir	334-1395
25	5/16	Elizabeth M. Howard	1816 Cape Cod Cir	369-8357
26	5/16	John M. Howard	1816 Cape Cod Cir	369-8357
27	5/16	Margaret M. Howard	1804 Cape Cod Cir	369-2581
28	5/16	John M. Howard	" " "	368-9185
29	5/16	John M. Howard	" " "	"

PETITION TO CITY COUNCIL OF LODI REGARDING LAKESHORE VILLAGE

	Date	Name	Address
31	5/18/87	Quidley <sup>ut</sup>	1748 Cape Cod Cir
31	5-18-87	Lisa Hetchow	1720 Cape Cod Cir.
32	5-18-87	Jack Gasser	1712 Cape Cod Circle
33	5-18-87	Annal Glenn	1712 Cape Cod Circle
34	5-18-87	Debra G Wood	1716 Cape Cod Circle
35	5-18-87	Jeffrey B Wood	1716 Cape Cod Circle
36	5-18-87	Kathy Sandgren	1728 Cape Cod Cir.
37	5-18-87	Scott Sandgren	1728 Cape Cod Cir.
38	5-18-87	Ferian Perry	1737 Cape Cod Cir.
39	5-18-87	Patricia Perry	1737 Cape Cod Cir.
40	5-18-87	Frank Matrone	1738 Cape Cod Cir.
41	5-18-87	Julie Buchmiller	1737 Cape Cod Cir.
42	5-18-87	Mary Matrone	1741 Cape Cod Cir.
43	5-18-87	Ka Matrone	1768 Cape Cod Cir.
44	5-18-87	Michael Fought	1784 Cape Cod Cir.
45	5-18-87	Mitchel Matrone	1800 Cape Cod Cir.
46	5-18-87	Cheri Frese	1815 Cape Cod Circle
47	5-18-87	Byn Knuffroth	1827 Cape Cod Circle
48	5-18-87	Andrea Knuffroth	1827 Cape Cod Circle
49	5-18-87	James M. Schiffler	1744 Cape Cod Circle, Lodi
50	5-18-87	Annette A. Schiffler	1704 Cape Cod Lodi
51	5/18/87	Jocann Schiffler	1744 Cape Cod Cir
52	5/19/87	A. S. Schiffler	1768 Cape Cod Circle
53	5/19/87	Mecki Schiffler	1776 Cape Cod Circle
54	5/19/87	Hobin Schiffler	1776 Cape Cod Circle
55	5/19/87	Susan Hall	1753 Cape Cod Circle

Petition to City Council of Lodi Regarding  
 LAKESHIRE VILLAGE

	DATE	NAME	ADDRESS
56	May 20	Mildred Blair	1506 Timberlake Circle
57	" "	Lawrence W. Abie	1506 Timberlake Circle
58	May 20	Dorothy Sawcett	1512 Timberlake Circle
59	May 20	M. Sawcett	1512 Timberlake Circle
60	May 20	H. Campbell	1535 Timberlake Circle
61	May 20	Douglas Galt	1535 Timberlake Circle
62	MAY 20	Gene McCarley	1541 Timberlake Circle
63	May 20	Gene McCarley	1541 Timberlake Cr. Lodi
64	May 20	Shirley A. Gane	1547 Timberlake Cir. Lodi
65	May 20	Alexandra D. Madamba	1653 Timberlake Circle, Lodi
66	May 20	Robert J. Williams Jr.	1653 Timberlake Circle
67	May 21	Walter Schmidt	1509 Lakeshore

PETITION TO CITY COUNCIL OF LODI REGARDING LAKESHORE VILLAGE

	Date	Name	Address
68 69	5/19	Jack & Jan Cornell	1726 Timberlake Cir Lodi
70 <sup>71</sup>	5/19	Jack & Jerry Cope	1733 Timberlake Cir Lodi
72	5-19	HERB PRESZLER	1727 TIMBERLAKE CIR Lodi
73 74	5-19	Diane & Bill Mason	1709 Timberlake C.R. Lodi
75 76	5/19	Jack & Brenda Fogelock	1702 Timberlake Cir. Lodi
77	5-19	<del>Pat &amp; Jane</del>	1720 Timberlake Circle
78	5/19	<del>Pat &amp; Jane</del>	1700 Timberlake Cir. Lodi
79	5/19	Mary Pimentel	1678 Timberlake Circle, Lodi
80	5/19	Betty & Betty Hope	1666 Timberlake Circle Lodi
81 82	5/19	Bette & Brad Battjer	1660 Timberlake Circle Lodi
83	5/19	Jane Davis	1648 Timberlake Circle Lodi
84 85	5/19	Rocky & Pat Yorlee	1642 Timberlake Circle, Lodi, Ca.
86 87	5/19	Barbara Stewart	1624 Timberlake, Lodi, CA
88	5/19	David Swille	1613 Timberlake Cir Lodi
89	5/19	<del>Pat &amp; Jane</del>	1600 Timberlake Circle
90	5/19	Fadel Ibrahim	1606 Timberlake Circle Lodi
91	5-19	Kathy Jewett	1600 Timberlake
92	5/19	Faye Reegen	1560 Timberlake Lodi
93	5/19	Robert B. Swergord	1554 TIMBERLAKE CIRCLE, LODI, CA
94	5/19	Virginia J. Swergord	1554 Timberlake Circle, Lodi, Ca.
95	5/19	Walter K. Kuntz	1548 TIMBERLAKE CIR LODI, CA
96	5/19	Frank Johnson	1536 Timberlake Cir. Lodi CA
97	5/19	Betty & Lewis	1524 Timberlake Cir Lodi Ca.
98	5/19	Gene & Gene	1703 Timberlake Circle, Ca.
99	5/20	Alfred B. Dan	1715 Timberlake Circle, Lodi CA
100	5/20	Pat & Jane	1700 Timberlake Circle, Lodi, Ca.
101	5/20	Dennis Horn	1500 TIMBERLAKE CIR LODI CA

PETITION TO CITY COUNCIL OF LODI REGARDING LAKESHORE VILLAGE

	Date	Name	Address
102 103	5/18/87	Henry & Jane Lyken	523 Brandywine Dr.
104	5/18/87	Ken & King	1611 Lakeshore Dr
105 106	"	Dr. & Mrs. A.D. King	"
107 108	"	Curt & Bev Gabrielson	1607 Lakeshore dr.
109 110	5-18-87	Bob & Carole Romans	1117 Lakeshore Dr
111 112	5-18-87	Lawrence & Mary Goss	1707 Lakeshore Dr.
113	5-18-87	<del>Dr. &amp; Mrs. J. J. King</del>	1731 LAKESHORE DR.
114 115	5-18-87	Robert & Lynda Nuss	1805 Lakeshore Dr.
116	5-19-87	MARIA Clare Taylor	1801 Lakeshore Dr Lodi
117	5-19-87	Marlyn B. Nushaw	1629 Lakeshore Dr.
118	5-20-87	Marlene Chapple	1724 Cape Cod Dr
119	5-21-87	James S. Kennedy	1721 LAKESHORE DR.
120	6-21-87	Judith Dr. Kennedy	1721 Lakeshore Dr.

PETITION TO CITY COUNCIL OF LODI REGARDING LAKESHORE VILLAGE

	Date	Name	Address
121	5/13/87	Diane Jensen	1623 Lakeshore Drive
122	5/13/87	Michelle Kucera	1701 Windjammer Ct
123	5/13/87	Shawn Foster	1735 Windjammer Ct.
124	5/13/87	Rita Schefko	1711 Windjammer Ct
125	5/13/87	Mitch Schefko	1711 WINDJAMMER CT.
126 127	5/13/87	Larry & Carol Krotzman	1714 Windjammer Ct
333-2404 128	5/13/87	Kate Polysken	1776 Creek Forest
129	5-13-87	John W. Reif	1877 Lakeshore Dr.
333-0457 130	5-13-87	Linda Geygle	1877 Lakeshore Dr
131	5-13-87	Craig W. Jamb	1741 Windjam Ct
132	5-13-87	Susan & James	1741 Windjammer Ct
133	5/13/87	Michael Jensen	1623 Lakeshore Drive
134	5/13/87	Bruce Velt	1732 Willow Pt Ct
135	5/17/87	Deane Puzosman	1795 Willow Point Ct
136	5/17/87	Paul Suprenant	1715 Willow Point Ct.
137	5-17-87	Robert Liso	1738 Willow Point Ct.
138 139	5-18-87	mo. Mrs Sam Rosemary England	1857 Lakeshore
140 141	5-19-87	Mr + Mrs Angelo Zazzarini	1725 Willow Point

PETITION TO CITY COUNCIL OF LODI REGARDING LAKESHORE VILLAGE

	Date	Name	Address	Phone
142	5/15/87	DeAnn D. Elwin	1601 Lakeshore	333-8748
2 143	5/15/87	Debi Hyzoly	1747 Windjammer	333-0117
144	5/15/87	Thomas J. ...	1947 Lakeshore	334-2651
145	5/15/87	Stephanie C. ...	1869 LAKESHORE	368-6517
146	5/15/87	Maria ...	330 Lakeshore Dr.	368-1591
147	5/15/87	Pat ...	1731 Willow Point Ct.	333-1046
148	5/17/87	Jay ...	1719 Willow pt Ct	368-1277
149	5/17/87	Kathie ...	1719 Willow Pt. Ct.	368-1277
150	5/17/87	Phil ...	1743 Lakeshore Dr.	334-6283
151	5/17/87	Bud ...	1743 Lakeshore Dr.	334-6283
152	5/17/87	Karhen ...	1732 Willow Pt Ct	368-5097
153	5/19/87	<del>Richard ...</del>	1601 Lakeshore Dr.	333-8748
154	5/19/87	Cara Lynn ...	1714 Willow Point Ct	334-2575

PETITION TO CITY COUNCIL OF LODI REGARDING LAKESHORE VILLAGE

No. of Kids	Date	Name	Address	Telephone
155 Grand Kids	5/18	Vera + Ernest Misite	1776 Lakeshore Dr	
157 no kids	5/18	Lorna + Jim Weybret	1730 Lakeshore Dr	334-2162
159 14 kids	5/18	Richard + Betty Binkler	1729 Lakeshore Dr	334-0430
161 2 kids	5/18	Jeffrey + Sandra Duarte	1706 Lakeshore Dr	333-2397
163 No Kids	5/18	Bill + Marie Peppelle	1732 S. Mills Ave	339-4262
165 No Kids	5/18	Ray + Jan Honey	1714 S. Mills Ave	368-3624
167	5/18	Ken + Gabi Gilhart	1708 S. Mills	369-8687
169	5/18	Michele + Sharon Felton	1702 S. Mills	369-1112
172	5/18	Clark + Sherry Wallace	1618 S. Mills	333-2099
173	5/18	Michael L Nelson	1612 S. Mills	369-7730
174	5/18	Bill + Chris Correll	1606 S. Mills	369-2851
176	5/20	Forrest + Loren Compton	1761 Cape Cod Cir	334-9426 368-8676
178	5/20	John + Nardine Ohman	1718 Lakeshore Drive	



PETITION TO CITY COUNCIL OF LODI REGARDING LAKESHORE VILLAGE

	Date	Name	Address
120	5/18/87	John Szalay	1806 Lakeshore
131	5/18/87	May Somogyi	1806 Lake Shore Dr.
132	5/18/87	Shelene Smith	1810 Lakeshore Dr.
133	5/18/87	Risa Barkdale	1814 Lakeshore Dr.
134	5/18/87	Danny Duen	1814 Larchan Dr
135	5/18/87	Duffy Rock	1818 Lakeshore Dr.
136	5/18/87	Jay Crocraft	1826 Lakeshore Dr.
137	5/18/87	Carole Patterson	1830 Lakeshore Dr.
138	5/18/87	Harold Patton	1830 Lakeshore Dr.
139	5/18/87	Amy Eastman	1834 Lakeshore Dr.
190	5/18/87	Ruth M. Ireland	1842 Lakeshore Dr.
191	5/18/87	Lyle Lopez	1846 Lakeshore Drive
192	5/18/87	Lisa Rushing	1850 Lakeshore Drive
193	5/18/87	Ken [unclear]	1850 Lakeshore Drive
194	5/18/87	Lenore Rojas	1854 Lakeshore Dr.
195	5/18/87	Georgia Zagari	1858 Lakeshore Dr.
196	5-18-87	D. Dennis Zagari	1858 Lakeshore Dr.
197	5-19-87	John Denton	1754 Lakeshore Dr.
198	5-19-87	Jean Ellen	1874 Lakeshore Dr. LODI, CA 95242
199	5-19-87	Bonnie Anderson	1802 Lakeshore Dr Lodi Ca 95242
200	5-19-87	R. S. Campbell	1808 Lakeshore Dr Lodi, CA 95242
201	5-19-87	Red Shultz	1810 Lakeshore Dr Lodi 95242
202	5/19/87	Kim Ashby	1870 Lakeshore Dr. Lodi 95242
203	5/19/87	Carl [unclear]	1870 Lakeshore Lodi 95242
204	5-19-87	Jan M. Ehlers	1874 Lakeshore Dr.
205	5-19-87	Greg [unclear]	1877 Lakeshore Dr.
206	5-19-87	Jim [unclear]	1904 Lakeshore Dr.

PETITION TO CITY COUNCIL OF LODI REGARDING LAKESHORE VILLAGE

	Date	Name	Address
207	5/19/87	Brian Holze	1908 LAKESHORE
208	"	PAT MACFARLANE	" "
209	5/19-87	Eileen Black	1920 " D
210	5/19/87	Duke Reese	1928 "
211	5/19/87	Lana Lakeic	1932 "
212	5/19/87	Cerra Sullivan	1930 LAKESHORE
213	5/19/87	Richard Gullivan	1930 " "
214	5/19/87	Mike Badley	1942 Lakeshore
215	5/19/87	Patricia Craine	1798 Lakeshore
216	5/19/87	Conway McCarty	1705 Cape Cod Cir.

COPY

AGENDA

ISSUE

- Speed of traffic and reckless driving and its impact on Lakeshore Village residents.

CONCERNS

- Potential fatality and/or serious bodily injury to Lakeshore Village residents.
- Public awareness with regard to traffic laws.
- Property damage.
- Congestion.

RECOMMENDATION

*Study*

- The following traffic control signs should be installed:
  - 1 • 4-way stop at Timberlake Circle and Lakeshore Drive
  - 2 • 3-way stop at Newport Drive and Lakeshore Drive
  - 3 • Speed limit signs south of Highway 12 on Lakeshore Drive and on Mills Avenue
  - 4 • 3-way stop at south Mills Avenue and Lakeshore Drive
  - 5 • Yield signs at:
    - Willow Point Court entering Lakeshore Drive
    - Windjammer Court entering Lakeshore Drive
    - Cape Cod Circle entering Lakeshore Drive (both entries)

DISCUSSION

- Viewpoints of Lakeshore Village residents.

CONCLUSION

KETTLEMAN (HWY 12)

LANE

**L E G E N D**

- ▶ 850 24 HR VOLUME IN DIRECTION SHOWN
- ↔ 35 MPH PERCENTILE SPEED IN DIRECTION SHOWN
- NUMBER OF ACCIDENTS AT INTERSECTION INDICATED FOR 1984, 85, 86 & 87 TO DATE

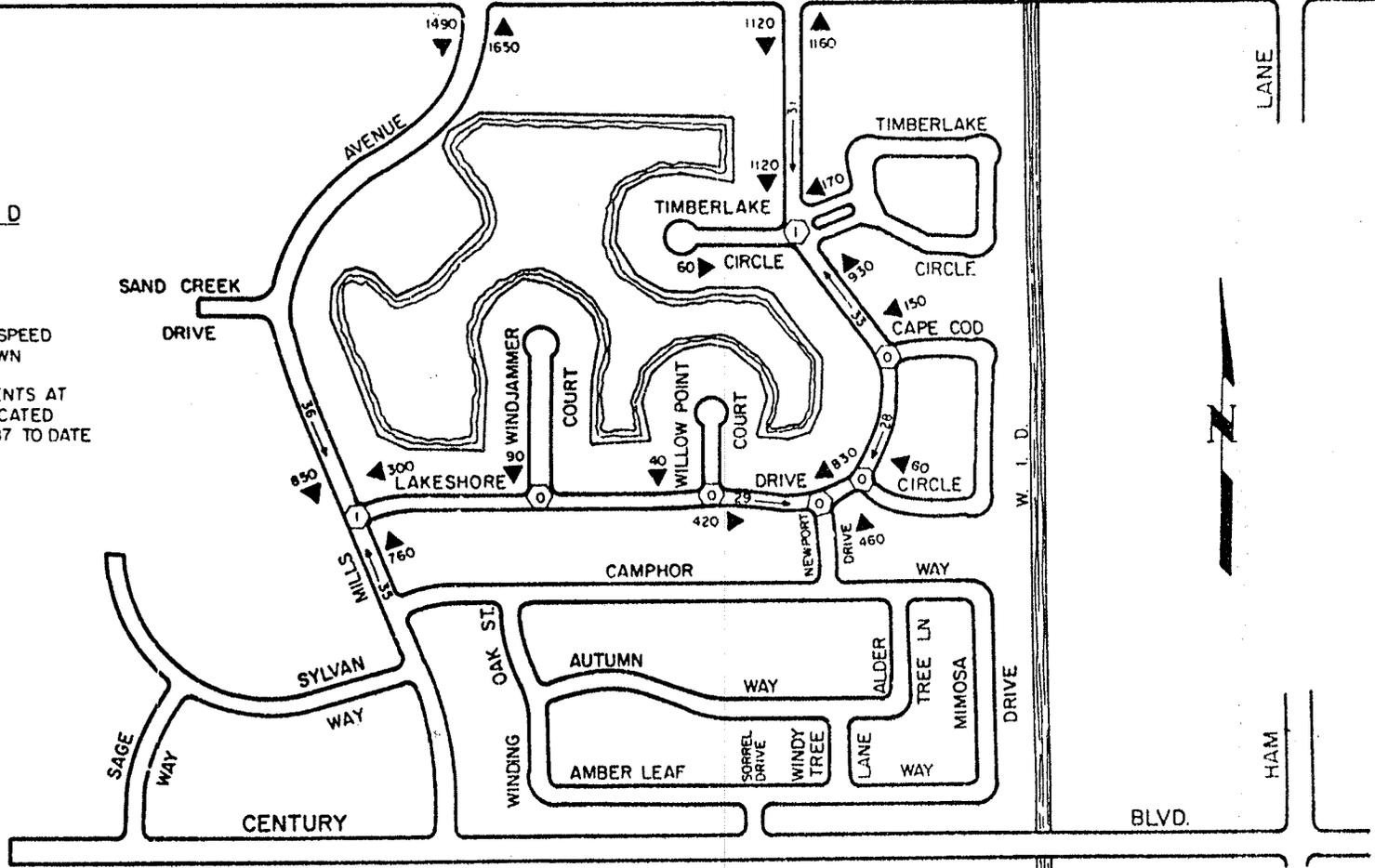


Exhibit B

No	Date	Revision	Appr.
1			

Approved By  
Public Works Director  
Date



**CITY OF LODI**  
PUBLIC WORKS DEPARTMENT

**MILLS / LAKESHORE**  
TRAFFIC STUDY

EXHIBIT  
B

Dr. R.S.K.  
Date 6/87



**MULTI-WAY STOP SIGN WARRANTS**

INTERSECTION OF Lakeshore Dr and Timberlake Cir  
DATE 6-22-87 BY PJF

Any of the following conditions may warrant a multi-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 multi-way stop installation in a 12-month period. Types of accidents susceptible of correction include right angle and left turn collisions.

Time period June 86 - June 87 (mid) Number of correctible accidents 0  
Total number of accidents 1 Satisfied \_\_\_\_\_ Not Satisfied

3. Minimum volume warrant:

a. 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, and

Hour	1	2	3	4	5	6	7
Major Street	126	119	128	122	143	142	151
Minor Street			est. 16				

Highest 8 hours 7 a.m. to 7 p.m.  
Total volume 1256 vehicles  
Average per hour 157 vehicles  
Satisfied \_\_\_\_\_ Not Satisfied

b. 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.

Hour	1	2	3	4	5	6	7
Minor Street Vehicles			est. 16 vph				
Pedestrians			est. 5 pph				

Highest 8 hours 7 a.m. to 7 p.m.  
Average per hour 16 vehicles  
Average per hour 5 pedestrians (EST)  
Average units per hour 21  
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.

85-percentile speed 32 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 90 %  
% Traffic minor street 10 %



MULTI-WAY STOP SIGN WARRANTS

INTERSECTION OF Lakeshore Dr and Newport Dr  
 DATE 6-22-87 BY PJF

Any of the following conditions may warrant a multi-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

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Time period June 86 - June 87 (mid) Number of correctible accidents 0  
 Total number of accidents 0 Satisfied \_\_\_\_\_ Not Satisfied

3. Minimum volume warrant:

a. 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, and

Hour	1 <sup>0</sup>	2 <sup>0</sup>	3 <sup>0</sup>	4 <sup>0</sup>	5 <sup>0</sup>	6 <sup>0</sup>	7 <sup>0</sup>
Major Street	94	88	106	94	90	93	88
Minor Street	39	26	32	46	31	31	27

Highest 8 hours 7 a.m. to 7 p.m.  
 Total volume 1019 vehicles  
 Average per hour 127 vehicles  
 Satisfied \_\_\_\_\_ Not Satisfied

b. 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.

Hour	1 <sup>0</sup>	2 <sup>0</sup>	3 <sup>0</sup>	4 <sup>0</sup>	5 <sup>0</sup>	6 <sup>0</sup>	7 <sup>0</sup>
Minor Street Vehicles	39	29	32	46	31	31	27
Pedestrians			est. 5				

Highest 8 hours 7 a.m. to 6 p.m.  
 Average per hour 36 vehicles  
 Average per hour 5 pedestrians (EST)  
 Average units per hour 41  
 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.

WB = 28  
 EB = 29

85-percentile speed 28.5 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 73 %  
 % Traffic minor street 27 %



MULTI-WAY STOP SIGN  
WARRANTS

INTERSECTION OF Mills Ave and Lakeshore Dr  
DATE 6-22-87 BY PJF

Any of the following conditions may warrant a multi-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 multi-way stop installation in a 12-month period. Types of accidents susceptible of correction include right angle and left turn collisions.

Time period June 86 - June 87 (mid) Number of correctible accidents 0  
Total number of accidents 1 Satisfied \_\_\_\_\_ Not Satisfied

3. Minimum volume warrant:

a. 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, and

Hour	1 <sup>0</sup>	2 <sup>0</sup>	3 <sup>0</sup>	4 <sup>0</sup>	5 <sup>0</sup>	6 <sup>0</sup>	7 <sup>0</sup>	8 <sup>0</sup>	Highest 8 hours <u>7</u> a.m. to <u>8</u> p.m.
Major Street	110	97	106	97	130	120	131	110	Total volume <u>1073</u> vehicles
Minor Street	23	20	23	21	15	29	25	16	Average per hour <u>134</u> vehicles
									Satisfied _____ Not Satisfied <input checked="" type="checkbox"/>

b. 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.

Hour	6 <sup>0</sup>	7 <sup>0</sup>	8 <sup>0</sup>	9 <sup>0</sup>	10 <sup>0</sup>	11 <sup>0</sup>	12 <sup>0</sup>	13 <sup>0</sup>	Highest 8 hours <u>6</u> a.m. to <u>7</u> p.m.
Minor Street Vehicles	18	23	23	20	23	21	29	25	Average per hour <u>23</u> vehicles
Pedestrians				est. 5					Average per hour <u>~5</u> pedestrians (EST)
									Average units per hour <u>28</u>
									Satisfied _____ Not Satisfied <input checked="" type="checkbox"/>

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.

NB = 35  
SB = 30  
85-percentile speed 35.5 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 84 %  
% Traffic minor street 16 %

L O D I      P O L I C E      D E P A R T M E N T

M e m o r a n d u m

To:            Captain Larry D. Hansen

From:         Traffic Officer Garold Murray #30

Date:         July 1, 1987

Subject:      RESULTS OF TRAFFIC ENFORCEMENT IN LAKESHORE DRIVE  
AND MILLS AVENUE AREA

The following citations were issued upon receiving "traffic enforcement requests" from residents in the area. 34 citations were issued on five separate dates. The average was 12.4 mph over the speed limit. 67% of those cited were area residents.

Date	Time	Location	Violation	Approx. Address Of Violator
6/04/87	1718 5:16	1500 S Mills	22350	600 Wimbeldon
6/04/87	1802 6:02	1500 S Mills	22350	*1700 S Mills
6/04/87	1717 5:17	1500 S Mills	22350	*1700 S Mills
6/04/87	1730 5:30	1600 S Mills	22350	*1900 S Mills
6/04/87	1740 5:40	1600 S Mills	22350	400 Almond Drive
6/04/87	1802 6:02	1600 S Mills	22350	*1900 S Mills
6/04/87	1810 6:10	1500 S Mills	22350	1800 S Hutchins
6/04/87	1820 6:20	1500 S Mills	22350	700 S School
6/04/87	1822 6:22	1500 S Mills	22350	*1700 S Mills
6/04/87	1842 6:42	1500 S Mills	22350	1700 Long Barn
6/04/87	1908 7:08	1600 S Mills	22350	*2000 Sylvan Way
6/04/87	1929 7:29	1700 S Mills	22350	Coloma Drive
6/04/87	1949 7:49	1600 Lakeshore	22350	(out of town)
6/15/87	1716 5:16	1800 S Mills	22350	*2000 Sylvan Way
6/15/87	1732 5:32	1800 S Mills	22350	*1700 S Mills
6/15/87	1743 5:43	1800 Lakeshore	**	1800 S Hutchins
6/15/87	1743 5:43	1800 Lakeshore	**	100 Arbor Court
6/15/87	1808 6:08	1800 Lakeshore	22350	*2000 Sylvan Way
6/15/87	1820 6:20	1800 Lakeshore	22350	*2000 Sylvan Way
6/16/87	1620 4:20	1700 Lakeshore	22350	400 Almond Drive
6/16/87	1630 4:30	1700 Lakeshore	22350	*2000 Sylvan Way
6/16/87	1633 4:33	1700 Lakeshore	22350	*2000 Sylvan Way
6/16/87	1644 4:44	1700 Lakeshore	22350	*1300 W Century Blvd.
6/16/87	1645 4:45	1700 Lakeshore	22350	*1800 Autumn Way
6/16/87	1710 5:10	1700 Lakeshore	22350	*1700 S Mills
6/16/87	1805 6:05	1700 Lakeshore	22350	400 E Locust
6/25/87	0735 7:35	1600 S Mills	22350	*2000 Sylvan Way
6/25/87	0740 7:40	1600 S Mills	22350	*1500 S Mills
6/25/87	0750 7:50	1600 S Mills	22350	*1900 S Mills
6/30/87	1706 5:06	1700 Lakeshore	22350	*1900 S Mills
6/30/87	1717 5:17	1700 Lakeshore	22350	*1900 S Mills
6/30/87	1729 5:29	1800 Lakeshore	22350	*1500 S Mills
6/30/87	1747 5:47	1700 Lakeshore	22350	*1700 S Mills
6/30/87	1758 5:58	1700 Lakeshore	22350	500 Rimby Avenue

\*Area Residents

\*\*Unlicensed Juvenile on Scooter

SUMMARY OF STUDIES ON  
UNJUSTIFIED STOP SIGNS

<u>SOURCE</u>	<u>STUDY</u>	<u>CONCLUSIONS</u>
Lakewood, Colorado	12 year study on Lee Street, 1/2 mile, residential street, volume approx. 1500 vpd 85th % speed - approx. 32 mph	a) No volume reduction (only reduction due to opening of parallel streets) b) Poor compliance - only 14.5% of drivers come to complete stop c) No speed reduction except at intersection d) No change in accident rate except when parallel street was opened  Note: City Council approved removal of stop signs in 1985
Troy, Michigan	Four residential streets, each approx. 1/2 mile length	a) Stop signs not effective in controlling speeds in residential areas. Slight increase (less than 1 mph) in speeds after stop signs installed. b) Poor compliance (50% rolling stops, 25% do not stop at all, 25% full stop)
El Monte, California	Four intersections on two highways 15000 average daily traffic on highways	a) Stop signs had little effect on speed. After 4-way stop installed, the speeds increased by 2-3 mph on one street and decreased 3-4 mph on another street. b) Increased number of rear end accidents. c) Accidents increased from 6 to 37 in 3 year period after stop signs installed (total for all 4 intersections).
La Mirada, California	Two residential streets, before and after 25 mph signs and stop signs	a) No change in speed due to signs

RESOLUTION NO. 87-84

RESOLUTION OF THE LODI CITY COUNCIL  
APPROVING VARIOUS TRAFFIC CONTROLS  
AT LAKESHORE VILLAGE

RESOLVED that the City Council of the City of Lodi does hereby approve the following traffic controls at Lakeshore Village:

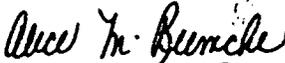
1. Establish Mills Avenue as a through street
2. Approve the installation of two-way stop signs on Timberlake Circle at Lakeshore Drive.
3. Approve the installation of a "yield sign" on Newport Drive at Lakeshore Drive
4. Approve centerline striping on Lakeshore Drive

Dated: July 1, 1987

I hereby certify that Resolution No. 87-84 was passed and adopted by the City Council of the City of Lodi in a Regular Meeting held July 1, 1987 by the following vote:

Ayes: Council Members - Pinkerton, Reid, Snider, and Olson (Mayor)  
Noes: Council Members - Hinchman  
Absent: Council Members - None

Attest:

  
ALICE M. REIMCHE  
City Clerk

