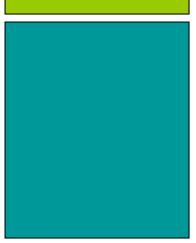
# 6747 Collins Avenue

Miami Beach, Florida







prepared for: **Arquitectonica** 



January 2016

## 6747 Collins Avenue

### Miami Beach, Florida

## **Traffic Study**

January 2016

Prepared for: Arquitectonica

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#### **INTRODUCTION**

The 6747 Collins Avenue project is a planned luxury residential condominium development to be located on the east side of Collins Avenue between 67<sup>th</sup> Street and 69<sup>th</sup> Street in Miami Beach, Miami-Dade County, Florida. The location of this project site is illustrated in Figure 1 on the following page.

Traf Tech Engineering, Inc. has been retained by Arquitectonica to prepare a traffic study in connection with this proposed development. This study addresses the vehicular traffic volumes expected to be generated by the proposed use and the project traffic assignment at the project access driveways on Collins Avenue and nearby intersections. The driveways on Collins Avenue will serve as the only vehicular access points to the site.

This traffic study is divided into five (5) sections, as listed below:

- 1. Inventory
- 2. Trip Generation
- 3. Trip Distribution and Project Traffic Assignment
- 4. Site Plan Details
- 5. Summary & Conclusions



#### **INVENTORY**

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

The project site is currently vacant. Vehicular access to the site is currently provided by two (2) "drop-curbs" on Collins Avenue.

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

The site will be redeveloped with an eighteen-story luxury residential condominium project. The total number of dwelling units will be 42. Vehicular access to the site will be provided via a right-turn in only driveway located at the southern end of the site and a right-turn out only driveway located at the northern end of the site. Appendix A contains the preliminary site plan and the Level 1 Plan for the proposed project.

#### **Roadway System**

Collins Avenue is located along the west side of the project site. In this area, Collins Avenue is a one-way, northbound only, three-lane principal arterial roadway with on-street parking located on the west side of the roadway.

#### TRIP GENERATION

A trip generation analysis has been conducted for the proposed residential use. The analysis was performed using the trip generation equations published in the Institute of Transportation Engineer's ITE *Trip Generation Manual* (9<sup>th</sup> Edition). The trip generation analysis was undertaken for daily, AM peak hour, and PM peak hour conditions. According to the ITE report, the most appropriate land use category for the proposed development is as follows:

#### RESIDENTIAL CONDOMINIUM / TOWNHOUSE (ITE LAND USE #230)

□ Weekday: Ln(T) = 0.87 Ln(X) + 2.46where T = number of trips and <math>X = number of dwelling units

 $\Box$  AM Peak Hour: Ln(T) = 0.80 Ln(X) + 0.26 (17% in / 83% out)

 $\Box$  PM Peak Hour: Ln(T) = 0.82 Ln(X) + 0.32 (67% in / 33% out)

Utilizing the above-listed trip generation equations from the referenced ITE document, a trip generation analysis was undertaken for the proposed residential development. The results of this effort are documented in Table 1 below.

Table 1 Trip Generation Summary 6747 Collins Avenue - Miami Beach, Florida										
Land Use	Size	Daily Trips	AM Peak Hour Trips In Out Total			PM Peak Hour Trips In Out Total				
Land Use	Size	111ps	111	Out	Total	111	Out	Total		
<b>Proposed</b> Residential Condominium	42 DU	302	4	22	26	20	10	30		
Total		302	4	22	26	20	10	30		

Compiled by: Traf Tech Engineering, Inc. (January 2016).

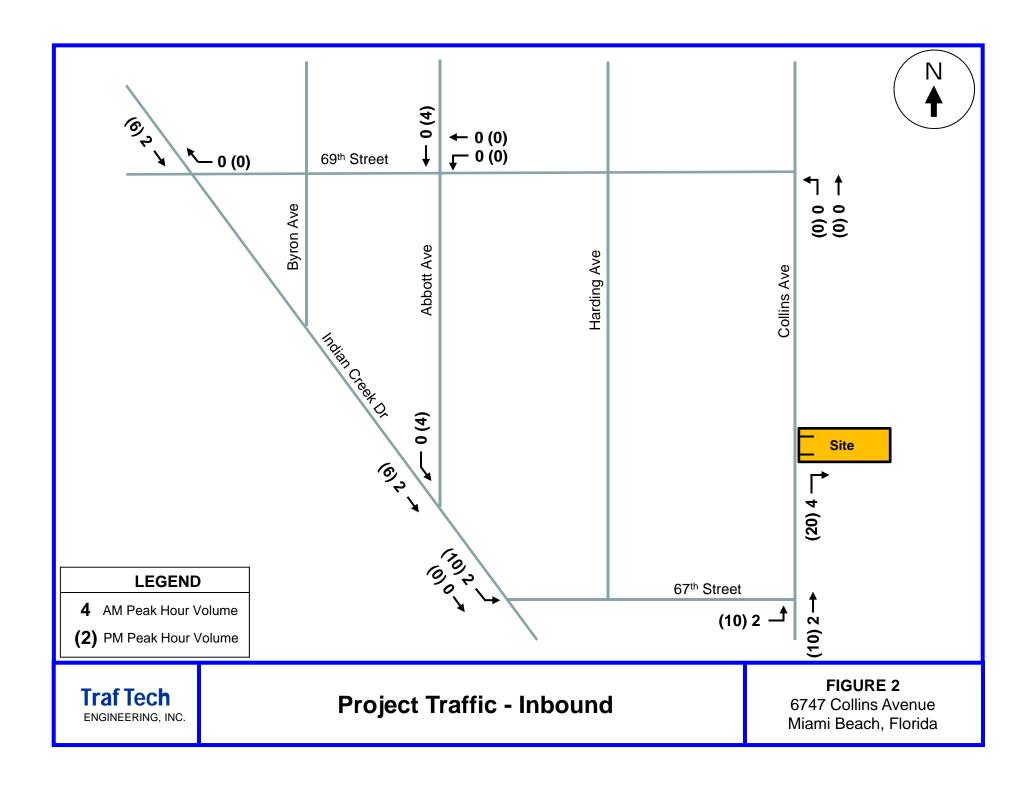
Source: Institute of Transportation Engineers (ITE) Trip Generation Manual (9th Edition).

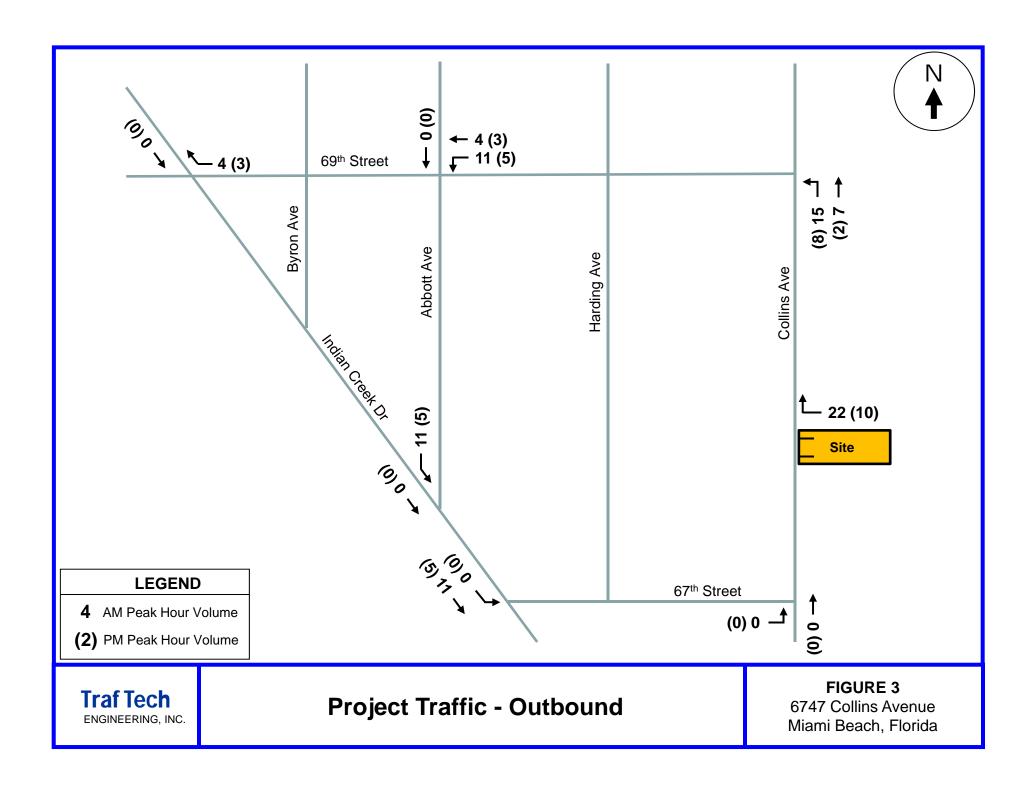
As indicated in Table 1, the proposed project is anticipated to generate 302 daily vehicle trips, 26 AM peak hour vehicle trips (4 inbound and 22 outbound) and 30 vehicle trips (20 inbound and 10 outbound) during the typical afternoon peak hour.

#### TRIP DISTRIBUTION AND DRIVEWAY ASSIGNMENT

Given the driveway locations and the roadway geometry of Collins Avenue in this area, all project traffic will enter the site as northbound right turns and all exiting traffic will be required to turn right onto Collins Avenue and travel in a northbound direction. Based upon the general location of the site, it is estimated that 50% of the project traffic will travel to and from the north / northwest and 50% of the project traffic will travel to and from the south / southwest. Figures 2 and 3 on the following pages present the inbound and outbound peak hour project traffic volumes.

Based upon the projected low driveway volumes anticipated during the AM and PM peak hours, turn lanes are not required / warranted on Collins Avenue. Furthermore, the low project traffic volumes are anticipated to have negligible impacts to the nearby intersections.





#### SITE PLAN DETAILS

The following sections of the report address several transportation related characteristics associated with the proposed site plan.

#### **Vehicle Parking**

The subject site will contain a total of 87 parking spaces primarily within the proposed parking structure. There will be four (4) visitor parking spaces located on Level 1 between the parking structure and the residential tower. The remaining 83 parking spaces (4 of which will be visitor's spaces) will be located on Levels 2 and 3 of the parking structure. At the present time, there are no plans for valet parking and, as such, all parking spaces will have standard dimensions for self-parking.

#### **Bicycle Parking**

There will be four (4) short-term bicycle parking spaces located on Level 1 in the northwest portion of the site near the electrical room. In addition, there will be 42 bicycle parking spaces located throughout Levels 2 and 3 of the parking structure.

#### **Loading Space & Operations**

As required by Code, there will be one (1) loading space provided on site. This space will be located on Level 1 at the northwest corner of the residential tower. Vehicles will enter this space by traveling in a northbound direction on Level 1 between the parking structure and the residential tower, turning left to orient the vehicle in a westbound direction, and then backing into the loading space. Vehicles will exit by pulling forward to travel in a westbound direction along the north side of the site and then exit the property onto Collins Avenue.

#### **SUMMARY & CONCLUSIONS**

The 6747 Collins Avenue project is a planned luxury residential condominium development to be located on the east side of Collins Avenue between 67<sup>th</sup> Street and 69<sup>th</sup> Street in Miami Beach, Miami-Dade County, Florida. The site will be redeveloped with an eighteen-story luxury residential condominium project. The total number of dwelling units will be 42. Vehicular access to the site will be provided via a right-turn in only driveway located at the southern end of the site and a right-turn out only driveway located at the northern end of the site.

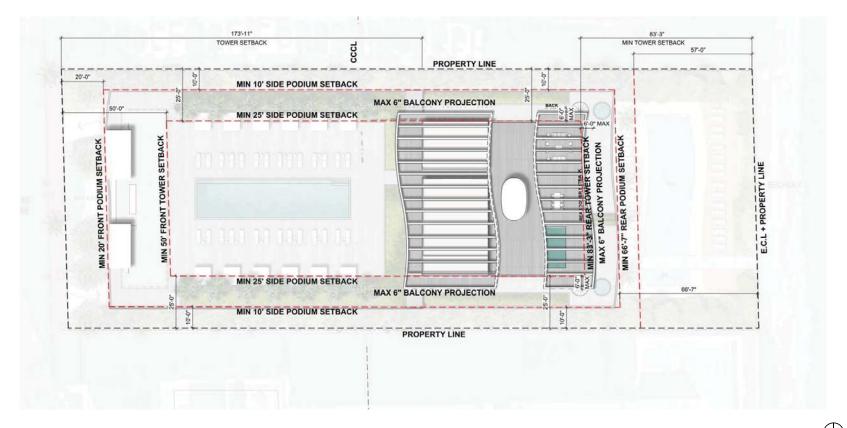
The trip generation analysis indicates that the proposed project is anticipated to generate approximately 302 daily vehicle trips, 26 AM peak hour vehicle trips (4 inbound and 22 outbound) and 30 vehicle trips (20 inbound and 10 outbound) during the typical afternoon peak hour.

Based upon the projected low driveway volumes anticipated during the AM and PM peak hours, turn lanes are not required / warranted on Collins Avenue. Furthermore, the low project traffic volumes are anticipated to have negligible impacts to the nearby intersections.

# **Appendix A**

**6747 Collins Avenue** 

Preliminary Site Plan & Level 1 Plan















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6747 COLLINS AVENUE MIAMI BEACH, FL

**LEVEL 01 PLAN** 

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