

# CITY OF MANHATTAN BEACH DEPARTMENT OF COMMUNITY DEVELOPMENT TRAFFIC ENGINEERING DIVISION MEMORANDUM

**DATE**: July 28, 2022

TO: Parking and Public Improvements Commission

FROM: Carrie Tai, AICP, Community Development Director

BY: Erik Zandvliet, T.E., City Traffic Engineer

SUBJECT: Consider a Request for Stop Signs in All Directions at Pacific Avenue and

18<sup>th</sup> Street

#### **RECOMMENDATION**

Staff recommends that the Commission pass a motion to recommend approval of stop signs in all directions at the intersection of Pacific Avenue and 18<sup>th</sup> Street.

#### **BACKGROUND**

In June 2022, Mr. Paul Beswick, at 1729 Pacific Avenue, submitted a neighborhood petition requesting stop signs in all directions at the intersection of Pacific Avenue and 18<sup>rd</sup> Street. (Exhibit A) The petition states that the intersection is unsafe for both pedestrians and drivers. The petition is signed by 24 residents representing 24 homes in the area. There are two existing stop signs on the 18<sup>th</sup> Street approaches of this intersection.

On November 25, 2007, the Parking and Public Improvements Commission (Commission) reviewed a similar petition request for stop signs in all directions at this intersection. The Commission did not recommend additional stop signs on the Pacific Avenue approaches, but did recommend the installation of 25 feet of red curb on the northeast and southwest corners for improved visibility, and the installation of new pedestrian crossing signs.

#### DISCUSSION

Pacific Avenue is a 40-foot wide, two-lane major local street that connects with Valley Drive/Ardmore Avenue/Marine Avenue to the north and Manhattan Beach Boulevard to the

south. Pacific Avenue provides north-south circulation for several streets in the area and has stop controls at 19<sup>th</sup> Street approximately 400' to the north and 17<sup>th</sup> Street 400' to the south. Pacific Avenue has stop controls at all cross-streets between 14<sup>th</sup> Street and Marine Avenue except at 18<sup>th</sup> Street. 18<sup>th</sup> Street is a 30-foot wide, two-lane local street that connects Ardmore Avenue to the west and Poinsettia Avenue to the east. 18<sup>th</sup> Street has stop controls at Pacific Avenue. The speed limit on both streets is 25 mph. Both streets have curbs, gutters and sidewalks. (Exhibit B)

There is a slight downhill slope on Pacific Avenue in a southerly direction near 18<sup>th</sup> Street. Parking is allowed on both sides of both streets. Pacific Elementary School is on Pacific Avenue at 17<sup>th</sup> Street south of subject intersection. American Martyrs Catholic Elementary School is located one block west of the intersection at 18<sup>th</sup> Street and Agnes Road. The intersection is painted with yellow crosswalks on all approaches, and high visibility school crossing signs are posted on Pacific Avenue in at 18<sup>th</sup> Street. Pacific Avenue is a key crossing point at 18<sup>th</sup> Street on the Suggested Routes to School Map for American Martyrs Elementary School, located one block to the west (Exhibit C). Students attending Pacific Elementary School normally walk north and south along Pacific Avenue and cross Pacific Avenue at 17<sup>th</sup> Street instead.

A traffic volume count was conducted in June 2022 on typical school days. A summary of the peak hour and daily traffic volume is provided below:

DIRECTION	AM PEAK HOUR	PM PEAK HOUR	DAILY
Northbound (Pacific Ave.)	152 (8 AM)	177 (12 NN)	2,073
Southbound (Pacific Ave.)	165 (8 AM)	221 (12 NN)	1,968
Subtotal	317	398	4,041
Eastbound (18 <sup>th</sup> Street)	10 (8 AM)	13 (3 PM)	124
Westbound (18 <sup>th</sup> Street)	13 (8 AM)	17 (12 NN)	201
	23	30	325

A speed survey was conducted in June 2022 using a calibrated RADAR speed measuring device during free-flow traffic conditions. A statistical summary of the recorded speeds shown below confirms that prevailing speeds on Pacific Avenue are typical for a residential area.

Average Speed 22 mph 85<sup>th</sup> Percentile Speed 26 mph 10-mile Pace Speed 18-27 mph The traffic collision history between January 1, 2015 and December 31, 2021 was analyzed for the intersection. According to City records, no traffic collisions have been reported near the intersection during this seven-year period. No collision patterns were identified.

Field observations were made at the intersection during peak travel periods of 7-9am and 2-6pm on typical school weekdays. Staff confirmed the empirical traffic count data and speed data. Pacific Avenue carries moderate traffic volumes appropriate for its designation as a major local street. 18th Street carries very low traffic volumes. No delays were observed at the intersection. Intersection visibility is good in all directions from the stopped approaches on 18<sup>th</sup> Street with the exception of a large tree on the northeast corner the partly restricts the view of westbound drivers. Existing red curbs on Pacific Avenue prevent parked vehicles from significantly obstructing views near the intersection. Due to the location of the crosswalks, drivers on 18<sup>th</sup> Street may have to stop first for possible pedestrians and then move forward slightly for better visibility before entering or crossing Pacific Avenue. Also, it was observed that a driver unfamiliar with the neighborhood may occasionally slow down or stop at the crosswalks on Pacific Avenue even if there are no pedestrians.

This intersection is a key crossing for school pedestrians attending American Martyrs School. High pedestrian volumes crossing both Pacific Avenue and 18<sup>th</sup> Street were noted by the Traffic Engineer during field observations that coincided with the peak travel times. However, there is no crossing guard assigned to this location. School parents use this intersection as a primary access route to drop off and pick up their children for both schools, which results in a large number of turning movements across the crosswalks. This set of conditions increase the potential for collisions between vehicles and pedestrians. In addition, the absence of stop signs on Pacific Avenue increases the potential for collisions since the uncontrolled intersection is inconsistent with the five other consecutively stopped intersections between Manhattan Beach Boulevard and Ardmore Avenue.

One of the key themes in the City's Mobility Plan is to provide safe and convenient pedestrian crossings. Installation of stop signs at crosswalks, where warranted, can improve the safety of uncontrolled crossings. Safer pedestrian crossings support the Mobility Element's policies of promoting active transportation (I-3.8), improving pedestrian and bicycle safety around schools (I-3.9) and enhancing the Safe Routes to Schools programs (I-3.10), as well as the nation's Vision Zero goal of reducing traffic related deaths.

<u>Multi-way Stop Signs:</u> The State of California has established guidelines for the installation of stop signs. These criteria have been widely accepted and are used by the City of Manhattan Beach. Multi-way or all-way stop controls are generally recommended when one or more of

the criteria are satisfied. It is also advised that less intrusive measures be tried before resorting to multi-way stop signs. More important, stop signs should not be used for speed control.

A stop sign warrant checklist is attached to this report (Exhibit D) that indicates that multi-way stop signs would not be justified at this intersection based on volumes, speed or collision history. However, there are certain special conditions at this intersection that meet other criteria for the installation of multi-way stop signs, namely: the need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes. Based on the proximity to two elementary schools that generate high pedestrian volumes, school related traffic conflicts and designation as a crossing location on the Suggested Route to School map, multi-way stop signs are warranted at this intersection.

#### PUBLIC NOTIFICATION, OUTREACH, AND COMMENT

A courtesy notice was mailed to all property owners and residents within a 300-foot radius of the subject location as well as to the schools' administrators and stop sign petitioners with instructions on how to comment on this agenda item and/or attend this meeting.

#### CONCLUSION

Based on the proximity to two elementary schools, key crossing point on the Suggested Routes to School map, concentration of pedestrian activity and need to control vehicle/pedestrian conflicts at this location during school periods, the Traffic Engineer recommends the installation of stop signs in all directions at the intersection of Pacific Avenue and 18<sup>th</sup> Street.

#### **EXHIBITS:**

- A. Resident Petition
- B. Aerial Photo and Site Plan
- C. American Martyrs Suggested Routes to School Map
- D. Stop Sign Warrant Checklist

### **EXHIBIT A**



### City of Manhattan Beach Stop Sign Petition Form

We, the undersigned residents,	do hereby peti-	ion the City	of Manhattan	Beach to	install st	op sians	in
all directions at the following into		,					

MAIN STREET: Pacific A	venue	F.	
CROSS STREET: 18th Stre	eet		
We attest that each undersigne the city.	ed person is 18 years or	older and is a responsible own	er or resident in
The designated contact person	(s) are:		
CONTACT PERSON: Paul Bes	swick	DAYTIME PHONE NO:(31)	0) 545-5229
ALTERNATE CONTACT: _ <b>Jennife</b>	r Gale	_ DAYTIME PHONE NO:(310	) 480-3101
NOTE: Only one responsible signatu	re per residence is required.		× ×
SIGNATURE Or "Opposed" or "No Contact"	PRINT NAME	PRINT STREET ADDRESS	PRINT DATE
1. Melinda Beswits	Melindaleswick	1729 Pacific Avenue	3/23/2022
Jahl Dell.	Gabrella Lim	747 18th St.	3/23/2022
3. DET har	Dianay Ehrhard	1728 Pacific Ave.	3/23/2022
4. Beepan Theekery		1725 Pacific	3/24/20
5. Jall	Jennifer Gale	1809 Pacific Ave	3/24/2022
6. Randy Elf	Randy Seltzer	1813 Pacific Ave	3/24/22
7.	LORDAINEARVIN	1717 Pacific Ave	324 22
of the same of the	Claure Regenstrait	818 18th St	3/25/22
Marcangle	MARY ARCANGEL	1801 John Street	3/25/22
18 ABOV	baurd Harrington	113 Pacific Ave	3/24/22
declare under penalty of perjury, pur	suant to the laws of the State	e of California, that the foregoing is tr	ue and correct.

Executed on 3

Signed by Contact

\_\_in Manhattan Beach, California.

NOTE: Only one responsible signature per residence is required. SIGNATURE PRINT NAME PRINT STREET ADDRESS PRINT DATE Or "Opposed" or "No Contact" 1. 801 St. MB, CA Pacific too MB 3. 1721 PACIFICANE MB 789 6. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24.

declare under penalty of perjury, pursuant to the la	ws of the State	of California, that t	he foregoing is true ar	nd correct.
declare under penalty of perjury, pursuant to the la	Executed on	7/14/22	in Manhattan Reach	California
Signed by Contact		Date	_iii waiiiattan beach,	Camorna

NOTE: Only one responsible signature per residence is required. **SIGNATURE** PRINT DATE **PRINT STREET ADDRESS PRINT NAME** Or "Opposed" or "No Contact" 1202 Cypress Ane 3. 4. 5. 6. 8. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24.

declare under penalty of perjury, pursuant	to the laws of the State	of California,	that the foregoing is true	and correct.
declare under penalty of perjury, pursuant	Executed on	7-14-	Om Manhattan Beac	ch, California
Signed by Contact		Date (		

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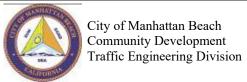
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### EXHIBIT B









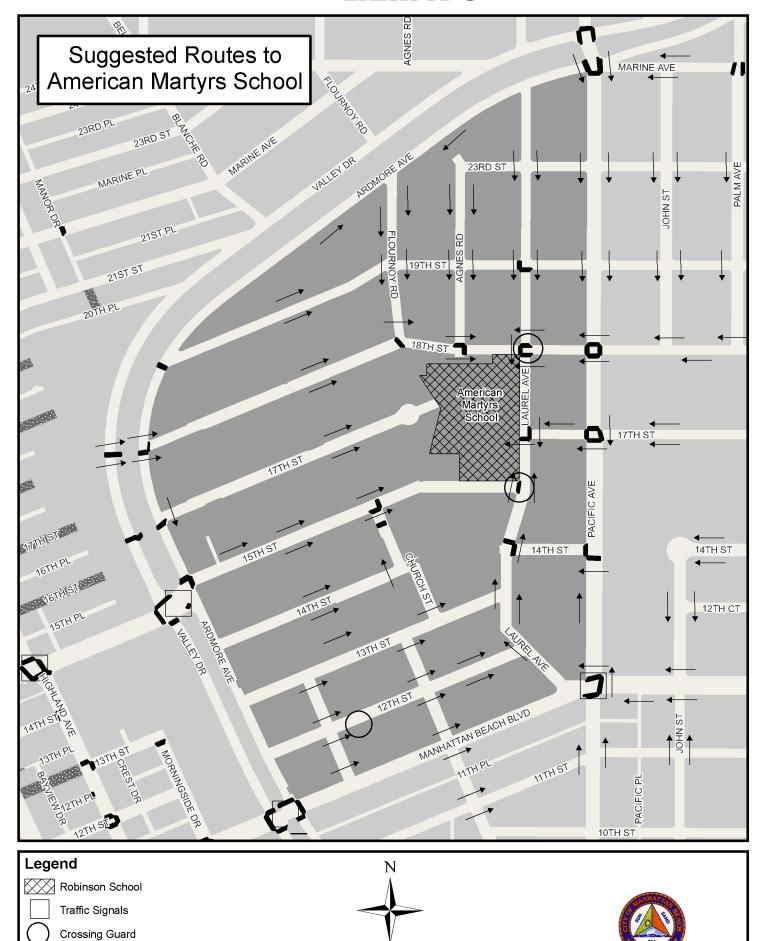
Request for Stop Signs Pacific Avenue at 18<sup>th</sup> Street Aerial Photo and Location Map

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### **EXHIBIT C**



225

900 ☐Feet

Crosswalks

Suggested Route

City of Manhattan Beach

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### **EXHIBIT D**



# STOP SIGN WARRANT CHECKLIST 2014 CA – MUTCD

<u>MA</u>	<u>JOR STREET:                                  </u>	Pacific Avenue	MINOR STREET:	18 <sup>th</sup> Street
RE	QUESTED BY:	Resident Petition	DATE:	July 2022
RE'	VIEWED BY:	Erik Zandvliet		
	IOR STREET STO	OP SIGN WARRANTS (L	OWER VOLUME STREE	т)
$\overline{\mathbf{V}}$	On a less importareasonable compli	ant road where the normal ance with the law.	right-of-way rules would no	ot be expected to provide
$\checkmark$	On a street enterin	ng a designated through high	way or street.	
	At an unsignalized	intersection in a signalized	area.	
	Where the vehicul	ar volume on the through str	eet exceeds 6,000 vehicles	per day.
	Where restricted v	iew exists that requires user	s to stop to observe approac	hing through traffic.
	At an intersection	with 5+ crashes in 2-year pe	riod or 3+ crashes in 1-year	correctable by stop signs.
	4 or more legged l	ocal intersection with a comb	pined vehicle/bike/ped volum	ne over 2,000 per day.
	4 or more legged l	ocal intersection with sight d	istance that is insufficient for	normal right-of-way rule.
	4 or more legged l	ocal intersection with 5+ cras	shes in 3-year period, or 3+	crashes in 2-years.
MU	LTI-WAY STOF	SIGN WARRANTS		
	Where traffic signal while the signal is	als are warranted, and stop installed.	signs are used as an interim	n measure to control traffic
	At an intersection	with 5+ crashes in a 1-year բ	period of a type correctable l	by stop signs.
	vehicles per hour* the minor street a	ehicular volume entering from for any 8 hours, and the cosapproaches <u>average</u> at leas the minor street traffic of at leas	mbined vehicular, bicycle ar t 200 units per hour* for th	nd pedestrian volume from ne same 8 hours, with an
		ercentile approach speed of twarrant is 70 percent of the a		eds 40 MPH, the minimum
		eported accidents within a 1- age major and minor street v		
	Where there is a n	eed to control left turn confli	cts.	
V	Where there is a pedestrian volume	need to control vehicle/pe	edestrian conflicts near loc	ations that generate high
		er, after stopping, cannot s ut also requiring the conflictir		s unable to negotiate the
		of two residential collector s	treets where multi-way stop	control would improve the

### **MULTI-WAY STOP SIGN WORKSHEET**

MAJOR STREET: Pacific Avenue MINOR STREET: 18th Street

DATE: July 2022 85<sup>TH</sup> SPEED: 26 mph

TRAFFIC VOLUMES WARRANTED YES NO

If the 85<sup>th</sup> percentile speed of the major street exceeds 40 MPH, use 70% volume.

Street	Min Volume	70%	80%	Ave.	ve. Hour / Volume							
					8AM	10AM	11AM	12NN	1PM	3PM	4PM	6PM
Major	300	210	240	307	317	227	292	398	326	344	311	244
Minor	200	140	160	21	19	25	22	21	19	24	19	21

And, does the minor street have an average delay of at least 30 seconds in the peak hour?

Peak Average Delay < 30 mph

### COLLISION RECORD WARRANTED YES NO

Are there <u>five</u> or more reported collisions within a 12 month period of a type correctable by a multi-way stop sign?

DATE	TIME	DIRECTION	TYPE	CAUSE
2021		None		
2019		None		
2018		None		
2017		None		
2016		None		
2015		None		

### 80% COMBINATION WARRANTED YES NO

Are there <u>four</u> or more reported accidents within a 12 month period of a type correctable by a multi-way stop sign, and

Average major and minor street volumes are at least 80% of the minimum values?

#### OTHER MULTI-WAY STOP CONDITIONS WARRANTED

A. Need to control left turn conflicts

B. Need to control vehicle/pedestrian conflicts at high ped locations

YES NO
NO

C. Visibility obstruction after stopping on minor street approach. See notes

VES

NO

D. Two similar neighborhood collector streets that would improve operation

#### Notes:

Minor sight distance reduction on northeast corner. Wide crossing on Pacific Avenue. High school pedestrian volumes on all legs from two nearby elementary schools. No crossing guard. Elevated rate of conflicts between pedestrians and school related traffic turning at intersection. More active vehicle controls would improve pedestrian crossing safety. Uncontrolled intersection between consecutively stopped intersections on Pacific Avenue leads to unnecessary stops by unfamiliar road users.