

May 24, 2019

Steve Siebert Architecture
466 N. Federal Highway
Boynton Beach, FL 33435

ATTN: Mr. Simeon Kirilov

RE: 217 E. Atlantic Ave, Delray Beach, FL
Class-4 Site Modification
Traffic Statement
PCN#: 12-43-46-16-01-084-0102
Buildout – December 2019

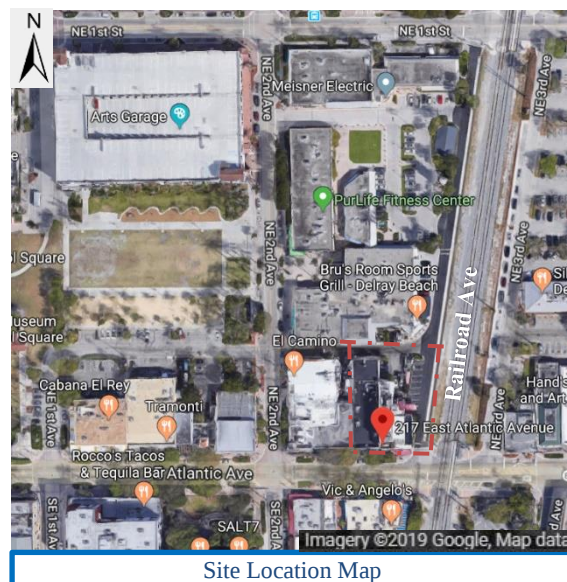
Dear Mr. Kirilov:

As requested by the City of Delray Beach, the following traffic analysis has been performed to determine the traffic impacts of the subject property building addition and change of use. The existing site is located on the northwest corner of E. Atlantic Avenue and Railroad Avenue in the City of Delray Beach. The existing Buddha Sky Bar restaurant is anticipated to remain with a slight reduction in square footage and retail space is proposed to be added onto the building by the end of this year. This study follows the methodology of Article 12, Traffic Performance Standards (TPS), of the Palm Beach County Unified Land Development Code (ULDC).

Existing Site and Roadway Conditions

The existing Buddha Sky Bar restaurant currently occupies the 9,523 SF building at 217 E. Atlantic Avenue located on the northwest corner of Railroad Avenue and E. Atlantic Avenue. The site currently has 10 parking spaces and offers parking validation for downtown parking.

E. Atlantic Avenue is classified as a two-way Urban Minor Arterial with a posted speed limit of 25 mph. The Florida Department of Transportation's Florida Traffic Online documented an average annual daily traffic volume (AADT) of 10,348 vehicles per day traveling on E. Atlantic Avenue on March 6th, 2018. Railroad Avenue is a one-way southbound local road with an area speed limit of 25 mph. A pedestrian sidewalk is located along the east side of the roadway in vicinity of the site and southbound left-turns are prohibited onto E. Atlantic Avenue. AADT data was not available.



In the study area, the roadways primarily service urban restaurant and retail use. In addition, the Arts parking garage is located in the area as well as the Crest Theatre at old School Square.

Project Description & Parking Evaluation

The existing 9,523 SF building of restaurant use is proposed to be expanded by 3,070 SF, making the total building size 12,593 SF. The building is proposed to continue to have restaurant use as well as add retail use. The restaurant use is proposed to be reduced to 8,454 SF and the retail space will consist of 4,139 SF. The building is currently occupied by Buddha Sky Bar restaurant which will continue to be in operation. Both the restaurant and retail operation are not anticipated to be open during the morning peak hours.

The building currently has access to 10 on-site parking spaces (including one (1) handicap space) from Railroad Avenue one-way street southbound. In addition, patrons may also use other on-street parking spaces along E. Atlantic Avenue and the surrounding streets as well as the nearby Arts Parking Garage. The site offers parking validation for downtown parking with an agreement they have with the City of Delray Beach. With the proposed project expansion, the on-site parking spaces will be reduced to 8 on-site parking spaces (including one (1) handicap space). Per the City of Delray Beach Land Development Regulations (section 4.6.9 4(c)), no spaces are required for retail use and no additional spaces for the reduced restaurant use. Therefore, the number of parking spaces provided meets the City of Delray Beach parking requirements.

For additional project details, please refer to the **Attached Site Plans (CS.1, SP.1, A1.1-3)**.

Trip Generation

The trip generation methodology used for the proposed project was prepared utilizing the Palm Beach County Trip Generation Rates dated March 26th, 2019. For the existing and proposed restaurant use Land Use Code 931 “Quality Restaurant” was used and for the proposed retail use Land Use Code 820 “General Commercial” was used to represent the anticipated vehicle trips.

The existing building is currently occupied and has not been vacant for less than five years. Therefore, a vehicle trip credit of 100% was taken for the existing restaurant use.

Pass-by Trips

Some trips generated from the proposed uses are from existing traffic passing the project site and are not newly generated trips. Credit against the trip generation of the proposed uses was taken from these trips based on the pass-by percentages shown in the Palm Beach County Trip Generation Rates Table.

Table 1 on the following page is a summary of the subject property weekday trip generation. It is anticipated that the proposed restaurant and retail uses will yield an additional 12 trips (5 enter, 7 exit) during the PM peak hour. The site is not anticipated to be open during the AM peak hour and therefore no new trips are expected to be generated, however the AM peak hour trips have been included for reference purposes. Please see the **Attached Palm Beach County Trip Generation Table** for additional information.

Table 1: Trip Generation Summary – Weekday

Land Use Buildout December 2019	Daily Trips	AM Peak Hour ¹			PM Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total
Proposed Use: Restaurant-LUC 931 8,454 SF	709	3	3	6	44	22	66
Pass-by Trips (44%)		<u>-1</u>	<u>-1</u>	<u>-2</u>	<u>-19</u>	<u>-10</u>	<u>-29</u>
New External Trips		2	2	4	25	12	37
Proposed Use: Retail Gen. Commercial-LUC 820 4,139 SF	520	3	1	4	20	21	41
Pass-by Trips (62%)		<u>-2</u>	<u>-0</u>	<u>-2</u>	<u>-12</u>	<u>-13</u>	<u>-25</u>
New External Trips		1	1	2	8	8	16
Existing Use: Restaurant-LUC 931 9,523 SF	798	4	3	7	50	24	74
Pass-by Trips (44%)		<u>-2</u>	<u>-1</u>	<u>-3</u>	<u>-22</u>	<u>-11</u>	<u>-33</u>
Existing External Trips		2	2	4	28	13	41
Net New External Trips ²	-	1	1	2	5	7	12
Net New Peak Hour Trips ³	-	2	1	3	14	19	33
Total Site Trips ⁴	431	6	4	10	64	43	107

Notes:

- 1 The restaurant and retail use will not be open during the AM peak hour, therefore the anticipated trip generation is zero.
- 2 The Net New External Trip calcs: Proposed Restaurant + Proposed Retail – Existing Restaurant – proposed Pass-by trips.
- 3 The Net New Peak Hour Trip calcs include pass-by trips: Proposed Restaurant + Proposed Retail – Existing Restaurant.
- 4 The Total Site Trips include pass-by trips: Proposed Restaurant + Proposed Retail.

Traffic Performance Standards Analysis

The Traffic Performance Standards (TPS) consists of two tests. The first test requires that the project not add traffic in the radius of development influence which would have the total traffic exceeding the adopted Level of Service (LOS) at the end of the buildout period. The second test requires that the project not add traffic in the radius of development influence which would have the total traffic exceeding the adopted LOS at the end of the five-year analysis period.

Based on the projects net new external trip generation of 12 trips during the PM peak hour, the radius of development influence for this analysis only includes the site driveway (ULDC Article 12, Table 12.B.2.D-7 3A), as the two-way trip generation is less than 20. Therefore, the Traffic Performance Standards tests are not required.

Trip Distribution & Site Traffic Volumes

The major thoroughfare providing access to the project is E. Atlantic Avenue between Interstate 95 and Federal Highway/NE 6th Avenue. A directional distribution of traffic has been done based on existing Palm Beach County turning movement counts at the intersection of E. Atlantic Avenue and

217 E. Atlantic Avenue – Traffic Statement

Swinton Avenue. Please refer to the attached **Figure 1** for the Trip Distribution and Site Turning Movement Volumes.

Although the proposed new 12 vehicles during the PM peak hour are shown to access the project on-site parking spaces on Railroad Avenue, it is anticipated that a portion of these vehicles will park off-site along Atlantic Avenue and the surrounding streets as well at the near-by Arts Parking Garage and not go directly to the site. Therefore, it is likely that the project site and Railroad Avenue will experience less trips than shown in this analysis.

Summary and Conclusions

As a result of this analysis, it is anticipated that the addition to the existing building, new retail use, and a reduction to the restaurant square footage will not have adverse impacts on the surrounding traffic operations. Therefore, no changes to the adjacent street network are recommended.

If you should have any questions or require additional information, please feel free to contact me at the number listed below.

Sincerely,
T. Y. Lin International

Meaghan Capuano

Meaghan Capuano, P.E.
Transportation Engineer

MPC

Enclosures

Cc: Quazi Bari, Palm Beach County Traffic



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Palm Beach County Trip Generation Rates

(May be used immediately, but must be used in traffic studies submitted to the County on or after 4/15/2019)

Cat.	Landuse	ITE Code	Unit	Daily Rate/Equation	Pass-By %	AM Peak Hour		PM Peak Hour	
						In/Out	Rate/Equation	In/Out	Rate/Equation
Industrial	Light Industrial	110	1000 S.F.	4.96	10%	88/12	0.7	13/87	0.63
	Warehouse	150	1000 S.F.	1.74	10%	77/23	0.17	27/73	0.19
	Flex Space - IND FLU	PBC	1000 S.F.	7.86	10%	64/36	1.53	40/60	1.21
	Flex Space - COM FLU	PBC	1000 S.F.	29.67	45%	72/28	2.12	40/60	2.67
	Mini-Warehouse/SS	151	1000 S.F.	1.51	10%	60/40	0.1	47/53	0.17
Residential	Single Family Detached	210	Dwelling Unit	10	0%	25/75	0.74	63/37	$\text{Ln}(T) = 0.96 \text{Ln}(X) + 0.20$
	Multifamily Low-Rise Housing upto 2 story (Apartment/Condo/TH)	220	Dwelling Unit	7.32	0%	23/77	0.46	63/37	0.56
	Multifamily Mid-Rise Housing 3-10 story (Apartment/Condo/TH)	221	Dwelling Unit	5.44	0%	26/74	0.36	61/39	0.44
	55+ SF Detached	251	Dwelling Unit	4.27	0%	33/67	0.24	61/39	0.30
	55+ SF Attached	252	Dwelling Unit	3.7	0%	35/65	0.2	55/45	0.26
	Congregate Care Facility	253	Dwelling Unit	2.02	0%	60/40	0.07	53/47	0.18
	Assisted Living Facility	254	Beds	2.6	0%	63/37	0.19	38/62	0.26
Ldg	Hotel	310	Rooms	8.36	10%	59/41	0.47	51/49	0.6
Rec	Movie Theater	444	Seats	1.76	5%	N/A	0	55/45	0.09
	Health Club	492	1000 S.F.	32.93	5%	50/50	1.41	57/43	3.53
Institutional	Elementary School	520	Students	1.89	0%	54/46	0.67	48/52	0.17
	Middle/Junior School	522	Students	2.13	0%	54/46	0.58	49/51	0.17
	High School	530	Students	2.03	0%	67/33	0.52	48/52	0.14
	Private School (K-8)	534	Students	Use Private K-12 rate	0%	55/45	0.91	46/54	0.26
	Private School (K-12)*	536	Students	2.48	0%	61/39	0.80	43/57	0.17
	Church/Synagogue ^a	560	1000 S.F.	6.95	5%	60/40	0.33	45/55	0.49
	Day Care	565	Students	4.09	50%	53/47	0.78	47/53	0.79
Med	Library	590	1000 S.F.	72.05	10%	71/29	1	48/52	8.16
	Hospital	610	1000 S.F.	10.72	10%	68/32	0.89	32/68	0.97
	Nursing Home	620	Beds	3.06	10%	72/28	0.17	33/67	0.22
Office	General Office (>5,000 SF GFA)	710	1000 S.F.	$\text{Ln}(T) = 0.97 \text{Ln}(X) + 2.50$	10%	86/14	$T = 0.94(X) + 26.49$	16/84	1.15
	Small Office Building (<=5,000 SF GFA)	712	1000 S.F.	16.19	10%	83/18	1.92	32/68	2.45
	Medical Office	720	1000 S.F.	34.8	10%	78/22	2.78	28/72	3.46
	Medical Office (Reduced) ^b	PBC	1000 S.F.	17.4	10%	78/22	1.39	28/72	1.73
	Government Office	730	1000 S.F.	22.59	10%	75/25	3.34	25/75	1.71

Palm Beach County Trip Generation Rates

(May be used immediately, but must be used in traffic studies submitted to the County on or after 4/15/2019)

Cat.	Landuse	ITE Code	Unit	Daily Rate/Equation	Pass-By %	AM Peak Hour		PM Peak Hour	
						In/Out	Rate/Equation	In/Out	Rate/Equation
Retail	Nursery (Garden Center)	817	Acre	108.1	0%	N/A ^f	2.82	N/A ^f	8.06
	Nursery (Wholesale)	818	Acre	19.5 ^c	0%	N/A ^f	0.26	N/A ^f	0.45
	Gen. Commercial	820	1000 S.F.	$\text{Ln}(T) = 0.68 \text{Ln}(X) + 5.57^d$	Note e	62/38	0.94	48/52	$\text{Ln}(T) = 0.74 \text{Ln}(X) + 2.89^f$
	Automobile Sales (New)	840	1000 S.F.	27.84	15%	73/27	1.87	40/60	2.43
	Automobile Parts Sales	843	1000 S.F.	55.34	28%	55/45	2.59	48/52	4.91
	Tire Store	848	1000 S.F.	28.52	28%	64/36	2.72	43/57	3.98
	Pharmacy + DT	881	1000 S.F.	109.16	50%	53/47	3.84	50/50	10.29
	Drive-In Bank ^g	912	1000 S.F.	100.03	47%	58/42	9.5	50/50	20.45
Services	Quality Restaurant	931	1000 S.F.	83.84	44%	50/50	0.73	67/33	7.8
	High Turnover Sit-Down Rest.	932	1000 S.F.	112.18	43%	55/45	9.94	62/38	9.77
	Fast Food Restaurant w/o DT	933	1000 S.F.	346.23	45%	60/40	25.1	50/50	28.34
	Fast Food Restaurant + DT	934	1000 S.F.	470.95	49%	51/49	40.19	52/48	32.67
	Coffee/Donut Shop w/o DT	936	1000 S.F.	686.67 ^h	45%	51/49	101.14	50/50	36.31
	Coffee/Donut Shop + DT	937	1000 S.F.	820.38	49%	51/49	88.99	50/50	43.38
	Gas Station w/Convenience Store ⁱ	FDOT	FP, 1000 S.F.	14.3*PM Trips	61%	50/50	Note j	50/50	12.3*FP+15.5*(X)
	Carwash (Automated) ^k	PBC	Lane	166.00	0%	50/50	11.97	50/50	13.65

Footnotes: a) Weekend peak hour rate = 9.99 per 1,000 s.f. with a 48/52 directional split

b) To be used only when adjacent to hospital, for Med. Office square footage not to exceed 44% of the hospital square footage

c) Use caution when using because of very low sample data. Consult with the County before using.

d) For intensities under 10,000 s.f., use a rate of 125.61 / 1,000 S.F. instead of the equation.

e) Pass-by percent = 62% for 10,000 s.f. or less, otherwise = $83.18 - 9.30 * \text{Ln}(A)$ where A is 1,000 s.f. of leasable area

f) For intensities under 10,000 s.f., use a rate of 9.9 / 1,000 s.f. instead of the equation.

g) Use these rates for a drive-in bank with up to 4 drive-thru lanes (excl. ATM lane). For additional drive-thru lanes, use per lane rates from ITE Code 912 (124.76 daily, 8.83 AM, 27.15 PM. Use same in/out splits)

h) ITE rate NA. Rate derived using PM to Daily ratio for ITE Code 937

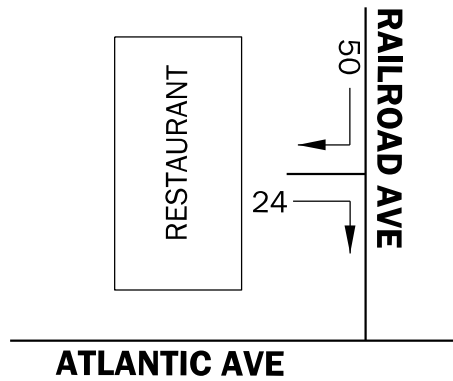
i) FP=Fueling Position. Use both FP and Convenience Store size in estimating trips using the provided equation. Note that no internalization between the gas pumps and convenience store, as per ULDC Article 12, should be applied to estimate the net trips.

j) Use PM rates

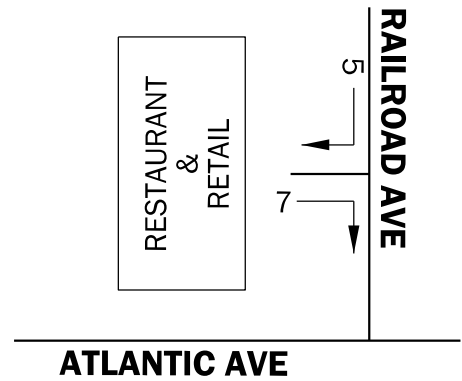
k) Daily rate taken from PBC trip gen. study. Peak hour rates derived by applying peak to daily ratios for gas station to daily carwash rate

l) Assume 50/50

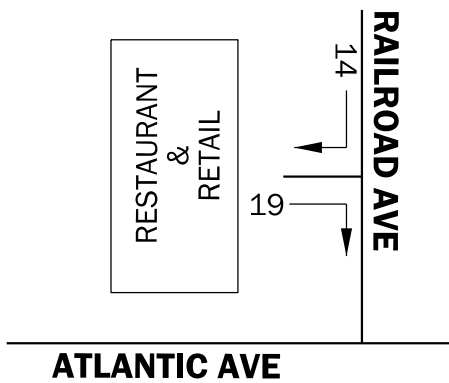
EXISTING SITE TRIPS
(Includes Pass-by)



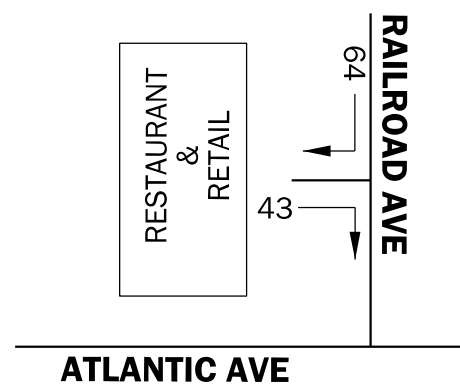
NEW EXTERNAL TRIPS
(No Pass-by)



NEW SITE TRIPS
(Includes & Pass-by)



TOTAL PROPOSED SITE TRIPS
(Includes & Pass-by)



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217 E. Atlantic Ave

FIGURE 1

TURNING MOVEMENT VOLUMES
PM - PEAK HOURS