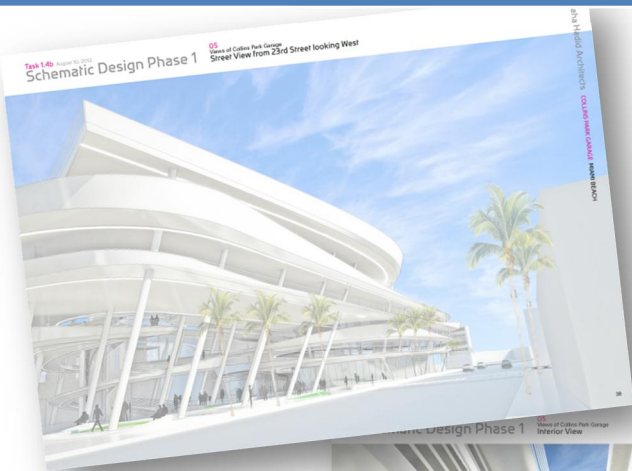


*Traffic Impact Analysis
for Submittal to the
City of Miami Beach*

Collins Park Garage
Miami Beach, Florida



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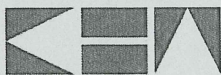
**Collins Park Garage
Miami Beach, Florida**

Prepared for:

City of Miami Beach Capital Improvements Department
Miami Beach, Florida

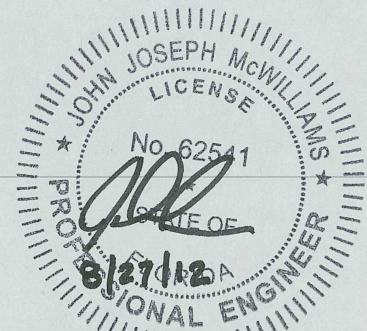
Prepared by:

Kimley-Horn and Associates, Inc.
Fort Lauderdale, Florida



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August 2012
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EXECUTIVE SUMMARY

The City of Miami Beach Capital Improvement Department is proposing a 490-space parking garage (+/-) with approximately 20,000 square-feet of ancillary retail space. The site is located on the east side of Park Avenue south of 23rd Street. The proposed development includes the closure of Liberty Avenue between 22nd Street and 23rd Street. The project is expected to be completed by 2016.

A traffic impact analysis was conducted for the project consistent with City of Miami Beach requirements. Parking garage peak hour demand was developed based on peak hour parking demand from three (3) City of Miami Beach parking garages including; G5 (17th Street and Pennsylvania Avenue Garage), G7 (City Hall Garage – 18th Street and Meridian) and G9 (Pennsylvania Avenue – 17th Street). These parking garages serve similar area land uses (Lincoln Road, New World Symphony, and Miami Convention Center) as the Collins Park Garage (Miami City Ballet and Miami Beach Branch Library).

The analysis also determined that a northbound right-turn only treatment at the intersection of 23rd Street and Park Avenue is feasible as the operating results appear adequate. Additionally, Bicycle parking will be provided on-site. Both short-term and long-term parking will be considered. However, at time of report publication, specific bicycle parking allocation is yet to be determined.

Intersection capacity analyses were conducted for the existing conditions and for future conditions with and without the project during the Friday peak hour and with the Liberty Avenue street closure. Analysis results demonstrate that the study intersections currently operate and will continue to operate at the adopted level of service standard. In conclusion, this project is not expected to adversely impact traffic operation below adopted standards.

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INTRODUCTION

The City of Miami Beach Capital Improvement Department is proposing a 490-space parking garage (+/-) with approximately 20,000 square-feet of ancillary retail space. The site is located on the east side of Park Avenue south of 23rd Street. The proposed development includes the closure of Liberty Avenue between 22nd Street and 23rd Street. A location map is provided as Figure 1 and a site plan is provided in Appendix A. The project is expected to be completed by 2016.

The roadways within the immediate vicinity of the site include Park Avenue, Liberty Avenue, Collins Avenue (State Road [SR] A1A), 22nd Street, and 23rd Street. Park Avenue is a two-lane bi-directional divided roadway between 21st Street and 22nd Street. Park Avenue between 22nd Street and 23rd Street has the cross-sectional width of a four-lane undivided roadway. However, faded pavement markings only delineate dedicated northbound left-turn and right-turn lanes at 23rd Street. Liberty Avenue, 22nd Street, 20th Street, and 21st Street are two-lane bi-directional roadways. Collins Avenue (SR A1A) is a four-lane undivided roadway.

Kimley-Horn and Associates, Inc. has completed this traffic impact analysis for submittal to the City of Miami Beach. The purpose of the study is to assess the project's impact on the surrounding roadway network, determine the feasibility of the proposed Liberty Avenue street closure between 22nd Street and 23rd Street, and determine if adequate capacity is available to support future traffic volumes. The study's methodology is consistent with the requirements of the City of Miami Beach. Methodology correspondence detailing the traffic study requirements is included in Appendix B. This report summarizes the data collection, project trip generation and distribution, and capacity analyses.



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Figure 1
Project Location Map
Collins Park Garage
Miami Beach, Florida

ANALYSIS PERIOD

The analysis period selected for this study was based on a 96-hour continuous traffic counts on Collins Avenue (SR A1A) between 22nd Street and 23rd Street and Liberty Avenue between 22nd Street and 23rd Street. The Florida Department of Transportation (FDOT) peak season conversion factor was applied to the traffic counts to adjust the traffic to peak season volumes. The appropriate peak season conversion factor for the weeks when the traffic counts were collected is 1.07. The 96-hour traffic count was conducted from Thursday, July 12, 2012 through Sunday, July 15, 2012.

The traffic data revealed that the peak two-hour period along Collins Avenue (SR A1A) occurred on Friday from 8:15 P.M. to 10:15 P.M. with a two-hour volume of 3,627 vehicles. The peak two-hour period for Liberty Avenue occurred on Saturday morning (Friday late night) from 12:30 A.M. to 2:30 A.M. with a two-hour volume of 199 vehicles. Based on this information, turning movement count data was collected on Friday from 8:15 P.M. to 10:15 P.M. as the higher volumes occurred on Collins Avenue (SR A1A). Traffic count data and FDOT peak season volumes are contained in Appendix D.

PARKING GARAGE DEMAND (PROJECT TRAFFIC)

Project traffic used in this analysis is defined as the parking demand of the garage generated by near-by land uses as public parking garages are not trip generators; but rather, divert existing traffic from current travel patterns or accommodate traffic from traffic generating land uses.

Existing and Proposed Land Uses

The site proposed for development consists of surface parking lots serving the Miami City Ballet and Miami Beach Branch Library. The proposed development consists of approximately 490-space parking garage and 20,000 square-feet of ancillary retail space. Please note that the retail space (7.88% of total development area) is considered ancillary to the parking garage (92.12% of total development area) due to the nominal area of the retail in comparison to the area of the parking garage.

Peak Hour Demand (Project Traffic)

Parking garage peak hour demand was estimated based on peak hour parking demand from three (3) City of Miami Beach parking garages including:

- G5 (17th Street and Pennsylvania Avenue Garage)
- G7 (City Hall Garage – 18th Street and Meridian)
- G9 (Pennsylvania Avenue – 17th Street)

These parking garages serve similar area land uses (Lincoln Road, New World Symphony, and Miami Convention Center) as the Collins Park Garage (Miami City Ballet and Miami Beach Branch Library).

Parking garage peak hour demand was estimated from parking data provided by the City of Miami Beach Parking Department during the months of April and May 2012. The average daily, average weekday, average weekend, average Friday, and average Saturday parking demand

rates were examined. Parking demand or parking turnover is defined as the number of vehicles entering and exiting a parking facility within a one (1) hour period in relation to the number of parking spaces provided. Parking demand is reported as a percentage. The average Friday parking rate represents the highest combination of entry (18.77%) and exit (7.75%) parking rates, these rates were used to determine entering and exiting parking demand for the Collins Park Garage. As summarized in Table 1, parking demand of 130 trips is expected during the

Table 1: Friday Peak Hour Parking Demand (Project Traffic)			
Proposed Land Use	Parking Demand Rate	Number of Parking Spaces	Parking Demand
Entering Project Traffic	18.77%	490	92
Exiting Project Traffic	7.75%	490	38
Total Project Traffic			130

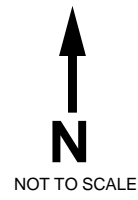
Friday peak hour. Detailed parking data is provided in Appendix C.

Project Access

Access to the parking garage will be provided from Park Avenue. A three (3) lane driveway will be provided with an exclusive ingress lane, egress lane, and a reversible ingress/egress lane. The site plan with sight triangles is provided in Appendix A.

Traffic Distribution and Assignment

Trip distribution for garage traffic was determined based upon turning movement counts collected at the study intersections. These calculations were performed for the Friday peak hour. Figure 2 presents the garage traffic's distribution for the Friday peak hour. Figure 3 presents the garage's traffic assignment for the Friday peak hour. The trip distribution and traffic assignment account for the Liberty Avenue street closure. Traffic diverted as a result of the Liberty Avenue street closure is discussed in the future total conditions section of this report.



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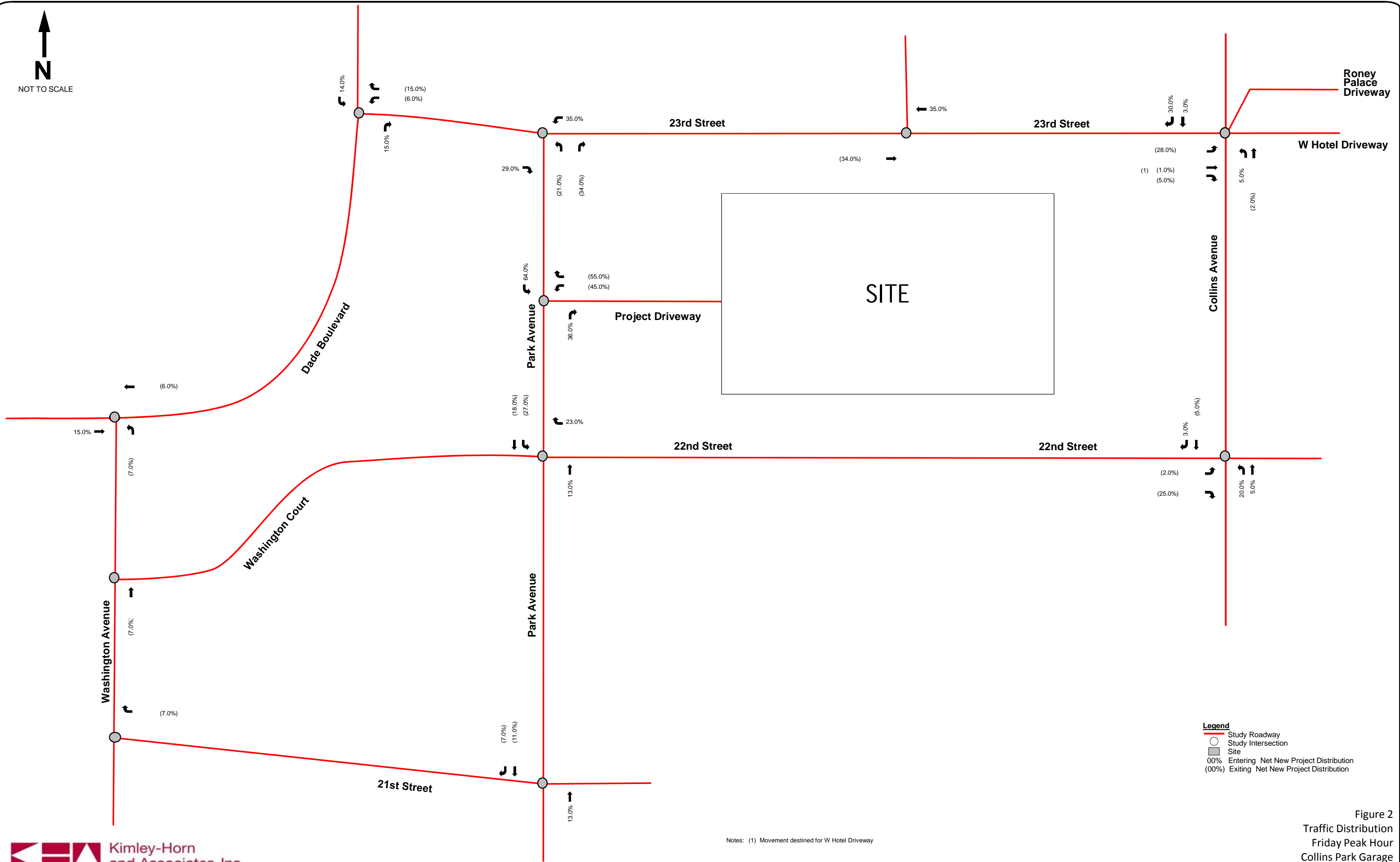
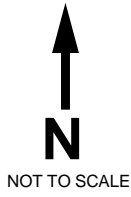
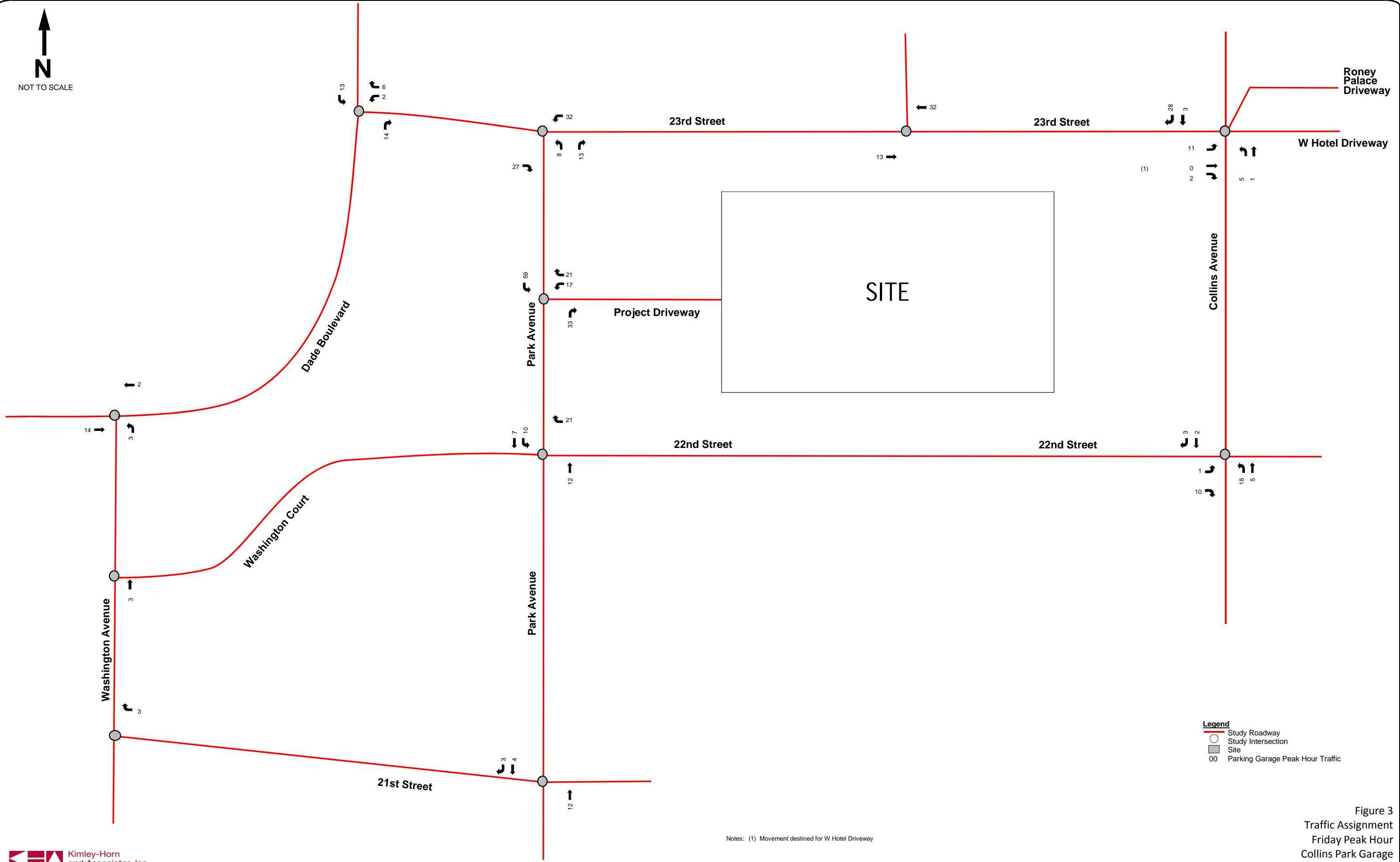


Figure 2
Traffic Distribution
Friday Peak Hour
Collins Park Garage
Miami Beach, Florida



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- Legend**
- Study Roadway
 - Study Intersection
 - Site
 - 00 Parking Garage Peak Hour Traffic

Notes: (1) Movement destined for W Hotel Driveway

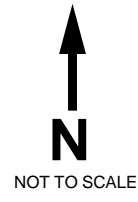
Figure 3
Traffic Assignment
Friday Peak Hour
Collins Park Garage
Miami Beach, Florida

EXISTING TRAFFIC

Friday peak period (8:15 P.M. to 10:15 P.M.) turning movement counts were collected at the following study area intersections:

- Collins Avenue (SR A1A) and 22nd Street (Friday, August 10, 2012)
- Collins Avenue (SR A1A) and 23rd Street (Friday, August 3, 2012)
- Liberty Avenue and 22nd Street (Friday, August 10, 2012)
- Liberty Avenue and 23rd Street (Friday, August 3, 2012)
- Park Avenue and 22nd Street (Friday, August 10, 2012)
- Park Avenue and 23rd Street (Friday, August 3, 2012)
- Dade Boulevard and 23rd Street (Friday, August 3, 2012)
- Dade Boulevard and Washington Avenue (Friday, August 10, 2012)
- Washington Avenue and Washington Court (Friday, August 10, 2012)
- Washington Avenue and 21st Street (Friday, August 10, 2012)
- Park Avenue and 21st Street (Friday, August 10, 2012)

Volumes were collected in 15-minute intervals and the peak hour was determined for each intersection. The FDOT peak season conversion factor was applied to the traffic counts to adjust the traffic to peak season volumes. The appropriate peak season conversion factor for the weeks when the traffic counts was collected is 1.07 for all study area intersections. The turning movement counts and FDOT peak season factor category report are included in Appendix D. Figure 4 presents the existing turning movement volumes at the study intersections during the Friday peak hour.



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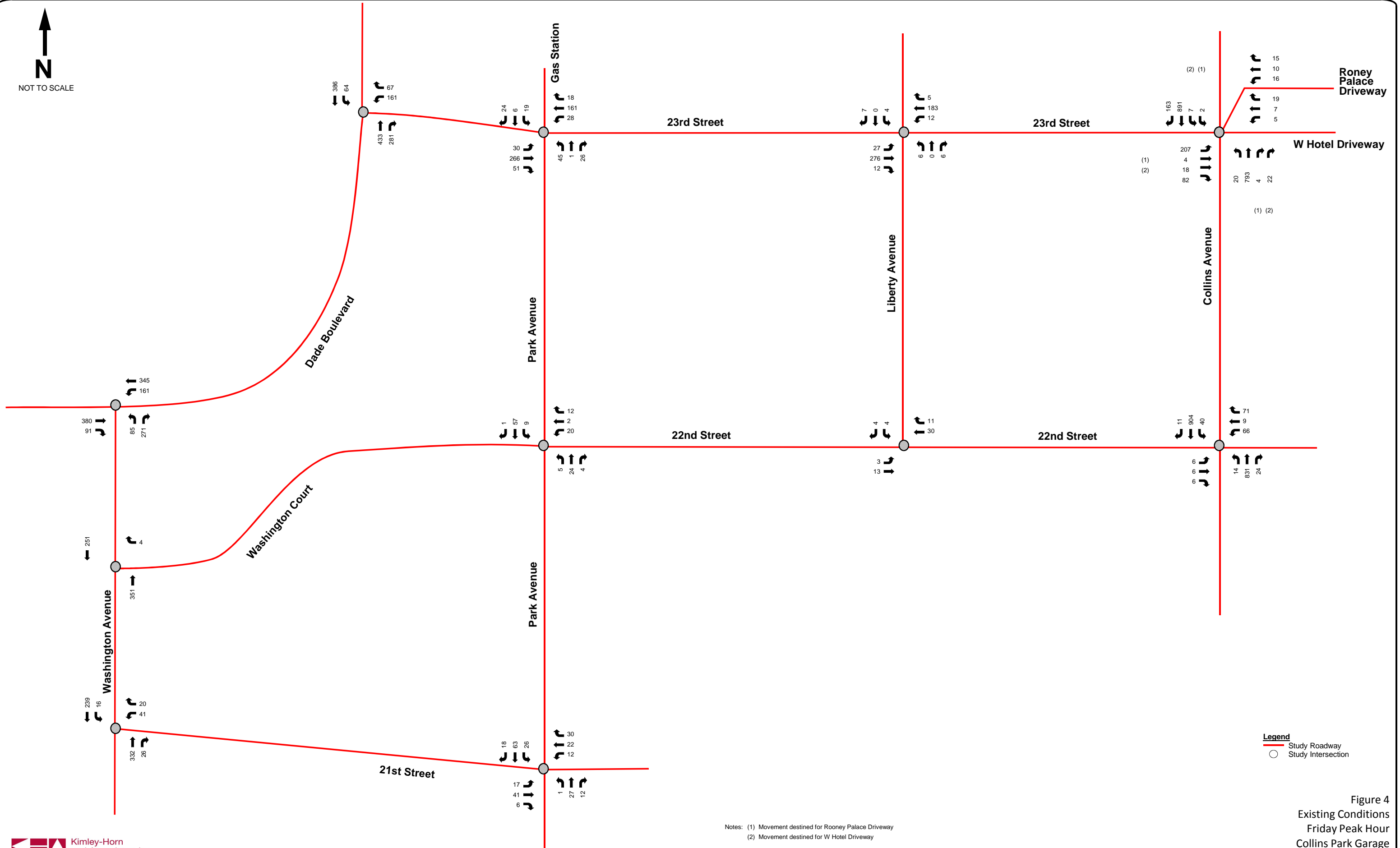


Figure 4
Existing Conditions
Friday Peak Hour
Collins Park Garage
Miami Beach, Florida

FUTURE BACKGROUND TRAFFIC

Future background traffic conditions are defined as expected traffic conditions on the roadway network in the year 2016 without the construction of the proposed project or closure of Liberty Avenue. Future background traffic volumes used in the analysis are the sum of the existing traffic, traffic generated by growth in the study area, and committed developments not yet constructed. Refer to Figure 5 for the 2016 peak hour background traffic volumes during the Friday peak hour.

Background Area Growth

Future traffic growth on the transportation network was determined based upon (1) historic growth trends at nearby FDOT traffic count stations and (2) traffic volume comparisons from the year 2005 and 2030 Florida Standard Urban Transportation Model Structure (FSUTMS) Southeast Florida Regional Planning Model (SERPM) transportation models.

The FDOT count station referenced in this analysis includes Count Station # 5170 located on Collins Avenue (SR A1A) north of 21st Street. The growth rate analysis determined a 0.78 percent (0.78%) growth trend over the most recent five (5) year period and a negative growth rate over the most recent ten (10) year period.

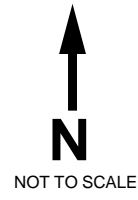
Based on the volume information obtained from years 2005 and 2030 FSUTMS SERPM model, an annual growth rate of 0.83 percent (0.83%) in the vicinity of the project site was calculated. Therefore, a growth rate of 0.83 percent (0.83%) was applied annually to the existing traffic volumes to attain future (2016) background traffic conditions. Growth trends analysis along with the Miami-Dade MPO FSUTMS transportation model outputs are included in Appendix E.

FDOT currently has a Resurfacing, Restoration, and Rehabilitation (3R) project along Collins Avenue from north of Lincoln Road to 26th Street. The proposed intersection geometry and roadway laneage is consistent with the existing intersection geometry and roadway laneage.

Please note that bicycle “sharrow” lanes are provided along Collins Avenue (SR A1A). Signing and marking plans are provided in Appendix F.

Committed Developments

In addition to background traffic growth, traffic generated for developments in the vicinity of the project site that have been approved but are not yet constructed were accounted for. Two (2) developments were identified for inclusion in the traffic analysis: SLS Hotel South Beach and Parc Place Development. Trip generation, distribution, and assignment calculations were evaluated for these projects. Trip assignments were developed for the projects and are included in Appendix F. Volume development worksheets for the study intersections are included in Appendix G.



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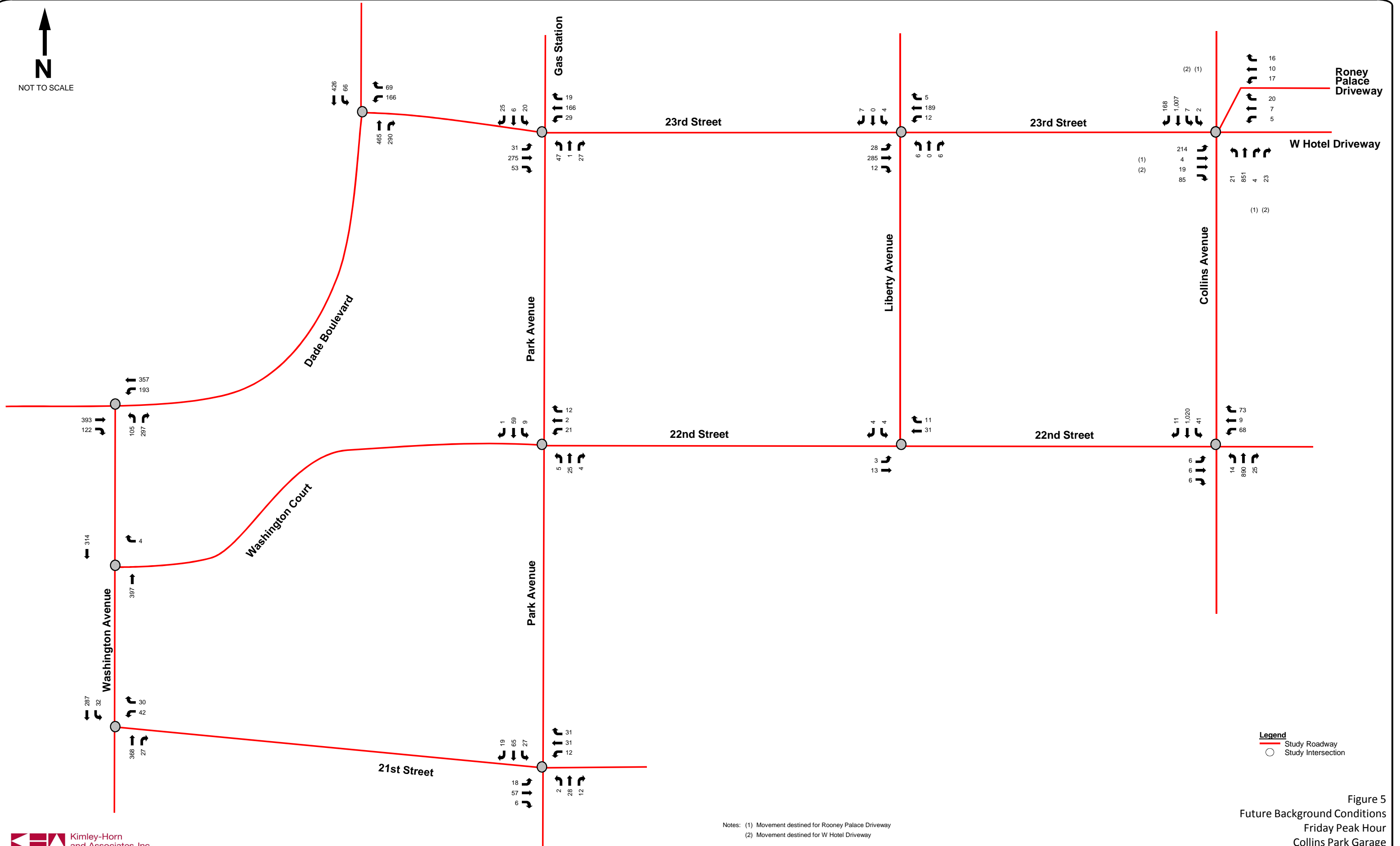
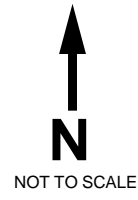


Figure 5
Future Background Conditions
Friday Peak Hour
Collins Park Garage
Miami Beach, Florida

FUTURE TOTAL TRAFFIC

Future total traffic conditions are defined as the expected traffic conditions in the year 2016 after the opening of the garage. Total traffic volumes considered in the analysis for this project are the sum of the 2016 background traffic volumes, the expected garage traffic volumes, and traffic diverted to account for the Liberty Avenue roadway closure between 22nd Street and 23rd Street. The traffic diversion assumed that diverted trips would utilize Park Avenue due to the similar local roadway characteristics of the two (2) roadways. Figure 6 provides a graphic representation of the Liberty Avenue roadway closure traffic diversion.

The peak hour future traffic volumes for the Friday peak hour are shown in Figure 8. Volume development worksheets for the study intersections are included in Appendix G.



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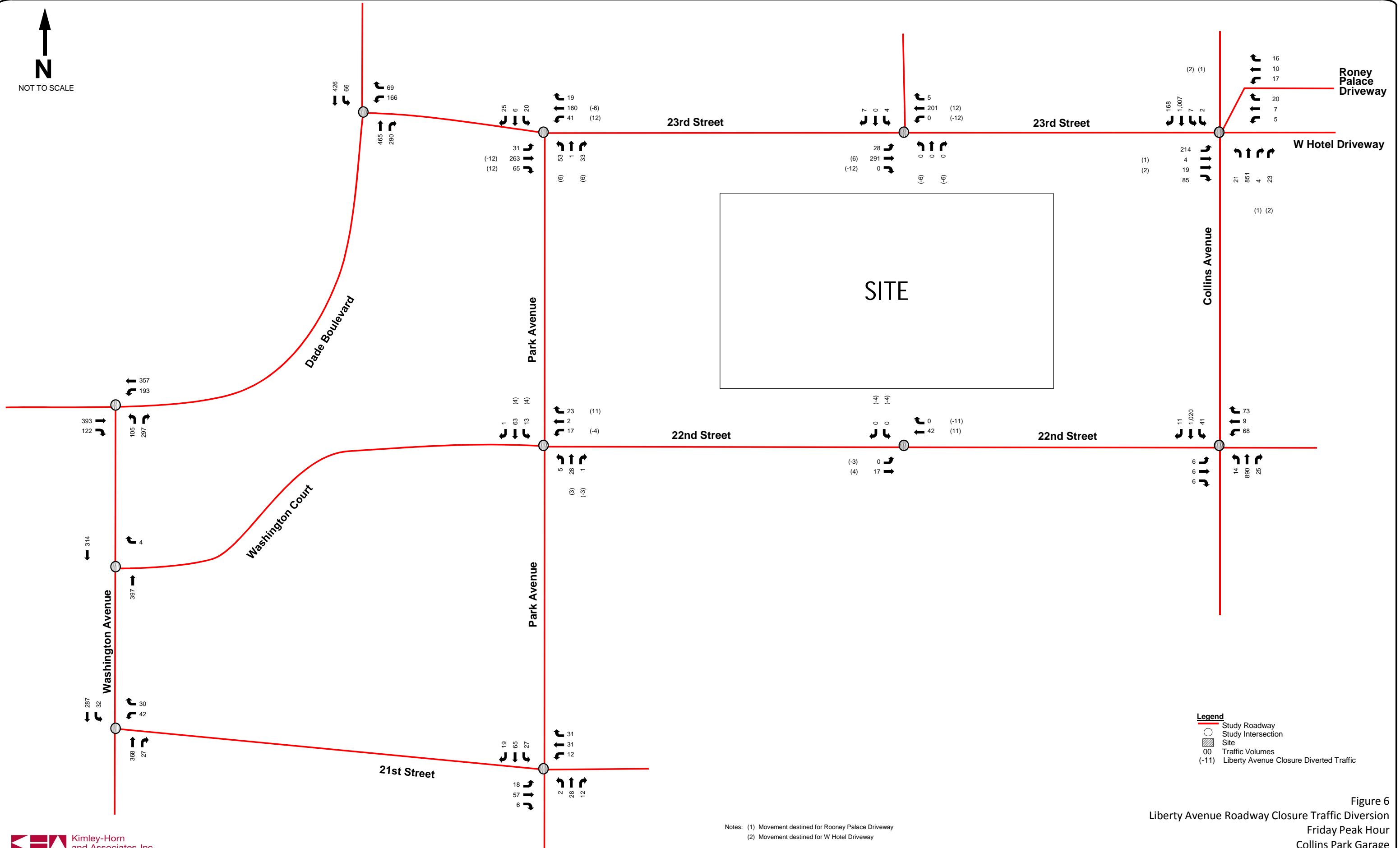


Figure 6
 Liberty Avenue Roadway Closure Traffic Diversion
 Friday Peak Hour
 Collins Park Garage
 Miami Beach, Florida

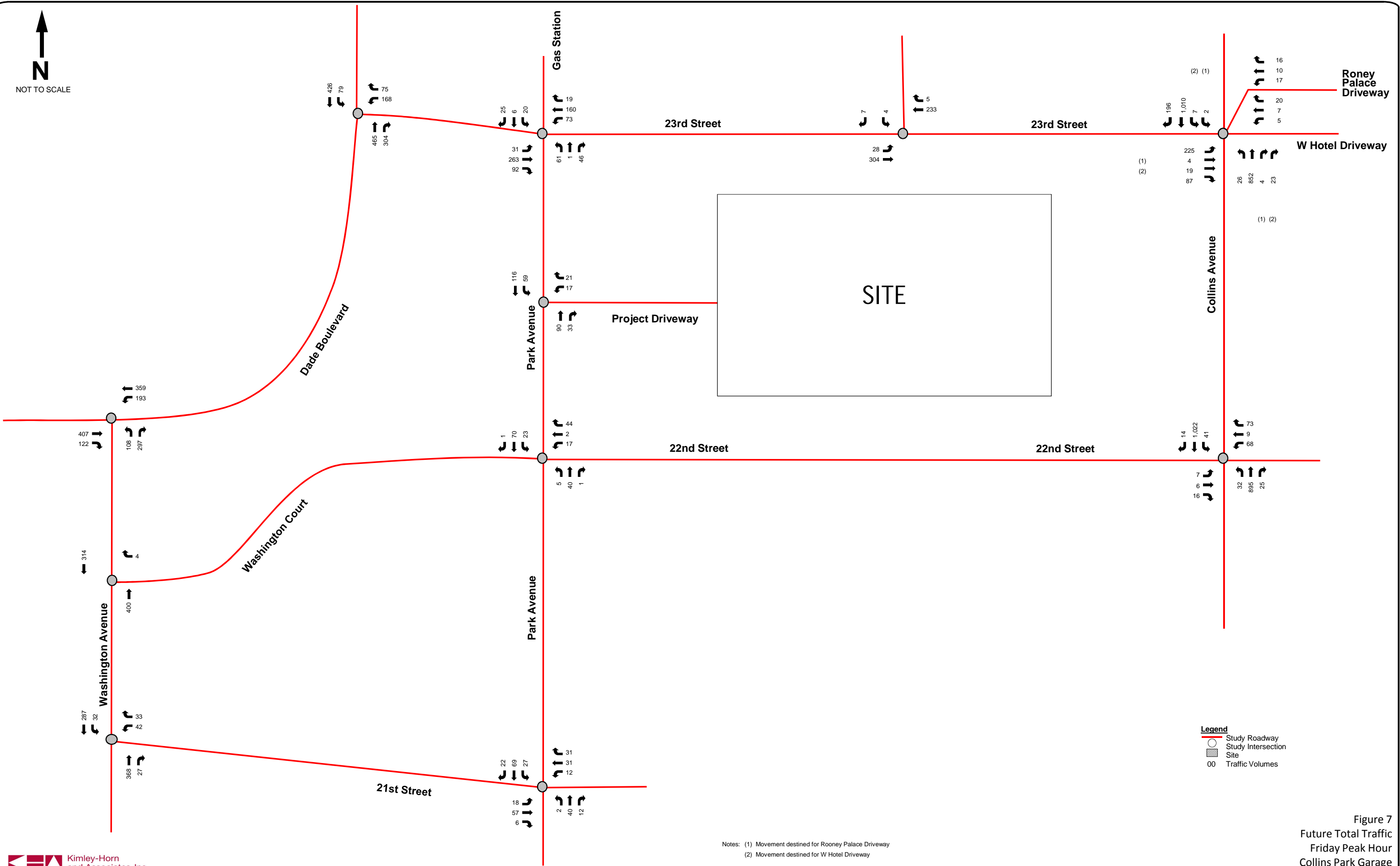


Figure 7
 Future Total Traffic
 Friday Peak Hour
 Collins Park Garage
 Miami Beach, Florida

INTERSECTION CAPACITY ANALYSIS

The operating conditions were analyzed at study intersections, for three (3) scenarios (existing conditions, future background conditions, and future total conditions) using *Trafficware's SYNCHRO 8.0 Software*, which applies methodologies outlined in the *Highway Capacity Manual, 2010 Edition*. Synchro worksheets for the study intersections are included in Appendix H. A summary of the intersection analyses for the Saturday late night peak hour is presented in Table 2. As this table indicates, all study intersections are expected to operate at adopted levels of service (LOS D or better) overall during the Friday peak hour under all analysis conditions.

Table 2: Friday Peak Hour Intersection Capacity Analysis							
Intersection	Traffic Control	Overall LOS/Delay	Approach LOS				
			NB	SB	EB	WB	
<i>Existing Conditions (Background Conditions) [Future Total Conditions]</i>							
Dade Boulevard & 23 rd Street	Signalized ⁽¹⁾	B/19.4 sec (B/19.7 sec) [C/20.6 sec]	B (B) [C]	B (B) [B]	N/A	C (C) [C]	
Park Avenue & 23 rd Street	Two-Way Stop-Controlled	(2)	B (B) [B]	B (B) [B]	A (A) [A]	A (A) [A]	
Liberty Avenue & 23 rd Street	Two-Way Stop-Controlled	(2)	B (B) [N/A] ⁽⁴⁾	A (A) [A]	A (A) [A]	A (A) [A]	
Collins Avenue & 23 rd Street	Signalized ⁽³⁾	C/26.7 sec (C/27.3 sec) [C/27.4 sec]	C (C) [C]	C (C) [C]	D (D) [D]	D (D) [D]	E (E) [E]
Park Avenue & 22 nd Street	One-Way Stop-Controlled	(2)	A (A) [A]	A (A) [A]	N/A	A (A) [A]	
Liberty Avenue & 22 nd Street	One-Way Stop-Controlled	(2)	N/A	A (A) [N/A] ⁽⁴⁾	A (A) [N/A] ⁽⁴⁾	A (A) [N/A] ⁽⁴⁾	
Collins Avenue & 22 nd Street	Signalized	A/8.3 sec (A/8.3 sec) [A/8.5 sec]	A (A) [A]	A (A) [A]	D (D) [D]	E (F) [F]	
Washington Avenue & Dade Boulevard	Signalized	B/11.0 sec (B/11.6 sec) [B/11.6 sec]	C (C) [C]	N/A	A (A) [A]	A (A) [A]	
Washington Avenue & Washington Court	One-Way Stop-Controlled	(2)	A (A) [A]	A (A) [A]	N/A	A (A) [A]	
Washington Avenue & 21 st Street	Signalized	A/0.2 sec (A/0.2 sec) [A/0.2 sec]	A (A) [A]	A (A) [A]	N/A	A (A) [A]	
Park Avenue & 21 st Street	All-Way Stop-Controlled	A/7.8 sec (A/7.9 sec) [A/8.0 sec]	A (A) [A]	A (A) [A]	A (A) [A]	A (A) [A]	
Project Driveway & Park Avenue	One-Way Stop-Controlled	(2)	[A]	[A]	N/A	[B]	

Notes:

- (1) HCM 2000 utilized for analysis of this intersection, as the pedestrian only phase does not adhere to NEMA/HCM 2010 evaluation requirements and cannot be analyzed in HCM 2010.
- (2) Overall intersection LOS is not defined, as intersection operates under stop-control conditions.
- (3) HCM 2000 utilized for analysis as this intersection operations as a five-legged intersection does not strictly adhere to NEMA/HCM 2010 evaluation requirements and cannot be analyzed in HCM 2010.
- (4) Approach removed, as part of Liberty Avenue roadway closure.

23rd STREET AND PARK AVENUE INTERSECTION REVIEW

The City requested that intersection alternatives and improvements be examined at the intersection of 23rd Street and Park Avenue, due to the skewed roadway geometry on 23rd Street and as only 80 feet separates the intersections of 23rd Street at Park Avenue and 23rd Street at Dade Boulevard. Two (2) alternatives were examined including (1) a roundabout at the intersection and (2) northbound right-turn only at the intersection.

Roundabout Alternative

A conceptual two-lane roundabout alternative was examined and is depicted in Figure 8. The roundabout would provide storage for approximately one (1) vehicle at the westbound approach at the intersection of 23rd Street and Dade Boulevard. Limited storage would result in the westbound queue blocking the rotary portion of the roundabout. Furthermore, the roundabout would encroach into the Collins Canal, requiring culvert modifications. Additional right-of-way would also be required including the gas station on the north side of 23rd Street and the multi-family residential building on the west side of Park Avenue to accommodate the roundabout. Modifications to the proposed parking garage would be required as a portion of the roundabout encroaches into the northwest quadrant of the parcel. Based on these issues, this alternative is not recommended for further study or implementation.

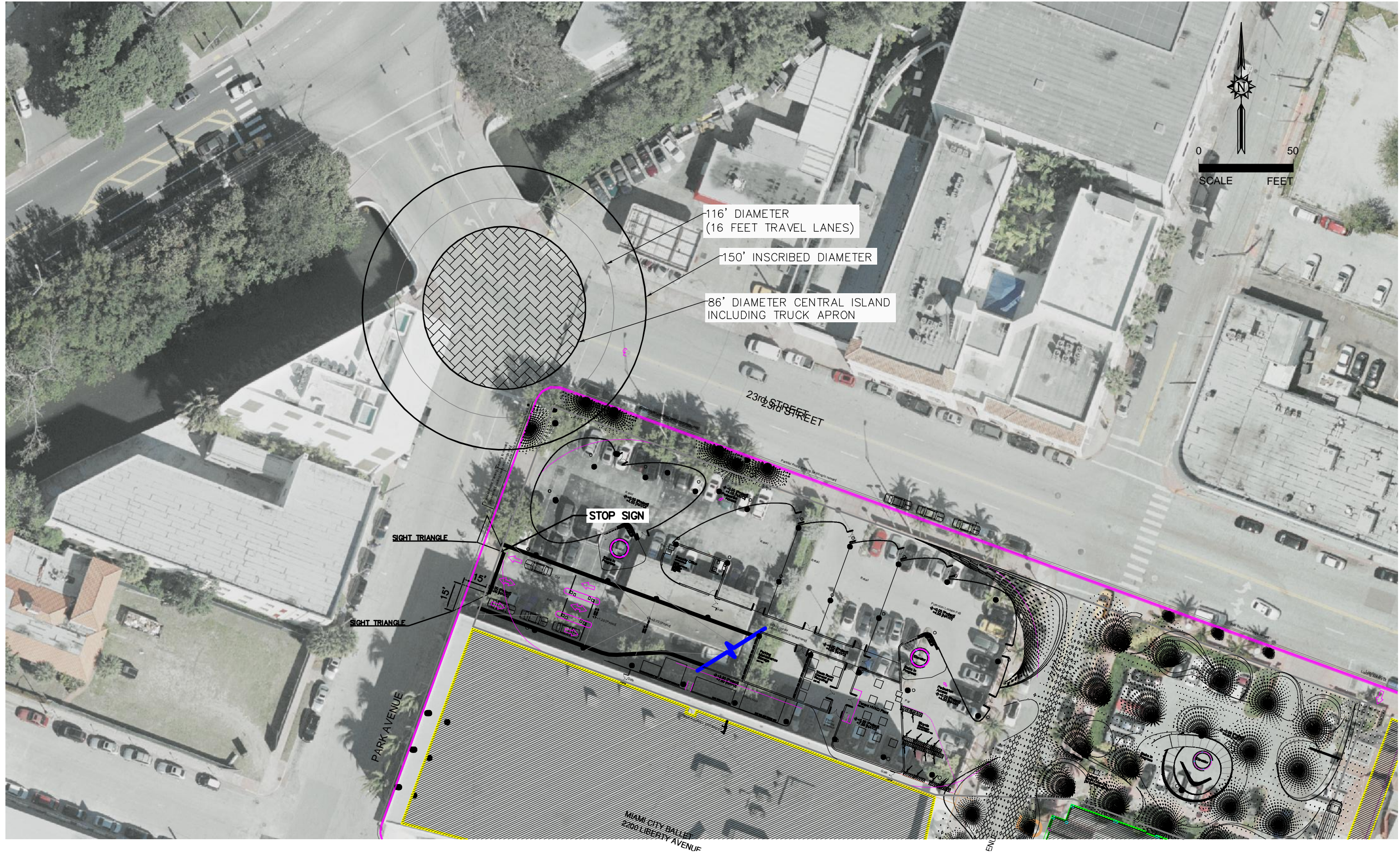
Park Avenue Northbound Right-Turn Only Alternative

This alternative proposes a right-turn only movement at the northbound approach of 23rd Street and Park Avenue while prohibiting the northbound left-turn movement. Under existing conditions, only 80 feet of storage is provided for the westbound approach of 23rd Street between Dade Boulevard and Park Avenue. This improvement would eliminate the short storage length. Additionally, the northbound left-turn movement experiences limited driver reaction time in crossing the eastbound lanes of 23rd Street due to the short distance between Dade Boulevard and Park Avenue. A conceptual sketch of this improvement is provided as Figure 9.

A capacity analysis was prepared for this alternative. The northbound left-turn traffic, project trip distribution, and project traffic assignment were modified to account for this condition and are presented as Figures 10 through 12.

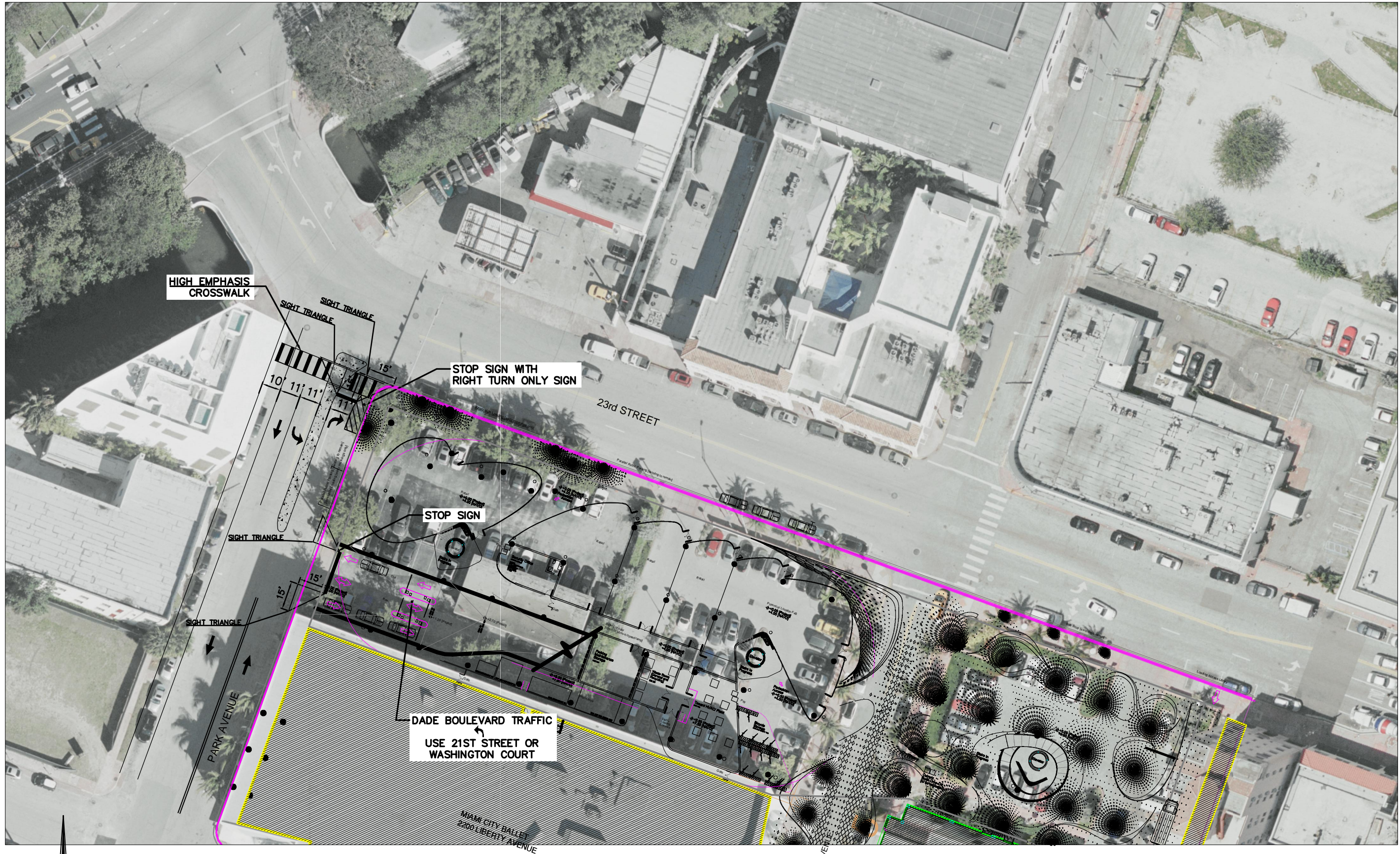
The peak hour future traffic volumes accounting for this alternative during the Friday peak hour are shown in Figure 13. Volume development worksheets for the impacted study intersections are included in Appendix I.

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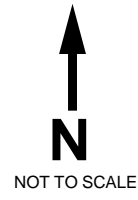


23rd Street and Park Avenue MIAMI BEACH FLORIDA		Roundabout Alternative		DESIGN ENGINEER: Kimley-Horn and Associates, Inc. © 2012 KIMLEY-HORN AND ASSOCIATES, INC. 2200 NW 33rd Avenue, Suite 109, Fort Lauderdale, FL 33309 PHONE (954) 535-5100 FAX (954) 739-2247 WWW.KIMLEY-HORN.COM CA 0000696	
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<p>DATE:</p>	<p>EJW</p>
<p>Northbound Right-turn Only Alternative</p>	
<p>23rd Street and Park Avenue MIAMI BEACH FLORIDA</p>	
<p>DATE</p>	<p>09-10-2012</p>
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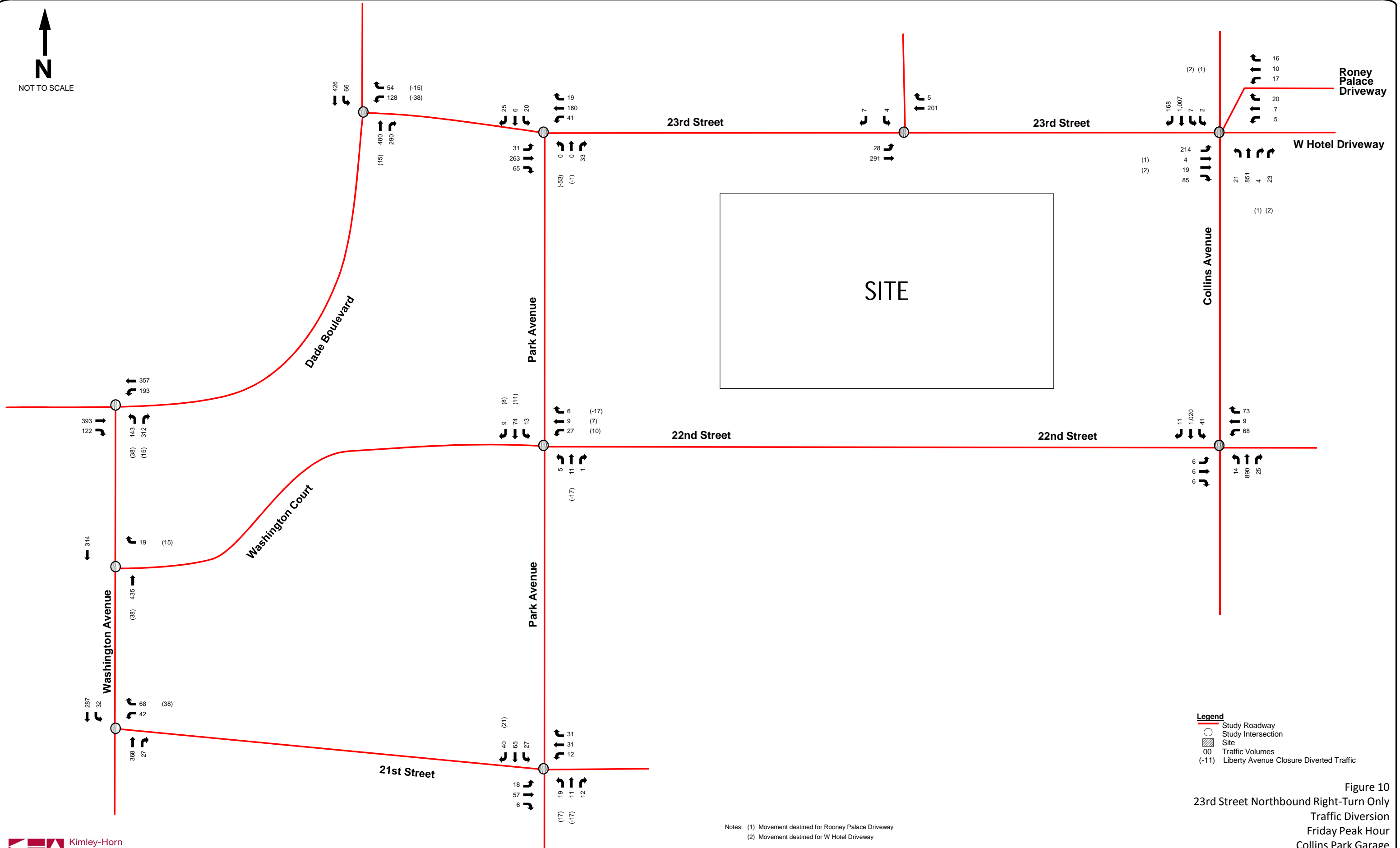
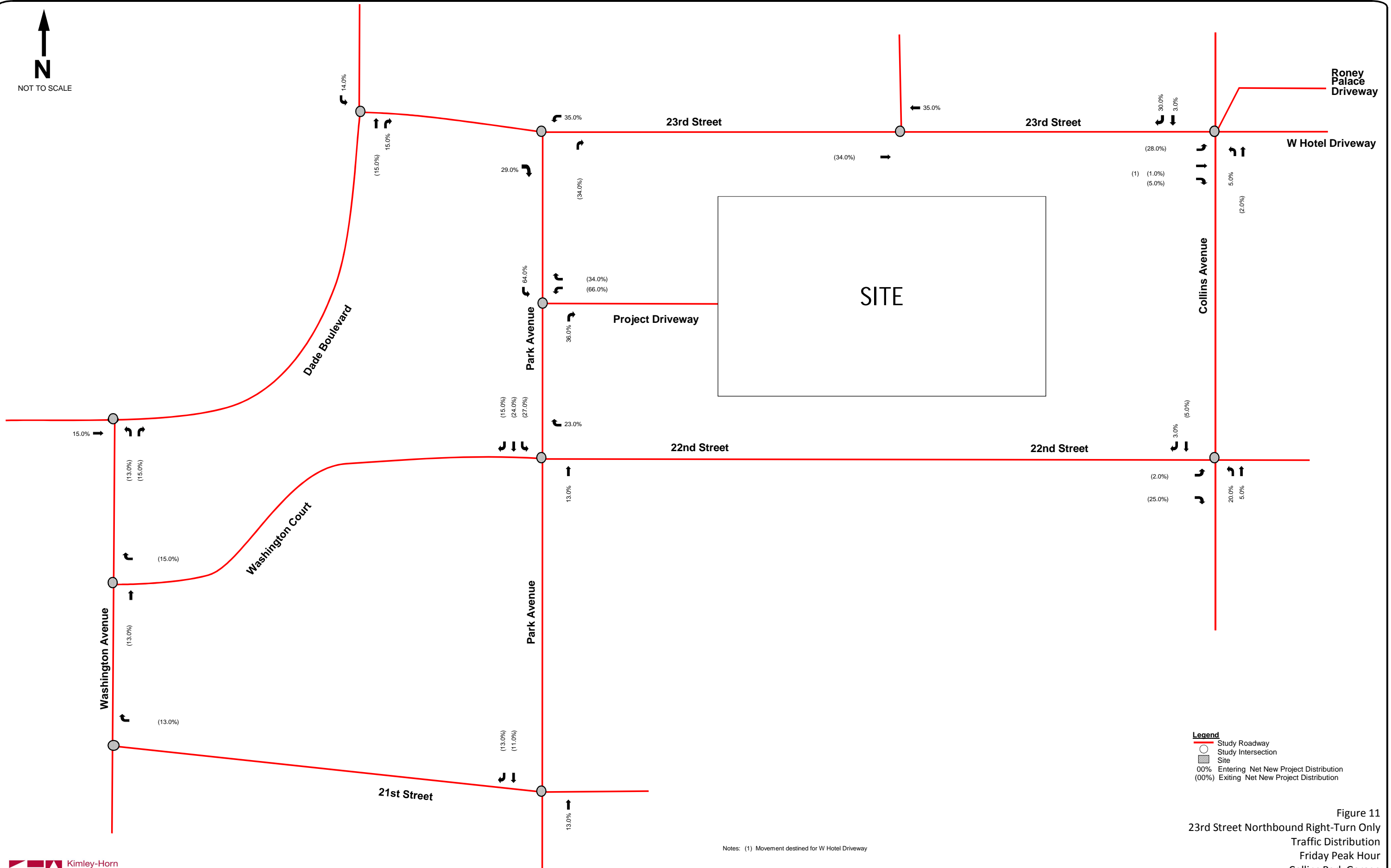


Figure 10
 23rd Street Northbound Right-Turn Only
 Traffic Diversion
 Friday Peak Hour
 Collins Park Garage
 Miami Beach, Florida



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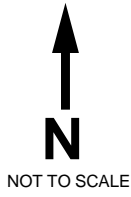


Notes: (1) Movement destined for W Hotel Driveway

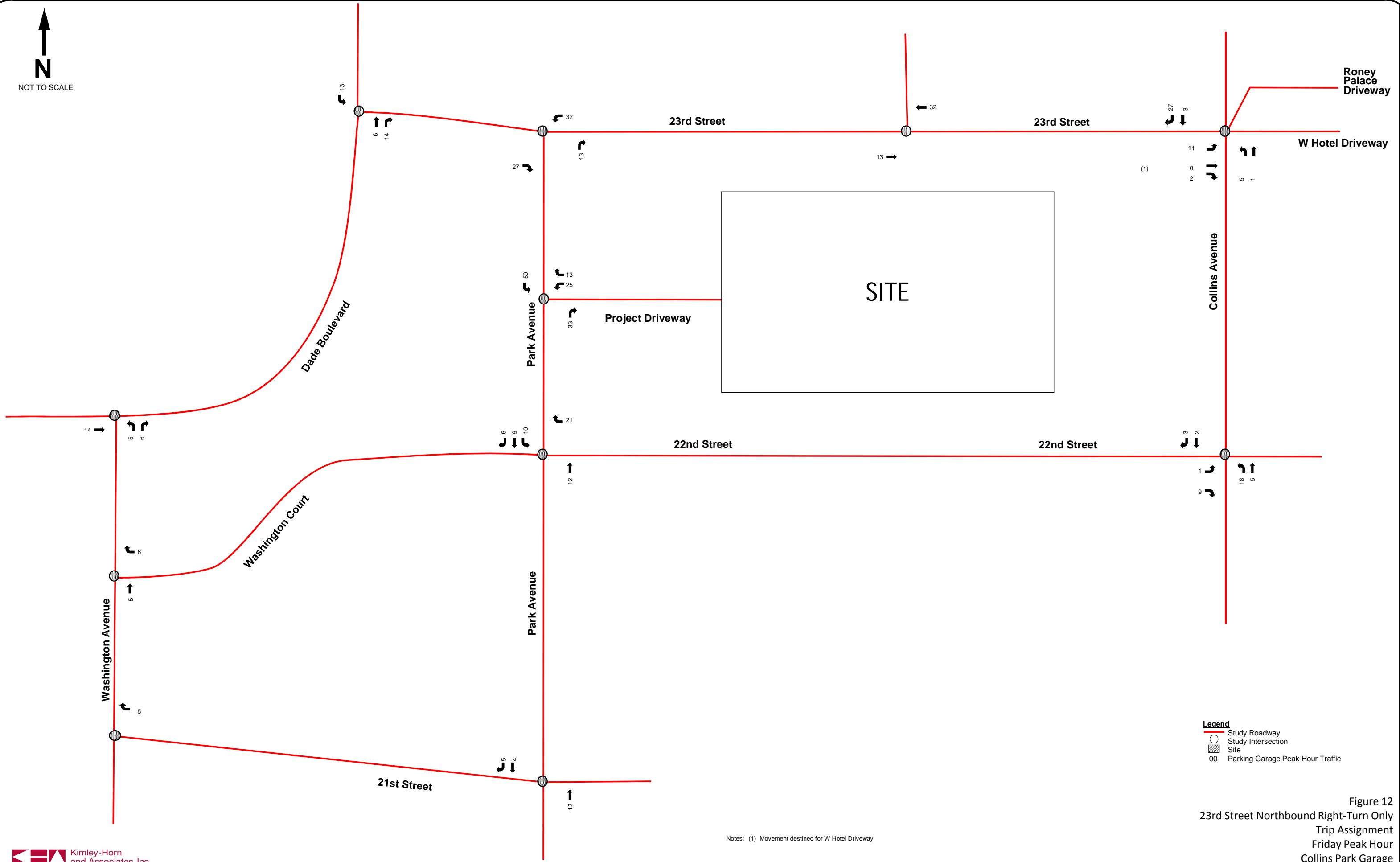
Legend

- Study Roadway
- Study Intersection
- Site
- 00% Entering Net New Project Distribution
- (00%) Exiting Net New Project Distribution

Figure 11
 23rd Street Northbound Right-Turn Only
 Traffic Distribution
 Friday Peak Hour
 Collins Park Garage
 Miami Beach, Florida



NOT TO SCALE



Notes: (1) Movement destined for W Hotel Driveway

Figure 12
23rd Street Northbound Right-Turn Only
Trip Assignment
Friday Peak Hour
Collins Park Garage
Miami Beach, Florida



NOT TO SCALE

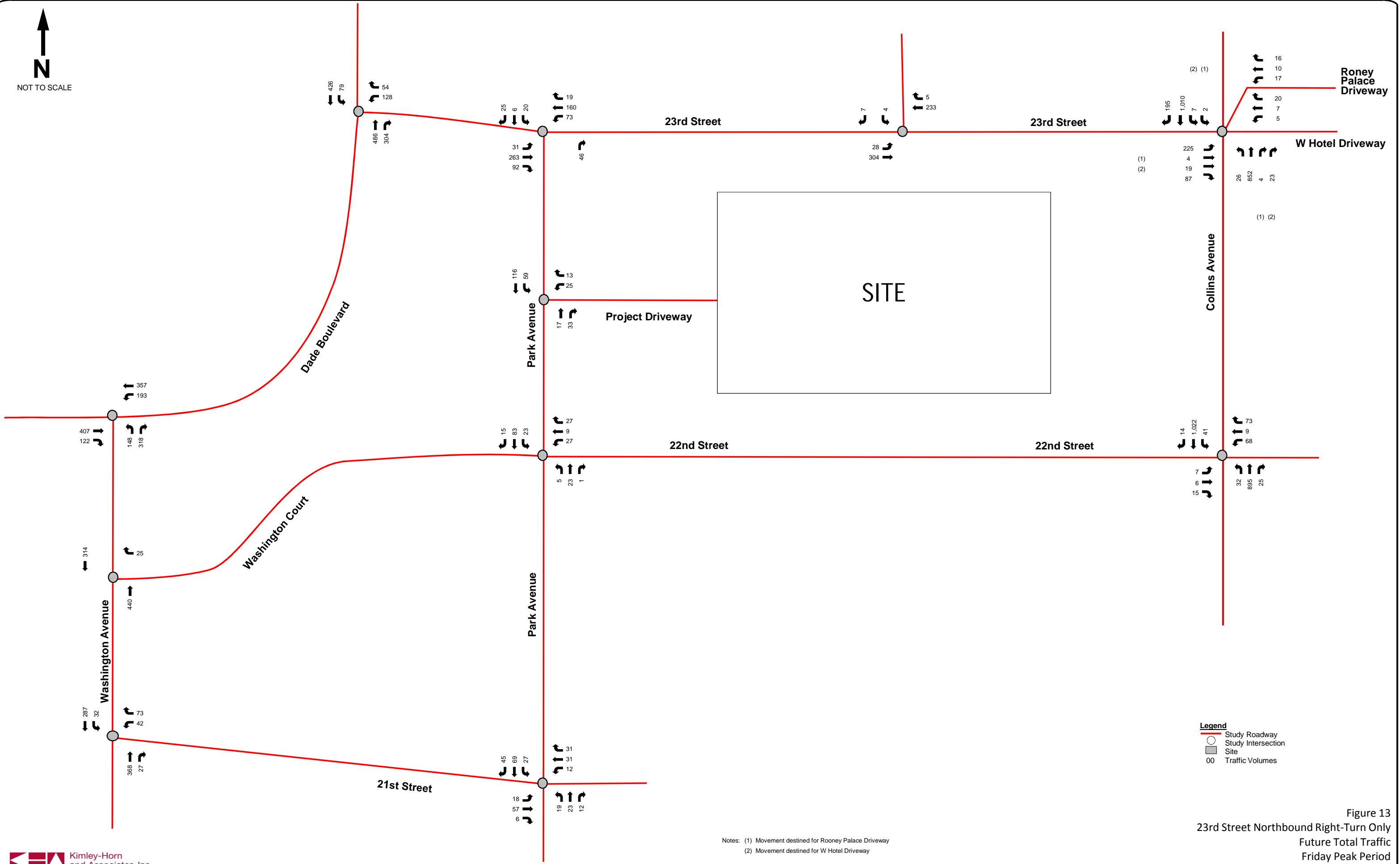


Figure 13
23rd Street Northbound Right-Turn Only
Future Total Traffic
Friday Peak Period
Collins Park Garage

The operating conditions were analyzed for the five (5) study intersections impacted by the right-turn only at the northbound approach of 23rd Street and Park Avenue. The analysis was prepared using *Trafficware's SYNCHRO 8.0* software. Synchro calculation worksheets for the study intersections are included in Appendix I. A summary of the intersection analyses for the Friday peak hour is presented in Table 3. All the study intersections are expected to operate at adopted levels of service (LOS D or better) overall during the Friday peak hour under this alternative condition. Therefore, only allowing a northbound right-turn movement at the intersection of 23rd Street and Park Avenue is feasible.

Table 3: Park Avenue Northbound Right-Turn Only Alternative Friday Peak Hour Intersection Capacity Analysis						
Intersection	Traffic Control	Overall LOS/Delay	Approach LOS			
			NB	SB	EB	WB
<i>[Future Total Conditions]</i>						
Dade Boulevard & 23 rd Street	Signalized ⁽¹⁾	[B/18.4 sec]	[B]	[B]	N/A	[D]
Park Avenue & 23 rd Street	Two-Way Stop-Controlled	⁽²⁾	[A]	[B]	[A]	[A]
Park Avenue & 22 nd Street	One-Way Stop-Controlled	⁽²⁾	[A]	[A]	N/A	[A]
Washington Avenue & Dade Boulevard	Signalized	[B/12.2 sec]	[C]	N/A	[B]	[A]
Washington Avenue & Washington Court	One-Way Stop-Controlled	⁽²⁾	[A]	[A]	N/A	[A]
Washington Avenue & 21 st Street	Signalized	[A/0.2 sec]	[A]	[A]	N/A	[A]
Park Avenue & 21 st Street	All-Way Stop-Controlled	[A/8.0 sec]	[A]	[A]	[A]	[A]
Project Driveway & Park Avenue	One-Way Stop-Controlled	⁽²⁾	[A]	[A]	N/A	[B]

Notes:

- ⁽¹⁾ HCM 2000 utilized for analysis of this intersection, as the pedestrian only phase does not adhere to NEMA/HCM 2010 evaluation requirements and cannot be analyzed in HCM 2010.
- ⁽²⁾ Overall intersection LOS is not defined, as intersection operates under stop-control conditions.

ENTRY GATE ANALYSIS

As previously indicated, access to the parking garage is provided by a driveway located on Park Avenue. The driveway will consist of three (3) lanes including an exclusive ingress lane, egress lane, and a reversible ingress/egress lane. It is assumed that access to the parking garage will be provided by a push button ticket splitter device. A queuing assessment consistent with the methodology outlined in Van Nostrand Reinhold's *Parking Structures: Planning, Design, Construction, Maintenance, and Repair*, 1989, was performed for traffic entering the parking garage. Two (2) scenarios were analyzed, including (1) typical peak hour parking demand (18.77% or 92 vehicles) consistent with peak hour demand calculated in the parking garage peak hour demand section, (2) major event parking demand. The major event parking demand was estimated for peak hour demand based on the Miami International Boat Show & Strictly Sail (Thursday, February 17, 2012 to Monday, February 20, 2012) event and South Beach Wine & Food Festival (Friday, February 24, 2012 to Sunday, February 26, 2012). In order to provide a conservative analysis, the major event parking demand was prepared for the highest entry demand (63.01%) based on peak hour parking demand from three (3) City of Miami Beach parking garages including:

- G5 (17th Street and Pennsylvania Avenue Garage)
- G7 (City Hall Garage – 18th Street and Meridian)
- G9 (Pennsylvania Avenue – 17th Street)

Note that, for the highest entry demand scenario, two (2) lanes are required for entering the parking garage. Results of the analysis are summarized in Table 4. Detailed parking data and analyses are provided in Appendix J.

Table 4: Parking Demand Entry Gate Analysis

Scenario	Parking Control	Number of Entry Lanes (vph)	Service Rate (vph)	Queue ⁽¹⁾	Total Available Queue Storage
Typical Peak Hour Parking Demand	Ticket Spitter – Push Button	1	257	1 vehicle	1 vehicle
Major Event Peak Hour Parking Demand	Ticket Spitter – Push Button	2	514	1 vehicle	2 vehicles

Note:

⁽¹⁾ Number of vehicles queued behind the service position per lane.

MULTI-MODAL CONSIDERATIONS

Mass Transit Review

No bus stops will be directly impacted by the Liberty Avenue roadway closure. However, one (1) bus stop is located along the south side of 23rd Street just west of Liberty Avenue. This bus stop serves Route 123/South Beach Local. Route 123/South Beach Local operates on Collins Avenue (SR A1A), 21st Street, 23rd Street, Washington Avenue, Dade Boulevard, and Park Avenue in the vicinity of the project. This route operates with 30-minute headways throughout the day. Detailed route information and headway data is provided in Appendix K.

On-Site Bicycle Parking

Bicycle parking will be provided on-site. Both short-term and long-term parking will be considered. However, at time of report publication, specific bicycle parking allocation is yet to be determined.

On-Street Parking

Approximately 18 on-street parking spaces will be removed along Liberty Avenue as a result of the roadway closure. Approximately six (6) on-street parking spaces will be gained along 23rd Street as surface parking lot driveways will be removed as a result of the parking garage development. Therefore, parking garage development will result in a net loss of approximately 12 on-street parking spaces.

CONCLUSIONS

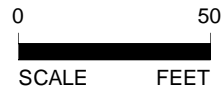
This analysis has addressed traffic-related impacts associated with the proposed development project consisting of a 490-space parking garage (+/-) with approximately 20,000 square-feet of ancillary retail space. Based on the results of the analysis, the following is concluded:

- The project will close Liberty Avenue between 22nd Street and 23rd Street. The closure is not expected to have an adverse impact on traffic in the study area.
- Intersection capacity analyses indicate that all the study intersections are expected to continue to operate at LOS D or better after the opening of the project.
- A northbound right-turn only treatment at the intersection of 23rd Street and Park Avenue was determined feasible as the operating results appear adequate.
- Two (2) entry lanes into the parking garage are required for major event conditions.
- No bus stops will be directly impacted by the Liberty Avenue roadway closure.
- Bicycle parking will be provided on-site. Both short-term and long-term parking will be considered. However, at time of report publication, specific bicycle parking allocation is yet to be determined.
- A net loss of approximately 12 on-street parking spaces will result from the Liberty Avenue street closure.

In conclusion, this project is not expected to adversely impact traffic operation below adopted standards.

APPENDIX A:
Site Plan

Drawing name: K:\FTL_TPTO\043439000-Collins Park Garage\CADD\07.13.12 - Site Plan\Site plan 10 12.dwg Layout1 Oct 10, 2012 8:59am by: adrian.dabkowski
 This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



23rd Street and Park Avenue MIAMI BEACH FLORIDA		Site Plan		DESIGN ENGINEER: Kimley-Horn and Associates, Inc. © 2012 KIMLEY-HORN AND ASSOCIATES, INC. 5200 NW 33rd Avenue, Suite 109, Fort Lauderdale, FL 33309 PHONE (954) 535-5100 FAX (954) 739-2247 WWW.KIMLEY-HORN.COM CA 0000696	
DATE	09-10-2012	SCALE	AS NOTED	DESIGNED BY	ID
PROJECT NO.		DRAWN BY	ID	CHECKED BY	EJW
SHEET NUMBER		FLORIDA REGISTRATION NUMBER:		DATE:	
REVISIONS		No.		DATE	BY

APPENDIX B:
Methodology Correspondence



Memorandum

■
5200 NW 33rd Avenue
Suite 109
Fort Lauderdale, Florida
33309

To: Xavier Falconi, P.E.
City of Miami Beach

From: Adrian K. Dabkowski, P.E., PTOE
John J. McWilliams, P.E.

CC: Richard Lorber, AICP, City of Miami Beach
Jose Gonzalez, P.E., City of Miami Beach
Josiel Ferrer-Diaz, E.I., City of Miami Beach
Thais Vieira, R.A., City of Miami Beach
Gustavo Berenblum, AIA, Berenblum Busch Architecture
Eva Tiedemann, Zaha-Hadid

Date: August 3, 2012

Subject: Collins Park Garage
Traffic Impact Analysis Methodology

The purpose of this memorandum is to summarize our traffic impact study methodology for the proposed Collins Park Garage located on the south side of 23rd Street between Park Avenue and west of Liberty Avenue. The proposed development plan consists of a 450-space parking garage and ancillary retail space. A site plan is provided in Attachment A. Currently, the site is occupied by surface parking lots. Based on our July 3, 2012 meeting, the following study parameters are proposed:

Data Collection

The peak analysis period selected for this study will be based on 96-hour continuous traffic counts on Collins Avenue (SR A1A) between 22nd Street and 23rd Street and Liberty Avenue between 22nd Street and 23rd Street. **The Florida Department of Transportation (FDOT) peak season conversion factor was applied to the traffic counts to adjust the traffic to peak season volumes. The appropriate peak season conversion factor for the weeks when the traffic counts were collected is 1.07.** The 96-hour traffic count was conducted from Thursday, July 12, 2012 through Sunday, July 15, 2012. The traffic data revealed that the peak two-hour period along Collins Avenue occurred on Friday from 8:15 P.M. to 10:15 P.M. The peak two-hour period for Liberty Avenue occurred on Saturday morning (Friday late night) from 12:30 A.M. to 2:30 A.M. Traffic count data **and FDOT peak season volumes are** contained in Attachment B.

The parking garage peak hour traffic information for the 17th Street parking garage indicates that the average Friday peak hour for the two months of April and May 2012 occurs between 8:00 P.M. to 9:00 P.M with the average Saturday peak hour occurring between 7:00 P.M. and 8:00 P.M. Detailed parking data is provided in Attachment C.

Based on this information, turning movement count data will be collected on Friday from 8:15 P.M. to 10:15 P.M.

All traffic counts will be adjusted to account for seasonality using the appropriate FDOT seasonal factors. Signal timing information will be obtained from Miami-Dade County Public Works and Waste Management Department – Traffic Signals and Signs Division. All background documentation collected will be provided in the Appendix of the traffic impact study.

Parking Garage Peak Hour Traffic (Trip Generation)

Public parking garage are not trip generators; rather, they divert existing traffic or accommodate traffic from traffic generating land uses. Parking garage peak hour traffic volumes was developed based on peak hour parking turnover rates developed from three (3) parking garages including:

- G5 (17th Street and Pennsylvania Avenue Garage)
- G7 (City Hall Garage – 18th Street and Meridian)
- G9 (Pennsylvania Avenue – 17th Street)

These parking garages serve similar area land uses (Lincoln Road, New World Symphony, and Miami Convention Center) as the Collins Park Garage (Miami City Ballet and Miami Beach Branch Library).

Parking turnover rate rates were calculated based on the parking data provided by the City of Miami Beach Parking Department during the months of April and May 2012. The average daily, average weekday, average weekend, average Friday, and average Saturday turnover rates were examined. The average Friday turnover rate represents the highest combination of entry (18.77%) and exit (7.75%) turnover rates, these rates will be used to determine entering and exiting traffic for the Collins Park Garage. Detailed parking data is provided in Appendix C.

Trip Distribution

Trip distribution will be determined based on actual turning movements counts collected at the study area intersections. The traffic impact study will include graphics of the project traffic assignment and off-site valet trips at the project's driveways and the study intersections.

Study Area

Based on the proposed development plan, the following intersections in addition to the project driveway, are proposed to be analyzed.

- Collins Avenue (SR A1A) and 22nd Street
- Collins Avenue (SR A1A) and 23rd Street
- Liberty Avenue and 22nd Street
- Liberty Avenue and 23rd Street
- Park Avenue and 22nd Street
- Park Avenue and 23rd Street
- Dade Boulevard and 23rd Street
- Dade Boulevard and Washington Avenue/Washington Court
- Washington Avenue and 21st Street
- Park Avenue and 21st Street

Mass Transit Review

A review of the existing mass transit service in proximity to the section of Liberty Avenue proposed for closure will be conducted as part of the analysis. Existing bus service information in the area will be documented in the report.

If impacts or conflicts are identified to area bus stops as a result of the parking garage, strategies will be prepared to mitigate the impact or conflicts on area bus stops.

Background Growth Rate/Major Committed Development

A background growth rate will be calculated based on historic growth trends at nearby Florida Department of Transportation (FDOT) traffic count stations. Additionally, growth rates based on Miami-Dade Metropolitan Planning Organization's (MPO) projected 2005 and 2030 model network volumes will be examined. The higher of the two (2) growth rates will be used in the analysis. Documentation will be provided in the Appendix of the traffic impact study.

Additionally, the City has requested that two (2) committed developments be included as background conditions. The SLS Hotel South Beach and Parc Place proposed developments will be included as committed developments in the analysis.

Florida Department of Transportation currently has Resurfacing, Restoration, and Rehabilitation (3R) project along Collins Avenue (SR A1A) plans will be reviewed to determine any impacts on study area intersections.

Liberty Avenue Closure

As part of this project, Liberty Avenue between 22nd Street and 23rd Street is proposed to be closed to vehicular traffic. Traffic currently utilizing this segment of Liberty Avenue will be reassigned to the adjacent roadway network.

The Liberty Avenue closure will be coordinated with City of Miami Beach Public Works Department, Planning Department, and Miami-Dade County Public Works and Waste Management Department.

Capacity Analysis

Capacity analyses will be conducted for one (1) peak hour for the study intersections. Intersection analyses will be performed using Trafficware's *Synchro 8.0* traffic engineering analysis software which applies Highway Capacity Manual 2010 (HCM) methodology. Capacity analyses will be conducted for three (3) scenarios: existing, build-out year without project (background conditions), and build-out year with project (future total conditions). The build-out year will be specified in the analysis. Future total conditions analysis will include the proposed Liberty Avenue closure between 22nd Street and 23rd Street. Collins Park Garage traffic, Liberty Avenue closure reassigned traffic, and background traffic growth will be factored into the analysis. **Intersection level of service and delay will be provided.**

If intersection capacity deficiencies are identified, strategies and improvements may be developed to attain acceptable levels of service. Improvements such as providing bicycle parking facilities may be considered.

The following figures will be included for the study intersections:

1. Existing conditions
2. Trip distribution
3. Trip assignment (will outline which driveways are used for the various land uses **and including Liberty Avenue closure**)
4. Future background traffic conditions (with growth rate and committed development traffic)
5. Future total traffic conditions (with project **and Liberty Avenue closure**)

Park Avenue and 23rd Street Intersection Operations Analysis

A detailed intersection operations analysis for the intersection of Park Avenue and 23rd Street will be prepared using future total with project traffic volumes. The analysis will consider three (3) scenarios:

1. Existing roadway geometry
2. Roundabout intersection
3. Prohibiting northbound left-turn movements at the intersection of Park Avenue and 23rd Street

Sidra Intersection and *Synchro 8.0* traffic engineering analysis software, which apply Highway Capacity Manual (HCM) methodology, will be used for these analyses to examine level of service and vehicle queuing lengths under future total traffic conditions (with project). **Additionally, a maneuverability analysis utilizing AutoTURN software will be prepared to verify that the City's fire trucks**

will be able to maneuver through the roundabout. The analysis will be coordinated with the City's Fire Department and Public Works Department.

Utilizing the capacity analysis prepared for this intersection, conceptual sketches will be prepared for scenarios 2 or 3 if either of these scenarios is found favorable for implementation.

Entry Gate Analysis

An entry gate analysis will be performed for the parking garage access. The entry gate queuing analysis will be prepared for typical demand and event conditions. The typical conditions will use an entry/exit rate previously mentioned. The event conditions will examine an entry rate of 33.41 percent (33.41%) of the parking capacity and an exit rate of 4.12 percent (4.12%) based on a recent event (Friday May 18, 2012) parking garage turnover rates for G5, G7, and G9. These entry and exit rates will be compared to other event rates for such occurrences as the Boat Show. The higher of the two (2) will be used as the event conditions analysis.

Parking garage data and turnover rate calculations are included in Attachment C.

Entry gate queuing analysis will be conducted consistent with the procedures outlined in *Parking Structures – Planning, Design, Construction, Maintenance, and Repair*, 1989. The purpose of this analysis is to determine any future queue storage deficiencies at the entry gates and provide preliminary recommendations for mitigating these deficiencies.

On-Site Bicycle Parking

Providing on-site bicycle parking will be examined and documented in the report for both short-term and long-term bicycle parking.

Sight Distance Analysis

Sight distance triangles will be provided on the site plan. If deficiencies are identified, strategies and improvements may be developed to mitigate the deficiencies.

On-Street Parking

A review of the existing parking spaces along Liberty Avenue that will be removed due to the proposed closure will be examined and documented in the report. As well as on-street parking modification due to the parking garage access location will also be documented in the report and coordinated with the City's Parking Department.

Maneuverability Analysis

A maneuverability analysis for loading maneuvers along 23rd Street and the access to the structured mechanical parking garage will be performed utilizing

AutoTURN software. Deficiencies related to maneuverability, traffic flow, and vehicular conflicts will be documented in a technical memorandum. **Figures will be provided to scale.**

Valet Analysis

Valet service is being contemplated for the parking garage. However at this time a final discussion has not been made. If it is decided that valet service will be provided, an analysis will be developed, in order to ensure that queues do not spill back into public right-of-way.

If valet service is provided, trip generation estimates will be utilized to provide for two (2) scenarios including typical/average scenario and highest demand (peak hour of generator) scenario. The typical/average demand scenario will be based on half of the highest demand scenario. The valet operations queuing analysis will be conducted consistent with procedures described in the Institute of Transportation Engineers (ITE) *Transportation and Land Development*, 1988. A traffic circulation figure will be prepared to illustrate the valet routes and will be included as part of a technical memorandum documenting analysis assumptions and results, including the required number of valet attendants to service the facility under both typical and highest demand. Hours of operation will also be documented.

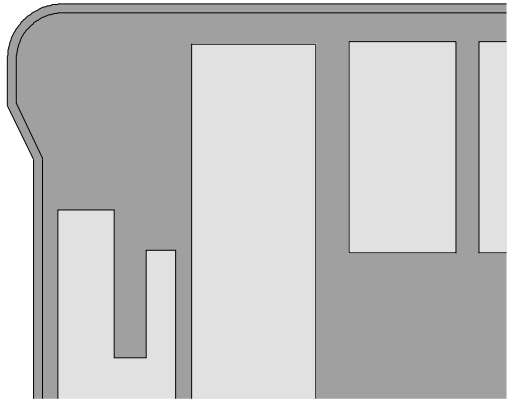
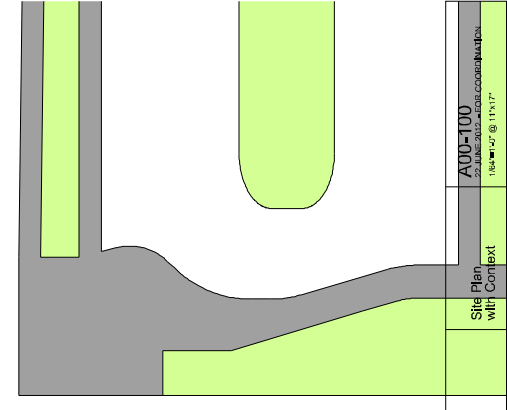
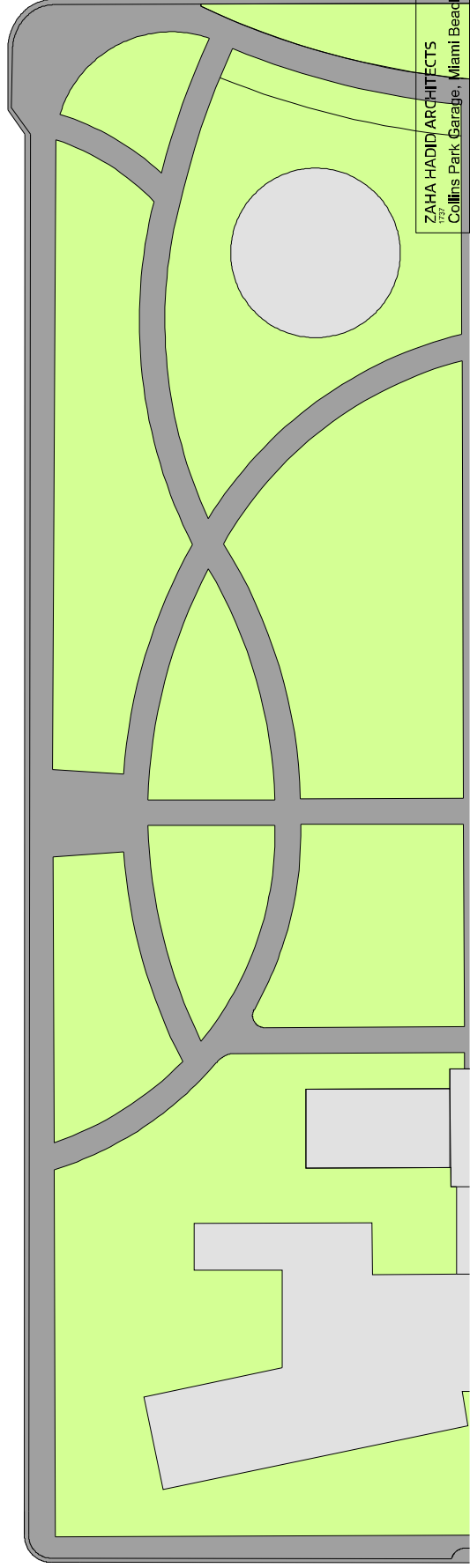
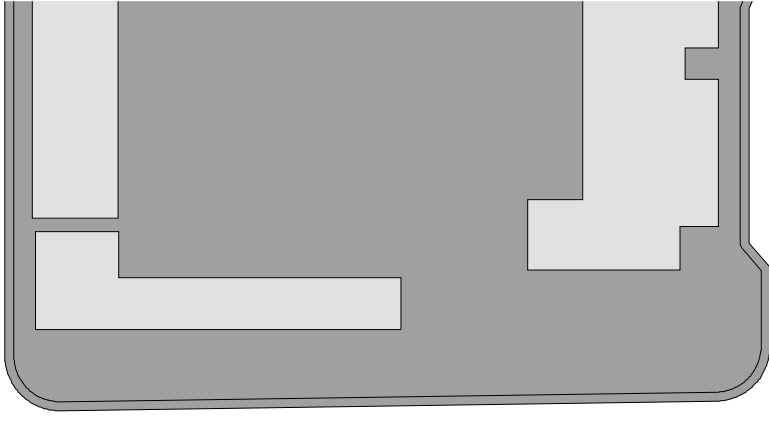
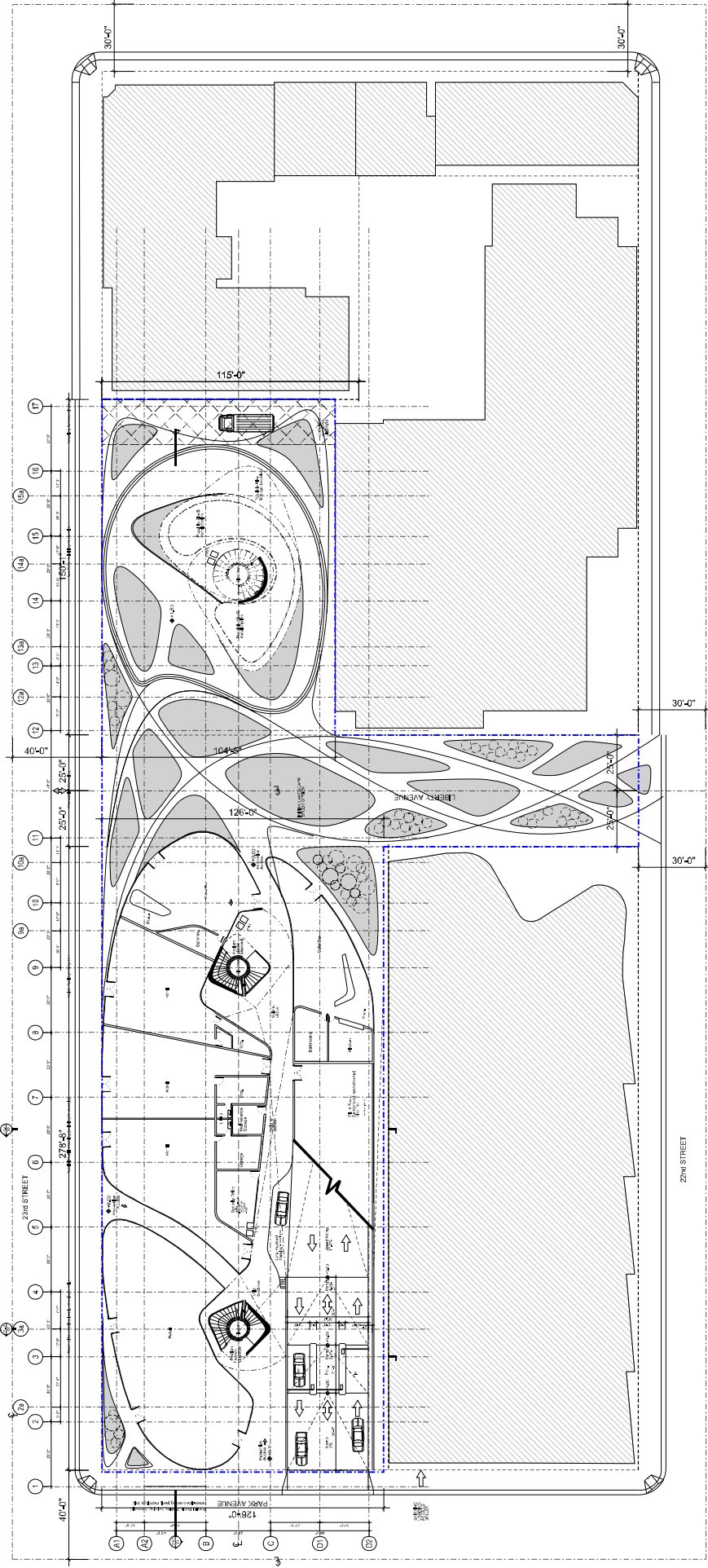
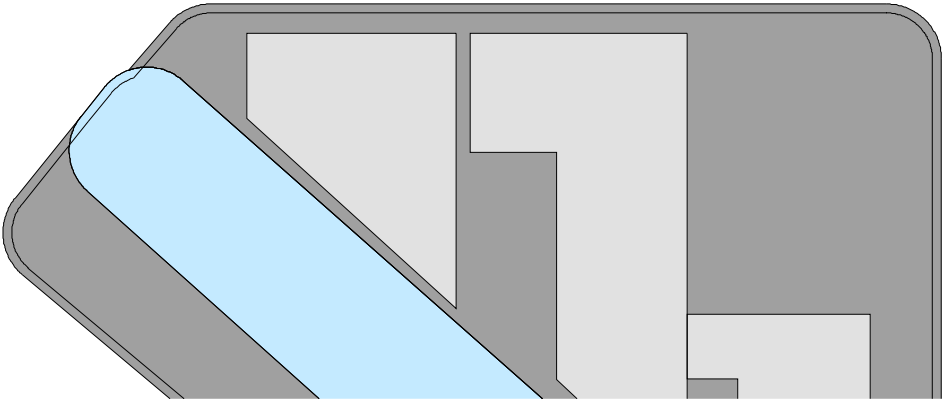
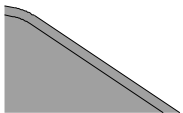
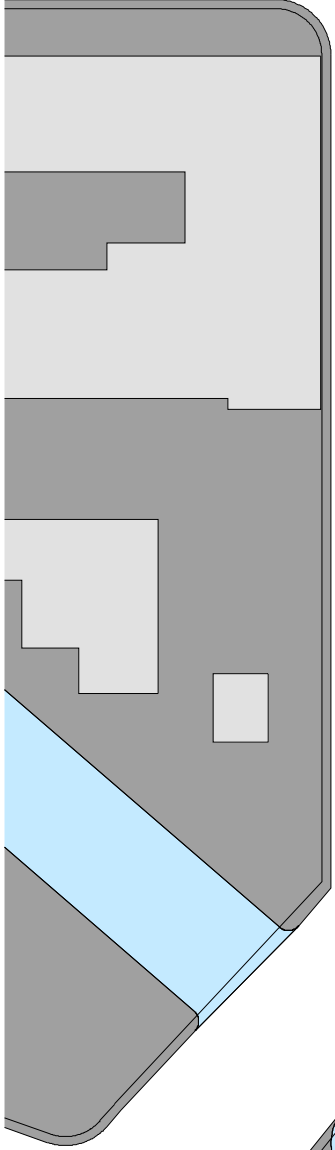
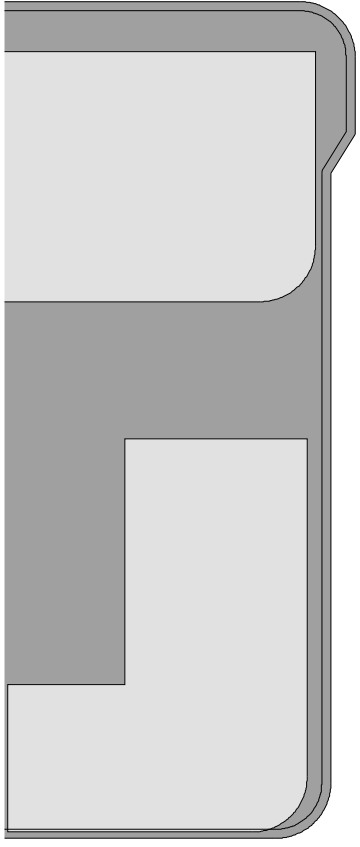
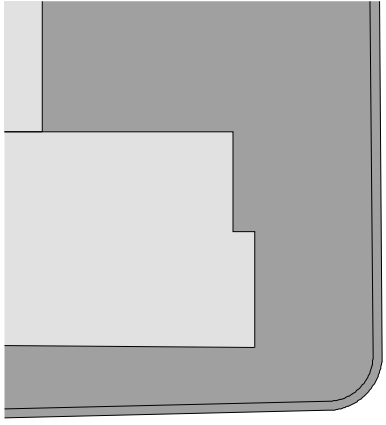
Documentation

The results of the traffic analysis will be summarized in a report. The report will include supporting documents including signal timings, lane geometry, and software output sheets, entry gate analysis, and site plan of the Liberty Avenue closure. The report will also include text and graphics necessary to summarize the assumptions and analysis. If intersection capacity deficiencies are identified, strategies and improvements will be developed to attain City of Miami Beach adopted levels of service.

Separate documents will be prepared for the valet analysis (if provided) and maneuverability analysis. **One (1) original and 12 copies of the traffic engineering document sets will be provided.**

Four (4) CDs and electronic copy of the reports will be provided as part of the submittal package. Additionally, the Synchro analysis files will be provided on the CDs. The submittal package will also include the latest site plan to scale.

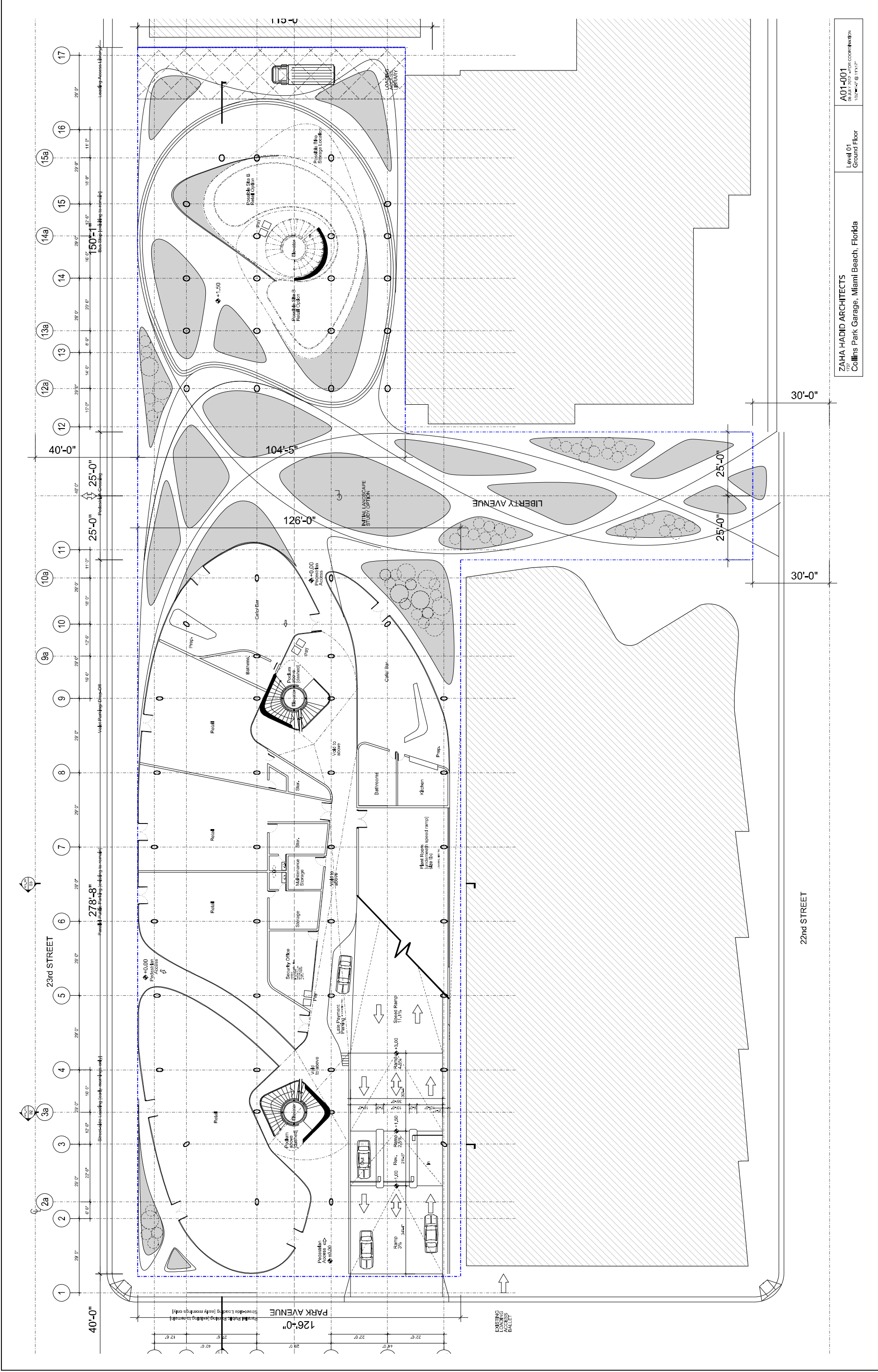
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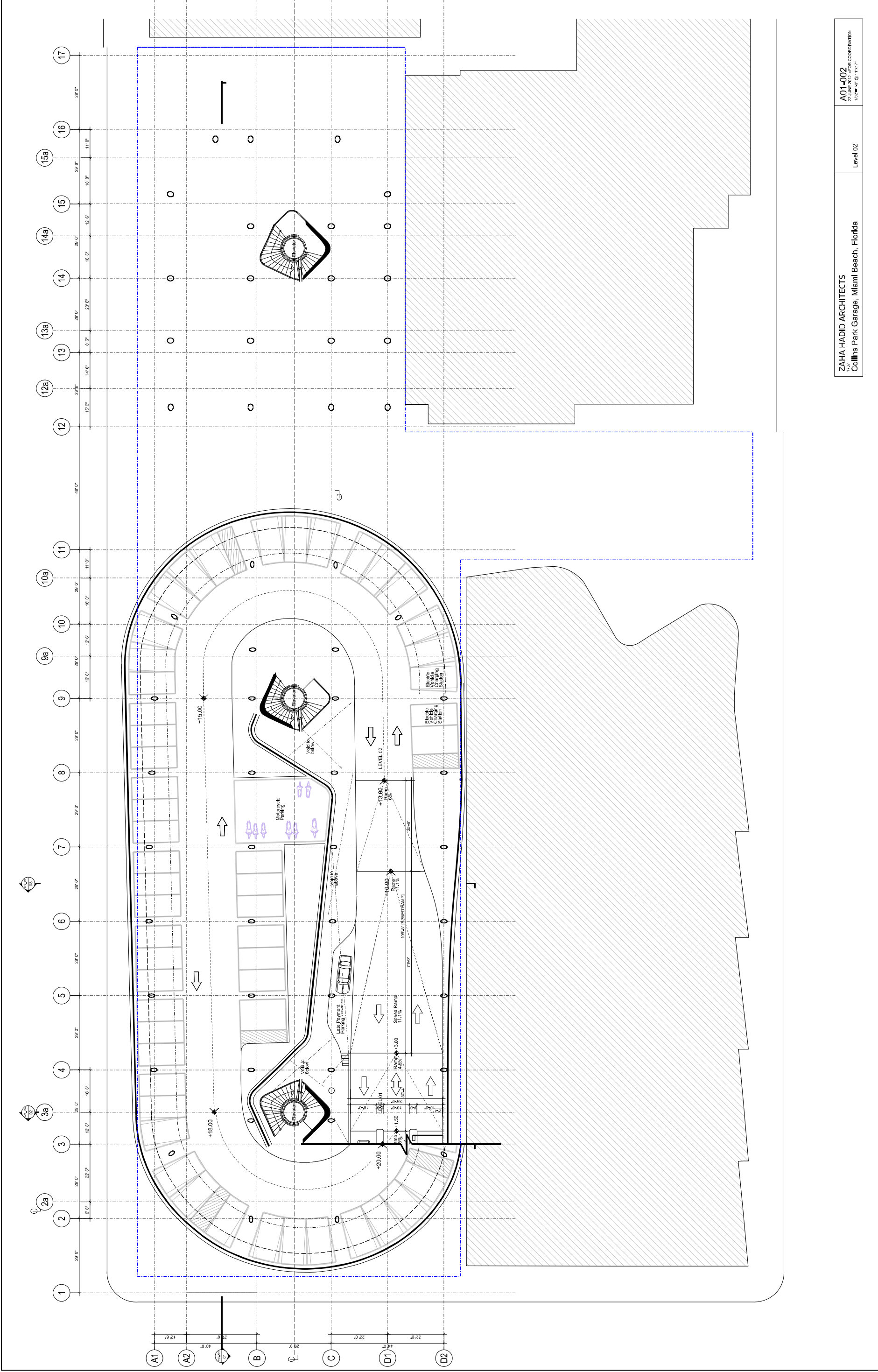


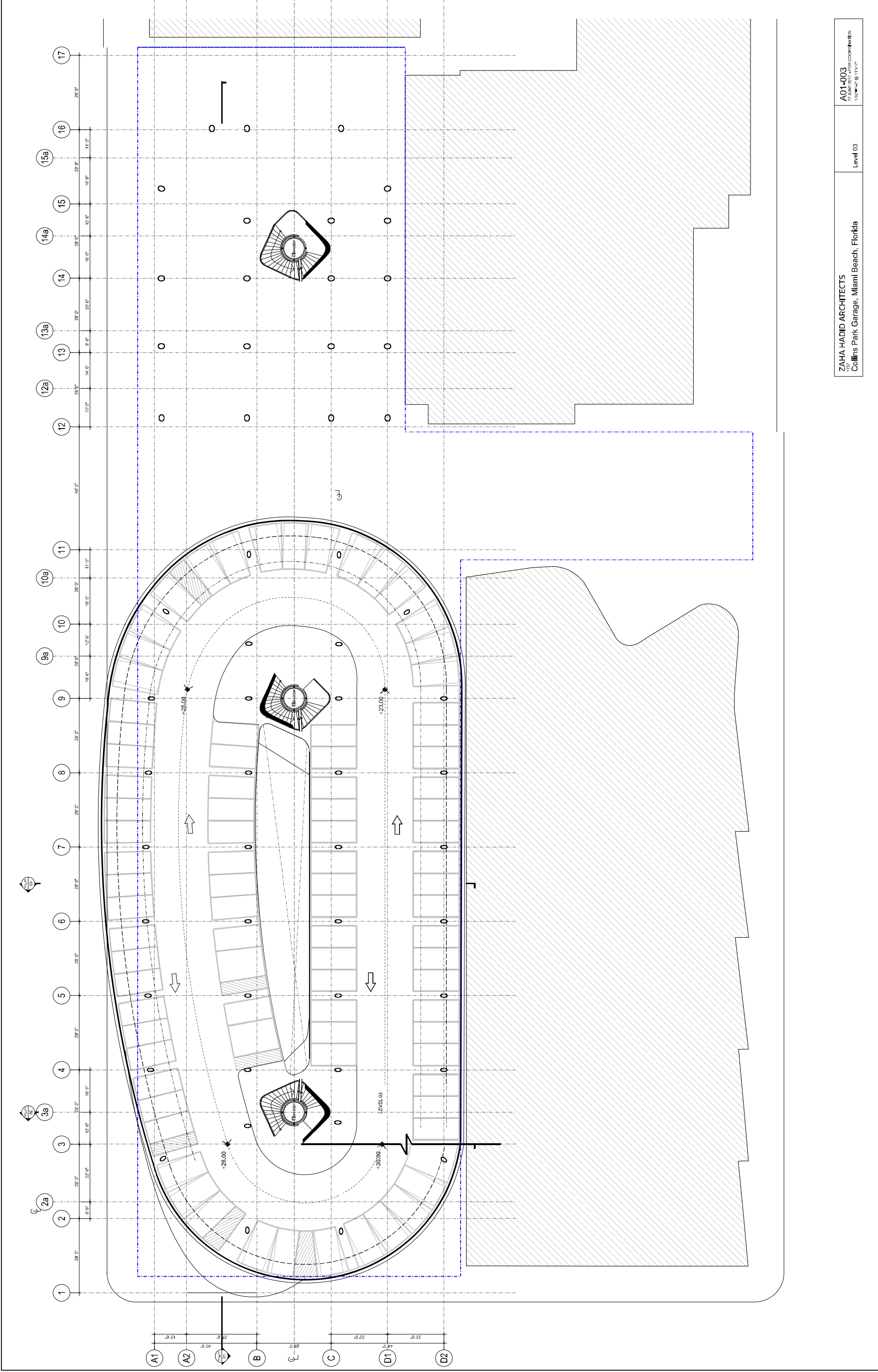
ZAHA HADID ARCHITECTS
FOR
Collins Park Garage, Miami Beach, Florida

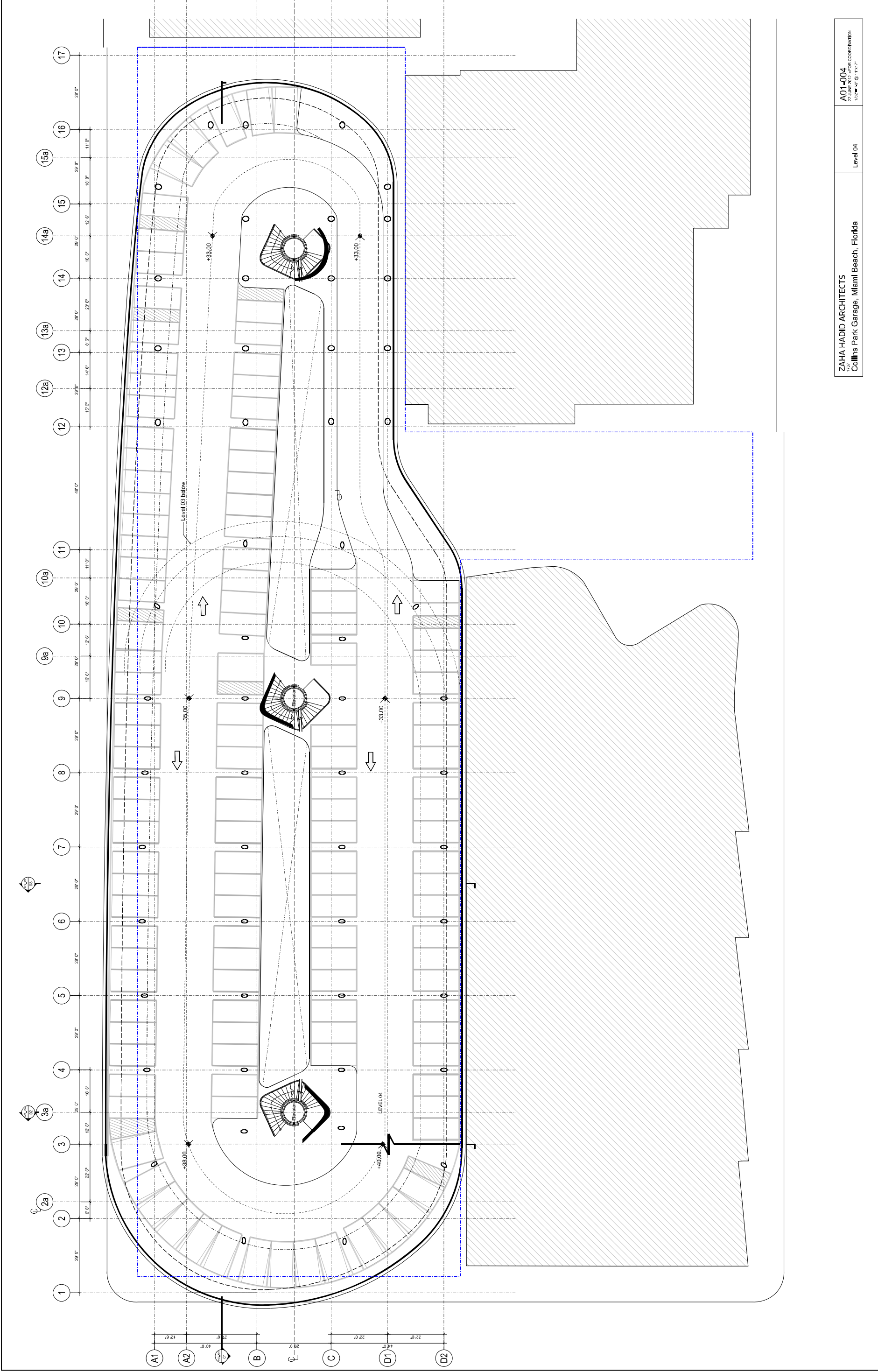
Site Plan
With Context

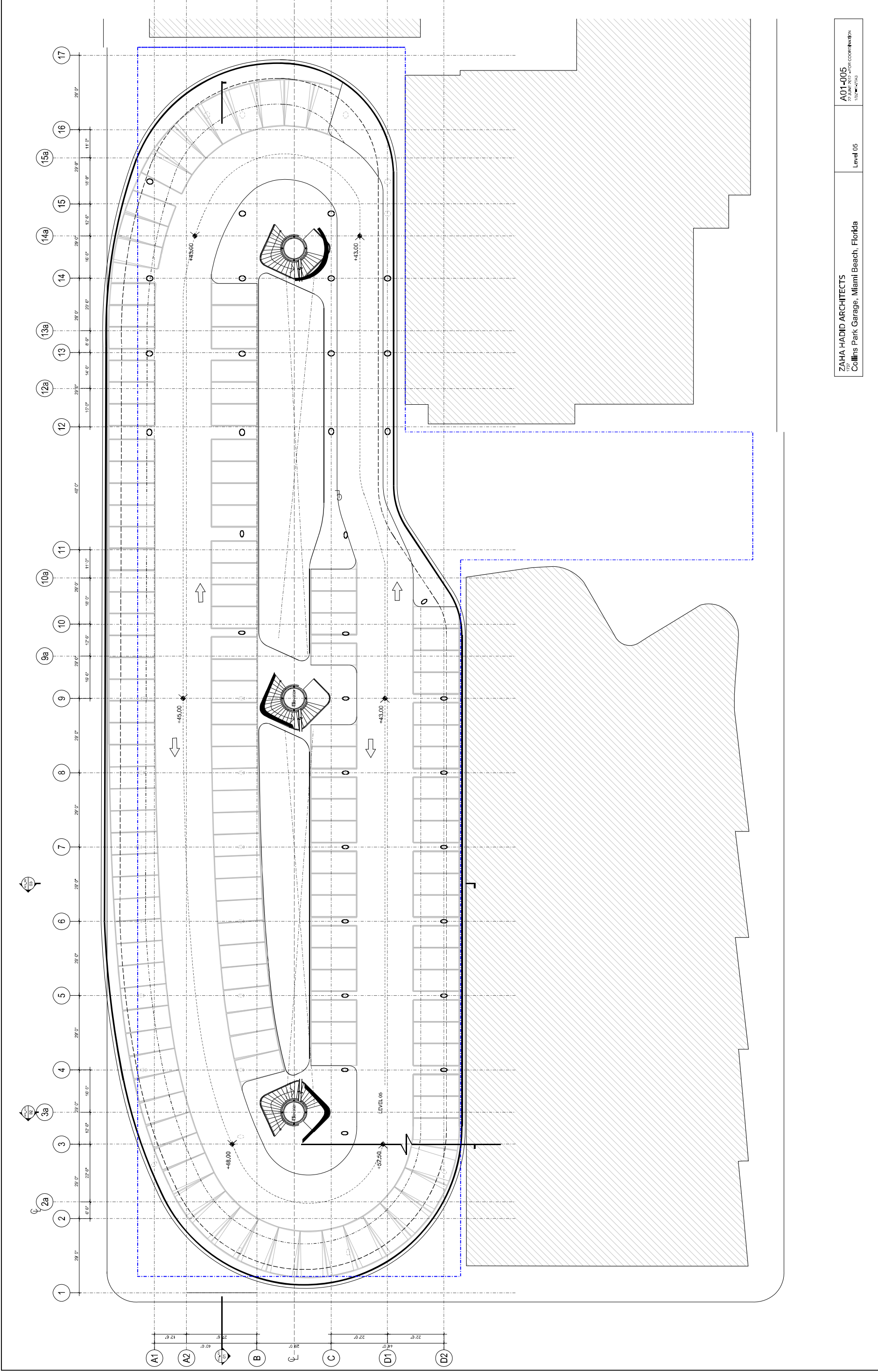
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22 JULY 2015 - 02:00:00 PM EDT
1:8" = 1'-0" @ 11/17

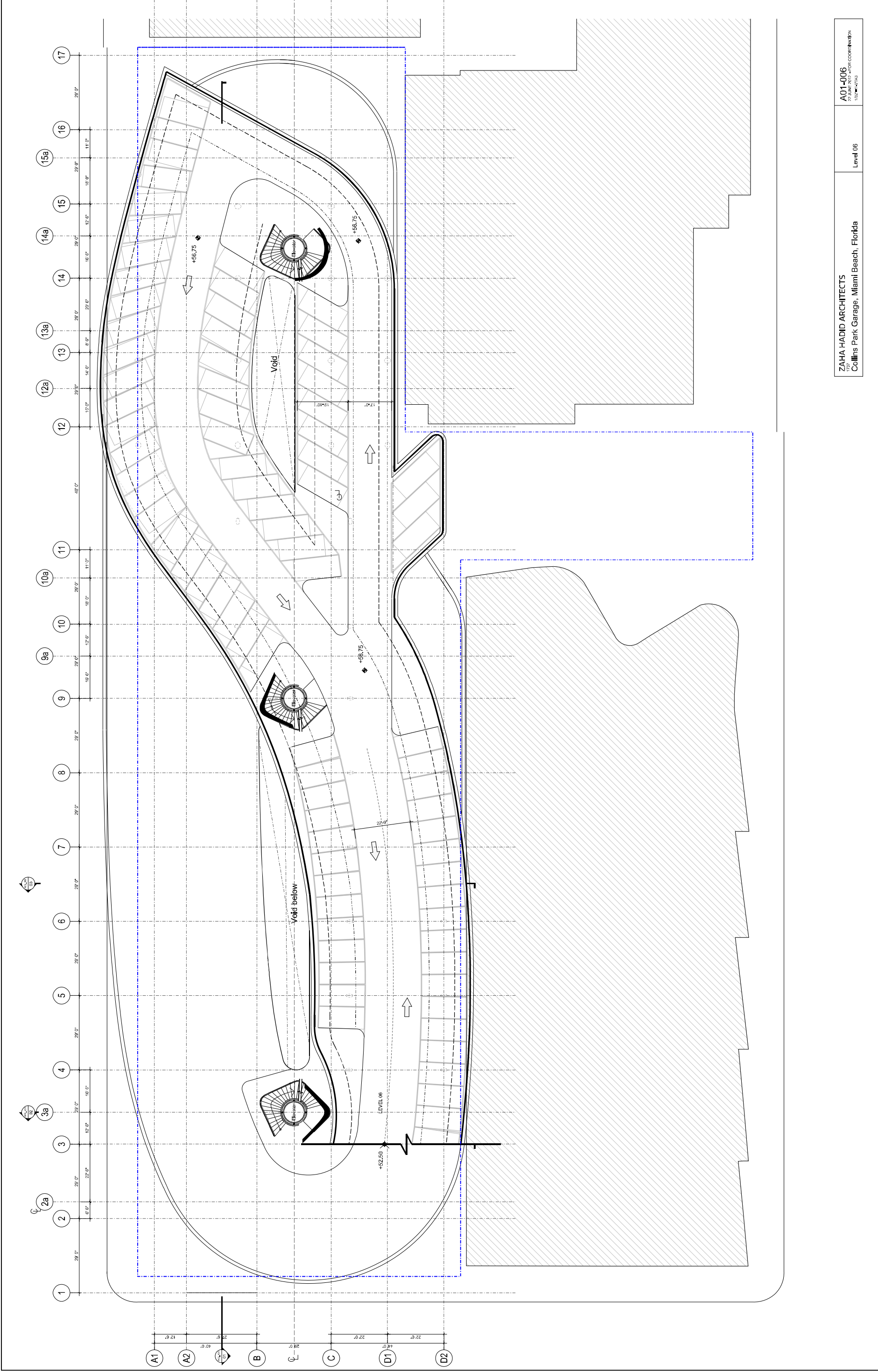


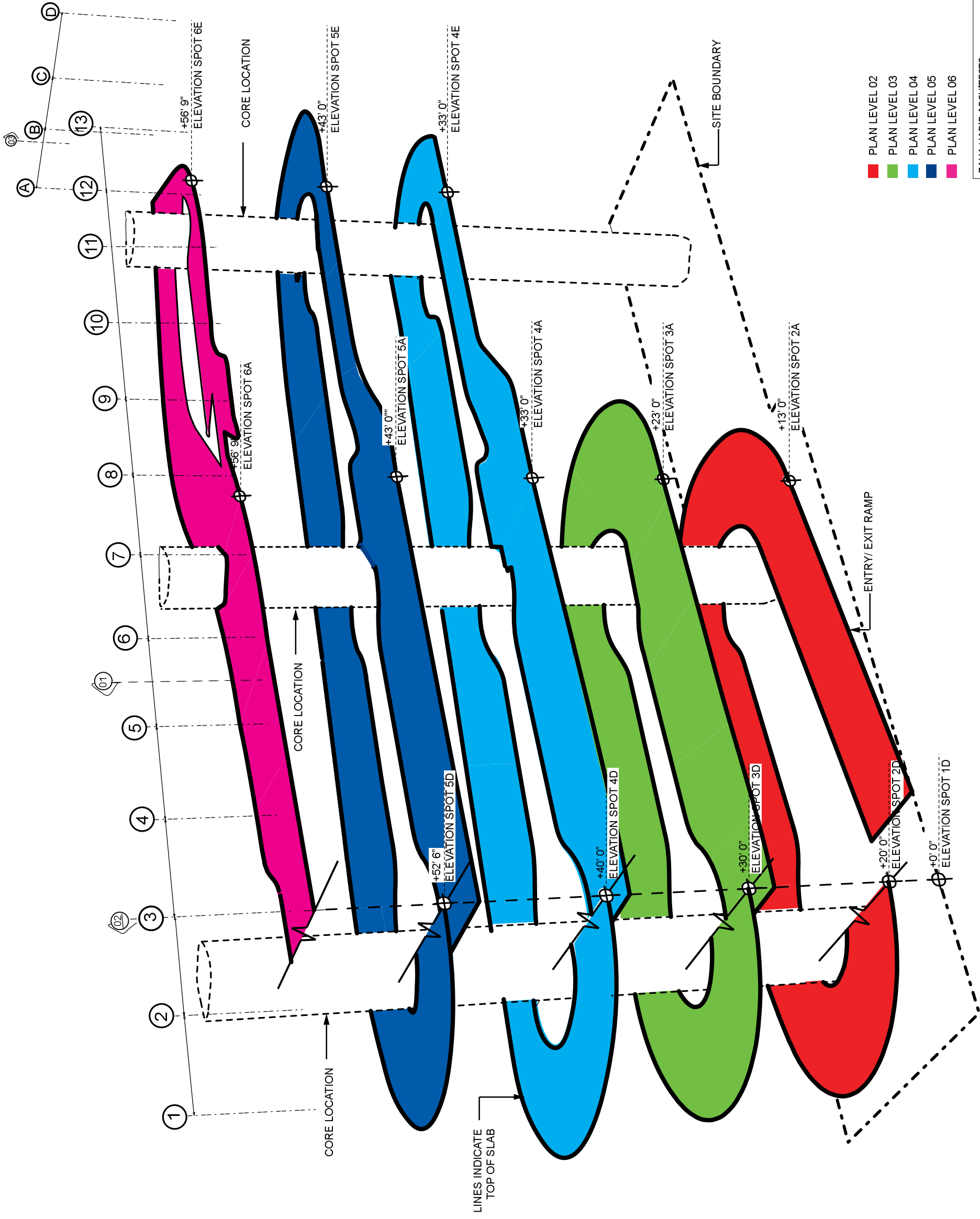












- PLAN LEVEL 02
- PLAN LEVEL 03
- PLAN LEVEL 04
- PLAN LEVEL 05
- PLAN LEVEL 06

01 EXPLODED SETOUT DIAGRAM
N.T.S.

ZAHA HADID ARCHITECTS
Collins Park Garage, Miami Beach, Florida

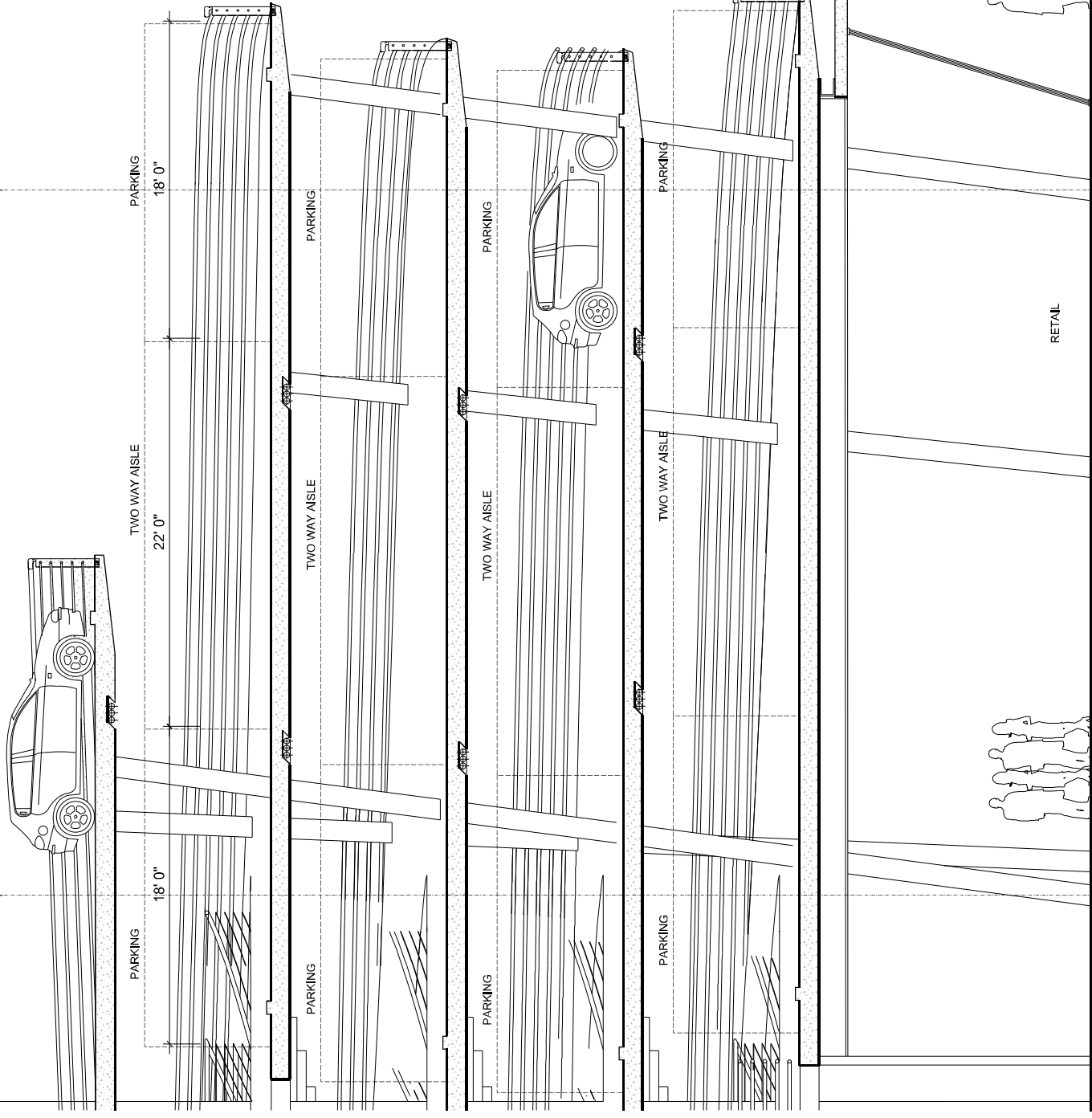
Geometry Setout

A00-003
22 JUNE 2012 - FOR COORDINATION
N.T.S.

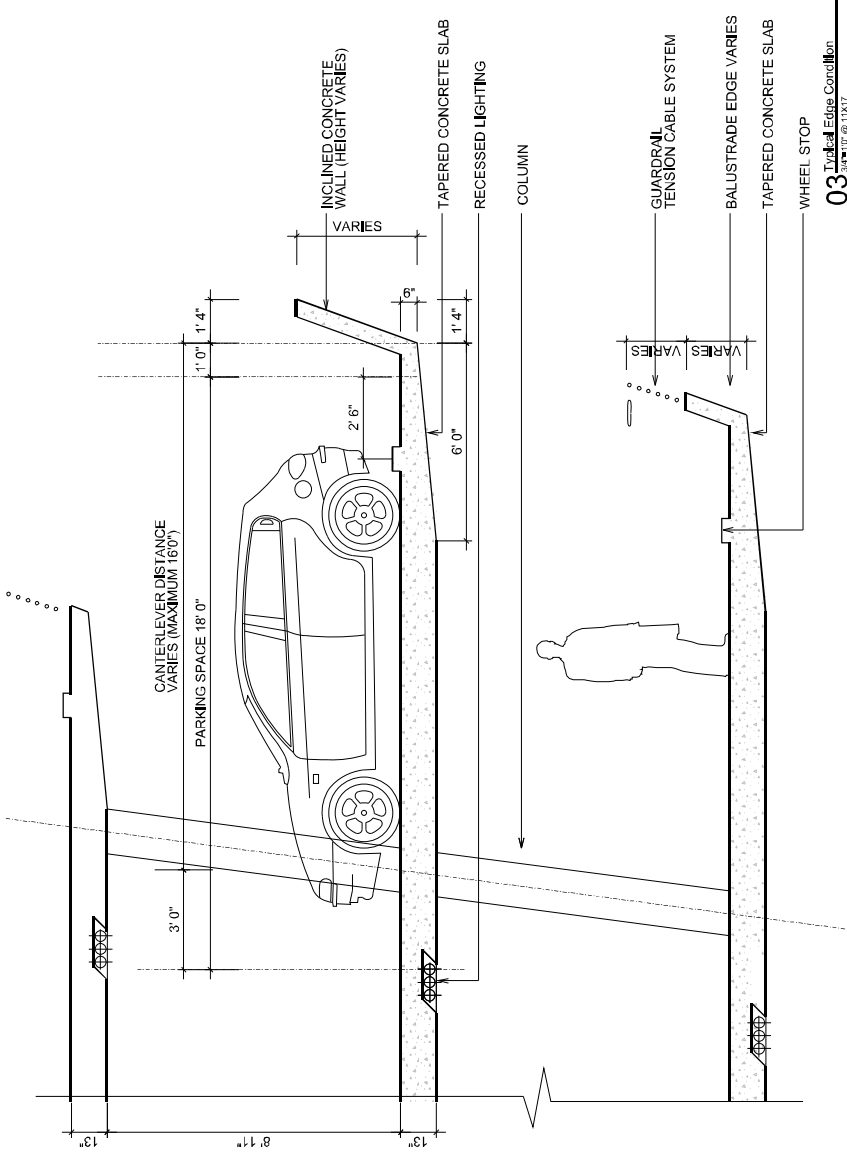
A

B

40' 0"

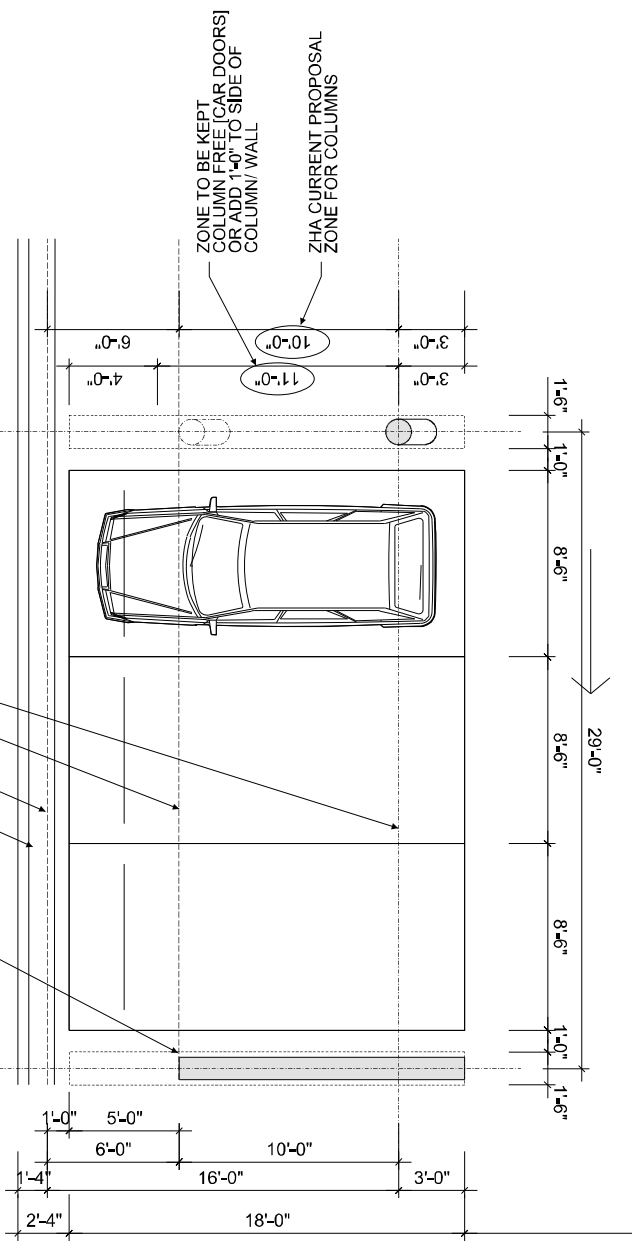


01 Section
1/8" = 1' @ 1/16"



02 Typical Edge Condition
3/16" = 1' @ 1/16"

POTENTIAL SHEAR WALL
BALUSTRADE (SLOPING)
OUTER BEVEL EDGE AT UNDERSIDE
INNER BEVEL EDGE AT UNDERSIDE
MAX CANTILEVER

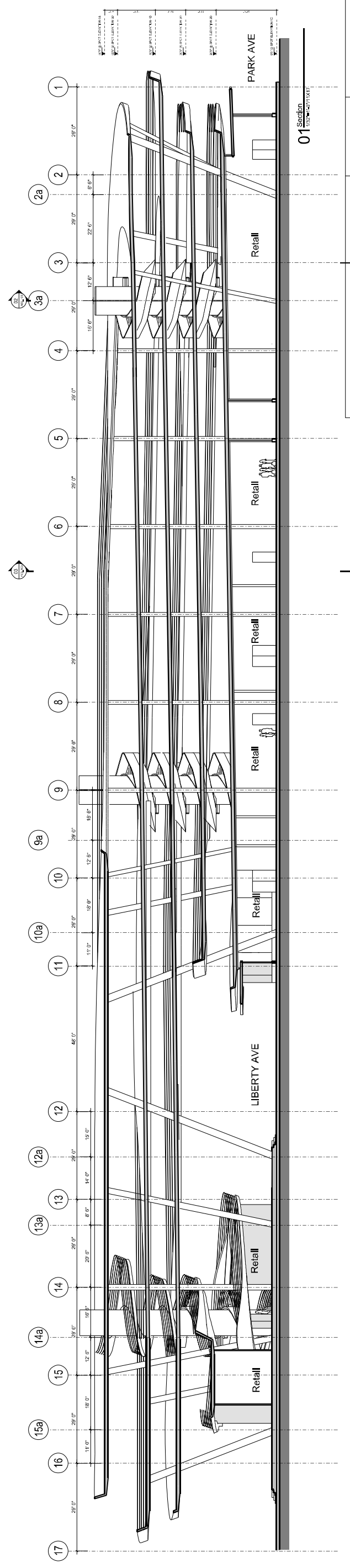
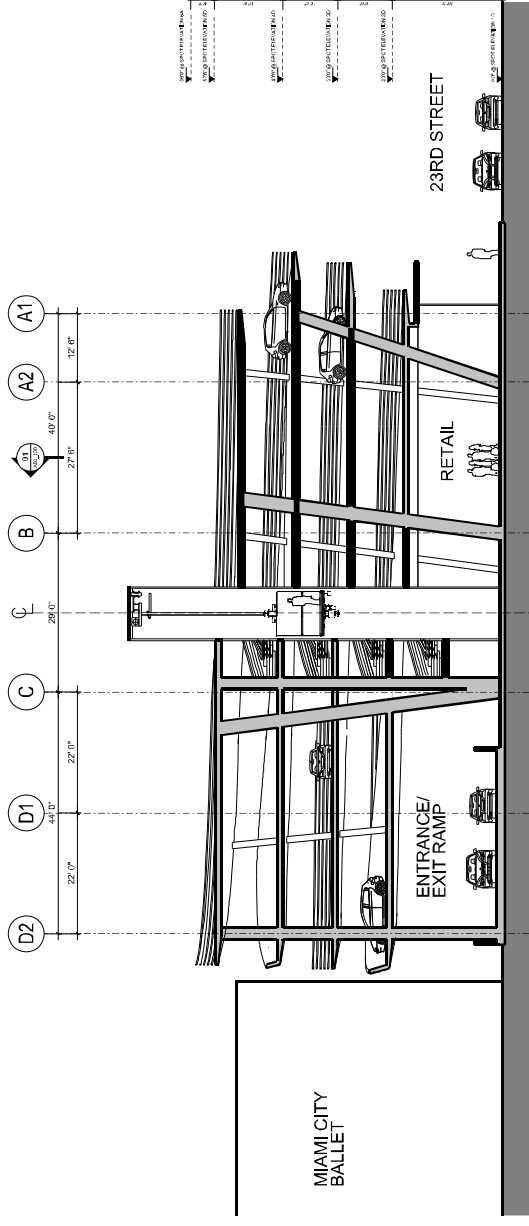


03 Typical Edge Condition
3/16" = 1' @ 1/16"

ZAHA HADID ARCHITECTS
777
Collins Park Garage, Miami Beach, Florida

Sections

A03-200
16 JULY 2012 • FOR COORDINATION
SCALE VARIES



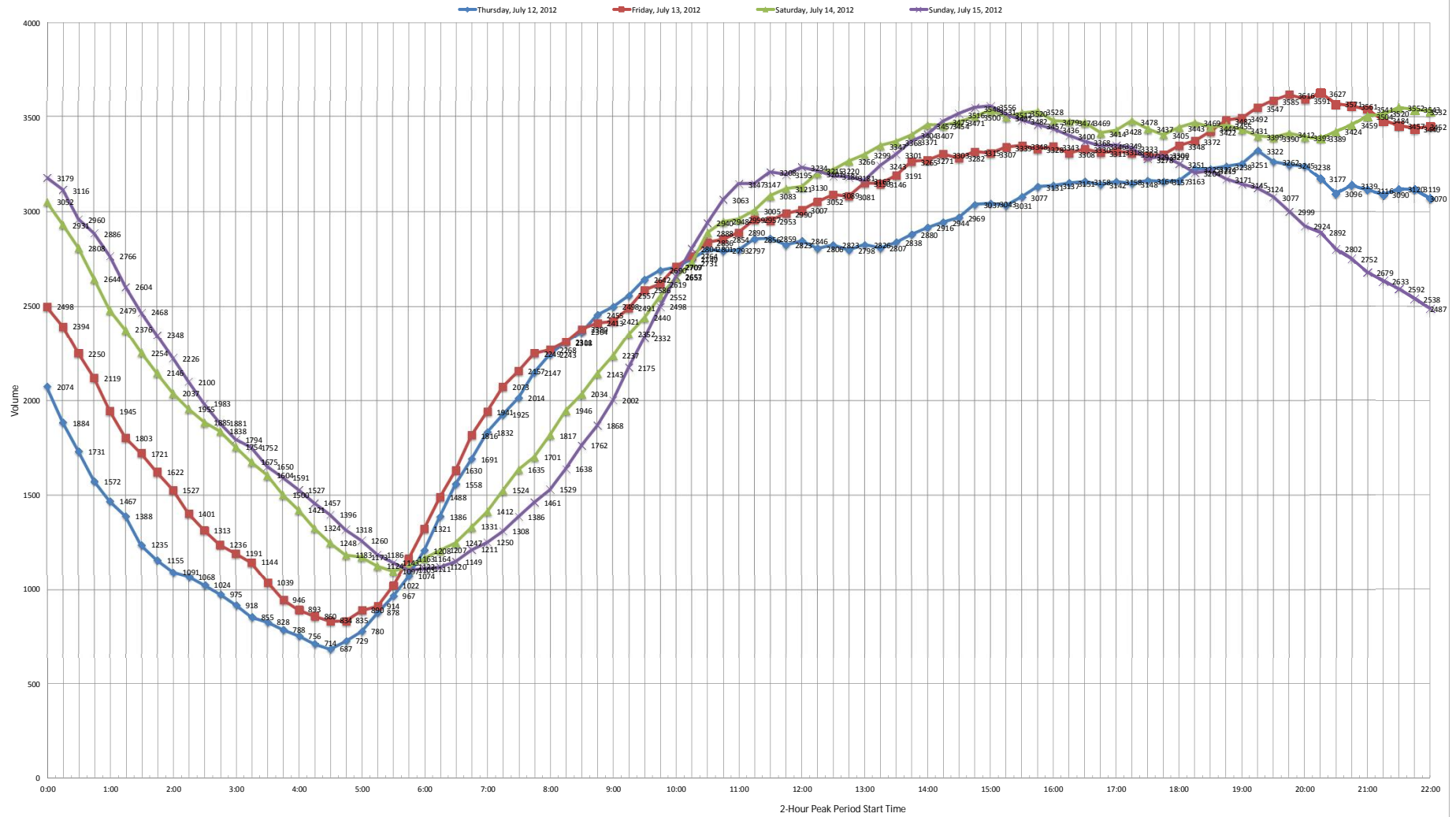
ZAHA HADID ARCHITECTS
722
Collins Park Garage, Miami Beach, Florida

Sections 01, 02 + 03
Looking West-South

A03-100
22 JUNE 2017 + FOR COORDINATION
1:12 = 1/8" = 1/32"

Attachment B

96-Hour Continuous (Peak 2-Hour Period) Traffic Count on Collins Avenue Between 22nd Street and 23rd Street



Data File : D0712001.PRN
 Station : 000000071102
 Identification : 009601150081 Interval : 15 minutes
 Start date : Jul 12, 12 Start time : 00:00
 Stop date : Jul 12, 12 Stop time : 24:00
 City/Town : Miami Beach, Florida County : Dade
 Location : Collins Ave Between 22 St & 23 St

Jul 12 Northbound Volume for Lane 1

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	132	83	73	47	44	30	43	100	152	170	172	174
30	110	111	63	43	42	29	50	90	148	157	173	179
45	117	79	45	53	37	39	84	95	166	188	206	181
00	97	71	67	61	44	47	97	141	206	198	173	189
Hr Total	456	344	248	204	167	145	274	426	672	713	724	723

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	180	209	176	203	166	175	162	192	193	198	161	162
30	184	170	180	167	185	178	202	221	208	155	140	174
45	180	170	166	174	179	182	175	199	195	182	192	155
00	183	204	192	188	170	182	200	195	204	174	162	146
Hr Total	727	753	714	732	700	717	739	807	800	709	655	637

24 Hour Total : 13786
 AM peak hour begins : 09:45 AM peak volume : 749 Peak hour factor : 0.91
 PM peak hour begins : 18:45 PM peak volume : 812 Peak hour factor : 0.92

Jul 12 Southbound Volume for Lane 2

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	185	130	67	92	74	50	35	72	92	89	133	140
30	175	128	79	53	59	42	26	64	89	80	116	137
45	163	103	86	54	48	30	40	74	82	106	127	158
00	149	105	81	56	51	41	46	72	69	104	143	129
Hr Total	672	466	313	255	232	163	147	282	332	379	519	564

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	164	160	130	148	166	165	183	139	210	200	185	212
30	154	149	174	181	193	213	182	185	175	195	167	204
45	145	135	136	171	186	213	175	189	168	190	212	216
00	137	136	154	185	182	197	167	190	175	204	195	186
Hr Total	600	580	594	685	727	788	707	703	728	789	759	818

24 Hour Total : 12802
 AM peak hour begins : 00:00 AM peak volume : 672 Peak hour factor : 0.91
 PM peak hour begins : 22:45 PM peak volume : 827 Peak hour factor : 0.96

Traffic Survey Specialists, Inc. 624 Gardenia Terrace
 Delray Beach, Florida 33444 Phone (561) 272-3255
 Volume Report with 24 Hour Totals

Data File : D0712001.PRN
 Station : 000000071102
 Identification : 009601150081 Interval : 15 minutes
 Start date : Jul 12, 12 Start time : 00:00
 Stop date : Jul 12, 12 Stop time : 24:00
 City/Town : Miami Beach, Florida County : Dade
 Location : Collins Ave Between 22 St & 23 St

Jul 12 Total Volume for All Lanes

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	317	213	140	139	118	80	78	172	244	259	305	314
30	285	239	142	96	101	71	76	154	237	237	289	316
45	280	182	131	107	85	69	124	169	248	294	333	339
00	246	176	148	117	95	88	143	213	275	302	316	318

Hr Total 1128 810 561 459 399 308 421 708 1004 1092 1243 1287

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	344	369	306	351	332	340	345	331	403	398	346	374
30	338	319	354	348	378	391	384	406	383	350	307	378
45	325	305	302	345	365	395	350	388	363	372	404	371
00	320	340	346	373	352	379	367	385	379	378	357	332

Hr Total 1327 1333 1308 1417 1427 1505 1446 1510 1528 1498 1414 1455

24 Hour Total : 26588
 AM peak hour begins : 11:30 AM peak volume : 1339 Peak hour factor : 0.97
 PM peak hour begins : 19:15 PM peak volume : 1582 Peak hour factor : 0.97

Traffic Survey Specialists, Inc. 624 Gardenia Terrace
 Delray Beach, Florida 33444 Phone (561) 272-3255
 Volume Report with 24 Hour Totals

Data File : D0713001.PRN
 Station : 000000071102
 Identification : 009601150081 Interval : 15 minutes
 Start date : Jul 13, 12 Start time : 00:00
 Stop date : Jul 13, 12 Stop time : 24:00
 City/Town : Miami Beach, Florida County : Dade
 Location : Collins Ave Between 22 St & 23 St

Jul 13 Northbound Volume for Lane 1

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	156	132	99	72	50	56	49	70	155	149	163	190
30	136	100	84	68	57	36	58	107	153	163	158	204
45	148	99	90	48	51	26	86	129	193	178	213	172
00	147	109	73	73	62	53	112	161	189	173	161	191
Hr Total	587	440	346	261	220	171	305	467	690	663	695	757

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	192	201	207	187	207	191	174	203	232	254	218	189
30	213	179	231	189	185	181	185	209	234	218	182	195
45	187	203	180	215	192	177	172	222	242	217	218	189
00	176	189	222	180	192	192	223	248	243	221	185	195
Hr Total	768	772	840	771	776	741	754	882	951	910	803	768

24 Hour Total : 15338
 AM peak hour begins : 10:30 AM peak volume : 768 Peak hour factor : 0.90
 PM peak hour begins : 20:15 PM peak volume : 973 Peak hour factor : 0.96

Jul 13 Southbound Volume for Lane 2

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	177	153	136	80	67	52	37	60	87	104	119	128
30	203	155	121	110	66	44	40	74	77	97	136	145
45	176	143	111	102	78	37	44	66	111	103	122	140
00	178	123	90	70	59	41	61	81	101	87	137	153
Hr Total	734	574	458	362	270	174	182	281	376	391	514	566

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	141	180	168	190	198	216	199	194	163	194	211	206
30	148	166	165	198	191	214	211	173	209	199	208	197
45	165	143	164	200	183	219	185	180	171	214	186	226
00	156	171	175	186	198	188	174	177	164	181	203	218
Hr Total	610	660	672	774	770	837	769	724	707	788	808	847

24 Hour Total : 13848
 AM peak hour begins : 00:00 AM peak volume : 734 Peak hour factor : 0.90
 PM peak hour begins : 16:45 PM peak volume : 847 Peak hour factor : 0.97

Data File : D0713001.PRN
 Station : 000000071102
 Identification : 009601150081 Interval : 15 minutes
 Start date : Jul 13, 12 Start time : 00:00
 Stop date : Jul 13, 12 Stop time : 24:00
 City/Town : Miami Beach, Florida County : Dade
 Location : Collins Ave Between 22 St & 23 St

Jul 13 Total Volume for All Lanes

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	333	285	235	152	117	108	86	130	242	253	282	318
30	339	255	205	178	123	80	98	181	230	260	294	349
45	324	242	201	150	129	63	130	195	304	281	335	312
00	325	232	163	143	121	94	173	242	290	260	298	344
Hr Total	1321	1014	804	623	490	345	487	748	1066	1054	1209	1323

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	333	381	375	377	405	407	373	397	395	448	429	395
30	361	345	396	387	376	395	396	382	443	417	390	392
45	352	346	344	415	375	396	357	402	413	431	404	415
00	332	360	397	366	390	380	397	425	407	402	388	413
Hr Total	1378	1432	1512	1545	1546	1578	1523	1606	1658	1698	1611	1615

24 Hour Total : 29186
 AM peak hour begins : 11:30 AM peak volume : 1350 Peak hour factor : 0.93
 PM peak hour begins : 20:15 PM peak volume : 1711 Peak hour factor : 0.95

Peak Period: Friday 8:15 PM to 10:15 PM (3,390)

Data File : D0714001.PRN
 Station : 000000071102
 Identification : 009601150081 Interval : 15 minutes
 Start date : Jul 14, 12 Start time : 00:00
 Stop date : Jul 14, 12 Stop time : 24:00
 City/Town : Miami Beach, Florida County : Dade
 Location : Collins Ave Between 22 St & 23 St

Jul 14 Northbound Volume for Lane 1

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	203	164	132	106	84	58	51	63	93	125	154	175
30	203	146	122	109	80	55	64	74	102	129	129	169
45	193	154	111	108	77	61	88	99	136	140	185	183
00	186	129	115	86	65	62	106	101	137	161	202	217
Hr Total	785	593	480	409	306	236	309	337	468	555	670	744

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	196	202	212	211	211	199	225	209	201	209	210	207
30	212	203	241	229	221	214	194	214	216	198	209	188
45	197	190	205	203	215	204	193	207	213	200	226	189
00	218	205	200	254	190	197	200	222	189	225	217	177
Hr Total	823	800	858	897	837	814	812	852	819	832	862	761

24 Hour Total : 15859
 AM peak hour begins : 11:30 AM peak volume : 808 Peak hour factor : 0.93
 PM peak hour begins : 15:45 PM peak volume : 901 Peak hour factor : 0.89

Jul 14 Southbound Volume for Lane 2

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	184	164	142	126	113	100	55	49	53	91	113	148
30	169	186	135	109	112	97	57	53	56	102	111	144
45	194	188	123	133	113	83	42	69	73	90	126	152
00	212	177	129	118	100	68	49	68	94	116	117	154
Hr Total	759	715	529	486	438	348	203	239	276	399	467	598

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	144	164	195	200	193	180	175	216	223	186	210	203
30	175	183	163	177	199	214	221	176	176	183	216	223
45	170	181	205	201	222	207	193	174	183	202	203	204
00	111	174	160	175	199	186	202	197	191	176	205	214
Hr Total	600	702	723	753	813	787	791	763	773	747	834	844

24 Hour Total : 14587
 AM peak hour begins : 00:00 AM peak volume : 759 Peak hour factor : 0.90
 PM peak hour begins : 23:00 PM peak volume : 844 Peak hour factor : 0.95

Traffic Survey Specialists, Inc. 624 Gardenia Terrace
 Delray Beach, Florida 33444 Phone (561) 272-3255
 Volume Report with 24 Hour Totals

Data File : D0714001.PRN
 Station : 000000071102
 Identification : 009601150081 Interval : 15 minutes
 Start date : Jul 14, 12 Start time : 00:00
 Stop date : Jul 14, 12 Stop time : 24:00
 City/Town : Miami Beach, Florida County : Dade
 Location : Collins Ave Between 22 St & 23 St

Jul 14 Total Volume for All Lanes

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	387	328	274	232	197	158	106	112	146	216	267	323
30	372	332	257	218	192	152	121	127	158	231	240	313
45	387	342	234	241	190	144	130	168	209	230	311	335
00	398	306	244	204	165	130	155	169	231	277	319	371
Hr Total	1544	1308	1009	895	744	584	512	576	744	954	1137	1342

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	340	366	407	411	404	379	400	425	424	395	420	410
30	387	386	404	406	420	428	415	390	392	381	425	411
45	367	371	410	404	437	411	386	381	396	402	429	393
00	329	379	360	429	389	383	402	419	380	401	422	391
Hr Total	1423	1502	1581	1650	1650	1601	1603	1615	1592	1579	1696	1605

24 Hour Total : 30446
 AM peak hour begins : 00:00 AM peak volume : 1544 Peak hour factor : 0.97
 PM peak hour begins : 22:00 PM peak volume : 1696 Peak hour factor : 0.99

Traffic Survey Specialists, Inc. 624 Gardenia Terrace
 Delray Beach, Florida 33444 Phone (561) 272-3255
 Volume Report with 24 Hour Totals

Data File : D0715001.PRN
 Station : 000000071102
 Identification : 009601150081 Interval : 15 minutes
 Start date : Jul 15, 12 Start time : 00:00
 Stop date : Jul 15, 12 Stop time : 24:00
 City/Town : Miami Beach, Florida County : Dade
 Location : Collins Ave Between 22 St & 23 St

Jul 15 Northbound Volume for Lane 1

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	202	175	146	115	92	73	70	70	69	106	133	185
30	188	177	132	109	82	65	66	59	84	104	147	168
45	174	164	132	93	86	86	63	84	119	136	157	219
00	208	145	121	91	90	60	95	79	101	116	166	210
Hr Total	772	661	531	408	350	284	294	292	373	462	603	782

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	193	201	191	225	221	207	196	193	176	144	134	146
30	227	221	200	229	207	204	197	180	173	140	136	132
45	207	212	213	225	235	217	191	210	164	153	152	131
00	224	222	200	220	195	219	197	174	175	142	115	111
Hr Total	851	856	804	899	858	847	781	757	688	579	537	520

24 Hour Total : 14789
 AM peak hour begins : 11:30 AM peak volume : 849 Peak hour factor : 0.94
 PM peak hour begins : 15:00 PM peak volume : 899 Peak hour factor : 0.98

Jul 15 Southbound Volume for Lane 2

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	169	219	166	128	103	130	60	63	70	81	108	164
30	242	193	152	134	92	83	51	49	60	77	113	159
45	185	183	158	141	109	93	59	58	61	76	122	149
00	190	157	165	97	115	68	56	56	86	83	146	137
Hr Total	786	752	641	500	419	374	226	226	277	317	489	609

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	186	148	171	199	205	176	197	175	173	205	185	160
30	160	163	160	209	191	206	171	179	206	175	159	144
45	187	144	176	196	184	181	207	200	193	184	158	156
00	166	161	173	197	185	178	186	185	183	147	175	130
Hr Total	699	616	680	801	765	741	761	739	755	711	677	590

24 Hour Total : 14151
 AM peak hour begins : 00:15 AM peak volume : 836 Peak hour factor : 0.86
 PM peak hour begins : 15:15 PM peak volume : 807 Peak hour factor : 0.97

Data File : D0715001.PRN
 Station : 000000071102
 Identification : 009601150081 Interval : 15 minutes
 Start date : Jul 15, 12 Start time : 00:00
 Stop date : Jul 15, 12 Stop time : 24:00
 City/Town : Miami Beach, Florida County : Dade
 Location : Collins Ave Between 22 St & 23 St

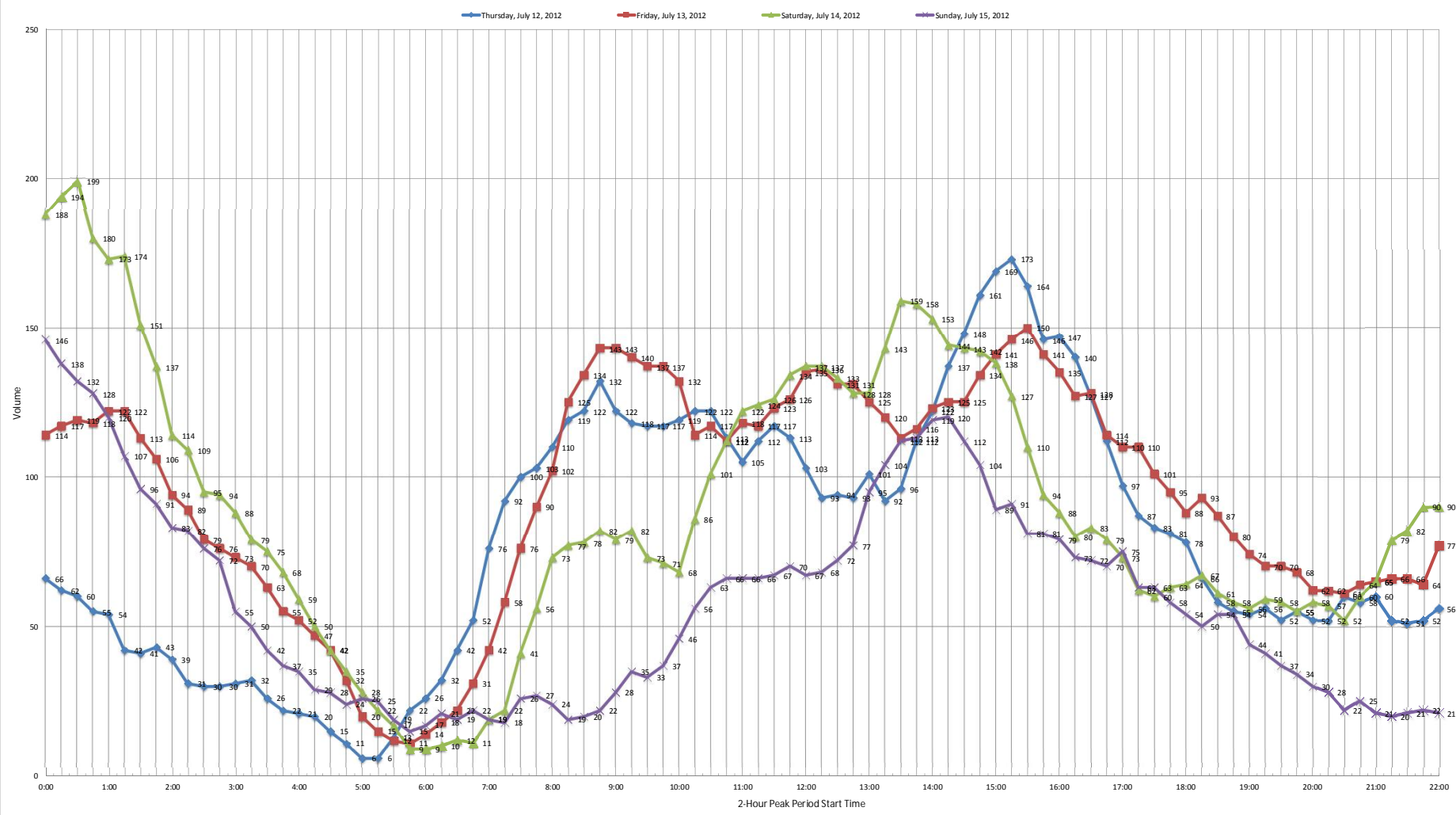
Jul 15 Total Volume for All Lanes

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	371	394	312	243	195	203	130	133	139	187	241	349
30	430	370	284	243	174	148	117	108	144	181	260	327
45	359	347	290	234	195	179	122	142	180	212	279	368
00	398	302	286	188	205	128	151	135	187	199	312	347
Hr Total	1558	1413	1172	908	769	658	520	518	650	779	1092	1391

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	379	349	362	424	426	383	393	368	349	349	319	306
30	387	384	360	438	398	410	368	359	379	315	295	276
45	394	356	389	421	419	398	398	410	357	337	310	287
00	390	383	373	417	380	397	383	359	358	289	290	241
Hr Total	1550	1472	1484	1700	1623	1588	1542	1496	1443	1290	1214	1110

24 Hour Total : 28940
 AM peak hour begins : 00:15 AM peak volume : 1581 Peak hour factor : 0.92
 PM peak hour begins : 15:15 PM peak volume : 1702 Peak hour factor : 0.97

96-Hour Continuous (Peak 2-Hour Period) Traffic Count on Liberty Avenue Between 22nd Avenue and 23rd Avenue



 Data File : D0712003.PRN
 Station : 000000071103
 Identification : 009600650034 Interval : 15 minutes
 Start date : Jul 12, 12 Start time : 00:00
 Stop date : Jul 12, 12 Stop time : 24:00
 City/Town : Miami Beach, Florida County : Dade
 Location : Liberty Ave Between 22 St & 23 St

Jul 12 Northbound Volume for Lane 1

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	5	4	4	1	1	1	0	0	2	3	6	4
30	5	4	3	0	2	0	0	1	2	4	1	7
45	6	1	2	2	0	0	1	5	4	4	12	8
00	2	1	1	0	2	0	0	1	5	2	3	7
Hr Total	18	10	10	3	5	1	1	7	13	13	22	26

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	10	6	4	6	10	9	10	6	2	5	2	2
30	6	7	7	11	14	6	5	4	0	3	3	0
45	6	5	6	10	9	5	5	1	5	6	4	4
00	2	1	5	5	10	6	5	8	4	5	3	4
Hr Total	24	19	22	32	43	26	25	19	11	19	12	10

24 Hour Total : 391
 AM peak hour begins : 11:15 AM peak volume : 32 Peak hour factor : 0.80
 PM peak hour begins : 16:00 PM peak volume : 43 Peak hour factor : 0.77

Jul 12 Southbound Volume for Lane 2

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	7	9	4	1	0	2	0	3	4	15	8	10
30	3	3	3	6	3	0	0	5	7	9	11	5
45	4	1	3	2	5	1	0	5	7	9	8	5
00	2	5	2	2	2	1	0	3	17	9	10	6
Hr Total	16	18	12	11	10	4	0	16	35	42	37	26

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	7	15	4	7	12	8	6	1	3	4	3	0
30	6	9	6	9	9	5	6	4	3	2	7	4
45	6	5	5	15	14	3	4	5	1	2	0	5
00	3	2	7	7	10	7	1	2	1	3	4	7
Hr Total	22	31	22	38	45	23	17	12	8	11	14	16

24 Hour Total : 486
 AM peak hour begins : 08:45 AM peak volume : 50 Peak hour factor : 0.74
 PM peak hour begins : 16:00 PM peak volume : 45 Peak hour factor : 0.80

Traffic Survey Specialists, Inc. 624 Gardenia Terrace
 Delray Beach, Florida 33444 Phone (561) 272-3255
 Volume Report with 24 Hour Totals

Data File : D0712003.PRN
 Station : 000000071103
 Identification : 009600650034 Interval : 15 minutes
 Start date : Jul 12, 12 Start time : 00:00
 Stop date : Jul 12, 12 Stop time : 24:00
 City/Town : Miami Beach, Florida County : Dade
 Location : Liberty Ave Between 22 St & 23 St

Jul 12 Total Volume for All Lanes

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	12	13	8	2	1	3	0	3	6	18	14	14
30	8	7	6	6	5	0	0	6	9	13	12	12
45	10	2	5	4	5	1	1	10	11	13	20	13
00	4	6	3	2	4	1	0	4	22	11	13	13

Hr Total 34 28 22 14 15 5 1 23 48 55 59 52

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	17	21	8	13	22	17	16	7	5	9	5	2
30	12	16	13	20	23	11	11	8	3	5	10	4
45	12	10	11	25	23	8	9	6	6	8	4	9
00	5	3	12	12	20	13	6	10	5	8	7	11

Hr Total 46 50 44 70 88 49 42 31 19 30 26 26

24 Hour Total : 877
 AM peak hour begins : 08:45 AM peak volume : 66 Peak hour factor : 0.75
 PM peak hour begins : 16:00 PM peak volume : 88 Peak hour factor : 0.96

Data File : D0713003.PRN
 Station : 000000071103
 Identification : 009600650034 Interval : 15 minutes
 Start date : Jul 13, 12 Start time : 00:00
 Stop date : Jul 13, 12 Stop time : 24:00
 City/Town : Miami Beach, Florida County : Dade
 Location : Liberty Ave Between 22 St & 23 St

Jul 13 Northbound Volume for Lane 1

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	2	3	4	6	2	3	0	1	3	4	13	6
30	7	4	9	7	5	1	1	0	3	4	8	7
45	7	7	7	7	3	0	0	1	1	5	5	6
00	4	8	8	1	6	0	0	0	2	6	3	5

Hr Total 20 22 28 21 16 4 1 2 9 19 29 24

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	7	5	7	8	6	7	5	10	6	6	5	7
30	9	6	6	6	6	11	9	5	2	6	1	4
45	6	4	7	10	6	8	4	2	0	1	2	2
00	6	7	4	11	5	12	5	2	4	0	4	6

Hr Total 28 22 24 35 23 38 23 19 12 13 12 19

24 Hour Total : 463
 AM peak hour begins : 09:30 AM peak volume : 32 Peak hour factor : 0.62
 PM peak hour begins : 17:00 PM peak volume : 38 Peak hour factor : 0.79

Jul 13 Southbound Volume for Lane 2

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	7	9	7	6	4	6	1	3	2	15	14	10
30	8	13	8	2	3	2	2	0	4	13	7	7
45	7	10	6	3	7	2	1	0	8	9	13	8
00	6	5	6	1	5	0	0	3	8	8	7	4

Hr Total 28 37 27 12 19 10 4 6 22 45 41 29

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	4	10	5	2	8	7	2	4	6	4	7	4
30	8	14	6	8	6	7	4	4	5	3	5	5
45	8	13	7	9	16	3	5	4	3	4	4	1
00	9	10	6	13	12	6	8	9	3	5	4	11

Hr Total 29 47 24 32 42 23 19 21 17 16 20 21

24 Hour Total : 591
 AM peak hour begins : 08:45 AM peak volume : 45 Peak hour factor : 0.75
 PM peak hour begins : 13:00 PM peak volume : 47 Peak hour factor : 0.84

Data File : D0713003.PRN
 Station : 000000071103
 Identification : 009600650034 Interval : 15 minutes
 Start date : Jul 13, 12 Start time : 00:00
 Stop date : Jul 13, 12 Stop time : 24:00
 City/Town : Miami Beach, Florida County : Dade
 Location : Liberty Ave Between 22 St & 23 St

Jul 13 Total Volume for All Lanes

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	9	12	11	12	6	9	1	4	5	19	27	16
30	15	17	17	9	8	3	3	0	7	17	15	14
45	14	17	13	10	10	2	1	1	9	14	18	14
00	10	13	14	2	11	0	0	3	10	14	10	9

Hr Total 48 59 55 33 35 14 5 8 31 64 70 53

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	11	15	12	10	14	14	7	14	12	10	12	11
30	17	20	12	14	12	18	13	9	7	9	6	9
45	14	17	14	19	22	11	9	6	3	5	6	3
00	15	17	10	24	17	18	13	11	7	5	8	17

Hr Total 57 69 48 67 65 61 42 40 29 29 32 40

24 Hour Total : 1054
 AM peak hour begins : 09:45 AM peak volume : 74 Peak hour factor : 0.69
 PM peak hour begins : 15:45 PM peak volume : 72 Peak hour factor : 0.75

Traffic Survey Specialists, Inc. 624 Gardenia Terrace
 Delray Beach, Florida 33444 Phone (561) 272-3255
 Volume Report with 24 Hour Totals

Data File : D0714003.PRN
 Station : 000000071103
 Identification : 009600650034 Interval : 15 minutes
 Start date : Jul 14, 12 Start time : 00:00
 Stop date : Jul 14, 12 Stop time : 24:00
 City/Town : Miami Beach, Florida County : Dade
 Location : Liberty Ave Between 22 St & 23 St

Jul 14 Northbound Volume for Lane 1

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	3	5	4	8	5	4	1	0	0	2	1	4
30	10	10	10	3	4	4	0	0	1	6	2	2
45	8	9	4	9	5	4	0	1	1	1	1	7
00	7	10	6	6	4	0	0	0	5	3	5	5

Hr Total 28 34 24 26 18 12 1 1 7 12 9 18

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	13	6	12	10	6	4	6	3	5	1	1	10
30	8	3	5	11	8	6	9	1	6	3	1	4
45	9	12	8	13	5	1	6	4	0	3	7	5
00	8	13	7	2	4	3	2	3	1	3	7	4

Hr Total 38 34 32 36 23 14 23 11 12 10 16 23

24 Hour Total : 462
 AM peak hour begins : 01:00 AM peak volume : 34 Peak hour factor : 0.85
 PM peak hour begins : 13:30 PM peak volume : 42 Peak hour factor : 0.81

Jul 14 Southbound Volume for Lane 2

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	6	8	10	6	4	2	0	1	2	2	5	3
30	6	21	11	6	4	1	0	0	1	11	1	6
45	19	20	5	7	3	6	2	1	0	15	4	7
00	13	21	8	4	4	1	1	1	4	14	1	10

Hr Total 44 70 34 23 15 10 3 3 7 42 11 26

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	9	3	10	13	8	9	1	0	5	5	8	9
30	9	7	8	14	4	3	6	6	3	3	4	5
45	7	9	4	7	6	4	1	4	4	2	4	7
00	7	5	8	11	7	4	3	5	2	8	1	7

Hr Total 32 24 30 45 25 20 11 15 14 18 17 28

24 Hour Total : 567
 AM peak hour begins : 01:15 AM peak volume : 72 Peak hour factor : 0.86
 PM peak hour begins : 15:00 PM peak volume : 45 Peak hour factor : 0.80

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 Identification : 009600650034 Interval : 15 minutes
 Start date : Jul 14, 12 Start time : 00:00
 Stop date : Jul 14, 12 Stop time : 24:00
 City/Town : Miami Beach, Florida County : Dade
 Location : Liberty Ave Between 22 St & 23 St

Jul 14 Total Volume for All Lanes

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	9	13	14	14	9	6	1	1	2	4	6	7
30	16	31	21	9	8	5	0	0	2	17	3	8
45	27	29	9	16	8	10	2	2	1	16	5	14
00	20	31	14	10	8	1	1	1	9	17	6	15

Hr Total 72 104 58 49 33 22 4 4 14 54 20 44

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	22	9	22	23	14	13	7	3	10	6	9	19
30	17	10	13	25	12	9	15	7	9	6	5	9
45	16	21	12	20	11	5	7	8	4	5	11	12
00	15	18	15	13	11	7	5	8	3	11	8	11

Hr Total 70 58 62 81 48 34 34 26 26 28 33 51

24 Hour Total : 1029
 AM peak hour begins : 01:15 AM peak volume : 105 Peak hour factor : 0.85
 PM peak hour begins : 14:45 PM peak volume : 83 Peak hour factor : 0.83

Peak Period: Saturday 12:30 AM to 2:30 AM (186)

Traffic Survey Specialists, Inc. 624 Gardenia Terrace
 Delray Beach, Florida 33444 Phone (561) 272-3255
 Volume Report with 24 Hour Totals

Data File : D0715003.PRN
 Station : 000000071103
 Identification : 009600650034 Interval : 15 minutes
 Start date : Jul 15, 12 Start time : 00:00
 Stop date : Jul 15, 12 Stop time : 24:00
 City/Town : Miami Beach, Florida County : Dade
 Location : Liberty Ave Between 22 St & 23 St

Jul 15 Northbound Volume for Lane 1

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	5	5	3	3	5	0	0	0	4	1	1	6
30	6	7	2	7	0	3	2	0	0	2	0	2
45	5	10	5	3	3	2	0	0	2	1	2	1
00	10	5	4	3	2	2	1	2	1	0	2	3

Hr Total 26 27 14 16 10 7 3 2 7 4 5 12

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	7	4	7	7	8	10	4	5	1	2	1	3
30	3	1	7	10	4	2	2	3	3	2	0	2
45	3	4	11	4	4	5	3	1	1	0	2	1
00	2	5	15	8	7	3	11	1	2	0	1	0

Hr Total 15 14 40 29 23 20 20 10 7 4 4 6

24 Hour Total : 325
 AM peak hour begins : 00:45 AM peak volume : 32 Peak hour factor : 0.80
 PM peak hour begins : 14:30 PM peak volume : 43 Peak hour factor : 0.72

Jul 15 Southbound Volume for Lane 2

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	10	14	5	4	2	3	1	2	1	0	0	2
30	10	16	8	6	4	2	1	0	1	5	2	3
45	7	4	4	6	2	3	1	1	2	1	4	5
00	16	6	14	1	0	0	3	2	0	1	4	6

Hr Total 43 40 31 17 8 8 6 5 4 7 10 16

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	3	4	4	9	4	8	2	2	2	2	0	0
30	6	5	5	4	1	3	2	2	4	0	2	1
45	6	4	3	5	2	4	1	3	3	1	4	1
00	4	2	8	4	2	7	3	5	3	2	1	1

Hr Total 19 15 20 22 9 22 8 12 12 5 7 3

24 Hour Total : 349
 AM peak hour begins : 00:30 AM peak volume : 53 Peak hour factor : 0.83
 PM peak hour begins : 14:45 PM peak volume : 26 Peak hour factor : 0.72

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 Station : 000000071103
 Identification : 009600650034 Interval : 15 minutes
 Start date : Jul 15, 12 Start time : 00:00
 Stop date : Jul 15, 12 Stop time : 24:00
 City/Town : Miami Beach, Florida County : Dade
 Location : Liberty Ave Between 22 St & 23 St

Jul 15 Total Volume for All Lanes

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	15	19	8	7	7	3	1	2	5	1	1	8
30	16	23	10	13	4	5	3	0	1	7	2	5
45	12	14	9	9	5	5	1	1	4	2	6	6
00	26	11	18	4	2	2	4	4	1	1	6	9
Hr Total	69	67	45	33	18	15	9	7	11	11	15	28

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	10	8	11	16	12	18	6	7	3	4	1	3
30	9	6	12	14	5	5	4	5	7	2	2	3
45	9	8	14	9	6	9	4	4	4	1	6	2
00	6	7	23	12	9	10	14	6	5	2	2	1
Hr Total	34	29	60	51	32	42	28	22	19	9	11	9

24 Hour Total : 674
 AM peak hour begins : 00:45 AM peak volume : 82 Peak hour factor : 0.79
 PM peak hour begins : 14:30 PM peak volume : 67 Peak hour factor : 0.73

MOCF: 0.96

Week	Dates	SF	PSCF
1	01/01/2011 - 01/01/2011	1.03	1.07
2	01/02/2011 - 01/08/2011	1.02	1.06
3	01/09/2011 - 01/15/2011	1.01	1.05
4	01/16/2011 - 01/22/2011	1.00	1.04
5	01/23/2011 - 01/29/2011	0.99	1.03
* 6	01/30/2011 - 02/05/2011	0.97	1.01
* 7	02/06/2011 - 02/12/2011	0.96	1.00
* 8	02/13/2011 - 02/19/2011	0.95	0.98
* 9	02/20/2011 - 02/26/2011	0.95	0.98
*10	02/27/2011 - 03/05/2011	0.96	1.00
*11	03/06/2011 - 03/12/2011	0.96	1.00
*12	03/13/2011 - 03/19/2011	0.96	1.00
*13	03/20/2011 - 03/26/2011	0.96	1.00
*14	03/27/2011 - 04/02/2011	0.97	1.01
*15	04/03/2011 - 04/09/2011	0.97	1.01
*16	04/10/2011 - 04/16/2011	0.97	1.01
*17	04/17/2011 - 04/23/2011	0.98	1.02
*18	04/24/2011 - 04/30/2011	0.98	1.02
19	05/01/2011 - 05/07/2011	0.99	1.03
20	05/08/2011 - 05/14/2011	0.99	1.03
21	05/15/2011 - 05/21/2011	0.99	1.03
22	05/22/2011 - 05/28/2011	1.00	1.04
23	05/29/2011 - 06/04/2011	1.00	1.04
24	06/05/2011 - 06/11/2011	1.00	1.04
25	06/12/2011 - 06/18/2011	1.00	1.04
26	06/19/2011 - 06/25/2011	1.01	1.05
27	06/26/2011 - 07/02/2011	1.02	1.06
28	07/03/2011 - 07/09/2011	1.03	1.07
29	07/10/2011 - 07/16/2011	1.03	1.07
30	07/17/2011 - 07/23/2011	1.03	1.07
31	07/24/2011 - 07/30/2011	1.03	1.07
32	07/31/2011 - 08/06/2011	1.03	1.07
33	08/07/2011 - 08/13/2011	1.03	1.07
34	08/14/2011 - 08/20/2011	1.03	1.07
35	08/21/2011 - 08/27/2011	1.02	1.06
36	08/28/2011 - 09/03/2011	1.02	1.06
37	09/04/2011 - 09/10/2011	1.01	1.05
38	09/11/2011 - 09/17/2011	1.01	1.05
39	09/18/2011 - 09/24/2011	1.01	1.05
40	09/25/2011 - 10/01/2011	1.01	1.05
41	10/02/2011 - 10/08/2011	1.00	1.04
42	10/09/2011 - 10/15/2011	1.00	1.04
43	10/16/2011 - 10/22/2011	1.00	1.04
44	10/23/2011 - 10/29/2011	1.00	1.04
45	10/30/2011 - 11/05/2011	1.00	1.04
46	11/06/2011 - 11/12/2011	1.00	1.04
47	11/13/2011 - 11/19/2011	1.00	1.04
48	11/20/2011 - 11/26/2011	1.01	1.05
49	11/27/2011 - 12/03/2011	1.01	1.05
50	12/04/2011 - 12/10/2011	1.02	1.06
51	12/11/2011 - 12/17/2011	1.03	1.07
52	12/18/2011 - 12/24/2011	1.02	1.06
53	12/25/2011 - 12/31/2011	1.01	1.05

* Peak Season

Attachment C

**Parking Garage Turnover Rates
Based on April and May 2012**

G5, G7, and G9 Parking Garages

	Entry Turnover	Exit Turnover
Average Daily	13.45%	8.75%
Average Weekday (Mon-Thur)	14.19%	8.49%
Weekend (Fri-Sun)	12.38%	9.12%
Friday	18.77%	7.75%
Saturday	10.23%	9.92%
Event (Friday 5/18, Exxxotica)	33.41%	4.12%

G5 - 17th Street & Pennsylvania Ave - Parking Garage April and May 2012 Data

Date	Day	Enter	Exit	Total	Peak Hour	Spaces	Entry Turnover	Exit Turnover
4/1/2012	Sunday	360	392	752	16:00	1460	24.66%	26.85%
4/2/2012	Monday	181	215	396	18:00	1460	12.40%	14.73%
4/3/2012	Tuesday	210	241	451	18:00	1460	14.38%	16.51%
4/4/2012	Wednesday	133	253	386	17:00	1460	9.11%	17.33%
4/5/2012	Thursday	639	163	802	19:00	1460	43.77%	11.16%
4/6/2012	Friday	324	172	496	20:00	1460	22.19%	11.78%
4/7/2012	Saturday	256	357	613	17:00	1460	17.53%	24.45%
4/8/2012	Sunday	226	365	591	18:00	1460	15.48%	25.00%
4/9/2012	Monday	95	232	327	17:00	1460	6.51%	15.89%
4/10/2012	Tuesday	91	247	338	15:00	1460	6.23%	16.92%
4/11/2012	Wednesday	90	264	354	17:00	1460	6.16%	18.08%
4/12/2012	Thursday	101	258	359	17:00	1460	6.92%	17.67%
4/13/2012	Friday	317	209	526	18:00	1460	21.71%	14.32%
4/14/2012	Saturday	274	299	573	22:00	1460	18.77%	20.48%
4/15/2012	Sunday	279	326	605	17:00	1460	19.11%	22.33%
4/16/2012	Monday	116	248	364	18:00	1460	7.95%	16.99%
4/17/2012	Tuesday	120	280	400	17:00	1460	8.22%	19.18%
4/18/2012	Wednesday	211	164	375	19:00	1460	14.45%	11.23%
4/19/2012	Thursday	176	212	388	18:00	1460	12.05%	14.52%
4/20/2012	Friday	293	163	456	19:00	1460	20.07%	11.16%
4/21/2012	Saturday	224	187	411	22:00	1460	15.34%	12.81%
4/22/2012	Sunday	245	355	600	17:00	1460	16.78%	24.32%
4/23/2012	Monday	118	213	331	18:00	1460	8.08%	14.59%
4/24/2012	Tuesday	256	241	497	18:00	1460	17.53%	16.51%
4/25/2012	Wednesday	193	240	433	18:00	1460	13.22%	16.44%
4/26/2012	Thursday	137	272	409	17:00	1460	9.38%	18.63%
4/27/2012	Friday	170	277	447	22:00	1460	11.64%	18.97%
4/28/2012	Saturday	487	156	643	19:00	1460	33.36%	10.68%
4/29/2012	Sunday	112	255	367	0:00	1460	7.67%	17.47%
4/30/2012	Monday	95	241	336	17:00	1460	6.51%	16.51%
5/1/2012	Tuesday	310	140	450	19:00	1460	21.23%	9.59%
5/2/2012	Wednesday	134	235	369	18:00	1460	9.18%	16.10%
5/3/2012	Thursday	187	225	412	18:00	1460	12.81%	15.41%
5/4/2012	Friday	371	166	537	20:00	1460	25.41%	11.37%
5/5/2012	Saturday	451	268	719	19:00	1460	30.89%	18.36%
5/6/2012	Sunday	348	283	631	15:00	1460	23.84%	19.38%
5/7/2012	Monday	116	261	377	17:00	1460	7.95%	17.88%
5/8/2012	Tuesday	103	258	361	17:00	1460	7.05%	17.67%
5/9/2012	Wednesday	192	157	349	14:00	1460	13.15%	10.75%
5/10/2012	Thursday	140	240	380	18:00	1460	9.59%	16.44%
5/11/2012	Friday	486	460	946	20:00	1460	33.29%	31.51%
5/12/2012	Saturday	546	244	790	19:00	1460	37.40%	16.71%
5/13/2012	Sunday	294	230	524	15:00	1460	20.14%	15.75%
5/14/2012	Monday	114	228	342	16:00	1460	7.81%	15.62%
5/15/2012	Tuesday	184	262	446	18:00	1460	12.60%	17.95%
5/16/2012	Wednesday	322	137	459	20:00	1460	22.05%	9.38%
5/17/2012	Thursday	126	232	358	17:00	1460	8.63%	15.89%
5/18/2012	Friday	638	116	754	21:00	1460	43.70%	7.95%
5/19/2012	Saturday	382	212	594	20:00	1460	26.16%	14.52%
5/20/2012	Sunday	320	344	664	15:00	1460	21.92%	23.56%
5/21/2012	Monday	128	260	388	17:00	1460	8.77%	17.81%
5/22/2012	Tuesday	82	238	320	17:00	1460	5.62%	16.30%
5/23/2012	Wednesday	113	222	335	18:00	1460	7.74%	15.21%
5/24/2012	Thursday	169	223	392	18:00	1460	11.58%	15.27%
5/25/2012	Friday	151	218	369	15:00	1460	10.34%	14.93%
5/26/2012	Saturday	158	140	298	15:00	1460	10.82%	9.59%
5/27/2012	Sunday	155	141	296	17:00	1460	10.62%	9.66%
5/28/2012	Monday	142	139	281	15:00	1460	9.73%	9.52%
5/29/2012	Tuesday	108	234	342	17:00	1460	7.40%	16.03%
5/30/2012	Wednesday	133	255	388	17:00	1460	9.11%	17.47%
5/31/2012	Thursday	120	247	367	17:00	1460	8.22%	16.92%

AVERAGE DAILY	225	238	463	17:00	15.44%	16.29%
AVERAGE WEEKDAY (MON-THUR)	163	227	390	17:00	11.20%	15.56%
WEEKEND (FRI-SUN)	315	253	568	15:00	21.55%	17.36%
FRIDAY	344	223	566	20:00	23.54%	15.25%
SATURDAY	347	233	580	19:00	23.78%	15.95%
EVENT FRIDAY 5/18 (EXXXOTICA)	638	116	754	21:00	43.70%	7.95%

G7 - 18th Street & Meridian - City Hall Garage - Parking Garage April and May 2012 Data

Date	Day	Enter	Exit	Total	Peak Hour	Spaces	Entry Turnover	Exit Turnover
4/1/2012	Sunday	42	16	58	11:00	650	6.46%	2.46%
4/2/2012	Monday	6	152	158	17:00	650	0.92%	23.38%
4/3/2012	Tuesday	170	12	182	8:00	650	26.15%	1.85%
4/4/2012	Wednesday	152	8	160	8:00	650	23.38%	1.23%
4/5/2012	Thursday	149	12	161	8:00	650	22.92%	1.85%
4/6/2012	Friday	108	11	119	8:00	650	16.62%	1.69%
4/7/2012	Saturday	10	8	18	9:00	650	1.54%	1.23%
4/8/2012	Sunday	5	9	14	15:00	650	0.77%	1.38%
4/9/2012	Monday	164	18	182	8:00	650	25.23%	2.77%
4/10/2012	Tuesday	170	18	188	8:00	650	26.15%	2.77%
4/11/2012	Wednesday	449	77	526	3:25	650	69.08%	11.85%
4/12/2012	Thursday	162	16	178	8:00	650	24.92%	2.46%
4/13/2012	Friday	149	17	166	8:00	650	22.92%	2.62%
4/14/2012	Saturday	23	10	33	18:00	650	3.54%	1.54%
4/15/2012	Sunday	38	11	49	14:00	650	5.85%	1.69%
4/16/2012	Monday	150	20	170	8:00	650	23.08%	3.08%
4/17/2012	Tuesday	166	19	185	8:00	650	25.54%	2.92%
4/18/2012	Wednesday	158	19	177	8:00	650	24.31%	2.92%
4/19/2012	Thursday	158	13	171	8:00	650	24.31%	2.00%
4/20/2012	Friday	161	19	180	8:00	650	24.77%	2.92%
4/21/2012	Saturday	13	5	18	11:00	650	2.00%	0.77%
4/22/2012	Sunday	14	12	26	11:00	650	2.15%	1.85%
4/23/2012	Monday	163	19	182	8:00	650	25.08%	2.92%
4/24/2012	Tuesday	169	11	180	8:00	650	26.00%	1.69%
4/25/2012	Wednesday	154	23	177	8:00	650	23.69%	3.54%
4/26/2012	Thursday	171	11	182	8:00	650	26.31%	1.69%
4/27/2012	Friday	151	13	164	8:00	650	23.23%	2.00%
4/28/2012	Saturday	8	7	15	11:00	650	1.23%	1.08%
4/29/2012	Sunday	7	14	21	14:00	650	1.08%	2.15%
4/30/2012	Monday	156	15	171	8:00	650	24.00%	2.31%
5/1/2012	Tuesday	12	153	165	17:00	650	1.85%	23.54%
5/2/2012	Wednesday	167	10	177	8:00	650	25.69%	1.54%
5/3/2012	Thursday	182	15	197	8:00	650	28.00%	2.31%
5/4/2012	Friday	168	15	183	8:00	650	25.85%	2.31%
5/5/2012	Saturday	17	10	27	20:00	650	2.62%	1.54%
5/6/2012	Sunday	3	11	14	20:00	650	0.46%	1.69%
5/7/2012	Monday	159	13	172	8:00	650	24.46%	2.00%
5/8/2012	Tuesday	167	13	180	8:00	650	25.69%	2.00%
5/9/2012	Wednesday	513	154	667	3:30	650	78.92%	23.69%
5/10/2012	Thursday	5	170	175	17:00	650	0.77%	26.15%
5/11/2012	Friday	154	22	176	8:00	650	23.69%	3.38%
5/12/2012	Saturday	11	6	17	14:00	650	1.69%	0.92%
5/13/2012	Sunday	5	12	17	18:00	650	0.77%	1.85%
5/14/2012	Monday	136	18	154	8:00	650	20.92%	2.77%
5/15/2012	Tuesday	13	169	182	17:00	650	2.00%	26.00%
5/16/2012	Wednesday	14	174	188	17:00	650	2.15%	26.77%
5/17/2012	Thursday	168	16	184	8:00	650	25.85%	2.46%
5/18/2012	Friday	157	18	175	8:00	650	24.15%	2.77%
5/19/2012	Saturday	48	44	92	19:00	650	7.38%	6.77%
5/20/2012	Sunday	8	8	16	14:00	650	1.23%	1.23%
5/21/2012	Monday	161	19	180	8:00	650	24.77%	2.92%
5/22/2012	Tuesday	86	6	92	8:00	650	13.23%	0.92%
5/23/2012	Wednesday	163	16	179	8:00	650	25.08%	2.46%
5/24/2012	Thursday	162	15	177	8:00	650	24.92%	2.31%
5/25/2012	Friday	138	18	156	8:00	650	21.23%	2.77%
5/26/2012	Saturday	10	13	23	18:00	650	1.54%	2.00%
5/27/2012	Sunday	9	10	19	17:00	650	1.38%	1.54%
5/28/2012	Monday	11	3	14	9:00	650	1.69%	0.46%
5/29/2012	Tuesday	145	13	158	8:00	650	22.31%	2.00%
5/30/2012	Wednesday	170	21	191	8:00	650	26.15%	3.23%
5/31/2012	Thursday	4	169	173	17:00	650	0.62%	26.00%

AVERAGE DAILY	111	32	143	8:00	17.05%	4.97%
AVERAGE WEEKDAY (MON-THUR)	147	45	192	8:00	22.67%	6.97%
WEEKEND (FRI-SUN)	58	14	72	8:00	8.97%	2.09%
FRIDAY	148	17	165	8:00	22.81%	2.56%
SATURDAY	18	13	30	18:00	2.69%	1.98%
EVENT FRIDAY 5/18 (EXXXOTICA)	157	18	175	8:00	24.15%	2.77%

G9 - Pennsylvania Ave (17th Street)- Parking Garage April and May 2012 Data

Date	Day	Enter	Exit	Total	Peak Hour	Spaces	Entry Turnover	Exit Turnover
4/1/2012	Sunday	17	109	126	16:00	550	3.09%	19.82%
4/2/2012	Monday	54	5	59	9:00	550	9.82%	0.91%
4/3/2012	Tuesday	50	3	53	9:00	550	9.09%	0.55%
4/4/2012	Wednesday	65	3	68	9:00	550	11.82%	0.55%
4/5/2012	Thursday	95	18	113	21:00	550	17.27%	3.27%
4/6/2012	Friday	6	50	56	0:00	550	1.09%	9.09%
4/7/2012	Saturday	18	76	94	22:00	550	3.27%	13.82%
4/8/2012	Sunday	20	13	33	15:00	550	3.64%	2.36%
4/9/2012	Monday	48	5	53	9:00	550	8.73%	0.91%
4/10/2012	Tuesday	56	6	62	9:00	550	10.18%	1.09%
4/11/2012	Wednesday	60	4	64	9:00	550	10.91%	0.73%
4/12/2012	Thursday	55	5	60	9:00	550	10.00%	0.91%
4/13/2012	Friday	25	105	130	22:00	550	4.55%	19.09%
4/14/2012	Saturday	0	40	40	0:00	550	0.00%	7.27%
4/15/2012	Sunday	30	3	33	17:00	550	5.45%	0.55%
4/16/2012	Monday	55	5	60	9:00	550	10.00%	0.91%
4/17/2012	Tuesday	69	4	73	9:00	550	12.55%	0.73%
4/18/2012	Wednesday	59	5	64	9:00	550	10.73%	0.91%
4/19/2012	Thursday	23	46	69	16:00	550	4.18%	8.36%
4/20/2012	Friday	63	1	64	9:00	550	11.45%	0.18%
4/21/2012	Saturday	10	10	20	15:00	550	1.82%	1.82%
4/22/2012	Sunday	62	12	74	13:00	550	11.27%	2.18%
4/23/2012	Monday	66	8	74	9:00	550	12.00%	1.45%
4/24/2012	Tuesday	61	4	65	9:00	550	11.09%	0.73%
4/25/2012	Wednesday	58	1	59	9:00	550	10.55%	0.18%
4/26/2012	Thursday	57	5	62	9:00	550	10.36%	0.91%
4/27/2012	Friday	58	5	63	9:00	550	10.55%	0.91%
4/28/2012	Saturday	49	50	99	21:00	550	8.91%	9.09%
4/29/2012	Sunday	3	36	39	0:00	550	0.55%	6.55%
4/30/2012	Monday	53	7	60	9:00	550	9.64%	1.27%
5/1/2012	Tuesday	64	8	72	9:00	550	11.64%	1.45%
5/2/2012	Wednesday	69	6	75	9:00	550	12.55%	1.09%
5/3/2012	Thursday	59	1	60	9:00	550	10.73%	0.18%
5/4/2012	Friday	48	11	59	10:00	550	8.73%	2.00%
5/5/2012	Saturday	52	167	219	22:00	550	9.45%	30.36%
5/6/2012	Sunday	123	8	131	13:00	550	22.36%	1.45%
5/7/2012	Monday	6	55	61	17:00	550	1.09%	10.00%
5/8/2012	Tuesday	8	61	69	17:00	550	1.45%	11.09%
5/9/2012	Wednesday	63	7	70	9:00	550	11.45%	1.27%
5/10/2012	Thursday	11	48	59	18:00	550	2.00%	8.73%
5/11/2012	Friday	14	52	66	20:00	550	2.55%	9.45%
5/12/2012	Saturday	38	37	75	23:00	550	6.91%	6.73%
5/13/2012	Sunday	6	33	39	0:00	550	1.09%	6.00%
5/14/2012	Monday	55	4	59	9:00	550	10.00%	0.73%
5/15/2012	Tuesday	58	6	64	9:00	550	10.55%	1.09%
5/16/2012	Wednesday	61	2	63	9:00	550	11.09%	0.36%
5/17/2012	Thursday	11	45	56	17:00	550	2.00%	8.18%
5/18/2012	Friday	178	9	187	20:00	550	32.36%	1.64%
5/19/2012	Saturday	6	132	138	0:00	550	1.09%	24.00%
5/20/2012	Sunday	15	105	120	1:00	550	2.73%	19.09%
5/21/2012	Monday	50	37	87	18:00	550	9.09%	6.73%
5/22/2012	Tuesday	63	6	69	9:00	550	11.45%	1.09%
5/23/2012	Wednesday	55	7	62	9:00	550	10.00%	1.27%
5/24/2012	Thursday	47	2	49	9:00	550	8.55%	0.36%
5/25/2012	Friday	46	6	52	9:00	550	8.36%	1.09%
5/26/2012	Saturday	12	8	20	16:00	550	2.18%	1.45%
5/27/2012	Sunday	11	9	20	16:00	550	2.00%	1.64%
5/28/2012	Monday	12	16	28	18:00	550	2.18%	2.91%
5/29/2012	Tuesday	6	56	62	17:00	550	1.09%	10.18%
5/30/2012	Wednesday	26	41	67	17:00	550	4.73%	7.45%
5/31/2012	Thursday	16	42	58	16:00	550	2.91%	7.64%

AVERAGE DAILY	43	27	70	9:00	7.85%	4.98%
AVERAGE WEEKDAY (MON-THUR)	48	16	64	9:00	8.71%	2.95%
WEEKEND (FRI-SUN)	36	43	79	0:00	6.62%	7.91%
FRIDAY	55	30	85	9:00	9.95%	5.43%
SATURDAY	23	65	88	22:00	4.20%	11.82%
EVENT FRIDAY 5/18 (EXXXOTICA)	178	9	187	20:00	32.36%	1.64%

APPENDIX C:
Parking Garage Peak Hour
Demand (Project Traffic)

**Parking Garage Turnover Rates
Based on April and May 2012**

G5, G7, and G9 Parking Garages

	Entry Turnover	Exit Turnover
Average Daily	13.45%	8.75%
Average Weekday (Mon-Thur)	14.19%	8.49%
Weekend (Fri-Sun)	12.38%	9.12%
Friday	18.77%	7.75%
Saturday	10.23%	9.92%

G5 - 17th Street & Pennsylvania Ave - Parking Garage April and May 2012 Data

Date	Day	Enter	Exit	Total	Peak Hour	Spaces	Entry Turnover	Exit Turnover
4/1/2012	Sunday	360	392	752	16:00	1460	24.66%	26.85%
4/2/2012	Monday	181	215	396	18:00	1460	12.40%	14.73%
4/3/2012	Tuesday	210	241	451	18:00	1460	14.38%	16.51%
4/4/2012	Wednesday	133	253	386	17:00	1460	9.11%	17.33%
4/5/2012	Thursday	639	163	802	19:00	1460	43.77%	11.16%
4/6/2012	Friday	324	172	496	20:00	1460	22.19%	11.78%
4/7/2012	Saturday	256	357	613	17:00	1460	17.53%	24.45%
4/8/2012	Sunday	226	365	591	18:00	1460	15.48%	25.00%
4/9/2012	Monday	95	232	327	17:00	1460	6.51%	15.89%
4/10/2012	Tuesday	91	247	338	15:00	1460	6.23%	16.92%
4/11/2012	Wednesday	90	264	354	17:00	1460	6.16%	18.08%
4/12/2012	Thursday	101	258	359	17:00	1460	6.92%	17.67%
4/13/2012	Friday	317	209	526	18:00	1460	21.71%	14.32%
4/14/2012	Saturday	274	299	573	22:00	1460	18.77%	20.48%
4/15/2012	Sunday	279	326	605	17:00	1460	19.11%	22.33%
4/16/2012	Monday	116	248	364	18:00	1460	7.95%	16.99%
4/17/2012	Tuesday	120	280	400	17:00	1460	8.22%	19.18%
4/18/2012	Wednesday	211	164	375	19:00	1460	14.45%	11.23%
4/19/2012	Thursday	176	212	388	18:00	1460	12.05%	14.52%
4/20/2012	Friday	293	163	456	19:00	1460	20.07%	11.16%
4/21/2012	Saturday	224	187	411	22:00	1460	15.34%	12.81%
4/22/2012	Sunday	245	355	600	17:00	1460	16.78%	24.32%
4/23/2012	Monday	118	213	331	18:00	1460	8.08%	14.59%
4/24/2012	Tuesday	256	241	497	18:00	1460	17.53%	16.51%
4/25/2012	Wednesday	193	240	433	18:00	1460	13.22%	16.44%
4/26/2012	Thursday	137	272	409	17:00	1460	9.38%	18.63%
4/27/2012	Friday	170	277	447	22:00	1460	11.64%	18.97%
4/28/2012	Saturday	487	156	643	19:00	1460	33.36%	10.68%
4/29/2012	Sunday	112	255	367	0:00	1460	7.67%	17.47%
4/30/2012	Monday	95	241	336	17:00	1460	6.51%	16.51%
5/1/2012	Tuesday	310	140	450	19:00	1460	21.23%	9.59%
5/2/2012	Wednesday	134	235	369	18:00	1460	9.18%	16.10%
5/3/2012	Thursday	187	225	412	18:00	1460	12.81%	15.41%
5/4/2012	Friday	371	166	537	20:00	1460	25.41%	11.37%
5/5/2012	Saturday	451	268	719	19:00	1460	30.89%	18.36%
5/6/2012	Sunday	348	283	631	15:00	1460	23.84%	19.38%
5/7/2012	Monday	116	261	377	17:00	1460	7.95%	17.88%
5/8/2012	Tuesday	103	258	361	17:00	1460	7.05%	17.67%
5/9/2012	Wednesday	192	157	349	14:00	1460	13.15%	10.75%
5/10/2012	Thursday	140	240	380	18:00	1460	9.59%	16.44%
5/11/2012	Friday	486	460	946	20:00	1460	33.29%	31.51%
5/12/2012	Saturday	546	244	790	19:00	1460	37.40%	16.71%
5/13/2012	Sunday	294	230	524	15:00	1460	20.14%	15.75%
5/14/2012	Monday	114	228	342	16:00	1460	7.81%	15.62%
5/15/2012	Tuesday	184	262	446	18:00	1460	12.60%	17.95%
5/16/2012	Wednesday	322	137	459	20:00	1460	22.05%	9.38%
5/17/2012	Thursday	126	232	358	17:00	1460	8.63%	15.89%
5/18/2012	Friday	638	116	754	21:00	1460	43.70%	7.95%
5/19/2012	Saturday	382	212	594	20:00	1460	26.16%	14.52%
5/20/2012	Sunday	320	344	664	15:00	1460	21.92%	23.56%
5/21/2012	Monday	128	260	388	17:00	1460	8.77%	17.81%
5/22/2012	Tuesday	82	238	320	17:00	1460	5.62%	16.30%
5/23/2012	Wednesday	113	222	335	18:00	1460	7.74%	15.21%
5/24/2012	Thursday	169	223	392	18:00	1460	11.58%	15.27%
5/25/2012	Friday	151	218	369	15:00	1460	10.34%	14.93%
5/26/2012	Saturday	158	140	298	15:00	1460	10.82%	9.59%
5/27/2012	Sunday	155	141	296	17:00	1460	10.62%	9.66%
5/28/2012	Monday	142	139	281	15:00	1460	9.73%	9.52%
5/29/2012	Tuesday	108	234	342	17:00	1460	7.40%	16.03%
5/30/2012	Wednesday	133	255	388	17:00	1460	9.11%	17.47%
5/31/2012	Thursday	120	247	367	17:00	1460	8.22%	16.92%

AVERAGE DAILY	225	238	463	17:00	15.44%	16.29%
AVERAGE WEEKDAY (MON-THUR)	163	227	390	17:00	11.20%	15.56%
WEEKEND (FRI-SUN)	315	253	568	15:00	21.55%	17.36%
FRIDAY	344	223	566	20:00	23.54%	15.25%
SATURDAY	347	233	580	19:00	23.78%	15.95%

G7 - 18th Street & Meridian - City Hall Garage - Parking Garage April and May 2012 Data

Date	Day	Enter	Exit	Total	Peak Hour	Spaces	Entry Turnover	Exit Turnover
4/1/2012	Sunday	42	16	58	11:00	650	6.46%	2.46%
4/2/2012	Monday	6	152	158	17:00	650	0.92%	23.38%
4/3/2012	Tuesday	170	12	182	8:00	650	26.15%	1.85%
4/4/2012	Wednesday	152	8	160	8:00	650	23.38%	1.23%
4/5/2012	Thursday	149	12	161	8:00	650	22.92%	1.85%
4/6/2012	Friday	108	11	119	8:00	650	16.62%	1.69%
4/7/2012	Saturday	10	8	18	9:00	650	1.54%	1.23%
4/8/2012	Sunday	5	9	14	15:00	650	0.77%	1.38%
4/9/2012	Monday	164	18	182	8:00	650	25.23%	2.77%
4/10/2012	Tuesday	170	18	188	8:00	650	26.15%	2.77%
4/11/2012	Wednesday	449	77	526	3:25	650	69.08%	11.85%
4/12/2012	Thursday	162	16	178	8:00	650	24.92%	2.46%
4/13/2012	Friday	149	17	166	8:00	650	22.92%	2.62%
4/14/2012	Saturday	23	10	33	18:00	650	3.54%	1.54%
4/15/2012	Sunday	38	11	49	14:00	650	5.85%	1.69%
4/16/2012	Monday	150	20	170	8:00	650	23.08%	3.08%
4/17/2012	Tuesday	166	19	185	8:00	650	25.54%	2.92%
4/18/2012	Wednesday	158	19	177	8:00	650	24.31%	2.92%
4/19/2012	Thursday	158	13	171	8:00	650	24.31%	2.00%
4/20/2012	Friday	161	19	180	8:00	650	24.77%	2.92%
4/21/2012	Saturday	13	5	18	11:00	650	2.00%	0.77%
4/22/2012	Sunday	14	12	26	11:00	650	2.15%	1.85%
4/23/2012	Monday	163	19	182	8:00	650	25.08%	2.92%
4/24/2012	Tuesday	169	11	180	8:00	650	26.00%	1.69%
4/25/2012	Wednesday	154	23	177	8:00	650	23.69%	3.54%
4/26/2012	Thursday	171	11	182	8:00	650	26.31%	1.69%
4/27/2012	Friday	151	13	164	8:00	650	23.23%	2.00%
4/28/2012	Saturday	8	7	15	11:00	650	1.23%	1.08%
4/29/2012	Sunday	7	14	21	14:00	650	1.08%	2.15%
4/30/2012	Monday	156	15	171	8:00	650	24.00%	2.31%
5/1/2012	Tuesday	12	153	165	17:00	650	1.85%	23.54%
5/2/2012	Wednesday	167	10	177	8:00	650	25.69%	1.54%
5/3/2012	Thursday	182	15	197	8:00	650	28.00%	2.31%
5/4/2012	Friday	168	15	183	8:00	650	25.85%	2.31%
5/5/2012	Saturday	17	10	27	20:00	650	2.62%	1.54%
5/6/2012	Sunday	3	11	14	20:00	650	0.46%	1.69%
5/7/2012	Monday	159	13	172	8:00	650	24.46%	2.00%
5/8/2012	Tuesday	167	13	180	8:00	650	25.69%	2.00%
5/9/2012	Wednesday	513	154	667	3:30	650	78.92%	23.69%
5/10/2012	Thursday	5	170	175	17:00	650	0.77%	26.15%
5/11/2012	Friday	154	22	176	8:00	650	23.69%	3.38%
5/12/2012	Saturday	11	6	17	14:00	650	1.69%	0.92%
5/13/2012	Sunday	5	12	17	18:00	650	0.77%	1.85%
5/14/2012	Monday	136	18	154	8:00	650	20.92%	2.77%
5/15/2012	Tuesday	13	169	182	17:00	650	2.00%	26.00%
5/16/2012	Wednesday	14	174	188	17:00	650	2.15%	26.77%
5/17/2012	Thursday	168	16	184	8:00	650	25.85%	2.46%
5/18/2012	Friday	157	18	175	8:00	650	24.15%	2.77%
5/19/2012	Saturday	48	44	92	19:00	650	7.38%	6.77%
5/20/2012	Sunday	8	8	16	14:00	650	1.23%	1.23%
5/21/2012	Monday	161	19	180	8:00	650	24.77%	2.92%
5/22/2012	Tuesday	86	6	92	8:00	650	13.23%	0.92%
5/23/2012	Wednesday	163	16	179	8:00	650	25.08%	2.46%
5/24/2012	Thursday	162	15	177	8:00	650	24.92%	2.31%
5/25/2012	Friday	138	18	156	8:00	650	21.23%	2.77%
5/26/2012	Saturday	10	13	23	18:00	650	1.54%	2.00%
5/27/2012	Sunday	9	10	19	17:00	650	1.38%	1.54%
5/28/2012	Monday	11	3	14	9:00	650	1.69%	0.46%
5/29/2012	Tuesday	145	13	158	8:00	650	22.31%	2.00%
5/30/2012	Wednesday	170	21	191	8:00	650	26.15%	3.23%
5/31/2012	Thursday	4	169	173	17:00	650	0.62%	26.00%

AVERAGE DAILY	111	32	143	8:00	17.05%	4.97%
AVERAGE WEEKDAY (MON-THUR)	147	45	192	8:00	22.67%	6.97%
WEEKEND (FRI-SUN)	58	14	72	8:00	8.97%	2.09%
FRIDAY	148	17	165	8:00	22.81%	2.56%
SATURDAY	18	13	30	18:00	2.69%	1.98%

G9 - Pennsylvania Ave (17th Street)- Parking Garage April and May 2012 Data

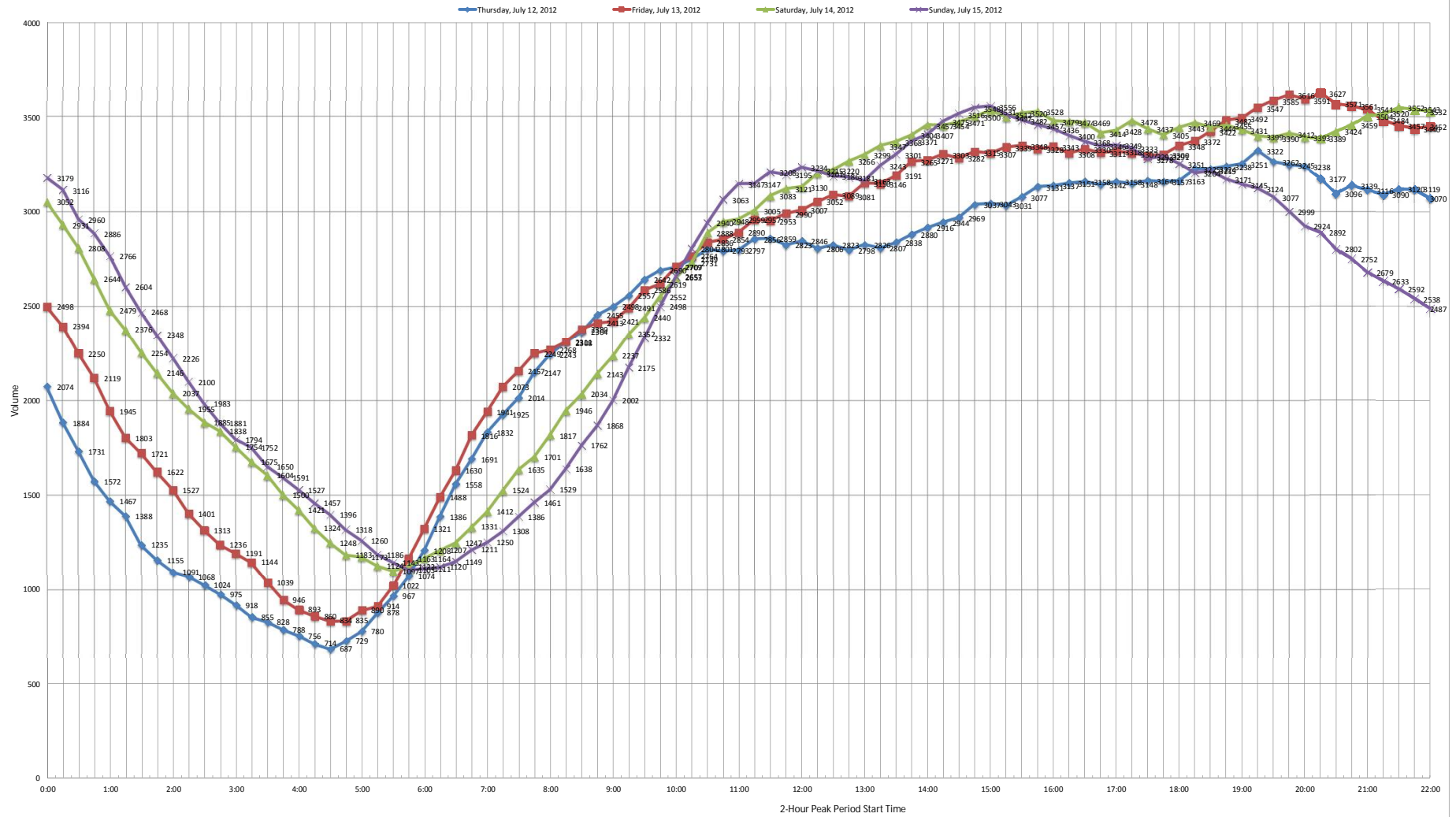
Date	Day	Enter	Exit	Total	Peak Hour	Spaces	Entry Turnover	Exit Turnover
4/1/2012	Sunday	17	109	126	16:00	550	3.09%	19.82%
4/2/2012	Monday	54	5	59	9:00	550	9.82%	0.91%
4/3/2012	Tuesday	50	3	53	9:00	550	9.09%	0.55%
4/4/2012	Wednesday	65	3	68	9:00	550	11.82%	0.55%
4/5/2012	Thursday	95	18	113	21:00	550	17.27%	3.27%
4/6/2012	Friday	6	50	56	0:00	550	1.09%	9.09%
4/7/2012	Saturday	18	76	94	22:00	550	3.27%	13.82%
4/8/2012	Sunday	20	13	33	15:00	550	3.64%	2.36%
4/9/2012	Monday	48	5	53	9:00	550	8.73%	0.91%
4/10/2012	Tuesday	56	6	62	9:00	550	10.18%	1.09%
4/11/2012	Wednesday	60	4	64	9:00	550	10.91%	0.73%
4/12/2012	Thursday	55	5	60	9:00	550	10.00%	0.91%
4/13/2012	Friday	25	105	130	22:00	550	4.55%	19.09%
4/14/2012	Saturday	0	40	40	0:00	550	0.00%	7.27%
4/15/2012	Sunday	30	3	33	17:00	550	5.45%	0.55%
4/16/2012	Monday	55	5	60	9:00	550	10.00%	0.91%
4/17/2012	Tuesday	69	4	73	9:00	550	12.55%	0.73%
4/18/2012	Wednesday	59	5	64	9:00	550	10.73%	0.91%
4/19/2012	Thursday	23	46	69	16:00	550	4.18%	8.36%
4/20/2012	Friday	63	1	64	9:00	550	11.45%	0.18%
4/21/2012	Saturday	10	10	20	15:00	550	1.82%	1.82%
4/22/2012	Sunday	62	12	74	13:00	550	11.27%	2.18%
4/23/2012	Monday	66	8	74	9:00	550	12.00%	1.45%
4/24/2012	Tuesday	61	4	65	9:00	550	11.09%	0.73%
4/25/2012	Wednesday	58	1	59	9:00	550	10.55%	0.18%
4/26/2012	Thursday	57	5	62	9:00	550	10.36%	0.91%
4/27/2012	Friday	58	5	63	9:00	550	10.55%	0.91%
4/28/2012	Saturday	49	50	99	21:00	550	8.91%	9.09%
4/29/2012	Sunday	3	36	39	0:00	550	0.55%	6.55%
4/30/2012	Monday	53	7	60	9:00	550	9.64%	1.27%
5/1/2012	Tuesday	64	8	72	9:00	550	11.64%	1.45%
5/2/2012	Wednesday	69	6	75	9:00	550	12.55%	1.09%
5/3/2012	Thursday	59	1	60	9:00	550	10.73%	0.18%
5/4/2012	Friday	48	11	59	10:00	550	8.73%	2.00%
5/5/2012	Saturday	52	167	219	22:00	550	9.45%	30.36%
5/6/2012	Sunday	123	8	131	13:00	550	22.36%	1.45%
5/7/2012	Monday	6	55	61	17:00	550	1.09%	10.00%
5/8/2012	Tuesday	8	61	69	17:00	550	1.45%	11.09%
5/9/2012	Wednesday	63	7	70	9:00	550	11.45%	1.27%
5/10/2012	Thursday	11	48	59	18:00	550	2.00%	8.73%
5/11/2012	Friday	14	52	66	20:00	550	2.55%	9.45%
5/12/2012	Saturday	38	37	75	23:00	550	6.91%	6.73%
5/13/2012	Sunday	6	33	39	0:00	550	1.09%	6.00%
5/14/2012	Monday	55	4	59	9:00	550	10.00%	0.73%
5/15/2012	Tuesday	58	6	64	9:00	550	10.55%	1.09%
5/16/2012	Wednesday	61	2	63	9:00	550	11.09%	0.36%
5/17/2012	Thursday	11	45	56	17:00	550	2.00%	8.18%
5/18/2012	Friday	178	9	187	20:00	550	32.36%	1.64%
5/19/2012	Saturday	6	132	138	0:00	550	1.09%	24.00%
5/20/2012	Sunday	15	105	120	1:00	550	2.73%	19.09%
5/21/2012	Monday	50	37	87	18:00	550	9.09%	6.73%
5/22/2012	Tuesday	63	6	69	9:00	550	11.45%	1.09%
5/23/2012	Wednesday	55	7	62	9:00	550	10.00%	1.27%
5/24/2012	Thursday	47	2	49	9:00	550	8.55%	0.36%
5/25/2012	Friday	46	6	52	9:00	550	8.36%	1.09%
5/26/2012	Saturday	12	8	20	16:00	550	2.18%	1.45%
5/27/2012	Sunday	11	9	20	16:00	550	2.00%	1.64%
5/28/2012	Monday	12	16	28	18:00	550	2.18%	2.91%
5/29/2012	Tuesday	6	56	62	17:00	550	1.09%	10.18%
5/30/2012	Wednesday	26	41	67	17:00	550	4.73%	7.45%
5/31/2012	Thursday	16	42	58	16:00	550	2.91%	7.64%

AVERAGE DAILY	43	27	70	9:00	7.85%	4.98%
AVERAGE WEEKDAY (MON-THUR)	48	16	64	9:00	8.71%	2.95%
WEEKEND (FRI-SUN)	36	43	79	0:00	6.62%	7.91%
FRIDAY	55	30	85	9:00	9.95%	5.43%
SATURDAY	23	65	88	22:00	4.20%	11.82%

APPENDIX D:
96-hour Continuous Counts,
Intersection Turning Movement
Counts, FDOT Peak Season
Factor Category Report

96-hour Continuous Count

96-Hour Continuous (Peak 2-Hour Period) Traffic Count on Collins Avenue Between 22nd Street and 23rd Street



Data File : D0712001.PRN
 Station : 000000071102
 Identification : 009601150081 Interval : 15 minutes
 Start date : Jul 12, 12 Start time : 00:00
 Stop date : Jul 12, 12 Stop time : 24:00
 City/Town : Miami Beach, Florida County : Dade
 Location : Collins Ave Between 22 St & 23 St

Jul 12 Northbound Volume for Lane 1

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	132	83	73	47	44	30	43	100	152	170	172	174
30	110	111	63	43	42	29	50	90	148	157	173	179
45	117	79	45	53	37	39	84	95	166	188	206	181
00	97	71	67	61	44	47	97	141	206	198	173	189
Hr Total	456	344	248	204	167	145	274	426	672	713	724	723

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	180	209	176	203	166	175	162	192	193	198	161	162
30	184	170	180	167	185	178	202	221	208	155	140	174
45	180	170	166	174	179	182	175	199	195	182	192	155
00	183	204	192	188	170	182	200	195	204	174	162	146
Hr Total	727	753	714	732	700	717	739	807	800	709	655	637

24 Hour Total : 13786
 AM peak hour begins : 09:45 AM peak volume : 749 Peak hour factor : 0.91
 PM peak hour begins : 18:45 PM peak volume : 812 Peak hour factor : 0.92

Jul 12 Southbound Volume for Lane 2

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	185	130	67	92	74	50	35	72	92	89	133	140
30	175	128	79	53	59	42	26	64	89	80	116	137
45	163	103	86	54	48	30	40	74	82	106	127	158
00	149	105	81	56	51	41	46	72	69	104	143	129
Hr Total	672	466	313	255	232	163	147	282	332	379	519	564

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	164	160	130	148	166	165	183	139	210	200	185	212
30	154	149	174	181	193	213	182	185	175	195	167	204
45	145	135	136	171	186	213	175	189	168	190	212	216
00	137	136	154	185	182	197	167	190	175	204	195	186
Hr Total	600	580	594	685	727	788	707	703	728	789	759	818

24 Hour Total : 12802
 AM peak hour begins : 00:00 AM peak volume : 672 Peak hour factor : 0.91
 PM peak hour begins : 22:45 PM peak volume : 827 Peak hour factor : 0.96

Data File : D0712001.PRN
 Station : 000000071102
 Identification : 009601150081 Interval : 15 minutes
 Start date : Jul 12, 12 Start time : 00:00
 Stop date : Jul 12, 12 Stop time : 24:00
 City/Town : Miami Beach, Florida County : Dade
 Location : Collins Ave Between 22 St & 23 St

Jul 12 Total Volume for All Lanes

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	317	213	140	139	118	80	78	172	244	259	305	314
30	285	239	142	96	101	71	76	154	237	237	289	316
45	280	182	131	107	85	69	124	169	248	294	333	339
00	246	176	148	117	95	88	143	213	275	302	316	318

Hr Total 1128 810 561 459 399 308 421 708 1004 1092 1243 1287

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	344	369	306	351	332	340	345	331	403	398	346	374
30	338	319	354	348	378	391	384	406	383	350	307	378
45	325	305	302	345	365	395	350	388	363	372	404	371
00	320	340	346	373	352	379	367	385	379	378	357	332

Hr Total 1327 1333 1308 1417 1427 1505 1446 1510 1528 1498 1414 1455

24 Hour Total : 26588
 AM peak hour begins : 11:30 AM peak volume : 1339 Peak hour factor : 0.97
 PM peak hour begins : 19:15 PM peak volume : 1582 Peak hour factor : 0.97

Traffic Survey Specialists, Inc. 624 Gardenia Terrace
 Delray Beach, Florida 33444 Phone (561) 272-3255
 Volume Report with 24 Hour Totals

Data File : D0713001.PRN
 Station : 000000071102
 Identification : 009601150081 Interval : 15 minutes
 Start date : Jul 13, 12 Start time : 00:00
 Stop date : Jul 13, 12 Stop time : 24:00
 City/Town : Miami Beach, Florida County : Dade
 Location : Collins Ave Between 22 St & 23 St

Jul 13 Northbound Volume for Lane 1

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	156	132	99	72	50	56	49	70	155	149	163	190
30	136	100	84	68	57	36	58	107	153	163	158	204
45	148	99	90	48	51	26	86	129	193	178	213	172
00	147	109	73	73	62	53	112	161	189	173	161	191
Hr Total	587	440	346	261	220	171	305	467	690	663	695	757

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	192	201	207	187	207	191	174	203	232	254	218	189
30	213	179	231	189	185	181	185	209	234	218	182	195
45	187	203	180	215	192	177	172	222	242	217	218	189
00	176	189	222	180	192	192	223	248	243	221	185	195
Hr Total	768	772	840	771	776	741	754	882	951	910	803	768

24 Hour Total : 15338
 AM peak hour begins : 10:30 AM peak volume : 768 Peak hour factor : 0.90
 PM peak hour begins : 20:15 PM peak volume : 973 Peak hour factor : 0.96

Jul 13 Southbound Volume for Lane 2

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	177	153	136	80	67	52	37	60	87	104	119	128
30	203	155	121	110	66	44	40	74	77	97	136	145
45	176	143	111	102	78	37	44	66	111	103	122	140
00	178	123	90	70	59	41	61	81	101	87	137	153
Hr Total	734	574	458	362	270	174	182	281	376	391	514	566

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	141	180	168	190	198	216	199	194	163	194	211	206
30	148	166	165	198	191	214	211	173	209	199	208	197
45	165	143	164	200	183	219	185	180	171	214	186	226
00	156	171	175	186	198	188	174	177	164	181	203	218
Hr Total	610	660	672	774	770	837	769	724	707	788	808	847

24 Hour Total : 13848
 AM peak hour begins : 00:00 AM peak volume : 734 Peak hour factor : 0.90
 PM peak hour begins : 16:45 PM peak volume : 847 Peak hour factor : 0.97

Traffic Survey Specialists, Inc. 624 Gardenia Terrace
 Delray Beach, Florida 33444 Phone (561) 272-3255
 Volume Report with 24 Hour Totals

Data File : D0713001.PRN
 Station : 000000071102
 Identification : 009601150081 Interval : 15 minutes
 Start date : Jul 13, 12 Start time : 00:00
 Stop date : Jul 13, 12 Stop time : 24:00
 City/Town : Miami Beach, Florida County : Dade
 Location : Collins Ave Between 22 St & 23 St

Jul 13 Total Volume for All Lanes

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	333	285	235	152	117	108	86	130	242	253	282	318
30	339	255	205	178	123	80	98	181	230	260	294	349
45	324	242	201	150	129	63	130	195	304	281	335	312
00	325	232	163	143	121	94	173	242	290	260	298	344
Hr Total	1321	1014	804	623	490	345	487	748	1066	1054	1209	1323

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	333	381	375	377	405	407	373	397	395	448	429	395
30	361	345	396	387	376	395	396	382	443	417	390	392
45	352	346	344	415	375	396	357	402	413	431	404	415
00	332	360	397	366	390	380	397	425	407	402	388	413
Hr Total	1378	1432	1512	1545	1546	1578	1523	1606	1658	1698	1611	1615

24 Hour Total : 29186
 AM peak hour begins : 11:30 AM peak volume : 1350 Peak hour factor : 0.93
 PM peak hour begins : 20:15 PM peak volume : 1711 Peak hour factor : 0.95

 Data File : D0714001.PRN
 Station : 000000071102
 Identification : 009601150081 Interval : 15 minutes
 Start date : Jul 14, 12 Start time : 00:00
 Stop date : Jul 14, 12 Stop time : 24:00
 City/Town : Miami Beach, Florida County : Dade
 Location : Collins Ave Between 22 St & 23 St

Jul 14 Northbound Volume for Lane 1

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	203	164	132	106	84	58	51	63	93	125	154	175
30	203	146	122	109	80	55	64	74	102	129	129	169
45	193	154	111	108	77	61	88	99	136	140	185	183
00	186	129	115	86	65	62	106	101	137	161	202	217
Hr Total	785	593	480	409	306	236	309	337	468	555	670	744

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	196	202	212	211	211	199	225	209	201	209	210	207
30	212	203	241	229	221	214	194	214	216	198	209	188
45	197	190	205	203	215	204	193	207	213	200	226	189
00	218	205	200	254	190	197	200	222	189	225	217	177
Hr Total	823	800	858	897	837	814	812	852	819	832	862	761

24 Hour Total : 15859
 AM peak hour begins : 11:30 AM peak volume : 808 Peak hour factor : 0.93
 PM peak hour begins : 15:45 PM peak volume : 901 Peak hour factor : 0.89

Jul 14 Southbound Volume for Lane 2

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	184	164	142	126	113	100	55	49	53	91	113	148
30	169	186	135	109	112	97	57	53	56	102	111	144
45	194	188	123	133	113	83	42	69	73	90	126	152
00	212	177	129	118	100	68	49	68	94	116	117	154
Hr Total	759	715	529	486	438	348	203	239	276	399	467	598

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	144	164	195	200	193	180	175	216	223	186	210	203
30	175	183	163	177	199	214	221	176	176	183	216	223
45	170	181	205	201	222	207	193	174	183	202	203	204
00	111	174	160	175	199	186	202	197	191	176	205	214
Hr Total	600	702	723	753	813	787	791	763	773	747	834	844

24 Hour Total : 14587
 AM peak hour begins : 00:00 AM peak volume : 759 Peak hour factor : 0.90
 PM peak hour begins : 23:00 PM peak volume : 844 Peak hour factor : 0.95

Traffic Survey Specialists, Inc. 624 Gardenia Terrace
 Delray Beach, Florida 33444 Phone (561) 272-3255
 Volume Report with 24 Hour Totals

Data File : D0714001.PRN
 Station : 000000071102
 Identification : 009601150081 Interval : 15 minutes
 Start date : Jul 14, 12 Start time : 00:00
 Stop date : Jul 14, 12 Stop time : 24:00
 City/Town : Miami Beach, Florida County : Dade
 Location : Collins Ave Between 22 St & 23 St

Jul 14 Total Volume for All Lanes

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	387	328	274	232	197	158	106	112	146	216	267	323
30	372	332	257	218	192	152	121	127	158	231	240	313
45	387	342	234	241	190	144	130	168	209	230	311	335
00	398	306	244	204	165	130	155	169	231	277	319	371
Hr Total	1544	1308	1009	895	744	584	512	576	744	954	1137	1342

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	340	366	407	411	404	379	400	425	424	395	420	410
30	387	386	404	406	420	428	415	390	392	381	425	411
45	367	371	410	404	437	411	386	381	396	402	429	393
00	329	379	360	429	389	383	402	419	380	401	422	391
Hr Total	1423	1502	1581	1650	1650	1601	1603	1615	1592	1579	1696	1605

24 Hour Total : 30446
 AM peak hour begins : 00:00 AM peak volume : 1544 Peak hour factor : 0.97
 PM peak hour begins : 22:00 PM peak volume : 1696 Peak hour factor : 0.99

Traffic Survey Specialists, Inc. 624 Gardenia Terrace
 Delray Beach, Florida 33444 Phone (561) 272-3255
 Volume Report with 24 Hour Totals

Data File : D0715001.PRN
 Station : 000000071102
 Identification : 009601150081 Interval : 15 minutes
 Start date : Jul 15, 12 Start time : 00:00
 Stop date : Jul 15, 12 Stop time : 24:00
 City/Town : Miami Beach, Florida County : Dade
 Location : Collins Ave Between 22 St & 23 St

Jul 15 Northbound Volume for Lane 1

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	202	175	146	115	92	73	70	70	69	106	133	185
30	188	177	132	109	82	65	66	59	84	104	147	168
45	174	164	132	93	86	86	63	84	119	136	157	219
00	208	145	121	91	90	60	95	79	101	116	166	210
Hr Total	772	661	531	408	350	284	294	292	373	462	603	782

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	193	201	191	225	221	207	196	193	176	144	134	146
30	227	221	200	229	207	204	197	180	173	140	136	132
45	207	212	213	225	235	217	191	210	164	153	152	131
00	224	222	200	220	195	219	197	174	175	142	115	111
Hr Total	851	856	804	899	858	847	781	757	688	579	537	520

24 Hour Total : 14789
 AM peak hour begins : 11:30 AM peak volume : 849 Peak hour factor : 0.94
 PM peak hour begins : 15:00 PM peak volume : 899 Peak hour factor : 0.98

Jul 15 Southbound Volume for Lane 2

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	169	219	166	128	103	130	60	63	70	81	108	164
30	242	193	152	134	92	83	51	49	60	77	113	159
45	185	183	158	141	109	93	59	58	61	76	122	149
00	190	157	165	97	115	68	56	56	86	83	146	137
Hr Total	786	752	641	500	419	374	226	226	277	317	489	609

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	186	148	171	199	205	176	197	175	173	205	185	160
30	160	163	160	209	191	206	171	179	206	175	159	144
45	187	144	176	196	184	181	207	200	193	184	158	156
00	166	161	173	197	185	178	186	185	183	147	175	130
Hr Total	699	616	680	801	765	741	761	739	755	711	677	590

24 Hour Total : 14151
 AM peak hour begins : 00:15 AM peak volume : 836 Peak hour factor : 0.86
 PM peak hour begins : 15:15 PM peak volume : 807 Peak hour factor : 0.97

Data File : D0715001.PRN
 Station : 000000071102
 Identification : 009601150081 Interval : 15 minutes
 Start date : Jul 15, 12 Start time : 00:00
 Stop date : Jul 15, 12 Stop time : 24:00
 City/Town : Miami Beach, Florida County : Dade
 Location : Collins Ave Between 22 St & 23 St

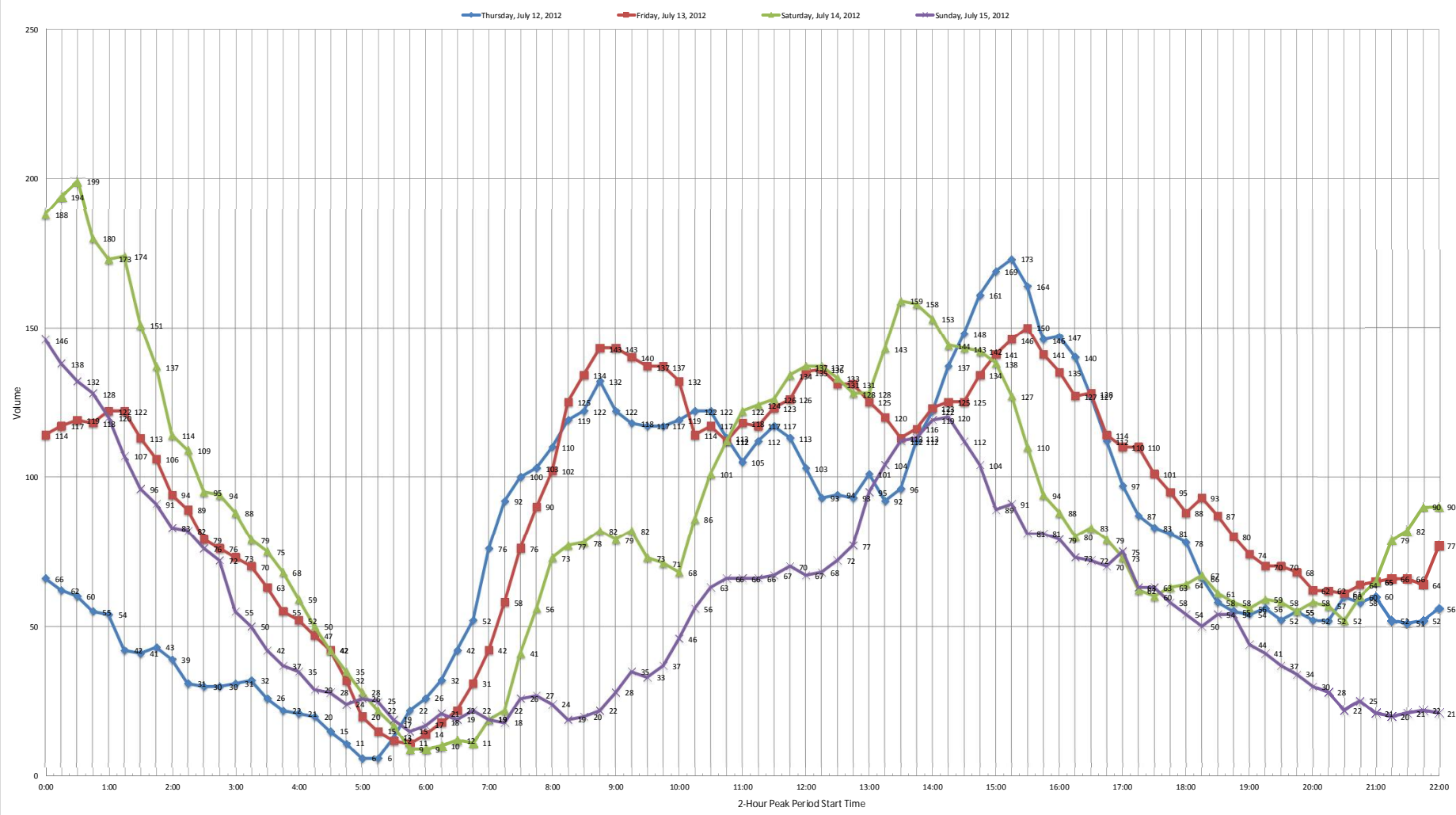
Jul 15 Total Volume for All Lanes

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	371	394	312	243	195	203	130	133	139	187	241	349
30	430	370	284	243	174	148	117	108	144	181	260	327
45	359	347	290	234	195	179	122	142	180	212	279	368
00	398	302	286	188	205	128	151	135	187	199	312	347
Hr Total	1558	1413	1172	908	769	658	520	518	650	779	1092	1391

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	379	349	362	424	426	383	393	368	349	349	319	306
30	387	384	360	438	398	410	368	359	379	315	295	276
45	394	356	389	421	419	398	398	410	357	337	310	287
00	390	383	373	417	380	397	383	359	358	289	290	241
Hr Total	1550	1472	1484	1700	1623	1588	1542	1496	1443	1290	1214	1110

24 Hour Total : 28940
 AM peak hour begins : 00:15 AM peak volume : 1581 Peak hour factor : 0.92
 PM peak hour begins : 15:15 PM peak volume : 1702 Peak hour factor : 0.97

96-Hour Continuous (Peak 2-Hour Period) Traffic Count on Liberty Avenue Between 22nd Avenue and 23rd Avenue



Traffic Survey Specialists, Inc. 624 Gardenia Terrace
 Delray Beach, Florida 33444 Phone (561) 272-3255
 Volume Report with 24 Hour Totals

 Data File : D0712003.PRN
 Station : 000000071103
 Identification : 009600650034 Interval : 15 minutes
 Start date : Jul 12, 12 Start time : 00:00
 Stop date : Jul 12, 12 Stop time : 24:00
 City/Town : Miami Beach, Florida County : Dade
 Location : Liberty Ave Between 22 St & 23 St

Jul 12 Northbound Volume for Lane 1

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	5	4	4	1	1	1	0	0	2	3	6	4
30	5	4	3	0	2	0	0	1	2	4	1	7
45	6	1	2	2	0	0	1	5	4	4	12	8
00	2	1	1	0	2	0	0	1	5	2	3	7
Hr Total	18	10	10	3	5	1	1	7	13	13	22	26

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	10	6	4	6	10	9	10	6	2	5	2	2
30	6	7	7	11	14	6	5	4	0	3	3	0
45	6	5	6	10	9	5	5	1	5	6	4	4
00	2	1	5	5	10	6	5	8	4	5	3	4
Hr Total	24	19	22	32	43	26	25	19	11	19	12	10

24 Hour Total : 391
 AM peak hour begins : 11:15 AM peak volume : 32 Peak hour factor : 0.80
 PM peak hour begins : 16:00 PM peak volume : 43 Peak hour factor : 0.77

Jul 12 Southbound Volume for Lane 2

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	7	9	4	1	0	2	0	3	4	15	8	10
30	3	3	3	6	3	0	0	5	7	9	11	5
45	4	1	3	2	5	1	0	5	7	9	8	5
00	2	5	2	2	2	1	0	3	17	9	10	6
Hr Total	16	18	12	11	10	4	0	16	35	42	37	26

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	7	15	4	7	12	8	6	1	3	4	3	0
30	6	9	6	9	9	5	6	4	3	2	7	4
45	6	5	5	15	14	3	4	5	1	2	0	5
00	3	2	7	7	10	7	1	2	1	3	4	7
Hr Total	22	31	22	38	45	23	17	12	8	11	14	16

24 Hour Total : 486
 AM peak hour begins : 08:45 AM peak volume : 50 Peak hour factor : 0.74
 PM peak hour begins : 16:00 PM peak volume : 45 Peak hour factor : 0.80

Traffic Survey Specialists, Inc. 624 Gardenia Terrace
 Delray Beach, Florida 33444 Phone (561) 272-3255
 Volume Report with 24 Hour Totals

Data File : D0712003.PRN
 Station : 000000071103
 Identification : 009600650034 Interval : 15 minutes
 Start date : Jul 12, 12 Start time : 00:00
 Stop date : Jul 12, 12 Stop time : 24:00
 City/Town : Miami Beach, Florida County : Dade
 Location : Liberty Ave Between 22 St & 23 St

Jul 12 Total Volume for All Lanes

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	12	13	8	2	1	3	0	3	6	18	14	14
30	8	7	6	6	5	0	0	6	9	13	12	12
45	10	2	5	4	5	1	1	10	11	13	20	13
00	4	6	3	2	4	1	0	4	22	11	13	13
Hr Total	34	28	22	14	15	5	1	23	48	55	59	52

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	17	21	8	13	22	17	16	7	5	9	5	2
30	12	16	13	20	23	11	11	8	3	5	10	4
45	12	10	11	25	23	8	9	6	6	8	4	9
00	5	3	12	12	20	13	6	10	5	8	7	11
Hr Total	46	50	44	70	88	49	42	31	19	30	26	26

24 Hour Total : 877
 AM peak hour begins : 08:45 AM peak volume : 66 Peak hour factor : 0.75
 PM peak hour begins : 16:00 PM peak volume : 88 Peak hour factor : 0.96

Data File : D0713003.PRN
 Station : 000000071103
 Identification : 009600650034 Interval : 15 minutes
 Start date : Jul 13, 12 Start time : 00:00
 Stop date : Jul 13, 12 Stop time : 24:00
 City/Town : Miami Beach, Florida County : Dade
 Location : Liberty Ave Between 22 St & 23 St

Jul 13 Northbound Volume for Lane 1

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	2	3	4	6	2	3	0	1	3	4	13	6
30	7	4	9	7	5	1	1	0	3	4	8	7
45	7	7	7	7	3	0	0	1	1	5	5	6
00	4	8	8	1	6	0	0	0	2	6	3	5

Hr Total 20 22 28 21 16 4 1 2 9 19 29 24

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	7	5	7	8	6	7	5	10	6	6	5	7
30	9	6	6	6	6	11	9	5	2	6	1	4
45	6	4	7	10	6	8	4	2	0	1	2	2
00	6	7	4	11	5	12	5	2	4	0	4	6

Hr Total 28 22 24 35 23 38 23 19 12 13 12 19

24 Hour Total : 463
 AM peak hour begins : 09:30 AM peak volume : 32 Peak hour factor : 0.62
 PM peak hour begins : 17:00 PM peak volume : 38 Peak hour factor : 0.79

Jul 13 Southbound Volume for Lane 2

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	7	9	7	6	4	6	1	3	2	15	14	10
30	8	13	8	2	3	2	2	0	4	13	7	7
45	7	10	6	3	7	2	1	0	8	9	13	8
00	6	5	6	1	5	0	0	3	8	8	7	4

Hr Total 28 37 27 12 19 10 4 6 22 45 41 29

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	4	10	5	2	8	7	2	4	6	4	7	4
30	8	14	6	8	6	7	4	4	5	3	5	5
45	8	13	7	9	16	3	5	4	3	4	4	1
00	9	10	6	13	12	6	8	9	3	5	4	11

Hr Total 29 47 24 32 42 23 19 21 17 16 20 21

24 Hour Total : 591
 AM peak hour begins : 08:45 AM peak volume : 45 Peak hour factor : 0.75
 PM peak hour begins : 13:00 PM peak volume : 47 Peak hour factor : 0.84

Data File : D0713003.PRN
 Station : 000000071103
 Identification : 009600650034 Interval : 15 minutes
 Start date : Jul 13, 12 Start time : 00:00
 Stop date : Jul 13, 12 Stop time : 24:00
 City/Town : Miami Beach, Florida County : Dade
 Location : Liberty Ave Between 22 St & 23 St

Jul 13 Total Volume for All Lanes

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	9	12	11	12	6	9	1	4	5	19	27	16
30	15	17	17	9	8	3	3	0	7	17	15	14
45	14	17	13	10	10	2	1	1	9	14	18	14
00	10	13	14	2	11	0	0	3	10	14	10	9
Hr Total	48	59	55	33	35	14	5	8	31	64	70	53

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	11	15	12	10	14	14	7	14	12	10	12	11
30	17	20	12	14	12	18	13	9	7	9	6	9
45	14	17	14	19	22	11	9	6	3	5	6	3
00	15	17	10	24	17	18	13	11	7	5	8	17
Hr Total	57	69	48	67	65	61	42	40	29	29	32	40

24 Hour Total : 1054
 AM peak hour begins : 09:45 AM peak volume : 74 Peak hour factor : 0.69
 PM peak hour begins : 15:45 PM peak volume : 72 Peak hour factor : 0.75

Traffic Survey Specialists, Inc. 624 Gardenia Terrace
 Delray Beach, Florida 33444 Phone (561) 272-3255
 Volume Report with 24 Hour Totals

Data File : D0714003.PRN
 Station : 000000071103
 Identification : 009600650034 Interval : 15 minutes
 Start date : Jul 14, 12 Start time : 00:00
 Stop date : Jul 14, 12 Stop time : 24:00
 City/Town : Miami Beach, Florida County : Dade
 Location : Liberty Ave Between 22 St & 23 St

Jul 14 Northbound Volume for Lane 1

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	3	5	4	8	5	4	1	0	0	2	1	4
30	10	10	10	3	4	4	0	0	1	6	2	2
45	8	9	4	9	5	4	0	1	1	1	1	7
00	7	10	6	6	4	0	0	0	5	3	5	5

Hr Total 28 34 24 26 18 12 1 1 7 12 9 18

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	13	6	12	10	6	4	6	3	5	1	1	10
30	8	3	5	11	8	6	9	1	6	3	1	4
45	9	12	8	13	5	1	6	4	0	3	7	5
00	8	13	7	2	4	3	2	3	1	3	7	4

Hr Total 38 34 32 36 23 14 23 11 12 10 16 23

24 Hour Total : 462
 AM peak hour begins : 01:00 AM peak volume : 34 Peak hour factor : 0.85
 PM peak hour begins : 13:30 PM peak volume : 42 Peak hour factor : 0.81

Jul 14 Southbound Volume for Lane 2

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	6	8	10	6	4	2	0	1	2	2	5	3
30	6	21	11	6	4	1	0	0	1	11	1	6
45	19	20	5	7	3	6	2	1	0	15	4	7
00	13	21	8	4	4	1	1	1	4	14	1	10

Hr Total 44 70 34 23 15 10 3 3 7 42 11 26

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	9	3	10	13	8	9	1	0	5	5	8	9
30	9	7	8	14	4	3	6	6	3	3	4	5
45	7	9	4	7	6	4	1	4	4	2	4	7
00	7	5	8	11	7	4	3	5	2	8	1	7

Hr Total 32 24 30 45 25 20 11 15 14 18 17 28

24 Hour Total : 567
 AM peak hour begins : 01:15 AM peak volume : 72 Peak hour factor : 0.86
 PM peak hour begins : 15:00 PM peak volume : 45 Peak hour factor : 0.80

Traffic Survey Specialists, Inc. 624 Gardenia Terrace
 Delray Beach, Florida 33444 Phone (561) 272-3255
 Volume Report with 24 Hour Totals

Data File : D0714003.PRN
 Station : 000000071103
 Identification : 009600650034 Interval : 15 minutes
 Start date : Jul 14, 12 Start time : 00:00
 Stop date : Jul 14, 12 Stop time : 24:00
 City/Town : Miami Beach, Florida County : Dade
 Location : Liberty Ave Between 22 St & 23 St

Jul 14 Total Volume for All Lanes

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	9	13	14	14	9	6	1	1	2	4	6	7
30	16	31	21	9	8	5	0	0	2	17	3	8
45	27	29	9	16	8	10	2	2	1	16	5	14
00	20	31	14	10	8	1	1	1	9	17	6	15
Hr Total	72	104	58	49	33	22	4	4	14	54	20	44

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	22	9	22	23	14	13	7	3	10	6	9	19
30	17	10	13	25	12	9	15	7	9	6	5	9
45	16	21	12	20	11	5	7	8	4	5	11	12
00	15	18	15	13	11	7	5	8	3	11	8	11
Hr Total	70	58	62	81	48	34	34	26	26	28	33	51

24 Hour Total : 1029
 AM peak hour begins : 01:15 AM peak volume : 105 Peak hour factor : 0.85
 PM peak hour begins : 14:45 PM peak volume : 83 Peak hour factor : 0.83

Data File : D0715003.PRN
 Station : 000000071103
 Identification : 009600650034 Interval : 15 minutes
 Start date : Jul 15, 12 Start time : 00:00
 Stop date : Jul 15, 12 Stop time : 24:00
 City/Town : Miami Beach, Florida County : Dade
 Location : Liberty Ave Between 22 St & 23 St

Jul 15 Northbound Volume for Lane 1

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	5	5	3	3	5	0	0	0	4	1	1	6
30	6	7	2	7	0	3	2	0	0	2	0	2
45	5	10	5	3	3	2	0	0	2	1	2	1
00	10	5	4	3	2	2	1	2	1	0	2	3

Hr Total 26 27 14 16 10 7 3 2 7 4 5 12

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	7	4	7	7	8	10	4	5	1	2	1	3
30	3	1	7	10	4	2	2	3	3	2	0	2
45	3	4	11	4	4	5	3	1	1	0	2	1
00	2	5	15	8	7	3	11	1	2	0	1	0

Hr Total 15 14 40 29 23 20 20 10 7 4 4 6

24 Hour Total : 325
 AM peak hour begins : 00:45 AM peak volume : 32 Peak hour factor : 0.80
 PM peak hour begins : 14:30 PM peak volume : 43 Peak hour factor : 0.72

Jul 15 Southbound Volume for Lane 2

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	10	14	5	4	2	3	1	2	1	0	0	2
30	10	16	8	6	4	2	1	0	1	5	2	3
45	7	4	4	6	2	3	1	1	2	1	4	5
00	16	6	14	1	0	0	3	2	0	1	4	6

Hr Total 43 40 31 17 8 8 6 5 4 7 10 16

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	3	4	4	9	4	8	2	2	2	2	0	0
30	6	5	5	4	1	3	2	2	4	0	2	1
45	6	4	3	5	2	4	1	3	3	1	4	1
00	4	2	8	4	2	7	3	5	3	2	1	1

Hr Total 19 15 20 22 9 22 8 12 12 5 7 3

24 Hour Total : 349
 AM peak hour begins : 00:30 AM peak volume : 53 Peak hour factor : 0.83
 PM peak hour begins : 14:45 PM peak volume : 26 Peak hour factor : 0.72

Traffic Survey Specialists, Inc. 624 Gardenia Terrace
 Delray Beach, Florida 33444 Phone (561) 272-3255
 Volume Report with 24 Hour Totals

Data File : D0715003.PRN
 Station : 000000071103
 Identification : 009600650034 Interval : 15 minutes
 Start date : Jul 15, 12 Start time : 00:00
 Stop date : Jul 15, 12 Stop time : 24:00
 City/Town : Miami Beach, Florida County : Dade
 Location : Liberty Ave Between 22 St & 23 St

Jul 15 Total Volume for All Lanes

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	15	19	8	7	7	3	1	2	5	1	1	8
30	16	23	10	13	4	5	3	0	1	7	2	5
45	12	14	9	9	5	5	1	1	4	2	6	6
00	26	11	18	4	2	2	4	4	1	1	6	9
Hr Total	69	67	45	33	18	15	9	7	11	11	15	28

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	10	8	11	16	12	18	6	7	3	4	1	3
30	9	6	12	14	5	5	4	5	7	2	2	3
45	9	8	14	9	6	9	4	4	4	1	6	2
00	6	7	23	12	9	10	14	6	5	2	2	1
Hr Total	34	29	60	51	32	42	28	22	19	9	11	9

24 Hour Total : 674
 AM peak hour begins : 00:45 AM peak volume : 82 Peak hour factor : 0.79
 PM peak hour begins : 14:30 PM peak volume : 67 Peak hour factor : 0.73

Intersection Turning Movement Counts

23RD STREET & DADE BOULEVARD
 MIAMI BEACH, FLORIDA
 COUNTED BY: MAURICE GOMEZ
 SIGNALIZED

Traffic Survey Specialists, Inc.
 624 Gardenia Terrace
 Delray Beach, Florida 33444
 Phone (561) 272-3255

Site Code : 00120090
 Start Date: 08/03/12
 File I.D. : 23STDADE
 Page : 1

ALL VEHICLES

DADE BOULEVARD From North				23RD STREET From East				DADE BOULEVARD From South				----- From West				Total	
UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right		
Date 08/03/12																	
20:15	0	18	102	0	0	45	0	16	0	0	119	64	0	0	0	0	364
20:30	0	12	88	0	0	44	0	11	1	0	102	69	0	0	0	0	327
20:45	0	12	98	0	0	35	0	20	0	0	102	70	0	0	0	0	337
21:00	0	18	73	0	0	26	0	16	0	0	82	60	0	0	0	0	275
Hr Total	0	60	361	0	0	150	0	63	1	0	405	263	0	0	0	0	1303
21:15	0	14	77	0	0	36	0	13	1	0	103	61	0	0	0	0	305
21:30	0	11	67	0	0	39	0	11	0	0	102	44	0	0	0	0	274
21:45	0	29	80	0	0	27	0	16	0	0	93	61	0	0	0	0	306
22:00	0	22	81	0	0	38	0	9	1	0	117	79	0	0	0	0	347
Hr Total	0	76	305	0	0	140	0	49	2	0	415	245	0	0	0	0	1232
TOTAL	0	136	666	0	0	290	0	112	3	0	820	508	0	0	0	0	2535

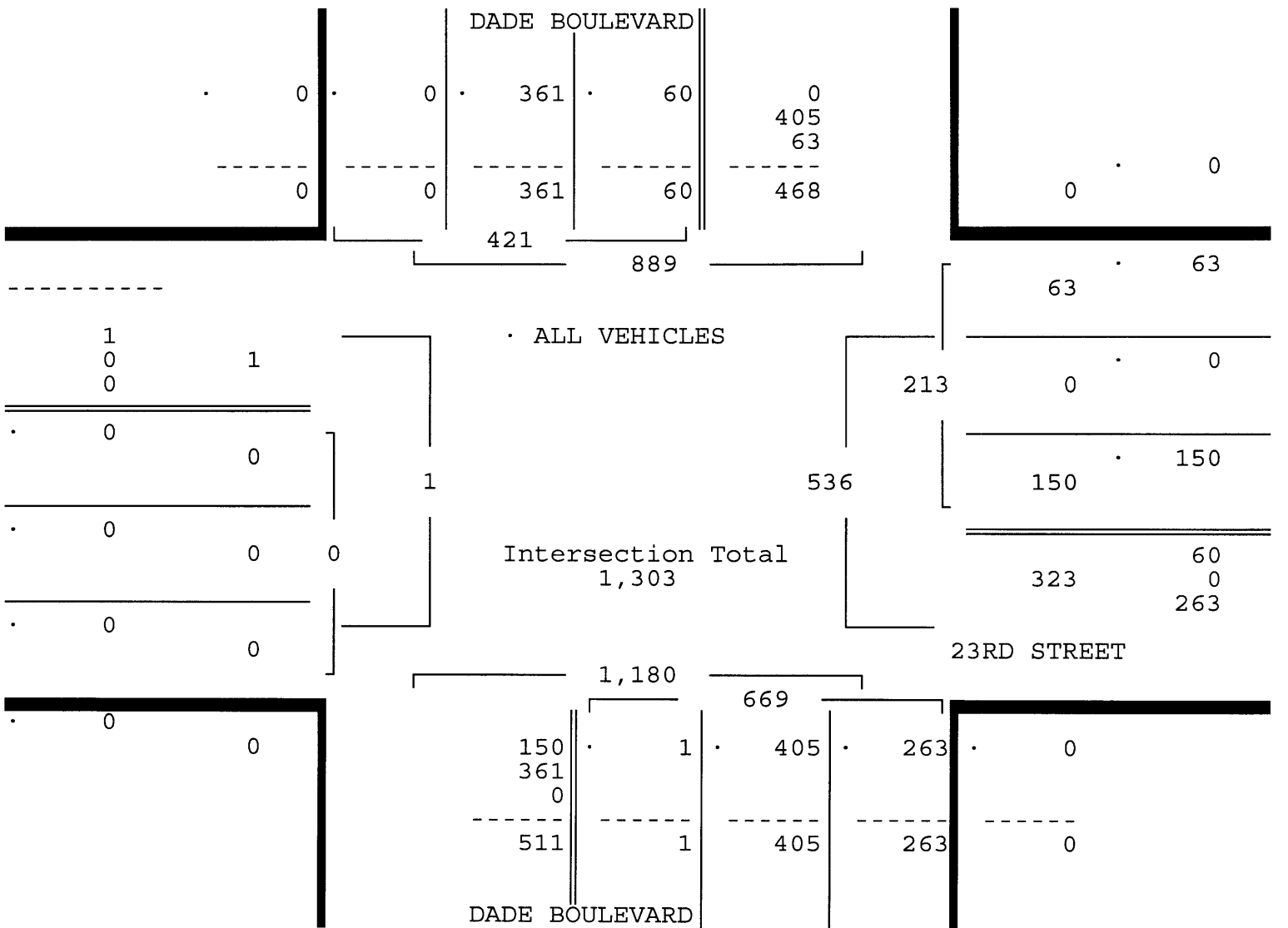
23RD STREET & DADE BOULEVARD
 MIAMI BEACH, FLORIDA
 COUNTED BY: MAURICE GOMEZ
 SIGNALIZED

Traffic Survey Specialists, Inc.
 624 Gardenia Terrace
 Delray Beach, Florida 33444
 Phone (561) 272-3255

Site Code : 00120090
 Start Date: 08/03/12
 File I.D. : 23STDADE
 Page : 2

ALL VEHICLES

DADE BOULEVARD From North				23RD STREET From East				DADE BOULEVARD From South				From West				Total
U Turn	Left	Thru	Right	U Turn	Left	Thru	Right	U Turn	Left	Thru	Right	U Turn	Left	Thru	Right	
Date 08/03/12																
Peak Hour Analysis By Entire Intersection for the Period: 20:15 to 22:15 on 08/03/12																
Peak start 20:15				20:15				20:15				20:15				
Volume	0	60	361	0	0	150	0	63	1	0	405	263	0	0	0	0
Percent	0%	14%	86%	0%	0%	70%	0%	30%	0%	0%	61%	39%	0%	0%	0%	0%
Pk total	421			213				669				0				
Highest 20:15				20:15				20:15				20:15				
Volume	0	18	102	0	0	45	0	16	0	0	119	64	0	0	0	0
Hi total	120			61				183				0				
PHF	.88			.87				.91				.0				



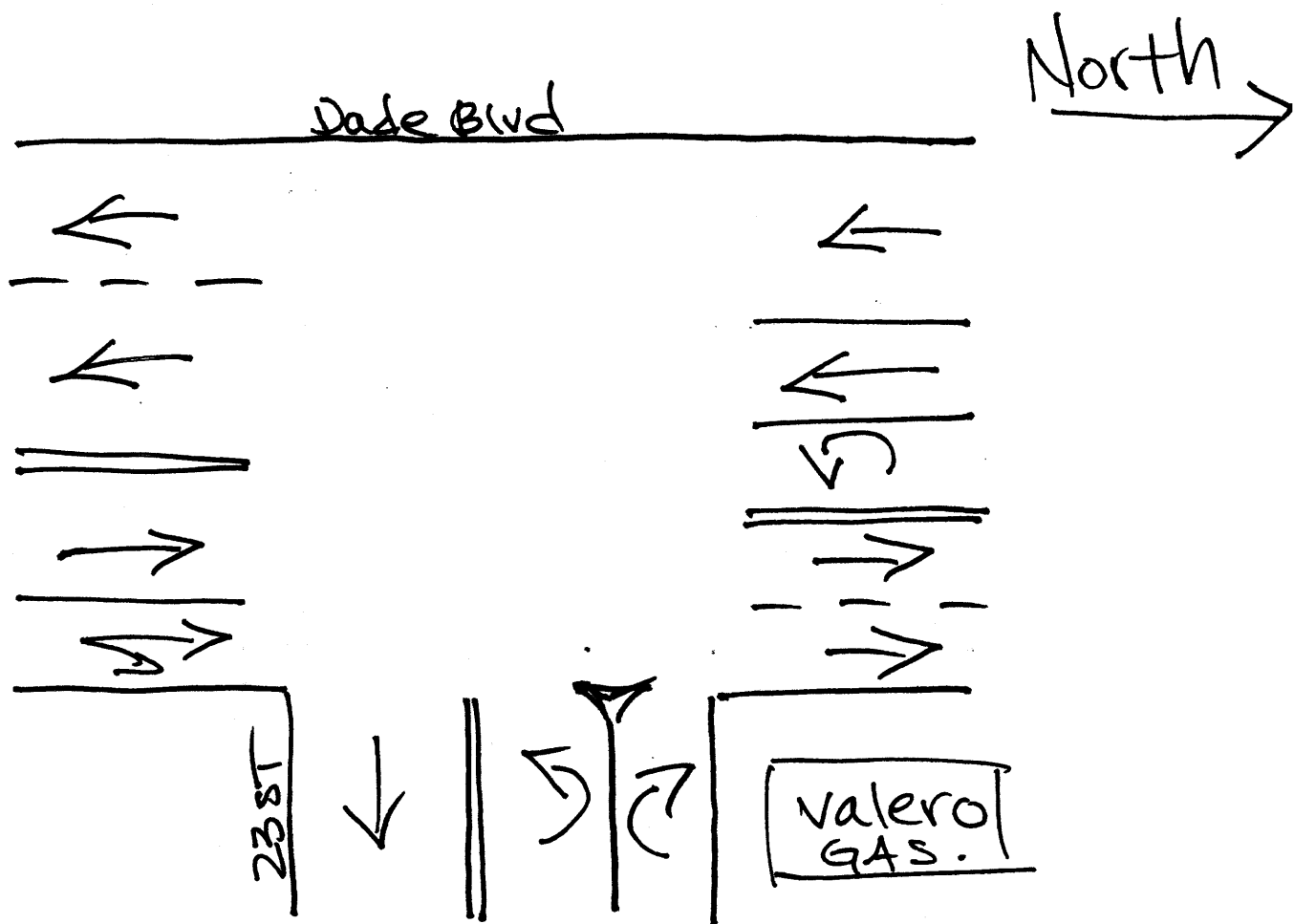
23RD STREET & DADE BOULEVARD
 MIAMI BEACH, FLORIDA
 COUNTED BY: MAURICE GOMEZ
 SIGNALIZED

Traffic Survey Specialists, Inc.
 624 Gardenia Terrace
 Delray Beach, Florida 33444
 Phone (561) 272-3255

Site Code : 00120090
 Start Date: 08/03/12
 File I.D. : 23STDADE
 Page : 1

PEDESTRIANS

Date 08/03/12	DADE BOULEVARD From North				23RD STREET From East				DADE BOULEVARD From South				----- From West				Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
20:15	0	0	0	0	0	0	0	4	0	0	0	4	0	0	0	0	8
20:30	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
20:45	0	0	0	0	0	0	0	2	0	0	0	6	0	0	0	0	8
21:00	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	2
Hr Total	0	0	0	0	0	0	0	7	0	0	0	13	0	0	0	0	20
21:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:30	0	0	0	0	0	0	0	2	0	0	0	5	0	0	0	0	7
21:45	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0	3
22:00	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
Hr Total	0	0	0	0	0	0	0	3	0	0	0	9	0	0	0	0	12
TOTAL	0	0	0	0	0	0	0	10	0	0	0	22	0	0	0	0	32



Miami beach, Florida
 August 03, 2012
 drawn by: Luis Palomino
 signalized

23RD STREET & PARK AVENUE
 MIAMI BEACH, FLORIDA
 COUNTED BY: CARLOS PALOMINO
 NOT SIGNALIZED

Traffic Survey Specialists, Inc.
 624 Gardenia Terrace
 Delray Beach, Florida 33444
 Phone (561) 272-3255

Site Code : 00120090
 Start Date: 08/03/12
 File I.D. : 23STPARK
 Page : 1

ALL VEHICLES

	DRIVEWAY From North				23RD STREET From East				PARK AVENUE From South				23RD STREET From West				Total
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	
Date 08/03/12	-----																
20:15	0	4	2	4	0	6	46	3	0	13	0	8	0	6	60	16	168
20:30	0	2	0	6	0	4	37	1	0	11	1	3	0	8	67	9	149
20:45	0	5	2	6	0	11	38	5	0	10	0	8	1	6	62	13	167
21:00	0	7	2	6	0	5	29	8	0	8	0	5	0	7	60	10	147
Hr Total	0	18	6	22	0	26	150	17	0	42	1	24	1	27	249	48	631
21:15	0	4	1	4	1	5	42	3	0	5	1	4	0	2	67	9	148
21:30	0	8	1	6	0	4	32	7	0	6	1	8	1	2	40	13	129
21:45	0	9	4	4	0	11	32	6	0	9	2	3	0	6	75	9	170
22:00	0	5	0	5	0	4	36	3	0	7	2	5	0	9	79	15	170
Hr Total	0	26	6	19	1	24	142	19	0	27	6	20	1	19	261	46	617
TOTAL	0	44	12	41	1	50	292	36	0	69	7	44	2	46	510	94	1248

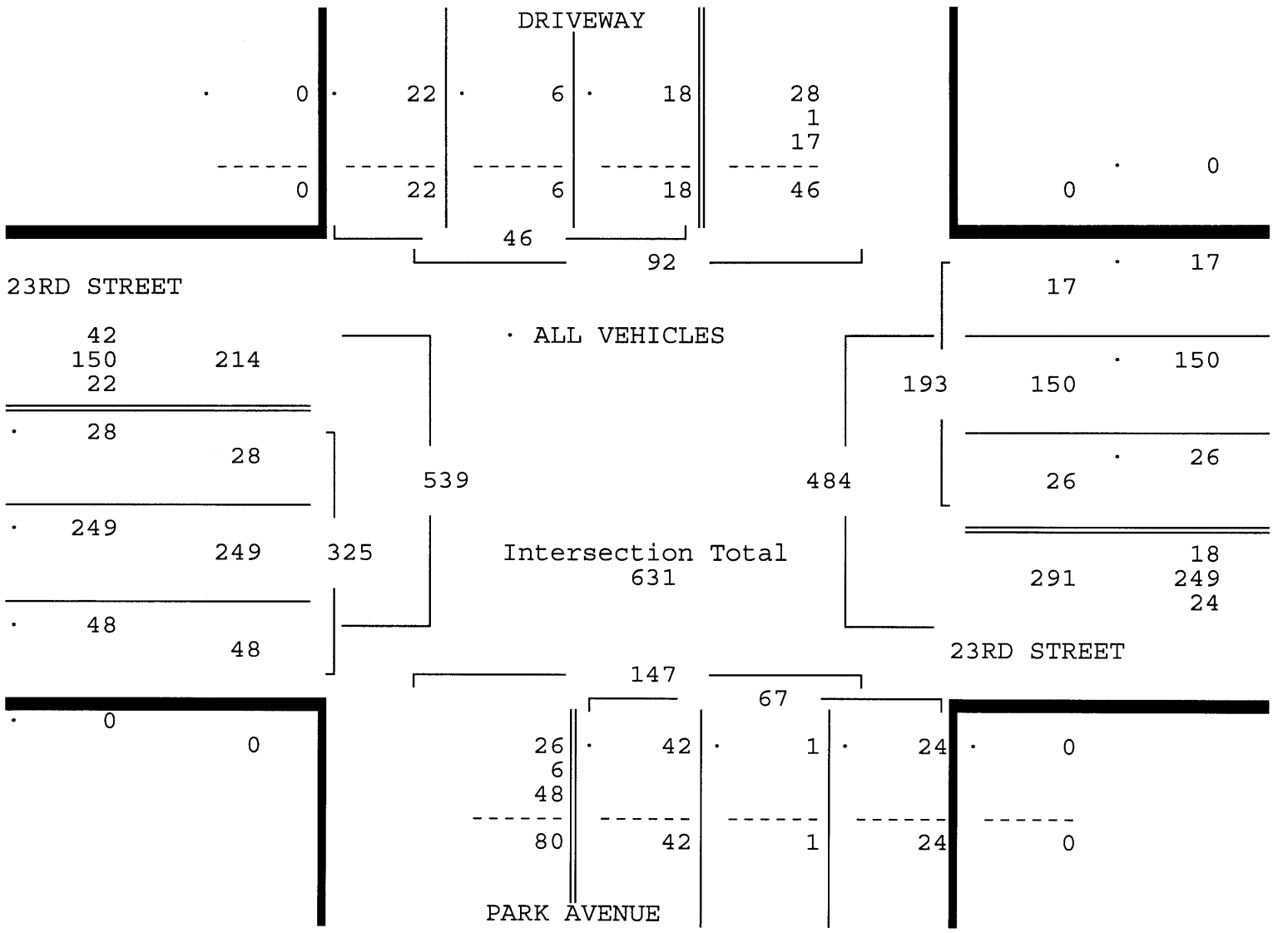
23RD STREET & PARK AVENUE
 MIAMI BEACH, FLORIDA
 COUNTED BY: CARLOS PALOMINO
 NOT SIGNALIZED

Traffic Survey Specialists, Inc.
 624 Gardenia Terrace
 Delray Beach, Florida 33444
 Phone (561) 272-3255

Site Code : 00120090
 Start Date: 08/03/12
 File I.D. : 23STPARK
 Page : 2

ALL VEHICLES

DRIVEWAY From North	23RD STREET From East				PARK AVENUE From South				23RD STREET From West				Total			
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right				
Date 08/03/12																
Peak Hour Analysis By Entire Intersection for the Period: 20:15 to 22:15 on 08/03/12																
Peak start 20:15				20:15				20:15				20:15				
Volume	0	18	6	22	0	26	150	17	0	42	1	24	1	27	249	48
Percent	0%	39%	13%	48%	0%	13%	78%	9%	0%	63%	1%	36%	0%	8%	77%	15%
Pk total	46				193				67				325			
Highest 21:00				20:15				20:15				20:30				
Volume	0	7	2	6	0	6	46	3	0	13	0	8	0	8	67	9
Hi total	15				55				21				84			
PHF	.77				.88				.80				.97			



23RD STREET & PARK AVENUE
 MIAMI BEACH, FLORIDA
 COUNTED BY: CARLOS PALOMINO
 NOT SIGNALIZED

Traffic Survey Specialists, Inc.
 624 Gardenia Terrace
 Delray Beach, Florida 33444
 Phone (561) 272-3255

Site Code : 00120090
 Start Date: 08/03/12
 File I.D. : 23STPARK
 Page : 1

PEDESTRIANS

	DRIVEWAY From North				23RD STREET From East				PARK AVENUE From South				23RD STREET From West				Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
Date 08/03/12	-----																
20:15	0	0	0	4	0	0	0	2	0	0	0	2	0	0	0	2	10
20:30	0	0	0	2	0	0	0	2	0	0	0	3	0	0	0	1	8
20:45	0	0	0	4	0	0	0	0	0	0	0	6	0	0	0	0	10
21:00	0	0	0	4	0	0	0	0	0	0	0	2	0	0	0	1	7
Hr Total	0	0	0	14	0	0	0	4	0	0	0	13	0	0	0	4	35
21:15	0	0	0	1	0	0	0	5	0	0	0	1	0	0	0	2	9
21:30	0	0	0	2	0	0	0	1	0	0	0	2	0	0	0	2	7
21:45	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
22:00	0	0	0	6	0	0	0	3	0	0	0	0	0	0	0	2	11
Hr Total	0	0	0	10	0	0	0	9	0	0	0	3	0	0	0	6	28
TOTAL	0	0	0	24	0	0	0	13	0	0	0	16	0	0	0	10	63

23RD STREET & LIBERTY AVENUE
 MIAMI BEACH, FLORIDA
 COUNTED BY: AMBER PALOMINO
 NOT SIGNALIZED

Traffic Survey Specialists, Inc.
 624 Gardenia Terrace
 Delray Beach, Florida 33444
 Phone (561) 272-3255

Site Code : 00120090
 Start Date: 08/03/12
 File I.D. : 23STLIBE
 Page : 1

ALL VEHICLES

Date 08/03/12	LIBERTY AVENUE From North				23RD STREET From East				LIBERTY AVENUE From South				23RD STREET From West				Total
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	
20:15	0	1	0	1	1	2	53	1	0	2	0	1	0	3	65	3	133
20:30	0	0	0	1	0	3	40	0	0	2	0	1	1	1	67	1	117
20:45	0	1	1	0	1	4	52	0	1	0	1	0	0	1	67	4	133
21:00	0	0	0	2	0	2	37	0	0	1	0	2	0	2	66	2	114
Hr Total	0	2	1	4	2	11	182	1	1	5	1	4	1	7	265	10	497
21:15	0	0	0	3	1	3	51	0	0	0	0	3	0	7	63	3	134
21:30	0	0	0	0	0	0	41	0	0	2	0	1	0	3	47	3	97
21:45	0	3	0	2	0	4	42	2	0	3	0	0	1	7	76	3	143
22:00	1	0	0	2	0	3	37	3	0	1	0	2	1	6	72	2	130
Hr Total	1	3	0	7	1	10	171	5	0	6	0	6	2	23	258	11	504
TOTAL	1	5	1	11	3	21	353	6	1	11	1	10	3	30	523	21	1001

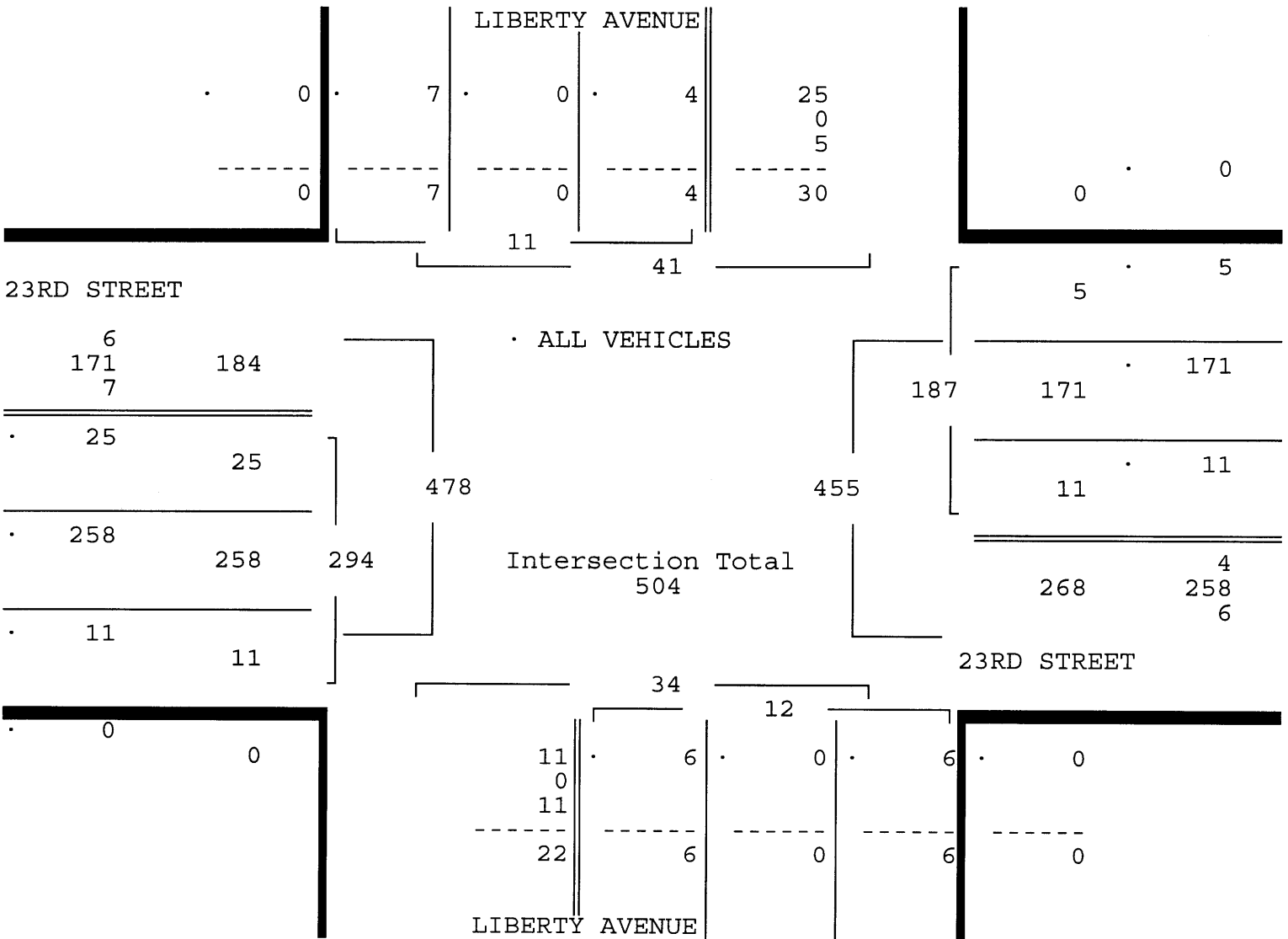
23RD STREET & LIBERTY AVENUE
 MIAMI BEACH, FLORIDA
 COUNTED BY: AMBER PALOMINO
 NOT SIGNALIZED

Traffic Survey Specialists, Inc.
 624 Gardenia Terrace
 Delray Beach, Florida 33444
 Phone (561) 272-3255

Site Code : 00120090
 Start Date: 08/03/12
 File I.D. : 23STLIBE
 Page : 2

ALL VEHICLES

LIBERTY AVENUE From North				23RD STREET From East				LIBERTY AVENUE From South				23RD STREET From West				Total
UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	
Date 08/03/12																
Peak Hour Analysis By Entire Intersection for the Period: 20:15 to 22:15 on 08/03/12																
Peak start 21:15				21:15				21:15				21:15				
Volume	1	3	0	7	1	10	171	5	0	6	0	6	2	23	258	11
Percent	9%	27%	0%	64%	1%	5%	91%	3%	0%	50%	0%	50%	1%	8%	88%	4%
Pk total	11			187				12				294				
Highest	21:45			21:15				21:15				21:45				
Volume	0	3	0	2	1	3	51	0	0	0	0	3	1	7	76	3
Hi total	5			55				3				87				
PHF	.55			.85				1.00				.84				



23RD STREET & LIBERTY AVENUE
 MIAMI BEACH, FLORIDA
 COUNTED BY: AMBER PALOMINO
 NOT SIGNALIZED

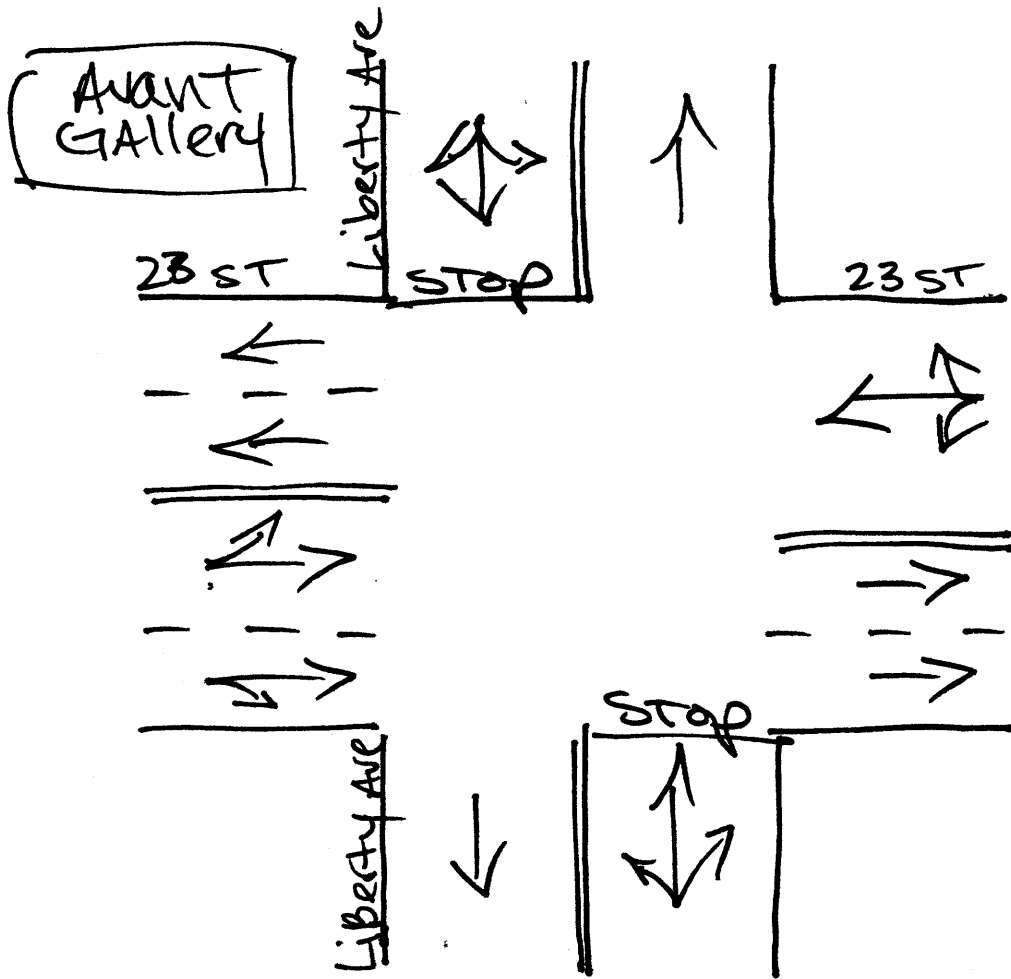
Traffic Survey Specialists, Inc.
 624 Gardenia Terrace
 Delray Beach, Florida 33444
 Phone (561) 272-3255

Site Code : 00120090
 Start Date: 08/03/12
 File I.D. : 23STLIBE
 Page : 1

PEDESTRIANS

Date 08/03/12	LIBERTY AVENUE From North				23RD STREET From East				LIBERTY AVENUE From South				23RD STREET From West				Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
20:15	0	0	0	12	0	0	0	1	0	0	0	0	0	0	0	8	21
20:30	0	0	0	12	0	0	0	1	0	0	0	4	0	0	0	7	24
20:45	0	0	0	6	0	0	0	6	0	0	0	6	0	0	0	0	18
21:00	0	0	0	8	0	0	0	4	0	0	0	1	0	0	0	1	14
Hr Total	0	0	0	38	0	0	0	12	0	0	0	11	0	0	0	16	77
21:15	0	0	0	14	0	0	0	6	0	0	0	1	0	0	0	1	22
21:30	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	5
21:45	0	0	0	6	0	0	0	3	0	0	0	0	0	0	0	3	12
22:00	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	2	8
Hr Total	0	0	0	26	0	0	0	14	0	0	0	1	0	0	0	6	47
TOTAL	0	0	0	64	0	0	0	26	0	0	0	12	0	0	0	22	124

↑
North



Miami beach, Florida
August 03, 2012
drawn by: Luis Palomino
NOT signalized

23RD STREET & COLLINS AVENUE
 MIAMI BEACH, FLORIDA
 COUNTED BY: MAXIE ESPINOSA
 SIGNALIZED

Traffic Survey Specialists, Inc.
 624 Gardenia Terrace
 Delray Beach, Florida 33444
 Phone (561) 272-3255

Site Code : 00120090
 Start Date: 08/03/12
 File I.D. : 23S_COLL
 Page : 1

MAIN INTERSECTION, NORTH DRIVEWAY

Date	COLLINS AVENUE From North				23RD STREET From East				COLLINS AVENUE From South				23RD STREET From West				Total
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	
08/03/12	-----																
20:15	0	3	195	42	1	1	4	15	0	7	188	3	0	49	3	17	528
20:30	0	4	216	41	1	5	4	8	0	0	176	4	0	50	10	20	539
20:45	0	1	197	32	9	2	2	2	0	10	198	11	0	53	4	22	543
21:00	0	1	225	37	0	1	6	7	0	2	179	7	0	41	4	18	528
Hr Total	0	9	833	152	11	9	16	32	0	19	741	25	0	193	21	77	2138
21:15	0	1	196	45	0	1	3	6	0	17	159	12	0	47	1	25	513
21:30	2	2	210	34	0	2	3	3	0	4	183	9	2	32	2	14	502
21:45	0	4	203	34	0	0	5	7	0	5	182	7	0	43	9	25	524
22:00	0	2	196	34	0	2	6	6	0	6	193	7	0	46	8	16	522
Hr Total	2	9	805	147	0	5	17	22	0	32	717	35	2	168	20	80	2061
TOTAL	2	18	1638	299	11	14	33	54	0	51	1458	60	2	361	41	157	4199

23RD STREET & COLLINS AVENUE
 MIAMI BEACH, FLORIDA
 COUNTED BY: MAXIE ESPINOSA
 SIGNALIZED

Traffic Survey Specialists, Inc.
 624 Gardenia Terrace
 Delray Beach, Florida 33444
 Phone (561) 272-3255

Site Code : 00120090
 Start Date: 08/03/12
 File I.D. : 23S_COLL
 Page : 2

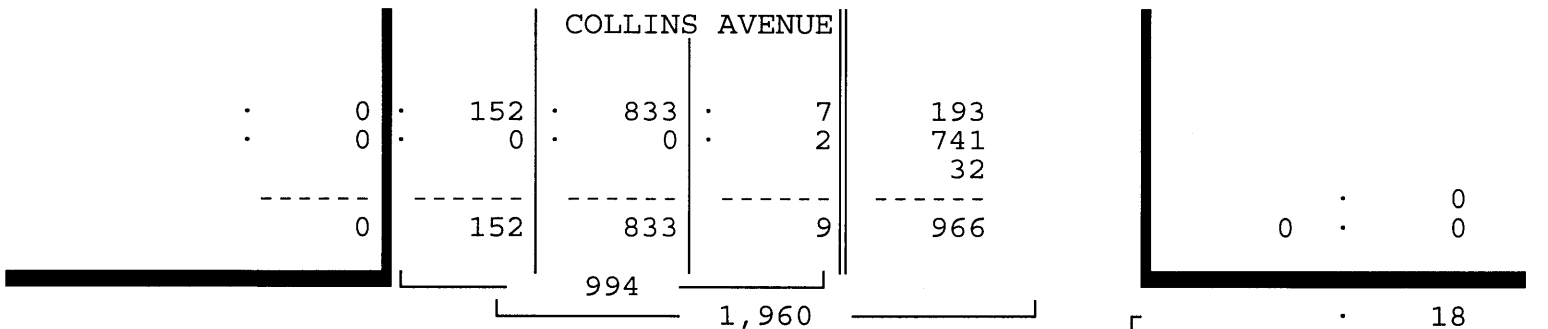
MAIN INTERSECTION, NORTH DRIVEWAY

COLLINS AVENUE From North				23RD STREET From East				COLLINS AVENUE From South				23RD STREET From West				Total
UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	

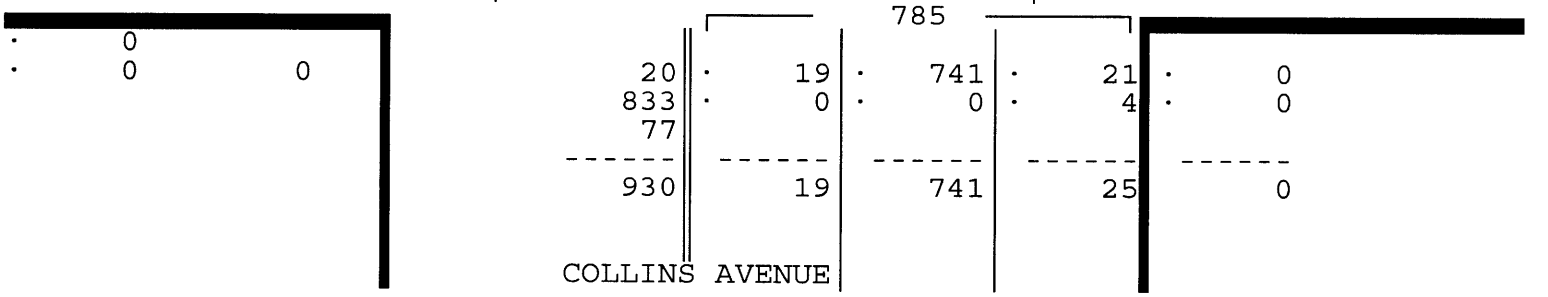
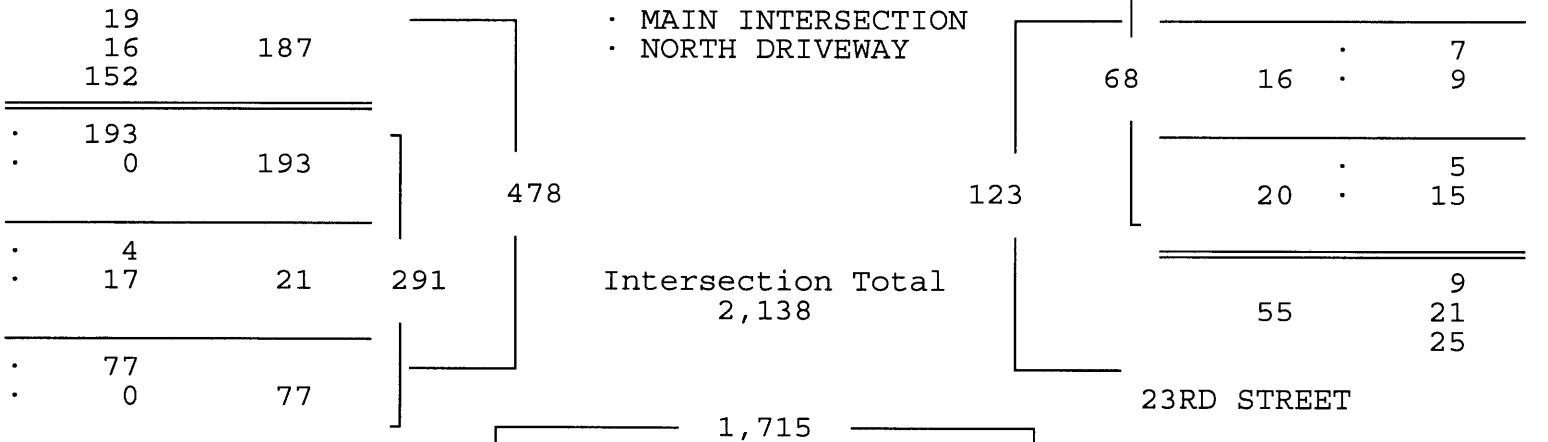
Date 08/03/12

Peak Hour Analysis By Entire Intersection for the Period: 20:15 to 22:15 on 08/03/12

Peak start 20:15	20:15				20:15				20:15				Total			
Volume	0	9	833	152	11	9	16	32	0	19	741	25	0	193	21	77
Percent	0%	1%	84%	15%	16%	13%	24%	47%	0%	2%	94%	3%	0%	66%	7%	26%
Pk total	994				68				785				291			
Highest	21:00				20:15				20:45				20:30			
Volume	0	1	225	37	1	1	4	15	0	10	198	11	0	50	10	20
Hi total	263				21				219				80			
PHF	.94				.81				.90				.91			



23RD STREET



23RD STREET & COLLINS AVENUE
 MIAMI BEACH, FLORIDA
 COUNTED BY: MAXIE ESPINOSA
 SIGNALIZED

Traffic Survey Specialists, Inc.
 624 Gardenia Terrace
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Site Code : 00120090
 Start Date: 08/03/12
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 Page : 1

MAIN INTERSECTION

Date	COLLINS AVENUE From North				23RD STREET From East				COLLINS AVENUE From South				23RD STREET From West				Total
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	
08/03/12																	
20:15	0	3	195	42	0	0	4	7	0	7	188	2	0	49	0	17	514
20:30	0	3	216	41	1	2	0	4	0	0	176	4	0	50	4	20	521
20:45	0	1	197	32	0	2	1	2	0	10	198	8	0	53	0	22	526
21:00	0	0	225	37	0	0	2	5	0	2	179	7	0	41	0	18	516
Hr Total	0	7	833	152	1	4	7	18	0	19	741	21	0	193	4	77	2077
21:15	0	1	196	45	0	0	0	4	0	17	159	11	0	47	0	25	505
21:30	0	0	210	34	0	0	1	1	0	4	183	8	0	32	0	14	487
21:45	0	2	203	34	0	0	1	1	0	5	182	6	0	43	0	25	502
22:00	0	1	196	34	0	0	2	2	0	6	193	5	0	46	2	15	502
Hr Total	0	4	805	147	0	0	4	8	0	32	717	30	0	168	2	79	1996
TOTAL	0	11	1638	299	1	4	11	26	0	51	1458	51	0	361	6	156	4073

23RD STREET & COLLINS AVENUE
 MIAMI BEACH, FLORIDA
 COUNTED BY: MAXIE ESPINOSA
 SIGNALIZED

Traffic Survey Specialists, Inc.
 624 Gardenia Terrace
 Delray Beach, Florida 33444
 Phone (561) 272-3255

Site Code : 00120090
 Start Date: 08/03/12
 File I.D. : 23S_COLL
 Page : 1

NORTH DRIVEWAY

Date 08/03/12	COLLINS AVENUE From North				23RD STREET From East				COLLINS AVENUE From South				23RD STREET From West				Total
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	
20:15	0	0	0	0	1	1	0	8	0	0	0	1	0	0	3	0	14
20:30	0	1	0	0	0	3	4	4	0	0	0	0	0	0	6	0	18
20:45	0	0	0	0	9	0	1	0	0	0	0	3	0	0	4	0	17
21:00	0	1	0	0	0	1	4	2	0	0	0	0	0	0	4	0	12
Hr Total	0	2	0	0	10	5	9	14	0	0	0	4	0	0	17	0	61
21:15	0	0	0	0	0	1	3	2	0	0	0	1	0	0	1	0	8
21:30	2	2	0	0	0	2	2	2	0	0	0	1	2	0	2	0	15
21:45	0	2	0	0	0	0	4	6	0	0	0	1	0	0	9	0	22
22:00	0	1	0	0	0	2	4	4	0	0	0	2	0	0	6	1	20
Hr Total	2	5	0	0	0	5	13	14	0	0	0	5	2	0	18	1	65
TOTAL	2	7	0	0	10	10	22	28	0	0	0	9	2	0	35	1	126

23RD STREET & COLLINS AVENUE
 MIAMI BEACH, FLORIDA
 COUNTED BY: MAXIE ESPINOSA
 SIGNALIZED

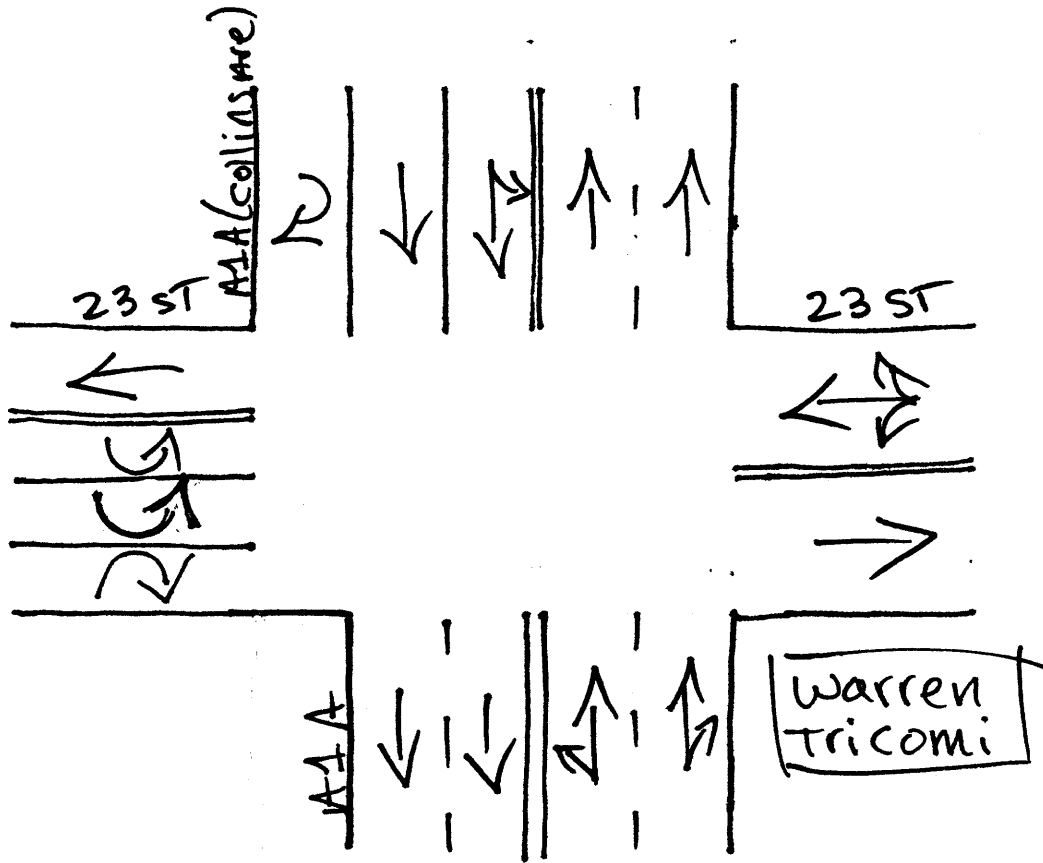
Traffic Survey Specialists, Inc.
 624 Gardenia Terrace
 Delray Beach, Florida 33444
 Phone (561) 272-3255

Site Code : 00120090
 Start Date: 08/03/12
 File I.D. : 23S_COLL
 Page : 1

PEDESTRIANS

Date 08/03/12	COLLINS AVENUE From North				23RD STREET From East				COLLINS AVENUE From South				23RD STREET From West				Total
	Left	Thru	RIGHT	PEDS	Left	Thru	RIGHT	PEDS	Left	Thru	RIGHT	PEDS	Left	Thru	RIGHT	PEDS	
20:15	0	0	0	16	0	0	0	53	0	0	0	8	0	0	0	9	86
20:30	0	0	0	28	0	0	0	72	0	0	0	10	0	0	0	20	130
20:45	0	0	0	28	0	0	0	73	0	0	0	11	0	0	0	23	135
21:00	0	0	0	29	0	0	0	71	0	0	0	5	0	0	0	19	124
Hr Total	0	0	0	101	0	0	0	269	0	0	0	34	0	0	0	71	475
21:15	0	0	0	30	0	0	0	49	0	0	0	2	0	0	0	27	108
21:30	0	0	0	47	0	0	0	38	0	0	0	14	0	0	0	36	135
21:45	0	0	0	43	0	0	0	96	0	0	0	17	0	0	0	37	193
22:00	0	0	0	67	0	0	0	107	0	0	0	19	0	0	0	70	263
Hr Total	0	0	0	187	0	0	0	290	0	0	0	52	0	0	0	170	699
TOTAL	0	0	0	288	0	0	0	559	0	0	0	86	0	0	0	241	1174

↑
North



Miami beach, Florida

August 03, 2012

drawn by: Luis Palomino

signalized

22ND STREET & PARK AVENUE
 MIAMI BEACH, FLORIDA
 COUNTED BY: CARLOS PALOMINO
 NOT SIGNALIZED

Traffic Survey Specialists, Inc.
 624 Gardenia Terrace
 Delray Beach, Florida 33444
 Phone (561) 272-3255

Site Code : 00120090
 Start Date: 08/10/12
 File I.D. : 22S_PARK
 Page : 1

ALL VEHICLES

Date 08/10/12	PARK AVENUE From North				22ND STREET From East				PARK AVENUE From South				22ND STREET From West				Total
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	
20:15	0	1	7	0	0	4	1	2	0	1	4	0	0	0	0	0	20
20:30	1	2	17	0	0	5	1	2	1	2	7	0	0	0	0	0	38
20:45	0	4	10	1	0	4	1	3	1	0	2	0	0	0	0	0	26
21:00	0	1	16	0	0	4	0	1	0	1	5	4	0	0	0	0	32
Hr Total	1	8	50	1	0	17	3	8	2	4	18	4	0	0	0	0	116
21:15	0	0	10	0	0	6	0	5	0	0	8	0	0	0	0	0	29
21:30	0	4	14	0	0	5	1	2	0	1	7	3	0	0	0	0	37
21:45	0	1	9	1	0	0	2	0	0	0	6	1	0	0	0	0	20
22:00	0	3	9	0	0	3	1	3	0	0	6	2	0	0	0	0	27
Hr Total	0	8	42	1	0	14	4	10	0	1	27	6	0	0	0	0	113
TOTAL	1	16	92	2	0	31	7	18	2	5	45	10	0	0	0	0	229

22ND STREET & PARK AVENUE
 MIAMI BEACH, FLORIDA
 COUNTED BY: CARLOS PALOMINO
 NOT SIGNALIZED

Traffic Survey Specialists, Inc.
 624 Gardenia Terrace
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Site Code : 00120090
 Start Date: 08/10/12
 File I.D. : 22S_PARK
 Page : 2

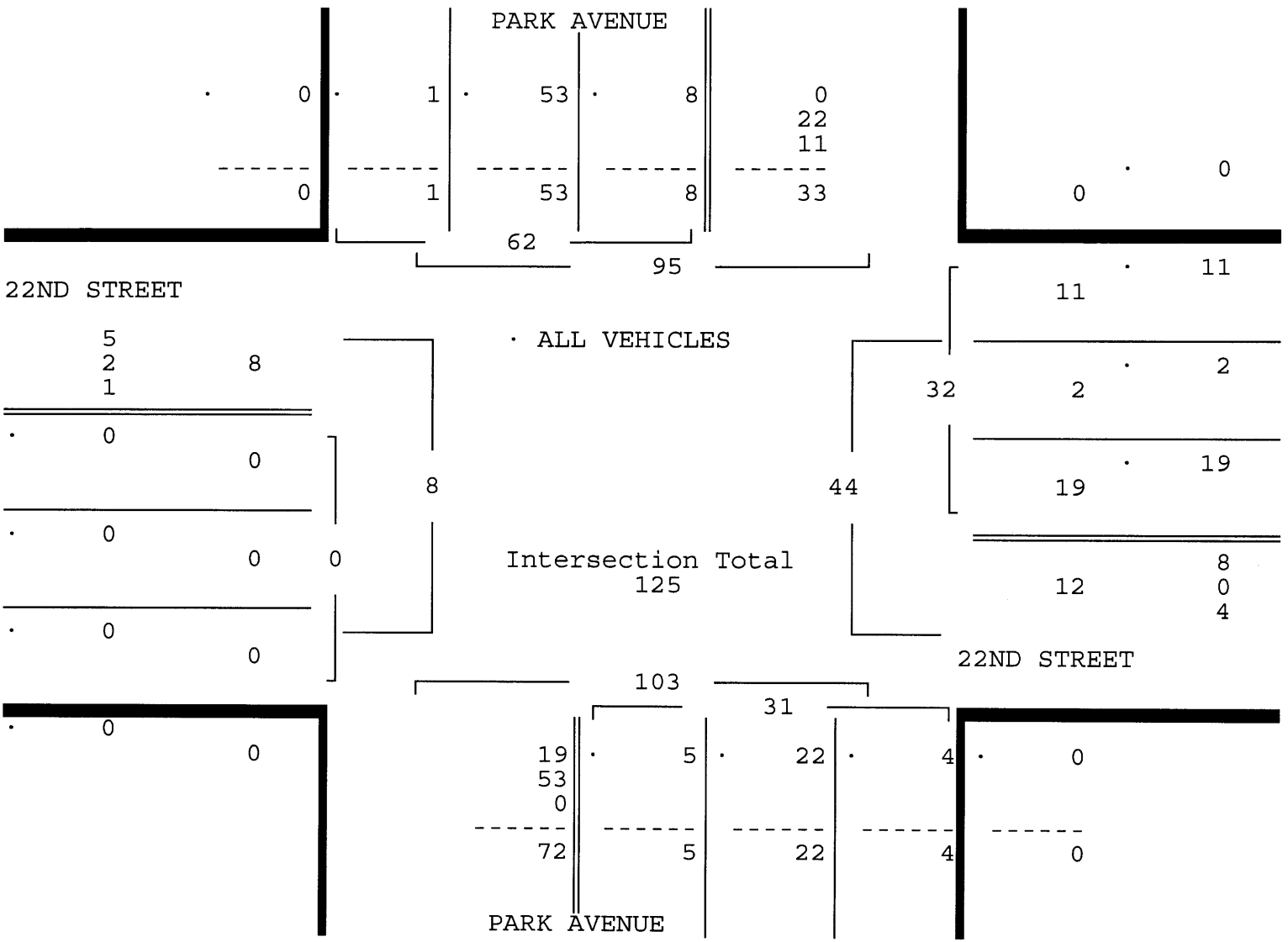
ALL VEHICLES

PARK AVENUE From North				22ND STREET From East				PARK AVENUE From South				22ND STREET From West				Total
UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	

Date 08/10/12

Peak Hour Analysis By Entire Intersection for the Period: 20:15 to 22:15 on 08/10/12

Peak start	20:30				20:30				20:30				20:30			
Volume	1	7	53	1	0	19	2	11	2	3	22	4	0	0	0	0
Percent	2%	11%	85%	2%	0%	59%	6%	34%	6%	10%	71%	13%	0%	0%	0%	0%
Pk total	62				32				31				0			
Highest	20:30				21:15				20:30				20:15			
Volume	1	2	17	0	0	6	0	5	1	2	7	0	0	0	0	0
Hi total	20				11				10				0			
PHF	.78				.73				.78				.0			



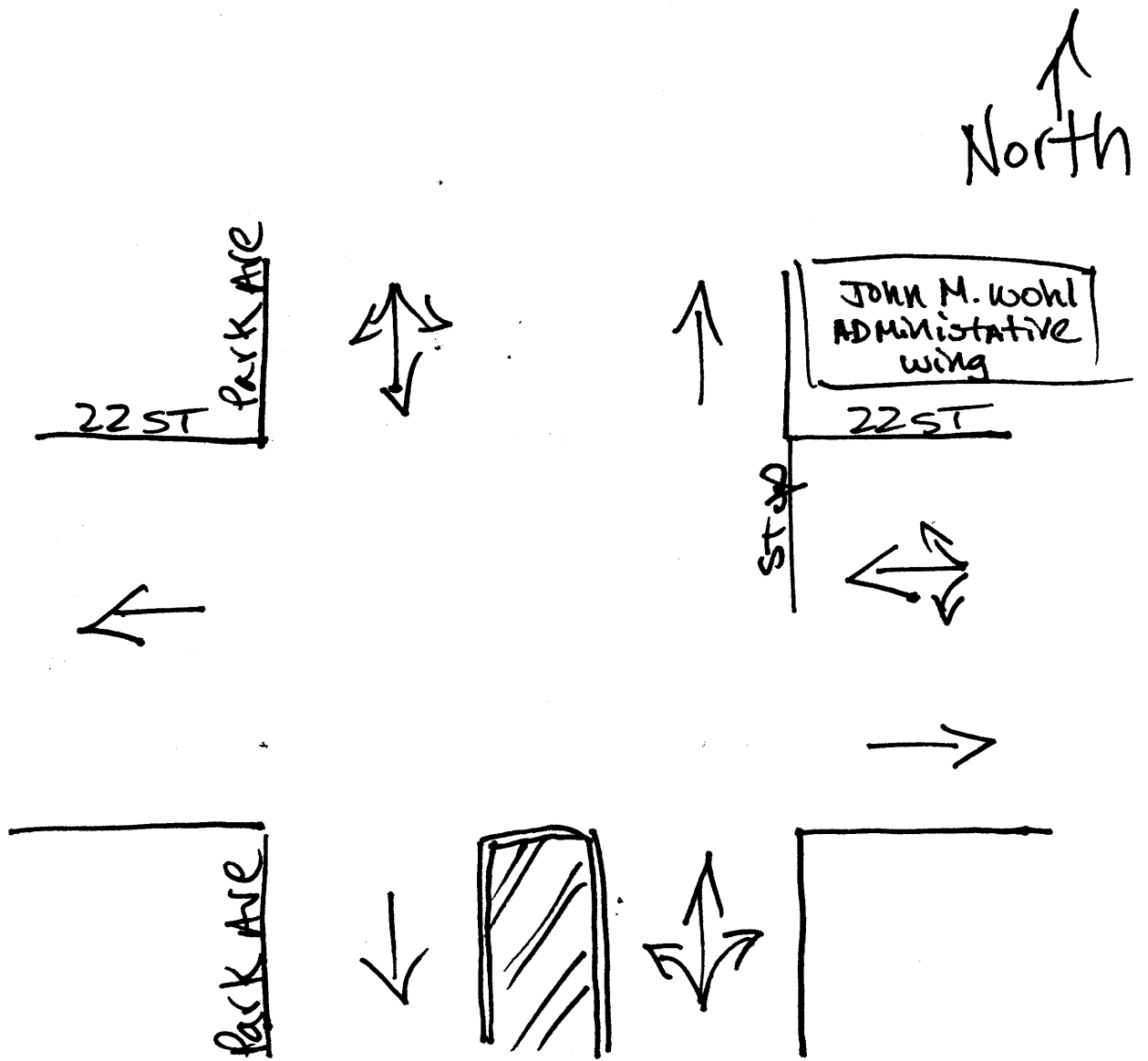
22ND STREET & PARK AVENUE
 MIAMI BEACH, FLORIDA
 COUNTED BY: CARLOS PALOMINO
 NOT SIGNALIZED

Traffic Survey Specialists, Inc.
 624 Gardenia Terrace
 Delray Beach, Florida 33444
 Phone (561) 272-3255

Site Code : 00120090
 Start Date: 08/10/12
 File I.D. : 22S_PARK
 Page : 1

PEDESTRIANS

Date 08/10/12	PARK AVENUE From North				22ND STREET From East				PARK AVENUE From South				22ND STREET From West				Total	
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds		
20:15	0	0	0	3	0	0	0	4	0	0	0	0	0	0	0	0	2	9
20:30	0	0	0	0	0	0	0	7	0	0	0	2	0	0	0	0	1	10
20:45	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0	0	0	3
21:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	2
Hr Total	0	0	0	3	0	0	0	13	0	0	0	4	0	0	0	0	4	24
21:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
21:30	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
21:45	0	0	0	0	0	0	0	4	0	0	0	2	0	0	0	0	0	6
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hr Total	0	0	0	0	0	0	0	6	0	0	0	2	0	0	0	0	1	9
TOTAL	0	0	0	3	0	0	0	19	0	0	0	6	0	0	0	0	5	33



Miami beach, Florida
August 03, 2012
drawn by: Luis Palomino
NOT Signalized

22ND STREET & LIBERTY AVENUE
 MIAMI BEACH, FLORIDA
 COUNTED BY: AMBER PALOMINO
 NOT SIGNALIZED

Traffic Survey Specialists, Inc.
 624 Gardenia Terrace
 Delray Beach, Florida 33444
 Phone (561) 272-3255

Site Code : 00120090
 Start Date: 08/10/12
 File I.D. : 22S_LIBE
 Page : 1

ALL VEHICLES

Date 08/10/12	LIBERTY AVENUE From North				22ND STREET From East				----- From South				22ND STREET From West				Total
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	
20:15	0	0	0	1	0	0	5	0	0	0	0	0	0	0	1	0	7
20:30	0	1	0	0	0	0	8	4	0	0	0	0	0	0	2	0	15
20:45	0	1	0	1	1	0	8	4	0	0	0	0	0	0	4	0	19
21:00	0	1	0	0	0	0	4	3	0	0	0	0	0	0	4	0	12
Hr Total	0	3	0	2	1	0	25	11	0	0	0	0	0	0	11	0	53
21:15	0	2	0	1	0	0	10	1	0	0	0	0	0	0	0	0	14
21:30	0	0	0	2	0	0	6	2	0	0	0	0	0	3	4	0	17
21:45	0	1	0	1	0	0	3	1	0	0	0	0	0	1	1	0	8
22:00	0	1	0	2	0	0	6	1	0	0	0	0	0	1	6	0	17
Hr Total	0	4	0	6	0	0	25	5	0	0	0	0	0	5	11	0	56
TOTAL	0	7	0	8	1	0	50	16	0	0	0	0	0	5	22	0	109

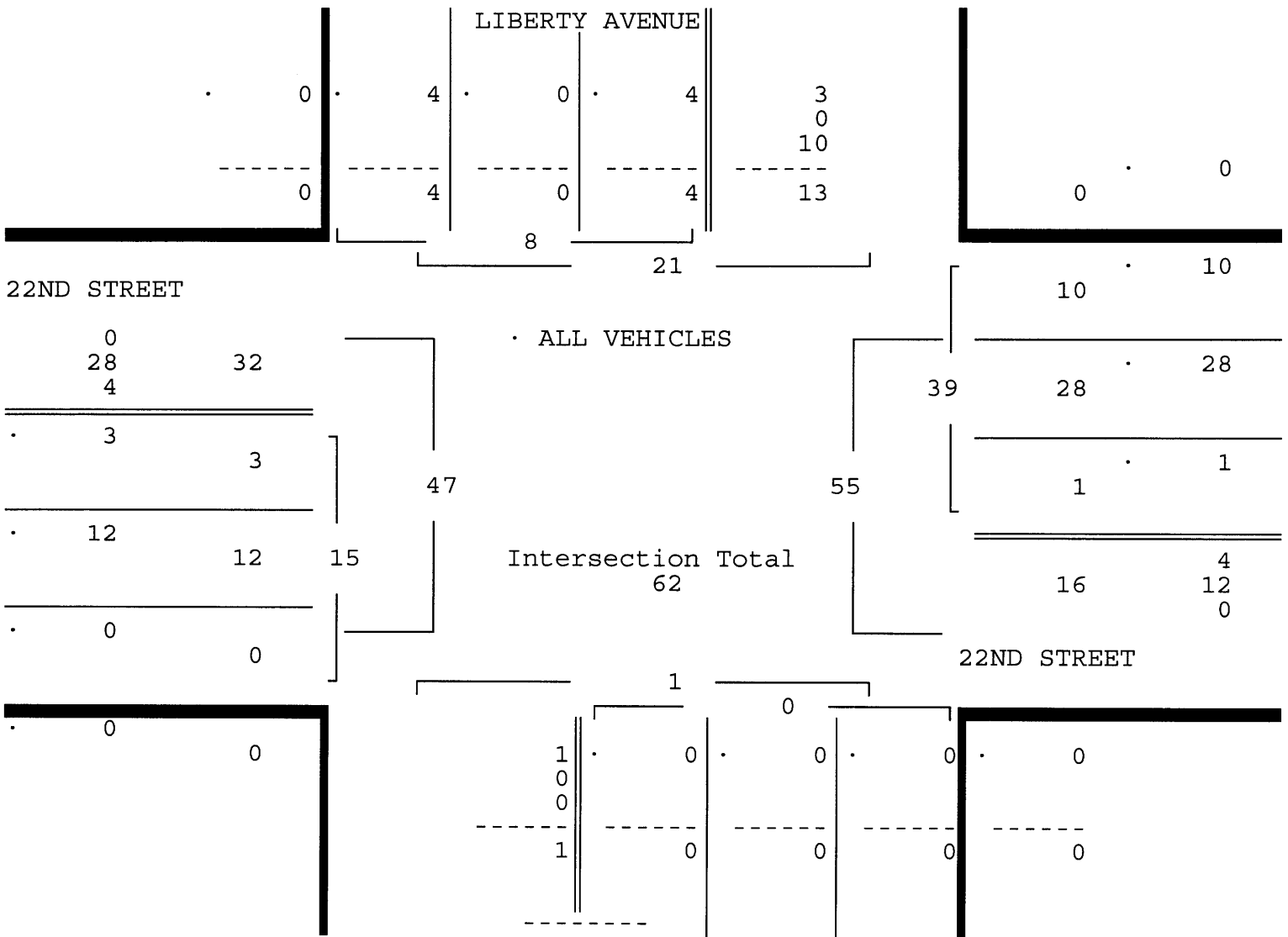
22ND STREET & LIBERTY AVENUE
 MIAMI BEACH, FLORIDA
 COUNTED BY: AMBER PALOMINO
 NOT SIGNALIZED

Traffic Survey Specialists, Inc.
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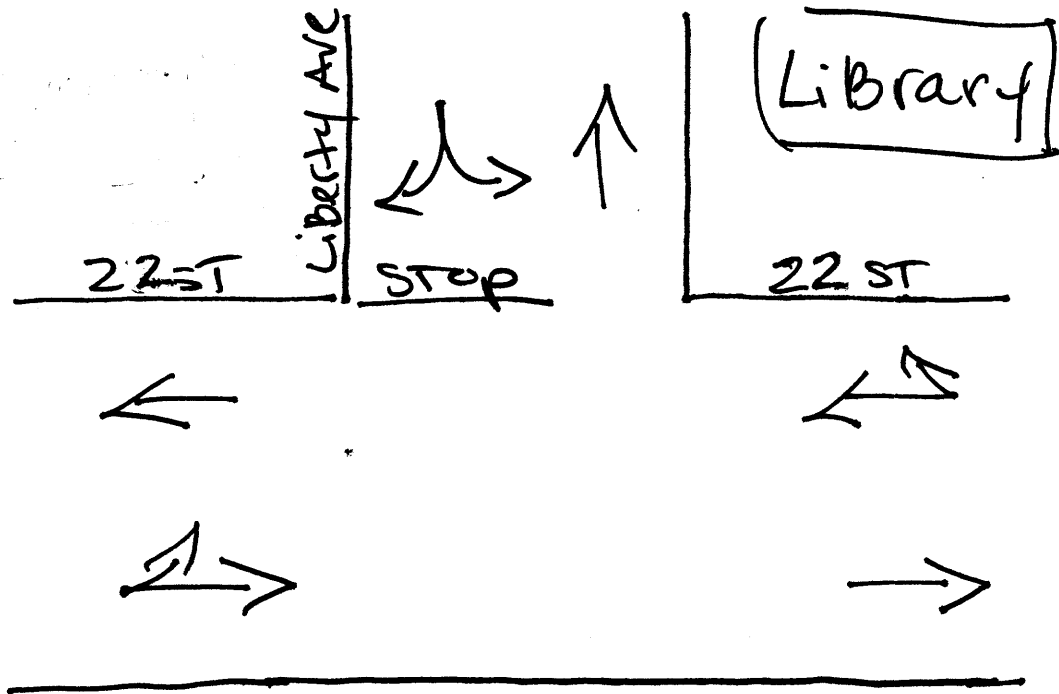
Site Code : 00120090
 Start Date: 08/10/12
 File I.D. : 22S_LIBE
 Page : 2

ALL VEHICLES

LIBERTY AVENUE From North				22ND STREET From East				----- From South				22ND STREET From West				Total
UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	
Date 08/10/12																
Peak Hour Analysis By Entire Intersection for the Period: 20:15 to 22:15 on 08/10/12																
Peak start 20:45				20:45				20:45				20:45				
Volume	0	4	0	4	1	0	28	10	0	0	0	0	0	3	12	0
Percent	0%	50%	0%	50%	3%	0%	72%	26%	0%	0%	0%	0%	0%	20%	80%	0%
Pk total	8				39				0				15			
Highest	21:15				20:45				20:15				21:30			
Volume	0	2	0	1	1	0	8	4	0	0	0	0	0	3	4	0
Hi total	3				13				0				7			
PHF	.67				.75				.0				.54			



↑
North



Miami beach, Florida
August 03, 2012
drawn by: Luis Palomino
NOT Signalized

22ND STREET & COLLINS AVENUE
 MIAMI BEACH, FLORIDA
 COUNTED BY: MAXIE ESPINOSA
 SIGNALIZED

Traffic Survey Specialists, Inc.
 624 Gardenia Terrace
 Delray Beach, Florida 33444
 Phone (561) 272-3255

Site Code : 00120090
 Start Date: 08/10/12
 File I.D. : 22S_COLL
 Page : 1

ALL VEHICLES

Date 08/10/12	COLLINS AVENUE From North				22ND STREET From East				COLLINS AVENUE From South				22ND STREET From West				Total
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	
20:15	0	9	224	3	0	12	0	14	0	2	176	3	0	0	0	0	443
20:30	0	10	216	2	0	13	4	12	0	7	168	4	0	0	2	1	439
20:45	0	5	227	2	0	9	3	10	0	7	171	5	0	1	3	1	444
21:00	1	15	209	1	0	13	5	11	0	1	180	10	0	1	3	2	452
Hr Total	1	39	876	8	0	47	12	47	0	17	695	22	0	2	8	4	1778
21:15	0	9	210	4	3	7	4	22	0	3	180	7	0	0	1	1	451
21:30	1	11	234	3	0	21	2	13	0	2	207	4	0	2	2	2	504
21:45	0	6	196	1	0	10	0	21	0	4	204	5	1	1	1	0	450
22:00	0	10	205	2	0	21	2	10	1	3	186	6	0	2	2	3	453
Hr Total	1	36	845	10	3	59	8	66	1	12	777	22	1	5	6	6	1858
TOTAL	2	75	1721	18	3	106	20	113	1	29	1472	44	1	7	14	10	3636

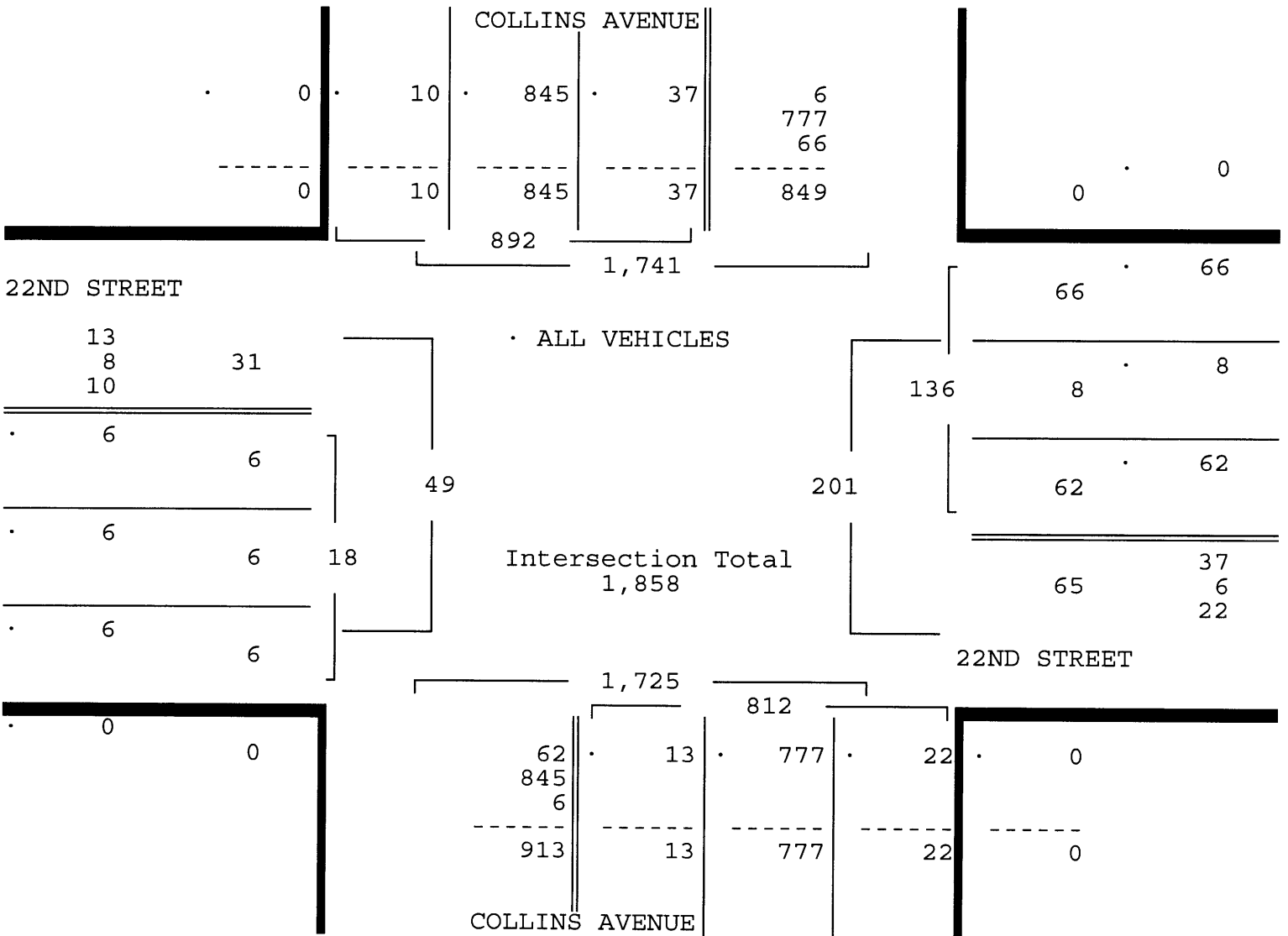
22ND STREET & COLLINS AVENUE
 MIAMI BEACH, FLORIDA
 COUNTED BY: MAXIE ESPINOSA
 SIGNALIZED

Traffic Survey Specialists, Inc.
 624 Gardenia Terrace
 Delray Beach, Florida 33444
 Phone (561) 272-3255

Site Code : 00120090
 Start Date: 08/10/12
 File I.D. : 22S_COLL
 Page : 2

ALL VEHICLES

COLLINS AVENUE From North				22ND STREET From East				COLLINS AVENUE From South				22ND STREET From West				Total
UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	
Date 08/10/12																
Peak Hour Analysis By Entire Intersection for the Period: 20:15 to 22:15 on 08/10/12																
Peak start 21:15				21:15				21:15				21:15				
Volume	1	36	845	10	3	59	8	66	1	12	777	22	1	5	6	6
Percent	0%	4%	95%	1%	2%	43%	6%	49%	0%	1%	96%	3%	6%	28%	33%	33%
Pk total	892			136				812				18				
Highest 21:30				21:15				21:30				22:00				
Volume	1	11	234	3	3	7	4	22	0	2	207	4	0	2	2	3
Hi total	249			36				213				7				
PHF	.90			.94				.95				.64				



22ND STREET & COLLINS AVENUE
 MIAMI BEACH, FLORIDA
 COUNTED BY: MAXIE ESPINOSA
 SIGNALIZED

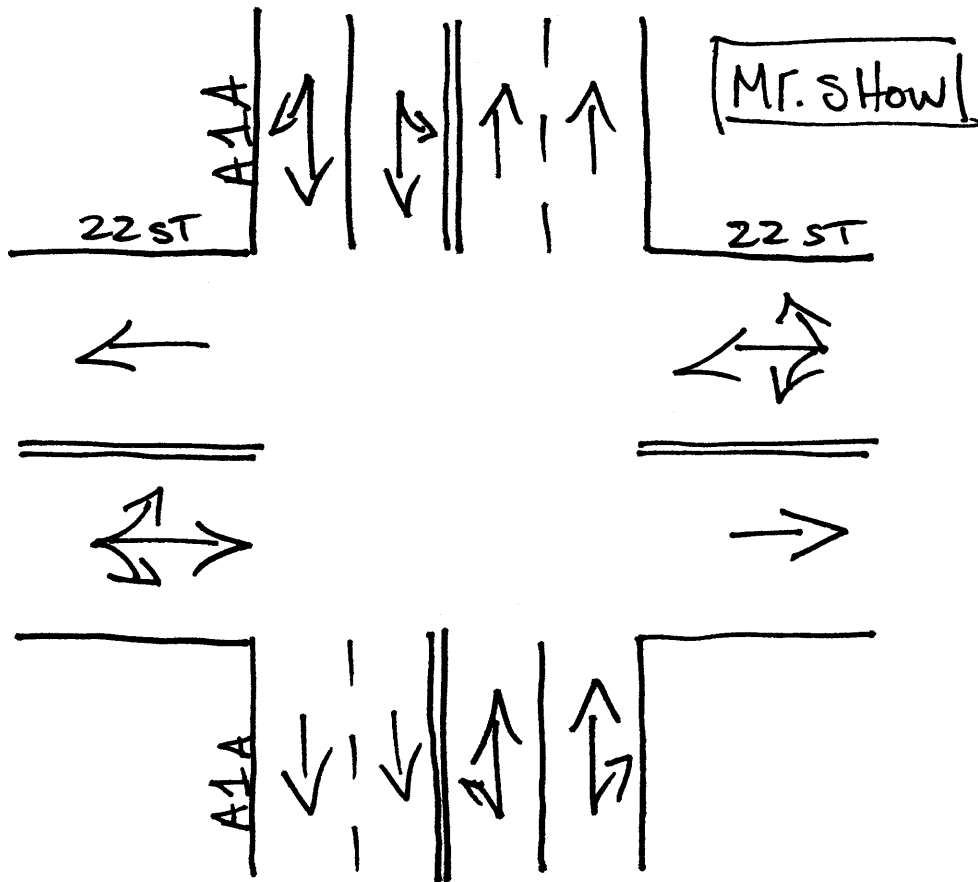
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 Delray Beach, Florida 33444
 Phone (561) 272-3255

Site Code : 00120090
 Start Date: 08/10/12
 File I.D. : 22S_COLL
 Page : 1

PEDESTRIANS

Date 08/10/12	COLLINS AVENUE From North				22ND STREET From East				COLLINS AVENUE From South				22ND STREET From West				Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
20:15	0	0	0	7	0	0	0	83	0	0	0	3	0	0	0	22	115
20:30	0	0	0	1	0	0	0	114	0	0	0	9	0	0	0	43	167
20:45	0	0	0	2	0	0	0	96	0	0	0	11	0	0	0	42	151
21:00	0	0	0	0	0	0	0	63	0	0	0	2	0	0	0	25	90
Hr Total	0	0	0	10	0	0	0	356	0	0	0	25	0	0	0	132	523
21:15	0	0	0	0	0	0	0	67	0	0	0	1	0	0	0	23	91
21:30	0	0	0	0	0	0	0	76	0	0	0	1	0	0	0	36	113
21:45	0	0	0	2	0	0	0	92	0	0	0	6	0	0	0	37	137
22:00	0	0	0	9	0	0	0	97	0	0	0	4	0	0	0	28	138
Hr Total	0	0	0	11	0	0	0	332	0	0	0	12	0	0	0	124	479
TOTAL	0	0	0	21	0	0	0	688	0	0	0	37	0	0	0	256	1002

↑
North



Miami beach, Florida
August 03, 2012
drawn by: Luis Palomino
Signalized

DADE BOULEVARD & WASHINGTON AVENUE
 WITH DADE COURT SEPARATED
 MIAMI BEACH, FLORIDA, SIGNALIZED
 COUNTED BY: MAURICE GOMEZ

Traffic Survey Specialists, Inc.
 624 Gardenia Terrace
 Delray Beach, Florida 33444
 Phone (561) 272-3255

Site Code : 00120090
 Start Date: 08/10/12
 File I.D. : WASH_DAD
 Page : 1

WASHINGTON AVENUE, WASHINGTON COURT

Date 08/10/12	SCHOOL DRIVEWAY From North				DADE BOULEVARD From East				WASHINGTON AVENUE From South				DADE BOULEVARD From West				Total
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	
20:15	0	0	0	0	0	38	86	0	0	30	0	56	0	0	88	19	317
20:30	0	0	0	0	0	32	85	0	0	18	0	81	0	0	83	25	324
20:45	0	0	0	0	0	41	81	0	0	18	0	46	0	0	85	14	285
21:00	0	0	0	0	0	31	65	0	0	24	0	71	0	0	94	26	311
Hr Total	0	0	0	0	0	142	317	0	0	90	0	254	0	0	350	84	1237
21:15	0	0	0	0	0	46	91	0	0	19	0	55	0	0	93	20	324
21:30	0	0	0	0	0	39	71	0	0	12	1	60	0	0	85	25	293
21:45	0	0	0	0	0	43	67	0	0	21	0	53	0	0	85	21	290
22:00	0	0	0	0	0	45	65	0	0	17	0	69	0	0	107	18	321
Hr Total	0	0	0	0	0	173	294	0	0	69	1	237	0	0	370	84	1228
TOTAL	0	0	0	0	0	315	611	0	0	159	1	491	0	0	720	168	2465

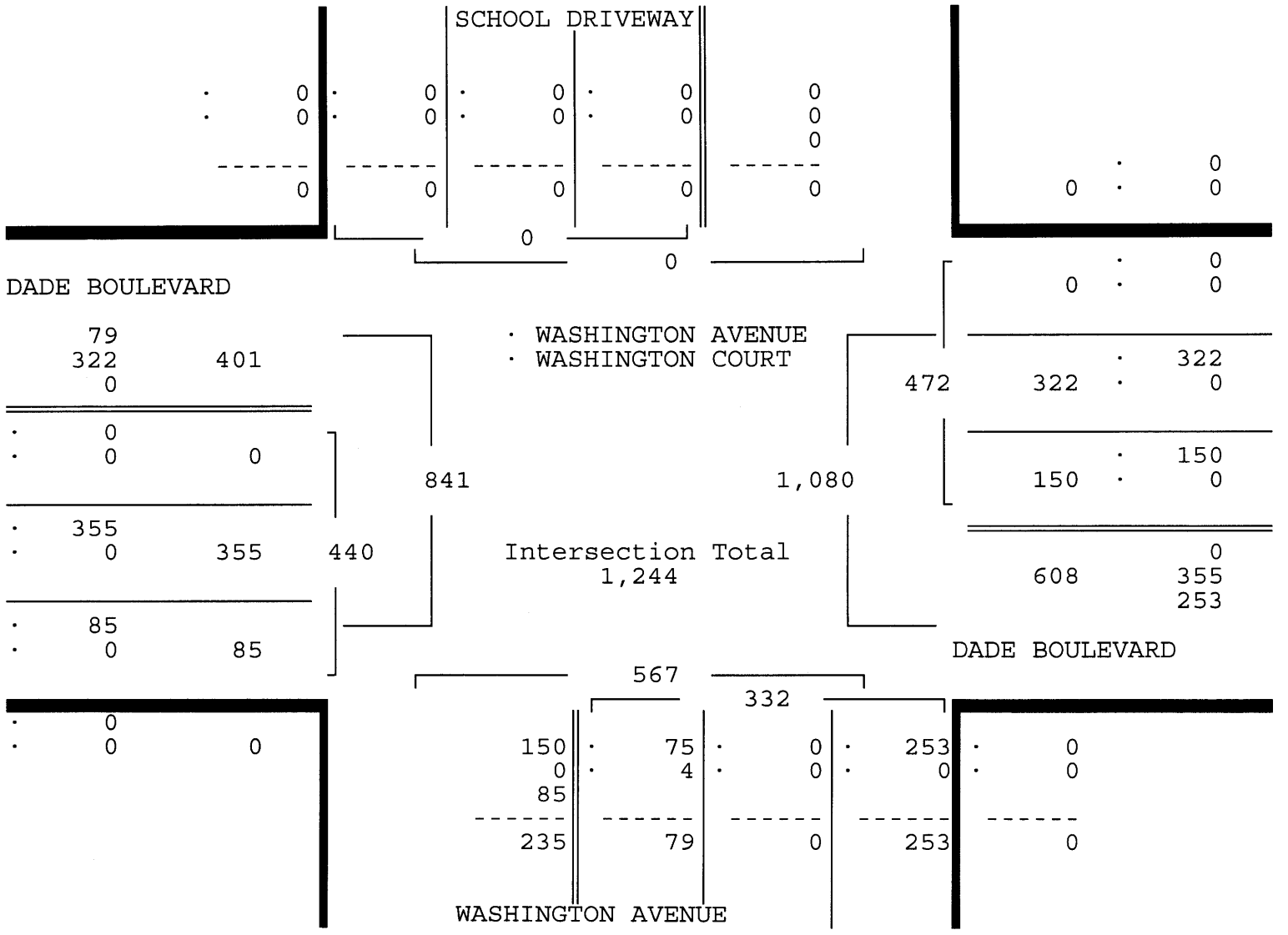
DADE BOULEVARD & WASHINGTON AVENUE
 WITH DADE COURT SEPARATED
 MIAMI BEACH, FLORIDA, SIGNALIZED
 COUNTED BY: MAURICE GOMEZ

Traffic Survey Specialists, Inc.
 624 Gardenia Terrace
 Delray Beach, Florida 33444
 Phone (561) 272-3255

Site Code : 00120090
 Start Date: 08/10/12
 File I.D. : WASH_DAD
 Page : 2

WASHINGTON AVENUE, WASHINGTON COURT

SCHOOL DRIVEWAY From North					DADE BOULEVARD From East				WASHINGTON AVENUE From South				DADE BOULEVARD From West				Total
UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right		
Date 08/10/12																	
Peak Hour Analysis By Entire Intersection for the Period: 20:15 to 22:15 on 08/10/12																	
Peak start 20:30					20:30				20:30				20:30				
Volume	0	0	0	0	0	150	322	0	0	79	0	253	0	0	355	85	
Percent	0%	0%	0%	0%	0%	32%	68%	0%	0%	24%	0%	76%	0%	0%	81%	19%	
Pk total	0				472				332				440				
Highest	20:15				21:15				20:30				21:00				
Volume	0	0	0	0	0	46	91	0	0	18	0	81	0	0	94	26	
Hi total	0				137				99				120				
PHF	.0				.86				.84				.92				



DADE BOULEVARD & WASHINGTON AVENUE
 WITH DADE COURT SEPARATED
 MIAMI BEACH, FLORIDA, SIGNALIZED
 COUNTED BY: MAURICE GOMEZ

Traffic Survey Specialists, Inc.
 624 Gardenia Terrace
 Delray Beach, Florida 33444
 Phone (561) 272-3255

Site Code : 00120090
 Start Date: 08/10/12
 File I.D. : WASH_DAD
 Page : 1

WASHINGTON COURT

Date	SCHOOL DRIVEWAY From North				DADE BOULEVARD From East				WASHINGTON AVENUE From South				DADE BOULEVARD From West				Total
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	
20:15	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
20:30	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
20:45	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hr Total	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5
21:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:30	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
21:45	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	3
22:00	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
Hr Total	0	0	0	0	0	0	0	0	0	4	0	2	0	0	0	0	6
TOTAL	0	0	0	0	0	0	0	0	0	9	0	2	0	0	0	0	11

Traffic Survey Specialists, Inc.

DADE BOULEVARD & WASHINGTON AVENUE
 WITH DADE COURT SEPARATED
 MIAMI BEACH, FLORIDA, SIGNALIZED
 COUNTED BY: MAURICE GOMEZ

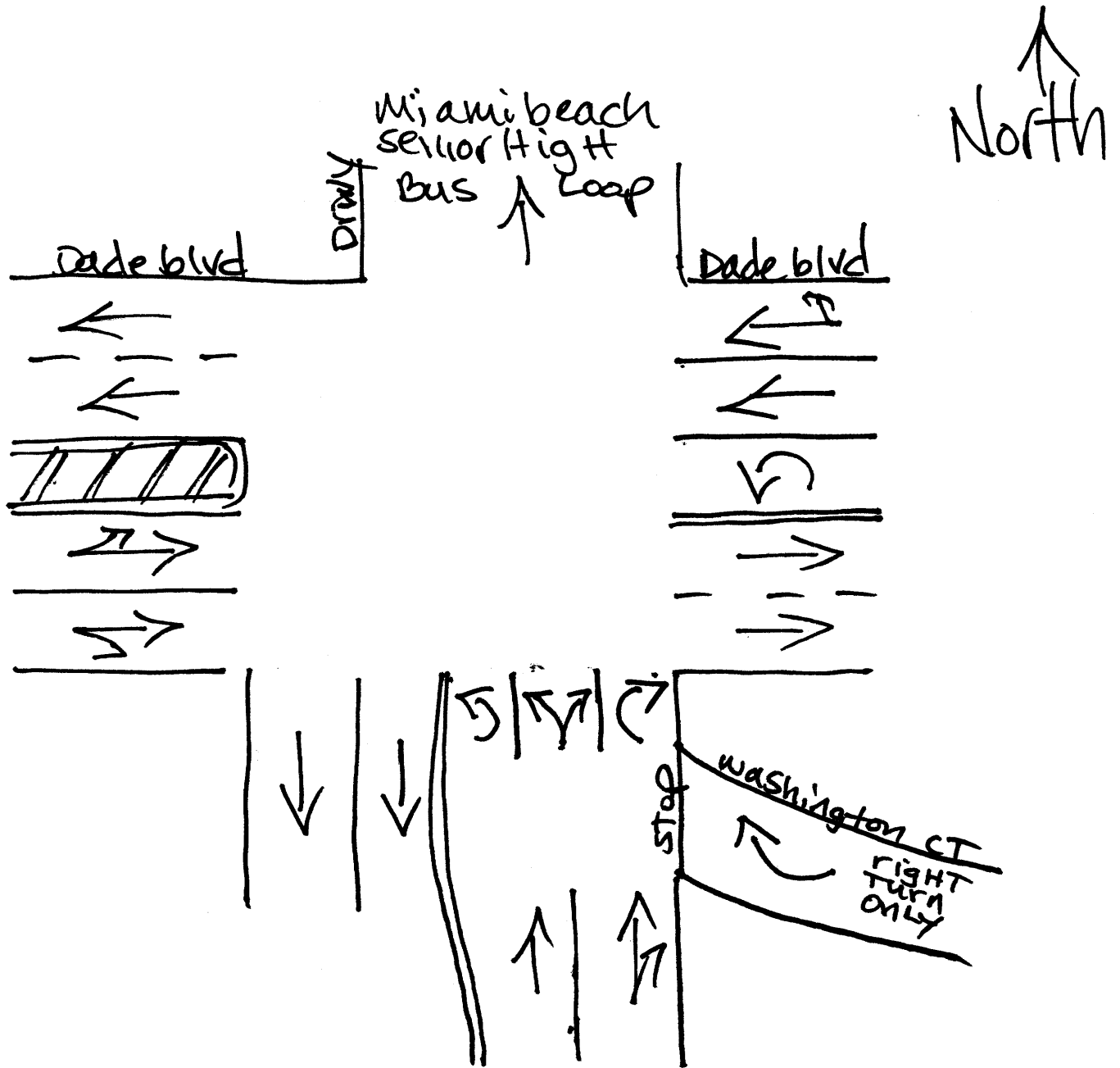
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Site Code : 00120090
 Start Date: 08/10/12
 File I.D. : WASH_DAD
 Page : 1

PEDESTRIANS

Date 08/10/12	SCHOOL DRIVEWAY From North				DADE BOULEVARD From East				WASHINGTON AVENUE From South				DADE BOULEVARD From West				Total
	Left	Thru	RIGHT	PEDS	Left	Thru	RIGHT	PEDS	Left	Thru	RIGHT	PEDS	Left	Thru	RIGHT	PEDS	
20:15	0	0	0	2	1	0	0	1	0	0	0	0	0	0	0	0	4
20:30	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	1	6
20:45	0	0	0	1	2	0	0	1	0	0	0	0	0	0	0	0	4
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5
Hr Total	0	0	0	8	3	0	0	2	0	0	0	0	0	0	0	6	19
21:15	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	1	4
21:30	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
21:45	0	0	0	6	1	0	0	0	0	0	0	0	0	0	0	0	7
22:00	0	0	0	1	0	0	0	4	0	0	0	0	0	0	0	0	5
Hr Total	0	0	0	9	1	0	0	6	0	0	0	0	0	0	0	1	17
TOTAL	0	0	0	17	4	0	0	8	0	0	0	0	0	0	0	7	36

↑
 ILLEGAL
 LEFTS FROM COURT
 WASHINGTON



Miami beach, Florida
 August 03, 2012
 drawn by: Luis Palomino
 Signalized

21ST STREET & WASHINGTON AVENUE
 MIAMI BEACH, FLORIDA
 COUNTED BY: WAYNE ASSAM
 SIGNALIZED

Traffic Survey Specialists, Inc.
 624 Gardenia Terrace
 Delray Beach, Florida 33444
 Phone (561) 272-3255

Site Code : 00120090
 Start Date: 08/10/12
 File I.D. : 21S_WASH
 Page : 1

ALL VEHICLES

Date 08/10/12	WASHINGTON AVENUE From North				21ST STREET From East				WASHINGTON AVENUE From South				----- From West				Total
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	
20:15	0	6	54	0	0	5	0	7	2	0	81	2	0	0	0	0	157
20:30	0	3	54	0	0	9	0	7	0	0	84	5	0	0	0	0	162
20:45	0	1	57	0	0	9	0	5	0	0	64	11	0	0	0	0	147
21:00	1	9	46	0	0	7	0	3	0	0	86	4	0	0	0	0	156
Hr Total	1	19	211	0	0	30	0	22	2	0	315	22	0	0	0	0	622
21:15	0	1	66	0	0	13	0	4	0	0	76	4	0	0	0	0	164
21:30	1	9	52	0	0	8	0	1	0	0	67	5	0	0	0	0	143
21:45	0	6	59	0	0	4	0	4	0	0	68	9	0	0	0	0	150
22:00	0	5	59	0	0	4	0	3	0	0	84	5	0	0	0	0	160
Hr Total	1	21	236	0	0	29	0	12	0	0	295	23	0	0	0	0	617
TOTAL	2	40	447	0	0	59	0	34	2	0	610	45	0	0	0	0	1239

21ST STREET & WASHINGTON AVENUE
 MIAMI BEACH, FLORIDA
 COUNTED BY: WAYNE ASSAM
 SIGNALIZED

Traffic Survey Specialists, Inc.
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 Phone (561) 272-3255

Site Code : 00120090
 Start Date: 08/10/12
 File I.D. : 21S_WASH
 Page : 2

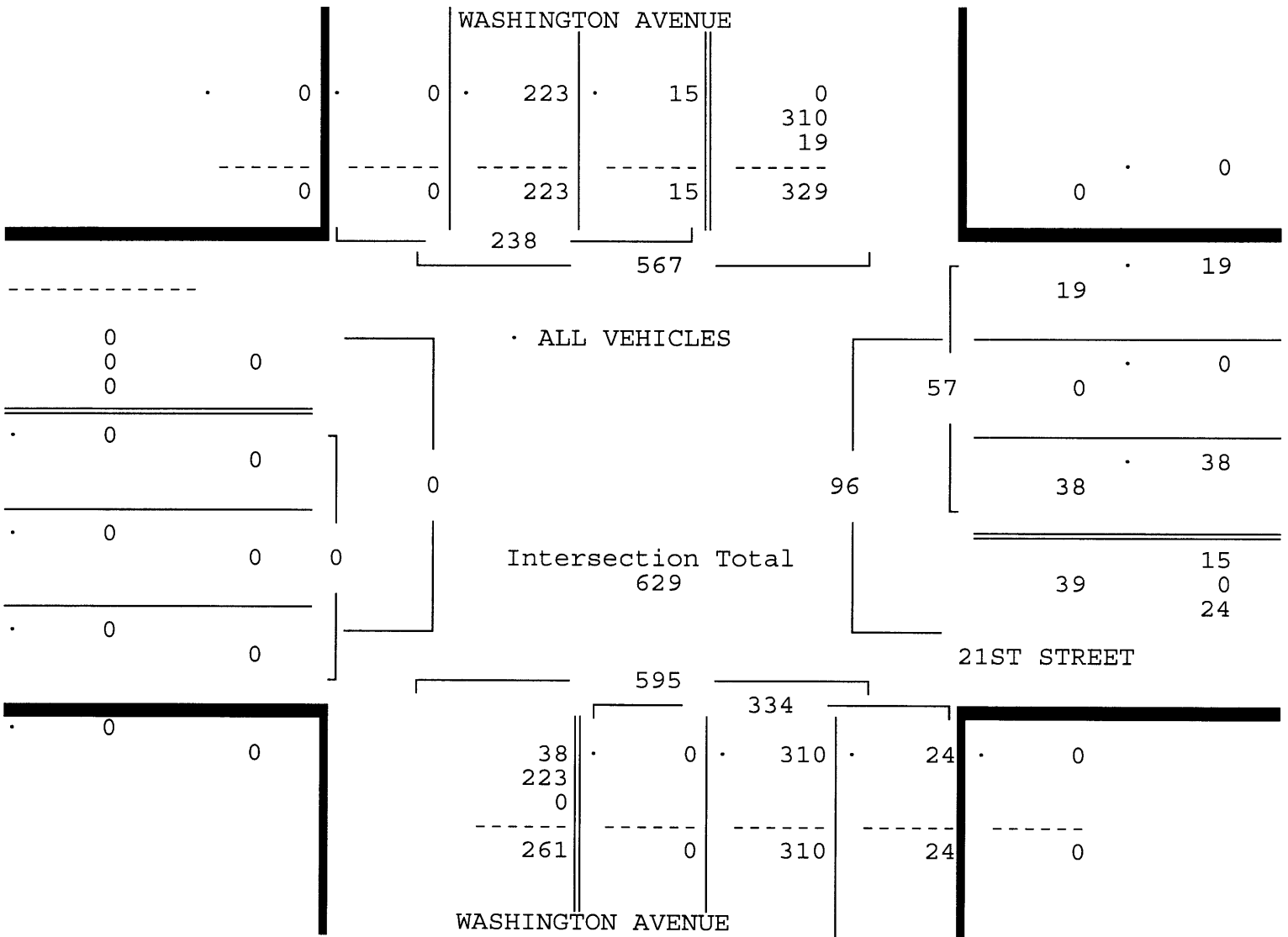
ALL VEHICLES

WASHINGTON AVENUE From North				21ST STREET From East				WASHINGTON AVENUE From South				From West				Total
U Turn	Left	Thru	Right	U Turn	Left	Thru	Right	U Turn	Left	Thru	Right	U Turn	Left	Thru	Right	

Date 08/10/12

Peak Hour Analysis By Entire Intersection for the Period: 20:15 to 22:15 on 08/10/12

Peak start 20:30	20:30				20:30				20:30						
Volume	1	14	223	0	0	38	0	19	0	0	310	24	0	0	0
Percent	0%	6%	94%	0%	0%	67%	0%	33%	0%	0%	93%	7%	0%	0%	0%
Pk total	238				57				334						
Highest	21:15				21:15				21:00						
Volume	0	1	66	0	0	13	0	4	0	0	86	4	0	0	0
Hi total	67				17				90						
PHF	.89				.84				.93						



21ST STREET & WASHINGTON AVENUE
 MIAMI BEACH, FLORIDA
 COUNTED BY: WAYNE ASSAM
 SIGNALIZED

Traffic Survey Specialists, Inc.
 624 Gardenia Terrace
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 Phone (561) 272-3255

Site Code : 00120090
 Start Date: 08/10/12
 File I.D. : 21S_WASH
 Page : 1

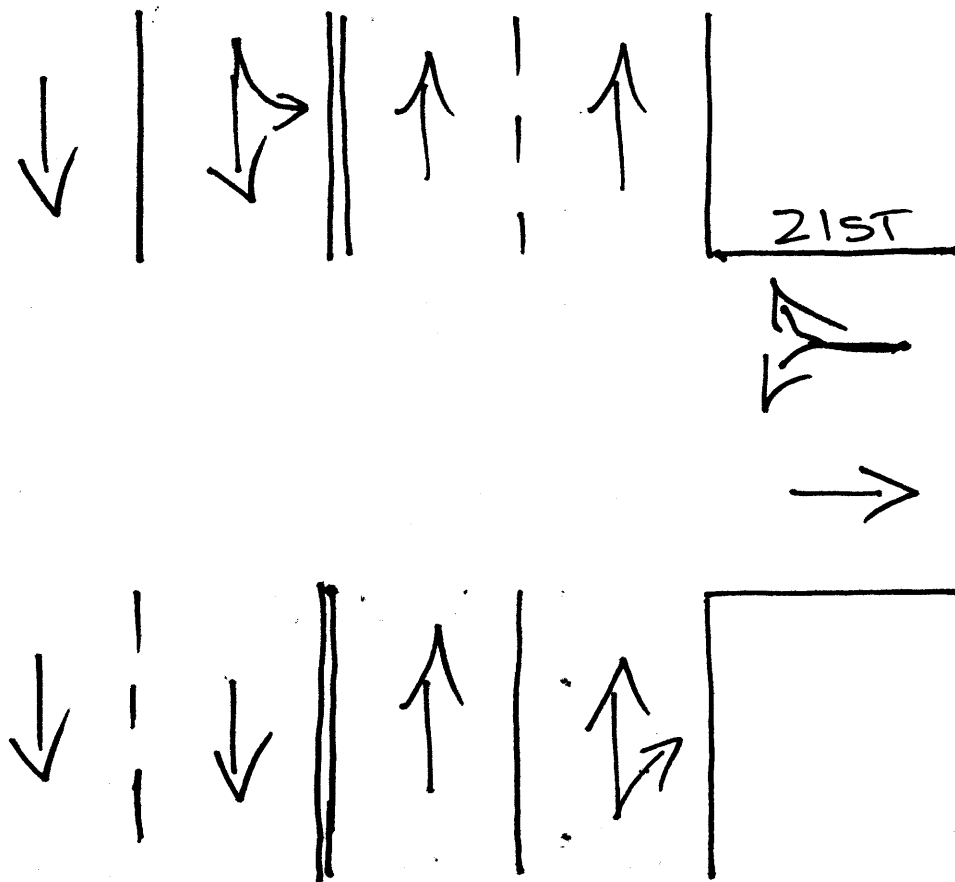
PEDESTRIANS

Date 08/10/12	WASHINGTON AVENUE From North				21ST STREET From East				WASHINGTON AVENUE From South				----- From West				Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
20:15	0	0	0	5	0	0	0	10	0	0	0	5	0	0	0	0	20
20:30	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	4
20:45	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
21:00	0	0	0	0	0	0	0	4	0	0	0	1	0	0	0	0	5
Hr Total	0	0	0	5	0	0	0	19	0	0	0	6	0	0	0	0	30
21:15	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	3
21:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
21:45	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	5
22:00	0	0	0	4	0	0	0	4	0	0	0	0	0	0	0	0	8
Hr Total	0	0	0	5	0	0	0	11	0	0	0	1	0	0	0	0	17
TOTAL	0	0	0	10	0	0	0	30	0	0	0	7	0	0	0	0	47

↑
North

21ST
Recreational
Center

washington ave



Miami beach, Florida
August 03, 2012
drawn by: Luis Palomino
Signalized

21ST STREET & PARK AVENUE
 MIAMI BEACH, FLORIDA
 COUNTED BY: WAYNE ASSAM
 NOT SIGNALIZED

Traffic Survey Specialists, Inc.
 624 Gardenia Terrace
 Delray Beach, Florida 33444
 Phone (561) 272-3255

Site Code : 00120090
 Start Date: 08/03/12
 File I.D. : 21STPARK
 Page : 1

ALL VEHICLES

Date 08/03/12	PARK AVENUE From North				21ST STREET From East				PARK AVENUE From South				21ST STREET From West				Total
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	
20:15	2	1	18	5	0	5	4	5	0	0	6	2	1	7	8	3	67
20:30	1	5	13	4	0	2	9	4	0	1	8	0	0	2	5	0	54
20:45	5	5	16	3	0	2	4	9	0	0	6	6	0	0	17	2	75
21:00	1	4	12	5	0	2	4	10	0	0	5	3	0	6	8	1	61
Hr Total	9	15	59	17	0	11	21	28	0	1	25	11	1	15	38	6	257
21:15	3	5	6	5	0	4	10	3	0	0	4	1	0	7	8	1	57
21:30	1	4	8	4	0	2	4	7	0	0	5	2	0	5	8	1	51
21:45	1	4	14	4	0	2	10	8	0	0	5	2	0	7	9	1	67
22:00	3	4	11	0	0	3	10	3	0	1	6	2	0	3	7	0	53
Hr Total	8	17	39	13	0	11	34	21	0	1	20	7	0	22	32	3	228
TOTAL	17	32	98	30	0	22	55	49	0	2	45	18	1	37	70	9	485

21ST STREET & PARK AVENUE
 MIAMI BEACH, FLORIDA
 COUNTED BY: WAYNE ASSAM
 NOT SIGNALIZED

Traffic Survey Specialists, Inc.
 624 Gardenia Terrace
 Delray Beach, Florida 33444
 Phone (561) 272-3255

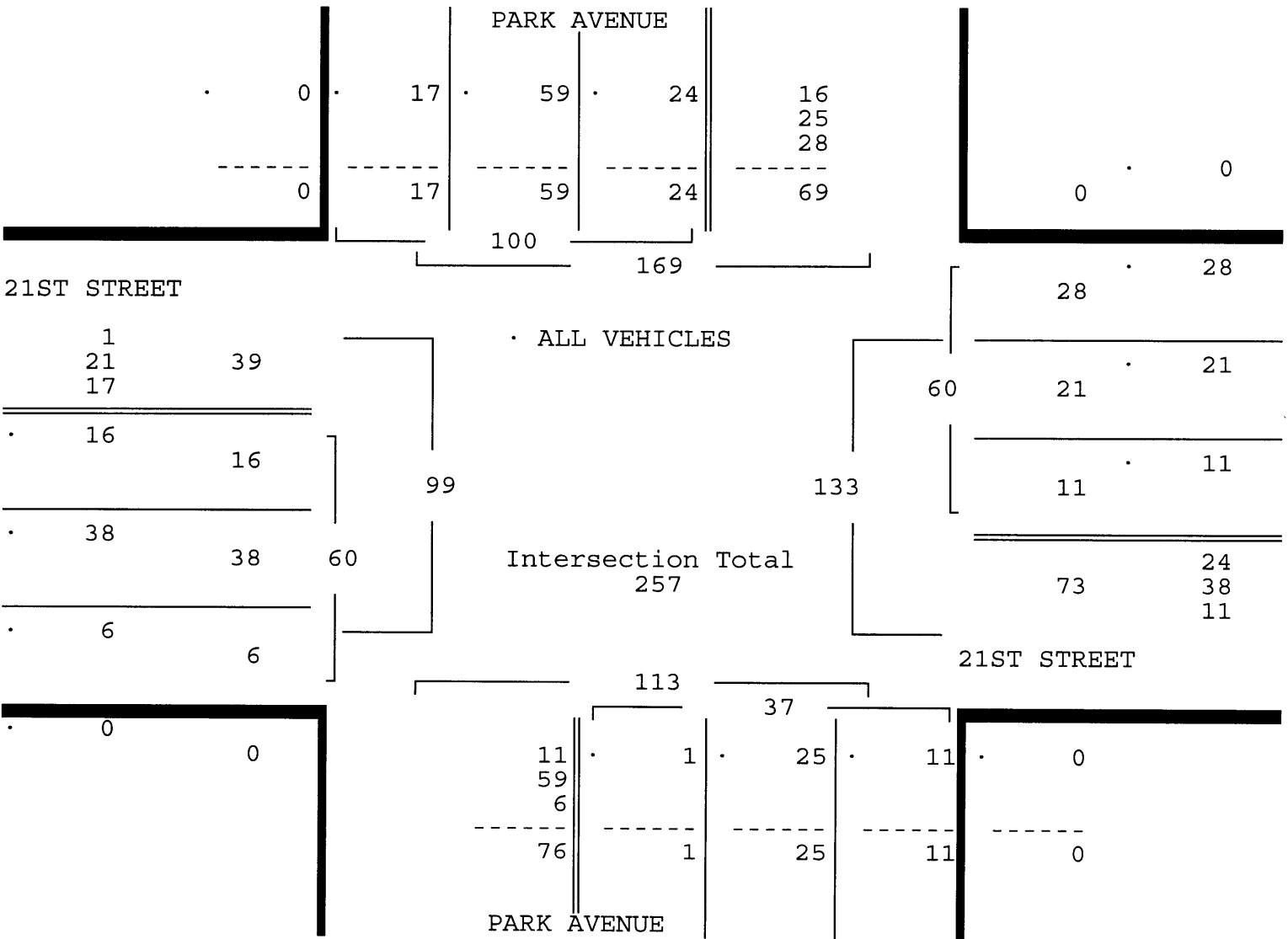
Site Code : 00120090
 Start Date: 08/03/12
 File I.D. : 21STPARK
 Page : 2

ALL VEHICLES

PARK AVENUE From North				21ST STREET From East				PARK AVENUE From South				21ST STREET From West				Total
UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	

Peak Hour Analysis By Entire Intersection for the Period: 20:15 to 22:15 on 08/03/12

Peak start	20:15				20:15				20:15				20:15			
Volume	9	15	59	17	0	11	21	28	0	1	25	11	1	15	38	6
Percent	9%	15%	59%	17%	0%	18%	35%	47%	0%	3%	68%	30%	2%	25%	63%	10%
Pk total	100				60				37				60			
Highest	20:45				21:00				20:45				20:15			
Volume	5	5	16	3	0	2	4	10	0	0	6	6	1	7	8	3
Hi total	29				16				12				19			
PHF	.86				.94				.77				.79			



21ST STREET & PARK AVENUE
 MIAMI BEACH, FLORIDA
 COUNTED BY: WAYNE ASSAM
 NOT SIGNALIZED

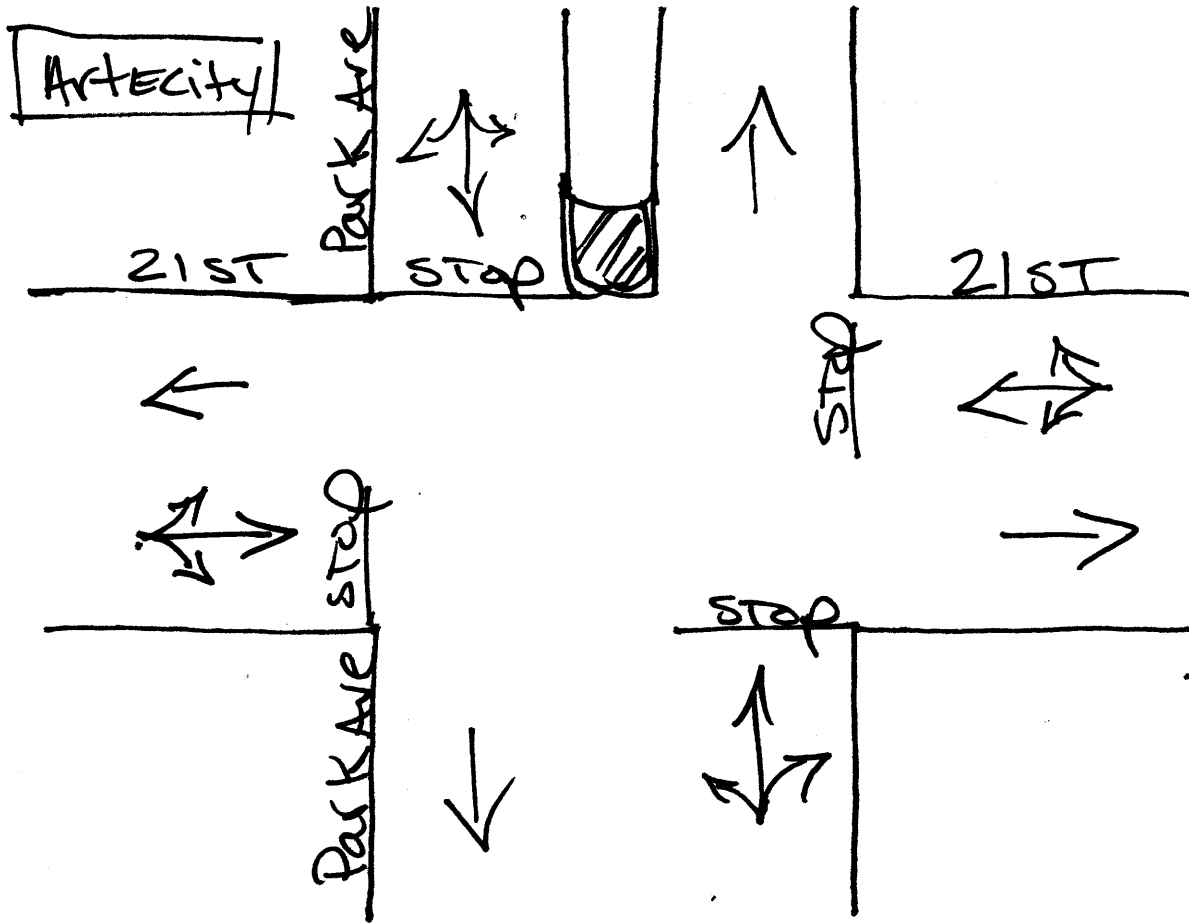
Traffic Survey Specialists, Inc.
 624 Gardenia Terrace
 Delray Beach, Florida 33444
 Phone (561) 272-3255

Site Code : 00120090
 Start Date: 08/03/12
 File I.D. : 21STPARK
 Page : 1

PEDESTRIANS

Date 08/03/12	PARK AVENUE From North				21ST STREET From East				PARK AVENUE From South				21ST STREET From West				Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
20:15	0	0	0	7	0	0	0	2	0	0	0	6	0	0	0	5	20
20:30	0	0	0	4	0	0	0	4	0	0	0	2	0	0	0	1	11
20:45	0	0	0	8	0	0	0	3	0	0	0	3	0	0	0	5	19
21:00	0	0	0	12	0	0	0	5	0	0	0	3	0	0	0	5	25
Hr Total	0	0	0	31	0	0	0	14	0	0	0	14	0	0	0	16	75
21:15	0	0	0	8	0	0	0	2	0	0	0	1	0	0	0	1	12
21:30	0	0	0	10	0	0	0	1	0	0	0	7	0	0	0	3	21
21:45	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
22:00	0	0	0	7	0	0	0	1	0	0	0	0	0	0	0	0	8
Hr Total	0	0	0	29	0	0	0	4	0	0	0	8	0	0	0	4	45
TOTAL	0	0	0	60	0	0	0	18	0	0	0	22	0	0	0	20	120

↑
North



Miami beach, Florida
August 03, 2012
drawn by: Luis Palomino
NOT signalized

FDOT Peak Season Factor Category Report

MOCF: 0.96

Week	Dates	SF	PSCF
1	01/01/2011 - 01/01/2011	1.03	1.07
2	01/02/2011 - 01/08/2011	1.02	1.06
3	01/09/2011 - 01/15/2011	1.01	1.05
4	01/16/2011 - 01/22/2011	1.00	1.04
5	01/23/2011 - 01/29/2011	0.99	1.03
* 6	01/30/2011 - 02/05/2011	0.97	1.01
* 7	02/06/2011 - 02/12/2011	0.96	1.00
* 8	02/13/2011 - 02/19/2011	0.95	0.98
* 9	02/20/2011 - 02/26/2011	0.95	0.98
*10	02/27/2011 - 03/05/2011	0.96	1.00
*11	03/06/2011 - 03/12/2011	0.96	1.00
*12	03/13/2011 - 03/19/2011	0.96	1.00
*13	03/20/2011 - 03/26/2011	0.96	1.00
*14	03/27/2011 - 04/02/2011	0.97	1.01
*15	04/03/2011 - 04/09/2011	0.97	1.01
*16	04/10/2011 - 04/16/2011	0.97	1.01
*17	04/17/2011 - 04/23/2011	0.98	1.02
*18	04/24/2011 - 04/30/2011	0.98	1.02
19	05/01/2011 - 05/07/2011	0.99	1.03
20	05/08/2011 - 05/14/2011	0.99	1.03
21	05/15/2011 - 05/21/2011	0.99	1.03
22	05/22/2011 - 05/28/2011	1.00	1.04
23	05/29/2011 - 06/04/2011	1.00	1.04
24	06/05/2011 - 06/11/2011	1.00	1.04
25	06/12/2011 - 06/18/2011	1.00	1.04
26	06/19/2011 - 06/25/2011	1.01	1.05
27	06/26/2011 - 07/02/2011	1.02	1.06
28	07/03/2011 - 07/09/2011	1.03	1.07
29	07/10/2011 - 07/16/2011	1.03	1.07
30	07/17/2011 - 07/23/2011	1.03	1.07
31	07/24/2011 - 07/30/2011	1.03	1.07
32	07/31/2011 - 08/06/2011	1.03	1.07
33	08/07/2011 - 08/13/2011	1.03	1.07
34	08/14/2011 - 08/20/2011	1.03	1.07
35	08/21/2011 - 08/27/2011	1.02	1.06
36	08/28/2011 - 09/03/2011	1.02	1.06
37	09/04/2011 - 09/10/2011	1.01	1.05
38	09/11/2011 - 09/17/2011	1.01	1.05
39	09/18/2011 - 09/24/2011	1.01	1.05
40	09/25/2011 - 10/01/2011	1.01	1.05
41	10/02/2011 - 10/08/2011	1.00	1.04
42	10/09/2011 - 10/15/2011	1.00	1.04
43	10/16/2011 - 10/22/2011	1.00	1.04
44	10/23/2011 - 10/29/2011	1.00	1.04
45	10/30/2011 - 11/05/2011	1.00	1.04
46	11/06/2011 - 11/12/2011	1.00	1.04
47	11/13/2011 - 11/19/2011	1.00	1.04
48	11/20/2011 - 11/26/2011	1.01	1.05
49	11/27/2011 - 12/03/2011	1.01	1.05
50	12/04/2011 - 12/10/2011	1.02	1.06
51	12/11/2011 - 12/17/2011	1.03	1.07
52	12/18/2011 - 12/24/2011	1.02	1.06
53	12/25/2011 - 12/31/2011	1.01	1.05

* Peak Season

APPENDIX E:
Background Conditions
Development

Historical Growth Trend Analysis

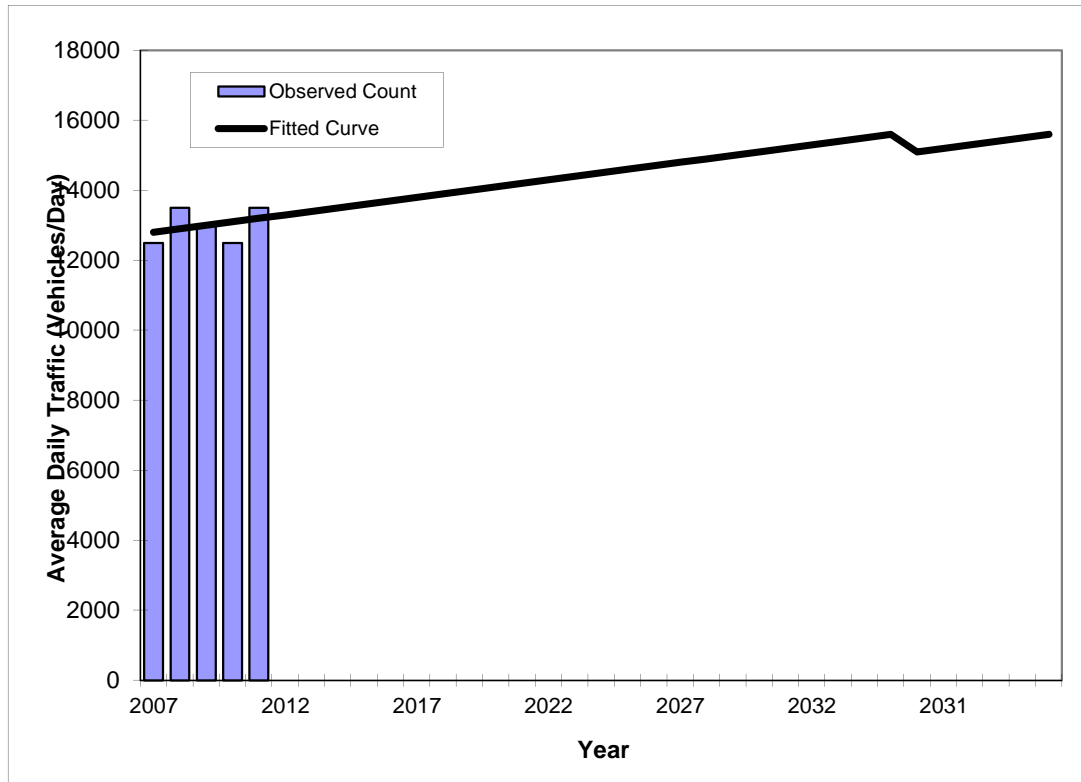
Historical AADT Growth Rates

Station Number	Location	Historic Growth	
		5-year	10-year
5170	SR A1A/Collins Avenue	0.78%	-1.11%
	Total	0.78%	-1.11%

TRAFFIC TRENDS

SR A1A/Collins Ave -- North of 21st Street

County:	87
Station #:	5170
Highway:	SR A1A/Collins Ave



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2007	12500	12800
2008	13500	12900
2009	13000	13000
2010	12500	13100
2011	13500	13200
2015 Opening Year Trend		
2015	N/A	13600
2025 Mid-Year Trend		
2025	N/A	14600
2035 Design Year Trend		
2035	N/A	15600
TRANPLAN Forecasts/Trends		

** Annual Trend Increase: 100
 Trend R-squared: 10.0%
 Trend Annual Historic Growth Rate: 0.78%
 Trend Growth Rate (2011 to Design Year): 0.76%
 Printed: 31-Jul-12

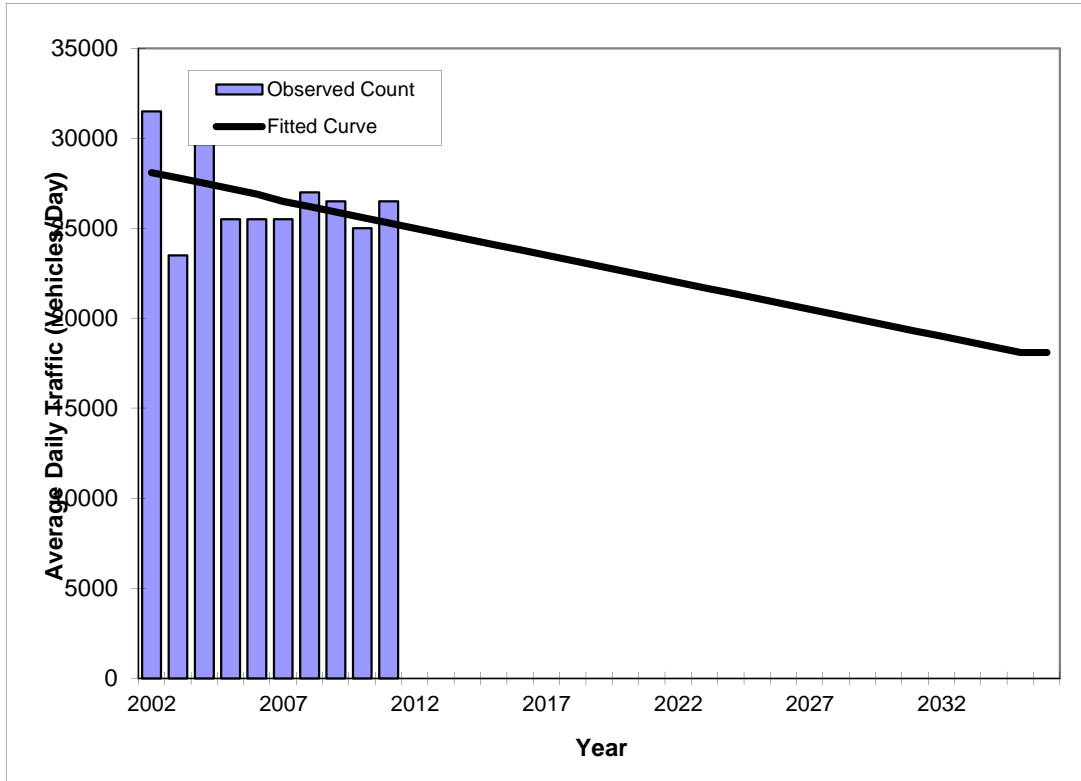
Straight Line Growth Option

*Axle-Adjusted

TRAFFIC TRENDS

SR A1A/Collins Ave -- North of 21st Street

County:	87
Station #:	5170
Highway:	SR A1A/Collins Ave



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2002	31500	28100
2003	23500	27800
2004	30500	27500
2005	25500	27200
2006	25500	26900
2007	25500	26500
2008	27000	26200
2009	26500	25900
2010	25000	25600
2011	26500	25300
2015 Opening Year Trend		
2015	N/A	24100
2025 Mid-Year Trend		
2025	N/A	21100
2035 Design Year Trend		
2035	N/A	18100
TRANPLAN Forecasts/Trends		

** Annual Trend Increase: -303
 Trend R-squared: 13.7%
 Trend Annual Historic Growth Rate: -1.11%
 Trend Growth Rate (2011 to Design Year): -1.19%
 Printed: 31-Jul-12

Straight Line Growth Option

*Axle-Adjusted

Florida Department of Transportation
 Transportation Statistics Office
 2011 Historical AADT Report

County: 87 - MIAMI-DADE

Site: 5170 - SR 1A/COLLINS AV, N OF 21 ST (MIAMI BEACH)

Year	AADT	Direction 1	Direction 2	*K Factor	D Factor	T Factor
2011	26500 C	N 13500	S 13000	9.00	55.10	2.80
2010	25000 C	N 12500	S 12500	8.98	54.08	2.80
2009	26500 C	N 13000	S 13500	8.99	53.24	2.70
2008	27000 C	N 13500	S 13500	9.09	55.75	4.60
2007	25500 C	N 12500	S 13000	8.01	54.34	5.10
2006	25500 C	N 12500	S 13000	7.97	54.22	2.70
2005	25500 C	N 13000	S 12500	8.80	53.80	11.60
2004	30500 C	N 15000	S 15500	9.00	53.30	11.60
2003	23500 C	N 11500	S 12000	8.80	53.40	6.90
2002	31500 C	N 16000	S 15500	9.80	52.30	4.00
2001	29500 F	N 14500	S 15000	8.20	53.50	6.00
2000	29500 C	N 14500	S 15000	8.20	53.10	4.90
1999	26000 C	N 12500	S 13500	9.10	52.70	4.30
1998	26500 C	N 13000	S 13500	6.10	52.70	2.50
1997	19000 C	N 9500	S 9500	9.10	64.50	2.70
1996	25000 C	N 10500	S 14500	8.50	53.10	4.10

AADT Flags: C = Computed; E = Manual Estimate; F = First Year Estimate
 S = Second Year Estimate; T = Third Year Estimate; X = Unknown
 *K Factor: Starting with Year 2011 is StandardK, Prior years are K30 values

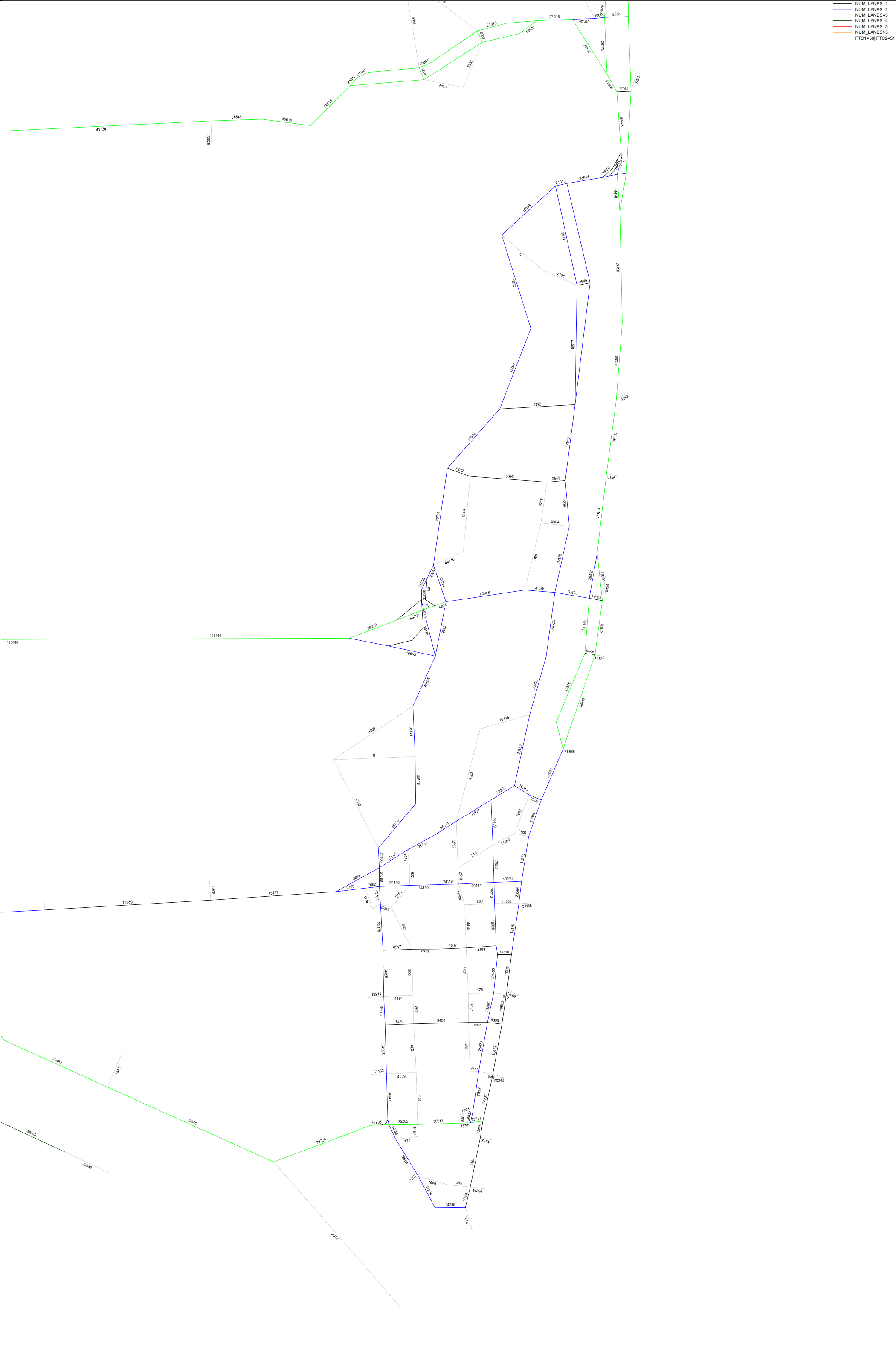
Florida Standard Urban
Transportation Model Structure
(FSUTMS) Southeast Florida
Regional Planning Model
(SERPM) Growth Trend Analysis

Growth Rate Calculations from 2005 and 2030 M-D MPO FSUTMS Model

Location	Model Volumes			Growth Rate (%)
	2005	2030	Diff	
Collins Avenue	19,975	23,465	3,490	0.70%
	23,384	24,792	1,408	0.24%
	32,800	38,181	5,381	0.66%
23rd Street	9,950	14,378	4,428	1.78%
	16,948	19,699	2,751	0.65%
Dade Boulevard	27,222	37,095	9,873	1.45%
	26,185	31,323	5,138	0.78%
Total	156,464	188,933	32,469	0.83%

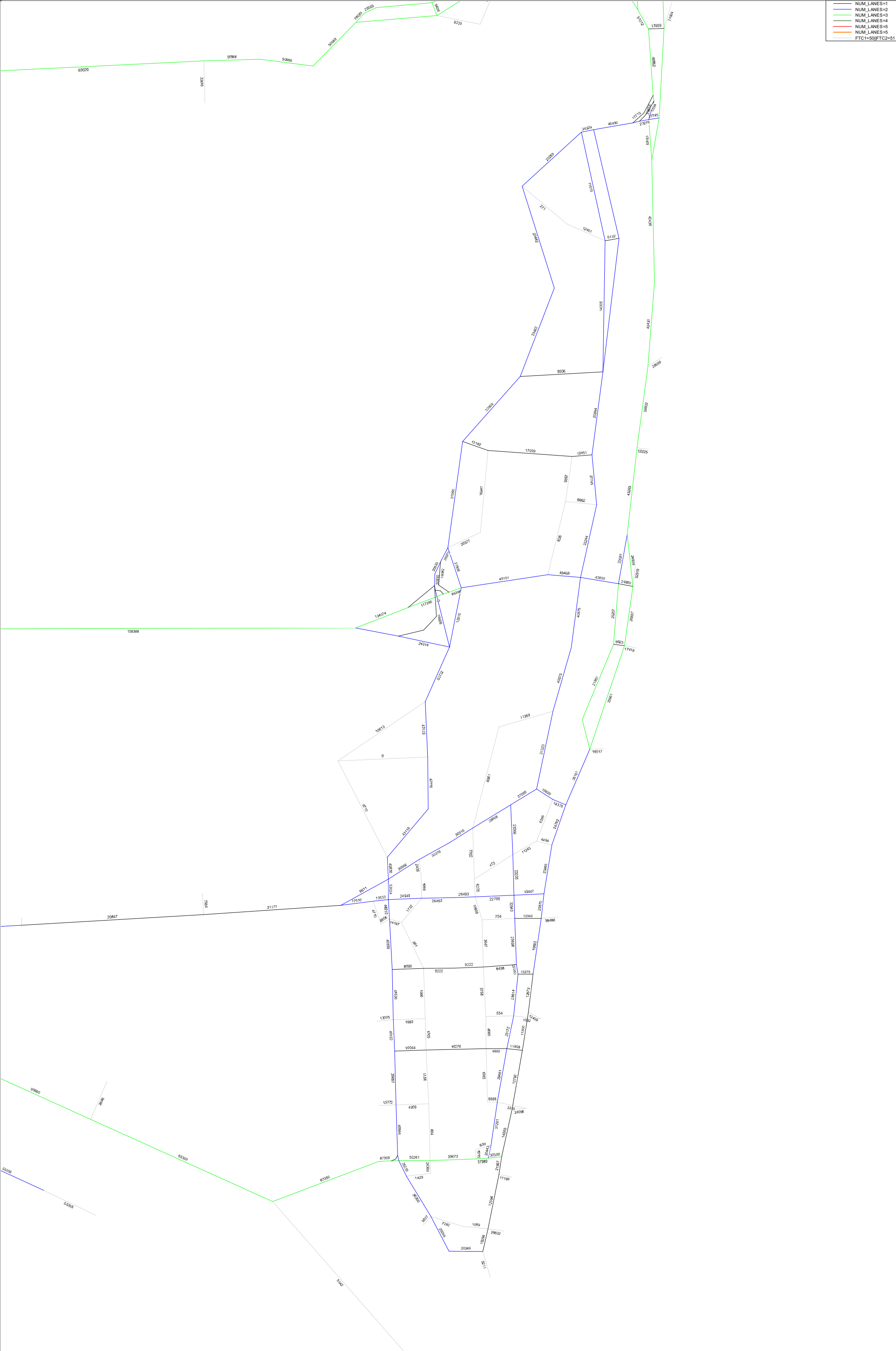
2005 SERPM Network
Miami Beach Area

- NUM_LANES=1
- NUM_LANES=2
- NUM_LANES=3
- NUM_LANES=4
- NUM_LANES=5
- NUM_LANES>5
- FTC1=50|FTC2=51

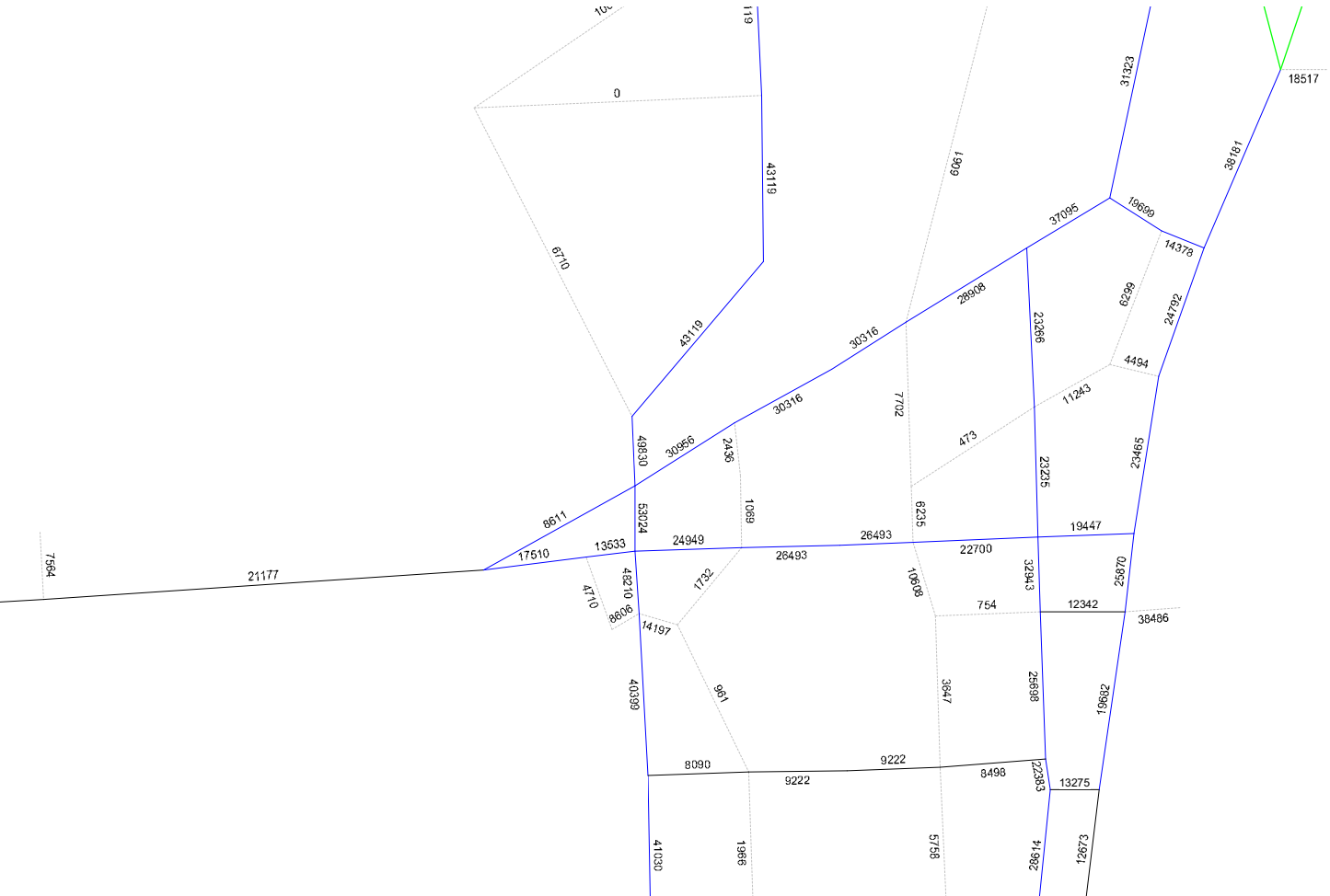


2030 SERPM Network
Miami Beach Area

- NUM_LANES=1
- NUM_LANES=2
- NUM_LANES=3
- NUM_LANES=4
- NUM_LANES=5
- NUM_LANES>5
- FTC1=50|FTC2=51



2030 SERPM Network Miami Beach Area



Committed Development

*Traffic Impact Analysis
for Submittal to the
City of Miami Beach*

Parc Place
Miami Beach, Florida



©2011 Kimley-Horn and Associates, Inc.

November 2011

043396000



- Legend**
- Study Roadway
 - Study Intersection
 - Site
 - 00 Net New Project Trips
 - (00) 20th Street Valet Trips

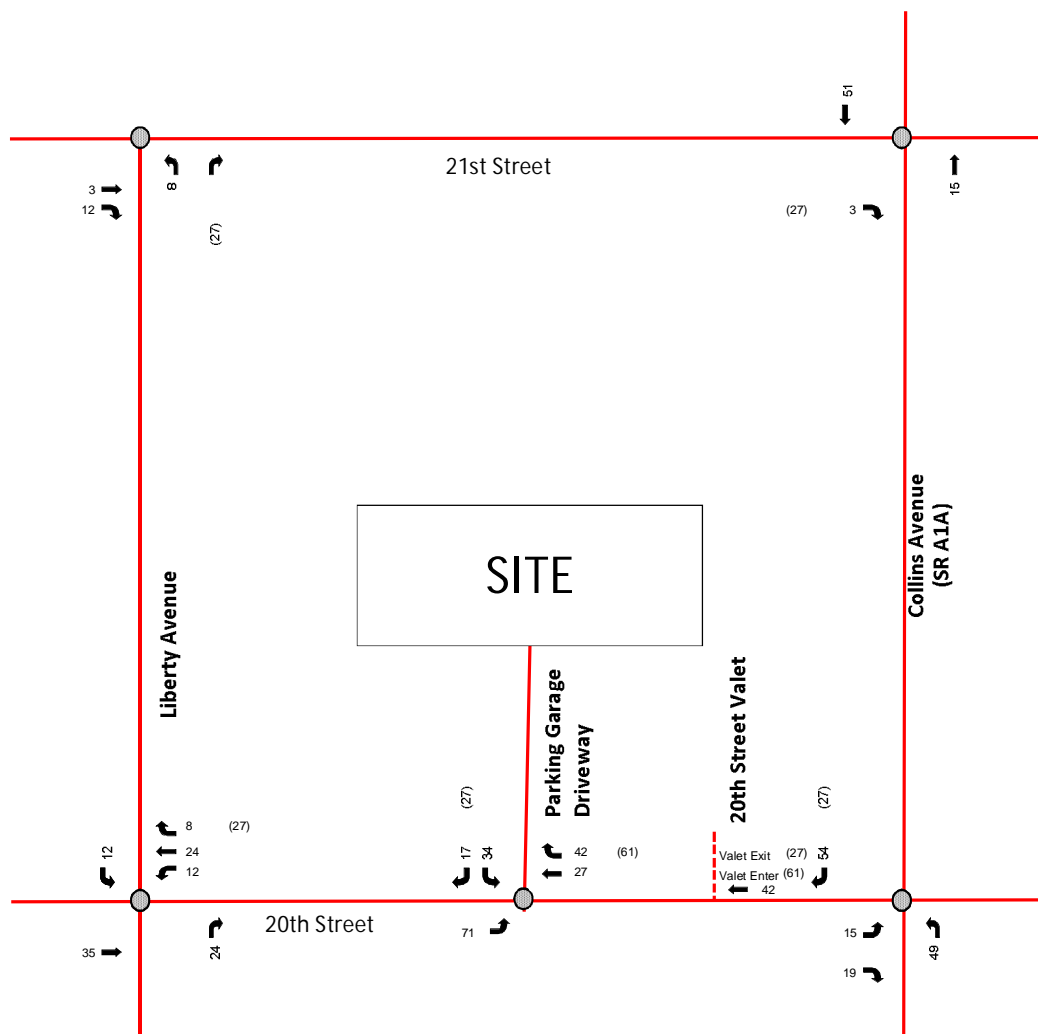
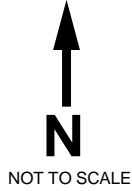
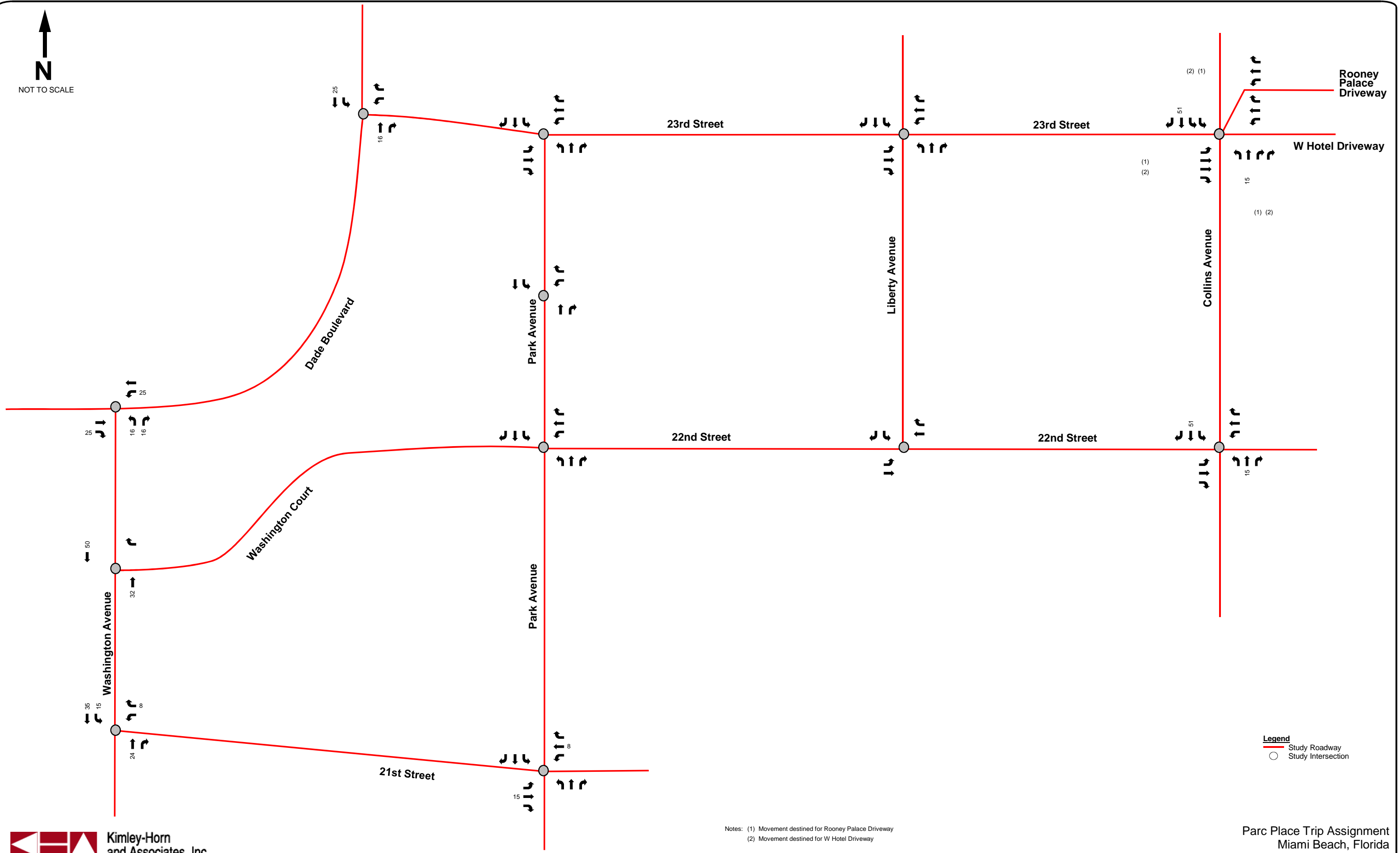


Figure 5
 Project Trip Assignment
 Saturday Late Night Peak Hour
 Parc Place
 City of Miami Beach, Florida



NOT TO SCALE



Legend
 — Study Roadway
 ○ Study Intersection

Notes: (1) Movement destined for Rooney Palace Driveway
 (2) Movement destined for W Hotel Driveway

Parc Place Trip Assignment
 Miami Beach, Florida

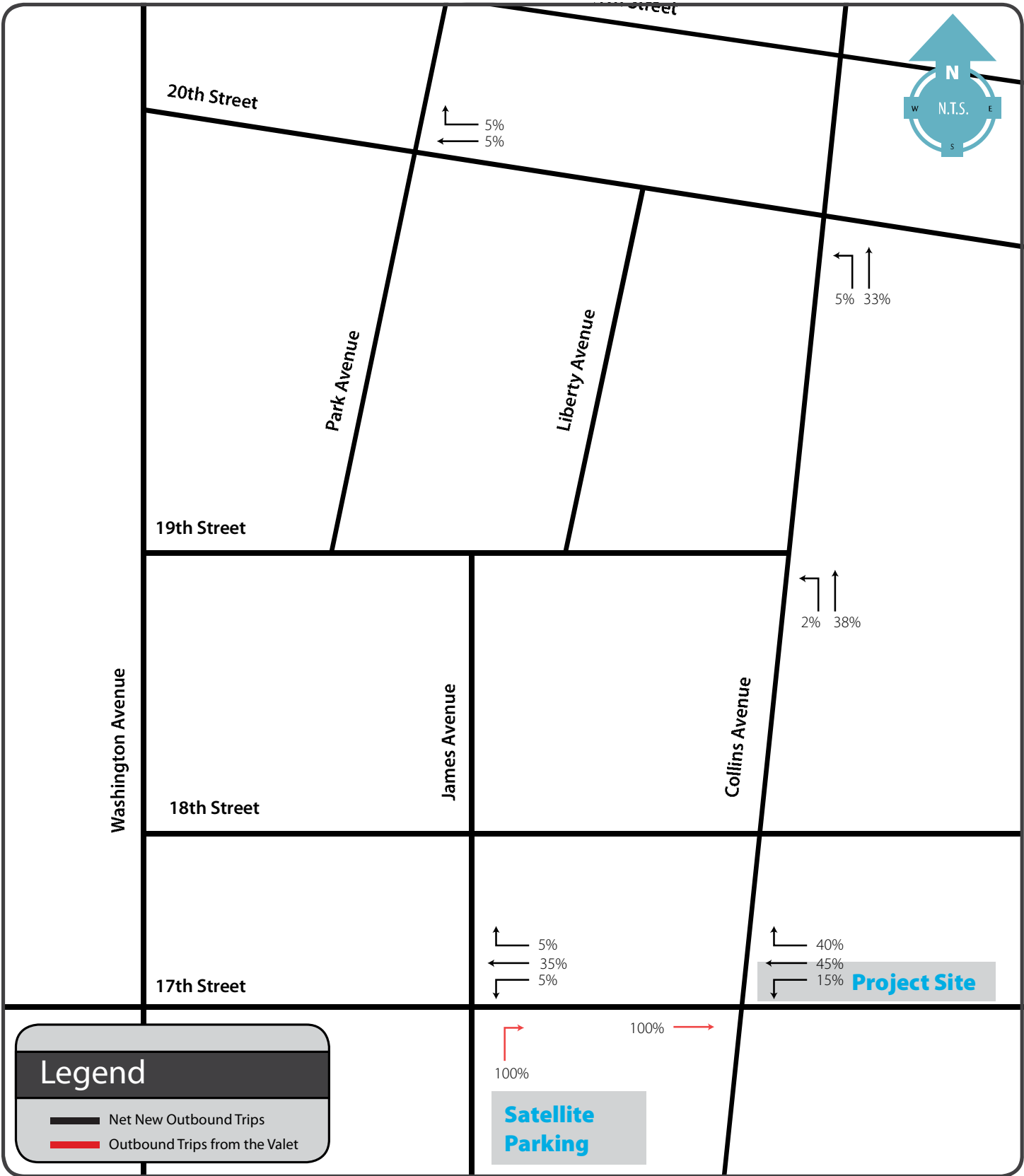
SLS Hotel South Beach

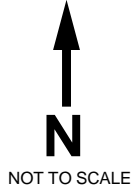
Transportation Impact Study



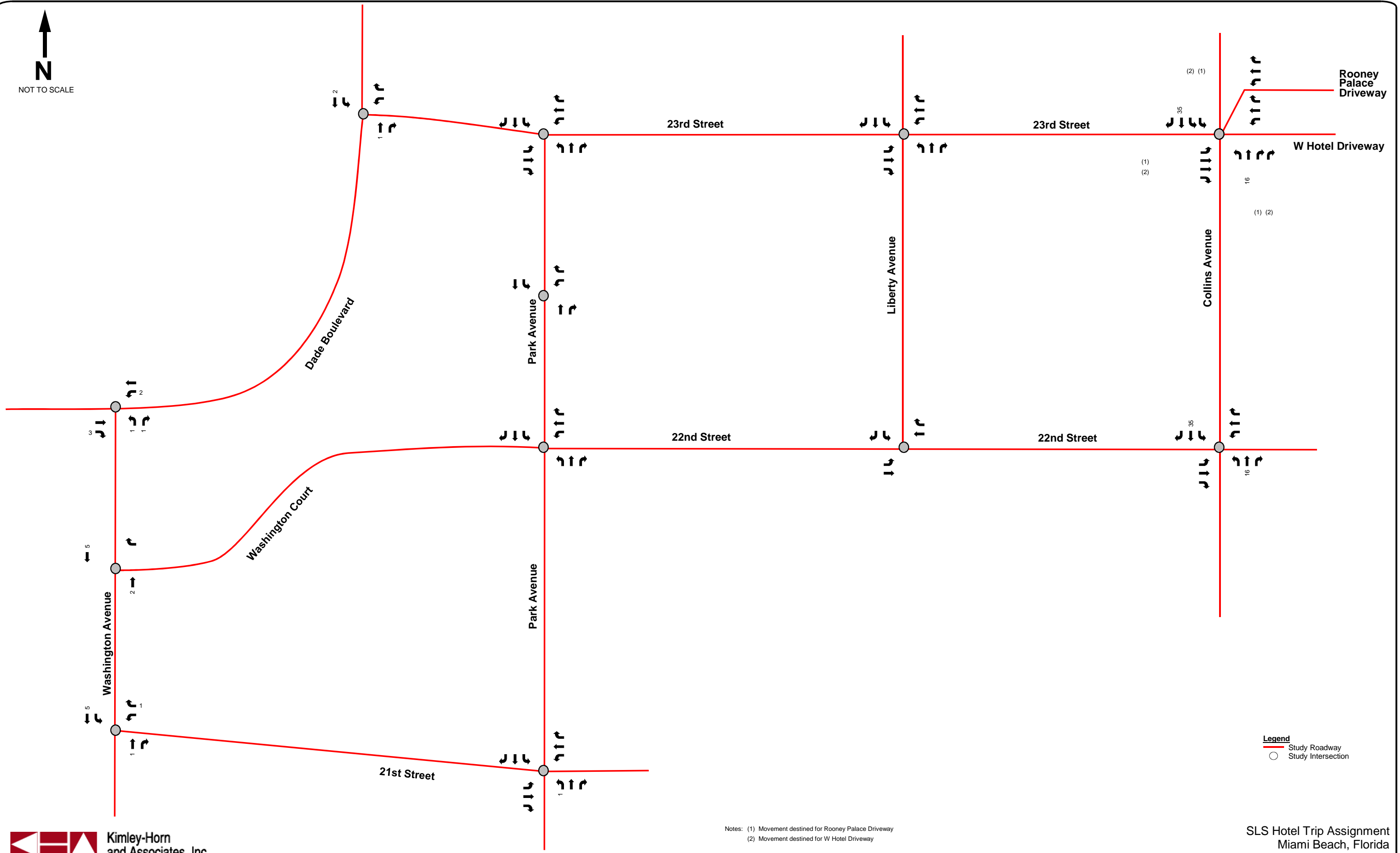
DAVID PLUMMER & ASSOCIATES







NOT TO SCALE

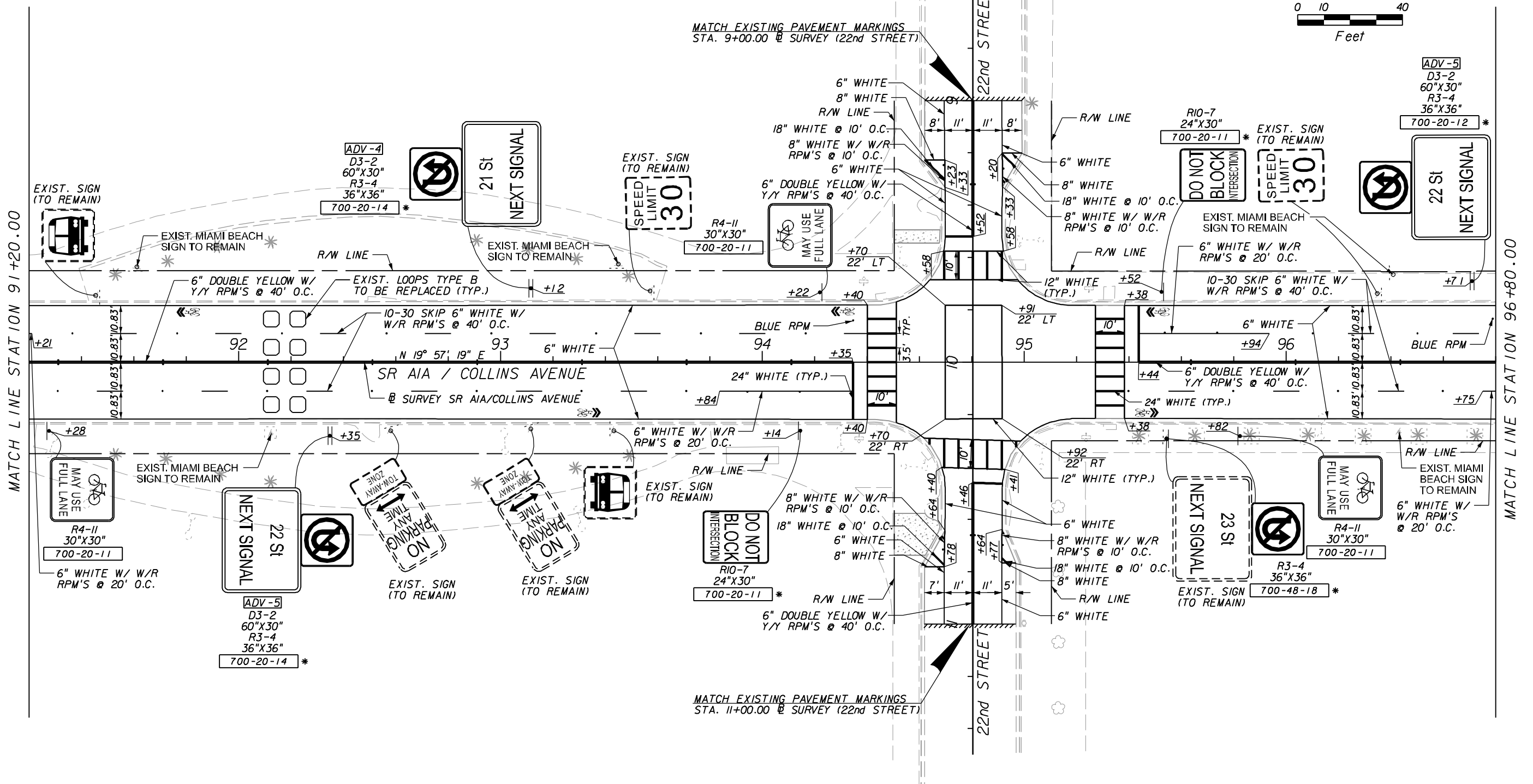
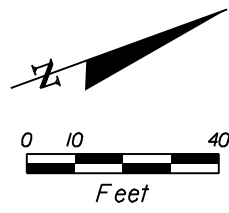


Legend
 — Study Roadway
 ○ Study Intersection

Notes: (1) Movement destined for Rooney Palace Driveway
 (2) Movement destined for W Hotel Driveway

SLS Hotel Trip Assignment
 Miami Beach, Florida

APPENDIX F:
FDOT Collins Avenue Signing
and Pavement Markings



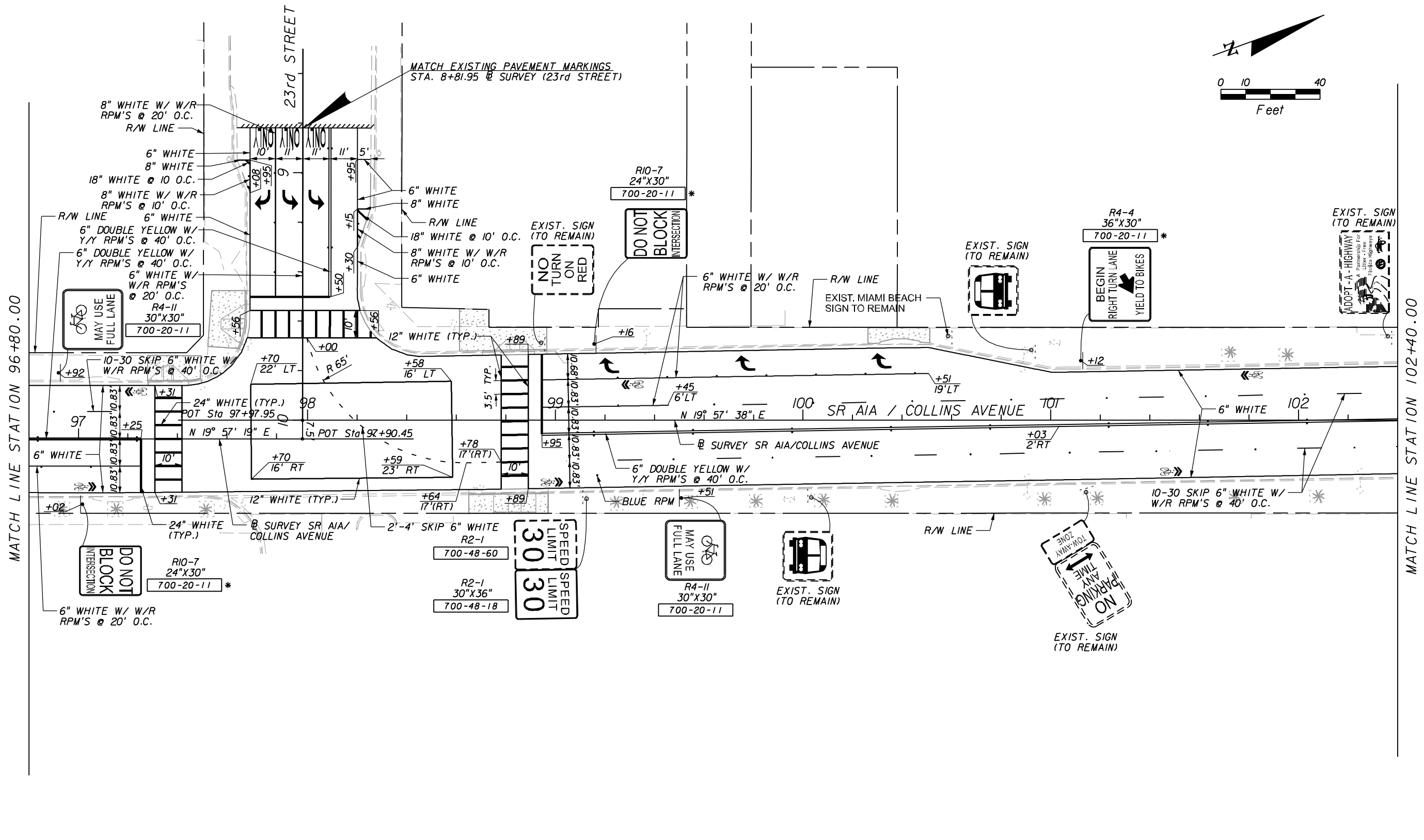
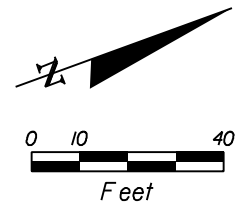
MATCH EXISTING PAVEMENT MARKINGS
STA. 9+00.00 @ SURVEY (22nd STREET)

MATCH EXISTING PAVEMENT MARKINGS
STA. 11+00.00 @ SURVEY (22nd STREET)

* PAY ITEMS TO BE PAID UNDER FPID # 425504-2-52-01

REVISIONS				CORRADINO	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO. S-9
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
				4055 N.W. 97th Avenue, Doral, Florida, 33178 Ph : (305) 594-0735 Fax : (305) 594-0755 Certificate Of Authorization No. 00007665 E.O.R. Favio A. Laverde, P.E. No. 63546	AIA	MIAMI-DADE	425504-1-52-01	

NOTICE: THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE SIGNED AND SEALED UNDER RULE 6005-23.003, F.A.C.



* PAY ITEMS TO BE PAID UNDER FPID # 425504-2-52-01

REVISIONS				CORRADINO	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SIGNING AND PAVEMENT MARKING PLANS	SHEET NO. S-10
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
				4055 N.W. 97th Avenue, Doral, Florida, 33178 Ph : (305) 594-0735 Fax : (305) 594-0755 Certificate Of Authorization No. 00007665 E.O.R. Favio A. Laverde, P.E. No. 63546	A/A	MIAMI-DADE	425504-1-52-01		

NOTICE: THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE SIGNED AND SEALED UNDER RULE 6105-23.003, F.A.C.

APPENDIX G:
Traffic Volume Development
Worksheets

Existing and Background Volume Development

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: 23rd Street and Dade Boulevard
COUNT DATE: August 3, 2012
TIME PERIOD: Friday Peak Period
PEAK HOUR FACTOR: 0.89

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements						150		63			405	263		60	361	
Peak Season Correction Factor	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070
EXISTING CONDITIONS						161		67			433	281		64	386	
"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Parc Place											16				25	
SLS Hotel											1				2	
TOTAL "VESTED" TRAFFIC						0		0			17	0		0	27	
Years To Buildout	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Yearly Growth Rate	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%
BACKGROUND TRAFFIC GROWTH						5		2			15	9		2	13	
NON-PROJECT TRAFFIC						166		69			465	290		66	426	

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: 23rd Street and Park Avenue
COUNT DATE: August 3, 2012
TIME PERIOD: Friday Peak Period
PEAK HOUR FACTOR: 0.94

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		28	249	48		26	150	17		42	1	24		18	6	22
Peak Season Correction Factor	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070
EXISTING CONDITIONS		30	266	51		28	161	18		45	1	26		19	6	24
"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Parc Place																
SLS Hotel																
TOTAL "VESTED" TRAFFIC		0	0	0		0	0	0		0	0	0		0	0	0
Years To Buildout	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Yearly Growth Rate	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%
BACKGROUND TRAFFIC GROWTH		1	9	2		1	5	1		2	0	1		1	0	1
NON-PROJECT TRAFFIC		31	275	53		29	166	19		47	1	27		20	6	25

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: 23rd Street and Liberty Avenue
COUNT DATE: August 3, 2012
TIME PERIOD: Friday Peak Period
PEAK HOUR FACTOR: 0.88

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		25	258	11		11	171	5		6	0	6		4	0	7
Peak Season Correction Factor	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070
EXISTING CONDITIONS		27	276	12		12	183	5		6	0	6		4	0	7
"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Parc Place																
SLS Hotel																
TOTAL "VESTED" TRAFFIC		0	0	0		0	0	0		0	0	0		0	0	0
Years To Buildout	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Yearly Growth Rate	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%
BACKGROUND TRAFFIC GROWTH		1	9	0		0	6	0		0	0	0		0	0	0
NON-PROJECT TRAFFIC		28	285	12		12	189	5		6	0	6		4	0	7

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: 23rd Street and Collins Avenue
COUNT DATE: August 3, 2012
TIME PERIOD: Friday Peak Period
PEAK HOUR FACTOR: 0.98

"EXISTING TRAFFIC"	EBL	EBT ⁽¹⁾	EBT ⁽²⁾	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR ⁽¹⁾	NBR ⁽²⁾	SBL ⁽¹⁾	SBL ⁽²⁾	SBT	SBR
Raw Turning Movements	193	4	17	77		5	7	18	19	741	4	21	2	7	833	152
Peak Season Correction Factor	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070

EXISTING CONDITIONS	207	4	18	82		5	7	19	20	793	4	22	2	7	891	163
----------------------------	-----	---	----	----	--	---	---	----	----	-----	---	----	---	---	-----	-----

"BACKGROUND TRAFFIC"	EBL	EBT ⁽¹⁾	EBT ⁽²⁾	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR ⁽¹⁾	NBR ⁽²⁾	SBL ⁽¹⁾	SBL ⁽²⁾	SBT	SBR
Parc Place										15					51	
SLS Hotel										16					35	
TOTAL "VESTED" TRAFFIC	0	0	0	0		0	0	0	0	31	0	0	0	0	86	0

Years To Buildout	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Yearly Growth Rate	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%
BACKGROUND TRAFFIC GROWTH	7	0	1	3		0	0	1	1	27	0	1	0	0	30	5

NON-PROJECT TRAFFIC	214	4	19	85		5	7	20	21	851	4	23	2	7	1,007	168
----------------------------	-----	---	----	----	--	---	---	----	----	-----	---	----	---	---	-------	-----

Note:

(1) Movement destined for Rooney Palace Driveway

(2) Movement destined for W Hotel Driveway

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: Collins Avenue and Rooney Palace Driveway
COUNT DATE: August 3, 2012
TIME PERIOD: Friday Peak Period
PEAK HOUR FACTOR: 0.98

"EXISTING TRAFFIC"					WBU	WBL	WBT	WBR								
Raw Turning Movements						15	9	14								
Peak Season Correction Factor	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070
EXISTING CONDITIONS						16	10	15								
"BACKGROUND TRAFFIC"					WBU	WBL	WBT	WBR								
Parc Place																
SLS Hotel																
TOTAL "VESTED" TRAFFIC						0	0	0								
Years To Buildout	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Yearly Growth Rate	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%
BACKGROUND TRAFFIC GROWTH						1	0	1								
NON-PROJECT TRAFFIC						17	10	16								

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: 22nd Street and Park Avenue
COUNT DATE: August 10, 2012
TIME PERIOD: Friday Peak Period
PEAK HOUR FACTOR: 0.82

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements						19	2	11		5	22	4		8	53	1
Peak Season Correction Factor	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070
EXISTING CONDITIONS						20	2	12		5	24	4		9	57	1
"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Parc Place																
SLS Hotel																
TOTAL "VESTED" TRAFFIC						0	0	0		0	0	0		0	0	0
Years To Buildout	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Yearly Growth Rate	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%
BACKGROUND TRAFFIC GROWTH						1	0	0		0	1	0		0	2	0
NON-PROJECT TRAFFIC						21	2	12		5	25	4		9	59	1

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: 22nd Street and Liberty Avenue
COUNT DATE: August 10, 2012
TIME PERIOD: Friday Peak Period
PEAK HOUR FACTOR: 0.82

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		3	12				28	10						4		4
Peak Season Correction Factor	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070
EXISTING CONDITIONS		3	13				30	11						4		4
"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Parc Place																
SLS Hotel																
TOTAL "VESTED" TRAFFIC		0	0				0	0						0		0
Years To Buildout	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Yearly Growth Rate	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%
BACKGROUND TRAFFIC GROWTH		0	0				1	0						0		0
NON-PROJECT TRAFFIC		3	13				31	11						4		4

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: 22nd Street and Collins Avenue
COUNT DATE: August 10, 2012
TIME PERIOD: Friday Peak Period
PEAK HOUR FACTOR: 0.92

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		6	6	6		62	8	66		13	777	22		37	845	10
Peak Season Correction Factor	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070
EXISTING CONDITIONS		6	6	6		66	9	71		14	831	24		40	904	11
"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Parc Place											15				51	
SLS Hotel											16				35	
TOTAL "VESTED" TRAFFIC		0	0	0		0	0	0		0	31	0		0	86	0
Years To Buildout	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Yearly Growth Rate	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%
BACKGROUND TRAFFIC GROWTH		0	0	0		2	0	2		0	28	1		1	30	0
NON-PROJECT TRAFFIC		6	6	6		68	9	73		14	890	25		41	1,020	11

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: Washington Avenue and Dade Boulevard
COUNT DATE: August 10, 2012
TIME PERIOD: Friday Peak Period
PEAK HOUR FACTOR: 0.96

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements			355	85		150	322			79		253				
Peak Season Correction Factor	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070
EXISTING CONDITIONS			380	91		161	345			85		271				
"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Parc Place				25		25				16		16				
SLS Hotel				3		2				1		1				
TOTAL "VESTED" TRAFFIC			0	28		27	0			17		17				
Years To Buildout	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Yearly Growth Rate	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%
BACKGROUND TRAFFIC GROWTH			13	3		5	12			3		9				
NON-PROJECT TRAFFIC			393	122		193	357			105		297				

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: Washington Avenue and Washington Court
COUNT DATE: August 10, 2012
TIME PERIOD: Friday Peak Period
PEAK HOUR FACTOR: 0.96

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements								4			328				235	
Peak Season Correction Factor	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070
EXISTING CONDITIONS								4			351				251	
"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Parc Place											32				50	
SLS Hotel											2				5	
TOTAL "VESTED" TRAFFIC								0			34				55	
Years To Buildout	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Yearly Growth Rate	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%
BACKGROUND TRAFFIC GROWTH								0			12				8	
NON-PROJECT TRAFFIC								4			397				314	

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: 21st Street and Washington Avenue
COUNT DATE: August 10, 2012
TIME PERIOD: Friday Peak Period
PEAK HOUR FACTOR: 0.96

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements						38		19			310	24		15	223	
Peak Season Correction Factor	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070
EXISTING CONDITIONS						41		20			332	26		16	239	
"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Parc Place								8			24			15	35	
SLS Hotel								1			1				5	
TOTAL "VESTED" TRAFFIC						0		9			25	0		15	40	
Years To Buildout	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Yearly Growth Rate	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%
BACKGROUND TRAFFIC GROWTH						1		1			11	1		1	8	
NON-PROJECT TRAFFIC						42		30			368	27		32	287	

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: 21st Street and Park Avenue
COUNT DATE: August 3, 2012
TIME PERIOD: Friday Peak Period
PEAK HOUR FACTOR: 0.86

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		16	38	6		11	21	28		1	25	11		24	59	17
Peak Season Correction Factor	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070
EXISTING CONDITIONS		17	41	6		12	22	30		1	27	12		26	63	18
"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Parc Place			15				8									
SLS Hotel										1						
TOTAL "VESTED" TRAFFIC		0	15	0		0	8	0		1	0	0		0	0	0
Years To Buildout	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Yearly Growth Rate	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%
BACKGROUND TRAFFIC GROWTH		1	1	0		0	1	1		0	1	0		1	2	1
NON-PROJECT TRAFFIC		18	57	6		12	31	31		2	28	12		27	65	19

Future Total Volume Development

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: 23rd Street and Dade Boulevard
COUNT DATE: August 3, 2012
TIME PERIOD: Friday Peak Period
PEAK HOUR FACTOR: 0.89

"EXISTING TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements							150		63			405	263		60	361	
Peak Season Correction Factor		1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070
EXISTING CONDITIONS							161		67			433	281		64	386	
"BACKGROUND TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Parc Place												16				25	
SLS Hotel												1				2	
Liberty Avenue Closure																	
TOTAL "VESTED" TRAFFIC						0		0				17	0		0	27	
Years To Buildout		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Yearly Growth Rate		0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%
BACKGROUND TRAFFIC GROWTH						5		2				15	9		2	13	
NON-PROJECT TRAFFIC						166		69				465	290		66	426	
"PROJECT DISTRIBUTION"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
LAND USE	TYPE																
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering												15.0%		14.0%		
	Exiting						6.0%		15.0%								
"PROJECT TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
LAND USE	TYPE																
Project Trips	Pass - By																
	Net New					2		6					14		13		
TOTAL PROJECT TRAFFIC						2		6				0	14		13	0	
TOTAL TRAFFIC						168		75				465	304		79	426	

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: 23rd Street and Park Avenue
COUNT DATE: August 3, 2012
TIME PERIOD: Friday Peak Period
PEAK HOUR FACTOR: 0.94

"EXISTING TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR		
Raw Turning Movements			28	249	48		26	150	17		42	1	24		18	6	22		
Peak Season Correction Factor		1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070		
EXISTING CONDITIONS			30	266	51		28	161	18		45	1	26		19	6	24		
"BACKGROUND TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR		
Parc Place																			
SLS Hotel																			
Liberty Avenue Closure				-12	12		12	-6			6		6						
TOTAL "VESTED" TRAFFIC			0	-12	12		12	-6	0		6	0	6		0	0	0		
Years To Buildout		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4		
Yearly Growth Rate		0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%		
BACKGROUND TRAFFIC GROWTH			1	9	2		1	5	1		2	0	1		1	0	1		
NON-PROJECT TRAFFIC			31	263	65		41	160	19		53	1	33		20	6	25		
"PROJECT DISTRIBUTION"		LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																		
	Exiting																		
Net New Distribution	Entering				29.0%			35.0%											
	Exiting											21.0%		34.0%					
"PROJECT TRAFFIC"		LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																		
	Net New				27			32					8		13				
TOTAL PROJECT TRAFFIC					0	0	27		32	0	0		8	0	13		0	0	0
TOTAL TRAFFIC			31	263	92		73	160	19		61	1	46		20	6	25		

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: 23rd Street and Liberty Avenue
COUNT DATE: August 3, 2012
TIME PERIOD: Friday Peak Period
PEAK HOUR FACTOR: 0.88

"EXISTING TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR		
Raw Turning Movements			25	258	11		11	171	5		6	0	6		4	0	7		
Peak Season Correction Factor		1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070		
EXISTING CONDITIONS			27	276	12		12	183	5		6	0	6		4	0	7		
"BACKGROUND TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR		
Parc Place																			
SLS Hotel																			
Liberty Avenue Closure				6	-12		-12	12			-6		-6						
TOTAL "VESTED" TRAFFIC			0	6	-12		-12	12	0		-6	0	-6		0	0	0		
Years To Buildout		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4		
Yearly Growth Rate		0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%		
BACKGROUND TRAFFIC GROWTH			1	9	0		0	6	0		0	0	0		0	0	0		
NON-PROJECT TRAFFIC			28	291	0		0	201	5		0	0	0		4	0	7		
"PROJECT DISTRIBUTION"		LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																		
	Exiting																		
Net New Distribution	Entering								35.0%										
	Exiting			34.0%															
"PROJECT TRAFFIC"		LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																		
	Net New			13					32										
TOTAL PROJECT TRAFFIC				0	13	0		0	32	0		0	0	0		0	0	0	
TOTAL TRAFFIC			28	304	0		0	233	5		0	0	0		4	0	7		

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: 23rd Street and Collins Avenue
COUNT DATE: August 3, 2012
TIME PERIOD: Friday Peak Period
PEAK HOUR FACTOR: 0.98

"EXISTING TRAFFIC"	EBL	EBT ⁽¹⁾	EBT ⁽²⁾	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR ⁽¹⁾	NBR ⁽²⁾	SBL ⁽¹⁾	SBL ⁽²⁾	SBT	SBR		
Raw Turning Movements	193	4	17	77		5	7	18	19	741	4	21	2	7	833	152		
Peak Season Correction Factor	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070		
EXISTING CONDITIONS	207	4	18	82		5	7	19	20	793	4	22	2	7	891	163		
"BACKGROUND TRAFFIC"	EBL	EBT ⁽¹⁾	EBT ⁽²⁾	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR ⁽¹⁾	NBR ⁽²⁾	SBL ⁽¹⁾	SBL ⁽²⁾	SBT	SBR		
Parc Place										15					51			
SLS Hotel										16					35			
Liberty Avenue Closure																		
TOTAL "VESTED" TRAFFIC	0	0	0	0		0	0	0	0	31	0	0	0	0	86	0		
Years To Buildout	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4		
Yearly Growth Rate	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%		
BACKGROUND TRAFFIC GROWTH	7	0	1	3		0	0	1	1	27	0	1	0	0	30	5		
NON-PROJECT TRAFFIC	214	4	19	85		5	7	20	21	851	4	23	2	7	1,007	168		
"PROJECT DISTRIBUTION"	LAND USE	TYPE	EBL	EBT ⁽¹⁾	EBT ⁽²⁾	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR ⁽¹⁾	NBR ⁽²⁾	SBL ⁽¹⁾	SBL ⁽²⁾	SBT	SBR
Pass-By Distribution	Entering																	
	Exiting																	
Net New Distribution	Entering										5.0%						3.0%	30.0%
	Exiting	28.0%		1.0%	5.0%							2.0%						
"PROJECT TRAFFIC"	LAND USE	TYPE	EBL	EBT ⁽¹⁾	EBT ⁽²⁾	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR ⁽¹⁾	NBR ⁽²⁾	SBL ⁽¹⁾	SBL ⁽²⁾	SBT	SBR
Project Trips	Pass - By																	
	Net New	11		0	2						5	1					3	28
TOTAL PROJECT TRAFFIC		11	0	0	2			0	0	0	5	1	0	0	0	0	3	28
TOTAL TRAFFIC		225	4	19	87		5	7	20	26	852	4	23	2	7	1,010	196	

Note:
 (1) Movement destined for Rooney Palace Driveway
 (2) Movement destined for W Hotel Driveway

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: Collins Avenue and Rooney Palace Driveway
COUNT DATE: August 3, 2012
TIME PERIOD: Friday Peak Period
PEAK HOUR FACTOR: 0.98

"EXISTING TRAFFIC"					WBU	WBL	WBT	WBR									
Raw Turning Movements							15	9	14								
Peak Season Correction Factor					1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070
EXISTING CONDITIONS							16	10	15								

"BACKGROUND TRAFFIC"					WBU	WBL	WBT	WBR								
Parc Place																
SLS Hotel																
Liberty Avenue Closure																
TOTAL "VESTED" TRAFFIC							0	0	0							

Years To Buildout	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Yearly Growth Rate	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%
BACKGROUND TRAFFIC GROWTH						1	0	1								
NON-PROJECT TRAFFIC							17	10	16							

"PROJECT DISTRIBUTION"			WBU	WBL	WBT	WBR										
LAND USE	TYPE															
Pass-By Distribution	Entering															
	Exiting															
Net New Distribution	Entering															
	Exiting															

"PROJECT TRAFFIC"			WBU	WBL	WBT	WBR										
LAND USE	TYPE															
Project Trips	Pass - By															
	Net New															
TOTAL PROJECT TRAFFIC					0	0	0									
TOTAL TRAFFIC							17	10	16							

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: Parking Garage Driveway and Park Avenue
COUNT DATE: August 3, 2012
TIME PERIOD: Friday Peak Period
PEAK HOUR FACTOR: 0.92

"EXISTING TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT ⁽¹⁾	NBR	SBU	SBL	SBT ⁽¹⁾	SBR
Raw Turning Movements												81				105	
Peak Season Correction Factor		1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070
EXISTING CONDITIONS												87				112	
"BACKGROUND TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Parc Place																	
SLS Hotel																	
Liberty Avenue Closure																	
TOTAL "VESTED" TRAFFIC												0				0	
Years To Buildout		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Yearly Growth Rate		0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%
BACKGROUND TRAFFIC GROWTH												3					4
NON-PROJECT TRAFFIC												90				116	
"PROJECT DISTRIBUTION"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
LAND USE	TYPE																
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering												36.0%		64.0%		
	Exiting						45.0%		55.0%								
"PROJECT TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New						17		21				33		59		
TOTAL PROJECT TRAFFIC							17		21			0	33		59	0	
TOTAL TRAFFIC							17		21			90	33		59	116	

Note:
 (1) Based on movements at 23rd Street and Park Avenue

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: 22nd Street and Park Avenue
COUNT DATE: August 10, 2012
TIME PERIOD: Friday Peak Period
PEAK HOUR FACTOR: 0.82

"EXISTING TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements							19	2	11		5	22	4		8	53	1
Peak Season Correction Factor		1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070
EXISTING CONDITIONS							20	2	12		5	24	4		9	57	1
"BACKGROUND TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Parc Place																	
SLS Hotel																	
Liberty Avenue Closure							-4		11			3	-3		4	4	
TOTAL "VESTED" TRAFFIC							-4	0	11		0	3	-3		4	4	0
Years To Buildout		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Yearly Growth Rate		0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%
BACKGROUND TRAFFIC GROWTH							1	0	0		0	1	0		0	2	0
NON-PROJECT TRAFFIC							17	2	23		5	28	1		13	63	1
"PROJECT DISTRIBUTION"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
LAND USE	TYPE																
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering								23.0%			13.0%					
	Exiting														27.0%	18.0%	
"PROJECT TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
LAND USE	TYPE																
Project Trips	Pass - By																
	Net New								21			12			10	7	
TOTAL PROJECT TRAFFIC							0	0	21		0	12	0		10	7	0
TOTAL TRAFFIC							17	2	44		5	40	1		23	70	1

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: 22nd Street and Liberty Avenue
COUNT DATE: August 10, 2012
TIME PERIOD: Friday Peak Period
PEAK HOUR FACTOR: 0.82

"EXISTING TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements			3	12				28	10						4		4
Peak Season Correction Factor		1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070
EXISTING CONDITIONS			3	13				30	11						4		4
"BACKGROUND TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Parc Place																	
SLS Hotel																	
Liberty Avenue Closure			-3	4				11	-11						-4		-4
TOTAL "VESTED" TRAFFIC			-3	4				11	-11						-4		-4
Years To Buildout		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Yearly Growth Rate		0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%
BACKGROUND TRAFFIC GROWTH			0	0				1	0						0		0
NON-PROJECT TRAFFIC			0	17				42	0						0		0
"PROJECT DISTRIBUTION"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
LAND USE	TYPE																
Pass-By	Entering																
Distribution	Exiting																
Net New	Entering							23.0%									
Distribution	Exiting			27.0%													
"PROJECT TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
LAND USE	TYPE																
Project	Pass - By																
Trips	Net New			10				21									
TOTAL PROJECT TRAFFIC			0	10				21	0						0		0
TOTAL TRAFFIC			0	27				63	0						0		0

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: 22nd Street and Collins Avenue
COUNT DATE: August 10, 2012
TIME PERIOD: Friday Peak Period
PEAK HOUR FACTOR: 0.92

"EXISTING TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR		
Raw Turning Movements			6	6	6		62	8	66		13	777	22		37	845	10		
Peak Season Correction Factor		1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070		
EXISTING CONDITIONS			6	6	6		66	9	71		14	831	24		40	904	11		
"BACKGROUND TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR		
Parc Place												15				51			
SLS Hotel												16				35			
Liberty Avenue Closure																			
TOTAL "VESTED" TRAFFIC			0	0	0		0	0	0		0	31	0		0	86	0		
Years To Buildout		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4		
Yearly Growth Rate		0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%		
BACKGROUND TRAFFIC GROWTH			0	0	0		2	0	2		0	28	1		1	30	0		
NON-PROJECT TRAFFIC			6	6	6		68	9	73		14	890	25		41	1,020	11		
"PROJECT DISTRIBUTION"		LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																		
	Exiting																		
Net New Distribution	Entering											20.0%	5.0%						3.0%
	Exiting		2.0%		25.0%													5.0%	
"PROJECT TRAFFIC"		LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																		
	Net New		1		10								18	5				2	3
TOTAL PROJECT TRAFFIC			1	0	10		0	0	0			18	5	0		0	2	3	
TOTAL TRAFFIC			7	6	16		68	9	73		32	895	25		41	1,022	14		

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: Washington Avenue and Dade Boulevard
COUNT DATE: August 10, 2012
TIME PERIOD: Friday Peak Period
PEAK HOUR FACTOR: 0.96

"EXISTING TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements				355	85		150	322			79		253				
Peak Season Correction Factor		1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070
EXISTING CONDITIONS				380	91		161	345			85		271				
"BACKGROUND TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Parc Place					25		25				16		16				
SLS Hotel					3		2				1		1				
Liberty Avenue Closure																	
TOTAL "VESTED" TRAFFIC				0	28		27	0			17		17				
Years To Buildout		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Yearly Growth Rate		0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%
BACKGROUND TRAFFIC GROWTH				13	3		5	12			3		9				
NON-PROJECT TRAFFIC				393	122		193	357			105		297				
"PROJECT DISTRIBUTION"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
LAND USE	TYPE																
Pass-By	Entering																
Distribution	Exiting																
Net New	Entering			15.0%													
Distribution	Exiting							6.0%			7.0%						
"PROJECT TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
LAND USE	TYPE																
Project	Pass - By																
Trips	Net New			14				2			3						
TOTAL PROJECT TRAFFIC				14	0		0	2			3		0				
TOTAL TRAFFIC				407	122		193	359			108		297				

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: Washington Avenue and Washington Court
COUNT DATE: August 10, 2012
TIME PERIOD: Friday Peak Period
PEAK HOUR FACTOR: 0.96

"EXISTING TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements									4			328				235	
Peak Season Correction Factor		1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070
EXISTING CONDITIONS									4			351				251	
"BACKGROUND TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Parc Place												32					50
SLS Hotel												2					5
Liberty Avenue Closure																	
TOTAL "VESTED" TRAFFIC									0			34					55
Years To Buildout		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Yearly Growth Rate		0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%
BACKGROUND TRAFFIC GROWTH									0			12					8
NON-PROJECT TRAFFIC									4			397					314
"PROJECT DISTRIBUTION"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
LAND USE	TYPE																
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering																
	Exiting											7.0%					
"PROJECT TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New											3					
TOTAL PROJECT TRAFFIC									0			3					0
TOTAL TRAFFIC									4			400					314

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: 21st Street and Washington Avenue
COUNT DATE: August 10, 2012
TIME PERIOD: Friday Peak Period
PEAK HOUR FACTOR: 0.96

"EXISTING TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements							38		19			310	24		15	223	
Peak Season Correction Factor		1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070
EXISTING CONDITIONS							41		20			332	26		16	239	
"BACKGROUND TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Parc Place									8			24			15	35	
SLS Hotel									1			1				5	
Liberty Avenue Closure																	
TOTAL "VESTED" TRAFFIC							0		9			25	0		15	40	
Years To Buildout		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Yearly Growth Rate		0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%
BACKGROUND TRAFFIC GROWTH							1		1			11	1		1	8	
NON-PROJECT TRAFFIC							42		30			368	27		32	287	
"PROJECT DISTRIBUTION"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
LAND USE	TYPE																
Pass-By	Entering																
Distribution	Exiting																
Net New	Entering																
Distribution	Exiting								7.0%								
"PROJECT TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
LAND USE	TYPE																
Project	Pass - By																
Trips	Net New								3								
TOTAL PROJECT TRAFFIC							0		3			0	0		0	0	
TOTAL TRAFFIC							42		33			368	27		32	287	

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: 21st Street and Park Avenue
COUNT DATE: August 3, 2012
TIME PERIOD: Friday Peak Period
PEAK HOUR FACTOR: 0.86

"EXISTING TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR		
Raw Turning Movements			16	38	6		11	21	28		1	25	11		24	59	17		
Peak Season Correction Factor		1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070		
EXISTING CONDITIONS			17	41	6		12	22	30		1	27	12		26	63	18		
"BACKGROUND TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR		
Parc Place				15				8											
SLS Hotel											1								
Liberty Avenue Closure																			
TOTAL "VESTED" TRAFFIC			0	15	0		0	8	0		1	0	0		0	0	0		
Years To Buildout		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4		
Yearly Growth Rate		0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%		
BACKGROUND TRAFFIC GROWTH			1	1	0		0	1	1		0	1	0		1	2	1		
NON-PROJECT TRAFFIC			18	57	6		12	31	31		2	28	12		27	65	19		
"PROJECT DISTRIBUTION"		LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																		
	Exiting																		
Net New Distribution	Entering												13.0%						
	Exiting																	11.0%	7.0%
"PROJECT TRAFFIC"		LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																		
	Net New													12				4	3
TOTAL PROJECT TRAFFIC				0	0	0		0	0	0		0	12	0		0		4	3
TOTAL TRAFFIC			18	57	6		12	31	31		2	40	12		27	69	22		

APPENDIX H:
Intersection Capacity Analyses

Existing Conditions

Timings
1: Dade Blvd & 23rd ST

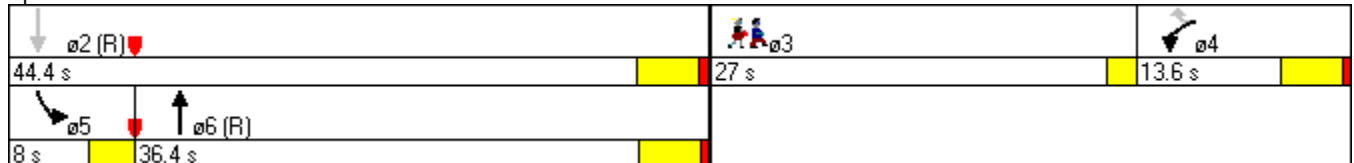
Existing Conditions
Friday Peak Hour

Lane Group	WBL	WBR	NBT	SBL	SBT	ø3
Lane Configurations						
Volume (vph)	161	67	433	64	386	
Turn Type	NA	Perm	NA	Prot	NA	
Protected Phases	4		6	5		3
Permitted Phases		4			2	
Detector Phase	4	4	6	5	2	
Switch Phase						
Minimum Initial (s)	7.0	7.0	16.0	5.0	16.0	1.0
Minimum Split (s)	13.6	13.6	20.6	8.0	29.7	27.0
Total Split (s)	13.6	13.6	36.4	8.0	44.4	27.0
Total Split (%)	16.0%	16.0%	42.8%	9.4%	52.2%	32%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0	2.0
All-Red Time (s)	0.6	0.6	0.6	0.0	0.7	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.6	4.6	4.6	3.0	4.7	
Lead/Lag	Lag	Lag	Lag	Lead		Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		Yes
Recall Mode	None	None	C-Min	None	C-Min	None

Intersection Summary

Cycle Length: 85
 Actuated Cycle Length: 85
 Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green
 Natural Cycle: 75
 Control Type: Actuated-Coordinated

Splits and Phases: 1: Dade Blvd & 23rd ST














HCM Signalized Intersection Capacity Analysis

Existing Conditions

1: Dade Blvd & 23rd ST

Friday Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	161	67	433	281	64	386
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		3.0	4.7
Lane Util. Factor	1.00	1.00	0.95		1.00	0.95
Frbp, ped/bikes	1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	0.94		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	3330		1770	3539
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	1583	3330		1770	3539
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	179	74	481	312	71	429
RTOR Reduction (vph)	0	61	104	0	0	0
Lane Group Flow (vph)	179	13	689	0	71	429
Confl. Peds. (#/hr)	13				7	
Turn Type	NA	Perm	NA		Prot	NA
Protected Phases	4		6		5	
Permitted Phases		4				2
Actuated Green, G (s)	14.4	14.4	41.2		5.2	49.3
Effective Green, g (s)	14.4	14.4	41.2		5.2	49.3
Actuated g/C Ratio	0.17	0.17	0.48		0.06	0.58
Clearance Time (s)	4.6	4.6	4.6		3.0	4.7
Vehicle Extension (s)	2.5	2.5	1.0		2.0	1.0
Lane Grp Cap (vph)	299	268	1614		108	2052
v/s Ratio Prot	c0.10		c0.21		c0.04	
v/s Ratio Perm		0.01				0.12
v/c Ratio	0.60	0.05	0.43		0.66	0.21
Uniform Delay, d1	32.6	29.6	14.2		39.0	8.5
Progression Factor	1.00	1.00	1.21		1.00	1.00
Incremental Delay, d2	2.7	0.1	0.8		10.5	0.2
Delay (s)	35.3	29.6	18.0		49.5	8.8
Level of Service	D	C	B		D	A
Approach Delay (s)	33.6		18.0			14.5
Approach LOS	C		B			B
Intersection Summary						
HCM 2000 Control Delay			19.4		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.42			
Actuated Cycle Length (s)			85.0		Sum of lost time (s)	14.2
Intersection Capacity Utilization			45.1%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

HCM 2010 TWSC
2: Park Ave & 23rd ST

Existing Conditions
Friday Peak Hour

Intersection

Intersection Delay (sec/veh): 2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	30	266	51	28	161	18	45	1	26	19	6	24
Conflicting Peds.(#/hr)	14	0	13	13	0	14	4	0	4	4	0	4
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles(%)	2	2	2	2	2	2	2	2	2	2	2	2
Movement Flow Rate	32	283	54	30	171	19	48	1	28	20	6	26
Number of Lanes	0	2	0	0	2	0	1	1	0	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	194	0	0	341	0	0	531	632	187	455	650	114
Stage 1	-	-	-	-	-	-	378	378	-	245	245	-
Stage 2	-	-	-	-	-	-	153	254	-	210	405	-
Follow-up Headway	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Capacity-1 Maneuver	1493	-	-	1215	-	-	*516	449	823	589	438	*1417
Stage 1	-	-	-	-	-	-	*616	614	-	864	779	-
Stage 2	-	-	-	-	-	-	*1417	771	-	773	597	-
Time blocked-Platoon(%)	6	-	-	0	-	-	6	6	0	6	6	6
Mov Capacity-1 Maneuver	1476	-	-	1201	-	-	*473	422	811	536	412	*1396
Mov Capacity-2 Maneuver	-	-	-	-	-	-	*473	422	-	536	412	-
Stage 1	-	-	-	-	-	-	*597	595	-	838	754	-
Stage 2	-	-	-	-	-	-	*1325	747	-	717	579	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0.7	1.2	12.1	10.3
HCM LOS	A	A	B	B

Lane	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	*473	*784							*729
HCM Control Delay (s)	13.5	9.8	7.493	0.1	-	8.074	0.1	-	10.3
HCM Lane VC Ratio	0.101	0.037	0.022	-	-	0.025	-	-	0.072
HCM Lane LOS	B	A	A	A	-	A	A	-	B
HCM 95th Percentile Queue (veh)	0.336	0.114	0.066	-	-	0.076	-	-	0.23

HCM 2010 TWSC
3: Liberty Ave & 23rd St

Existing Conditions
Friday Peak Hour

Intersection

Intersection Delay (sec/veh): 1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	27	276	12	12	183	5	6	0	6	4	0	7
Conflicting Peds.(#/hr)	26	0	1	1	0	26	6	0	14	14	0	6
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles(%)	2	2	2	2	2	2	2	2	2	2	2	2
Movement Flow Rate	31	314	14	14	208	6	7	0	7	5	0	8
Number of Lanes	0	2	0	0	2	0	0	1	0	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	228	0	0	342	0	0	543	653	204	486	657	147
Stage 1	-	-	-	-	-	-	397	397	-	253	253	-
Stage 2	-	-	-	-	-	-	146	256	-	233	404	-
Follow-up Headway	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Capacity-1 Maneuver	1449	-	-	1214	-	-	*506	436	803	558	434	*1417
Stage 1	-	-	-	-	-	-	*600	602	-	854	772	-
Stage 2	-	-	-	-	-	-	*1417	770	-	749	598	-
Time blocked-Platoon(%)	6	-	-	0	-	-	6	6	0	6	6	6
Mov Capacity-1 Maneuver	1417	-	-	1188	-	-	*471	409	776	518	407	*1371
Mov Capacity-2 Maneuver	-	-	-	-	-	-	*471	409	-	518	407	-
Stage 1	-	-	-	-	-	-	*577	579	-	821	753	-
Stage 2	-	-	-	-	-	-	*1361	751	-	707	575	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0.7	0.5	11.3	9.3
HCM LOS	A	A	B	A

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	*586							*858
HCM Control Delay (s)	11.3	7.597	0.1	-	8.065	0	-	9.3
HCM Lane VC Ratio	0.023	0.022	-	-	0.011	-	-	0.015
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th Percentile Queue (veh)	0.071	0.066	-	-	0.035	-	-	0.044

Timings

Existing Conditions

4: Collins Ave & W Hotel Driveway & 23rd St/23rd St (Rooney Palace)

Friday Peak Hour

Lane Group	EBL	EBT	EBR2	WBT	NBL	NBT	SBL2	SBL	SBT	SBR	NWL
Lane Configurations											
Volume (vph)	207	4	82	10	20	793	2	7	891	163	7
Turn Type	Split	NA	Perm	NA	Perm	NA	Perm	Perm	NA	pm+ov	NA
Protected Phases	3	3		4		6			2	3	8
Permitted Phases			3		6		2	2		2	
Detector Phase	3	3	3	4	6	6	2	2	2	3	8
Switch Phase											
Minimum Initial (s)	7.0	7.0	7.0	7.0	5.0	5.0	5.0	5.0	5.0	7.0	7.0
Minimum Split (s)	22.6	22.6	22.6	26.6	26.0	26.0	26.0	26.0	26.0	22.6	11.6
Total Split (s)	23.0	23.0	23.0	27.0	58.0	58.0	58.0	58.0	58.0	23.0	12.0
Total Split (%)	19.2%	19.2%	19.2%	22.5%	48.3%	48.3%	48.3%	48.3%	48.3%	19.2%	10.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.6	0.6	0.6	0.6	1.0	1.0	1.0	1.0	1.0	0.6	0.6
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0			0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	4.6		5.0			5.0	4.6	4.6
Lead/Lag	Lead	Lead	Lead	Lag						Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes						Yes	
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min	C-Min	C-Min	None	None

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 83 (69%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
 Natural Cycle: 90
 Control Type: Actuated-Coordinated

Splits and Phases: 4: Collins Ave & W Hotel Driveway & 23rd St/23rd St (Rooney Palace)

2 (R)	3	4	8
58 s	23 s	27 s	12 s
6 (R)			
58 s			










HCM Signalized Intersection Capacity Analysis
 4: Collins Ave & W Hotel Driveway & 23rd St/23rd St (Rooney Palace)

Existing Conditions
 Friday Peak Hour

Movement	EBL	EBT	EBR	EBR2	WBL	WBT	WBR	NBL	NBT	NBR	NBR2	SBL2
Lane Configurations												
Volume (vph)	207	4	18	82	16	10	15	20	793	4	22	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6		4.6			5.0			
Lane Util. Factor	0.95	0.91		0.95		1.00			0.95			
Frbp, ped/bikes	1.00	0.98		0.92		0.94			0.98			
Flpb, ped/bikes	1.00	1.00		1.00		1.00			1.00			
Frt	1.00	0.97		0.85		0.95			1.00			
Flt Protected	0.95	0.96		1.00		0.98			1.00			
Satd. Flow (prot)	1681	1553		1386		1626			3441			
Flt Permitted	0.95	0.96		1.00		0.98			0.92			
Satd. Flow (perm)	1681	1553		1386		1626			3159			
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	211	4	18	84	16	10	15	20	809	4	22	2
RTOR Reduction (vph)	0	3	0	64	0	0	0	0	2	0	0	0
Lane Group Flow (vph)	122	116	0	12	0	41	0	0	853	0	0	0
Confl. Peds. (#/hr)	101			34	34		101	71		269	269	269
Turn Type	Split	NA		Perm	Split	NA		Perm	NA			Perm
Protected Phases	3	3			4	4			6			
Permitted Phases				3				6				2
Actuated Green, G (s)	18.7	18.7		18.7		22.0			54.9			
Effective Green, g (s)	18.7	18.7		18.7		22.0			54.9			
Actuated g/C Ratio	0.16	0.16		0.16		0.18			0.46			
Clearance Time (s)	4.6	4.6		4.6		4.6			5.0			
Vehicle Extension (s)	2.5	2.5		2.5		2.5			1.0			
Lane Grp Cap (vph)	261	242		215		298			1445			
v/s Ratio Prot	0.07	c0.07				c0.03						
v/s Ratio Perm				0.01					0.27			
v/c Ratio	0.47	0.48		0.06		0.14			0.59			
Uniform Delay, d1	46.1	46.2		43.1		41.1			24.2			
Progression Factor	1.00	1.00		1.00		1.00			0.82			
Incremental Delay, d2	1.0	1.1		0.1		0.2			1.7			
Delay (s)	47.1	47.3		43.2		41.2			21.5			
Level of Service	D	D		D		D			C			
Approach Delay (s)		46.2				41.2			21.5			
Approach LOS		D				D			C			
Intersection Summary												
HCM 2000 Control Delay			26.7		HCM 2000 Level of Service				C			
HCM 2000 Volume to Capacity ratio			0.47									
Actuated Cycle Length (s)			120.0		Sum of lost time (s)				18.8			
Intersection Capacity Utilization			73.2%		ICU Level of Service				D			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis
 4: Collins Ave & W Hotel Driveway & 23rd St/23rd St (Rooney Palace)

Existing Conditions
 Friday Peak Hour

						
Movement	SBL	SBT	SBR	NWL2	NWL	NWR
Lane Configurations						
Volume (vph)	7	891	163	5	7	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	4.6		4.6	
Lane Util. Factor		0.95	1.00		1.00	
Frbp, ped/bikes		1.00	0.89		0.77	
Flpb, ped/bikes		1.00	1.00		1.00	
Frt		1.00	0.85		0.92	
Flt Protected		1.00	1.00		0.98	
Satd. Flow (prot)		3533	1405		1291	
Flt Permitted		0.94	1.00		0.98	
Satd. Flow (perm)		3340	1405		1291	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	7	909	166	5	7	19
RTOR Reduction (vph)	0	0	64	0	0	0
Lane Group Flow (vph)	0	918	102	0	31	0
Confl. Peds. (#/hr)	269		71		34	101
Turn Type	Perm	NA	pm+ov	Split	NA	
Protected Phases		2	3	8	8	
Permitted Phases	2		2			
Actuated Green, G (s)		54.9	73.6		5.6	
Effective Green, g (s)		54.9	73.6		5.6	
Actuated g/C Ratio		0.46	0.61		0.05	
Clearance Time (s)		5.0	4.6		4.6	
Vehicle Extension (s)		1.0	2.5		2.5	
Lane Grp Cap (vph)		1528	861		60	
v/s Ratio Prot			0.02		c0.02	
v/s Ratio Perm		c0.27	0.05			
v/c Ratio		0.60	0.12		0.52	
Uniform Delay, d1		24.4	9.7		55.9	
Progression Factor		1.00	1.00		1.00	
Incremental Delay, d2		1.8	0.0		5.5	
Delay (s)		26.1	9.7		61.4	
Level of Service		C	A		E	
Approach Delay (s)		23.6			61.4	
Approach LOS		C			E	

Intersection Summary

Intersection

Intersection Delay (sec/veh): 3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	0	0	20	2	12	5	24	4	9	57	1
Conflicting Peds.(#/hr)	0	0	0	4	0	0	3	0	9	9	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles(%)	2	2	2	2	2	2	2	2	2	2	2	2
Movement Flow Rate	0	0	0	24	2	15	6	29	5	11	70	1
Number of Lanes	0	0	0	0	1	0	0	1	0	0	1	0

Major/Minor	Minor 1		Major 1		Major 2	
Conflicting Flow Rate - All	141	141	45	71	0	38
Stage 1	48	48	-	-	-	-
Stage 2	93	93	-	-	-	-
Follow-up Headway	3.518	4.018	3.318	2.218	-	2.218
Pot Capacity-1 Maneuver	829	751	1025	1529	-	1572
Stage 1	965	855	-	-	-	-
Stage 2	914	818	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	-	0
Mov Capacity-1 Maneuver	813	740	1014	1518	-	1560
Mov Capacity-2 Maneuver	813	740	-	-	-	-
Stage 1	958	849	-	-	-	-
Stage 2	901	812	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay (s)	9.4	1.1	1
HCM LOS	A	A	A

Lane	NBL	NBT	NBR	WBLn1	SBL	SBT	SBR
Capacity (vph)				869			
HCM Control Delay (s)	7.381	0	-	9.4	7.324	0	-
HCM Lane VC Ratio	0.004	-	-	0.048	0.007	-	-
HCM Lane LOS	A	A	-	A	A	A	-
HCM 95th Percentile Queue (veh)	0.012	-	-	0.15	0.021	-	-

Intersection

Intersection Delay (sec/veh): 1.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Volume (vph)	3	13	30	11	4	4
Conflicting Peds.(#/hr)	0	0	0	0	6	11
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None
Storage Length	0			0	0	0
Median Width		0	0		12	
Grade (%)		0%	0%		0%	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles(%)	2	2	2	2	2	2
Movement Flow Rate	4	16	37	13	5	5
Number of Lanes	0	1	1	0	1	0

Major/Minor	Major 1		Major 2			
Conflicting Flow Rate - All	61	0	0	0	79	55
Stage 1	-	-	-	-	55	-
Stage 2	-	-	-	-	24	-
Follow-up Headway	2.218	-	-	-	3.518	3.318
Pot Capacity-1 Maneuver	1544	-	-	-	930	1018
Stage 1	-	-	-	-	971	-
Stage 2	-	-	-	-	999	-
Time blocked-Platoon(%)	1	-	-	-	1	1
Mov Capacity-1 Maneuver	1544	-	-	-	910	1009
Mov Capacity-2 Maneuver	-	-	-	-	910	-
Stage 1	-	-	-	-	962	-
Stage 2	-	-	-	-	987	-

Approach	EB	WB	SB
HCM Control Delay (s)	1.4	0	8.8
HCM LOS	A	A	A

Lane	EBL	EBT	WBT	WBR	SBLn1
Capacity (vph)					957
HCM Control Delay (s)	7.337	-	-	-	8.8
HCM Lane VC Ratio	0.002	-	-	-	0.01
HCM Lane LOS	A	-	-	-	A
HCM 95th Percentile Queue (veh)	0.007	-	-	-	0.031

Timings
7: Collins Ave & 22nd St

Existing Conditions
Friday Peak Hour

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Volume (vph)	6	6	66	9	14	831	40	904
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		8		4		6		2
Permitted Phases	8		4		6		2	
Detector Phase	8	8	4	4	6	6	2	2
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	7.0	12.0	12.0	12.0	12.0
Minimum Split (s)	23.0	23.0	23.0	23.0	21.5	21.5	21.5	21.5
Total Split (s)	23.0	23.0	23.0	23.0	97.0	97.0	97.0	97.0
Total Split (%)	19.2%	19.2%	19.2%	19.2%	80.8%	80.8%	80.8%	80.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.9	0.9	0.9	0.9	1.5	1.5	1.5	1.5
Lost Time Adjust (s)		0.0		0.0		0.0		0.0
Total Lost Time (s)		4.9		4.9		5.5		5.5
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min	C-Min

Intersection Summary

















Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 114 (95%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
 Natural Cycle: 55
 Control Type: Actuated-Coordinated

Splits and Phases: 7: Collins Ave & 22nd St

ø2 (R) 97 s	ø4 23 s
ø6 (R) 97 s	ø8 23 s

HCM 2010 Signalized Intersection Summary
7: Collins Ave & 22nd St

Existing Conditions
Friday Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	6	6	6	66	9	71	14	831	24	40	904	11
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	0.98		0.63	0.98		0.78	0.94		0.92
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Lanes	0	1	0	0	1	0	0	2	0	0	2	0
Capacity, veh/h	113	111	92	98	19	69	50	2511	72	106	2323	28
Arriving On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.76	0.76	0.76	1.00	1.00	1.00
Sat Flow, veh/h	612.3	387.8	612.3	425.9	66.7	458.2	55.0	3345.8	94.2	133.1	3128.9	36.6
Grp Volume(v), veh/h	19.6	0.0	0.0	158.7	0.0	0.0	488.5	0.0	456.1	488.3	0.0	549.7
Grp Sat Flow(s),veh/h/ln	1837.1	0.0	0.0	942.2	0.0	0.0	1764.5	0.0	1647.6	1495.4	0.0	1684.8
Q Serve(g_s), s	0.0	0.0	0.0	16.0	0.0	0.0	0.0	0.0	10.9	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.2	0.0	0.0	18.1	0.0	0.0	10.1	0.0	10.9	20.2	0.0	0.0
Proportion In Lane	0.333		0.333	0.452		0.486	0.031		0.057	0.089		0.022
Lane Grp Cap(c), veh/h	317.1	0.0	0.0	185.7	0.0	0.0	1376.4	0.0	1256.3	1172.9	0.0	1284.7
V/C Ratio(X)	0.062	0.000	0.000	0.855	0.000	0.000	0.355	0.000	0.363	0.416	0.000	0.428
Avail Cap(c_a), veh/h	317.1	0.0	0.0	185.7	0.0	0.0	1376.4	0.0	1256.3	1172.9	0.0	1284.7
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.000	0.000	0.000	1.000	0.000	0.000	1.000	0.000	1.000	0.811	0.000	0.811
Uniform Delay (d), s/veh	43.8	0.0	0.0	50.3	0.0	0.0	4.6	0.0	4.7	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	29.0	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	43.8	0.0	0.0	79.2	0.0	0.0	4.6	0.0	4.7	0.1	0.0	0.1
Lane Group LOS	D			E			A		A	A		A
Approach Volume, veh/h		20			159			945			1038	
Approach Delay, s/veh		43.8			79.2			4.7			0.1	
Approach LOS		D			E			A			A	
Timer												
Assigned Phase		8			4			6			2	
Phase Duration (G+Y+Rc), s		23.00			23.00			97.00			97.00	
Change Period (Y+Rc), s		4.90			4.90			5.50			5.50	
Max Green Setting (Gmax), s		18.10			18.10			91.50			91.50	
Max Q Clear Time (g_c+I1), s		3.16			20.10			12.91			22.17	
Green Extension Time (p_c)		0.46			0.00			6.25			6.24	
Intersection Summary												
HCM 2010 Control Delay				8.3								
HCM 2010 Level of Service				A								

Timings
8: Washington Ave & Dade Blvd

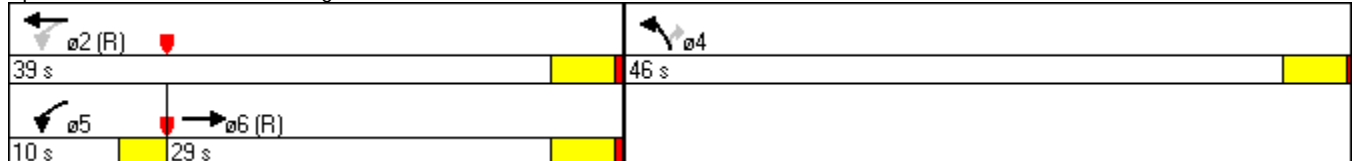
Existing Conditions
Friday Peak Hour

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↘	↑↑	↘↘	↘
Volume (vph)	380	161	345	85	271
Turn Type	NA	pm+pt	NA	NA	Perm
Protected Phases	6	5	2	4	
Permitted Phases		2			4
Detector Phase	6	5	2	4	4
Switch Phase					
Minimum Initial (s)	16.0	5.0	16.0	7.0	7.0
Minimum Split (s)	20.7	8.0	20.7	24.0	24.0
Total Split (s)	29.0	10.0	39.0	46.0	46.0
Total Split (%)	34.1%	11.8%	45.9%	54.1%	54.1%
Yellow Time (s)	4.0	3.0	4.0	4.0	4.0
All-Red Time (s)	0.7	0.0	0.7	0.4	0.4
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.7	3.0	4.7	4.4	4.4
Lead/Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes			
Recall Mode	C-Min	None	C-Min	None	None

Intersection Summary












Cycle Length: 85
 Actuated Cycle Length: 85
 Offset: 53 (62%), Referenced to phase 2:WBTL and 6:EBT, Start of Green
 Natural Cycle: 55
 Control Type: Actuated-Coordinated

Splits and Phases: 8: Washington Ave & Dade Blvd



HCM 2010 Signalized Intersection Summary
8: Washington Ave & Dade Blvd

Existing Conditions
Friday Peak Hour

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	380	91	161	345	85	271
Number	6	16	5	2	7	14
Initial Queue, veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1863	1863	1863	1863	1863	1863
Lanes	2	0	1	2	2	1
Capacity, veh/h	1375	326	638	2178	785	350
Arriving On Green	0.47	0.47	0.09	0.62	0.22	0.22
Sat Flow, veh/h	2932.7	690.5	1774.0	3632.4	3548.1	1583.3
Grp Volume(v), veh/h	251.6	239.0	167.7	359.4	88.5	282.3
Grp Sat Flow(s),veh/h/ln	1862.7	1740.9	1774.0	1769.6	1774.0	1583.3
Q Serve(g_s), s	4.6	4.7	2.3	2.4	1.1	9.4
Cycle Q Clear(g_c), s	4.6	4.7	2.3	2.4	1.1	9.4
Proportion In Lane		0.397	1.000		1.000	1.000
Lane Grp Cap(c), veh/h	879.0	821.5	638.2	2178.0	785.3	350.4
V/C Ratio(X)	0.286	0.291	0.263	0.165	0.113	0.806
Avail Cap(c_a), veh/h	879.0	821.5	701.9	2178.0	2648.2	1181.8
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.957	0.957	1.000	1.000
Uniform Delay (d), s/veh	9.0	9.0	5.5	4.6	17.3	20.6
Incr Delay (d2), s/veh	0.1	0.1	0.1	0.0	0.0	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	9.1	9.1	5.6	4.6	17.4	23.9
Lane Group LOS	A	A	A	A	B	C
Approach Volume, veh/h	491			527	371	
Approach Delay, s/veh	9.1			4.9	22.3	
Approach LOS	A			A	C	
Timer						
Assigned Phase	6		5	2		
Phase Duration (G+Y+Rc), s	31.00		8.00	39.00		
Change Period (Y+Rc), s	4.70		3.00	4.70		
Max Green Setting (Gmax), s	24.30		7.00	34.30		
Max Q Clear Time (g_c+l1), s	6.68		4.34	4.42		
Green Extension Time (p_c)	1.96		0.06	2.06		
Intersection Summary						
HCM 2010 Control Delay			11.0			
HCM 2010 Level of Service			B			

Intersection

Intersection Delay (sec/veh): 0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Volume (vph)	0	4	351	0	0	251
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None
Storage Length	0	0		0	0	
Median Width	0		0			0
Grade (%)	0%		0%			0%
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles(%)	2	2	2	2	2	2
Movement Flow Rate	0	4	366	0	0	261
Number of Lanes	0	1	2	0	0	2

Major/Minor	Major 1			Major 2		
Conflicting Flow Rate - All	~	183	0	-	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Follow-up Headway	0	3.32	-	0	0	-
Pot Capacity-1 Maneuver	0	*1322	-	0	0	-
Stage 1	0	-	-	0	0	-
Stage 2	0	-	-	0	0	-
Time blocked-Platoon(%)	0	12	-	0	0	-
Mov Capacity-1 Maneuver	-	*1322	-	-	-	-
Mov Capacity-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay (s)	7.7	0	0
HCM LOS	A	A	A








Lane	NBT	WBLn1	SBT
Capacity (vph)		*1322	
HCM Control Delay (s)	-	7.7	-
HCM Lane VC Ratio	-	0.003	-
HCM Lane LOS	-	A	-
HCM 95th Percentile Queue (veh)	-	0.009	-

Timings

10: Washington Ave & 21st ST

Existing Conditions

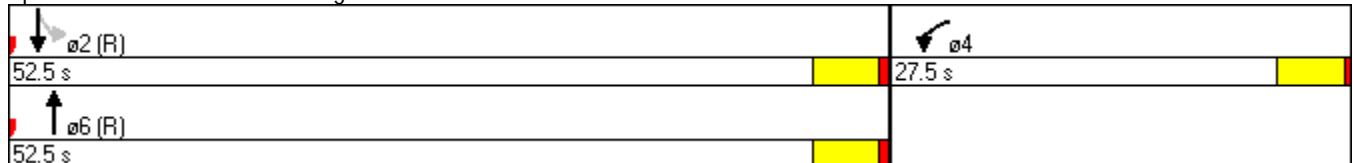
Friday Peak Hour

				
Lane Group	WBL	NBT	SBL	SBT
Lane Configurations				
Volume (vph)	41	332	16	239
Turn Type	NA	NA	Perm	NA
Protected Phases	4	6		2
Permitted Phases			2	
Detector Phase	4	6	2	2
Switch Phase				
Minimum Initial (s)	7.0	7.0	7.0	7.0
Minimum Split (s)	27.5	31.7	31.7	31.7
Total Split (s)	27.5	52.5	52.5	52.5
Total Split (%)	34.4%	65.6%	65.6%	65.6%
Yellow Time (s)	4.0	4.0	4.0	4.0
All-Red Time (s)	0.5	0.7	0.7	0.7
Lost Time Adjust (s)	0.0	0.0		0.0
Total Lost Time (s)	4.5	4.7		4.7
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	None	C-Min	C-Min	C-Min

Intersection Summary










Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 47 (59%), Referenced to phase 2:SBTL and 6:NBT, Start of Green
 Natural Cycle: 60
 Control Type: Actuated-Coordinated

Splits and Phases: 10: Washington Ave & 21st ST



HCM 2010 Signalized Intersection Summary
 10: Washington Ave & 21st ST

Existing Conditions
 Friday Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	41	20	332	26	16	239
Number	7	14	6	16	5	2
Initial Queue, veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		0.99	1.00	
Parking, Bus Adj	1.00	0.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1863	1863	1863	1863	1863	1863
Lanes	1	0	2	0	0	2
Capacity, veh/h	0	0	3106	242	198	2872
Arriving On Green	0.00	0.00	0.91	0.91	0.91	0.91
Sat Flow, veh/h	0.0		3415.1	265.7	198.3	3161.6
Grp Volume(v), veh/h	0.0		188.0	184.9	133.8	131.9
Grp Sat Flow(s),veh/h/ln	0.0		1862.7	1814.0	1592.0	1695.1
Q Serve(g_s), s	0.0		0.5	0.5	0.0	2.8
Cycle Q Clear(g_c), s	0.0		0.5	0.5	13.5	2.8
Proportion In Lane	0.000			0.146	0.125	
Lane Grp Cap(c), veh/h	0.0		1696.0	1651.6	1526.6	0.0
V/C Ratio(X)	0.000		0.111	0.112	0.088	0.000
Avail Cap(c_a), veh/h	0.0		1696.0	1651.6	1526.6	0.0
HCM Platoon Ratio	1.00		1.00	1.00	1.00	1.00
Upstream Filter(I)	0.000		1.000	1.000	1.000	1.000
Uniform Delay (d), s/veh	0.0		0.2	0.2	0.2	0.0
Incr Delay (d2), s/veh	0.0		0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0		0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	0.0		0.2	0.2	0.2	0.0
Lane Group LOS			A	A	A	
Approach Volume, veh/h	0		373			266
Approach Delay, s/veh	0.0		0.2			0.1
Approach LOS			A			A
Timer						
Assigned Phase			6			2
Phase Duration (G+Y+Rc), s			52.50			52.50
Change Period (Y+Rc), s			4.70			4.70
Max Green Setting (Gmax), s			47.80			47.80
Max Q Clear Time (g_c+I1), s			2.53			15.47
Green Extension Time (p_c)			1.36			1.35
Intersection Summary						
HCM 2010 Control Delay			0.2			
HCM 2010 Level of Service			A			

Intersection

Intersection Delay (sec/veh)	7.8											
Intersection LOS	A											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	17	41	6	12	22	30	1	27	12	26	63	18
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles(%)	2	2	2	2	2	2	2	2	2	2	2	2
Movement Flow Rate	20	48	7	14	26	35	1	31	14	30	73	21
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0











Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.8	7.5	7.5	8
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Volume Left (%)	3%	27%	19%	24%
Volume Thru (%)	68%	64%	34%	59%
Volume Right (%)	30%	9%	47%	17%
Sign Control	Stop	Stop	Stop	Stop
Traffic Volume by Lane	40	64	64	107
Left Turning Volume	27	41	22	63
Through Volume	12	6	30	18
Right Turning Volume	1	17	12	26
Lane Flow Rate	47	74	74	124
Geometry Group	1	1	1	1
Degree of Utilization, X	0.055	0.091	0.086	0.144
Departure Headway, Hd	4.224	4.39	4.153	4.174
Convergence(Y/N)	Yes	Yes	Yes	Yes
Capacity	851	820	867	844
Service Time	2.232	2.395	2.158	2.274
HCM Lane V/C Ratio	0.055	0.09	0.085	0.147
HCM Control Delay	7.5	7.8	7.5	8
HCM Lane LOS	A	A	A	A
HCM 95th Percentile Queue	0.2	0.3	0.3	0.5

Future Background Conditions

Timings
1: Dade Blvd & 23rd ST

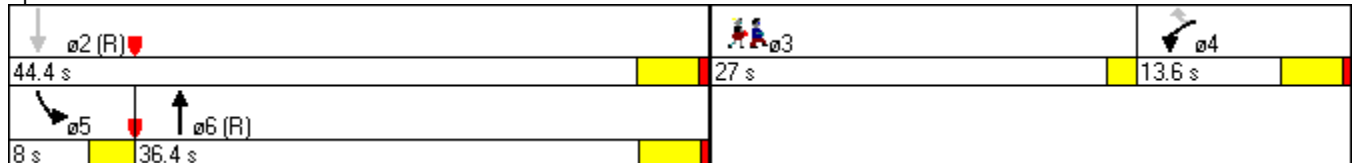
Background Conditions
Friday Peak Hour

						ø3
Lane Group	WBL	WBR	NBT	SBL	SBT	
Lane Configurations						
Volume (vph)	166	69	465	66	426	
Turn Type	NA	Perm	NA	Prot	NA	
Protected Phases	4		6	5		3
Permitted Phases		4			2	
Detector Phase	4	4	6	5	2	
Switch Phase						
Minimum Initial (s)	7.0	7.0	16.0	5.0	16.0	1.0
Minimum Split (s)	13.6	13.6	20.6	8.0	29.7	27.0
Total Split (s)	13.6	13.6	36.4	8.0	44.4	27.0
Total Split (%)	16.0%	16.0%	42.8%	9.4%	52.2%	32%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0	2.0
All-Red Time (s)	0.6	0.6	0.6	0.0	0.7	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.6	4.6	4.6	3.0	4.7	
Lead/Lag	Lag	Lag	Lag	Lead		Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		Yes
Recall Mode	None	None	C-Min	None	C-Min	None

Intersection Summary

Cycle Length: 85
 Actuated Cycle Length: 85
 Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green
 Natural Cycle: 75
 Control Type: Actuated-Coordinated

Splits and Phases: 1: Dade Blvd & 23rd ST
















HCM Signalized Intersection Capacity Analysis

1: Dade Blvd & 23rd ST

Background Conditions

Friday Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			 			 
Volume (vph)	166	69	465	290	66	426
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		3.0	4.7
Lane Util. Factor	1.00	1.00	0.95		1.00	0.95
Frbp, ped/bikes	1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	0.94		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	3335		1770	3539
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	1583	3335		1770	3539
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	184	77	517	322	73	473
RTOR Reduction (vph)	0	64	93	0	0	0
Lane Group Flow (vph)	184	13	746	0	73	473
Confl. Peds. (#/hr)	13				7	
Turn Type	NA	Perm	NA		Prot	NA
Protected Phases	4		6		5	
Permitted Phases		4				2
Actuated Green, G (s)	14.2	14.2	41.5		5.1	49.5
Effective Green, g (s)	14.2	14.2	41.5		5.1	49.5
Actuated g/C Ratio	0.17	0.17	0.49		0.06	0.58
Clearance Time (s)	4.6	4.6	4.6		3.0	4.7
Vehicle Extension (s)	2.5	2.5	1.0		2.0	1.0
Lane Grp Cap (vph)	295	264	1628		106	2060
v/s Ratio Prot	c0.10		c0.22		c0.04	
v/s Ratio Perm		0.01				0.13
v/c Ratio	0.62	0.05	0.46		0.69	0.23
Uniform Delay, d1	32.9	29.7	14.3		39.2	8.6
Progression Factor	1.00	1.00	1.21		1.00	1.00
Incremental Delay, d2	3.5	0.1	0.9		13.8	0.3
Delay (s)	36.4	29.8	18.3		53.0	8.8
Level of Service	D	C	B		D	A
Approach Delay (s)	34.5		18.3			14.7
Approach LOS	C		B			B

Intersection Summary

HCM 2000 Control Delay	19.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	14.2
Intersection Capacity Utilization	46.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Intersection

Intersection Delay (sec/veh): 2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	31	275	53	29	166	19	47	1	27	20	6	25
Conflicting Peds.(#/hr)	14	0	13	13	0	14	4	0	4	4	0	4
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles(%)	2	2	2	2	2	2	2	2	2	2	2	2
Movement Flow Rate	33	293	56	31	177	20	50	1	29	21	6	27
Number of Lanes	0	2	0	0	2	0	1	1	0	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	201	0	0	353	0	0	549	654	193	470	672	117
Stage 1	-	-	-	-	-	-	391	391	-	253	253	-
Stage 2	-	-	-	-	-	-	158	263	-	217	419	-
Follow-up Headway	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Capacity-1 Maneuver	1485	-	-	1202	-	-	*500	436	816	574	424	*1417
Stage 1	-	-	-	-	-	-	*605	606	-	854	772	-
Stage 2	-	-	-	-	-	-	*1417	764	-	765	588	-
Time blocked-Platoon(%)	6	-	-	0	-	-	6	6	0	6	6	6
Mov Capacity-1 Maneuver	1467	-	-	1188	-	-	*457	408	804	520	398	*1396
Mov Capacity-2 Maneuver	-	-	-	-	-	-	*457	408	-	520	398	-
Stage 1	-	-	-	-	-	-	*586	587	-	828	747	-
Stage 2	-	-	-	-	-	-	*1323	740	-	707	570	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0.7	1.2	12.3	10.5
HCM LOS	A	A	B	B

Lane	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	*457	*777							*714
HCM Control Delay (s)	13.8	9.8	7.51	0.1	-	8.111	0.1	-	10.5
HCM Lane VC Ratio	0.109	0.038	0.022	-	-	0.026	-	-	0.076
HCM Lane LOS	B	A	A	A	-	A	A	-	B
HCM 95th Percentile Queue (veh)	0.366	0.119	0.069	-	-	0.08	-	-	0.246

Intersection

Intersection Delay (sec/veh): 1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	28	285	12	12	189	5	6	0	6	4	0	7
Conflicting Peds.(#/hr)	26	0	1	1	0	26	6	0	14	14	0	6
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles(%)	2	2	2	2	2	2	2	2	2	2	2	2
Movement Flow Rate	32	324	14	14	215	6	7	0	7	5	0	8
Number of Lanes	0	2	0	0	2	0	0	1	0	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	235	0	0	352	0	0	559	672	209	500	676	151
Stage 1	-	-	-	-	-	-	409	409	-	260	260	-
Stage 2	-	-	-	-	-	-	150	263	-	240	416	-
Follow-up Headway	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Capacity-1 Maneuver	1440	-	-	1203	-	-	*491	424	797	544	422	*1417
Stage 1	-	-	-	-	-	-	*590	594	-	846	766	-
Stage 2	-	-	-	-	-	-	*1417	764	-	742	590	-
Time blocked-Platoon(%)	6	-	-	0	-	-	6	6	0	6	6	6
Mov Capacity-1 Maneuver	1409	-	-	1177	-	-	*457	397	771	505	395	*1371
Mov Capacity-2 Maneuver	-	-	-	-	-	-	*457	397	-	505	395	-
Stage 1	-	-	-	-	-	-	*567	571	-	812	747	-
Stage 2	-	-	-	-	-	-	*1359	745	-	699	567	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0.7	0.6	11.4	9.3
HCM LOS	A	A	B	A

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	*574							*844
HCM Control Delay (s)	11.4	7.614	0.1	-	8.094	0.1	-	9.3
HCM Lane VC Ratio	0.024	0.023	-	-	0.012	-	-	0.015
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th Percentile Queue (veh)	0.073	0.069	-	-	0.035	-	-	0.045

Timings

Background Conditions

4: Collins Ave & W Hotel Driveway & 23rd St/23rd St (Rooney Palace)

Friday Peak Hour

Lane Group	EBL	EBT	EBR2	WBT	NBL	NBT	SBL2	SBL	SBT	SBR	NWL
Lane Configurations											
Volume (vph)	214	4	85	10	21	851	2	7	1007	168	7
Turn Type	Split	NA	Perm	NA	Perm	NA	Perm	Perm	NA	pm+ov	NA
Protected Phases	3	3		4		6			2	3	8
Permitted Phases			3		6		2	2		2	
Detector Phase	3	3	3	4	6	6	2	2	2	3	8
Switch Phase											
Minimum Initial (s)	7.0	7.0	7.0	7.0	5.0	5.0	5.0	5.0	5.0	7.0	7.0
Minimum Split (s)	22.6	22.6	22.6	26.6	26.0	26.0	26.0	26.0	26.0	22.6	11.6
Total Split (s)	23.0	23.0	23.0	27.0	58.0	58.0	58.0	58.0	58.0	23.0	12.0
Total Split (%)	19.2%	19.2%	19.2%	22.5%	48.3%	48.3%	48.3%	48.3%	48.3%	19.2%	10.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.6	0.6	0.6	0.6	1.0	1.0	1.0	1.0	1.0	0.6	0.6
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0			0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	4.6		5.0			5.0	4.6	4.6
Lead/Lag	Lead	Lead	Lead	Lag						Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes						Yes	
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min	C-Min	C-Min	None	None

Intersection Summary


















Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 83 (69%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
 Natural Cycle: 90
 Control Type: Actuated-Coordinated

Splits and Phases: 4: Collins Ave & W Hotel Driveway & 23rd St/23rd St (Rooney Palace)

2 (R)	3	4	8
58 s	23 s	27 s	12 s
6 (R)			
58 s			










HCM Signalized Intersection Capacity Analysis
 4: Collins Ave & W Hotel Driveway & 23rd St/23rd St (Rooney Palace)

Background Conditions
 Friday Peak Hour

												
Movement	EBL	EBT	EBR	EBR2	WBL	WBT	WBR	NBL	NBT	NBR	NBR2	SBL2
Lane Configurations												
Volume (vph)	214	4	19	85	17	10	16	21	851	4	23	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6		4.6			5.0			
Lane Util. Factor	0.95	0.91		0.95		1.00			0.95			
Frbp, ped/bikes	1.00	0.98		0.92		0.94			0.98			
Flpb, ped/bikes	1.00	1.00		1.00		1.00			1.00			
Frt	1.00	0.97		0.85		0.95			1.00			
Flt Protected	0.95	0.96		1.00		0.98			1.00			
Satd. Flow (prot)	1681	1551		1386		1623			3446			
Flt Permitted	0.95	0.96		1.00		0.98			0.91			
Satd. Flow (perm)	1681	1551		1386		1623			3139			
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	218	4	19	87	17	10	16	21	868	4	23	2
RTOR Reduction (vph)	0	3	0	66	0	0	0	0	2	0	0	0
Lane Group Flow (vph)	126	121	0	12	0	43	0	0	914	0	0	0
Confl. Peds. (#/hr)	101			34	34		101	71		269	269	269
Turn Type	Split	NA		Perm	Split	NA		Perm	NA			Perm
Protected Phases	3	3			4	4			6			
Permitted Phases				3				6				2
Actuated Green, G (s)	18.5	18.5		18.5		22.0			55.7			
Effective Green, g (s)	18.5	18.5		18.5		22.0			55.7			
Actuated g/C Ratio	0.15	0.15		0.15		0.18			0.46			
Clearance Time (s)	4.6	4.6		4.6		4.6			5.0			
Vehicle Extension (s)	2.5	2.5		2.5		2.5			1.0			
Lane Grp Cap (vph)	259	239		213		297			1457			
v/s Ratio Prot	0.07	c0.08				c0.03						
v/s Ratio Perm				0.01					0.29			
v/c Ratio	0.49	0.51		0.06		0.14			0.63			
Uniform Delay, d1	46.4	46.6		43.3		41.1			24.3			
Progression Factor	1.00	1.00		1.00		1.00			0.81			
Incremental Delay, d2	1.0	1.2		0.1		0.2			1.9			
Delay (s)	47.5	47.8		43.4		41.3			21.5			
Level of Service	D	D		D		D			C			
Approach Delay (s)		46.6				41.3			21.5			
Approach LOS		D				D			C			
Intersection Summary												
HCM 2000 Control Delay			27.3		HCM 2000 Level of Service				C			
HCM 2000 Volume to Capacity ratio			0.52									
Actuated Cycle Length (s)			120.0		Sum of lost time (s)				18.8			
Intersection Capacity Utilization			75.5%		ICU Level of Service				D			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis
 4: Collins Ave & W Hotel Driveway & 23rd St/23rd St (Rooney Palace)

Background Conditions
 Friday Peak Hour

						
Movement	SBL	SBT	SBR	NWL2	NWL	NWR
Lane Configurations						
Volume (vph)	7	1007	168	5	7	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	4.6		4.6	
Lane Util. Factor		0.95	1.00		1.00	
Frbp, ped/bikes		1.00	0.89		0.76	
Flpb, ped/bikes		1.00	1.00		1.00	
Frt		1.00	0.85		0.92	
Flt Protected		1.00	1.00		0.98	
Satd. Flow (prot)		3534	1404		1266	
Flt Permitted		0.95	1.00		0.98	
Satd. Flow (perm)		3342	1404		1266	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	7	1028	171	5	7	20
RTOR Reduction (vph)	0	0	65	0	0	0
Lane Group Flow (vph)	0	1037	106	0	32	0
Confl. Peds. (#/hr)	269		71		34	101
Turn Type	Perm	NA	pm+ov	Split	NA	
Protected Phases		2	3	8	8	
Permitted Phases	2		2			
Actuated Green, G (s)		55.7	74.2		5.0	
Effective Green, g (s)		55.7	74.2		5.0	
Actuated g/C Ratio		0.46	0.62		0.04	
Clearance Time (s)		5.0	4.6		4.6	
Vehicle Extension (s)		1.0	2.5		2.5	
Lane Grp Cap (vph)		1551	868		52	
v/s Ratio Prot			0.02		c0.03	
v/s Ratio Perm		c0.31	0.06			
v/c Ratio		0.67	0.12		0.62	
Uniform Delay, d1		25.0	9.5		56.6	
Progression Factor		1.00	1.00		1.00	
Incremental Delay, d2		2.3	0.0		17.0	
Delay (s)		27.3	9.5		73.6	
Level of Service		C	A		E	
Approach Delay (s)		24.8			73.6	
Approach LOS		C			E	

Intersection Summary

Intersection

Intersection Delay (sec/veh): 3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	0	0	21	2	12	5	25	4	9	59	1
Conflicting Peds.(#/hr)	0	0	0	4	0	0	3	0	9	9	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles(%)	2	2	2	2	2	2	2	2	2	2	2	2
Movement Flow Rate	0	0	0	26	2	15	6	30	5	11	72	1
Number of Lanes	0	0	0	0	1	0	0	1	0	0	1	0

Major/Minor	Minor 1		Major 1			Major 2			
Conflicting Flow Rate - All	144	144	46	73	0	0	39	0	0
Stage 1	49	49	-	-	-	-	-	-	-
Stage 2	95	95	-	-	-	-	-	-	-
Follow-up Headway	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Capacity-1 Maneuver	825	748	1023	1527	-	-	1571	-	-
Stage 1	964	854	-	-	-	-	-	-	-
Stage 2	912	816	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	809	737	1012	1516	-	-	1559	-	-
Mov Capacity-2 Maneuver	809	737	-	-	-	-	-	-	-
Stage 1	957	848	-	-	-	-	-	-	-
Stage 2	899	810	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay (s)	9.4	1.1	1
HCM LOS	A	A	A

Lane	NBL	NBT	NBR	WBLn1	SBL	SBT	SBR
Capacity (vph)				864			
HCM Control Delay (s)	7.384	0	-	9.4	7.326	0	-
HCM Lane VC Ratio	0.004	-	-	0.049	0.007	-	-
HCM Lane LOS	A	A	-	A	A	A	-
HCM 95th Percentile Queue (veh)	0.012	-	-	0.156	0.021	-	-

Intersection

Intersection Delay (sec/veh): 1.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Volume (vph)	3	13	31	11	4	4
Conflicting Peds.(#/hr)	0	0	0	0	6	11
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None
Storage Length	0			0	0	0
Median Width		0	0		12	
Grade (%)		0%	0%		0%	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles(%)	2	2	2	2	2	2
Movement Flow Rate	4	16	38	13	5	5
Number of Lanes	0	1	1	0	1	0













Major/Minor	Major 1		Major 2			
Conflicting Flow Rate - All	62	0	0	0	80	56
Stage 1	-	-	-	-	56	-
Stage 2	-	-	-	-	24	-
Follow-up Headway	2.218	-	-	-	3.518	3.318
Pot Capacity-1 Maneuver	1543	-	-	-	928	1017
Stage 1	-	-	-	-	970	-
Stage 2	-	-	-	-	999	-
Time blocked-Platoon(%)	1	-	-	-	1	1
Mov Capacity-1 Maneuver	1543	-	-	-	908	1008
Mov Capacity-2 Maneuver	-	-	-	-	908	-
Stage 1	-	-	-	-	961	-
Stage 2	-	-	-	-	987	-

Approach	EB	WB	SB
HCM Control Delay (s)	1.4	0	8.8
HCM LOS	A	A	A

Lane	EBL	EBT	WBT	WBR	SBLn1
Capacity (vph)					955
HCM Control Delay (s)	7.339	-	-	-	8.8
HCM Lane VC Ratio	0.002	-	-	-	0.01
HCM Lane LOS	A	-	-	-	A
HCM 95th Percentile Queue (veh)	0.007	-	-	-	0.031

Timings
7: Collins Ave & 22nd St












Background Conditions
Friday Peak Hour

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Volume (vph)	6	6	68	9	14	890	41	1020
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		8		4		6		2
Permitted Phases	8		4		6		2	
Detector Phase	8	8	4	4	6	6	2	2
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	7.0	12.0	12.0	12.0	12.0
Minimum Split (s)	23.0	23.0	23.0	23.0	21.5	21.5	21.5	21.5
Total Split (s)	23.0	23.0	23.0	23.0	97.0	97.0	97.0	97.0
Total Split (%)	19.2%	19.2%	19.2%	19.2%	80.8%	80.8%	80.8%	80.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.9	0.9	0.9	0.9	1.5	1.5	1.5	1.5
Lost Time Adjust (s)		0.0		0.0		0.0		0.0
Total Lost Time (s)		4.9		4.9		5.5		5.5
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min	C-Min

Intersection Summary

















Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 114 (95%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
 Natural Cycle: 60
 Control Type: Actuated-Coordinated

Splits and Phases: 7: Collins Ave & 22nd St

 ø2 (R) 97 s								 ø4 23 s
 ø6 (R) 97 s								 ø8 23 s

















HCM 2010 Signalized Intersection Summary
7: Collins Ave & 22nd St

Background Conditions
Friday Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	6	6	6	68	9	73	14	890	25	41	1020	11
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	0.98		0.63	0.98		0.78	0.95		0.92
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Lanes	0	1	0	0	1	0	0	2	0	0	2	0
Capacity, veh/h	113	111	92	98	18	69	48	2516	70	98	2353	25
Arriving On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.76	0.76	0.76	1.00	1.00	1.00
Sat Flow, veh/h	612.3	387.2	612.3	425.6	64.9	456.9	51.4	3342.4	91.9	122.2	3153.4	33.0
Grp Volume(v), veh/h	19.6	0.0	0.0	163.0	0.0	0.0	522.0	0.0	487.8	554.2	0.0	611.0
Grp Sat Flow(s),veh/h/ln	1837.1	0.0	0.0	938.7	0.0	0.0	1764.3	0.0	1648.8	1519.1	0.0	1685.8
Q Serve(g_s), s	0.0	0.0	0.0	16.1	0.0	0.0	0.0	0.0	12.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.2	0.0	0.0	18.1	0.0	0.0	11.1	0.0	12.0	22.4	0.0	0.0
Proportion In Lane	0.333		0.333	0.453		0.487	0.029		0.056	0.080		0.020
Lane Grp Cap(c), veh/h	317.1	0.0	0.0	185.2	0.0	0.0	1376.1	0.0	1257.2	1190.7	0.0	1285.5
V/C Ratio(X)	0.062	0.000	0.000	0.880	0.000	0.000	0.379	0.000	0.388	0.465	0.000	0.475
Avail Cap(c_a), veh/h	317.1	0.0	0.0	185.2	0.0	0.0	1376.1	0.0	1257.2	1190.7	0.0	1285.5
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.000	0.000	0.000	1.000	0.000	0.000	1.000	0.000	1.000	0.747	0.000	0.747
Uniform Delay (d), s/veh	43.8	0.0	0.0	50.3	0.0	0.0	4.7	0.0	4.8	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	34.1	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	43.8	0.0	0.0	84.5	0.0	0.0	4.8	0.0	4.9	0.1	0.0	0.1
Lane Group LOS	D			F			A		A	A		A
Approach Volume, veh/h		20			163			1010			1165	
Approach Delay, s/veh		43.8			84.5			4.8			0.1	
Approach LOS		D			F			A			A	
Timer												
Assigned Phase		8			4			6			2	
Phase Duration (G+Y+Rc), s		23.00			23.00			97.00			97.00	
Change Period (Y+Rc), s		4.90			4.90			5.50			5.50	
Max Green Setting (Gmax), s		18.10			18.10			91.50			91.50	
Max Q Clear Time (g_c+I1), s		3.16			20.10			13.97			24.38	
Green Extension Time (p_c)		0.47			0.00			7.37			7.37	
Intersection Summary												
HCM 2010 Control Delay				8.3								
HCM 2010 Level of Service				A								

Timings
8: Washington Ave & Dade Blvd

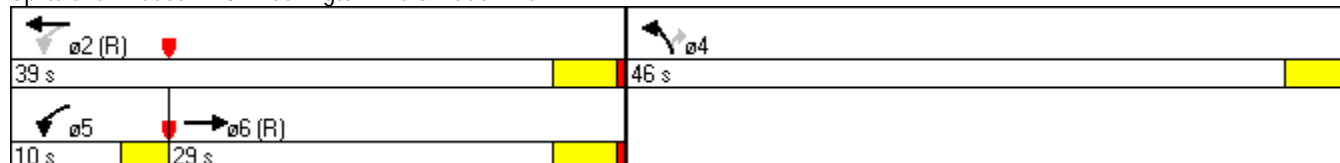
Background Conditions
Friday Peak Hour

					
Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations	 	 	 	  	 
Volume (vph)	393	193	357	105	297
Turn Type	NA	pm+pt	NA	NA	Perm
Protected Phases	6	5	2	4	
Permitted Phases		2			4
Detector Phase	6	5	2	4	4
Switch Phase					
Minimum Initial (s)	16.0	5.0	16.0	7.0	7.0
Minimum Split (s)	20.7	8.0	20.7	24.0	24.0
Total Split (s)	29.0	10.0	39.0	46.0	46.0
Total Split (%)	34.1%	11.8%	45.9%	54.1%	54.1%
Yellow Time (s)	4.0	3.0	4.0	4.0	4.0
All-Red Time (s)	0.7	0.0	0.7	0.4	0.4
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.7	3.0	4.7	4.4	4.4
Lead/Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes			
Recall Mode	C-Min	None	C-Min	None	None

Intersection Summary












Cycle Length: 85
 Actuated Cycle Length: 85
 Offset: 53 (62%), Referenced to phase 2:WBTL and 6:EBT, Start of Green
 Natural Cycle: 55
 Control Type: Actuated-Coordinated

Splits and Phases: 8: Washington Ave & Dade Blvd



HCM 2010 Signalized Intersection Summary
8: Washington Ave & Dade Blvd

Background Conditions
Friday Peak Hour

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	393	122	193	357	105	297
Number	6	16	5	2	7	14
Initial Queue, veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1863	1863	1863	1863	1863	1863
Lanes	2	0	1	2	2	1
Capacity, veh/h	1258	386	599	2129	847	378
Arriving On Green	0.46	0.46	0.09	0.60	0.24	0.24
Sat Flow, veh/h	2767.3	840.3	1774.0	3632.4	3548.1	1583.3
Grp Volume(v), veh/h	277.2	259.3	201.0	371.9	109.4	309.4
Grp Sat Flow(s),veh/h/ln	1862.7	1714.4	1774.0	1769.6	1774.0	1583.3
Q Serve(g_s), s	5.4	5.5	3.0	2.7	1.4	10.5
Cycle Q Clear(g_c), s	5.4	5.5	3.0	2.7	1.4	10.5
Proportion In Lane		0.490	1.000		1.000	1.000
Lane Grp Cap(c), veh/h	856.3	788.1	599.0	2129.2	847.3	378.1
V/C Ratio(X)	0.324	0.329	0.336	0.175	0.129	0.818
Avail Cap(c_a), veh/h	856.3	788.1	658.4	2129.2	2588.8	1155.2
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.951	0.951	1.000	1.000
Uniform Delay (d), s/veh	9.8	9.8	6.2	5.1	17.0	20.5
Incr Delay (d2), s/veh	0.1	0.1	0.1	0.0	0.1	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	9.9	9.9	6.3	5.1	17.1	23.8
Lane Group LOS	A	A	A	A	B	C
Approach Volume, veh/h	536			573	419	
Approach Delay, s/veh	9.9			5.5	22.1	
Approach LOS	A			A	C	
Timer						
Assigned Phase	6		5	2		
Phase Duration (G+Y+Rc), s	30.91		8.09	39.00		
Change Period (Y+Rc), s	4.70		3.00	4.70		
Max Green Setting (Gmax), s	24.30		7.00	34.30		
Max Q Clear Time (g_c+l1), s	7.49		5.03	4.67		
Green Extension Time (p_c)	2.11		0.06	2.23		
Intersection Summary						
HCM 2010 Control Delay			11.6			
HCM 2010 Level of Service			B			

Intersection

Intersection Delay (sec/veh): 0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Volume (vph)	0	4	397	0	0	314
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None
Storage Length	0	0		0	0	
Median Width	0		0			0
Grade (%)	0%		0%			0%
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles(%)	2	2	2	2	2	2
Movement Flow Rate	0	4	414	0	0	327
Number of Lanes	0	1	2	0	0	2

Major/Minor		Major 1		Major 2		
Conflicting Flow Rate - All	~	207	0	-	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Follow-up Headway	0	3.32	-	0	0	-
Pot Capacity-1 Maneuver	0	*1322	-	0	0	-
Stage 1	0	-	-	0	0	-
Stage 2	0	-	-	0	0	-
Time blocked-Platoon(%)	0	12	-	0	0	-
Mov Capacity-1 Maneuver	-	*1322	-	-	-	-
Mov Capacity-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay (s)	7.7	0	0
HCM LOS	A	A	A








Lane	NBT	WBLn1	SBT
Capacity (vph)		*1322	
HCM Control Delay (s)	-	7.7	-
HCM Lane VC Ratio	-	0.003	-
HCM Lane LOS	-	A	-
HCM 95th Percentile Queue (veh)	-	0.009	-

Timings

10: Washington Ave & 21st ST

Background Conditions




Friday Peak Hour

				
Lane Group	WBL	NBT	SBL	SBT
Lane Configurations				
Volume (vph)	42	368	32	287
Turn Type	NA	NA	Perm	NA
Protected Phases	4	6		2
Permitted Phases			2	
Detector Phase	4	6	2	2
Switch Phase				
Minimum Initial (s)	7.0	7.0	7.0	7.0
Minimum Split (s)	27.5	31.7	31.7	31.7
Total Split (s)	27.5	52.5	52.5	52.5
Total Split (%)	34.4%	65.6%	65.6%	65.6%
Yellow Time (s)	4.0	4.0	4.0	4.0
All-Red Time (s)	0.5	0.7	0.7	0.7
Lost Time Adjust (s)	0.0	0.0		0.0
Total Lost Time (s)	4.5	4.7		4.7
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	None	C-Min	C-Min	C-Min

Intersection Summary










Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 47 (59%), Referenced to phase 2:SBTL and 6:NBT, Start of Green
 Natural Cycle: 60
 Control Type: Actuated-Coordinated

Splits and Phases: 10: Washington Ave & 21st ST

 $\phi 2$ (R)	 $\phi 4$
52.5 s	27.5 s
 $\phi 6$ (R)	
52.5 s	

HCM 2010 Signalized Intersection Summary
 10: Washington Ave & 21st ST

Background Conditions
 Friday Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	42	30	368	27	32	287
Number	7	14	6	16	5	2
Initial Queue, veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		0.99	1.00	
Parking, Bus Adj	1.00	0.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1863	1863	1863	1863	1863	1863
Lanes	1	0	2	0	0	2
Capacity, veh/h	0	0	3122	228	291	2591
Arriving On Green	0.00	0.00	0.91	0.91	0.91	0.91
Sat Flow, veh/h	0.0		3433.0	250.5	290.0	2909.6
Grp Volume(v), veh/h	0.0		207.5	204.0	158.5	173.8
Grp Sat Flow(s),veh/h/ln	0.0		1862.7	1816.8	1379.0	1695.1
Q Serve(g_s), s	0.0		0.6	0.6	0.0	3.7
Cycle Q Clear(g_c), s	0.0		0.6	0.6	7.5	3.7
Proportion In Lane	0.000			0.138	0.210	
Lane Grp Cap(c), veh/h	0.0		1696.0	1654.1	1338.5	0.0
V/C Ratio(X)	0.000		0.122	0.123	0.118	0.000
Avail Cap(c_a), veh/h	0.0		1696.0	1654.1	1338.5	0.0
HCM Platoon Ratio	1.00		1.00	1.00	1.00	1.00
Upstream Filter(I)	0.000		1.000	1.000	1.000	1.000
Uniform Delay (d), s/veh	0.0		0.2	0.2	0.2	0.0
Incr Delay (d2), s/veh	0.0		0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0		0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	0.0		0.2	0.2	0.2	0.0
Lane Group LOS			A	A	A	
Approach Volume, veh/h	0		411			332
Approach Delay, s/veh	0.0		0.2			0.1
Approach LOS			A			A
Timer						
Assigned Phase			6			2
Phase Duration (G+Y+Rc), s			52.50			52.50
Change Period (Y+Rc), s			4.70			4.70
Max Green Setting (Gmax), s			47.80			47.80
Max Q Clear Time (g_c+I1), s			2.59			9.49
Green Extension Time (p_c)			1.64			1.64
Intersection Summary						
HCM 2010 Control Delay			0.2			
HCM 2010 Level of Service			A			

Intersection

Intersection Delay (sec/veh)	7.9											
Intersection LOS	A											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	18	57	6	12	31	31	2	28	12	27	65	19
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles(%)	2	2	2	2	2	2	2	2	2	2	2	2
Movement Flow Rate	21	66	7	14	36	36	2	33	14	31	76	22
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8	7.7	7.6	8.2
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Volume Left (%)	5%	22%	16%	24%
Volume Thru (%)	67%	70%	42%	59%
Volume Right (%)	29%	7%	42%	17%
Sign Control	Stop	Stop	Stop	Stop
Traffic Volume by Lane	42	81	74	111
Left Turning Volume	28	57	31	65
Through Volume	12	6	31	19
Right Turning Volume	2	18	12	27
Lane Flow Rate	49	94	86	129
Geometry Group	1	1	1	1
Degree of Utilization, X	0.059	0.116	0.101	0.156
Departure Headway, Hd	4.319	4.429	4.223	4.339
Convergence(Y/N)	Yes	Yes	Yes	Yes
Capacity	831	812	851	829
Service Time	2.335	2.444	2.238	2.352
HCM Lane V/C Ratio	0.059	0.116	0.101	0.156
HCM Control Delay	7.6	8	7.7	8.2
HCM Lane LOS	A	A	A	A
HCM 95th Percentile Queue	0.2	0.4	0.3	0.6

Future Total Conditions

Timings
1: Dade Blvd & 23rd ST

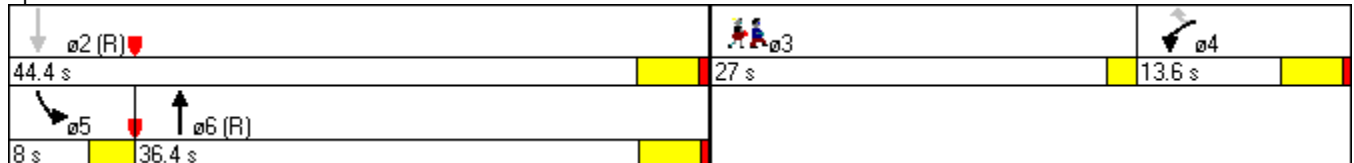
Future Total Conditions
Friday Peak Hour

Lane Group	WBL	WBR	NBT	SBL	SBT	ø3
Lane Configurations						
Volume (vph)	168	75	465	79	426	
Turn Type	NA	Perm	NA	Prot	NA	
Protected Phases	4		6	5		3
Permitted Phases		4			2	
Detector Phase	4	4	6	5	2	
Switch Phase						
Minimum Initial (s)	7.0	7.0	16.0	5.0	16.0	1.0
Minimum Split (s)	13.6	13.6	20.6	8.0	29.7	27.0
Total Split (s)	13.6	13.6	36.4	8.0	44.4	27.0
Total Split (%)	16.0%	16.0%	42.8%	9.4%	52.2%	32%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0	2.0
All-Red Time (s)	0.6	0.6	0.6	0.0	0.7	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.6	4.6	4.6	3.0	4.7	
Lead/Lag	Lag	Lag	Lag	Lead		Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		Yes
Recall Mode	None	None	C-Min	None	C-Min	None

Intersection Summary

Cycle Length: 85
 Actuated Cycle Length: 85
 Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green
 Natural Cycle: 75
 Control Type: Actuated-Coordinated

Splits and Phases: 1: Dade Blvd & 23rd ST
















HCM Signalized Intersection Capacity Analysis

Future Total Conditions

1: Dade Blvd & 23rd ST

Friday Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			 			 
Volume (vph)	168	75	465	304	79	426
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		3.0	4.7
Lane Util. Factor	1.00	1.00	0.95		1.00	0.95
Frbp, ped/bikes	1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	0.94		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	3329		1770	3539
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	1583	3329		1770	3539
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	187	83	517	338	88	473
RTOR Reduction (vph)	0	69	110	0	0	0
Lane Group Flow (vph)	187	14	745	0	88	473
Confl. Peds. (#/hr)	13				7	
Turn Type	NA	Perm	NA		Prot	NA
Protected Phases	4		6		5	
Permitted Phases		4				2
Actuated Green, G (s)	14.5	14.5	39.3		7.0	49.2
Effective Green, g (s)	14.5	14.5	39.3		7.0	49.2
Actuated g/C Ratio	0.17	0.17	0.46		0.08	0.58
Clearance Time (s)	4.6	4.6	4.6		3.0	4.7
Vehicle Extension (s)	2.5	2.5	1.0		2.0	1.0
Lane Grp Cap (vph)	301	270	1539		145	2048
v/s Ratio Prot	c0.11		c0.22		c0.05	
v/s Ratio Perm		0.01				0.13
v/c Ratio	0.62	0.05	0.48		0.61	0.23
Uniform Delay, d1	32.7	29.5	15.8		37.7	8.7
Progression Factor	1.00	1.00	1.23		1.00	1.00
Incremental Delay, d2	3.4	0.1	1.1		4.8	0.3
Delay (s)	36.1	29.6	20.6		42.5	9.0
Level of Service	D	C	C		D	A
Approach Delay (s)	34.1		20.6			14.2
Approach LOS	C		C			B
Intersection Summary						
HCM 2000 Control Delay			20.6		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.46			
Actuated Cycle Length (s)			85.0		Sum of lost time (s)	14.2
Intersection Capacity Utilization			47.3%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

Intersection

Intersection Delay (sec/veh): 3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	31	263	92	73	160	19	61	1	46	20	6	25
Conflicting Peds.(#/hr)	14	0	13	13	0	14	4	0	4	4	0	4
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles(%)	2	2	2	2	2	2	2	2	2	2	2	2
Movement Flow Rate	33	280	98	78	170	20	65	1	49	21	6	27
Number of Lanes	0	2	0	0	2	0	1	1	0	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	194	0	0	382	0	0	647	749	207	551	788	113
Stage 1	-	-	-	-	-	-	399	399	-	340	340	-
Stage 2	-	-	-	-	-	-	248	350	-	211	448	-
Follow-up Headway	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Capacity-1 Maneuver	1493	-	-	1173	-	-	421	382	799	498	361	*1417
Stage 1	-	-	-	-	-	-	598	601	-	755	705	-
Stage 2	-	-	-	-	-	-	860	697	-	771	571	-
Time blocked-Platoon(%)	6	-	-	0	-	-	6	6	0	6	6	6
Mov Capacity-1 Maneuver	1476	-	-	1159	-	-	370	341	787	423	322	*1396
Mov Capacity-2 Maneuver	-	-	-	-	-	-	370	341	-	423	322	-
Stage 1	-	-	-	-	-	-	579	582	-	731	650	-
Stage 2	-	-	-	-	-	-	764	643	-	693	553	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0.7	2.5	13.8	11.5
HCM LOS	A	A	B	B

Lane	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	370	766							608
HCM Control Delay (s)	16.8	10	7.495	0.1	-	8.329	0.2	-	11.5
HCM Lane VC Ratio	0.175	0.065	0.022	-	-	0.067	-	-	0.089
HCM Lane LOS	C	B	A	A	-	A	A	-	B
HCM 95th Percentile Queue (veh)	0.628	0.209	0.069	-	-	0.215	-	-	0.293

Intersection

Intersection Delay (sec/veh): 0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Volume (vph)	28	304	233	5	4	7
Conflicting Peds.(#/hr)	26	0	0	26	14	6
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None
Storage Length	0			0	0	0
Median Width		12	12		12	
Grade (%)		0%	0%		0%	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles(%)	2	2	2	2	2	2
Movement Flow Rate	32	345	265	6	5	8
Number of Lanes	0	2	2	0	1	0

Major/Minor	Major 1		Major 2			
Conflicting Flow Rate - All	285	0	0	0	519	176
Stage 1	-	-	-	-	282	-
Stage 2	-	-	-	-	237	-
Follow-up Headway	2.22	-	-	-	3.52	3.32
Pot Capacity-1 Maneuver	1429	-	-	-	610	*1381
Stage 1	-	-	-	-	891	-
Stage 2	-	-	-	-	780	-
Time blocked-Platoon(%)	8	-	-	-	8	8
Mov Capacity-1 Maneuver	1398	-	-	-	579	*1336
Mov Capacity-2 Maneuver	-	-	-	-	579	-
Stage 1	-	-	-	-	881	-
Stage 2	-	-	-	-	749	-

Approach	EB	WB	SB
HCM Control Delay (s)	0.6	0	9
HCM LOS	A	A	A

Lane	EBL	EBT	WBT	WBR	SBLn1
Capacity (vph)					906
HCM Control Delay (s)	7.635	-	-	-	9
HCM Lane VC Ratio	0.023	-	-	-	0.014
HCM Lane LOS	A	-	-	-	A
HCM 95th Percentile Queue (veh)	0.07	-	-	-	0.042

Timings

Future Total Conditions

4: Collins Ave & W Hotel Driveway & 23rd St/23rd St (Rooney Palace)

Friday Peak Hour

Lane Group	EBL	EBT	EBR2	WBT	NBL	NBT	SBL2	SBL	SBT	SBR	NWL
Lane Configurations											
Volume (vph)	225	4	87	10	26	852	2	7	1010	195	7
Turn Type	Split	NA	Perm	NA	Perm	NA	Perm	Perm	NA	pm+ov	NA
Protected Phases	3	3		4		6			2	3	8
Permitted Phases			3		6		2	2		2	
Detector Phase	3	3	3	4	6	6	2	2	2	3	8
Switch Phase											
Minimum Initial (s)	7.0	7.0	7.0	7.0	5.0	5.0	5.0	5.0	5.0	7.0	7.0
Minimum Split (s)	22.6	22.6	22.6	26.6	26.0	26.0	26.0	26.0	26.0	22.6	11.6
Total Split (s)	27.0	27.0	27.0	27.0	54.0	54.0	54.0	54.0	54.0	27.0	12.0
Total Split (%)	22.5%	22.5%	22.5%	22.5%	45.0%	45.0%	45.0%	45.0%	45.0%	22.5%	10.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.6	0.6	0.6	0.6	1.0	1.0	1.0	1.0	1.0	0.6	0.6
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0			0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	4.6		5.0			5.0	4.6	4.6
Lead/Lag	Lead	Lead	Lead	Lag						Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes						Yes	
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min	C-Min	C-Min	None	None

Intersection Summary


















Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 83 (69%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
 Natural Cycle: 100
 Control Type: Actuated-Coordinated

Splits and Phases: 4: Collins Ave & W Hotel Driveway & 23rd St/23rd St (Rooney Palace)

2 (R)	3	4	8
54 s	27 s	27 s	12 s
6 (R)			
54 s			










HCM Signalized Intersection Capacity Analysis
 4: Collins Ave & W Hotel Driveway & 23rd St/23rd St (Rooney Palace)

Future Total Conditions
 Friday Peak Hour

												
Movement	EBL	EBT	EBR	EBR2	WBL	WBT	WBR	NBL	NBT	NBR	NBR2	SBL2
Lane Configurations												
Volume (vph)	225	4	19	87	17	10	16	26	852	4	23	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6		4.6			5.0			
Lane Util. Factor	0.95	0.91		0.95		1.00			0.95			
Frbp, ped/bikes	1.00	0.98		0.92		0.94			0.98			
Flpb, ped/bikes	1.00	1.00		1.00		1.00			1.00			
Frt	1.00	0.97		0.85		0.95			1.00			
Flt Protected	0.95	0.96		1.00		0.98			1.00			
Satd. Flow (prot)	1681	1554		1386		1623			3445			
Flt Permitted	0.95	0.96		1.00		0.98			0.86			
Satd. Flow (perm)	1681	1554		1386		1623			2983			
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	230	4	19	89	17	10	16	27	869	4	23	2
RTOR Reduction (vph)	0	3	0	67	0	0	0	0	2	0	0	0
Lane Group Flow (vph)	133	126	0	13	0	43	0	0	921	0	0	0
Confl. Peds. (#/hr)	101			34	34		101	71		269	269	269
Turn Type	Split	NA		Perm	Split	NA		Perm	NA			Perm
Protected Phases	3	3			4	4			6			
Permitted Phases				3				6				2
Actuated Green, G (s)	18.9	18.9		18.9		22.0			55.6			
Effective Green, g (s)	18.9	18.9		18.9		22.0			55.6			
Actuated g/C Ratio	0.16	0.16		0.16		0.18			0.46			
Clearance Time (s)	4.6	4.6		4.6		4.6			5.0			
Vehicle Extension (s)	2.5	2.5		2.5		2.5			1.0			
Lane Grp Cap (vph)	264	244		218		297			1382			
v/s Ratio Prot	0.08	c0.08				c0.03						
v/s Ratio Perm				0.01					0.31			
v/c Ratio	0.50	0.52		0.06		0.14			0.67			
Uniform Delay, d1	46.3	46.4		43.0		41.1			25.0			
Progression Factor	1.00	1.00		1.00		1.00			0.80			
Incremental Delay, d2	1.1	1.4		0.1		0.2			2.3			
Delay (s)	47.4	47.8		43.1		41.3			22.3			
Level of Service	D	D		D		D			C			
Approach Delay (s)		46.5				41.3			22.3			
Approach LOS		D				D			C			
Intersection Summary												
HCM 2000 Control Delay			27.4		HCM 2000 Level of Service				C			
HCM 2000 Volume to Capacity ratio			0.52									
Actuated Cycle Length (s)			120.0		Sum of lost time (s)				18.8			
Intersection Capacity Utilization			79.3%		ICU Level of Service				D			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis
 4: Collins Ave & W Hotel Driveway & 23rd St/23rd St (Rooney Palace)

Future Total Conditions
 Friday Peak Hour

						
Movement	SBL	SBT	SBR	NWL2	NWL	NWR
Lane Configurations						
Volume (vph)	7	1010	195	5	7	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	4.6		4.6	
Lane Util. Factor		0.95	1.00		1.00	
Frbp, ped/bikes		1.00	0.89		1.00	
Flpb, ped/bikes		1.00	1.00		1.00	
Frt		1.00	0.85		0.92	
Flt Protected		1.00	1.00		0.98	
Satd. Flow (prot)		3534	1405		1674	
Flt Permitted		0.95	1.00		0.98	
Satd. Flow (perm)		3342	1405		1674	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	7	1031	199	5	7	20
RTOR Reduction (vph)	0	0	75	0	0	0
Lane Group Flow (vph)	0	1040	124	0	32	0
Confl. Peds. (#/hr)	269		71		34	
Turn Type	Perm	NA	pm+ov	Split	NA	
Protected Phases		2	3	8	8	
Permitted Phases	2		2			
Actuated Green, G (s)		55.6	74.5		4.7	
Effective Green, g (s)		55.6	74.5		4.7	
Actuated g/C Ratio		0.46	0.62		0.04	
Clearance Time (s)		5.0	4.6		4.6	
Vehicle Extension (s)		1.0	2.5		2.5	
Lane Grp Cap (vph)		1548	872		65	
v/s Ratio Prot			0.02		c0.02	
v/s Ratio Perm		c0.31	0.07			
v/c Ratio		0.67	0.14		0.49	
Uniform Delay, d1		25.1	9.5		56.5	
Progression Factor		1.00	1.00		1.00	
Incremental Delay, d2		2.3	0.1		4.2	
Delay (s)		27.4	9.5		60.7	
Level of Service		C	A		E	
Approach Delay (s)		24.6			60.7	
Approach LOS		C			E	

Intersection Summary

Intersection

Intersection Delay (sec/veh): 3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	0	0	17	2	44	5	40	1	23	70	1
Conflicting Peds.(#/hr)	0	0	0	4	0	0	3	0	9	9	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles(%)	2	2	2	2	2	2	2	2	2	2	2	2
Movement Flow Rate	0	0	0	21	2	54	6	49	1	28	85	1
Number of Lanes	0	0	0	0	1	0	0	1	0	0	1	0

Major/Minor	Minor 1		Major 1			Major 2				
Conflicting Flow Rate - All		208	208	63	86	0	0	54	0	0
Stage 1		66	66	-	-	-	-	-	-	-
Stage 2		142	142	-	-	-	-	-	-	-
Follow-up Headway		3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Capacity-1 Maneuver		749	689	1002	1510	-	-	1551	-	-
Stage 1		945	840	-	-	-	-	-	-	-
Stage 2		861	779	-	-	-	-	-	-	-
Time blocked-Platoon(%)		0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver		728	671	991	1499	-	-	1539	-	-
Mov Capacity-2 Maneuver		728	671	-	-	-	-	-	-	-
Stage 1		938	834	-	-	-	-	-	-	-
Stage 2		838	764	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay (s)	9.4	0.8	1.8
HCM LOS	A	A	A

Lane	NBL	NBT	NBR	WBLn1	SBL	SBT	SBR
Capacity (vph)				891			
HCM Control Delay (s)	7.411	0	-	9.4	7.383	0	-
HCM Lane VC Ratio	0.004	-	-	0.086	0.018	-	-
HCM Lane LOS	A	A	-	A	A	A	-
HCM 95th Percentile Queue (veh)	0.012	-	-	0.282	0.056	-	-

Timings
7: Collins Ave & 22nd St

Future Total Conditions
Friday Peak Hour

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Volume (vph)	7	6	68	9	32	895	41	1022
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		8		4		6		2
Permitted Phases	8		4		6		2	
Detector Phase	8	8	4	4	6	6	2	2
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	7.0	12.0	12.0	12.0	12.0
Minimum Split (s)	23.0	23.0	23.0	23.0	21.5	21.5	21.5	21.5
Total Split (s)	23.0	23.0	23.0	23.0	97.0	97.0	97.0	97.0
Total Split (%)	19.2%	19.2%	19.2%	19.2%	80.8%	80.8%	80.8%	80.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.9	0.9	0.9	0.9	1.5	1.5	1.5	1.5
Lost Time Adjust (s)		0.0		0.0		0.0		0.0
Total Lost Time (s)		4.9		4.9		5.5		5.5
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min	C-Min

Intersection Summary

















Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 114 (95%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
 Natural Cycle: 60
 Control Type: Actuated-Coordinated

Splits and Phases: 7: Collins Ave & 22nd St

ø2 (R) 97 s	ø4 23 s
ø6 (R) 97 s	ø8 23 s











HCM 2010 Signalized Intersection Summary
 7: Collins Ave & 22nd St

Future Total Conditions
 Friday Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	7	6	15	68	9	73	32	895	25	41	1022	14
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	0.98		0.63	0.98		0.78	0.95		0.92
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Lanes	0	1	0	0	1	0	0	2	0	0	2	0
Capacity, veh/h	86	78	146	98	18	69	86	2320	64	96	2325	32
Arriving On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.76	0.76	0.76	1.00	1.00	1.00
Sat Flow, veh/h	451.5	265.6	967.6	424.4	64.6	455.6	107.5	3090.4	84.0	120.4	3136.3	41.4
Grp Volume(v), veh/h	30.4	0.0	0.0	163.0	0.0	0.0	500.1	0.0	534.6	551.9	0.0	618.8
Grp Sat Flow(s),veh/h/ln	1806.1	0.0	0.0	936.2	0.0	0.0	1545.3	0.0	1652.8	1491.1	0.0	1683.5
Q Serve(g_s), s	0.0	0.0	0.0	16.1	0.0	0.0	0.0	0.0	13.6	1.6	0.0	0.0
Cycle Q Clear(g_c), s	1.9	0.0	0.0	18.1	0.0	0.0	25.8	0.0	13.6	25.6	0.0	0.0
Proportion In Lane	0.250		0.536	0.453		0.487	0.070		0.051	0.081		0.025
Lane Grp Cap(c), veh/h	309.9	0.0	0.0	184.8	0.0	0.0	1210.4	0.0	1260.2	1169.4	0.0	1283.7
V/C Ratio(X)	0.098	0.000	0.000	0.882	0.000	0.000	0.413	0.000	0.424	0.472	0.000	0.482
Avail Cap(c_a), veh/h	309.9	0.0	0.0	184.8	0.0	0.0	1210.4	0.0	1260.2	1169.4	0.0	1283.7
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.000	0.000	0.000	1.000	0.000	0.000	1.000	0.000	1.000	0.745	0.000	0.745
Uniform Delay (d), s/veh	44.1	0.0	0.0	50.4	0.0	0.0	4.6	0.0	5.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	34.6	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	44.1	0.0	0.0	84.9	0.0	0.0	4.7	0.0	5.1	0.1	0.0	0.1
Lane Group LOS	D			F			A		A	A		A
Approach Volume, veh/h		30			163			1035			1171	
Approach Delay, s/veh		44.1			84.9			4.9			0.1	
Approach LOS		D			F			A			A	
Timer												
Assigned Phase		8			4			6			2	
Phase Duration (G+Y+Rc), s		23.00			23.00			97.00			97.00	
Change Period (Y+Rc), s		4.90			4.90			5.50			5.50	
Max Green Setting (Gmax), s		18.10			18.10			91.50			91.50	
Max Q Clear Time (g_c+I1), s		3.88			20.10			27.77			27.56	
Green Extension Time (p_c)		0.49			0.00			7.93			7.93	
Intersection Summary												
HCM 2010 Control Delay				8.5								
HCM 2010 Level of Service				A								

Timings
8: Washington Ave & Dade Blvd

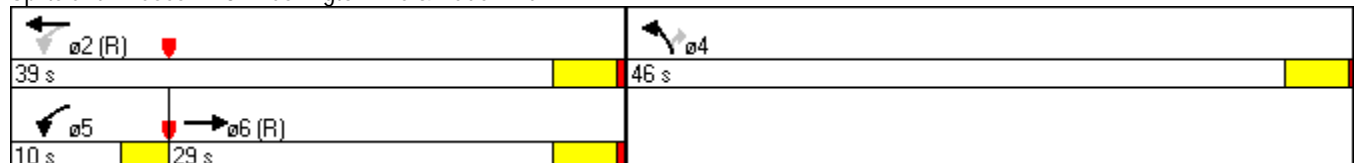
Future Total Conditions
Friday Peak Hour

					
Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations					
Volume (vph)	407	193	359	108	297
Turn Type	NA	pm+pt	NA	NA	Perm
Protected Phases	6	5	2	4	
Permitted Phases		2			4
Detector Phase	6	5	2	4	4
Switch Phase					
Minimum Initial (s)	16.0	5.0	16.0	7.0	7.0
Minimum Split (s)	20.7	8.0	20.7	24.0	24.0
Total Split (s)	29.0	10.0	39.0	46.0	46.0
Total Split (%)	34.1%	11.8%	45.9%	54.1%	54.1%
Yellow Time (s)	4.0	3.0	4.0	4.0	4.0
All-Red Time (s)	0.7	0.0	0.7	0.4	0.4
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.7	3.0	4.7	4.4	4.4
Lead/Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes			
Recall Mode	C-Min	None	C-Min	None	None

Intersection Summary












Cycle Length: 85
 Actuated Cycle Length: 85
 Offset: 53 (62%), Referenced to phase 2:WBTL and 6:EBT, Start of Green
 Natural Cycle: 55
 Control Type: Actuated-Coordinated

Splits and Phases: 8: Washington Ave & Dade Blvd



HCM 2010 Signalized Intersection Summary
8: Washington Ave & Dade Blvd

Future Total Conditions
Friday Peak Hour

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	407	122	193	359	108	297
Number	6	16	5	2	7	14
Initial Queue, veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1863	1863	1863	1863	1863	1863
Lanes	2	0	1	2	2	1
Capacity, veh/h	1269	377	592	2129	848	378
Arriving On Green	0.46	0.46	0.09	0.60	0.24	0.24
Sat Flow, veh/h	2790.8	819.6	1774.0	3632.4	3548.1	1583.3
Grp Volume(v), veh/h	284.6	266.4	201.0	374.0	112.5	309.4
Grp Sat Flow(s),veh/h/ln	1862.7	1718.1	1774.0	1769.6	1774.0	1583.3
Q Serve(g_s), s	5.6	5.7	3.0	2.7	1.4	10.5
Cycle Q Clear(g_c), s	5.6	5.7	3.0	2.7	1.4	10.5
Proportion In Lane		0.477	1.000		1.000	1.000
Lane Grp Cap(c), veh/h	856.1	789.6	592.2	2128.8	847.8	378.3
V/C Ratio(X)	0.332	0.337	0.339	0.176	0.133	0.818
Avail Cap(c_a), veh/h	856.1	789.6	651.6	2128.8	2588.3	1155.0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.950	0.950	1.000	1.000
Uniform Delay (d), s/veh	9.8	9.9	6.2	5.1	17.1	20.5
Incr Delay (d2), s/veh	0.1	0.1	0.1	0.0	0.1	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	9.9	9.9	6.4	5.1	17.1	23.8
Lane Group LOS	A	A	A	A	B	C
Approach Volume, veh/h	551			575	422	
Approach Delay, s/veh	9.9			5.5	22.0	
Approach LOS	A			A	C	
Timer						
Assigned Phase	6		5	2		
Phase Duration (G+Y+Rc), s	30.91		8.09	39.00		
Change Period (Y+Rc), s	4.70		3.00	4.70		
Max Green Setting (Gmax), s	24.30		7.00	34.30		
Max Q Clear Time (g_c+l1), s	7.66		5.03	4.68		
Green Extension Time (p_c)	2.14		0.06	2.27		
Intersection Summary						
HCM 2010 Control Delay			11.6			
HCM 2010 Level of Service			B			

Intersection

Intersection Delay (sec/veh): 0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Volume (vph)	0	4	400	0	0	314
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None
Storage Length	0	0		0	0	
Median Width	0		0			0
Grade (%)	0%		0%			0%
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles(%)	2	2	2	2	2	2
Movement Flow Rate	0	4	417	0	0	327
Number of Lanes	0	1	2	0	0	2








Major/Minor	Major 1		Major 2	
Conflicting Flow Rate - All	~	209	0	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Follow-up Headway	0	3.32	-	0
Pot Capacity-1 Maneuver	0	*1322	-	0
Stage 1	0	-	-	0
Stage 2	0	-	-	0
Time blocked-Platoon(%)	0	12	-	0
Mov Capacity-1 Maneuver	-	*1322	-	-
Mov Capacity-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay (s)	7.7	0	0
HCM LOS	A	A	A

Lane	NBT	WBLn1	SBT
Capacity (vph)		*1322	
HCM Control Delay (s)	-	7.7	-
HCM Lane VC Ratio	-	0.003	-
HCM Lane LOS	-	A	-
HCM 95th Percentile Queue (veh)	-	0.009	-

Timings
10: Washington Ave & 21st ST




Future Total Conditions
Friday Peak Hour

				
Lane Group	WBL	NBT	SBL	SBT
Lane Configurations				
Volume (vph)	42	368	32	287
Turn Type	NA	NA	Perm	NA
Protected Phases	4	6		2
Permitted Phases			2	
Detector Phase	4	6	2	2
Switch Phase				
Minimum Initial (s)	7.0	7.0	7.0	7.0
Minimum Split (s)	27.5	31.7	31.7	31.7
Total Split (s)	27.5	52.5	52.5	52.5
Total Split (%)	34.4%	65.6%	65.6%	65.6%
Yellow Time (s)	4.0	4.0	4.0	4.0
All-Red Time (s)	0.5	0.7	0.7	0.7
Lost Time Adjust (s)	0.0	0.0		0.0
Total Lost Time (s)	4.5	4.7		4.7
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	None	C-Min	C-Min	C-Min

Intersection Summary











Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 47 (59%), Referenced to phase 2:SBTL and 6:NBT, Start of Green
 Natural Cycle: 60
 Control Type: Actuated-Coordinated

Splits and Phases: 10: Washington Ave & 21st ST

 $\phi 2$ (R)	 $\phi 4$
52.5 s	27.5 s
 $\phi 6$ (R)	
52.5 s	

HCM 2010 Signalized Intersection Summary
 10: Washington Ave & 21st ST

Future Total Conditions
 Friday Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	42	33	368	27	32	287
Number	7	14	6	16	5	2
Initial Queue, veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		0.99	1.00	
Parking, Bus Adj	1.00	0.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1863	1863	1863	1863	1863	1863
Lanes	1	0	2	0	0	2
Capacity, veh/h	0	0	3122	228	291	2591
Arriving On Green	0.00	0.00	0.91	0.91	0.91	0.91
Sat Flow, veh/h	0.0		3433.0	250.5	290.0	2909.6
Grp Volume(v), veh/h	0.0		207.5	204.0	158.5	173.8
Grp Sat Flow(s),veh/h/ln	0.0		1862.7	1816.8	1379.0	1695.1
Q Serve(g_s), s	0.0		0.6	0.6	0.0	3.7
Cycle Q Clear(g_c), s	0.0		0.6	0.6	7.5	3.7
Proportion In Lane	0.000			0.138	0.210	
Lane Grp Cap(c), veh/h	0.0		1696.0	1654.1	1338.5	0.0
V/C Ratio(X)	0.000		0.122	0.123	0.118	0.000
Avail Cap(c_a), veh/h	0.0		1696.0	1654.1	1338.5	0.0
HCM Platoon Ratio	1.00		1.00	1.00	1.00	1.00
Upstream Filter(I)	0.000		1.000	1.000	1.000	1.000
Uniform Delay (d), s/veh	0.0		0.2	0.2	0.2	0.0
Incr Delay (d2), s/veh	0.0		0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0		0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	0.0		0.2	0.2	0.2	0.0
Lane Group LOS			A	A	A	
Approach Volume, veh/h	0		411			332
Approach Delay, s/veh	0.0		0.2			0.1
Approach LOS			A			A
Timer						
Assigned Phase			6			2
Phase Duration (G+Y+Rc), s			52.50			52.50
Change Period (Y+Rc), s			4.70			4.70
Max Green Setting (Gmax), s			47.80			47.80
Max Q Clear Time (g_c+I1), s			2.59			9.49
Green Extension Time (p_c)			1.64			1.64
Intersection Summary						
HCM 2010 Control Delay			0.2			
HCM 2010 Level of Service			A			

Intersection

Intersection Delay (sec/veh)	8											
Intersection LOS	A											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	18	57	6	12	31	31	2	40	12	27	69	22
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles(%)	2	2	2	2	2	2	2	2	2	2	2	2
Movement Flow Rate	21	66	7	14	36	36	2	47	14	31	80	26
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.1	7.8	7.7	8.2
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Volume Left (%)	4%	22%	16%	23%
Volume Thru (%)	74%	70%	42%	58%
Volume Right (%)	22%	7%	42%	19%
Sign Control	Stop	Stop	Stop	Stop
Traffic Volume by Lane	54	81	74	118
Left Turning Volume	40	57	31	69
Through Volume	12	6	31	22
Right Turning Volume	2	18	12	27
Lane Flow Rate	63	94	86	137
Geometry Group	1	1	1	1
Degree of Utilization, X	0.076	0.117	0.102	0.166
Departure Headway, Hd	4.368	4.48	4.274	4.347
Convergence(Y/N)	Yes	Yes	Yes	Yes
Capacity	822	802	841	827
Service Time	2.385	2.497	2.291	2.36
HCM Lane VIC Ratio	0.077	0.117	0.102	0.166
HCM Control Delay	7.7	8.1	7.8	8.2
HCM Lane LOS	A	A	A	A
HCM 95th Percentile Queue	0.2	0.4	0.3	0.6

HCM 2010 TWSC
 25: Park Ave & Parking Garage Driveway

Future Total Conditions
 Friday Peak Hour

Intersection

Intersection Delay (sec/veh): 2.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Volume (vph)	17	21	90	33	59	116
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None
Storage Length	0	0		0	0	
Median Width	12		0			0
Grade (%)	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles(%)	2	2	2	2	2	2
Movement Flow Rate	18	23	98	36	64	126
Number of Lanes	1	0	2	0	0	1

Major/Minor			Major 1		Major 2	
Conflicting Flow Rate - All	370	67	0	0	134	0
Stage 1	116	-	-	-	-	-
Stage 2	254	-	-	-	-	-
Follow-up Headway	3.52	3.32	-	-	2.22	-
Pot Capacity-1 Maneuver	603	983	-	-	1448	-
Stage 1	896	-	-	-	-	-
Stage 2	765	-	-	-	-	-
Time blocked-Platoon(%)	0	0	-	-	0	-
Mov Capacity-1 Maneuver	574	983	-	-	1448	-
Mov Capacity-2 Maneuver	574	-	-	-	-	-
Stage 1	896	-	-	-	-	-
Stage 2	728	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay (s)	10.1	0	2.6
HCM LOS	B	A	A

Lane	NBT	NBR	WBLn1	SBL	SBT
Capacity (vph)			745		
HCM Control Delay (s)	-	-	10.1	7.601	-
HCM Lane VC Ratio	-	-	0.055	0.044	-
HCM Lane LOS	-	-	B	A	-
HCM 95th Percentile Queue (veh)	-	-	0.176	0.139	-

APPENDIX I:
Northbound Right-Turn Only at
Park Avenue and 23rd Street

Volume Development

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: 23rd Street and Dade Boulevard
COUNT DATE: August 3, 2012
TIME PERIOD: Friday Peak Period
PEAK HOUR FACTOR: 0.89

"EXISTING TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements							150		63			405	263		60	361	
Peak Season Correction Factor		1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070
EXISTING CONDITIONS							161		67			433	281		64	386	
"BACKGROUND TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Parc Place												16				25	
SLS Hotel												1				2	
Liberty Avenue Closure																	
No NBLT at 23rd Street and Park Avenue							-38		-15			15					
TOTAL "VESTED" TRAFFIC							-38		-15			32	0		0	27	
Years To Buildout		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Yearly Growth Rate		0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%
BACKGROUND TRAFFIC GROWTH							5		2			15	9		2	13	
NON-PROJECT TRAFFIC							128		54			480	290		66	426	
"PROJECT DISTRIBUTION"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
LAND USE	TYPE																
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering												15.0%		14.0%		
	Exiting											15.0%					
LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New											6	14		13		
TOTAL PROJECT TRAFFIC							0		0			6	14		13	0	
TOTAL TRAFFIC							128		54			486	304		79	426	

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: 23rd Street and Park Avenue
COUNT DATE: August 3, 2012
TIME PERIOD: Friday Peak Period
PEAK HOUR FACTOR: 0.94

"EXISTING TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR		
Raw Turning Movements			28	249	48		26	150	17		42	1	24		18	6	22		
Peak Season Correction Factor		1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070		
EXISTING CONDITIONS			30	266	51		28	161	18		45	1	26		19	6	24		
"BACKGROUND TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR		
Parc Place																			
SLS Hotel																			
Liberty Avenue Closure				-12	12		12	-6			6		6						
No NBLT at 23rd Street and Park Avenue											-53	-1							
TOTAL "VESTED" TRAFFIC			0	-12	12		12	-6	0		-47	-1	6		0	0	0		
Years To Buildout		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4		
Yearly Growth Rate		0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%		
BACKGROUND TRAFFIC GROWTH			1	9	2		1	5	1		2	0	1		1	0	1		
NON-PROJECT TRAFFIC			31	263	65		41	160	19		0	0	33		20	6	25		
"PROJECT DISTRIBUTION"		LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																		
	Exiting																		
Net New Distribution	Entering				29.0%			35.0%											
	Exiting													34.0%					
"PROJECT TRAFFIC"		LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																		
	Net New				27			32							13				
TOTAL PROJECT TRAFFIC				0	0	27		32	0	0		0	0	13		0	0	0	0
TOTAL TRAFFIC			31	263	92		73	160	19		0	0	46		20	6	25		

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: 23rd Street and Liberty Avenue
COUNT DATE: August 3, 2012
TIME PERIOD: Friday Peak Period
PEAK HOUR FACTOR: 0.88

"EXISTING TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR		
Raw Turning Movements			25	258	11		11	171	5		6	0	6		4	0	7		
Peak Season Correction Factor		1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070		
EXISTING CONDITIONS			27	276	12		12	183	5		6	0	6		4	0	7		
"BACKGROUND TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR		
Parc Place																			
SLS Hotel																			
Liberty Avenue Closure				6	-12		-12	12			-6		-6						
No NBLT at 23rd Street and Park Avenue																			
TOTAL "VESTED" TRAFFIC			0	6	-12		-12	12	0		-6	0	-6		0	0	0		
Years To Buildout		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4		
Yearly Growth Rate		0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%		
BACKGROUND TRAFFIC GROWTH			1	9	0		0	6	0		0	0	0		0	0	0		
NON-PROJECT TRAFFIC			28	291	0		0	201	5		0	0	0		4	0	7		
"PROJECT DISTRIBUTION"		LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																		
	Exiting																		
Net New Distribution	Entering								35.0%										
	Exiting			34.0%															
"PROJECT TRAFFIC"		LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																		
	Net New			13					32										
TOTAL PROJECT TRAFFIC				0	13	0		0	32	0		0	0	0		0	0	0	
TOTAL TRAFFIC			28	304	0		0	233	5		0	0	0		4	0	7		

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: 23rd Street and Collins Avenue
COUNT DATE: August 3, 2012
TIME PERIOD: Friday Peak Period
PEAK HOUR FACTOR: 0.98

"EXISTING TRAFFIC"	EBL	EBT ⁽¹⁾	EBT ⁽²⁾	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR ⁽¹⁾	NBR ⁽²⁾	SBL ⁽¹⁾	SBL ⁽²⁾	SBT	SBR		
Raw Turning Movements	193	4	17	77		5	7	18	19	741	4	21	2	7	833	152		
Peak Season Correction Factor	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070		
EXISTING CONDITIONS	207	4	18	82		5	7	19	20	793	4	22	2	7	891	163		
"BACKGROUND TRAFFIC"	EBL	EBT ⁽¹⁾	EBT ⁽²⁾	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR ⁽¹⁾	NBR ⁽²⁾	SBL ⁽¹⁾	SBL ⁽²⁾	SBT	SBR		
Parc Place										15					51			
SLS Hotel										16					35			
Liberty Avenue Closure																		
No NBLT at 23rd Street and Park Avenue																		
TOTAL "VESTED" TRAFFIC	0	0	0	0		0	0	0	0	31	0	0	0	0	86	0		
Years To Buildout	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4		
Yearly Growth Rate	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%		
BACKGROUND TRAFFIC GROWTH	7	0	1	3		0	0	1	1	27	0	1	0	0	30	5		
NON-PROJECT TRAFFIC	214	4	19	85		5	7	20	21	851	4	23	2	7	1,007	168		
"PROJECT DISTRIBUTION"	LAND USE	TYPE	EBL	EBT ⁽¹⁾	EBT ⁽²⁾	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR ⁽¹⁾	NBR ⁽²⁾	SBL ⁽¹⁾	SBL ⁽²⁾	SBT	SBR
Pass-By Distribution	Entering																	
	Exiting																	
Net New Distribution	Entering										5.0%						3.0%	30.0%
	Exiting	28.0%		1.0%	5.0%							2.0%						
"PROJECT TRAFFIC"	LAND USE	TYPE	EBL	EBT ⁽¹⁾	EBT ⁽²⁾	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR ⁽¹⁾	NBR ⁽²⁾	SBL ⁽¹⁾	SBL ⁽²⁾	SBT	SBR
Project Trips	Pass - By																	
	Net New	11		0	2						5	1					3	27
TOTAL PROJECT TRAFFIC		11	0	0	2		0	0	0	5	1	0	0	0	0	0	3	27
TOTAL TRAFFIC		225	4	19	87		5	7	20	26	852	4	23	2	7	1,010	195	

Note:
 (1) Movement destined for Rooney Palace Driveway
 (2) Movement destined for W Hotel Driveway

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: Parking Garage Driveway and Park Avenue
COUNT DATE: August 3, 2012
TIME PERIOD: Friday Peak Period
PEAK HOUR FACTOR: 0.92

"EXISTING TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT ⁽¹⁾	NBR	SBU	SBL	SBT ⁽¹⁾	SBR
Raw Turning Movements												15				105	
Peak Season Correction Factor		1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070
EXISTING CONDITIONS												16				112	
"BACKGROUND TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Parc Place																	
SLS Hotel																	
Liberty Avenue Closure																	
No NBLT at 23rd Street and Park Avenue																	
TOTAL "VESTED" TRAFFIC												0				0	
Years To Buildout		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Yearly Growth Rate		0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%
BACKGROUND TRAFFIC GROWTH												1				4	
NON-PROJECT TRAFFIC												17				116	
"PROJECT DISTRIBUTION"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
LAND USE	TYPE																
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering												36.0%		64.0%		
	Exiting						66.0%		34.0%								
"PROJECT TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
LAND USE	TYPE																
Project Trips	Pass - By																
	Net New						25		13				33		59		
TOTAL PROJECT TRAFFIC							25		13			0	33		59	0	
TOTAL TRAFFIC							25		13			17	33		59	116	

Note:
 (1) Based on movements at 23rd Street and Park Avenue

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: 22nd Street and Park Avenue
COUNT DATE: August 10, 2012
TIME PERIOD: Friday Peak Period
PEAK HOUR FACTOR: 0.82

"EXISTING TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements							19	2	11		5	22	4		8	53	1
Peak Season Correction Factor		1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070
EXISTING CONDITIONS							20	2	12		5	24	4		9	57	1
"BACKGROUND TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Parc Place																	
SLS Hotel																	
Liberty Avenue Closure							-4		11			3	-3		4	4	
No NBLT at 23rd Street and Park Avenue							10	7	-17			-17				11	8
TOTAL "VESTED" TRAFFIC							6	7	-6		0	-14	-3		4	15	8
Years To Buildout		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Yearly Growth Rate		0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%
BACKGROUND TRAFFIC GROWTH							1	0	0		0	1	0		0	2	0
NON-PROJECT TRAFFIC							27	9	6		5	11	1		13	74	9
"PROJECT DISTRIBUTION"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
LAND USE	TYPE																
Pass-By	Entering																
Distribution	Exiting																
Net New	Entering								23.0%			13.0%					
Distribution	Exiting														27.0%	24.0%	15.0%
"PROJECT TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
LAND USE	TYPE																
Project	Pass - By																
Trips	Net New								21			12			10	9	6
TOTAL PROJECT TRAFFIC							0	0	21		0	12	0		10	9	6
TOTAL TRAFFIC							27	9	27		5	23	1		23	83	15

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: 22nd Street and Liberty Avenue
COUNT DATE: August 10, 2012
TIME PERIOD: Friday Peak Period
PEAK HOUR FACTOR: 0.82

"EXISTING TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements			3	12				28	10						4		4
Peak Season Correction Factor		1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070
EXISTING CONDITIONS			3	13				30	11						4		4
"BACKGROUND TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Parc Place																	
SLS Hotel																	
Liberty Avenue Closure			-3	4				11	-11						-4		-4
No NBLT at 23rd Street and Park Avenue																	
TOTAL "VESTED" TRAFFIC			-3	4				11	-11						-4		-4
Years To Buildout		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Yearly Growth Rate		0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%
BACKGROUND TRAFFIC GROWTH			0	0				1	0						0		0
NON-PROJECT TRAFFIC			0	17				42	0						0		0
"PROJECT DISTRIBUTION"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By	Entering																
Distribution	Exiting																
Net New	Entering							23.0%									
Distribution	Exiting			27.0%													
"PROJECT TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project	Pass - By																
Trips	Net New			10				21									
TOTAL PROJECT TRAFFIC			0	10				21	0						0		0
TOTAL TRAFFIC			0	27				63	0						0		0

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: 22nd Street and Collins Avenue
COUNT DATE: August 10, 2012
TIME PERIOD: Friday Peak Period
PEAK HOUR FACTOR: 0.92

"EXISTING TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR			
Raw Turning Movements			6	6	6		62	8	66		13	777	22		37	845	10			
Peak Season Correction Factor		1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070			
EXISTING CONDITIONS			6	6	6		66	9	71		14	831	24		40	904	11			
"BACKGROUND TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR			
Parc Place												15				51				
SLS Hotel												16				35				
Liberty Avenue Closure																				
No NBLT at 23rd Street and Park Avenue																				
TOTAL "VESTED" TRAFFIC			0	0	0		0	0	0		0	31	0		0	86	0			
Years To Buildout		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4			
Yearly Growth Rate		0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%			
BACKGROUND TRAFFIC GROWTH			0	0	0		2	0	2		0	28	1		1	30	0			
NON-PROJECT TRAFFIC			6	6	6		68	9	73		14	890	25		41	1,020	11			
"PROJECT DISTRIBUTION"		LAND USE	TYPE		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																			
	Exiting																			
Net New Distribution	Entering												20.0%	5.0%						3.0%
	Exiting		2.0%		25.0%														5.0%	
"PROJECT TRAFFIC"		LAND USE	TYPE		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																			
	Net New		1		9									18	5				2	3
TOTAL PROJECT TRAFFIC			1	0	9		0	0	0				18	5	0		0	2	3	
TOTAL TRAFFIC			7	6	15		68	9	73				32	895	25		41	1,022	14	

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: Washington Avenue and Dade Boulevard
COUNT DATE: August 10, 2012
TIME PERIOD: Friday Peak Period
PEAK HOUR FACTOR: 0.96

"EXISTING TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements				355	85		150	322			79		253				
Peak Season Correction Factor		1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070
EXISTING CONDITIONS				380	91		161	345			85		271				
"BACKGROUND TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Parc Place					25		25				16		16				
SLS Hotel					3		2				1		1				
Liberty Avenue Closure																	
No NBLT at 23rd Street and Park Avenue											38		15				
TOTAL "VESTED" TRAFFIC				0	28		27	0			55		32				
Years To Buildout		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Yearly Growth Rate		0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%
BACKGROUND TRAFFIC GROWTH				13	3		5	12			3		9				
NON-PROJECT TRAFFIC				393	122		193	357			143		312				
"PROJECT DISTRIBUTION"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
LAND USE	TYPE																
Pass-By	Entering																
Distribution	Exiting																
Net New	Entering			15.0%													
Distribution	Exiting										13.0%		15.0%				
"PROJECT TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
LAND USE	TYPE																
Project	Pass - By																
Trips	Net New			14							5		6				
TOTAL PROJECT TRAFFIC				14	0		0	0			5		6				
TOTAL TRAFFIC				407	122		193	357			148		318				

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: Washington Avenue and Washington Court
COUNT DATE: August 10, 2012
TIME PERIOD: Friday Peak Period
PEAK HOUR FACTOR: 0.96

"EXISTING TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements									4			328				235	
Peak Season Correction Factor		1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070
EXISTING CONDITIONS									4			351				251	
"BACKGROUND TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Parc Place												32				50	
SLS Hotel												2				5	
Liberty Avenue Closure																	
No NBLT at 23rd Street and Park Avenue									15			38					
TOTAL "VESTED" TRAFFIC									15			72				55	
Years To Buildout		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Yearly Growth Rate		0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%
BACKGROUND TRAFFIC GROWTH									0			12				8	
NON-PROJECT TRAFFIC									19			435				314	
"PROJECT DISTRIBUTION"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
LAND USE	TYPE																
Pass-By	Entering																
Distribution	Exiting																
Net New	Entering																
Distribution	Exiting								15.0%			13.0%					
"PROJECT TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
LAND USE	TYPE																
Project	Pass - By																
Trips	Net New								6			5					
TOTAL PROJECT TRAFFIC									6			5				0	
TOTAL TRAFFIC									25			440				314	

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: 21st Street and Washington Avenue
COUNT DATE: August 10, 2012
TIME PERIOD: Friday Peak Period
PEAK HOUR FACTOR: 0.96

"EXISTING TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements							38		19			310	24		15	223	
Peak Season Correction Factor		1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070
EXISTING CONDITIONS							41		20			332	26		16	239	
"BACKGROUND TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Parc Place									8			24			15	35	
SLS Hotel									1			1				5	
Liberty Avenue Closure																	
No NBLT at 23rd Street and Park Avenue									38								
TOTAL "VESTED" TRAFFIC							0		47			25	0		15	40	
Years To Buildout		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Yearly Growth Rate		0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%
BACKGROUND TRAFFIC GROWTH							1		1			11	1		1	8	
NON-PROJECT TRAFFIC							42		68			368	27		32	287	
"PROJECT DISTRIBUTION"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
LAND USE	TYPE																
Pass-By	Entering																
Distribution	Exiting																
Net New	Entering																
Distribution	Exiting								13.0%								
"PROJECT TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
LAND USE	TYPE																
Project	Pass - By																
Trips	Net New								5								
TOTAL PROJECT TRAFFIC							0		5			0	0		0	0	
TOTAL TRAFFIC							42		73			368	27		32	287	

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: 21st Street and Park Avenue
COUNT DATE: August 3, 2012
TIME PERIOD: Friday Peak Period
PEAK HOUR FACTOR: 0.86

"EXISTING TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR		
Raw Turning Movements			16	38	6		11	21	28		1	25	11		24	59	17		
Peak Season Correction Factor		1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070		
EXISTING CONDITIONS			17	41	6		12	22	30		1	27	12		26	63	18		
"BACKGROUND TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR		
Parc Place				15				8											
SLS Hotel											1								
Liberty Avenue Closure																			
No NBLT at 23rd Street and Park Avenue											17	-17					21		
TOTAL "VESTED" TRAFFIC			0	15	0		0	8	0		18	-17	0		0	0	21		
Years To Buildout		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4		
Yearly Growth Rate		0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%		
BACKGROUND TRAFFIC GROWTH			1	1	0		0	1	1		0	1	0		1	2	1		
NON-PROJECT TRAFFIC			18	57	6		12	31	31		19	11	12		27	65	40		
"PROJECT DISTRIBUTION"		LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																		
	Exiting																		
Net New Distribution	Entering												13.0%						
	Exiting																	11.0%	13.0%
"PROJECT TRAFFIC"		LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																		
	Net New													12				4	5
TOTAL PROJECT TRAFFIC				0	0	0		0	0	0		0	12	0		0	4	5	
TOTAL TRAFFIC			18	57	6		12	31	31		19	23	12		27	69	45		

Timings
1: Dade Blvd & 23rd ST

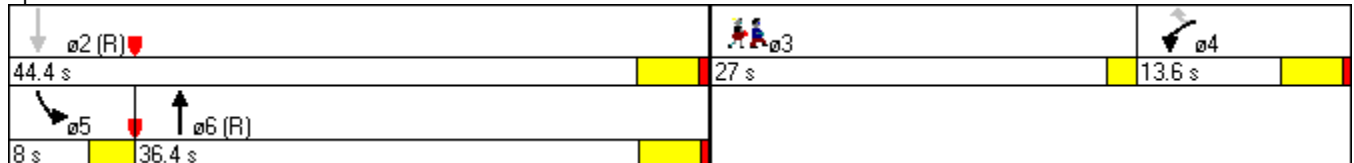
Future Total Conditions - NB RT Only at 23rd Street
Friday Peak Hour

Lane Group	WBL	WBR	NBT	SBL	SBT	ø3
Lane Configurations						
Volume (vph)	128	54	486	79	426	
Turn Type	NA	Perm	NA	Prot	NA	
Protected Phases	4		6	5		3
Permitted Phases		4			2	
Detector Phase	4	4	6	5	2	
Switch Phase						
Minimum Initial (s)	7.0	7.0	16.0	5.0	16.0	1.0
Minimum Split (s)	13.6	13.6	20.6	8.0	29.7	27.0
Total Split (s)	13.6	13.6	36.4	8.0	44.4	27.0
Total Split (%)	16.0%	16.0%	42.8%	9.4%	52.2%	32%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0	2.0
All-Red Time (s)	0.6	0.6	0.6	0.0	0.7	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.6	4.6	4.6	3.0	4.7	
Lead/Lag	Lag	Lag	Lag	Lead		Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		Yes
Recall Mode	None	None	C-Min	None	C-Min	None

Intersection Summary














Cycle Length: 85
 Actuated Cycle Length: 85
 Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green
 Natural Cycle: 75
 Control Type: Actuated-Coordinated

Splits and Phases: 1: Dade Blvd & 23rd ST



HCM Signalized Intersection Capacity Analysis
 1: Dade Blvd & 23rd ST

Future Total Conditions - NB RT Only at 23rd Street
 Friday Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			 			 
Volume (vph)	128	54	486	304	79	426
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		3.0	4.7
Lane Util. Factor	1.00	1.00	0.95		1.00	0.95
Frbp, ped/bikes	1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	0.94		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	3335		1770	3539
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	1583	3335		1770	3539
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	142	60	540	338	88	473
RTOR Reduction (vph)	0	52	92	0	0	0
Lane Group Flow (vph)	142	8	786	0	88	473
Confl. Peds. (#/hr)	13				7	
Turn Type	NA	Perm	NA		Prot	NA
Protected Phases	4		6		5	
Permitted Phases		4				2
Actuated Green, G (s)	11.0	11.0	42.7		7.1	52.7
Effective Green, g (s)	11.0	11.0	42.7		7.1	52.7
Actuated g/C Ratio	0.13	0.13	0.50		0.08	0.62
Clearance Time (s)	4.6	4.6	4.6		3.0	4.7
Vehicle Extension (s)	2.5	2.5	1.0		2.0	1.0
Lane Grp Cap (vph)	229	204	1675		147	2194
v/s Ratio Prot	c0.08		c0.24		c0.05	
v/s Ratio Perm		0.00				0.13
v/c Ratio	0.62	0.04	0.47		0.60	0.22
Uniform Delay, d1	35.0	32.4	13.8		37.6	7.1
Progression Factor	1.00	1.00	1.21		1.00	1.00
Incremental Delay, d2	4.5	0.1	0.9		4.3	0.2
Delay (s)	39.5	32.4	17.6		41.9	7.3
Level of Service	D	C	B		D	A
Approach Delay (s)	37.4		17.6			12.7
Approach LOS	D		B			B
Intersection Summary						
HCM 2000 Control Delay			18.4		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.44			
Actuated Cycle Length (s)			85.0		Sum of lost time (s)	14.2
Intersection Capacity Utilization			45.6%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

Intersection

Intersection Delay (sec/veh): 2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	31	263	92	73	160	19	0	0	46	20	6	25
Conflicting Peds.(#/hr)	14	0	13	13	0	14	0	0	4	4	0	4
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles(%)	2	2	2	2	2	2	2	2	2	2	2	2
Movement Flow Rate	33	280	98	78	170	20	0	0	49	21	6	27
Number of Lanes	0	2	0	0	2	0	0	0	1	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	194	0	0	382	0	0	~	~	207	550	788	113
Stage 1	-	-	-	-	-	-	-	-	-	340	340	-
Stage 2	-	-	-	-	-	-	-	-	-	210	448	-
Follow-up Headway	2.22	-	-	2.22	-	-	0	0	3.32	3.52	4.02	3.32
Pot Capacity-1 Maneuver	1493	-	-	1173	-	-	0	0	799	499	361	*1417
Stage 1	-	-	-	-	-	-	0	0	-	755	705	-
Stage 2	-	-	-	-	-	-	0	0	-	773	571	-
Time blocked-Platoon(%)	6	-	-	0	-	-	0	0	0	6	6	6
Mov Capacity-1 Maneuver	1476	-	-	1159	-	-	0	-	787	425	322	*1396
Mov Capacity-2 Maneuver	-	-	-	-	-	-	0	-	-	425	322	-
Stage 1	-	-	-	-	-	-	0	-	-	731	650	-
Stage 2	-	-	-	-	-	-	0	-	-	696	553	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0.7	2.5	9.9	11.5
HCM LOS	A	A	A	B

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	787							610
HCM Control Delay (s)	9.9	7.495	0.1	-	8.329	0.2	-	11.5
HCM Lane VC Ratio	0.062	0.022	-	-	0.067	-	-	0.089
HCM Lane LOS	A	A	A	-	A	A	-	B
HCM 95th Percentile Queue (veh)	0.198	0.069	-	-	0.215	-	-	0.292

Intersection

Intersection Delay (sec/veh): 3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	0	0	27	9	27	5	23	1	23	83	15
Conflicting Peds.(#/hr)	0	0	0	4	0	0	3	0	9	9	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles(%)	2	2	2	2	2	2	2	2	2	2	2	2
Movement Flow Rate	0	0	0	33	11	33	6	28	1	28	101	18
Number of Lanes	0	0	0	0	1	0	0	1	0	0	1	0

Major/Minor	Minor 1		Major 1		Major 2				
Conflicting Flow Rate - All	211	220	42	119	0	0	33	0	0
Stage 1	45	45	-	-	-	-	-	-	-
Stage 2	166	175	-	-	-	-	-	-	-
Follow-up Headway	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Capacity-1 Maneuver	746	679	1029	1469	-	-	1579	-	-
Stage 1	969	858	-	-	-	-	-	-	-
Stage 2	836	754	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	725	661	1018	1458	-	-	1567	-	-
Mov Capacity-2 Maneuver	725	661	-	-	-	-	-	-	-
Stage 1	962	852	-	-	-	-	-	-	-
Stage 2	814	740	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay (s)	9.9	1.3	1.4
HCM LOS	A	A	A

Lane	NBL	NBT	NBR	WBLn1	SBL	SBT	SBR
Capacity (vph)				814			
HCM Control Delay (s)	7.48	0	-	9.9	7.339	0	-
HCM Lane VC Ratio	0.004	-	-	0.094	0.018	-	-
HCM Lane LOS	A	A	-	A	A	A	-
HCM 95th Percentile Queue (veh)	0.013	-	-	0.312	0.055	-	-

Timings
8: Washington Ave & Dade Blvd

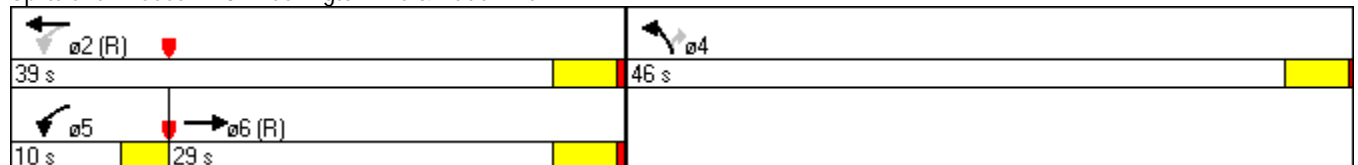
Future Total Conditions - NB RT Only at 23rd Street
Friday Peak Hour

	→	↙	←	↘	↗
Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↙	↑↑	↘↘	↗
Volume (vph)	407	193	357	148	318
Turn Type	NA	pm+pt	NA	NA	Perm
Protected Phases	6	5	2	4	
Permitted Phases		2			4
Detector Phase	6	5	2	4	4
Switch Phase					
Minimum Initial (s)	16.0	5.0	16.0	7.0	7.0
Minimum Split (s)	20.7	8.0	20.7	24.0	24.0
Total Split (s)	29.0	10.0	39.0	46.0	46.0
Total Split (%)	34.1%	11.8%	45.9%	54.1%	54.1%
Yellow Time (s)	4.0	3.0	4.0	4.0	4.0
All-Red Time (s)	0.7	0.0	0.7	0.4	0.4
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.7	3.0	4.7	4.4	4.4
Lead/Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes			
Recall Mode	C-Min	None	C-Min	None	None

Intersection Summary












Cycle Length: 85
 Actuated Cycle Length: 85
 Offset: 53 (62%), Referenced to phase 2:WBTL and 6:EBT, Start of Green
 Natural Cycle: 55
 Control Type: Actuated-Coordinated

Splits and Phases: 8: Washington Ave & Dade Blvd



HCM 2010 Signalized Intersection Summary
8: Washington Ave & Dade Blvd

Future Total Conditions - NB RT Only at 23rd Street
Friday Peak Hour

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	407	122	193	357	148	318
Number	6	16	5	2	7	14
Initial Queue, veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1863	1863	1863	1863	1863	1863
Lanes	2	0	1	2	2	1
Capacity, veh/h	1238	367	579	2087	900	402
Arriving On Green	0.45	0.45	0.09	0.59	0.25	0.25
Sat Flow, veh/h	2790.8	819.6	1774.0	3632.4	3548.1	1583.3
Grp Volume(v), veh/h	284.6	266.4	201.0	371.9	154.2	331.3
Grp Sat Flow(s),veh/h/ln	1862.7	1718.1	1774.0	1769.6	1774.0	1583.3
Q Serve(g_s), s	5.8	5.9	3.2	2.8	2.0	11.5
Cycle Q Clear(g_c), s	5.8	5.9	3.2	2.8	2.0	11.5
Proportion In Lane		0.477	1.000		1.000	1.000
Lane Grp Cap(c), veh/h	834.9	770.1	579.4	2087.3	900.4	401.8
V/C Ratio(X)	0.341	0.346	0.347	0.178	0.171	0.824
Avail Cap(c_a), veh/h	834.9	770.1	633.4	2087.3	2537.9	1132.5
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.962	0.962	1.000	1.000
Uniform Delay (d), s/veh	10.5	10.5	6.7	5.5	16.9	20.5
Incr Delay (d2), s/veh	0.1	0.1	0.1	0.0	0.1	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	10.5	10.6	6.8	5.5	17.0	23.7
Lane Group LOS	B	B	A	A	B	C
Approach Volume, veh/h	551			573	485	
Approach Delay, s/veh	10.6			6.0	21.6	
Approach LOS	B			A	C	
Timer						
Assigned Phase	6		5	2		
Phase Duration (G+Y+Rc), s	30.77		8.23	39.00		
Change Period (Y+Rc), s	4.70		3.00	4.70		
Max Green Setting (Gmax), s	24.30		7.00	34.30		
Max Q Clear Time (g_c+I1), s	7.89		5.18	4.80		
Green Extension Time (p_c)	2.13		0.06	2.27		
Intersection Summary						
HCM 2010 Control Delay			12.2			
HCM 2010 Level of Service			B			

Intersection

Intersection Delay (sec/veh): 0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Volume (vph)	0	25	440	0	0	314
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None
Storage Length	0	0		0	0	
Median Width	0		0			0
Grade (%)	0%		0%			0%
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles(%)	2	2	2	2	2	2
Movement Flow Rate	0	26	458	0	0	327
Number of Lanes	0	1	2	0	0	2








Major/Minor			Major 1			Major 2
Conflicting Flow Rate - All	~	229	0	-	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Follow-up Headway	0	3.32	-	0	0	-
Pot Capacity-1 Maneuver	0	*1268	-	0	0	-
Stage 1	0	-	-	0	0	-
Stage 2	0	-	-	0	0	-
Time blocked-Platoon(%)	0	15	-	0	0	-
Mov Capacity-1 Maneuver	-	*1268	-	-	-	-
Mov Capacity-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB		NB		SB
HCM Control Delay (s)	7.9		0		0
HCM LOS	A		A		A

Lane	NBT	WBLn1	SBT
Capacity (vph)		*1268	
HCM Control Delay (s)	-	7.9	-
HCM Lane VC Ratio	-	0.021	-
HCM Lane LOS	-	A	-
HCM 95th Percentile Queue (veh)	-	0.063	-

Timings
10: Washington Ave & 21st ST




Future Total Conditions - NB RT Only at 23rd Street
Friday Peak Hour










				
Lane Group	WBL	NBT	SBL	SBT
Lane Configurations				
Volume (vph)	42	368	32	287
Turn Type	NA	NA	Perm	NA
Protected Phases	4	6		2
Permitted Phases			2	
Detector Phase	4	6	2	2
Switch Phase				
Minimum Initial (s)	7.0	7.0	7.0	7.0
Minimum Split (s)	27.5	31.7	31.7	31.7
Total Split (s)	27.5	52.5	52.5	52.5
Total Split (%)	34.4%	65.6%	65.6%	65.6%
Yellow Time (s)	4.0	4.0	4.0	4.0
All-Red Time (s)	0.5	0.7	0.7	0.7
Lost Time Adjust (s)	0.0	0.0		0.0
Total Lost Time (s)	4.5	4.7		4.7
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	None	C-Min	C-Min	C-Min

Intersection Summary

Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 47 (59%), Referenced to phase 2:SBTL and 6:NBT, Start of Green
 Natural Cycle: 60
 Control Type: Actuated-Coordinated

Splits and Phases: 10: Washington Ave & 21st ST

 $\phi 2$ (R)	 $\phi 4$
52.5 s	27.5 s
 $\phi 6$ (R)	
52.5 s	

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	42	73	368	27	32	287
Number	7	14	6	16	5	2
Initial Queue, veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking, Bus Adj	1.00	0.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1863	1863	1863	1863	1863	1863
Lanes	1	0	2	0	0	2
Capacity, veh/h	0	0	3124	228	291	2592
Arriving On Green	0.00	0.00	0.91	0.91	0.91	0.91
Sat Flow, veh/h	0.0		3433.0	250.6	290.2	2909.6
Grp Volume(v), veh/h	0.0		207.4	204.1	158.6	173.7
Grp Sat Flow(s),veh/h/ln	0.0		1862.7	1818.5	1380.9	1695.1
Q Serve(g_s), s	0.0		0.6	0.6	0.0	3.7
Cycle Q Clear(g_c), s	0.0		0.6	0.6	0.4	3.7
Proportion In Lane	0.000			0.138	0.210	
Lane Grp Cap(c), veh/h	0.0		1696.0	1655.7	1340.2	0.0
V/C Ratio(X)	0.000		0.122	0.123	0.118	0.000
Avail Cap(c_a), veh/h	0.0		1696.0	1655.7	1340.2	0.0
HCM Platoon Ratio	1.00		1.00	1.00	1.00	1.00
Upstream Filter(I)	0.000		1.000	1.000	1.000	1.000
Uniform Delay (d), s/veh	0.0		0.2	0.2	0.2	0.0
Incr Delay (d2), s/veh	0.0		0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0		0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	0.0		0.2	0.2	0.2	0.0
Lane Group LOS			A	A	A	
Approach Volume, veh/h	0		411			332
Approach Delay, s/veh	0.0		0.2			0.1
Approach LOS			A			A
Timer						
Assigned Phase			6			2
Phase Duration (G+Y+Rc), s			52.50			52.50
Change Period (Y+Rc), s			4.70			4.70
Max Green Setting (Gmax), s			47.80			47.80
Max Q Clear Time (g_c+l1), s			2.59			5.69
Green Extension Time (p_c)			1.64			1.64
Intersection Summary						
HCM 2010 Control Delay			0.2			
HCM 2010 Level of Service			A			

Intersection

Intersection Delay (sec/veh)	8.1											
Intersection LOS	A											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	18	57	6	12	31	31	19	23	12	27	69	45
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles(%)	2	2	2	2	2	2	2	2	2	2	2	2
Movement Flow Rate	21	66	7	14	36	36	22	27	14	31	80	52
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.2	7.9	7.9	8.3
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Volume Left (%)	35%	22%	16%	19%
Volume Thru (%)	43%	70%	42%	49%
Volume Right (%)	22%	7%	42%	32%
Sign Control	Stop	Stop	Stop	Stop
Traffic Volume by Lane	54	81	74	141
Left Turning Volume	23	57	31	69
Through Volume	12	6	31	45
Right Turning Volume	19	18	12	27
Lane Flow Rate	63	94	86	164
Geometry Group	1	1	1	1
Degree of Utilization, X	0.078	0.119	0.104	0.194
Departure Headway, Hd	4.461	4.538	4.332	4.264
Convergence(Y/N)	Yes	Yes	Yes	Yes
Capacity	804	791	829	843
Service Time	2.482	2.557	2.352	2.282
HCM Lane V/C Ratio	0.078	0.119	0.104	0.195
HCM Control Delay	7.9	8.2	7.9	8.3
HCM Lane LOS	A	A	A	A
HCM 95th Percentile Queue	0.3	0.4	0.3	0.7

Intersection

Intersection Delay (sec/veh): 2.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Volume (vph)	25	13	90	33	59	116
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None
Storage Length	0	0		0	0	
Median Width	12		0			0
Grade (%)	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles(%)	2	2	2	2	2	2
Movement Flow Rate	27	14	98	36	64	126
Number of Lanes	1	0	2	0	0	2

Major/Minor			Major 1	Major 2		
Conflicting Flow Rate - All	307	67	0	0	134	0
Stage 1	116	-	-	-	-	-
Stage 2	191	-	-	-	-	-
Follow-up Headway	3.52	3.32	-	-	2.22	-
Pot Capacity-1 Maneuver	661	983	-	-	1448	-
Stage 1	896	-	-	-	-	-
Stage 2	822	-	-	-	-	-
Time blocked-Platoon(%)	0	0	-	-	0	-
Mov Capacity-1 Maneuver	629	983	-	-	1448	-
Mov Capacity-2 Maneuver	629	-	-	-	-	-
Stage 1	896	-	-	-	-	-
Stage 2	783	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay (s)	10.3	0	2.6
HCM LOS	B	A	A

Lane	NBT	NBR	WBLn1	SBL	SBT
Capacity (vph)			717		
HCM Control Delay (s)	-	-	10.3	7.601	-
HCM Lane VC Ratio	-	-	0.058	0.044	-
HCM Lane LOS	-	-	B	A	-
HCM 95th Percentile Queue (veh)	-	-	0.183	0.139	-

APPENDIX J:
Major Event Parking Demand
and Entry Gate Analysis

Major Event Parking Demand

**Parking Garage Turnover Rates
Based on February 2012 Data (Special Events)**

G5, G7, and G9 Parking Garages

	Entry Turnover	Exit Turnover
AVERAGE BOAT SHOW EVENT	25.83%	8.69%
AVERAGE FOOD & WINE FEST. EVENT	16.27%	7.33%
AVERAGE BOAT SHOW PEAK DAY	44.76%	1.67%
AVERAGE FOOD & WINE PEAK DAY	24.56%	9.47%

G5 - 17th Street & Pennsylvania Ave - Parking Garage February 2012 Data (Special Events)

Date	Day	Enter	Exit	Total	Peak Hour	Spaces	Entry Turnover	Exit Turnover
2/15/2012	Wednesday	248	229	477	14:00	1460	16.99%	15.68%
2/16/2012	Thursday	93	461	554	18:00	1460	6.37%	31.58%
2/17/2012	Friday	920	39	959	11:00	1460	63.01%	2.67%
2/18/2012	Saturday	224	343	567	19:00	1460	15.34%	23.49%
2/19/2012	Sunday	307	336	643	18:00	1460	21.03%	23.01%
2/20/2012	Monday	246	383	629	17:00	1460	16.85%	26.23%
2/21/2012	Tuesday	267	203	470	17:00	1460	18.29%	13.90%
2/22/2012	Wednesday	147	281	428	17:00	1460	10.07%	19.25%
2/23/2012	Thursday	235	258	493	18:00	1460	16.10%	17.67%
2/24/2012	Friday	254	335	589	17:00	1460	17.40%	22.95%
2/25/2012	Saturday	349	306	655	18:00	1460	23.90%	20.96%
2/26/2012	Sunday	415	352	767	16:00	1460	28.42%	24.11%
2/27/2012	Monday	116	242	358	18:00	1460	7.95%	16.58%

AVERAGE BOAT SHOW EVENT (2/16 - 2/20)	358	312	670	18:00		24.52%	21.40%
AVERAGE FOOD & WINE FEST. EVENT (2/24 - 2/26)	339	331	670	#N/A		23.24%	22.67%
BOAT SHOW PEAK DAY 2/17	920	39	959	11:00		63.01%	2.67%
FOOD & WINE FEST. PEAK DAY 2/26	415	352	767	16:00		28.42%	24.11%

G7 - 18th Street & Meridian - City Hall Garage - Parking Garage February 2012 Data (Special Events)

Date	Day	Enter	Exit	Total	Peak Hour	Spaces	Entry Turnover	Exit Turnover
2/15/2012	Wednesday	7	172	179	17:00	650	1.08%	26.46%
2/16/2012	Thursday	169	14	183	8:00	650	26.00%	2.15%
2/17/2012	Friday	7	166	173	17:00	650	1.08%	25.54%
2/18/2012	Saturday	68	93	161	16:00	650	10.46%	14.31%
2/19/2012	Sunday	115	80	195	14:00	650	17.69%	12.31%
2/20/2012	Monday	72	47	119	14:00	650	11.08%	7.23%
2/21/2012	Tuesday	160	27	187	8:00	650	24.62%	4.15%
2/22/2012	Wednesday	15	155	170	17:00	650	2.31%	23.85%
2/23/2012	Thursday	152	10	162	8:00	650	23.38%	1.54%
2/24/2012	Friday	157	15	172	8:00	650	24.15%	2.31%
2/25/2012	Saturday	24	32	56	19:00	650	3.69%	4.92%
2/26/2012	Sunday	14	15	29	15:00	650	2.15%	2.31%
2/27/2012	Monday	157	18	175	8:00	650	24.15%	2.77%

AVERAGE BOAT SHOW EVENT (2/16 - 2/20)	86	80	166	14:00	13.26%	12.31%
AVERAGE FOOD & WINE FEST. EVENT (2/24 - 2/26)	65	21	86	#N/A	10.00%	3.18%
BOAT SHOW PEAK DAY 2/16	169	14	183	8:00	26.00%	2.15%
FOOD & WINE FEST. PEAK DAY 2/24	157	15	172	8:00	24.15%	2.31%

G9 - Pennsylvania Ave (17th Street)- Parking Garage February 2012 Data (Special Events)

Date	Day	Enter	Exit	Total	Peak Hour	Spaces	Entry Turnover	Exit Turnover
2/15/2012	Wednesday	10	47	57	18:00	550	1.82%	8.55%
2/16/2012	Thursday	200	9	209	10:00	550	36.36%	1.64%
2/17/2012	Friday	249	1	250	9:00	550	45.27%	0.18%
2/18/2012	Saturday	239	9	248	10:00	550	43.45%	1.64%
2/19/2012	Sunday	248	1	249	10:00	550	45.09%	0.18%
2/20/2012	Monday	156	9	165	11:00	550	28.36%	1.64%
2/21/2012	Tuesday	28	52	80	17:00	550	5.09%	9.45%
2/22/2012	Wednesday	67	3	70	9:00	550	12.18%	0.55%
2/23/2012	Thursday	62	7	69	9:00	550	11.27%	1.27%
2/24/2012	Friday	43	29	72	15:00	550	7.82%	5.27%
2/25/2012	Saturday	116	11	127	20:00	550	21.09%	2.00%
2/26/2012	Sunday	98	17	115	15:00	550	17.82%	3.09%
2/27/2012	Monday	7	50	57	18:00	550	1.27%	9.09%

AVERAGE BOAT SHOW EVENT (2/16 - 2/20)	218	6	224	10:00	39.71%	1.05%
AVERAGE FOOD & WINE FEST. EVENT (2/24 - 2/26)	86	19	105	15:00	15.58%	3.45%
BOAT SHOW PEAK DAY 2/17	249	1	250	9:00	45.27%	0.18%
FOOD & WINE FEST. PEAK DAY 2/25	116	11	127	20:00	21.09%	2.00%

Entry Gate Analysis

Collins Park Garage - 22nd Street & Park Avenue

Reference: *Parking Structures: Planning, Design, Construction, Maintenance, and Repair* (Anthony Christ, Mary S. Smith, and Sam Bhuyan, 1989, Van Nostrand Reinhold)

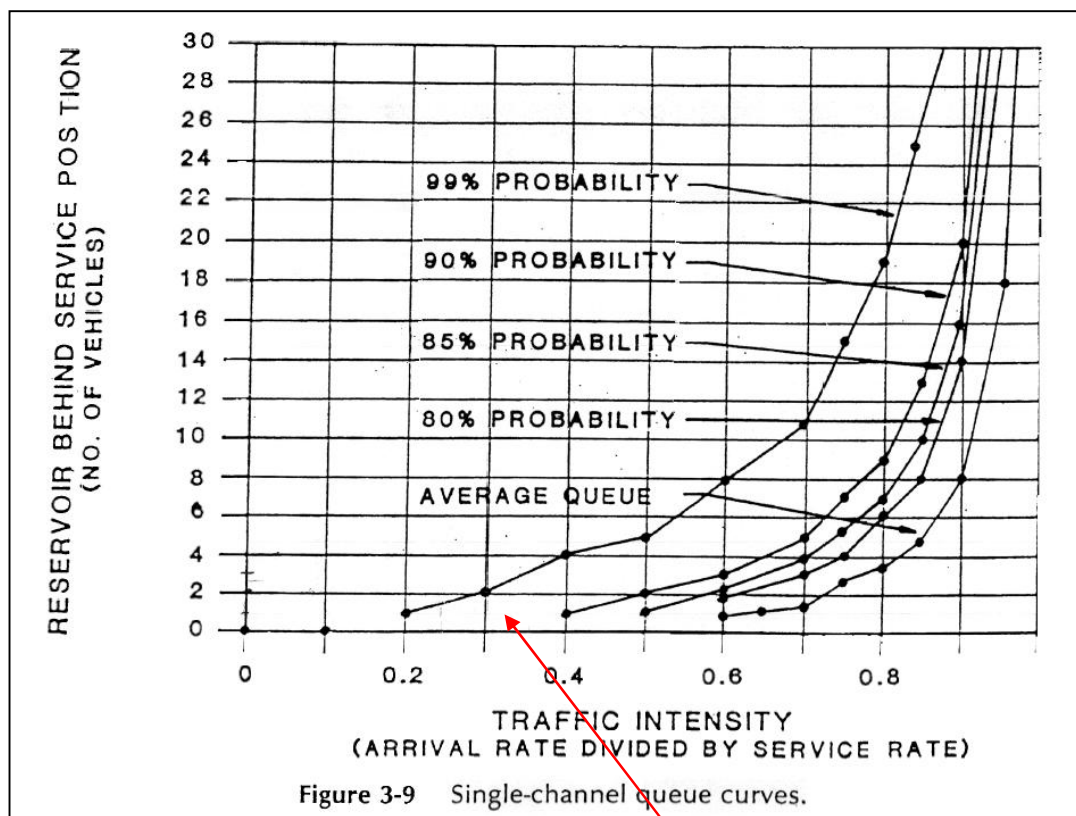
Analysis: Typical Peak Hour Parking Demand – Single-channel

Arrival Rate: $(490 \times 0.1877) = 92$ vph at access

Service Rate: 257 vph \times 1 lane = 257 vph
(based on Table 3-1: Ticket Spitter Push Button – Sharp Turn)

Traffic Intensity: $0.36 =$ Queue = 1 vehicle

Available queue storage = 1 vehicle



Intensity = 0.35
Queue = 1 vehicle

Collins Parking Garage - 22nd Street & Park Avenue

Reference: *Parking Structures: Planning, Design, Construction, Maintenance, and Repair* (Anthony Christ, Mary S. Smith, and Sam Bhuyan, 1989, Van Nostrand Reinhold)

Analysis: Major Event Peak Hour Parking Demand – Multi-channel

Arrival Rate: $(490 \times 0.6301) = 309$ vph at access

Service Rate: $257 \text{ vph} \times 2 \text{ lanes} = 514 \text{ vph}$
(based on Table 3-1: Ticket Spitter Push Button – Sharp Turn)

Traffic Intensity: $0.60 = \text{Queue} = 1 \text{ vehicle}$

Available queue storage = 1 vehicle

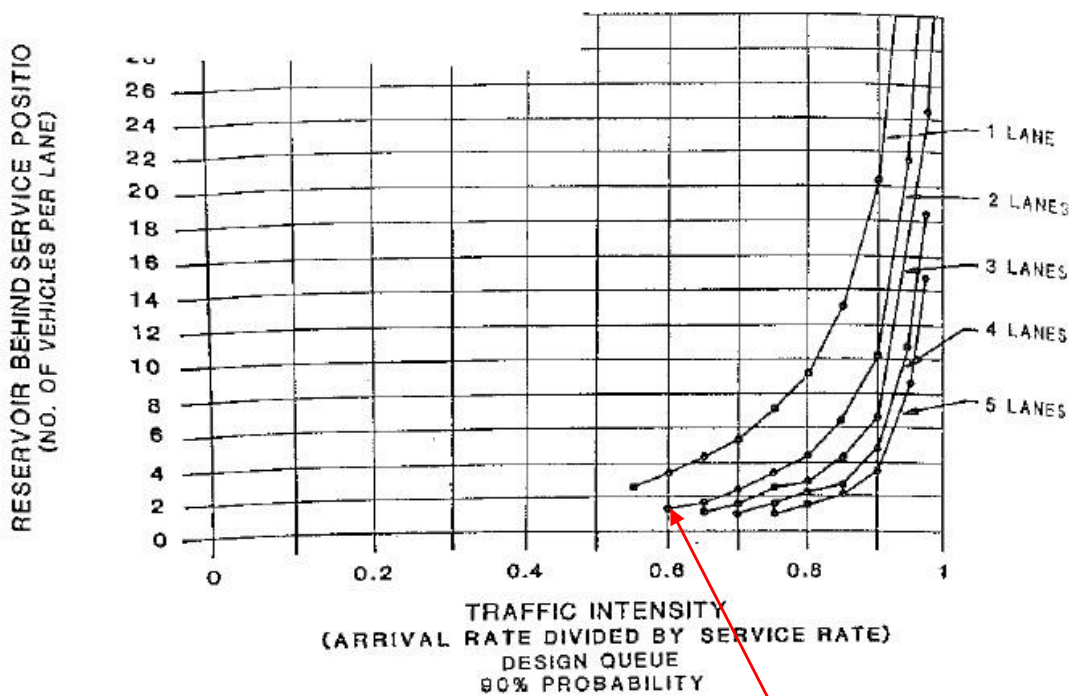
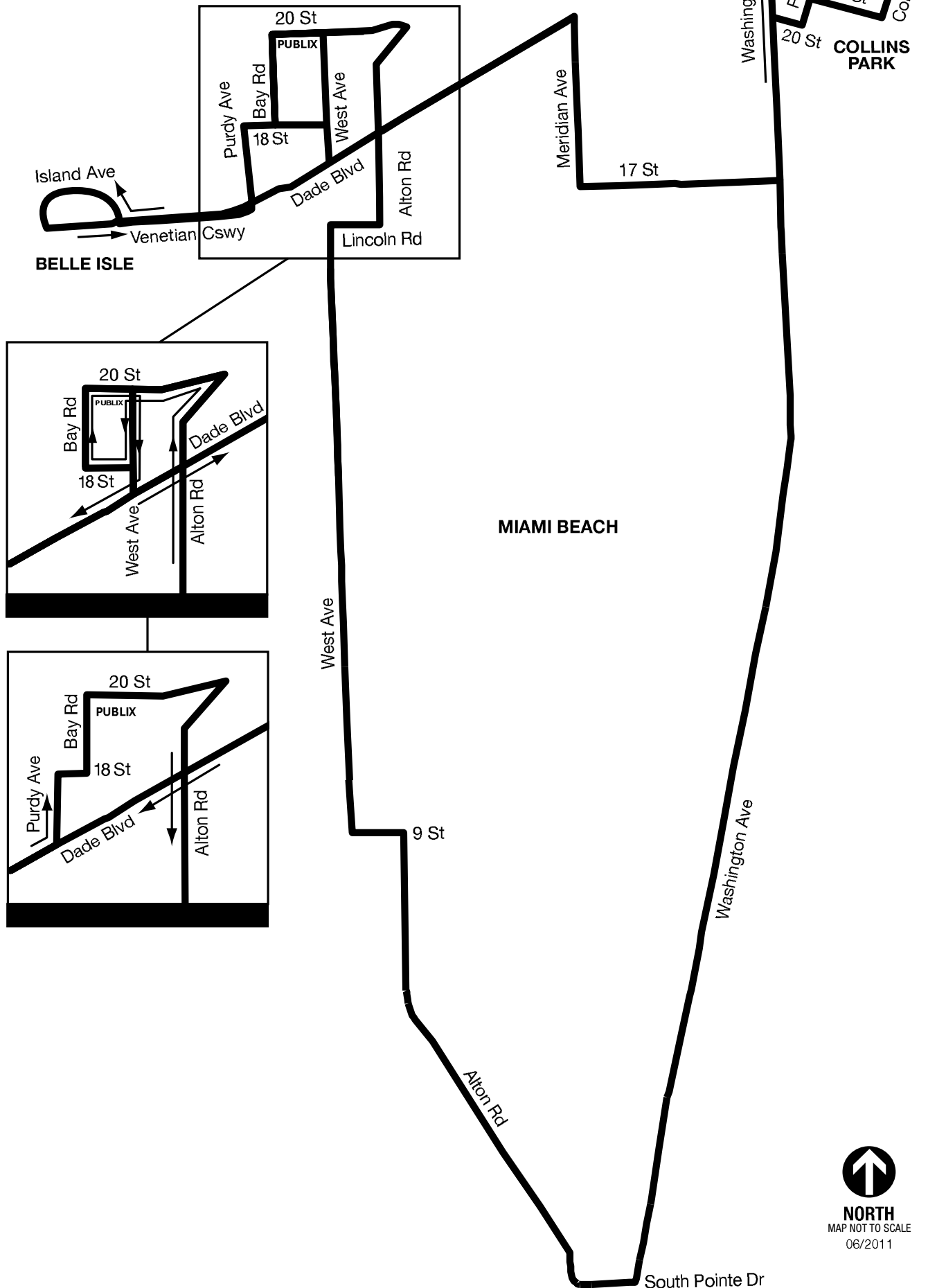


Figure 3-10. Multi-channel design queue curves.

Intensity = 0.60
Queue = 1 vehicle

APPENDIX K:
Transit Information

South Beach Local



NORTH
MAP NOT TO SCALE
06/2011

Miami-Dade County Miami-Dade Transit**Routes Schedule****Schedule**[Back to previous page \(javascript: history.go\(-1\)\)](#)**Service:** WEEKDAY**Direction:** CLOCKWISE

20 St & Alton Rd	Belle Isle	23 St & Liberty Ave	Lincoln Rd & Wash. Av	5 St & Washington Ave	1 St & Alton Rd	15 Street & West Ave	20 St & Alton Rd
07:50AM	07:53AM	08:06AM	08:12AM	08:21AM	08:25AM	08:33AM	08:39AM
08:20AM	08:24AM	08:37AM	08:43AM	08:52AM	08:56AM	09:04AM	09:10AM
08:40AM	08:44AM	08:57AM	09:03AM	09:12AM	09:16AM	09:24AM	09:30AM
09:00AM	09:04AM	09:17AM	09:23AM	09:32AM	09:36AM	09:44AM	09:50AM
09:20AM	09:24AM	09:37AM	09:43AM	09:52AM	09:56AM	10:05AM	10:12AM
09:40AM	09:44AM	09:57AM	10:04AM	10:14AM	10:18AM	10:27AM	10:34AM
10:00AM	10:04AM	10:17AM	10:24AM	10:34AM	10:38AM	10:47AM	10:54AM
10:13AM	10:17AM	10:30AM	10:37AM	10:47AM	10:51AM	11:00AM	11:07AM
10:26AM	10:30AM	10:43AM	10:50AM	11:00AM	11:04AM	11:13AM	11:20AM
10:39AM	10:43AM	10:56AM	11:03AM	11:13AM	11:17AM	11:26AM	11:33AM
10:52AM	10:56AM	11:09AM	11:16AM	11:26AM	11:30AM	11:39AM	11:46AM
11:05AM	11:09AM	11:22AM	11:29AM	11:39AM	11:43AM	11:52AM	11:59AM
11:18AM	11:22AM	11:35AM	11:42AM	11:52AM	11:56AM	12:05PM	12:12PM
11:31AM	11:35AM	11:48AM	11:55AM	12:05PM	12:09PM	12:18PM	12:25PM
11:44AM	11:48AM	12:01PM	12:08PM	12:18PM	12:22PM	12:31PM	12:38PM
11:57AM	12:01PM	12:14PM	12:21PM	12:31PM	12:35PM	12:44PM	12:51PM
12:10PM	12:14PM	12:27PM	12:34PM	12:44PM	12:48PM	12:57PM	01:04PM
12:23PM	12:27PM	12:40PM	12:47PM	12:57PM	01:01PM	01:10PM	01:17PM
12:36PM	12:40PM	12:53PM	01:00PM	01:10PM	01:14PM	01:23PM	01:30PM
12:49PM	12:53PM	01:07PM	01:14PM	01:24PM	01:28PM	01:37PM	01:44PM
01:02PM	01:06PM	01:20PM	01:27PM	01:37PM	01:41PM	01:50PM	01:57PM
01:15PM	01:19PM	01:33PM	01:40PM	01:50PM	01:54PM	02:03PM	02:10PM
01:28PM	01:32PM	01:46PM	01:53PM	02:03PM	02:07PM	02:16PM	02:23PM
01:41PM	01:45PM	01:59PM	02:06PM	02:16PM	02:20PM	02:29PM	02:36PM
01:59PM	02:03PM	02:17PM	02:24PM	02:34PM	02:38PM	02:47PM	02:54PM

02:12PM	02:16PM	02:30PM	02:37PM	02:47PM	02:51PM	03:00PM	03:07PM
02:25PM	02:29PM	02:43PM	02:50PM	03:00PM	03:04PM	03:13PM	03:20PM
02:38PM	02:42PM	02:56PM	03:03PM	03:13PM	03:17PM	03:26PM	03:33PM
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06:11PM	06:15PM	06:28PM	06:34PM	06:44PM	06:48PM	06:56PM	07:02PM
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08:10PM	08:14PM	08:26PM	08:31PM	08:42PM	08:46PM	08:54PM	08:59PM
08:30PM	08:34PM	08:46PM	08:51PM	09:02PM	09:06PM	09:14PM	09:19PM
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10:30PM	10:34PM	10:46PM	10:51PM	11:02PM	11:06PM	11:14PM	11:19PM
10:50PM	10:54PM	11:06PM	11:11PM	11:22PM	11:26PM	11:34PM	11:39PM
11:10PM	11:14PM	11:26PM	11:31PM	11:42PM	11:46PM	11:54PM	11:59PM

11:30PM	11:34PM	11:46PM	11:51PM	12:02AM	12:06AM	12:14AM	12:19AM
11:50PM	11:54PM	12:06AM	12:11AM	12:22AM	12:26AM	12:34AM	12:39AM

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