

# PROPOSED HOTEL RESTAURANT and ROOFTOP DECK

1750 Alton Road

## **Operation Plan**

### **Restaurant:**

- a) The hours of the restaurant are proposed to will be from 6am to 1am and shall be open for breakfast, lunch and dinner.
- b) There is not proposed entertainment at the restaurant.
- c) The restaurant will be open to the general public, not only guests of the hotel.
- d) The Applicant has not determined the branding of the restaurant as it still in the preliminary stages, so there is no sample menu available.
- e) Off-Street Parking for the restaurant will be valet only.

### **Rooftop Pool Deck:**

- a) The rooftop pool will be open only to hotel guests and their invitees. It shall not be a separate venue open to the general public.
- b) Food and drinks may be served at the pool to hotel guests and their invitees.

**FOR REFERENCE  
ONLY  
PB # 2279**

1750 Alton Road

## OPERATIONS PLAN

### FOR VALET-ONLY PARKING WITH MECHANICAL LIFTS

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1. Hours of operation for the valet-only parking level are 24 hours a day, 7 days a week.
2. The number of employees in the valet-only parking level will vary from 2 to 5 depending on demand as determined by the valet operator.
3. The mechanical lifts will be maintained in accordance with the manufacturer's requirements.
4. The mechanical lifts will operate in a quiet manner. The proposed lifts are made by Park Plus and make very little noise when being lowered and raised. In addition, all lifts are located inside the first level of a concrete building. As such, the enclosure will greatly control sounds from the lifts and vehicles.
5. In the event of a power outage, generators will assist with the operation of the lifts, minimally to remove cars from them. Manual operation is also possible in the event of a breakdown.

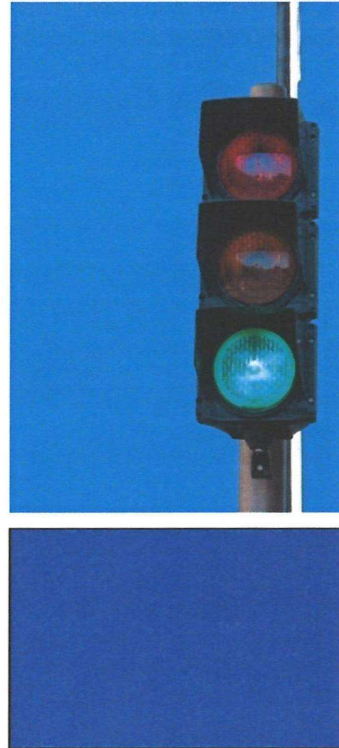
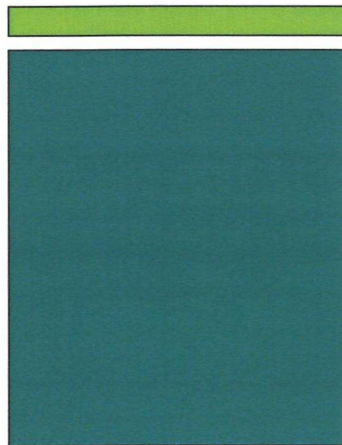
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PB # 2279

REVISED AS OF  
8/17/15

1750 Alton  
Miami Beach, Florida

traffic study



prepared for:  
SOBE Alton, LLC

**Traf Tech**  
ENGINEERING, INC.

July 2015  
Updated August 2015

August 17, 2015

Ronald J. Finvarb  
Principal  
SOBE Alton, LLC  
1065 Kane Concourse, Suite 201  
Bay Harbor Islands, Florida 33154

**Re: 1750 Alton Road – Updated Traffic Engineering Study**

Dear Ronald:

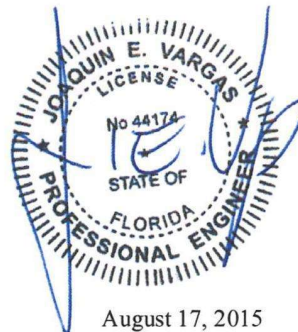
Traf Tech Engineering, Inc. is pleased to provide you with the results of the updated traffic study undertaken for the proposed hotel development project planned to be located at 1750 Alton Road in Miami Beach, Florida. The revised study addresses the traffic comments provided by the City of Miami Beach.

It has been a pleasure working with SOBE Alton on this project.

Sincerely,

**TRAF TECH ENGINEERING, INC.**

Joaquin E. Vargas, P.E.  
Senior Transportation Engineer



August 17, 2015



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## INTRODUCTION

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1750 Alton is a proposed lodging facility planned to be located at 1750 Alton Road in the City of Miami Beach in Miami-Dade County, Florida. The location of the project site is illustrated in Figure 1 on the following page.

Traf Tech Engineering, Inc. was retained by SOBE Alton, LLC to conduct a traffic study<sup>1</sup> in connection with the proposed hotel development. The study addresses trip generation and the traffic impacts created by the proposed project on the nearby transportation network. This study is divided into seven (7) sections, as listed below:

1. Inventory
2. Existing Conditions
3. Traffic Counts
4. Trip Generation
5. Trip Distribution and Traffic Assignment
6. Traffic Impact Analysis
7. Conclusions and Recommendations

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<sup>1</sup> The traffic methodology was discussed and agreed with the City of Miami Beach staff and is included in Appendix A





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## PROJECT LOCATION MAP

**FIGURE 1**  
1750 Alton  
Miami Beach, Florida



## INVENTORY

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### **Existing Land Use and Access**

The project site is currently developed with a 94-seats restaurant including a drive-through lane. Access to the hotel is provided via a right-turn in/right-turn out driveway off of Alton Road and from an alleyway located on the west side of the project site.

### **Proposed Land Use and Access**

The existing restaurant will be demolished and replaced with a 96-room hotel with an ancillary restaurant (160 seats). The access to the project site will consist of a right-turn in driveway off of Alton Road and via the alleyway located on the west side of the project site). Additionally, a parking garage is provided on site with a total of 66 parking spaces (four on the ground floor and 62 at the upper level). Based on previous experience by Traf Tech Engineering, Inc. relative to parking requirements for hotel developments, the 66 provided parking spaces should be adequate to accommodate the peak parking demands of the hotel and the restaurant (restaurant anticipated to be open to the hotel guests and general public). Moreover, publicly-accessible off-street parking is located at the 1111 Lincoln Road Garage (approximately 600 feet from this site) and at the Epicure Parking (located approximately 400 feet away), Sunset Harbour Parking Garage located at 1900 Bay Road and the City Parking lot located 17<sup>th</sup> Street and Lenox Avenue. Appendix B contains a copy of the proposed site plan for the project site.

## **EXISTING CONDITIONS**

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This section addresses the existing roadway system located in the vicinity of the project site and nearby intersections.

### **Roadway System**

The roadway system located near the project site includes Alton Road Dade Boulevard, 17<sup>th</sup> Street and West Avenue. Alton Road and Dade Boulevard are 4-lane facilities while 17<sup>th</sup> Street and West Avenue are generally 2-lane local streets.

### **Nearby Intersections**

With the assistance of City of Miami Beach staff, five intersections (were identified as the locations that will be impacted the most by the proposed project. These intersections include:

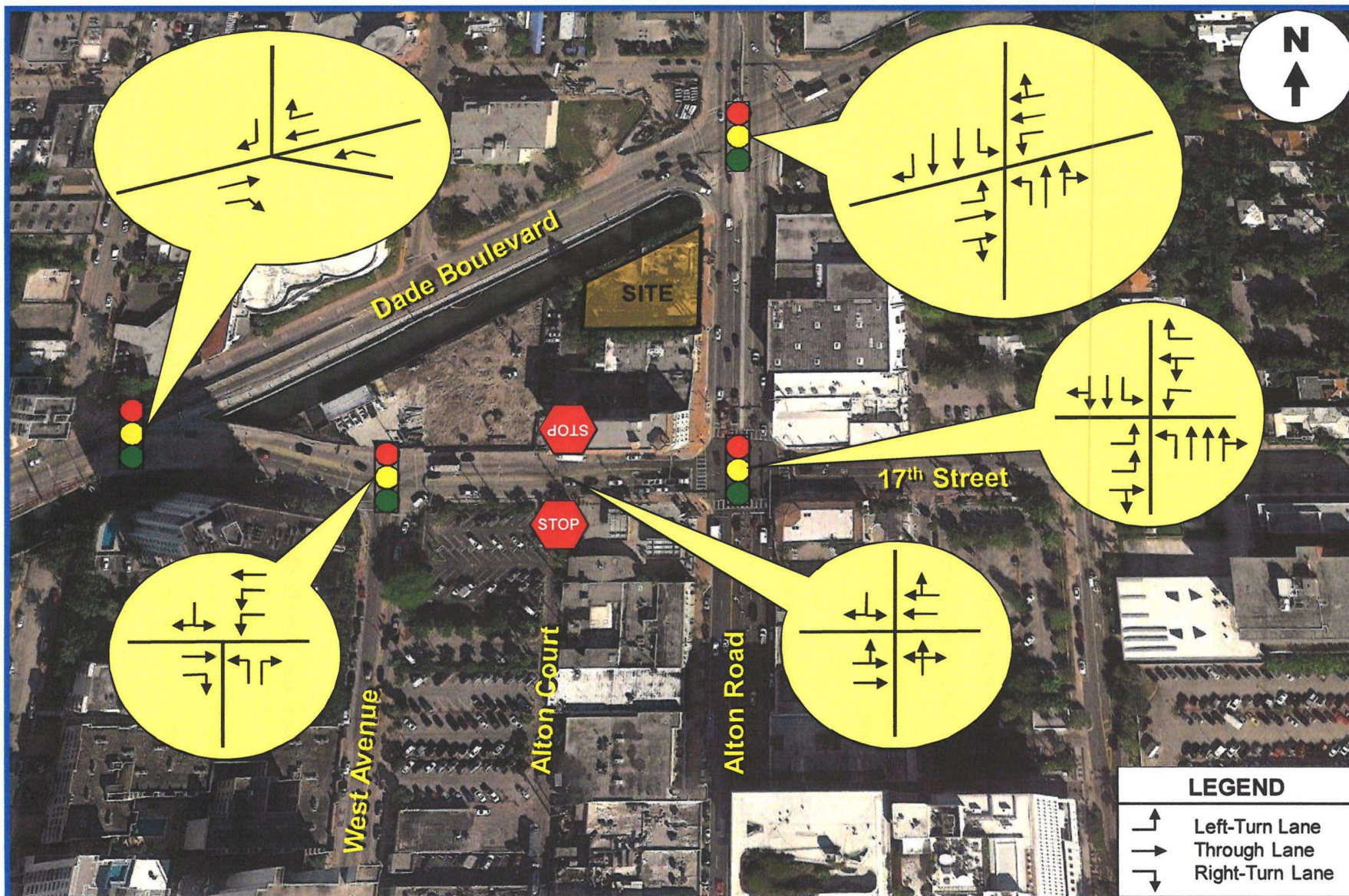
1. Dade Boulevard and Alton Road (signalized)
2. Alton Road and 17<sup>th</sup> Street (signalized)
3. 17<sup>th</sup> Street and Alton Court (alleyway – stop control)
4. 17<sup>th</sup> Street and West Avenue (signalized)
5. 17<sup>th</sup> Street and Dade Boulevard (signalized)

Figure 2 shows the existing lane geometry of the five intersections selected for analysis purposes. The number of lanes on the street system surrounding the project site is also depicted in the figure.

### **Public Transportation and Bicycle Sharing and Rental**

Six (6) Miami-Dade Transit routes operate along Alton Road, Dade Boulevard West Avenue and 17<sup>th</sup> Street near the project site. DecoBike Station 174 is located within walking distance from the project site (at West Avenue and Lincoln Road)





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## EXISTING LANE GEOMETRY

**FIGURE 2**  
1750 Alton  
Miami Beach, Florida



## TRAFFIC COUNTS

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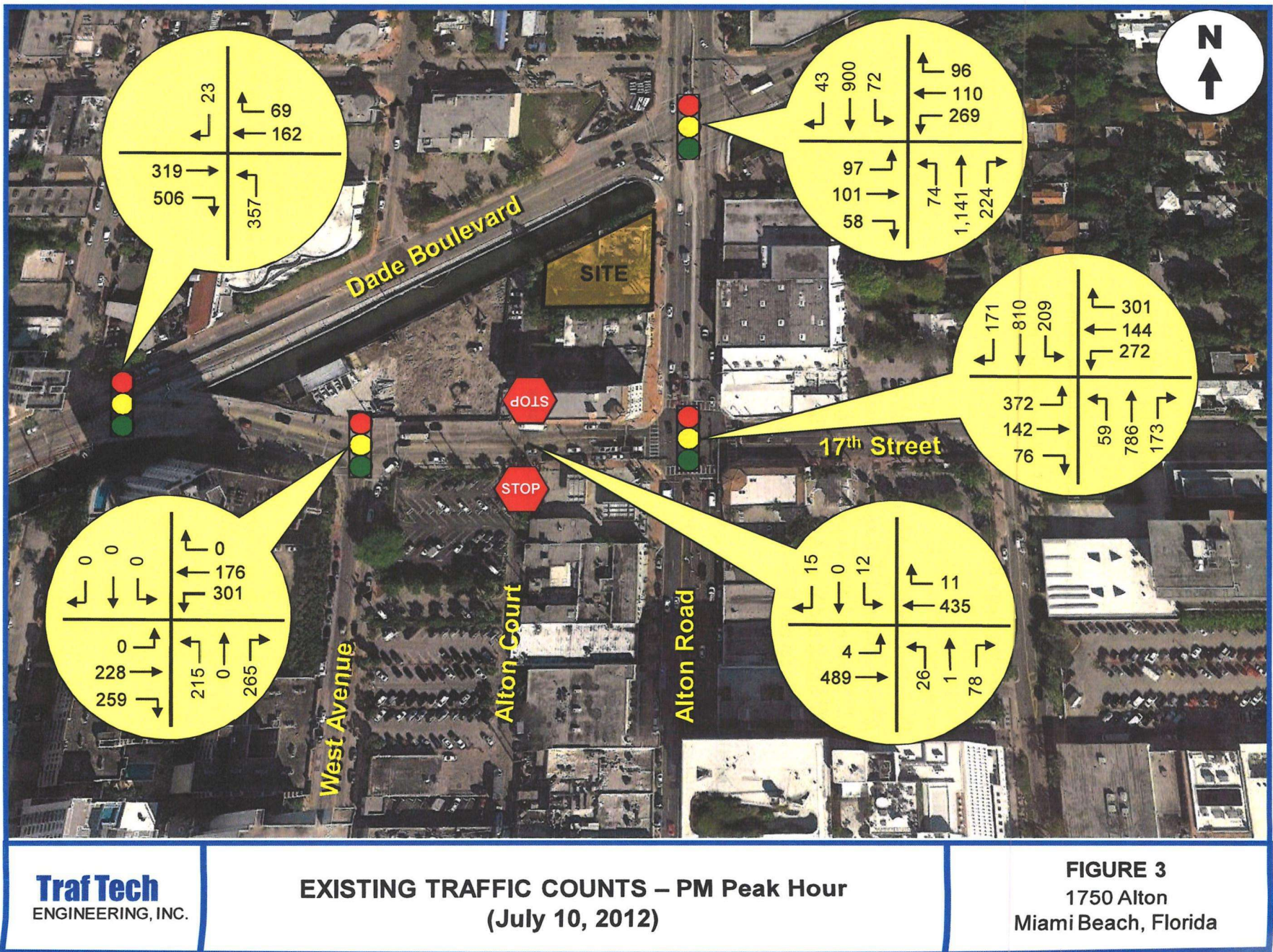
Due to the current construction of Alton Road, the traffic counts for this project were obtained from previous traffic studies conducted within this area prior to the Alton Road construction Project. These traffic counts were obtained from a traffic study conducted by Richard Garcia and Associates for the 17 Street Hotel project. Traffic counts were obtained for the following study intersections::

- Dade Boulevard and Alton Road (signalized)
- Alton Road and 17<sup>th</sup> Street (signalized)
- 17<sup>th</sup> Street and Alton Court (alleyway – stop control)
- 17<sup>th</sup> Street and West Avenue (signalized)
- 17<sup>th</sup> Street and Dade Boulevard (signalized)

The intersection turning movement counts performed by Richard Garcia and Associates were collected on Tuesday, July 10, 2012 during the PM peak period (4:00 PM to 6:00 PM).

Figure 3 summarizes the results of the intersection turning movement counts undertaken during the weekday peak hour. Appendix C contains the intersection turning movement counts, as collected in the field. The signal timing plans were obtained from the Miami-Dade County's web site and are also contained in Appendix C.







## TRIP GENERATION

The trip generation for the project was based on information contained in the Institute of Transportation Engineer's (ITE) *Trip Generation Manual* (9<sup>th</sup> Edition). According to the subject ITE manual, the most appropriate "land use" category for the existing and proposed land uses includes: Land Use 310 – Hotel and Land Use 932 – High Turnover Restaurant. Table 1 summarizes the trips associated with the existing and proposed developments.

TABLE 1 Trip Generation Summary 1750 Alton Road					
Land Use	Size	Daily Trips	Weekday Peak Hour Trips		
			Inbound	Outbound	Total
EXISTING USE					
Restaurant	94 seats	454	22	17	39
PROPOSED USE					
Hotel	96 Rooms	784	34	25	59
Restaurant	160 seats	458	28	14	42
SubTotal		1,242	62	39	101
Internal Trips <sup>1</sup> (30%)		-137	-8	-4	-12
Total		1,105	54	35	89
Difference	-	651	32	18	50

Source: ITE Trip Generation Manual (9<sup>th</sup> Edition)

As indicated in Table 1, the new (excluding the existing restaurant) trips anticipated to be generated by the proposed development consist of approximately 651 daily trips and approximately 50 trips during the weekday peak hour (32 inbound and 18 outbound). The trips associated with the restaurant are already accounted for in the traffic counts.

The trip generation rates used to determine the trips associated with the existing and proposed land uses are presented below:

<sup>1</sup> According to ITE's *Trip Generation Handbook* (Third Edition), up to 71% of restaurant trips within a hotel are internal trips. For purposes of this study, we have assumed that only 30% of the restaurant trips are internal to the project.

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### **ITE Land Use 310 – Hotel**

#### Weekday Daily Trip Generation

$$T = 8.17 (X)$$

Where T = number of weekday daily trips and X = number of rooms

#### Weekday Peak Hour of Generator

$$T = 0.61 (X) \text{ (58\% inbound and 42\% outbound)}$$

Where T = number of weekday peak hour trips and X = number of rooms

### **ITE Land Use 931 – Quality Restaurant**

#### Weekday Daily Trip Generation

$$T = 2.86 (X)$$

Where T = number of weekday daily trips and X = number of seats

#### Weekday Peak Hour of Generator

$$T = 0.26 (X) \text{ (67\% inbound and 33\% outbound)}$$

Where T = number of weekday peak hour trips and X = number of seats

### **ITE Land Use 932 – High Turnover Sit Down Restaurant**

#### Weekday Daily Trip Generation

$$T = 4.83 (X)$$

Where T = number of weekday daily trips and X = number of seats

#### Weekday Peak Hour of Generator

$$T = 0.41 (X) \text{ (57\% inbound and 43\% outbound)}$$

Where T = number of weekday peak hour trips and X = number of seats

## TRIP DISTRUBUTION AND TRAFFIC ASSIGNMENT

The trip distribution and traffic assignment for the project were based on Miami-Dade County's Cardinal Distribution information for the study area. Table 2 summarizes the County's cardinal distribution data for Traffic Analysis Zone 624, which is applicable to the project site from the latest SERPM data published by Miami-Dade County.

TABLE 2 Project Trip Distribution 1750 Alton		
Direction		% of Total Trips
North:	Northwest	16.0
	Northeast	10.0
South:	Southwest	14.6
	Southeast	7.2
East:	Northeast	8.2
	Southeast	2.2
West:	Northwest	19.2
	Southwest	22.6
Total		100.00%

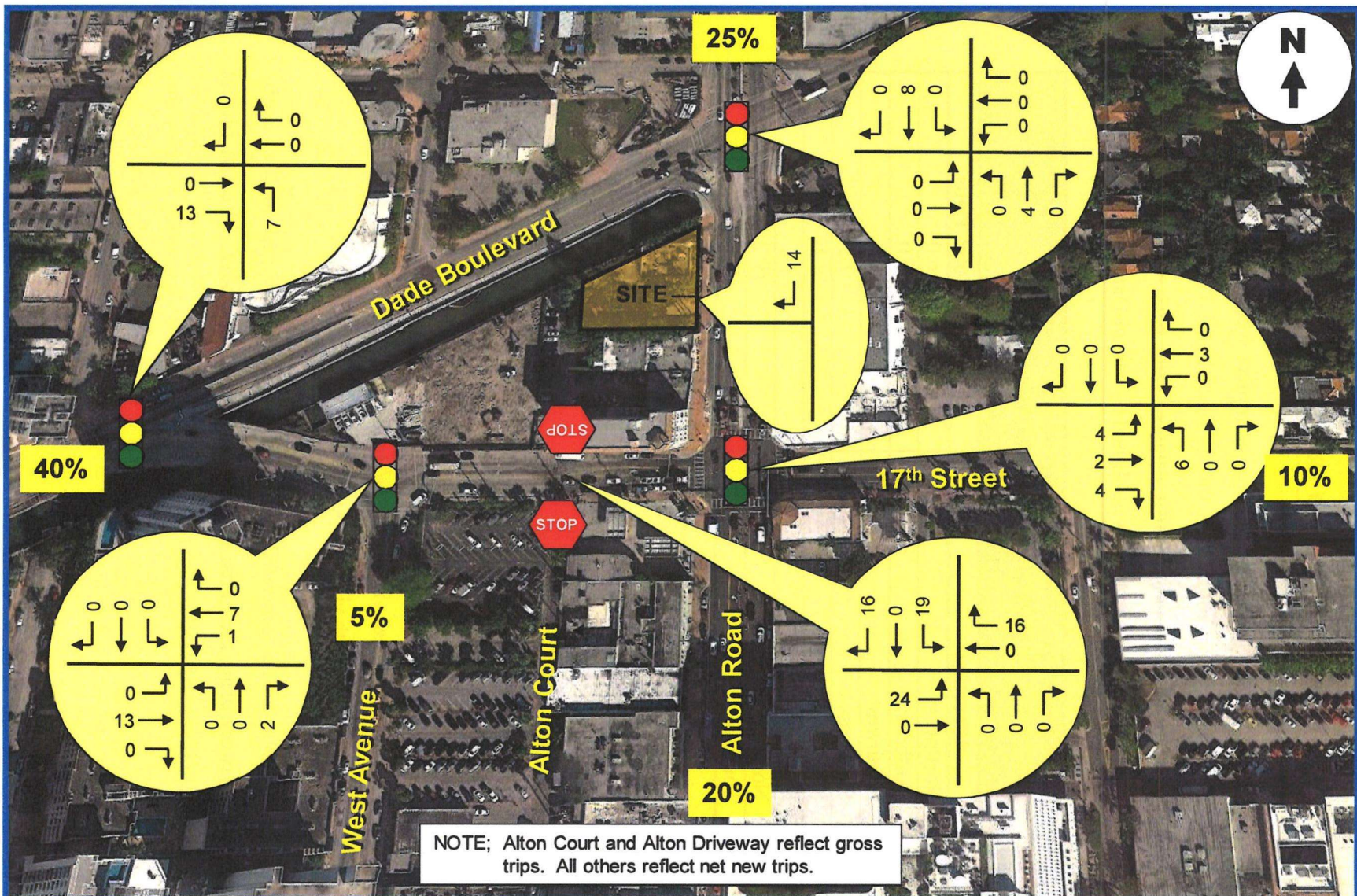
Source: Miami-Dade County (2040 SERPM)

Based on the above, the following traffic assignment was assumed for the proposed hotel development:

- 25% to and from the north via Alton Road
- 20% to and from the south via Alton Road
- 10% to and from the east via 17<sup>th</sup> Street
- 40% to and from the west via 17<sup>th</sup> Street/Dade Boulevard
- 5% to and from the south via West Avenue

The new peak hour traffic generated by the project was assigned to the nearby transportation network using the traffic assignment documented above. The new project traffic assignment is summarized in Figure 4.







## TRAFFIC ANALYSIS

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This section of the study is divided into three parts. The first part consists of developing the future conditions traffic volumes for the study area. The second part includes level-of-service analyses for existing and future conditions. The final section focusses on valet parking.

### **Future Conditions Traffic Volumes**

Two sets of future traffic volumes were developed. The first set includes project buildout conditions without the proposed project and the second set adds the new trips anticipated to be generated by the project.

In order to develop year 2017 traffic volumes (project anticipated to be built and occupied by the year 2017), without the proposed project, two separate analyses were undertaken. The first analysis converts the existing peak hour traffic counts collected in the field during the month of July to average peak season conditions. Based on FDOT's Peak Season Factor Category report, a factor of 1.07 is required to convert traffic counts collected in second week of July to average peak season conditions (refer to Appendix D). The second analysis includes a growth factor to project 2012 peak season traffic volumes to the year 2017. Based on traffic growth data published by the FDOT for a nearby traffic count stations, minimal/negligible traffic growth has occurred during the past five years (refer to Appendix D). However, in order to assess impacts with a conservative approach, and to account for unforeseen approved project (committed trips) that may impact the study intersections, a one percent (1%) growth rate was used for purposes of this study. Additionally, trips associated with the approved 1901 Alton and the 17<sup>th</sup> Street Hotel were added as committed developments.

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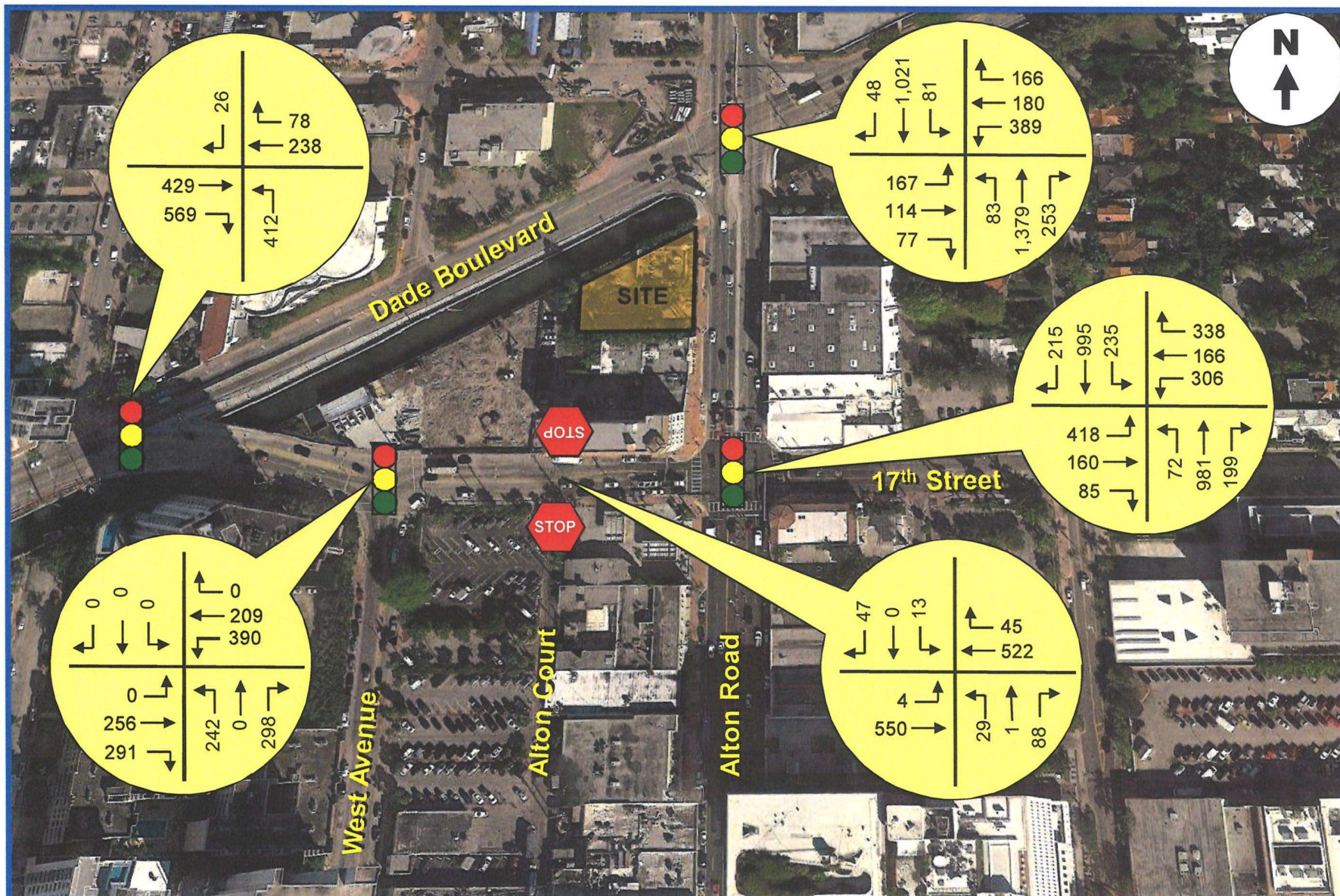
The new trips generated by the 1750 Alton project (refer to Figure 4) were added to the 2017 background traffic in order to develop total traffic conditions. The future traffic projections for the study intersections (peak season adjustments, traffic growth rates, committed developments and project traffic) are presented in tabular format in Appendix E. Figures 5 and 6 present the year 2017 future traffic volumes for the study area.

Figure 5 includes background traffic only (without the proposed project) and Figure 6 includes the additional traffic anticipated to be generated by the 1750 Alton project.

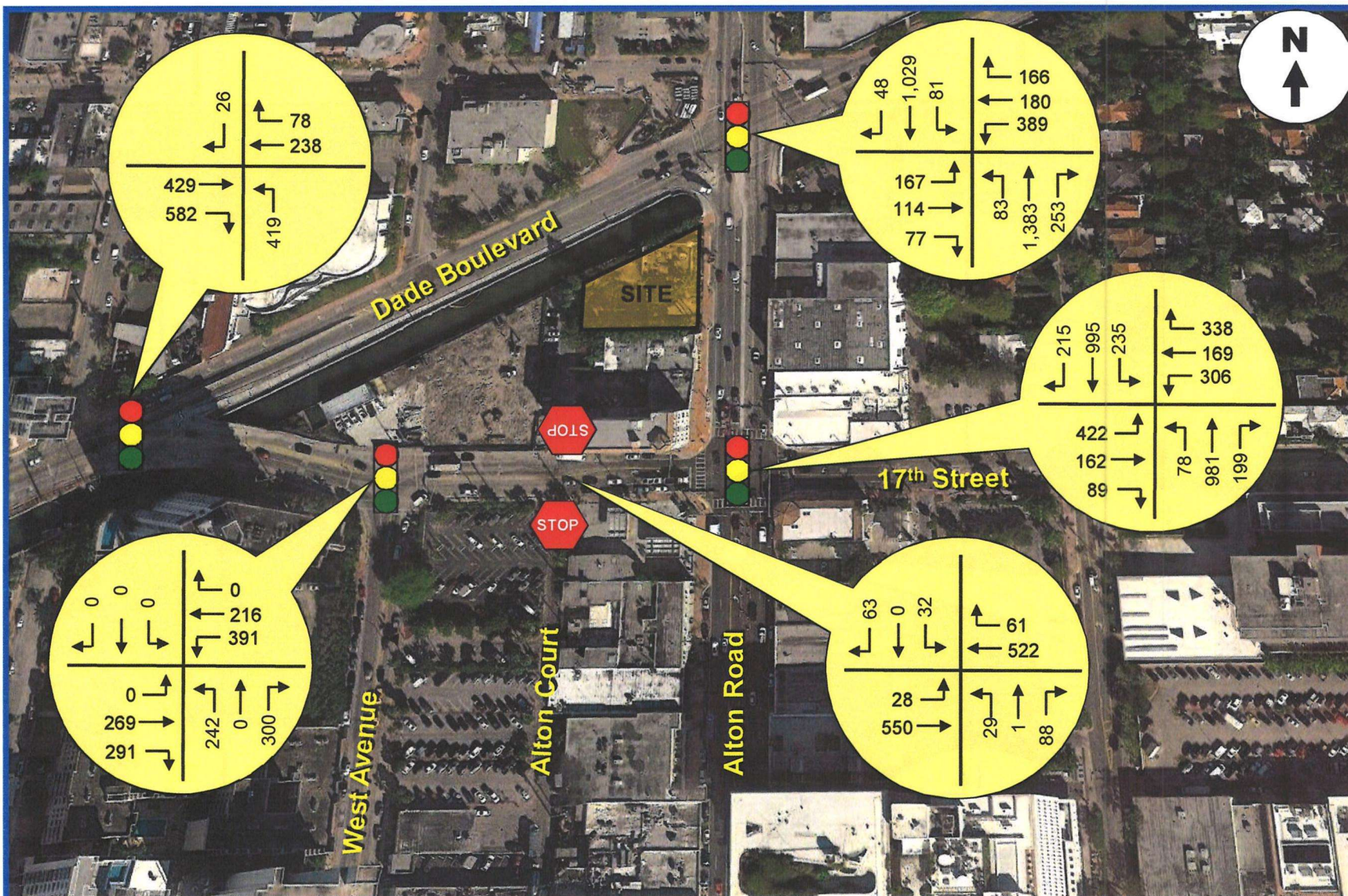
### **Level of Service Analyses**

Intersection capacity/level of service analyses were conducted for the five study intersections. The analyses were undertaken following the capacity/level of service procedures outlined in the Highway Capacity Manual (HCM) using the SYNCHRO software. The results of the capacity analyses are summarized in Tables 3 and 4. As indicated in Tables 3 and 4, all study intersections are currently operating at an acceptable level of service with two exceptions. In the year 2017 with the proposed project in place, all intersections are expected to continue to operate at an acceptable level of service with two exceptions. The two exceptions include the two signalized intersections located on Alton Road. However, with signal timing optimization, the project impacts at these two intersections can be mitigated. Therefore, it is recommended that after this project is built and occupied, the development team contact Miami-Dade County Signals and Signs Division in order to request that the two deficient signalized intersections be fined-tuned by the County.











<b>TABLE 3</b> <b>Intersection Level of Service – (Signalized Intersections)</b> <b>1750 Alton</b>			
<b>Intersection</b>	<b>2012 Existing</b>	<b>Future Traffic Conditions</b>	
		<b>2017 w/o Project</b>	<b>2017 With Project</b>
Alton Rd. & Dade Blvd.	F	F	F
Alton Rd & 17 <sup>th</sup> St	E	E	E
17 <sup>th</sup> St & West Ave	B	C	C
17 <sup>th</sup> St. & Dade Blvd.	B	B	B

Source: Highway Capacity Manual

<b>TABLE 4</b> <b>Intersection Level of Service (Stop-Control Intersections)</b> <b>1750 Alton</b>			
<b>Intersection/Movement</b>	<b>2012 Existing</b>	<b>Future Traffic Conditions</b>	
		<b>2017 w/o Project</b>	<b>2017 With Project</b>
17 <sup>th</sup> Street & Alton Court			
- EB Left	A	A	A
- NB Approach	B	C	C
- SB Approach	B	B	C

Source: Highway Capacity Manual

The computer printouts of the intersection capacity analyses are contained in Appendix F.

### **Valet Operation**

The 1750 Alton project will provide valet parking to all hotel patrons. All vehicles will access the valet station located near the northeast corner of the ground floor (refer to site plan). At the valet station, two vehicles can be parked without affecting the internal site circulation. A valet attendant will park vehicles at or retrieve vehicles from a parking garage located on site (second level).

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In order to determine the stacking requirements associated with the valet operation, a queuing analysis was undertaken. As indicated in Table 1, the maximum number of inbound vehicles associated with this project, during a one-hour period, is approximately 54 vehicles or one vehicle every 66 seconds.

A queuing analysis was conducted in order to ensure that the on-site stacking is sufficient to accommodate the maximum inbound vehicular demand anticipated at this facility. The length of queue anticipated at the drop-off/pick-up area was determined using information contained in ITE's *Transportation and Land Development*, Chapter 8 – Drive-In Facilities<sup>1</sup>. For this analysis, the following input variables were used:

- Service Rate: The distance between the valet station and the upper level parking garage (approximately midpoint within the parking area) is approximately 300 feet. Assuming a vehicular speed of five miles per hour, approximately 40 seconds are required to take a vehicle from the valet station to the parking garage. Assuming a best-case scenario (an immediate parking space available) of 20 seconds to park a vehicle, plus 60 seconds of walk/run (at a speed of 5 feet per second) time to return to the valet station, the best case-scenario to park a vehicle is approximately 2 minutes (40 seconds + 20 seconds + 60 seconds). For the worse-case scenario, it was assumed that two parked vehicles would have to be moved in order to park the incoming vehicle. Assuming two minutes of unparking time for each parked vehicles provides an additional four minutes for a total of six (6) minutes for the worse-case scenario. Hence, the average time between the best and worse-case scenarios is four minutes (2 + 6 divided by 2).
- Demand Rate: As indicated above, a maximum of 54 inbound vehicles will arrive during the highest hour.

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<sup>1</sup> By Vergil G. Stover and Frank J. Koepke.



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Using equation 8-9b and Table 8-11 of ITE's *Transportation and Land Development*, the maximum length of queue anticipated at the valet station, at the 90% confidence level, is two vehicles. Therefore, the on-site valet station should provide parking for at least two (2) vehicles and have seven (7) valet runners during the peak hotel times. The results of the ITE queuing procedure is contained in Appendix G.

### **Impacts on Future West Avenue Bridge**

The future analysis contained in the *17<sup>th</sup> Street/Dade Boulevard Corridor Study* prepared by AECOM (dated July 2008) for the intersection of West Avenue and Dade Boulevard indicate that the additional north/south traffic as a result of the West Avenue Bridge includes 137 new northbound vehicles and 120 new southbound vehicles (refer to Appendix H). These traffic volumes will likely be re-routed from future turning movements at the intersection of 17<sup>th</sup> Street and West Avenue. However, for purposes of this report, we have made the following assumptions and have conducted the following tasks:

- Assumed the 137/120 vehicles are new vehicles (not re-routed which is conservative)
- Added a fourth leg to the 17<sup>th</sup> Street/West Avenue intersection to replicate the future bridge.
- The north leg (bridge) was assumed to have one northbound lane and one southbound lane
- No new lanes were added to the existing three legs of this intersection
- Evaluated the intersection as a four-legged intersection in order to account for the future bridge.
- As indicated in Appendix H, the intersection of 17<sup>th</sup> Street/West Avenue is projected to operate at level of service "C" with the future West Avenue bridge in place.

The pertinent sections for the AECOM report are contained in Appendix J.

## **CONCLUSIONS AND RECOMMENDATIONS**

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1750 Alton is a proposed lodging facility planned to be located at 1750 Alton Road in the City of Miami Beach in Miami-Dade County, Florida.

The project site is currently developed with a 94-seats restaurant including a drive-through lane. Access to the hotel is provided via a right-turn in/right-turn out driveway off of Alton Road and from an alleyway located on the west side of the project site.

The existing restaurant will be demolished and replaced with a 96-room hotel including a restaurant. The access to the project site will consist of a right-turn in driveway off of Alton Road and via the alleyway located on the west side of the project site). Additionally, a parking garage is provided on site.

Traf Tech Engineering, Inc. was retained by SOBE Alton, LLC to conduct a traffic study in connection with the proposed hotel development. The conclusions and recommendations of the traffic study are presented below:

- The new (excluding the existing restaurant) trips anticipated to be generated by the proposed development consist of approximately 651 daily trips and approximately 50 trips during the weekday peak hour (32 inbound and 18 outbound). The trips associated with the restaurant are already accounted for in the traffic counts.
- In the year 2017 with the proposed project in place, all intersections are expected to continue to operate at an acceptable level of service with two exceptions. The two exceptions include the two signalized intersections located on Alton Road. However, with signal timing optimization, the project impacts at these two intersections can be mitigated.

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Therefore, it is recommended that after this project is built and occupied, the development team contact Miami-Dade County Signals and Signs Division in order to request that the two deficient signalized intersections be fine-tuned by the County.

- The on-site valet station should provide parking for at least two (2) vehicles.
- Up to seven (7) valet runners should be assigned to this facility during the anticipated peak periods.
- The intersection of 17<sup>th</sup> Street/West Avenue is projected to operate at level of service “C” with the future West Avenue bridge in place.
- Parking is projected to be adequate to accommodate the peak parking demands of the hotel/restaurant use and publicly-accessible parking garages are located within walking distance from the 1750 Alton project for surplus overflow parking needs.
- In order to encourage non-automobile modes of transportation, bicycle racks are being proposed at the site. It is also recommended that an informational kiosk be provided within the lobby of the hotel with information relative to bus schedules and routes (six bus routes travel near this site) and the location of the closest DecoBike Station 174.

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Therefore, it is recommended that after this project is built and occupied, the development team contact Miami-Dade County Signals and Signs Division in order to request that the two deficient signalized intersections be fined-tuned by the County.

- The on-site valet station should provide parking for at least two (2) vehicles.
- Up to four (4) valet runners should be assigned to this facility during the anticipated peak periods.
- Parking is projected to be adequate to accommodate the peak parking demands of the hotel/restaurant use and publicly-accessible parking garages are located within walking distance from the 1750 Alton project for surplus overflow parking needs.
- In order to encourage non-automobile modes of transportation, bicycle racks are being proposed at the site. It is also recommended that an informational kiosk be provided within the lobby of the hotel with information relative to bus schedules and routes (six bus routes travel near this site) and the location of the closest DecoBike Station 174.