



*Traffic and Parking Consultants
Highway and Signal Design*

MICHAEL MARIS ASSOCIATES, INC.

July 21, 2020

Mr. Bruce Meisel
Managing Member
Jefferson Realty Group, LLC
263 Center Avenue
Westwood, NJ 07675

RE: 21-35 Jefferson Avenue
Westwood, New Jersey

Dear Mr. Meisel:

As requested, we have performed analyses to estimate the traffic and parking generations of a proposal to convert an existing building located at 21-35 Jefferson Avenue in Westwood, New Jersey to a mixed-use residential/commercial occupancy. The building was previously occupied by the New York Sports Club and consists of two 9,443 square foot (sf) levels, for a total of 18,886 sf.

It is understood that the second level of the building will be converted to apartment units and that two additional levels will be constructed, providing a total of 28 apartments. It is also understood that about 1,000 sf of the first level of the building will be used to provide access to the apartments and the remaining 8,443 sf will likely be occupied by (Alternative 1) a smaller health club/fitness type use (Health Club) or (Alternative 2) office space.

There is a second two-level building on the site that consists of 6,749 sf per level and is occupied by a bank and a Learning Center on the first level and five (5) apartment units on the second level. No changes are proposed for this building.

The site plan shows that 104 parking spaces will be provided on the site. It is understood that the 104 spaces will be shared by the tenants of the two buildings.

The analyses performed as part of this assessment included estimates of the traffic and parking generations of the existing and alternative uses of the converted building and comparisons of the two in order to determine whether the proposed uses will generate more or less traffic and parking than the prior use. In addition, since the two buildings on the site will share the 104 on-site parking spaces, estimates were made of the parking needs of the smaller building and a comparison was made of the parking needs of both buildings to the on-site spaces to determine whether there will be sufficient on-site parking. Presented herein are the traffic and parking generation estimates and the findings of our analyses.

A. TRIP GENERATION ESTIMATES

The Trip Generations of the proposed and existing uses of the building to be converted were estimated using trip generation data presented in a publication of the Institute of Transportation Engineers (ITE) entitled Traffic Generation Manual, 10th Edition. This Manual contains Trip Generation Rates derived from surveys of existing developments that can be applied to proposed developments to estimate their potential trip generations. The estimates were made for the busiest traffic hours of the week, which include the Peak AM and PM Traffic Hours and the Peak Saturday Generator Hour.

1. Comparison of Existing Use to Alternative 1 (8,443 sf Health Club & 28 Apartments)

The following Table presents the trip generations of the existing and the Alternative 1 uses of the building, consisting of an 8,443-sf health club and 28 apartments. The ITE Trip Generation Rates for Land Use Code (LUC) 492 “Health/Fitness Club, General Urban/Suburban” were used to estimate the generations of the existing and future health clubs and the ITE Generation Rates for LUC 221 “Multifamily Housing (Mid-Rise), General Urban/Suburban” were used to estimate the generations of the apartment units.

a. <u>Generation Estimates</u>	<u>Peak AM Hour</u>			<u>Peak PM Hour</u>			<u>Peak Sat. Hour</u>		
	<u>Total</u>	<u>In</u>	<u>Out</u>	<u>Total</u>	<u>In</u>	<u>Out</u>	<u>Total</u>	<u>In</u>	<u>Out</u>
<u>Existing Health Club</u>	25	13	12	82	47	35	61	30	31
<u>Alternative 1</u>									
8,443 sf Health Club	11	6	5	48	27	21	27	13	14
28 Apartments	<u>10</u>	<u>3</u>	<u>7</u>	<u>13</u>	<u>8</u>	<u>5</u>	<u>18</u>	<u>9</u>	<u>9</u>
Alternative 1 Totals	21	9	12	61	35	26	45	22	23
b. <u>Generation Comparison</u>	<u>Peak AM Hour</u>			<u>Peak PM Hour</u>			<u>Peak Sat. Hour</u>		
Existing Health Club	25			82			61		
Alternative 1 Totals	<u>21</u>			<u>61</u>			<u>45</u>		
Traffic Reduction	4			21			16		
Percent Reduction	-16 %			-26%			-26%		

The above Tables shows that the Alternative 1 uses consisting of a smaller 8,443 sf health club and 28 apartments would reduce the building’s Peak Hour traffic generations by as much as 26 percent.

2. Comparison of Existing Use to Alternative 2 (8,443 sf office & 28 Apartments)

The following Table presents the trip generations of the existing and the Alternative 2 uses consisting of 8,443 sf of office space and 28 apartments. The generations of the office space were estimated using the Average ITE Trip Generation Rates for LUC 710 “General Office Building, General Urban/Suburban”.

a. <u>Generation Estimates</u>	<u>Peak AM Hour</u>			<u>Peak PM Hour</u>			<u>Peak Sat. Hour</u>		
	<u>Total</u>	<u>In</u>	<u>Out</u>	<u>Total</u>	<u>In</u>	<u>Out</u>	<u>Total</u>	<u>In</u>	<u>Out</u>
<u>Existing Health Club</u>	<u>25</u>	<u>13</u>	<u>12</u>	<u>82</u>	<u>47</u>	<u>35</u>	<u>61</u>	<u>30</u>	<u>31</u>
<u>Alternative 2</u>									
8,443 sf Office Space	10	9	1	11	2	9	5	3	2
28 Apartments	10	3	7	13	8	5	18	9	9
Alternative 2 Totals	<u>20</u>	<u>12</u>	<u>8</u>	<u>24</u>	<u>10</u>	<u>14</u>	<u>23</u>	<u>12</u>	<u>11</u>
b. <u>Generation Comparison</u>	<u>Peak AM Hour</u>			<u>Peak PM Hour</u>			<u>Peak Sat. Hour</u>		
Existing Health Club	25			82			61		
Alternative 2 Totals	<u>20</u>			<u>24</u>			<u>23</u>		
Traffic Reduction	5			58			38		
Percent Reduction	-20 %			-71%			-60%		

The above Tables shows that the Alternative 2 uses consisting of 8,443 sf of office space and 28 apartments would reduce the building’s Peak Hour traffic generations by a substantial amount (as much as 71 percent).

B. PARKING GENERATION ESTIMATES

The parking generations of the proposed and existing uses were estimated using Parking Ratios presented in another publication of the Institute of Transportation Engineers (ITE) entitled Parking Generation Manual, 5th Edition, which presents Parking Generation Rates derived from surveys of existing developments.

It is known that the peak parking generations of various land uses do not coincide and that one space can be occupied by one use at one time and by another use at another time. For example, during weekdays, the peak parking needs of residential developments occur during late nighttime hours while the peak parking needs of health clubs occur during the early evening hours and the peak parking needs of office space occur during the late morning hours. Therefore, Shared Parking Analyses were performed using the Average Parking Rates and Hourly Variations presented in the ITE publication. The Shared Parking Analyses were performed for each of the two Alternatives covering a typical weekday and a Saturday. The findings of the Shared Parking Analyses are presented in the Table included at the end of this letter report.

1. Comparison of Existing Use to Alternative 1 (8,443 sf Health Club & 28 Apartments)

A comparison of the parking generations of the existing use was made to the parking generations of Alternative 1 consisting of 8,443 sf of health club space and 28 apartments. The ITE data for LUC 492 “Health/Fitness Club, General Urban/Suburban” were used to estimate the parking needs of the existing and future health clubs. The ITE data for LUC 221 “Multifamily Housing (Mid-Rise), General Urban/Suburban” located within 0.5 miles of a train station were used to estimate the parking needs of the apartments. A review of the Table at the

end of this report shows the following maximum parking needs of the existing use and of Alternative 1 during weekdays and Saturdays:

<u>Building Use</u>	<u>Peak Weekday Need</u>	<u>Peak Saturday Need</u>
Existing Health Club	90	62
Alternative 1	<u>61</u>	<u>55</u>
Parking Reduction	29	7
Percent Reduction	-32%	-11%

As the above Table shows, the peak weekday parking needs of Alternative 1 will be 32 percent lower than those of the existing use during weekdays and 11 percent lower than those of the existing use during Saturdays.

2. Comparison of Existing Use to Alternative 2 (8,443 sf Office & 28 Apartments)

A comparison of the parking generations of the existing use was also made to the parking generations of Alternative 2 consisting of 8,443 sf of office space and 28 apartments. The generations of the office space were estimated using the ITE data for LUC 710 “General Office Building, General Urban/Suburban”. A review of the Table at the end of this report shows the following maximum parking needs of the existing use and of Alternative 2 during weekdays and Saturdays:

<u>Building Use</u>	<u>Peak Weekday Need</u>	<u>Peak Saturday Need</u>
Existing Health Club	90	62
Alternative 2	<u>38</u>	<u>32</u>
Parking Reduction	52	30
Percent Reduction	-58%	-48%

As the above Table shows, the peak weekday parking needs of Alternative 2 will be 58 percent lower than those of the existing use during weekdays and 48 percent lower than those of the existing use during Saturdays.

3. Comparison of the Alternatives’ Parking Needs to the 104 On-Site Parking Spaces

Since the proposed 104 on-site parking spaces will be shared by the two buildings on the site, the parking generations of the two buildings were combined and the total was compared to the available parking spaces.

a. Existing Smaller Building Parking Generations

The parking needs of the smaller building were estimated using parking rates in the ITE Parking Generation Manual previously referenced. The generations of the five apartments were estimated using the ITE Trip Generation Rates for LUC 220 “Multifamily Housing

(Low-Rise), General Urban/Suburban” located less than 0.5 miles from train station and the generations of the bank were estimated using the ITE Parking Generation Rates for LUC 912 “Drive-In Bank, General Urban/Suburban” and the Generations of the Learning Center were estimated based on knowledge of its operations.

It is understood that the Learning Center provides tutoring services and that approximately 6 to 8 students attend at any time, most of whom do not drive and are dropped off for classes. It is also understood that 4 to 6 employees are present during the same periods. Assuming that a maximum of 3 student vehicles will park on the site and that all employees will drive alone, it is estimated that the Learning Center generates a maximum need for 9 parking spaces.

The following Table presents a summary of the parking generation estimates of the existing smaller building assuming 100 percent occupancies during the daytime hours of a weekday:

<u>Smaller Building (to Remain)</u>	<u>Weekday Requirement</u>	
	<u>% of Peak</u>	<u>Spaces</u>
3,041 sf Bank	100%	20
2,541 sf Learning Center	100%	9
5 Apartments	100%	<u>5</u>
Total		34

b. Combined Parking Generations of Both Buildings

Following are the estimated combined parking needs of the two buildings. For these estimates, it was assumed that the peak parking needs of the two Alternatives will occur at the same time as the peak parking needs of the smaller building.

	<u>Parking Space Summary</u>		
	<u>Required (ITE)</u>	<u>Provided</u>	<u>Excess</u>
• Alternative 1 (8,443 sf Club & 28 Apartments)	61		
Smaller Building	<u>34</u>		
Parking Needs of Both Buildings	95	104	9
• Alternative 2 (8,443-sf Office & 28 Apartments)	38		
Smaller Building	<u>34</u>		
Parking Needs of Both Buildings	72	104	32

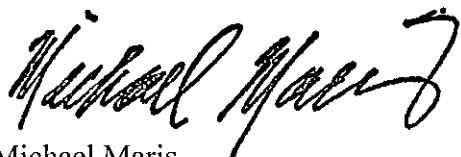
The above Table shows that the proposed 104 on-site parking spaces will be sufficient to serve both buildings whether the first level of the renovated building will be used as a health club or as office space. It is again noted that these accumulations are based on the assumptions that the maximum parking needs of the two buildings will coincide.

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In conclusion, based on the traffic and parking projections presented herein, it is our finding that the proposed conversion of the existing building to include 28 apartments and 8,443 sf occupied by a health club or office space will generate less traffic and lower parking needs than would be generated by a 18,886-sf health club. It is also our finding that the 104 on-site parking spaces will be sufficient for both buildings on the site.

We trust that the findings presented in this letter are clearly described. Please call us if you have any questions or require additional information.

Respectfully submitted,
MICHAEL MARIS ASSOCIATES, INC.

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Michael Maris
President

A handwritten signature in black ink, appearing to read "John Maris". The signature is fluid and cursive, with a large loop at the end.

John Maris
Vice President

cc: John J. Lamb, Esq.

WEEKDAY HOUR	EXISTING DEVELOPMENT		PROPOSED DEVELOPMENT							
	LUC 492 HEALTH CLUB (AVG) 18,886 sf		LUC 221 MID-RISE RESIDENTIAL W/ RAIL (AVG) 28 UNITS		LUC 492 HEALTH CLUB (AVG) 8,443 sf		LUC 710 OFFICE (AVG) 8,443 sf		FUTURE HOURLY PARKING DEMAND	
	% DEMAND	SPACES NEEDED	% DEMAND	SPACES NEEDED	% DEMAND	SPACES NEEDED	% DEMAND	SPACES NEEDED	ALTERNATIVE 1	ALTERNATIVE 2
12:00-4:00	-		100	32	-		-		32	32
5:00 AM	-		94	30	-		-		30	30
6:00 AM	-		83	27	-		-		27	27
7:00 AM	-		71	23	-		13	3	23	25
8:00 AM	-		61	20	-		48	10	20	30
9:00 AM	-		55	18	-		88	18	18	36
10:00 AM	62	56	54	17	62	25	100	21	42	38
11:00 AM	55	50	53	17	55	22	100	21	39	38
12:00 PM	44	40	50	16	44	18	85	18	34	34
1:00 PM	41	37	49	16	41	16	84	18	32	33
2:00 PM	36	32	49	16	36	14	93	20	30	35
3:00 PM	41	37	50	16	41	16	94	20	32	36
4:00 PM	69	62	58	19	69	28	85	18	46	36
5:00 PM	96	86	64	20	96	38	56	12	59	32
6:00 PM	100	90	67	21	100	40	20	4	61	26
7:00 PM	85	77	70	22	85	34	11	2	56	25
8:00 PM	-		76	24	-		-		24	24
9:00 PM	-		83	27	-		-		27	27
10:00 PM	-		90	29	-		-		29	29
11:00 PM	-		93	30	-		-		30	30

SATURDAY HOUR	EXISTING DEVELOPMENT		PROPOSED DEVELOPMENT							
	LUC 492 HEALTH CLUB (AVG) 18,886 sf		LUC 221 MID-RISE RESIDENTIAL W/ RAIL (AVG) 28 UNITS		LUC 492 HEALTH CLUB (AVG) 8,443 sf		LUC 710 OFFICE (AVG) 8,443 sf		FUTURE HOURLY PARKING DEMAND	
	% DEMAND	SPACES NEEDED	% DEMAND	SPACES NEEDED	% DEMAND	SPACES NEEDED	% DEMAND	SPACES NEEDED	ALTERNATIVE 1	ALTERNATIVE 2
12:00-4:00	-		100	32	-		-		32	32
5:00 AM	-		99	32	-		-		32	32
6:00 AM	-		97	31	-		-		31	31
7:00 AM	-		95	30	-		13	0	30	31
8:00 AM	80	50	88	28	80	22	48	1	51	30
9:00 AM	100	62	83	27	100	28	88	3	55	29
10:00 AM	100	62	75	24	100	28	100	3	52	27
11:00 AM	97	60	71	23	97	27	100	3	50	26
12:00 PM	79	49	68	22	79	22	85	3	44	24
1:00 PM	81	50	66	21	81	23	84	3	44	24
2:00 PM	73	45	70	22	73	20	93	3	43	25
3:00 PM	71	44	69	22	71	20	94	3	42	25
4:00 PM	70	43	72	23	70	20	85	3	43	26
5:00 PM	65	40	74	24	65	18	56	2	42	25
6:00 PM	62	38	74	24	62	17	20	1	41	24
7:00 PM	-		73	23	-		11	0	23	24
8:00 PM	-		75	24	-		-		24	24
9:00 PM	-		78	25	-		-		25	25
10:00 PM	-		82	26	-		-		26	26
11:00 PM	-		88	28	-		-		28	28