



September 9, 2019

Marty Walker
The MAP Sports Facility
12552 Western Avenue
Garden Grove, CA 92841

Re: **Parking Demand Study**
The MAP Sports Facility
12552 Western Ave, Garden Grove

Dear Marty,

Per your request, we have conducted a parking study for the MAP Sports Facility in Garden Grove. This letter presents our methodology, finding, and recommendation in regards to the parking conditions.

PROPOSED CHANGES

The MAP Sports Facility is an existing indoor sports facility of 75,000 square feet located at 12552 Western Avenue in the City of Garden Grove. Primary sports at the facility includes, but not limited to, basketball and volleyball.

The MAP Sports Facility is seeking an amendment to the conditional use permit to expand the hours of operation to allow weekday daytime uses. Weekday daytime activities will include youth summer camps, senior pickleball leagues, school-age team scrimmages, organized instructions and practices. Current hours of operation per approved Conditional Use Permit No. 339-11 (REV.2014) are 5 PM to 10 PM Monday through Friday, and 8 AM to 10 PM Saturday and Sunday. Proposed hours of operation are **Daily from 8 AM to 11 PM**. On-site parking is free for ALL proposed daytime activities on weekdays.

The facility plans to host youth summer camps of basketball and volleyball with up to 300 participants between 6 and 18 years of age. The specific activities in summer camps include organized instructions, drills, practices and scrimmages. Summer

K2 Traffic Engineering, Inc.

1442 Irvine Blvd, Suite 210, Tustin, CA 92780 T.714-832-2116 F.949-266-5875 Email: khsu@k2traffic.com

camp will be scheduled to start at least 15 minutes after 9 AM and finish at least 15 minutes before 4 PM.

In order to measure the anticipated parking demand for summer camp, the study conducted a “trial session” on Thursday, February 28, 2019. The results were reported by K2 Traffic Engineering in a Parking Demand Study dated July 8, 2019. Parents dropped off their campers around 9 AM and picked them up around 3:30 PM, and approximately 15% of the participants carpooled to the facility. During the “trail session”, 55 parking spaces were used by the attendance of 195 campers. Accordingly, The Map anticipates 80 parking spaces are required for a maximum of 300 summer campers.

The typical summer camp schedule is shown in **Table 1**. Additional details of the schedule prepared by The MAP Sports Facility can be found in **Appendix "A"**. The proposed changes do not affect operations and parking demand on weekends.

Table 1. Typical Summer Schedule

Day of Week	Daytime Uses 9 am - 4 pm	Late Afternoon Uses 4:30 pm - 10:30 pm
Monday thru Thursday	Summer Camp (up to 300 ppl)	League/Scrimmage/Practice (up to 160 ppl)
Friday		League Play after 6 pm
Saturday & Sunday	League Play (up to 500 ppl)	

The MAP has a long-term plan to introduce senior and adult pickleball leagues to take advantage of the off-peak usage on weekday daytime. If pickleball leagues become a reality, this activity schedule will start after 9 AM and finish before 4 PM for this year-round sports.

CURRENT PARKING LOT

The site currently provides 191 on-site parking spaces, including 45 spaces allocated for carpool parking. In accordance with the approved conditional use

permit, on-site parking is provided for free on weekdays and with a parking fee during high demand periods such as Friday evenings, weekends, and holidays. However, the allocated carpool parking is always free anytime any day. Our observations found that as many as 40 of 45 available carpool spaces are utilized each day on a typical weekend.

The combination of parking fees during high demand and the carpool incentive has contributed to reducing parking demand and encouraging carpooling. As part of the CUP Amendment, The MAP proposes to expand the free carpool program by adding 20 carpool spaces. A total of 65 spaces will be allocated for carpool use free of charge at anytime any day.

OVERFLOW PARKING

As shown in **Exhibit 1**, the project will introduce an overflow parking area on the east side of the lot separated by chain link fence and sliding gates. The gate connecting the parking lot will be opened to provide 78 additional spaces when the entire parking lot of 191 spaces is approximately 70% full. Each access gate will be equipped with a Knox box for emergency access as requested by the Garden Grove Fire Department .

Upon project completion, The MAP Sports Facility will provide 267 total parking spaces, including 7 accessible spaces, 182 standard spaces, and 78 overflow parking spaces. A total of 65 spaces will be allocated for carpool use.

THE INDUSTRIAL BUILDING

The industrial building operated by NILS, Inc. for ski/snowboard apparel distribution is located at the south side of the lot. As shown in **Exhibit 1** and labeled "Adjacent Building A", this building has a separate access through an existing driveway on Western Avenue. The building has 20,007 square feet gross floor area with 40 parking spaces provided exclusively for NILS' use. As shown in **Table 2**,

the NILS industrial building is fully compliant with the City of Garden Grove parking codes, and independent from The MAP Sports Facility.

Table 2. Parking Requirement for NILS

Industrial Use Adjacent Building A	Municipal Code Parking Requirement	GFA	Parking Required	Parking Provided
Buildings 20,001 to 100,000 sq. ft. of gross floor area	2 spaces per 1,000 square feet of gross floor area	20,007 Sq. Ft.	40 Spaces	40 Spaces

SITE OBSERVATIONS

To better understanding the potential parking demand on weekdays, the subject facility has allowed private daytime sessions for team practices and scrimmages. Parking observations were conducted at the facility on a typical weekday with practice and scrimmage sessions (Thursday, February 28, 2019). The number of parked vehicles were noted at each 30-minute interval between 8 a.m. and 5 p.m. A maximum of 55 out of the existing 191 parking spaces were used at 4 p.m. Complete data are shown in **Exhibit 2**.

The study also conducted a pedestrian count from 8:30 to 11:30am on Saturday, June 22, 2019 to observe off-site parking and walk-in patrons. The pedestrian count data can be found in **Exhibit 3**. The survey noted 105 pedestrians approaching from Western Avenue and Lampson Avenue to the MAP Sports Facility. Higher concentration of pedestrians were noted between 8:30 am and 9:00 am, and between 10:30 am and 11:00 am. It is estimated that 46 vehicles may have parked off-site within the survey period, assuming the average carpool ratio of 2.3 people per vehicle as found in a previous study of The MAP Sports Facility. As patrons may leave after finishing the early games, the number of parked vehicles at any time should be less than the totals shown.

ON-STREET PARKING

Similar to most indoor sports facilities that charges a parking fee during peak periods, some attendances would choose to park elsewhere for various reasons. On-

street parking is allowed for a total length of 760 feet (estimated 38 spaces) on Western Avenue between Lampson Avenue and Chapman Avenue, and 1,940 feet (estimated 97 spaces) on Anaconda Avenue, a total of 135 on-street parking spaces, all within the Industrial Park Zone. No other on-street parking areas were noted for patron use of The Map Sports Facility.

On-street parking were observed in the project vicinity, namely Western Avenue and Anaconda Avenue, as shown in **Exhibit 4**. The study found that as much as 102 cars parked on the street at the peak. During the same period, however, only 41 pedestrians walked to the subject site, indicating not all cars who parked on streets are project related. There is no apparent correlation between the number of walk-in patrons and the number vehicles parked on the street.

For the duration of observation, the overall attendance at The MAP Sports Facility was 480 and 105 pedestrian were noted, a likely indication of approximately 21% of all attendance have parked on the street and walked to the facility. Generally, on-street parking in the industrial area is abundantly available, especially on Friday evening, weekends, and holiday.

PARKING MANAGEMENT PLAN

The facility plans to maintain and enforce a Parking Management Plan that includes, but not limited to, the following elements:

1. The carpool incentive, named "Green Map Plan", will be expanded to allocate a total of sixty-five (65) spaces for free carpool parking with four or more occupants at anytime any day. The carpool incentive plan is intended to promote carpooling and reduce parking demand both on and off the site. The carpool incentive will continue to be posted at the building and distributed to all team captains during sign-up.

2. The main parking lot and overflow parking will be accessed through the main entrance at Western Avenue. The gate at Lampson Avenue will normally be closed.
3. Knox Boxes will be installed on all gates to allow emergency access by the Garden Grove Fire Department.
4. The overflow parking area will be open during high demand periods when the parking lot of 191 spaces is approximately 70% full. The parking supervisor will oversee parking operations and place appropriate signage for directions to the overflow parking area.
5. Bicycle racks will continue to provide convenient and safe storage of bicycles at the premise.

SUMMARY

The project is expected to improve the off-peak utilization at the premise during weekday daytime hours. The project further increases the number of free carpool spaces and provides an overflow parking area to enhance the parking redundancy that would benefit all facility users, especially during high demand periods.

Regards,

K2 Traffic Engineering, Inc.



Jende Kay Hsu, T.E.
California Licensed TR2285



K2 Traffic Engineering, Inc.

EXHIBIT 2. PARKING SURVEY

The MAP Sports Facility
 12552 Western Ave, Garden Grove

Date 2/28/2019Day ThursdayBy J.C.

<i>Time</i>	<i>Onsite Parking</i>	<i>Time Period</i>	<i>Drop-off/ Pick-up</i>
PARKING SPACES	191		
8:00 AM	2	8:00 AM - 8:30 AM	0
8:30 AM	5	8:30 AM - 9:00 AM	0
9:00 AM	11	9:00 AM - 9:30 AM	1
9:30 AM	15	9:30 AM - 10:00 AM	0
10:00 AM	25	10:00 AM - 10:30 AM	1
10:30 AM	30	10:30 AM - 11:00 AM	0
11:00 AM	30	11:00 AM - 11:30 AM	0
11:30 AM	23	11:30 AM - 12:00 PM	1
12:00 PM	24	12:00 PM - 12:30 PM	0
12:30 PM	16	12:30 PM - 1:00 PM	0
1:00 PM	11	1:00 PM - 1:30 PM	0
1:30 PM	12	1:30 PM - 2:00 PM	0
2:00 PM	14	2:00 PM - 2:30 PM	0
2:30 PM	14	2:30 PM - 3:00 PM	0
3:00 PM	18	3:00 PM - 3:30 PM	1
3:30 PM	35	3:30 PM - 4:00 PM	4
4:00 PM	55 *	4:00 PM - 4:30 PM	2
4:30 PM	41	4:30 PM - 5:00 PM	2
5:00 PM	46		

* Peak parking occurred at 4:00 pm when 55 parking spaces are used.

EXHIBIT 3. PEDESTRIAN COUNT

At the intersection of Western Ave and Lampson Ave

Date 6/22/2019Day SaturdayBy Jill L.

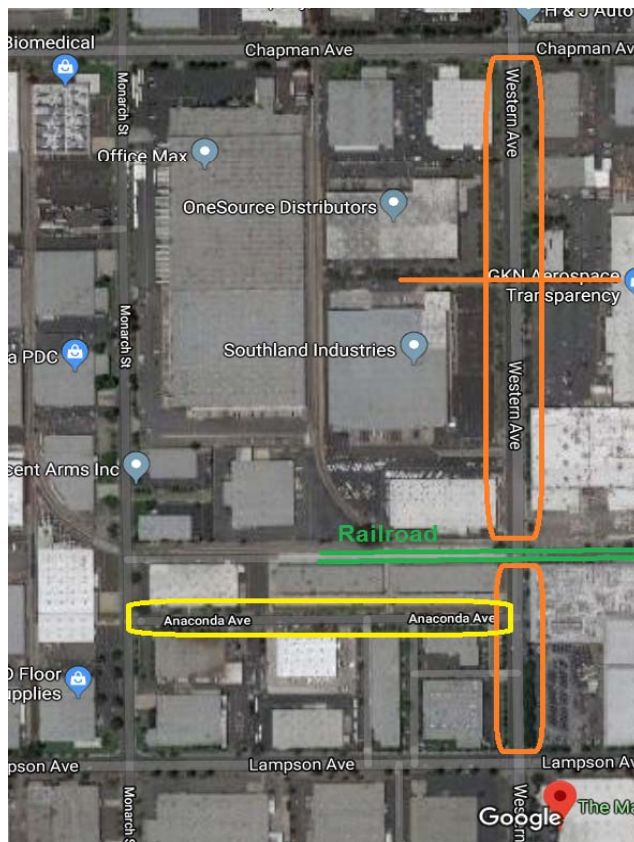
Pedestrian Count to the MAP	Western Ave	Lampson Ave	
Survey Period	North Approach	West Approach	TOTAL
8:30 AM - 9:00 AM	11	12	23
9:00 AM - 9:30 AM	7	2	9
9:30 AM - 10:00 AM	4	5	9
10:00 AM - 10:30 AM	7	4	11
10:30 AM - 11:00 AM	33	8	41
11:00 AM - 11:30 AM	12	0	12
Pedestrian for Each Approach	74	31	105
Assumed Carpool Ratio	2.3 ppl per vehicle		
Estimated Off-Site Parking	32	14	46

EXHIBIT 4. ON-STREET PARKING COUNT

Western Ave between Champman Ave and Lampson Ave

Date 6/22/2019
 Day Saturday
 By Kevin L.

Time	Western Ave (North)	Western Ave (Middle)	Western Ave (South)	Anaconda Ave	Total
Estimated Capacity	8	14	16	97	135
8:30 AM	0	12	14	70	96
9:00 AM	0	9	14	72	95
9:30 AM	0	10	14	71	95
10:00 AM	0	12	14	73	99
10:30 AM	1	12	14	75	102
11:00 AM	0	11	15	69	95
11:30 AM	0	9	10	65	84





The Map Sports

EZLeagues Check-in Time Clock P.O.S. Lockers Equipment Attendance Schedule Clients Groups Reports Administration



Tuesday, July 16, 2019

No Filter No Selection

Tuesday, 7/16/2019

Tuesday, 7/16/2019

Sync to Calendar

0 waitlists 0 bookable

Delete Mode Off

NEXT DAY

TODAY

PREVIOUS DAY

SEARCH

SEARCH

SEARCH

SEARCH

SEARCH

SEARCH

SEARCH

SEARCH

SEARCH

SEARCH

SEARCH

Courts

Leverage

Alley-Oop

MAP Champ

Hawk Hoops

Mountain Dew

Gatorade

Pepsi

AquaFina

8

9

10

11

12

1

2

3

4

5

6

7

8

9

10

LA Laker Camp - Jon Olivero

LA Laker Camp - Jon Olivero

LA Laker Camp - Jon Olivero

LA Laker Camp - Jon Olivero

LA Laker Camp - Jon Olivero

LA Laker Camp - Jon Olivero

LA Laker Camp - Jon Olivero

LA Laker Camp - Jon Olivero

Alley Oop 360 - Bry

Richard Brown - Richard Brown

Hoops Unlimited - Marty Walker

Jr Hoops - Richard

Kaba Hoops - Glenn

Kaba Hoops - Glenn Gonzales

Candy Crushers - Bobby Ni

Kelvin Lam - Kelvin Lam

Color Legend

Yellow Grid- Daily Bball Court Rentals/16.5 total hrs

Purple Grid- League Hours/5.75 total hrs

Blue Grid- Camp hours/7 hrs = 56 hrs total

9PM to 4PM: 300 people/ Camp

5 to 6: 10 to 20/ 6 to 7: 80 to 100/ 7 to 8: 120 to 140/ 8 to 9: 100 to 120/ 9 to 10: 60 to 80

Courts	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10
Leverage															
Alley-Oop															
MAP Champ															
Hawk Hoops															
Mountain Dew															
Gatorade															
Pepsi															
Aquafina															

Yellow Grid- Daily Bball Court Rentals/25.25 hrs total

Blue Grid- Camp hours/7 hrs = 56 hrs total

Purple Grid- League Hours/9 hrs total

9PM to 4PM: 300 people/ Camp

4to5: 20/ 5to6: 80 to 90/ 6to7: 130 to 150/

7to8: 140 to 160/ 8to9:140 to 160/ 9to10:120 to 140/ 10to11: 80 to 90.



The Map Sports

Courts	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10
Leverage															
Alley-Oop															
MAP Champ															
Hawk Hoops															
Mountain Dew															
Gatorade															
Pepsi															
Aquafina															

Blue Grid- Camp hours/7 hrs = 56 hrs total

Yellow Grid- Daily Bball Court Rentals/10.5 total hrs

Beige Grid- Daily Vball Rentals/1.5 total hrs

Purple Grid- League Hours/ 3.25hrs = 13 hrs

9PM to 4PM: 300 people/ Camp
 5to6: 100 to 120/ 6to7: 130 to 150/ 7to8: 130 to 150/ 8to9: 110 to 130/ 9to10: 50 to 70.

