Kimley»Horn

January 9, 2020

Firat Akcay
City of Miami Beach
1700 Convention Center Drive
Miami Beach, Florida 33139

Re: 3120 Collins Avenue Redevelopment
Traffic Assessment

Dear Mr. Akcay:

Kimley-Horn and Associates, Inc. has performed a traffic assessment for the proposed redevelopment of the property located at 3120 Collins Avenue in Miami Beach, Florida. Currently, the existing site is occupied by a 102-room hotel and a restaurant with three (3) dining areas with a total of 100 seats. The proposed redevelopment includes the addition of 18 hotel rooms for a total of 120 hotel rooms. Please note that the existing 100 seats within the three (3) dining areas will remain as part of the redevelopment. Further note that the 38 seats in the interior lobby will remain as part of the redevelopment and are considered ancillary to the hotel land use and were not included in the trip generation calculations as they are not expected to generate additional external site traffic. A location map, existing development site plan, and proposed redevelopment site plan are provided in Attachment A-1. The traffic assessment consists of trip generation calculations, on-site vehicle queueing analysis, and transportation demand management strategies and is consistent with the requirements outlined by the City of Miami Beach. Methodology correspondence detailing the traffic assessment requirements are included in Attachment B-1. The following sections summarize the traffic assessment.

TRIP GENERATION

Trip generation calculations for the proposed expansion were performed using the Institute of Transportation Engineers' (ITE's) *Trip Generation Manual*, 10th Edition. The trip generation for the proposed expansion was determined using ITE Land Use Code (LUC) 310 (Hotel) and LUC 931 (Quality Restaurant). Project trips were estimated for the weekday A.M. and P.M. peak hours and Saturday peak hour of generator.

A multimodal (public transit, bicycle, and pedestrian) factor based on US Census *Means of Transportation to Work* data was reviewed for the census tract in the vicinity of the site. The US Census data indicated that there is a 31.1 percent (31.1%) multimodal factor within the vicinity of the site. However, to provide a conservative analysis, a multimodal factor of 20.0 percent (20.0%) was applied to the trip generation calculations to account for the urban environment in which the project site is located. It is expected that a portion of employees, guests, and patrons will choose to walk, bike, or use public transit to and from the site.

Table 1 summarizes the expected trip generation for the proposed redevelopment. As Table 1 indicates, the project is expected to generate eight (8) net new vehicle trips during the weekday A.M. peak hour, 10 net new vehicle trips during the weekday P.M. peak hour, and 10 net new vehicle trips during the Saturday peak hour of generator. Detailed trip generation calculations and are included in Attachment C-1.

Table 1: Trip Generation Summary									
Scenario	**A.M. Peak Hour**			**P.M. Peak Hour**			**Saturday Peak Hour of Generator**		
	In	**Out**	**Total**	**In**	**Out**	**Total**	**In**	**Out**	**Total**
Existing	22	16	36	35	25	60	47	35	82
Proposed	27	19	46	39	31	70	53	39	92
Net New Trips	**5**	**3**	**8**	**4**	**6**	**10**	**6**	**4**	**10**

ON-SITE VEHICLE QUEUING ANALYSIS

An on-site vehicle queuing analysis for the guest drop-off/pick-up area was prepared in order to determine if vehicle queues are expected to extend onto Collins Avenue. The proposed expansion will be served by the existing drop-off/pick-up area located along the west side of Collins Avenue. Please note that the existing drop-off/pick-up area provides stacking to accommodate four (4) vehicles.

To determine if sufficient vehicle storage is provided, vehicle queueing data was collected in one (1) minute intervals from 12:00 P.M. to 7:00 P.M. on December 12, 2019 (Thursday) and December 14, 2019 (Saturday). A vehicle queueing ratio was developed utilizing the vehicle queueing data and was applied to the proposed redevelopment to determine the expected vehicle queue associated with the expansion. The maximum queues recorded were three (3) vehicles on Thursday and two (2) vehicles on Saturday. Vehicle queueing data is provided in Attachment D-1. Using the recorded maximum queues, accumulation rates of 0.0294 vehicles per room on a typical Thursday and 0.0196 vehicles per room on a typical Saturday were calculated. Based on the vehicle queueing rates, the proposed expansion will result in a maximum expected queue of four (4) vehicles on a typical Thursday and three (3) vehicles on a typical Saturday. Table 2 summarizes the expected vehicle queues associated with the proposed expansion.

Table 2: Existing and Proposed Accumulation			
Scenario	Rooms	Accumulation Rate per Hour	Car Line Maximum Accumulation
Thursday Conditions (Saturday Conditions)			
Existing	102	0.0294 (0.0196)	3 (2)
Proposed	120	0.0294 (0.0196)	4 (3)

The highest demand condition vehicle queueing analysis demonstrates that the proposed development is expected to result in a vehicle queue of four (4) vehicle within the proposed drop-off/pick-up area. As the existing drop-off/pick-up area provides one (1) drop-off/pick-up lane with storage for approximately four (4) vehicle lengths, it is expected that the existing drop-off/pick-up area will be able to accommodate the vehicle queues associated with the proposed expansion.

TRANSPORTATION DEMAND MANAGEMENT STRATEGIES

Transportation Demand Management (TDM) strategies are proposed to reduce the impacts of the project traffic on the surrounding roadway network. Typical measures promote bicycling and walking,

encourage car/vanpooling and offer alternatives to the typical workday hours. Additionally, the applicant will commit to providing the following incentives including:

- Creation of an Employee Transportation Coordinator position to run the transportation demand management (TDM) programs
- Provide ten (10) short-term bicycle parking spaces (bike racks) and six (6) long-term bicycle parking spaces (secured)
- Provide transit information within the site including route schedules and maps
- Designated scooter/motorcycle parking spaces
- Provide option to purchase pre-tax transit pass to employees
- Provide bike workroom/shop
- Provide bike washing stations

Additionally, please note that a Citi Bike station with 16 bicycle docks is located along the north side of 31st Street just east of Indian Creek Drive.

CONCLUSION

The proposed redevelopment includes the addition of 18 hotel rooms for a total of 120 hotel rooms. The proposed expansion is expected to generate eight (8) net new vehicle trips during the weekday A.M. peak hour, 10 net new vehicle trips during the weekday P.M. peak hour, and 10 net new vehicle trips during the Saturday peak hour of generator. Based on the on-site vehicle queueing analysis, the existing drop-off/pick-up area is expected to accommodate the vehicle queues associated with the proposed expansion.

TDM strategies are also proposed as part of the redevelopment to reduce the impacts of the project traffic on the surrounding roadway network. The applicant will commit to appointing a coordinator to oversee TDM programs, providing secure bicycle parking, providing transit information to guests, providing designated scooter/motorcycle parking spaces, providing an option to purchase pre-tax transit passes to employees, and providing bike workrooms and washing stations.

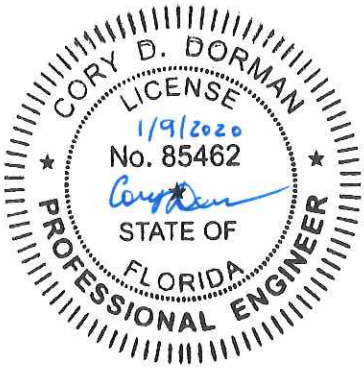
If you have any questions regarding this analysis, please feel free to contact me.

Sincerely,

KIMLEY-HORN AND ASSOCIATES, INC.

Cory D. Dorman, P.E., PTOE

Attachments

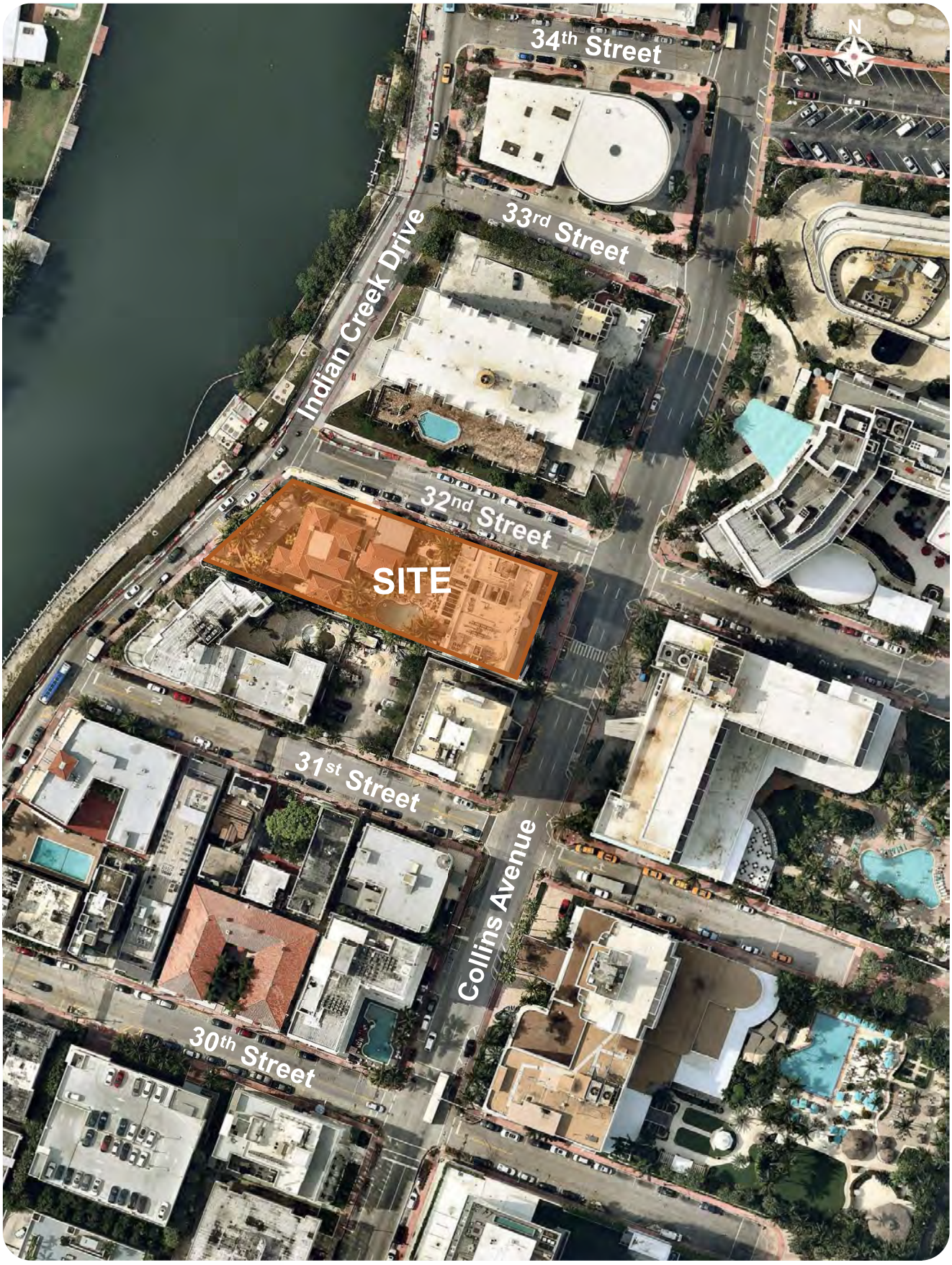


Cory D. Dorman, P.E., PTOE
Florida Registration Number 85462
Kimley-Horn and Associates, Inc.
600 North Pine Island Road, Suite 450
Plantation, Florida 33324
CA # 00000696

K:\FTL_TPTO\143153000-3120 Collins Ave\Correspondence\Letter\Traffic Assessment.docx

Attachment A-1

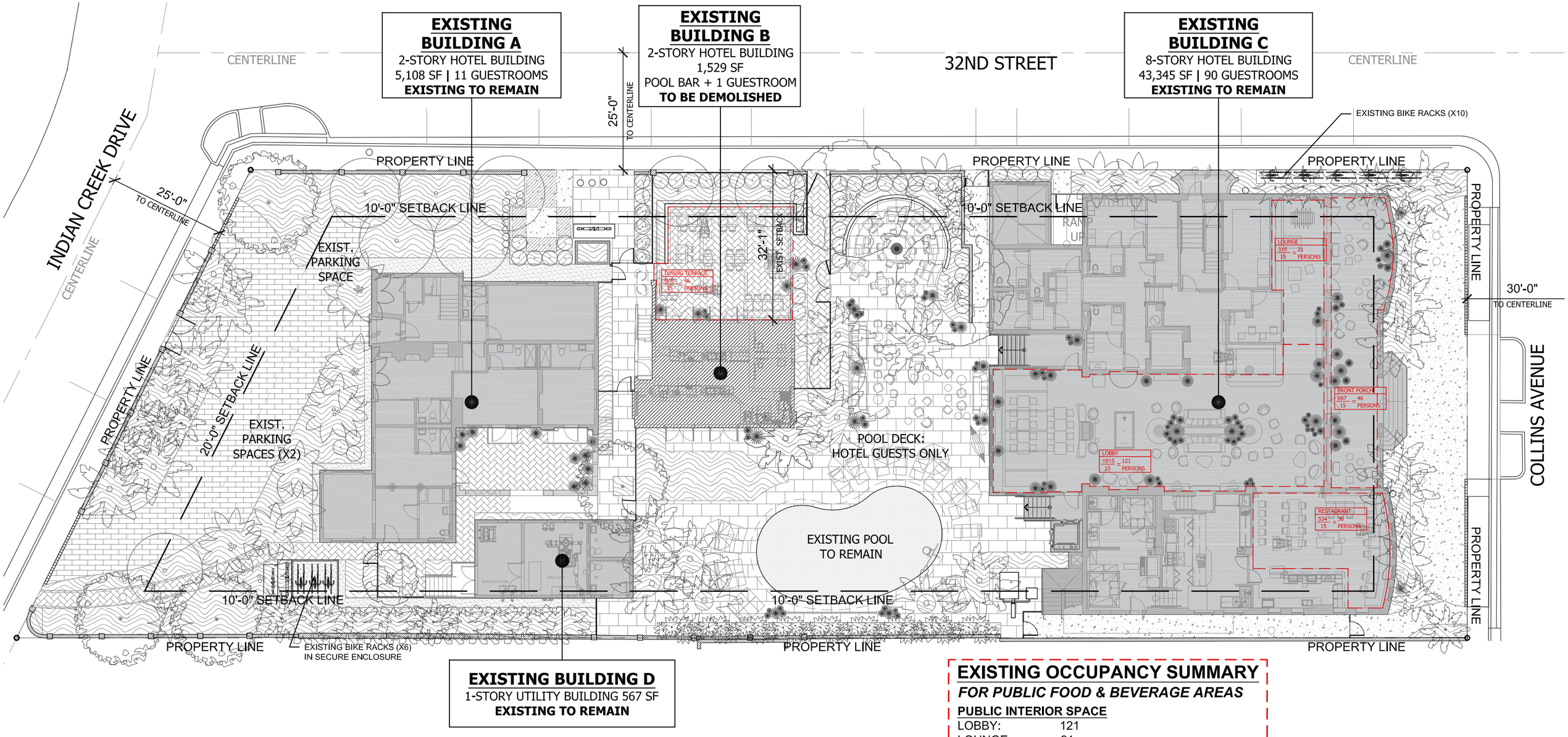
Location Map and Conceptual Site Plan



Kimley»Horn

© 2020

Location Map
3120 Collins Avenue
Miami Beach, Florida



EXISTING OCCUPANCY SUMMARY

FOR PUBLIC FOOD & BEVERAGE AREAS

PUBLIC INTERIOR SPACE

LOBBY:	121
LOUNGE:	21
RESTAURANT:	36
INTERIOR TOTAL:	**178**

PUBLIC EXTERIOR SPACE

FRONT PORCH:	46
DINING TERRACE:	46
EXTERIOR TOTAL:	**92**

PUBLIC SPACE GRAND TOTAL: 270 PERSONS

NOTE: POOL DECK RESERVED FOR HOTEL GUESTS ONLY.

1 EXISTING SITE PLAN
SCALE: 1" = 20'

N

EXISTING TO REMAIN
NOT IN SCOPE OF WORK

3526 NORTH MIAMI AVE.
MIAMI, FL 33127
TEL: 305.571.1811
Todd Tragash, A.I.A. Florida Registration Number #11053
STA ARCHITECTURAL GROUP

DRAFT

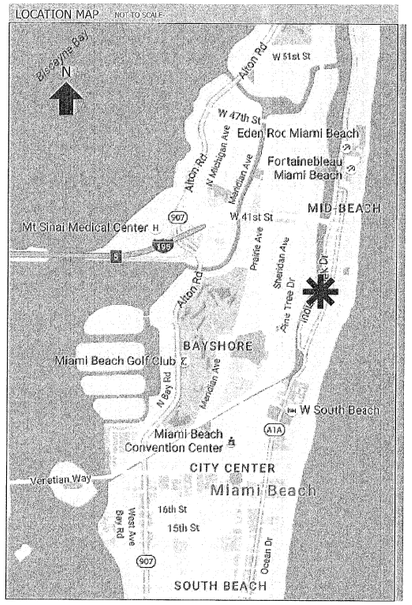
DEVELOPMENT REVIEW COMMITTEE: FIRST SUBMITTAL - 01/03/2020
City of Miami Beach Planning Dept.
1700 Convention Center Drive
Miami Beach, FL, 33139

Project # 3426.01
3120 Collins Avenue
Miami Beach, FL, 33139

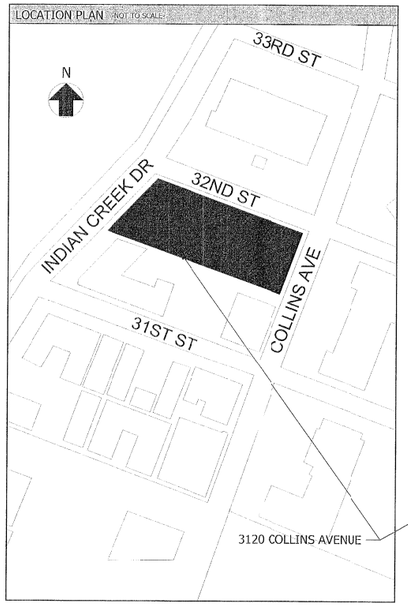
A-3.1
EXISTING SITE PLAN

MIAMIBEACH
REVIEWED FOR
CODE COMPLIANCE

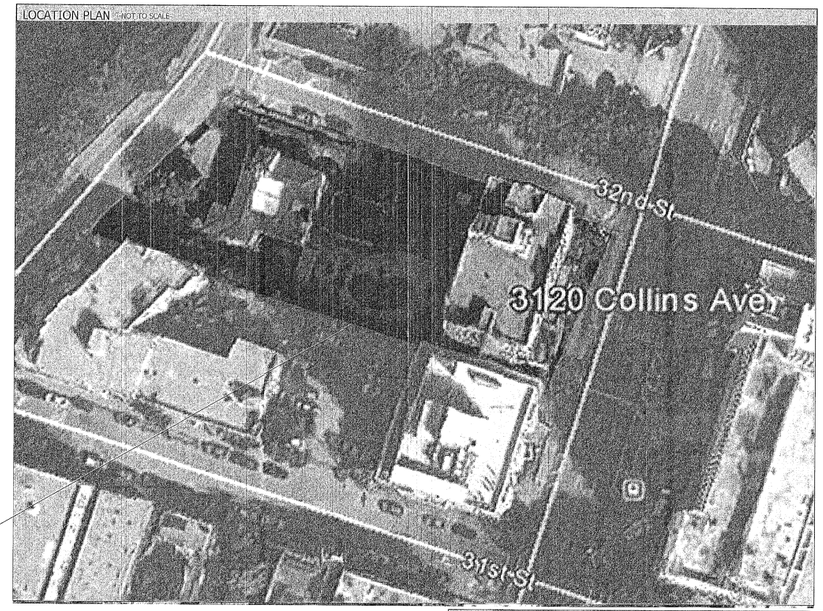
LOCATION MAP - NOT TO SCALE



LOCATION PLAN - NOT TO SCALE



LOCATION PLAN - NOT TO SCALE



SITE LEGEND

- PROPERTY LINE
- SETBACK LINE
- RAMP
- CONCRETE FLOOR
- GRAVEL/ CRUSHED SHELL
- OLD CHICAGO BRICK
- CONCRETE PAVER
- PLANTING
- CHILD BARRIER GATES (C-XX)
- ADA ACCESSIBILITY ROUTE
- PROPERTY LINE

CITY OF MIAMI BEACH PUBLIC WORKS NOTES

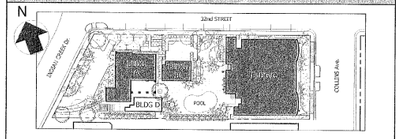
THE CITY'S INSPECTOR WILL DETERMINE THE MAGNITUDE OF TIE REPLACEMENT.

A - REMOVE AND REPLACE SIDEWALK ALONG THE ENTIRE PROPERTY.
B - RECONSTRUCT SWALE/SOD ALONG THE ENTIRE PROPERTY.
C - MILL AND RESURFACE 7 INCHES AVERAGE USING TYPE S-III ASPHALT MIX DESIGN OR THE DRIVING LANE (10 FOOT WIDE) ALONG THE ENTIRE PROPERTY.
D - ANY WORK AND/OR IMPROVEMENTS FROM/TO THE RIGHT-OF-WAY INCLUDING LANDSCAPING AND IRRIGATION REQUIRE A SEPARATE CMB PUBLIC WORKS DEPARTMENT RIGHT-OF-WAY CONSTRUCTION PERMIT.
E - ALL CONSTRUCTION AND/OR USE OF EQUIPMENT IN THE RIGHT-OF-WAY WILL REQUIRE A SEPARATE CITY OF MIAMI BEACH PUBLIC WORKS DEPARTMENT RIGHT-OF-WAY CONSTRUCTION PERMIT PRIOR TO START OF CONSTRUCTION.

CITY OF MIAMI BEACH PLANNING & ZONING NOTES

ALL FDC'S SHALL BE POLISHED CHROME.

KEY PLAN - NOT TO SCALE



KEY PLAN
NTS

FLOOD MANAGEMENT

TOP OF GROUND FLOOR SLAB (BLDG 'D'):	+1.95' (NGVD)
TOP OF FINISHED GROUND FLOOR (BLDG 'D'):	+1.00' (NGVD)
LOWEST FINISHED FLOOR ELEVATION OF HABITABLE SPACE:	+1.00' (NGVD)
LOWEST GRADE ELEVATION ADJACENT TO BUILDING 'D':	+1.75' (NGVD)
HIGHEST GRADE ELEVATION ADJACENT TO BUILDING 'D':	+1.90' (NGVD)
LOWEST ELEVATION OF EQUIPMENT SERVICING BUILDING 'D':	+9.00' (NGVD)
CROWN OF ROAD ELEVATION (INDIAN CREEK DR):	+1.61' (NGVD)

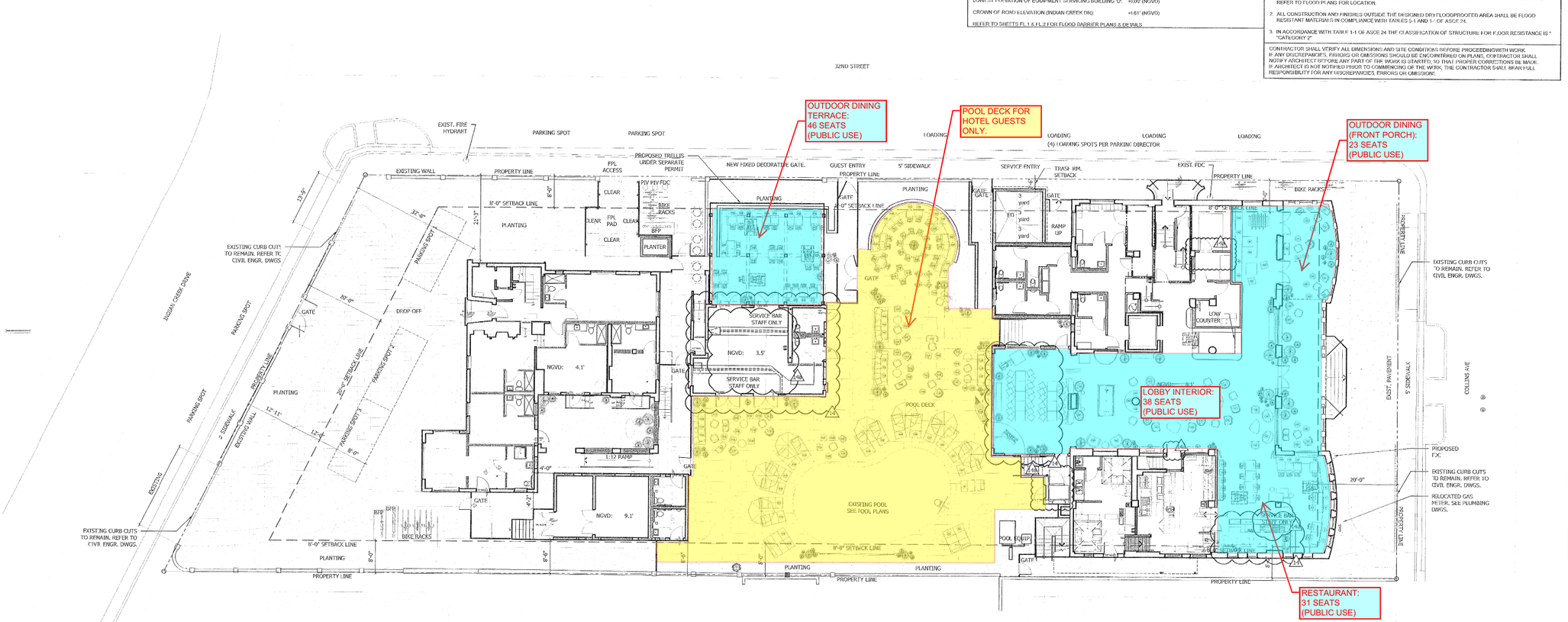
REFER TO SHEETS FL 1 & FL 2 FOR FLOOD BARRIER PLANS & DETAILS

FLOOD DATA

FLOOD ZONE: AE
BASE FLOOD ELEVATION (BFE): +8.0' NGVD
DESIGN FLOOD ELEVATION (DFE): SET + 12" = +9.0' NGVD
FIRM NUMBER: 12086C0318H
ALL MATERIALS IN DRY FLOOD PROOF AREAS BELOW +9.0' NGVD SHALL BE WATER RESISTANT AND SHALL COMPLY WITH F.E.M.A. BULLETIN NO. 2 - 2008
REFER TO SHEETS FL 1 & FL 2 FOR REFERENCE.

NOTES:
1. THE BUILDING WILL BE DESIGNED TO BE DRY FLOOD PROOFED IN ACCORDANCE WITH ASCE 24. CATEGORY 2 REFER TO FLOOD PLANS FOR LOCATION.
2. ALL CONSTRUCTION AND FINISHES OUTSIDE THE DESIGNED DRY FLOODPROOFED AREA SHALL BE FLOOD RESISTANT MATERIALS IN COMPLIANCE WITH TABLES 5-1 AND 1- OF ASCE 24.
3. IN ACCORDANCE WITH TABLE 1-1 OF ASCE 24 THE CLASSIFICATION OF STRUCTURE FOR FLOOR RESISTANCE IS " "CATEGORY 2"

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SITE CONDITIONS BEFORE PROCEEDING WITH WORK. IF ANY DISCREPANCIES, ERRORS OR OMISSIONS SHOULD BE ENCOUNTERED ON PLANS, CONTRACTOR SHALL NOTIFY ARCHITECT BEFORE ANY PART OF THE WORK IS STARTED, SO THAT PROPER CORRECTIONS BE MADE. IF ARCHITECT IS NOT NOTIFIED PRIOR TO COMMENCING OF THE WORK, THE CONTRACTOR SHALL BEAR FULL RESPONSIBILITY FOR ANY DISCREPANCIES, ERRORS OR OMISSIONS.



A SITE PLAN
SCALE: 3/32" = 1'-0"

REVISION #14
RV1805585

S:\PROJECTS\3426 ATLANTIC PRINCESS\DWGS\SHEETS\PHASE2\3426_A003 SITE PLAN.DWG
4/12/2018 8:16:52 PM
Dean McMurry

REVISIONS	
1	BLDG DEPT COMMENTS 4/5/2016
2	BLDG DEPT COMMENTS 11/7/2017
3	BLDG D OWNERSHIP 2/19/2018
4	PERMIT REVISIONS 12/20/2017
5	BLDG DEPT COMMENTS 5/2/2018

STAMP

APR 27 2018

TODD TRAGASH, A.I.A.
FLORIDA REGISTRATION NUMBER #11051

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DRAWN BY: jmb
CHECKED BY: tmt
DATE: 10.02.2016
PROJECT NO: 3426
PHASE: CONSTRUCTION DOCUMENTS 100 %
SITE PLAN
A.003

STA ARCHITECTURAL GROUP
3529 NORTH MIAMI AVE. MIAMI, FL 33127
305.571.1811 fax 305.571.1321

EXISTING BUILDING A
2-STORY HOTEL BUILDING
5,108 SF | 11 GUESTROOMS
EXISTING TO REMAIN

NEW BUILDING E
5-STORY HOTEL BUILDING
7,977 SF
POOL BAR + 19 GUESTROOMS
NEW CONSTRUCTION

EXISTING BUILDING C
8-STORY HOTEL BUILDING
43,345 SF | 90 GUESTROOMS
EXISTING TO REMAIN

EXISTING BUILDING D
1-STORY UTILITY BUILDING 567 SF
EXISTING TO REMAIN

CENTERLINE
32ND STREET
CENTERLINE
INDIAN CREEK DRIVE
CENTERLINE
COLLINS AVENUE
25'-0" TO CENTERLINE
30'-0" TO CENTERLINE
SEGMENT OF SITE WALL TO BE RECONSTRUCTED TO SCREEN EXISTING PAD-MOUNTED TRANSFORMER
EXISTING BIKE RACKS (X10)
PROPERTY LINE
10'-0" SETBACK LINE
EXIST. PAD-MOUNTED TRANSFORMER
EXIST. PARKING SPACE
EXIST. PARKING SPACES (X2)
20'-0" SETBACK LINE
BLDG OUTLINE OVERHEAD
OUTDOOR DINING PATIO: GUESTS ONLY
NEW BAR
POOL DECK: HOTEL GUESTS ONLY
EXISTING POOL TO REMAIN
RAMP UP
LOUNGE 316 / 15 = 21 PERSONS
FRONT PORCH 667 / 15 = 46 PERSONS
LOBBY 1815 / 15 = 121 PERSONS
RESTAURANT 534 / 15 = 36 PERSONS
BOOSTER PUMP
FIRE PIT
EXISTING BIKE RACKS (X6) IN SECURE ENCLOSURE

PROPOSED OCCUPANCY SUMMARY

FOR PUBLIC FOOD & BEVERAGE AREAS

PUBLIC INTERIOR SPACE

LOBBY:	121
LOUNGE:	21
RESTAURANT:	36
INTERIOR TOTAL:	**178**

PUBLIC EXTERIOR SPACE

FRONT PORCH:	46
EXTERIOR TOTAL:	**46**

PUBLIC SPACE GRAND TOTAL: 224 PERSONS

NOTE: POOL DECK RESERVED FOR HOTEL GUESTS ONLY.

EXISTING TO REMAIN
NOT IN SCOPE OF WORK

1 PROPOSED SITE PLAN
SCALE: 1" = 20'

N

3526 NORTH MIAMI AVE.
MIAMI, FL 33127
TEL: 305.571.1811
Todd Tragash, A.I.A. Florida Registration Number #11053
STA ARCHITECTURAL GROUP

DRAFT

DEVELOPMENT REVIEW COMMITTEE: FIRST SUBMITTAL - 01/03/2020
City of Miami Beach Planning Dept.
1700 Convention Center Drive
Miami Beach, FL, 33139

Project # 3426.01
3120 Collins Avenue
Miami Beach, FL, 33139

A-5.1
PROPOSED SITE PLAN

Attachment B-1

Methodology Correspondence

Dorman, Cory

From: Akcay, Firat <FiratAkcay@miamibeachfl.gov>
Sent: Friday, November 22, 2019 3:13 PM
To: Dabkowski, Adrian; Ferrer, Josiel
Cc: Dorman, Cory; Bobby Behar; Michael Larkin
Subject: RE: 3120 Collins Avenue | Traffic Assessment Methodology

Categories: External

Hi Adriano,

Thank you for the revisions. We have no further comments on the methodology.

MIAMIBEACH RISING ABOVE

Firat Akcay, M.S.C.E. MBA
Transportation Analyst
Transportation and Mobility Department
1688 Meridian Avenue, Suite 801, Miami Beach, FL 33139
Tel: 305-673-7000, ext 26839

We are committed to providing excellent public service and safety to all who live, work and play in our vibrant, tropical, historic community.

Please do not print this e-mail unless necessary.

From: Dabkowski, Adrian <Adrian.Dabkowski@Kimley-horn.com>
Sent: Friday, November 22, 2019 8:34 AM
To: Akcay, Firat <FiratAkcay@miamibeachfl.gov>; Ferrer, Josiel <JOSIELFERRER@miamibeachfl.gov>
Cc: Dorman, Cory <cory.dorman@kimley-horn.com>; Bobby Behar <rbehar@brzoninglaw.com>; Michael Larkin <MLarkin@brzoninglaw.com>
Subject: RE: 3120 Collins Avenue | Traffic Assessment Methodology

[THIS MESSAGE COMES FROM AN EXTERNAL EMAIL - USE CAUTION WHEN REPLYING AND OPENING LINKS OR ATTACHMENTS]

Good morning Firat:

The updated methodology attached, includes the restaurant and dining areas for the existing development and proposed redevelopment. Note that the existing 100-seats contained within the three dining areas will remain as part of the redevelopment. Note that the pool and pool bar are ancillary to the hotel as only hotel guests can utilize these facilities. A site plan denoting public and guest-only areas is contained in the attached methodology.

Let us know if the City has any further comments.

Thank you
Adrian

Adrian K. Dabkowski, P.E., PTOE
Kimley-Horn | 600 North Pine Island Road, Suite 450, Plantation, FL 33324
Direct: 954-535-5144 | Mobile: 303-990-2761

From: Akcay, Firat <FiratAkcay@miamibeachfl.gov>
Sent: Thursday, November 21, 2019 10:39 AM
To: Dabkowski, Adrian <Adrian.Dabkowski@Kimley-horn.com>; Ferrer, Josiel <JOSIELFERRER@miamibeachfl.gov>
Cc: Dorman, Cory <cory.dorman@kimley-horn.com>; Bobby Behar <rbehar@brzoninglaw.com>; Michael Larkin <MLarkin@brzoninglaw.com>
Subject: RE: 3120 Collins Avenue | Traffic Assessment Methodology

Adrian,

Can you clarify if the amenities will be open to public? If so, these uses cannot be considered as ancillary and would need to be included in the trip generation estimation.
Thank you

MIAMIBEACH RISING ABOVE

Firat Akcay, M.S.C.E. MBA
Transportation Analyst
Transportation and Mobility Department
1688 Meridian Avenue, Suite 801, Miami Beach, FL 33139
Tel: 305-673-7000, ext 26839

We are committed to providing excellent public service and safety to all who live, work and play in our vibrant, tropical, historic community.

Please do not print this e-mail unless necessary.

From: Dabkowski, Adrian <Adrian.Dabkowski@Kimley-horn.com>
Sent: Thursday, November 21, 2019 8:27 AM
To: Ferrer, Josiel <JOSIELFERRER@miamibeachfl.gov>; Akcay, Firat <FiratAkcay@miamibeachfl.gov>
Cc: Dorman, Cory <cory.dorman@kimley-horn.com>; Bobby Behar <rbehar@brzoninglaw.com>; Michael Larkin <MLarkin@brzoninglaw.com>
Subject: 3120 Collins Avenue | Traffic Assessment Methodology

[THIS MESSAGE COMES FROM AN EXTERNAL EMAIL - USE CAUTION WHEN REPLYING AND OPENING LINKS OR ATTACHMENTS]

Good morning Josiel and Firat:

I really appreciate you taking the time to accommodate the methodology meeting for the 3120 Collins Avenue project on Monday. Thank you again. The traffic assessment methodology is attached. Please let us know if the City has any comments.

Adrian

Adrian K. Dabkowski, P.E., PTOE
Kimley-Horn | 600 North Pine Island Road, Suite 450, Plantation, FL 33324
Direct: 954-535-5144 | Mobile: 303-990-2761

Kimley»Horn

Memorandum

To: Josiel Ferrer, P.E.
City of Miami Beach

Cc: Firat Akcay, City of Miami Beach

From: Cory D. Dorman, P.E., PTOE
Adrian K. Dabkowski, P.E., PTOE

Date: November 21, 2019

Subject: 3120 Collins Avenue Redevelopment
Traffic Assessment Methodology

The purpose of this memorandum is to summarize the traffic assessment methodology for the proposed redevelopment of the property located at 3120 Collins Avenue in Miami Beach, Florida. Currently, the existing site is occupied by a 102-room hotel and a restaurant with three (3) dining areas with a total of 100 seats. The proposed redevelopment includes the addition of 17 hotel rooms for a total of 119 hotel rooms. Please note that the existing 100 seats within the three (3) dining areas will remain as part of the redevelopment. Further note that the 38 seats in the interior lobby will remain as part of the redevelopment and are considered ancillary to the hotel land use and were not included in the trip generation calculations as they are not expected to generate additional external site traffic. A project location map and conceptual site plan are included in Attachment A. The following sections summarize our proposed methodology.

TRIP GENERATION

Trip generation calculations for the proposed redevelopment were performed using Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 10th Edition. The trip generation for the existing development and proposed redevelopment was determined using ITE Land Use Code (LUC) 310 (Hotel) and LUC 931 (Quality Restaurant). Project trips were estimated for the weekday A.M. and P.M. peak hours and Saturday peak hour of generator.

A multimodal (public transit, bicycle, and pedestrian) factor based on US Census *Means of Transportation to Work* data was reviewed for the census tracts in the vicinity of the site. The US Census data indicated that there is a 31.1 percent (31.1%) multimodal factor within the vicinity of the site. However, to provide a conservative analysis, a multimodal factor of 20.0 percent (20.0%) was applied to the trip generation calculations to account for the urban environment in which the project site is located. It is expected that a portion of employees, guests, and patrons will choose to walk, bike, or use public transit to and from the site.

The project is expected to generate seven (7) net new vehicle trips during the weekday A.M. peak hour, 11 net new vehicle trips during the weekday P.M. peak hour, and nine (9) net new vehicle trips during the Saturday peak hour of generator. Detailed trip generation calculations are included as Attachment B.

ON-SITE VEHICLE QUEUING ANALYSIS

An on-site vehicle queuing analysis will be prepared for the guest drop-off/pick-up area to determine if vehicle queues are expected to extend onto Collins Avenue. Vehicle queueing data will be collected in one (1) minute intervals from 12:00 P.M. to 7:00 P.M. on a typical weekday (Thursday) and weekend (Saturday) within the Collins Avenue drop-off/pick-up area. A vehicle queueing ratio will be developed utilizing the vehicle queueing data and will be applied to the proposed redevelopment to determine the expected vehicle queue associated with the expansion.

TRANSPORTATION DEMAND MANAGEMENT STRATEGIES

Transportation Demand Management (TDM) strategies will be developed to reduce the impact of project traffic on the surrounding roadway network and promote trip reduction. Typical measures promote bicycling and walking, encourage car/vanpooling and offer alternatives to the typical workday hours.

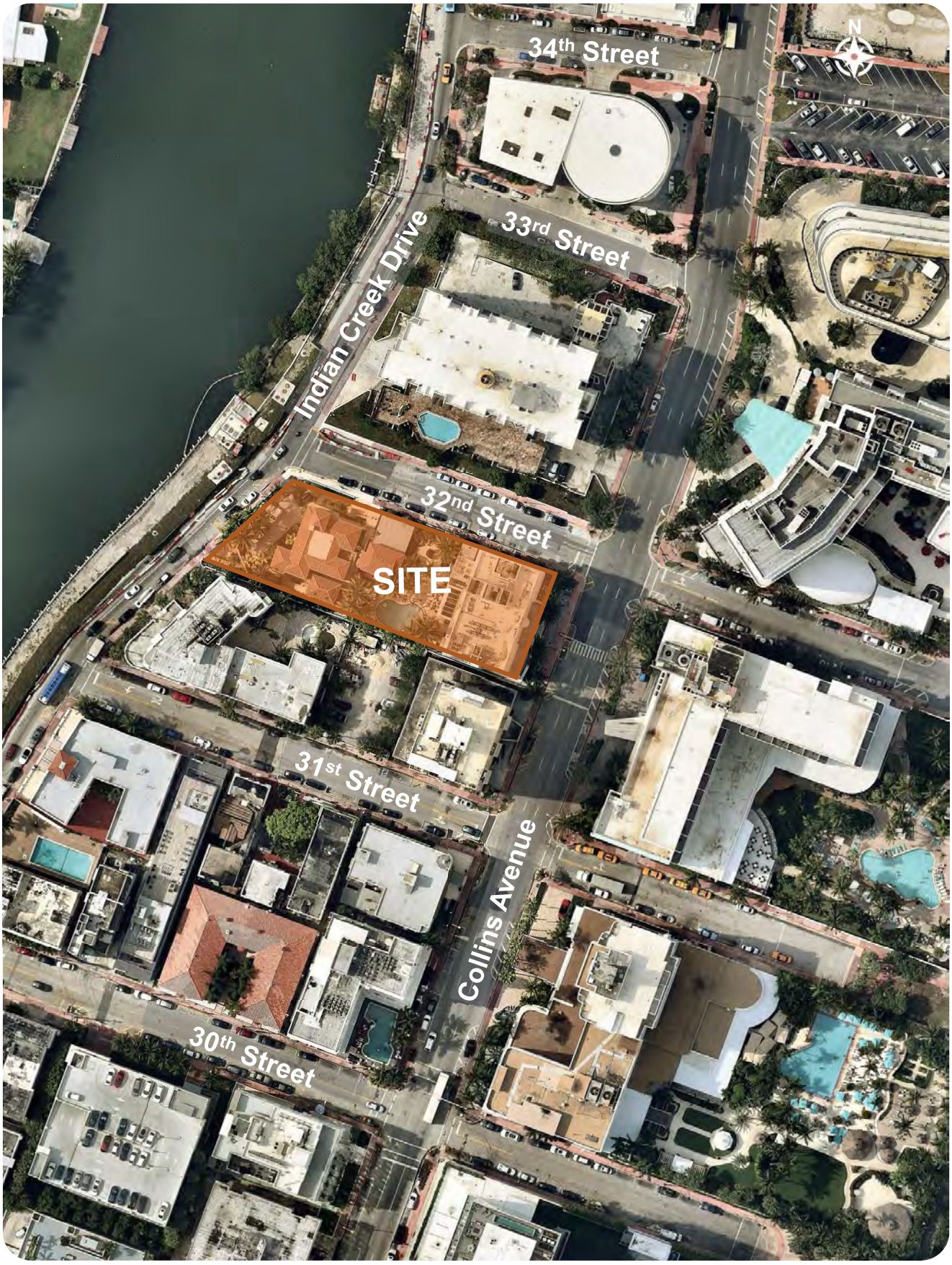
DOCUMENTATION

The results of the traffic assessment will be summarized in a technical letter. The technical letter will include supporting documents including trip generation calculations and text and graphics necessary to summarize the assumptions and analysis. An electronic copy of the technical letter will be provided as part of the submittal package.

K:\FTL_TPTO\143153000-3120 Collins Ave\Correspondence\Memo\3120 Collins Traffic Assessment Methodology.docx

Attachment A

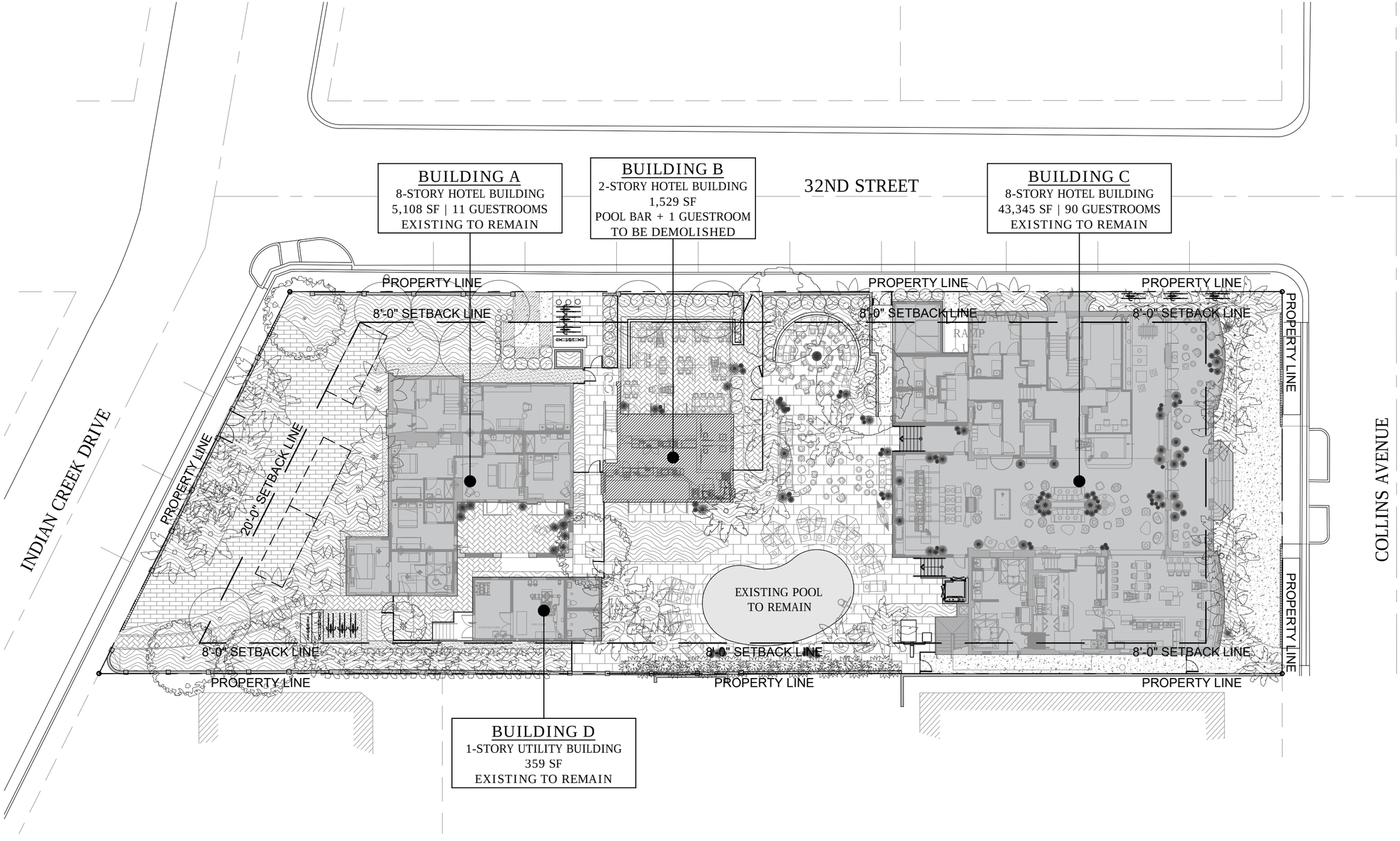
Project Location Map and Site Plan



Kimley»Horn

© 2019

Location Map
3120 Collins Avenue
Miami Beach, Florida



1 EXISTING SITE DIAGRAM

SCALE: 1" = 25'

N

STA ARCHITECTURAL GROUP
3526 NORTH MIAMI AVE. MIAMI, FL 33127
305.571.1811 fax 305.571.1821

STAMP

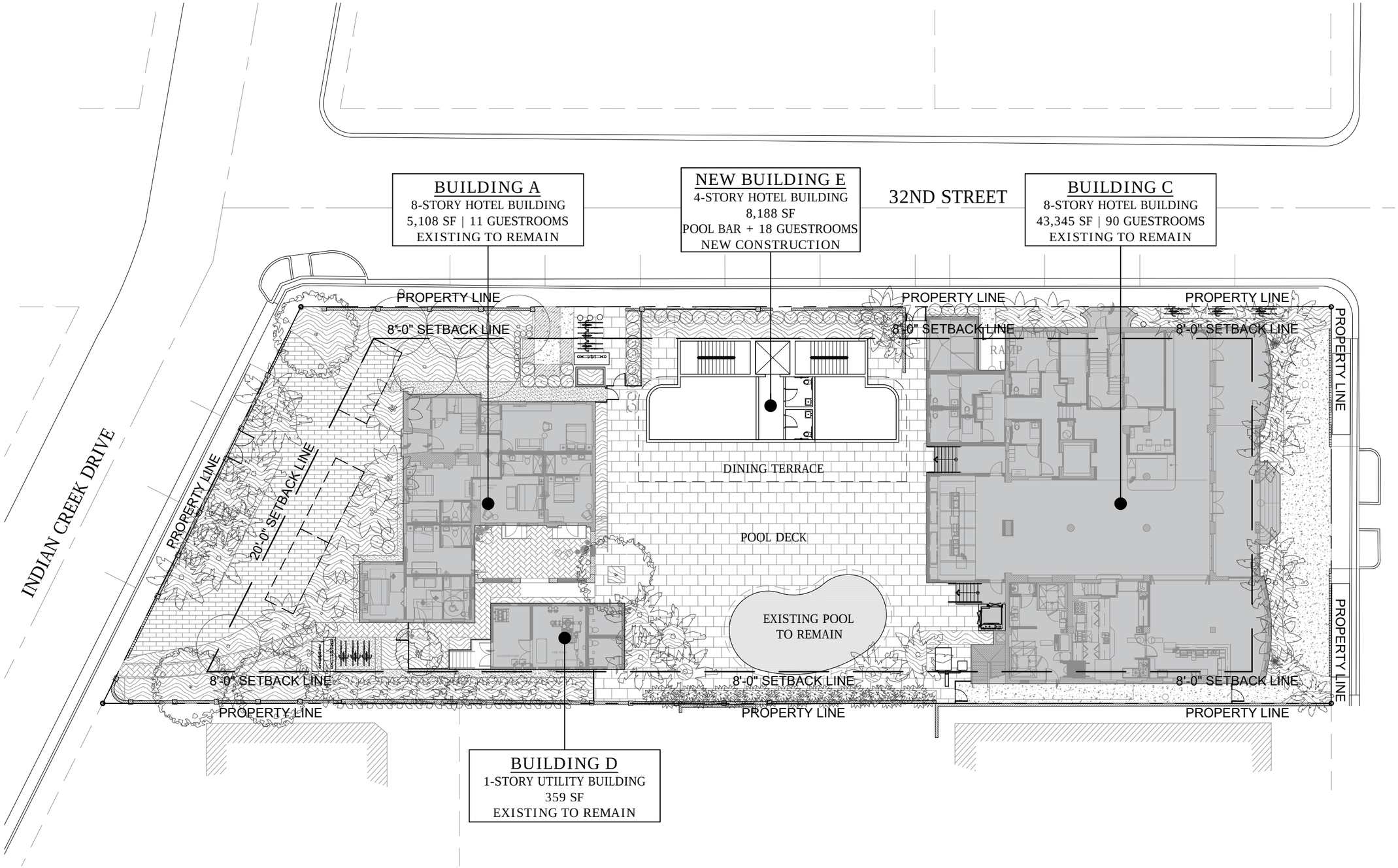
TODD TRAGASH, A.I.A.
FLORIDA REGISTRATION NUMBER 11053

DRAWN BY: DB
CHEDKED BY: TT
SCALE: AS NOTED
JOB NO: 3426.01
DATE: 11/1/19
REVISION:
PLOTTED: 2:34 PM

BUILDING E: SCHEMATIC STUDY
EXISTING SITE DIAGRAM

GENERATOR

3120 Collins Ave.
Miami Beach, Florida 33140



1 PROPOSED SITE DIAGRAM

SCALE: 1" = 25'

N

STA ARCHITECTURAL GROUP
3526 NORTH MIAMI AVE. MIAMI, FL 33127
305.571.1811 fax 305.571.1821

TODD TRAGASH, A.I.A.
FLORIDA REGISTRATION NUMBER 11053

STAMP

DRAWN BY: DB
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REVISION:
PLOTTED: 2:34 PM

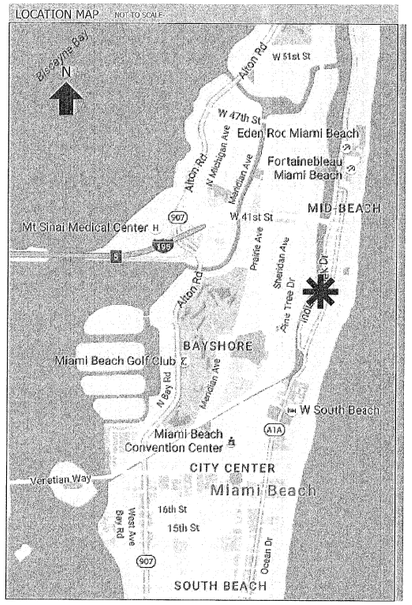
BUILDING E: SCHEMATIC STUDY
PROPOSED SITE DIAGRAM

GENERATOR

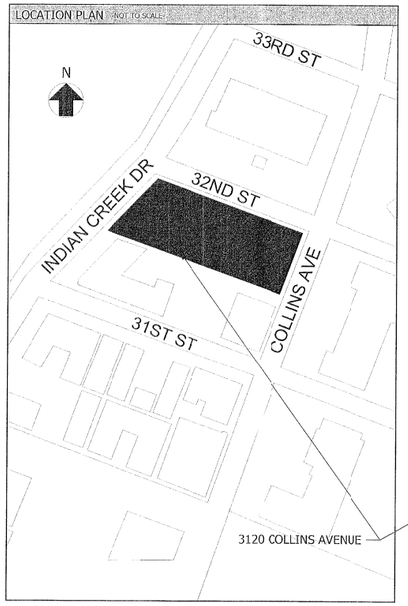
3120 Collins Ave.
Miami Beach, Florida 33140

MIAMIBEACH
REVIEWED FOR
CODE COMPLIANCE

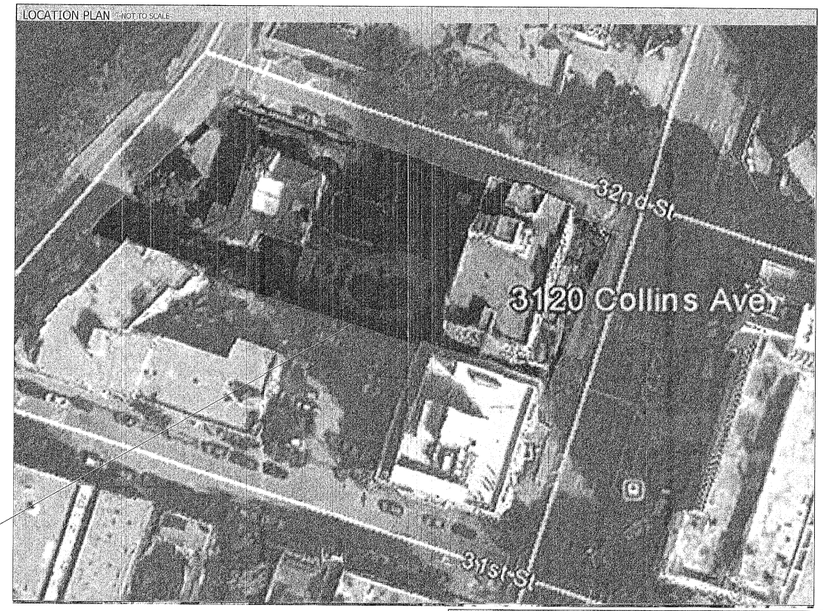
LOCATION MAP - NOT TO SCALE



LOCATION PLAN - NOT TO SCALE



LOCATION PLAN - NOT TO SCALE



SITE LEGEND

- PROPERTY LINE
- SETBACK LINE
- RAMP
- CONCRETE FLOOR
- GRAVEL/ CRUSHED SHELL
- OLD CHICAGO BRICK
- CONCRETE PAVER
- PLANTING
- CHILD BARRIER GATES (C-XX)
- ADA ACCESSIBILITY ROUTE
- PROPERTY LINE

CITY OF MIAMI BEACH PUBLIC WORKS NOTES

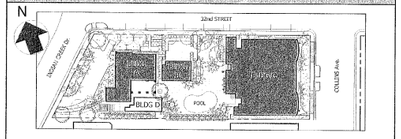
THE CITY'S INSPECTOR WILL DETERMINE THE MAGNITUDE OF TIE REPLACEMENT.

A - REMOVE AND REPLACE SIDEWALK ALONG THE ENTIRE PROPERTY.
B - RECONSTRUCT SWALE/SOD ALONG THE ENTIRE PROPERTY.
C - MILL AND RESURFACE 2 INCHES AVERAGE USING TYPE S-III ASPHALT MIX DESIGN OR THE DRIVING LANE (10 FOOT WIDE) ALONG THE ENTIRE PROPERTY.
D - ANY WORK AND/OR IMPROVEMENTS FROM/TO THE RIGHT-OF-WAY INCLUDING LANDSCAPING AND IRRIGATION REQUIRE A SEPARATE CMB PUBLIC WORKS DEPARTMENT RIGHT-OF-WAY CONSTRUCTION PERMIT.
E - ALL CONSTRUCTION AND/OR USE OF EQUIPMENT IN THE RIGHT-OF-WAY WILL REQUIRE A SEPARATE CITY OF MIAMI BEACH PUBLIC WORKS DEPARTMENT RIGHT-OF-WAY CONSTRUCTION PERMIT PRIOR TO START OF CONSTRUCTION.

CITY OF MIAMI BEACH PLANNING & ZONING NOTES

ALL FDC'S SHALL BE POLISHED CHROME.

KEY PLAN - NOT TO SCALE



KEY PLAN
NTS

FLOOD MANAGEMENT

TOP OF GROUND FLOOR SLAB (BLDG 'D'):	+1.95' (NGVD)
TOP OF FINISHED GROUND FLOOR (BLDG 'D'):	+1.00' (NGVD)
LOWEST FINISHED FLOOR ELEVATION OF HABITABLE SPACE:	+1.00' (NGVD)
LOWEST GRADE ELEVATION ADJACENT TO BUILDING 'D':	+1.75' (NGVD)
HIGHEST GRADE ELEVATION ADJACENT TO BUILDING 'D':	+1.90' (NGVD)
LOWEST ELEVATION OF EQUIPMENT SERVICING BUILDING 'D':	+9.00' (NGVD)
CROWN OF ROAD ELEVATION (INDIAN CREEK DR):	+1.61' (NGVD)

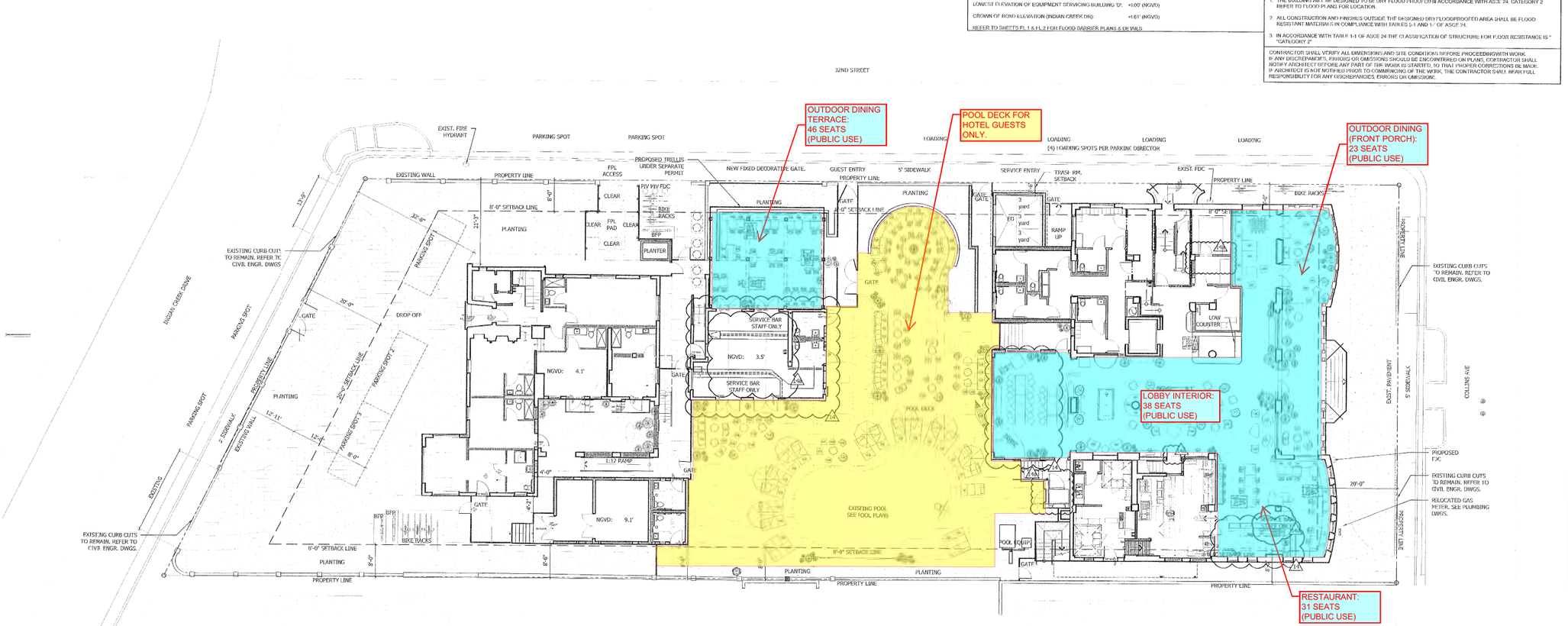
REFER TO SHEETS FL 1 & FL 2 FOR FLOOD BARRIER PLANS & DETAILS

FLOOD DATA

FLOOD ZONE: AE
BASE FLOOD ELEVATION (BFE): +8.0' NGVD
DESIGN FLOOD ELEVATION (DFE): SET + 12" = +9.0' NGVD
FIRM NUMBER: 12086C0033H
ALL MATERIALS IN DRY FLOOD PROOF AREAS BELOW +9.0' NGVD SHALL BE WATER RESISTANT AND SHALL COMPLY WITH F.E.M.A. BULLETIN NO. 2 - 2008
REFER TO SHEETS FL 1 & FL 2 FOR REFERENCE.

NOTES:
1. THE BUILDING WILL BE DESIGNED TO BE DRY FLOOD PROOFED IN ACCORDANCE WITH ASCE 24. CATEGORY 2 REFER TO FLOOD PLANS FOR LOCATION.
2. ALL CONSTRUCTION AND FINISHES OUTSIDE THE DESIGNED DRY FLOODPROOFED AREA SHALL BE FLOOD RESISTANT MATERIALS IN COMPLIANCE WITH TABLES 5-1 AND 1- OF ASCE 24.
3. IN ACCORDANCE WITH TABLE 1-1 OF ASCE 24 THE CLASSIFICATION OF STRUCTURE FOR FLOOR RESISTANCE IS " "CATEGORY 2"

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SITE CONDITIONS BEFORE PROCEEDING WITH WORK. IF ANY DISCREPANCIES, ERRORS OR OMISSIONS SHOULD BE ENCOUNTERED ON PLANS, CONTRACTOR SHALL NOTIFY ARCHITECT BEFORE ANY PART OF THE WORK IS STARTED, SO THAT PROPER CORRECTIONS BE MADE. IF ARCHITECT IS NOT NOTIFIED PRIOR TO COMMENCING OF THE WORK, THE CONTRACTOR SHALL BEAR FULL RESPONSIBILITY FOR ANY DISCREPANCIES, ERRORS OR OMISSIONS.



A SITE PLAN
SCALE: 3/32" = 1'-0"

REVISION #14
RV1805585

REV. NO.	DATE
1	BLDG DEPT COMMENTS 4/5/2018
2	BLDG DEPT COMMENTS 4/9/2018
3	BLDG. D OWNERSHIP 4/10/2018
4	PERMIT REVIEW 4/20/2018
5	BLDG DEPT COMMENTS 5/2/2018

STAMP

APR. 27, 2018

TODD TRAGASH, A.I.A.
FLORIDA REGISTRATION NUMBER #11051

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DRAWN BY: Author
CHECKED BY: Checker
DATE: 10.02.2016
PROJECT NO: 426
ISSUE: CONSTRUCTION DOCUMENTS 100 %
SITE PLAN
A.003

STA ARCHITECTURAL GROUP
3529 NORTH MIAMI AVE. MIAMI, FL 33127
305.571.1811 fax 305.571.1321

S:\PROJECTS\3426 ATLANTIC PRINCESS\DWGS\SHEETS\PHASE2\3426_A003 SITE PLAN.DWG
4/12/2018 8:16:52 PM
Dean McMurry

Attachment B

Trip Generation Calculations

AM PEAK HOUR TRIP GENERATION COMPARISON

EXISTING WEEKDAY AM PEAK HOUR TRIP GENERATION

		ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			MULTIMODAL REDUCTION		GROSS TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS		
			ITE	ITE		ITE	Percent						MR					IC					PB			
		Land Use	Edition	Code	Scale	Units	In	Out	In	Out	Total	Percent	Trips	In	Out	Total	Percent	Trips	In	Out	Total	Percent	Trips	In	Out	Total
GROUP 1	1	Hotel	10	310	102	room	59%	41%	27	19	46	20.0%	10	21	15	36	0.0%	0	21	15	36	0.0%	0	21	15	36
	2	Quality Restaurant	10	931	100	seat	50%	50%	1	1	2	20.0%	0	1	1	2	0.0%	0	1	1	2	0.0%	0	1	1	2
	3																									
	4																									
	5																									
	6																									
	7																									
	8																									
	9																									
	10																									
	11																									
	12																									
	13																									
	14																									
	15																									
		ITE Land Use Code		Rate or Equation				**Total:**	28	20	48	20.0%	10	22	16	38	0.0%	0	22	16	38	0.0%	0	22	16	38
		310		Y=0.5*(X)+-5.34																						
		931		Y=0.02(X)																						

PROPOSED WEEKDAY AM PEAK HOUR TRIP GENERATION

		ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			MULTIMODAL REDUCTION		GROSS TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS		
			ITE	ITE		ITE	Percent						MR					IC					PB			
		Land Use	Edition	Code	Scale	Units	In	Out	In	Out	Total	Percent	Trips	In	Out	Total	Percent	Trips	In	Out	Total	Percent	Trips	In	Out	Total
GROUP 2	1	Hotel	10	310	119	room	59%	41%	32	22	54	20.0%	11	26	17	43	0.0%	0	26	17	43	0.0%	0	26	17	43
	2	Quality Restaurant	10	931	100	seat	50%	50%	1	1	2	20.0%	0	1	1	2	0.0%	0	1	1	2	0.0%	0	1	1	2
	3																									
	4																									
	5																									
	6																									
	7																									
	8																									
	9																									
	10																									
	11																									
	12																									
	13																									
	14																									
	15																									
		ITE Land Use Code		Rate or Equation				**Total:**	33	23	56	20.0%	11	27	18	45	0.0%	0	27	18	45	0.0%	0	27	18	45
		310		Y=0.5*(X)+-5.34																						
		931		Y=0.02(X)																						

	IN	OUT	TOTAL
NET NEW TRIPS	**5**	**2**	**7**

PM PEAK HOUR TRIP GENERATION COMPARISON

EXISTING WEEKDAY PM PEAK HOUR TRIP GENERATION

		ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			MULTIMODAL REDUCTION		GROSS TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS		
			ITE	ITE		ITE	Percent						MR					IC					PB			
		Land Use	Edition	Code	Scale	Units	In	Out	In	Out	Total	Percent	Trips	In	Out	Total	Percent	Trips	In	Out	Total	Percent	Trips	In	Out	Total
GROUP 1	1	Hotel	10	310	102	room	51%	49%	26	24	50	20.0%	10	21	19	40	2.5%	1	21	18	39	0.0%	0	21	18	39
	2	Quality Restaurant	10	931	100	seat	67%	33%	19	9	28	20.0%	6	15	7	22	4.5%	1	14	7	21	0.0%	0	14	7	21
	3																									
	4																									
	5																									
	6																									
	7																									
	8																									
	9																									
	10																									
	11																									
	12																									
	13																									
	14																									
	15																									
		ITE Land Use Code		Rate or Equation				**Total:**	45	33	78	20.0%	16	36	26	62	3.2%	2	35	25	60	0.0%	0	35	25	60
		310		Y=0.75*(X)+-26.02																						
		931		Y=0.28(X)																						

PROPOSED WEEKDAY PM PEAK HOUR TRIP GENERATION

		ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			MULTIMODAL REDUCTION		GROSS TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS		
			ITE	ITE		ITE	Percent						MR					IC					PB			
		Land Use	Edition	Code	Scale	Units	In	Out	In	Out	Total	Percent	Trips	In	Out	Total	Percent	Trips	In	Out	Total	Percent	Trips	In	Out	Total
GROUP 2	1	Hotel	10	310	119	room	51%	49%	32	31	63	20.0%	12	26	25	51	2.0%	1	26	24	50	0.0%	0	26	24	50
	2	Quality Restaurant	10	931	100	seat	67%	33%	19	9	28	20.0%	6	15	7	22	4.5%	1	14	7	21	0.0%	0	14	7	21
	3																									
	4																									
	5																									
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	9																									
	10																									
	11																									
	12																									
	13																									
	14																									
	15																									
		ITE Land Use Code		Rate or Equation				**Total:**	51	40	91	20.0%	18	41	32	73	2.7%	2	40	31	71	0.0%	0	40	31	71
		310		Y=0.75*(X)+-26.02																						
		931		Y=0.28(X)																						

	IN	OUT	TOTAL
NET NEW TRIPS	**5**	**6**	**11**

Internal Capture Reduction Calculations

Methodology for A.M. Peak Hour and P.M. Peak Hour
on the *Trip Generation Handbook* , 3rd Edition, published by the Institute of Transportation Engi

Methodology for Daily
based on the average of the Unconstrained Rates for the A.M. Peak Hour and P.M. Peak Hour

SUMMARY (EXISTING)

GROSS TRIP GENERATION

INPUT

Land Use	A.M. Peak Hour		P.M. Peak Hour	
	Enter	Exit	Enter	Exit
Office	0	0	0	0
Retail	0	0	0	0
Restaurant	1	1	15	7
Cinema/Entertainment	0	0	0	0
Residential	0	0	0	0
Hotel	21	15	21	19
	22	16	36	26

INTERNAL TRIPS

OUTPUT

Land Use	A.M. Peak Hour		P.M. Peak Hour	
	Enter	Exit	Enter	Exit
Office	0	0	0	0
Retail	0	0	0	0
Restaurant	0	0	1	0
Cinema/Entertainment	0	0	0	0
Residential	0	0	0	0
Hotel	0	0	0	1
	0	0	1	1

OUTPUT

Total % Reduction	***0.0%***	***3.2%***
Office		
Retail		
Restaurant	0.0%	4.5%
Cinema/Entertainment		
Residential		
Hotel	0.0%	2.5%

EXTERNAL TRIPS

OUTPUT

Land Use	A.M. Peak Hour		P.M. Peak Hour	
	Enter	Exit	Enter	Exit
Office	0	0	0	0
Retail	0	0	0	0
Restaurant	1	1	14	7
Cinema/Entertainment	0	0	0	0
Residential	0	0	0	0
Hotel	21	15	21	18
	22	16	35	25

Internal Capture Reduction Calculations

Methodology for A.M. Peak Hour and P.M. Peak Hour
on the *Trip Generation Handbook* , 3rd Edition, published by the Institute of Transportation Engi

Methodology for Daily
based on the average of the Unconstrained Rates for the A.M. Peak Hour and P.M. Peak Hour

SUMMARY (PROPOSED)

GROSS TRIP GENERATION

INPUT

Land Use	A.M. Peak Hour		P.M. Peak Hour	
	Enter	Exit	Enter	Exit
Office	0	0	0	0
Retail	0	0	0	0
Restaurant	1	1	15	7
Cinema/Entertainment	0	0	0	0
Residential	0	0	0	0
Hotel	26	17	26	25
	27	18	41	32

INTERNAL TRIPS

OUTPUT

Land Use	A.M. Peak Hour		P.M. Peak Hour	
	Enter	Exit	Enter	Exit
Office	0	0	0	0
Retail	0	0	0	0
Restaurant	0	0	1	0
Cinema/Entertainment	0	0	0	0
Residential	0	0	0	0
Hotel	0	0	0	1
	0	0	1	1

OUTPUT

Total % Reduction	***0.0%***	***2.7%***
Office		
Retail		
Restaurant	0.0%	4.5%
Cinema/Entertainment		
Residential		
Hotel	0.0%	2.0%

EXTERNAL TRIPS

OUTPUT

Land Use	A.M. Peak Hour		P.M. Peak Hour	
	Enter	Exit	Enter	Exit
Office	0	0	0	0
Retail	0	0	0	0
Restaurant	1	1	14	7
Cinema/Entertainment	0	0	0	0
Residential	0	0	0	0
Hotel	26	17	26	24
	27	18	40	31

SATURDAY PEAK HOUR OF GENERATOR TRIP GENERATION COMPARISON

EXISTING SATURDAY PEAK HOUR OF GENERATOR TRIP GENERATION

		ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			MULTIMODAL REDUCTION		GROSS TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS		
		Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent In	Percent Out	In	Out	Total	Percent	MR Trips	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total
GROUP 1	1	Hotel	10	310	102	room	56%	44%	42	33	75	20.0%	15	34	26	60	3.3%	2	33	25	58	0.0%	0	33	25	58
	2	Quality Restaurant	10	931	100	seat	59%	41%	19	14	33	20.0%	7	15	11	26	7.7%	2	14	10	24	0.0%	0	14	10	24
	3																									
	4																									
	5																									
	6																									
	7																									
	8																									
	9																									
	10																									
	11																									
	12																									
	13																									
	14																									
	15																									
		ITE Land Use Code		Rate or Equation			**Total:**		61	47	108	20.0%	22	49	37	86	4.7%	4	47	35	82	0.0%	0	47	35	82
		310		Y=0.69*(X)+4.32																						
		931		Y=0.33(X)																						

PROPOSED SATURDAY PEAK HOUR OF GENERATOR TRIP GENERATION

		ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			MULTIMODAL REDUCTION		GROSS TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS		
		Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent In	Percent Out	In	Out	Total	Percent	MR Trips	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total
GROUP 2	1	Hotel	10	310	119	room	56%	44%	48	38	86	20.0%	17	39	30	69	2.9%	2	38	29	67	0.0%	0	38	29	67
	2	Quality Restaurant	10	931	100	seat	59%	41%	19	14	33	20.0%	7	15	11	26	7.7%	2	14	10	24	0.0%	0	14	10	24
	3																									
	4																									
	5																									
	6																									
	7																									
	8																									
	9																									
	10																									
	11																									
	12																									
	13																									
	14																									
	15																									
		ITE Land Use Code		Rate or Equation			**Total:**		67	52	119	20.0%	24	54	41	95	4.2%	4	52	39	91	0.0%	0	52	39	91
		310		Y=0.69*(X)+4.32																						
		931		Y=0.33(X)																						

	IN	OUT	TOTAL
NET NEW TRIPS	**5**	**4**	**9**

Internal Capture Reduction Calculations

Methodology for A.M. Peak Hour and P.M. Peak Hour
on the *Trip Generation Handbook* , 3rd Edition, published by the Institute of Transportation Engi

Methodology for Daily
based on the average of the Unconstrained Rates for the A.M. Peak Hour and P.M. Peak Hour

SUMMARY (EXISTING)

GROSS TRIP GENERATION

INPUT

Land Use	A.M. Peak Hour		P.M. Peak Hour	
	Enter	Exit	Enter	Exit
Office	0	0	0	0
Retail	0	0	0	0
Restaurant	0	0	15	11
Cinema/Entertainment	0	0	0	0
Residential	0	0	0	0
Hotel	0	0	34	26
	0	0	49	37

INTERNAL TRIPS

OUTPUT

Land Use	A.M. Peak Hour		P.M. Peak Hour	
	Enter	Exit	Enter	Exit
Office	0	0	0	0
Retail	0	0	0	0
Restaurant	0	0	1	1
Cinema/Entertainment	0	0	0	0
Residential	0	0	0	0
Hotel	0	0	1	1
	0	0	2	2

OUTPUT

Total % Reduction	***0.0%***	***4.7%***
Office		
Retail		
Restaurant		7.7%
Cinema/Entertainment		
Residential		
Hotel		3.3%

EXTERNAL TRIPS

OUTPUT

Land Use	A.M. Peak Hour		P.M. Peak Hour	
	Enter	Exit	Enter	Exit
Office	0	0	0	0
Retail	0	0	0	0
Restaurant	0	0	14	10
Cinema/Entertainment	0	0	0	0
Residential	0	0	0	0
Hotel	0	0	33	25
	0	0	47	35

Internal Capture Reduction Calculations

Methodology for A.M. Peak Hour and P.M. Peak Hour
on the *Trip Generation Handbook* , 3rd Edition, published by the Institute of Transportation Engi

Methodology for Daily
based on the average of the Unconstrained Rates for the A.M. Peak Hour and P.M. Peak Hour

SUMMARY (PROPOSED)

GROSS TRIP GENERATION

INPUT

Land Use	A.M. Peak Hour		P.M. Peak Hour	
	Enter	Exit	Enter	Exit
Office	0	0	0	0
Retail	0	0	0	0
Restaurant	0	0	15	11
Cinema/Entertainment	0	0	0	0
Residential	0	0	0	0
Hotel	0	0	39	30
	0	0	54	41

INTERNAL TRIPS

OUTPUT

Land Use	A.M. Peak Hour		P.M. Peak Hour	
	Enter	Exit	Enter	Exit
Office	0	0	0	0
Retail	0	0	0	0
Restaurant	0	0	1	1
Cinema/Entertainment	0	0	0	0
Residential	0	0	0	0
Hotel	0	0	1	1
	0	0	2	2

OUTPUT

Total % Reduction	***0.0%***	***4.2%***
Office		
Retail		
Restaurant		7.7%
Cinema/Entertainment		
Residential		
Hotel		2.9%

EXTERNAL TRIPS

OUTPUT

Land Use	A.M. Peak Hour		P.M. Peak Hour	
	Enter	Exit	Enter	Exit
Office	0	0	0	0
Retail	0	0	0	0
Restaurant	0	0	14	10
Cinema/Entertainment	0	0	0	0
Residential	0	0	0	0
Hotel	0	0	38	29
	0	0	52	39

B08301

MEANS OF TRANSPORTATION TO WORK
Universe: Workers 16 years and over
2013-2017 American Community Survey 5-Year Estimates

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Technical Documentation section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities, and towns and estimates of housing units for states and counties.

(80+34+189)/973=31.1%

	Census Tract 41.03, Miami-Dade County, Florida	
	Estimate	Margin of Error
Total:	973	+/-216
Car, truck, or van:	588	+/-157
Drove alone	522	+/-137
Carpooled:	66	+/-90
In 2-person carpool	66	+/-90
In 3-person carpool	0	+/-13
In 4-person carpool	0	+/-13
In 5- or 6-person carpool	0	+/-13
In 7-or-more-person carpool	0	+/-13
Public transportation (excluding taxicab):	189	+/-97
Bus or trolley bus	156	+/-91
Streetcar or trolley car (carro publico in Puerto Rico)	0	+/-13
Subway or elevated	0	+/-13
Railroad	33	+/-45
Ferryboat	0	+/-13
Taxicab	26	+/-42
Motorcycle	0	+/-13
Bicycle	34	+/-29
Walked	80	+/-50
Other means	11	+/-16
Worked at home	45	+/-37

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

Workers include members of the Armed Forces and civilians who were at work last week.

While the 2013-2017 American Community Survey (ACS) data generally reflect the February 2013 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas; in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic

entities.

Estimates of urban and rural populations, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

Explanation of Symbols:

1. An '**' entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.
2. An '-' entry in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution.
3. An '-' following a median estimate means the median falls in the lowest interval of an open-ended distribution.
4. An '+' following a median estimate means the median falls in the upper interval of an open-ended distribution.
5. An '***' entry in the margin of error column indicates that the median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.
6. An '*****' entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.
7. An 'N' entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.
8. An '(X)' means that the estimate is not applicable or not available.

Attachment C-1

Trip Generation

AM PEAK HOUR TRIP GENERATION COMPARISON

EXISTING WEEKDAY AM PEAK HOUR TRIP GENERATION

		ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			MULTIMODAL REDUCTION		GROSS TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS		
			ITE	ITE		ITE	Percent						MR					IC					PB			
		Land Use	Edition	Code	Scale	Units	In	Out	In	Out	Total	Percent	Trips	In	Out	Total	Percent	Trips	In	Out	Total	Percent	Trips	In	Out	Total
GROUP 1	1	Hotel	10	310	102	room	59%	41%	27	19	46	20.0%	10	21	15	36	0.0%	0	21	15	36	0.0%	0	21	15	36
	2	Quality Restaurant	10	931	100	seat	50%	50%	1	1	2	20.0%	0	1	1	2	0.0%	0	1	1	2	0.0%	0	1	1	2
	3																									
	4																									
	5																									
	6																									
	7																									
	8																									
	9																									
	10																									
	11																									
	12																									
	13																									
	14																									
	15																									
		ITE Land Use Code		Rate or Equation			**Total:**		28	20	48	20.0%	10	22	16	38	0.0%	0	22	16	38	0.0%	0	22	16	38
		310		Y=0.5*(X)+-5.34																						
		931		Y=0.02(X)																						

PROPOSED WEEKDAY AM PEAK HOUR TRIP GENERATION

		ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			MULTIMODAL REDUCTION		GROSS TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS		
			ITE	ITE		ITE	Percent						MR					IC					PB			
		Land Use	Edition	Code	Scale	Units	In	Out	In	Out	Total	Percent	Trips	In	Out	Total	Percent	Trips	In	Out	Total	Percent	Trips	In	Out	Total
GROUP 2	1	Hotel	10	310	120	room	59%	41%	32	23	55	20.0%	11	26	18	44	0.0%	0	26	18	44	0.0%	0	26	18	44
	2	Quality Restaurant	10	931	100	seat	50%	50%	1	1	2	20.0%	0	1	1	2	0.0%	0	1	1	2	0.0%	0	1	1	2
	3																									
	4																									
	5																									
	6																									
	7																									
	8																									
	9																									
	10																									
	11																									
	12																									
	13																									
	14																									
	15																									
		ITE Land Use Code		Rate or Equation			**Total:**		33	24	57	20.0%	11	27	19	46	0.0%	0	27	19	46	0.0%	0	27	19	46
		310		Y=0.5*(X)+-5.34																						
		931		Y=0.02(X)																						

	IN	OUT	TOTAL
NET NEW TRIPS	**5**	**3**	**8**

PM PEAK HOUR TRIP GENERATION COMPARISON

EXISTING WEEKDAY PM PEAK HOUR TRIP GENERATION

		ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			MULTIMODAL REDUCTION		GROSS TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS		
			ITE	ITE		ITE	Percent						MR					IC					PB			
		Land Use	Edition	Code	Scale	Units	In	Out	In	Out	Total	Percent	Trips	In	Out	Total	Percent	Trips	In	Out	Total	Percent	Trips	In	Out	Total
GROUP 1	1	Hotel	10	310	102	room	51%	49%	26	24	50	20.0%	10	21	19	40	2.5%	1	21	18	39	0.0%	0	21	18	39
	2	Quality Restaurant	10	931	100	seat	67%	33%	19	9	28	20.0%	6	15	7	22	4.5%	1	14	7	21	0.0%	0	14	7	21
	3																									
	4																									
	5																									
	6																									
	7																									
	8																									
	9																									
	10																									
	11																									
	12																									
	13																									
	14																									
	15																									
		ITE Land Use Code		Rate or Equation				**Total:**	45	33	78	20.0%	16	36	26	62	3.2%	2	35	25	60	0.0%	0	35	25	60
		310		Y=0.75*(X)+-26.02																						
		931		Y=0.28(X)																						

PROPOSED WEEKDAY PM PEAK HOUR TRIP GENERATION

		ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			MULTIMODAL REDUCTION		GROSS TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS		
			ITE	ITE		ITE	Percent						MR					IC					PB			
		Land Use	Edition	Code	Scale	Units	In	Out	In	Out	Total	Percent	Trips	In	Out	Total	Percent	Trips	In	Out	Total	Percent	Trips	In	Out	Total
GROUP 2	1	Hotel	10	310	120	room	51%	49%	33	31	64	20.0%	13	26	25	51	3.9%	2	25	24	49	0.0%	0	25	24	49
	2	Quality Restaurant	10	931	100	seat	67%	33%	19	9	28	20.0%	5	15	8	23	8.7%	2	14	7	21	0.0%	0	14	7	21
	3																									
	4																									
	5																									
	6																									
	7																									
	8																									
	9																									
	10																									
	11																									
	12																									
	13																									
	14																									
	15																									
		ITE Land Use Code		Rate or Equation				**Total:**	52	40	92	20.0%	18	41	33	74	5.4%	4	39	31	70	0.0%	0	39	31	70
		310		Y=0.75*(X)+-26.02																						
		931		Y=0.28(X)																						

	IN	OUT	TOTAL
NET NEW TRIPS	**4**	**6**	**10**

Internal Capture Reduction Calculations

Methodology for A.M. Peak Hour and P.M. Peak Hour
on the *Trip Generation Handbook* , 3rd Edition, published by the Institute of Transportation Engi

Methodology for Daily
based on the average of the Unconstrained Rates for the A.M. Peak Hour and P.M. Peak Hour

SUMMARY (EXISTING)

GROSS TRIP GENERATION

INPUT

Land Use	A.M. Peak Hour		P.M. Peak Hour	
	Enter	Exit	Enter	Exit
Office	0	0	0	0
Retail	0	0	0	0
Restaurant	1	1	15	7
Cinema/Entertainment	0	0	0	0
Residential	0	0	0	0
Hotel	21	15	21	19
	22	16	36	26

INTERNAL TRIPS

OUTPUT

Land Use	A.M. Peak Hour		P.M. Peak Hour	
	Enter	Exit	Enter	Exit
Office	0	0	0	0
Retail	0	0	0	0
Restaurant	0	0	1	0
Cinema/Entertainment	0	0	0	0
Residential	0	0	0	0
Hotel	0	0	0	1
	0	0	1	1

OUTPUT

Total % Reduction	***0.0%***	***3.2%***
Office		
Retail		
Restaurant	0.0%	4.5%
Cinema/Entertainment		
Residential		
Hotel	0.0%	2.5%

EXTERNAL TRIPS

OUTPUT

Land Use	A.M. Peak Hour		P.M. Peak Hour	
	Enter	Exit	Enter	Exit
Office	0	0	0	0
Retail	0	0	0	0
Restaurant	1	1	14	7
Cinema/Entertainment	0	0	0	0
Residential	0	0	0	0
Hotel	21	15	21	18
	22	16	35	25

Internal Capture Reduction Calculations

Methodology for A.M. Peak Hour and P.M. Peak Hour
on the *Trip Generation Handbook* , 3rd Edition, published by the Institute of Transportation Engi

Methodology for Daily
based on the average of the Unconstrained Rates for the A.M. Peak Hour and P.M. Peak Hour

SUMMARY (PROPOSED)

GROSS TRIP GENERATION

INPUT

Land Use	A.M. Peak Hour		P.M. Peak Hour	
	Enter	Exit	Enter	Exit
Office	0	0	0	0
Retail	0	0	0	0
Restaurant	1	1	15	8
Cinema/Entertainment	0	0	0	0
Residential	0	0	0	0
Hotel	26	18	26	25
	27	19	41	33

INTERNAL TRIPS

OUTPUT

Land Use	A.M. Peak Hour		P.M. Peak Hour	
	Enter	Exit	Enter	Exit
Office	0	0	0	0
Retail	0	0	0	0
Restaurant	0	0	1	1
Cinema/Entertainment	0	0	0	0
Residential	0	0	0	0
Hotel	0	0	1	1
	0	0	2	2

OUTPUT

Total % Reduction	***0.0%***	***5.4%***
Office		
Retail		
Restaurant	0.0%	8.7%
Cinema/Entertainment		
Residential		
Hotel	0.0%	3.9%

EXTERNAL TRIPS

OUTPUT

Land Use	A.M. Peak Hour		P.M. Peak Hour	
	Enter	Exit	Enter	Exit
Office	0	0	0	0
Retail	0	0	0	0
Restaurant	1	1	14	7
Cinema/Entertainment	0	0	0	0
Residential	0	0	0	0
Hotel	26	18	25	24
	27	19	39	31

SATURDAY PEAK HOUR OF GENERATOR TRIP GENERATION COMPARISON

EXISTING SATURDAY PEAK HOUR OF GENERATOR TRIP GENERATION

		ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			MULTIMODAL REDUCTION		GROSS TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS		
			ITE	ITE		ITE	Percent						MR					IC					PB			
		Land Use	Edition	Code	Scale	Units	In	Out	In	Out	Total	Percent	Trips	In	Out	Total	Percent	Trips	In	Out	Total	Percent	Trips	In	Out	Total
GROUP 1	1	Hotel	10	310	102	room	56%	44%	42	33	75	20.0%	15	34	26	60	3.3%	2	33	25	58	0.0%	0	33	25	58
	2	Quality Restaurant	10	931	100	seat	59%	41%	19	14	33	20.0%	7	15	11	26	7.7%	2	14	10	24	0.0%	0	14	10	24
	3																									
	4																									
	5																									
	6																									
	7																									
	8																									
	9																									
	10																									
	11																									
	12																									
	13																									
	14																									
	15																									
								Total:	61	47	108	20.0%	22	49	37	86	4.7%	4	47	35	82	0.0%	0	47	35	82

ITE Land Use Code	Rate or Equation
310	Y=0.69*(X)+4.32
931	Y=0.33(X)

PROPOSED SATURDAY PEAK HOUR OF GENERATOR TRIP GENERATION

		ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			MULTIMODAL REDUCTION		GROSS TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS		
			ITE	ITE		ITE	Percent						MR					IC					PB			
		Land Use	Edition	Code	Scale	Units	In	Out	In	Out	Total	Percent	Trips	In	Out	Total	Percent	Trips	In	Out	Total	Percent	Trips	In	Out	Total
GROUP 2	1	Hotel	10	310	120	room	56%	44%	49	38	87	20.0%	17	40	30	70	2.9%	2	39	29	68	0.0%	0	39	29	68
	2	Quality Restaurant	10	931	100	seat	59%	41%	19	14	33	20.0%	7	15	11	26	7.7%	2	14	10	24	0.0%	0	14	10	24
	3																									
	4																									
	5																									
	6																									
	7																									
	8																									
	9																									
	10																									
	11																									
	12																									
	13																									
	14																									
	15																									
								Total:	68	52	120	20.0%	24	55	41	96	4.2%	4	53	39	92	0.0%	0	53	39	92

ITE Land Use Code	Rate or Equation
310	Y=0.69*(X)+4.32
931	Y=0.33(X)

	IN	OUT	TOTAL
NET NEW TRIPS	**6**	**4**	**10**

Internal Capture Reduction Calculations

Methodology for A.M. Peak Hour and P.M. Peak Hour
on the *Trip Generation Handbook* , 3rd Edition, published by the Institute of Transportation Engi

Methodology for Daily
based on the average of the Unconstrained Rates for the A.M. Peak Hour and P.M. Peak Hour

SUMMARY (EXISTING)

GROSS TRIP GENERATION

	Land Use	A.M. Peak Hour		P.M. Peak Hour	
		Enter	Exit	Enter	Exit
INPUT	Office	0	0	0	0
	Retail	0	0	0	0
	Restaurant	0	0	15	11
	Cinema/Entertainment	0	0	0	0
	Residential	0	0	0	0
	Hotel	0	0	34	26
		0	0	49	37

INTERNAL TRIPS

	Land Use	A.M. Peak Hour		P.M. Peak Hour	
		Enter	Exit	Enter	Exit
OUTPUT	Office	0	0	0	0
	Retail	0	0	0	0
	Restaurant	0	0	1	1
	Cinema/Entertainment	0	0	0	0
	Residential	0	0	0	0
	Hotel	0	0	1	1
		0	0	2	2

	Total % Reduction	***0.0%***	***4.7%***
OUTPUT	Office		
	Retail		
	Restaurant		7.7%
	Cinema/Entertainment		
	Residential		
	Hotel		3.3%

EXTERNAL TRIPS

	Land Use	A.M. Peak Hour		P.M. Peak Hour	
		Enter	Exit	Enter	Exit
OUTPUT	Office	0	0	0	0
	Retail	0	0	0	0
	Restaurant	0	0	14	10
	Cinema/Entertainment	0	0	0	0
	Residential	0	0	0	0
	Hotel	0	0	33	25
		0	0	47	35

Internal Capture Reduction Calculations

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Methodology for Daily
based on the average of the Unconstrained Rates for the A.M. Peak Hour and P.M. Peak Hour

SUMMARY (PROPOSED)

GROSS TRIP GENERATION

INPUT

Land Use	A.M. Peak Hour		P.M. Peak Hour	
	Enter	Exit	Enter	Exit
Office	0	0	0	0
Retail	0	0	0	0
Restaurant	0	0	15	11
Cinema/Entertainment	0	0	0	0
Residential	0	0	0	0
Hotel	0	0	40	30
	0	0	55	41

INTERNAL TRIPS

OUTPUT

Land Use	A.M. Peak Hour		P.M. Peak Hour	
	Enter	Exit	Enter	Exit
Office	0	0	0	0
Retail	0	0	0	0
Restaurant	0	0	1	1
Cinema/Entertainment	0	0	0	0
Residential	0	0	0	0
Hotel	0	0	1	1
	0	0	2	2

OUTPUT

Total % Reduction	***0.0%***	***4.2%***
Office		
Retail		
Restaurant		7.7%
Cinema/Entertainment		
Residential		
Hotel		2.9%

EXTERNAL TRIPS

OUTPUT

Land Use	A.M. Peak Hour		P.M. Peak Hour	
	Enter	Exit	Enter	Exit
Office	0	0	0	0
Retail	0	0	0	0
Restaurant	0	0	14	10
Cinema/Entertainment	0	0	0	0
Residential	0	0	0	0
Hotel	0	0	39	29
	0	0	53	39

B08301

MEANS OF TRANSPORTATION TO WORK

Universe: Workers 16 years and over
2013-2017 American Community Survey 5-Year Estimates

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Technical Documentation section.

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(80+34+189)/973=31.1%

	Census Tract 41.03, Miami-Dade County, Florida	
	Estimate	Margin of Error
Total:	973	+/-216
Car, truck, or van:	588	+/-157
Drove alone	522	+/-137
Carpooled:	66	+/-90
In 2-person carpool	66	+/-90
In 3-person carpool	0	+/-13
In 4-person carpool	0	+/-13
In 5- or 6-person carpool	0	+/-13
In 7-or-more-person carpool	0	+/-13
Public transportation (excluding taxicab):	189	+/-97
Bus or trolley bus	156	+/-91
Streetcar or trolley car (carro publico in Puerto Rico)	0	+/-13
Subway or elevated	0	+/-13
Railroad	33	+/-45
Ferryboat	0	+/-13
Taxicab	26	+/-42
Motorcycle	0	+/-13
Bicycle	34	+/-29
Walked	80	+/-50
Other means	11	+/-16
Worked at home	45	+/-37

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

Workers include members of the Armed Forces and civilians who were at work last week.

While the 2013-2017 American Community Survey (ACS) data generally reflect the February 2013 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas; in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic

entities.

Estimates of urban and rural populations, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

Explanation of Symbols:

1. An '**' entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.
2. An '-' entry in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution.
3. An '-' following a median estimate means the median falls in the lowest interval of an open-ended distribution.
4. An '+' following a median estimate means the median falls in the upper interval of an open-ended distribution.
5. An '***' entry in the margin of error column indicates that the median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.
6. An '******' entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.
7. An 'N' entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.
8. An '(X)' means that the estimate is not applicable or not available.

Attachment D-1

On-site Vehicle Queuing Analysis

Miami Beach Study

Location: 3120 Collins Ave
City: Miami Beach

Day: Thursday
Date: 12/12/2019

TIME	Collins Avenue just S/o 32nd St	NOTES	TIME	Collins Avenue just S/o 32nd St	NOTES	TIME	Collins Avenue just S/o 32nd St	NOTES
	QUEUE			QUEUE			QUEUE	
12:00 PM	1		12:50 PM	2		1:40 PM		
12:01 PM	1		12:51 PM	2		1:41 PM		
12:02 PM	1		12:52 PM	1		1:42 PM		
12:03 PM	1		12:53 PM	1		1:43 PM		
12:04 PM	2		12:54 PM			1:44 PM		
12:05 PM	2		12:55 PM			1:45 PM	1	
12:06 PM	2		12:56 PM			1:46 PM	1	
12:07 PM	1		12:57 PM			1:47 PM	1	
12:08 PM	1		12:58 PM			1:48 PM	2	
12:09 PM	1		12:59 PM			1:49 PM	2	
12:10 PM			1:00 PM			1:50 PM	1	
12:11 PM	1		1:01 PM			1:51 PM	1	
12:12 PM	2		1:02 PM			1:52 PM		
12:13 PM	2		1:03 PM	1		1:53 PM		
12:14 PM	1		1:04 PM	1		1:54 PM		
12:15 PM			1:05 PM	1		1:55 PM		
12:16 PM			1:06 PM			1:56 PM		
12:17 PM			1:07 PM			1:57 PM		
12:18 PM			1:08 PM			1:58 PM		
12:19 PM	1		1:09 PM			1:59 PM		
12:20 PM	1		1:10 PM			2:00 PM		
12:21 PM	1		1:11 PM			2:01 PM		
12:22 PM	1		1:12 PM			2:02 PM		
12:23 PM	1		1:13 PM			2:03 PM		
12:24 PM			1:14 PM			2:04 PM		
12:25 PM			1:15 PM			2:05 PM		
12:26 PM	1		1:16 PM			2:06 PM		
12:27 PM	1		1:17 PM			2:07 PM		
12:28 PM	1		1:18 PM			2:08 PM	1	
12:29 PM			1:19 PM			2:09 PM	1	
12:30 PM			1:20 PM			2:10 PM	1	
12:31 PM			1:21 PM			2:11 PM	1	
12:32 PM			1:22 PM			2:12 PM	1	
12:33 PM			1:23 PM			2:13 PM	1	
12:34 PM			1:24 PM			2:14 PM	1	
12:35 PM			1:25 PM			2:15 PM	1	
12:36 PM			1:26 PM			2:16 PM	1	
12:37 PM			1:27 PM			2:17 PM	1	
12:38 PM			1:28 PM			2:18 PM	1	
12:39 PM			1:29 PM			2:19 PM	1	
12:40 PM			1:30 PM			2:20 PM	1	
12:41 PM			1:31 PM			2:21 PM	1	
12:42 PM			1:32 PM			2:22 PM	1	
12:43 PM			1:33 PM			2:23 PM	1	
12:44 PM			1:34 PM			2:24 PM		
12:45 PM			1:35 PM			2:25 PM		
12:46 PM			1:36 PM	1		2:26 PM		
12:47 PM			1:37 PM	1		2:27 PM		
12:48 PM	1		1:38 PM	1		2:28 PM		
12:49 PM	1		1:39 PM			2:29 PM		

Note: Highlighted values are maximum queues.

Miami Beach Study

Location: 3120 Collins Ave
City: Miami Beach

Day: Thursday
Date: 12/12/2019

TIME	Collins Avenue just S/o 32nd St QUEUE	NOTES	TIME	Collins Avenue just S/o 32nd St QUEUE	NOTES	TIME	Collins Avenue just S/o 32nd St QUEUE	NOTES
2:30 PM			3:20 PM	2		4:10 PM	1	
2:31 PM			3:21 PM	2		4:11 PM	2	
2:32 PM			3:22 PM	2		4:12 PM	2	
2:33 PM			3:23 PM	2		4:13 PM	2	
2:34 PM			3:24 PM	2		4:14 PM	3	
2:35 PM			3:25 PM	2		4:15 PM	3	
2:36 PM			3:26 PM	2		4:16 PM	3	
2:37 PM			3:27 PM	2		4:17 PM	3	
2:38 PM			3:28 PM	2		4:18 PM	2	
2:39 PM			3:29 PM	2		4:19 PM	2	
2:40 PM			3:30 PM	2		4:20 PM	2	
2:41 PM			3:31 PM	2		4:21 PM	2	
2:42 PM			3:32 PM	2		4:22 PM	2	
2:43 PM			3:33 PM	2		4:23 PM	2	
2:44 PM			3:34 PM	2		4:24 PM	2	
2:45 PM			3:35 PM	2		4:25 PM	2	
2:46 PM			3:36 PM	2		4:26 PM	2	
2:47 PM			3:37 PM	2		4:27 PM	2	
2:48 PM			3:38 PM	2		4:28 PM	2	
2:49 PM			3:39 PM	2		4:29 PM	2	
2:50 PM			3:40 PM	2		4:30 PM	2	
2:51 PM			3:41 PM	2		4:31 PM	2	
2:52 PM			3:42 PM	2		4:32 PM	2	
2:53 PM			3:43 PM	2		4:33 PM	2	
2:54 PM			3:44 PM	2		4:34 PM	2	
2:55 PM			3:45 PM	2		4:35 PM	2	
2:56 PM			3:46 PM	2		4:36 PM	2	
2:57 PM			3:47 PM	2		4:37 PM	2	
2:58 PM			3:48 PM	2		4:38 PM	2	
2:59 PM			3:49 PM	2		4:39 PM	2	
3:00 PM			3:50 PM	2		4:40 PM	2	
3:01 PM			3:51 PM	2		4:41 PM	2	
3:02 PM			3:52 PM	2		4:42 PM	2	
3:03 PM	1		3:53 PM	2		4:43 PM	2	
3:04 PM	1		3:54 PM	2		4:44 PM	2	
3:05 PM	1		3:55 PM	2		4:45 PM	2	
3:06 PM	1		3:56 PM	2		4:46 PM	2	
3:07 PM	1		3:57 PM	2		4:47 PM	2	
3:08 PM	2		3:58 PM	2		4:48 PM	2	
3:09 PM	2		3:59 PM	2		4:49 PM	2	
3:10 PM	2		4:00 PM	2		4:50 PM	2	
3:11 PM	2		4:01 PM	2		4:51 PM	2	
3:12 PM	2		4:02 PM	2		4:52 PM	2	
3:13 PM	2		4:03 PM	2		4:53 PM	2	
3:14 PM	2		4:04 PM	2		4:54 PM	2	
3:15 PM	2		4:05 PM	2		4:55 PM	2	
3:16 PM	2		4:06 PM	2		4:56 PM	2	
3:17 PM	2		4:07 PM	2		4:57 PM	2	
3:18 PM	2		4:08 PM	1		4:58 PM	3	
3:19 PM	2		4:09 PM	1		4:59 PM	3	

Note: Highlighted values are maximum queues.

Miami Beach Study

Location: 3120 Collins Ave
City: Miami Beach

Day: Thursday
Date: 12/12/2019

TIME	Collins Avenue just S/o 32nd St QUEUE	NOTES	TIME	Collins Avenue just S/o 32nd St QUEUE	NOTES	TIME	Collins Avenue just S/o 32nd St QUEUE	NOTES
5:00 PM	3		5:50 PM			6:40 PM		
5:01 PM	2		5:51 PM			6:41 PM		
5:02 PM	2		5:52 PM			6:42 PM		
5:03 PM	2		5:53 PM			6:43 PM		
5:04 PM	1		5:54 PM			6:44 PM		
5:05 PM	1		5:55 PM			6:45 PM		
5:06 PM	1		5:56 PM			6:46 PM		
5:07 PM	1		5:57 PM			6:47 PM		
5:08 PM	1		5:58 PM			6:48 PM		
5:09 PM	1		5:59 PM			6:49 PM		
5:10 PM			6:00 PM			6:50 PM		
5:11 PM			6:01 PM			6:51 PM		
5:12 PM			6:02 PM			6:52 PM		
5:13 PM			6:03 PM			6:53 PM		
5:14 PM			6:04 PM			6:54 PM		
5:15 PM			6:05 PM			6:55 PM		
5:16 PM			6:06 PM			6:56 PM		
5:17 PM			6:07 PM			6:57 PM		
5:18 PM			6:08 PM			6:58 PM		
5:19 PM			6:09 PM			6:59 PM		
5:20 PM			6:10 PM					
5:21 PM			6:11 PM					
5:22 PM			6:12 PM					
5:23 PM			6:13 PM					
5:24 PM			6:14 PM					
5:25 PM			6:15 PM					
5:26 PM			6:16 PM					
5:27 PM			6:17 PM					
5:28 PM			6:18 PM					
5:29 PM			6:19 PM					
5:30 PM			6:20 PM					
5:31 PM			6:21 PM					
5:32 PM			6:22 PM					
5:33 PM			6:23 PM					
5:34 PM			6:24 PM					
5:35 PM			6:25 PM					
5:36 PM			6:26 PM					
5:37 PM			6:27 PM					
5:38 PM			6:28 PM					
5:39 PM			6:29 PM					
5:40 PM			6:30 PM					
5:41 PM			6:31 PM					
5:42 PM			6:32 PM					
5:43 PM			6:33 PM					
5:44 PM			6:34 PM					
5:45 PM			6:35 PM					
5:46 PM			6:36 PM					
5:47 PM			6:37 PM					
5:48 PM			6:38 PM					
5:49 PM			6:39 PM					

Note: Highlighted values are maximum queues.

Miami Beach Study

Location: 3120 Collins Ave
City: Miami Beach

Day: Saturday
Date: 12/14/2019

TIME	Collins Avenue just S/o 32nd St QUEUE	NOTES	TIME	Collins Avenue just S/o 32nd St QUEUE	NOTES	TIME	Collins Avenue just S/o 32nd St QUEUE	NOTES
12:00 PM			12:50 PM			1:40 PM	1	
12:01 PM			12:51 PM			1:41 PM		
12:02 PM			12:52 PM			1:42 PM		
12:03 PM			12:53 PM			1:43 PM		
12:04 PM			12:54 PM			1:44 PM		
12:05 PM			12:55 PM			1:45 PM		
12:06 PM			12:56 PM			1:46 PM		
12:07 PM			12:57 PM			1:47 PM		
12:08 PM			12:58 PM			1:48 PM		
12:09 PM			12:59 PM			1:49 PM		
12:10 PM			1:00 PM			1:50 PM		
12:11 PM			1:01 PM			1:51 PM		
12:12 PM			1:02 PM			1:52 PM		
12:13 PM			1:03 PM			1:53 PM		
12:14 PM			1:04 PM			1:54 PM		
12:15 PM	1		1:05 PM			1:55 PM		
12:16 PM	1		1:06 PM			1:56 PM		
12:17 PM	1		1:07 PM			1:57 PM	1	
12:18 PM	1		1:08 PM	1		1:58 PM	1	
12:19 PM	1		1:09 PM	1		1:59 PM	1	
12:20 PM			1:10 PM	1		2:00 PM	2	
12:21 PM			1:11 PM	1		2:01 PM	1	
12:22 PM			1:12 PM	1		2:02 PM		
12:23 PM			1:13 PM	2		2:03 PM		
12:24 PM			1:14 PM	2		2:04 PM		
12:25 PM			1:15 PM	2		2:05 PM		
12:26 PM			1:16 PM	1		2:06 PM		
12:27 PM			1:17 PM	1		2:07 PM		
12:28 PM			1:18 PM	1		2:08 PM		
12:29 PM			1:19 PM	1		2:09 PM		
12:30 PM			1:20 PM	1		2:10 PM		
12:31 PM			1:21 PM	1		2:11 PM		
12:32 PM			1:22 PM	1		2:12 PM		
12:33 PM			1:23 PM	1		2:13 PM		
12:34 PM	1		1:24 PM	1		2:14 PM		
12:35 PM	1		1:25 PM	1		2:15 PM		
12:36 PM			1:26 PM	1		2:16 PM		
12:37 PM			1:27 PM	1		2:17 PM		
12:38 PM			1:28 PM	1		2:18 PM		
12:39 PM			1:29 PM			2:19 PM		
12:40 PM			1:30 PM			2:20 PM		
12:41 PM			1:31 PM			2:21 PM		
12:42 PM			1:32 PM			2:22 PM		
12:43 PM			1:33 PM			2:23 PM		
12:44 PM			1:34 PM			2:24 PM		
12:45 PM			1:35 PM			2:25 PM		
12:46 PM	1		1:36 PM	1		2:26 PM		
12:47 PM	1		1:37 PM	1		2:27 PM		
12:48 PM	1		1:38 PM	1		2:28 PM		
12:49 PM	1		1:39 PM	1		2:29 PM		

Note: Highlighted values are maximum queues.

Miami Beach Study

Location: 3120 Collins Ave
City: Miami Beach

Day: Saturday
Date: 12/14/2019

TIME	Collins Avenue just S/o 32nd St QUEUE	NOTES	TIME	Collins Avenue just S/o 32nd St QUEUE	NOTES	TIME	Collins Avenue just S/o 32nd St QUEUE	NOTES
2:30 PM			3:20 PM			4:10 PM		
2:31 PM			3:21 PM			4:11 PM		
2:32 PM			3:22 PM			4:12 PM		
2:33 PM			3:23 PM			4:13 PM		
2:34 PM			3:24 PM			4:14 PM		
2:35 PM			3:25 PM			4:15 PM		
2:36 PM			3:26 PM			4:16 PM		
2:37 PM			3:27 PM			4:17 PM		
2:38 PM			3:28 PM			4:18 PM		
2:39 PM			3:29 PM			4:19 PM		
2:40 PM			3:30 PM			4:20 PM		
2:41 PM			3:31 PM			4:21 PM		
2:42 PM			3:32 PM			4:22 PM		
2:43 PM			3:33 PM			4:23 PM		
2:44 PM			3:34 PM			4:24 PM		
2:45 PM			3:35 PM			4:25 PM		
2:46 PM			3:36 PM			4:26 PM		
2:47 PM			3:37 PM			4:27 PM		
2:48 PM			3:38 PM			4:28 PM		
2:49 PM			3:39 PM	1		4:29 PM		
2:50 PM			3:40 PM	1		4:30 PM		
2:51 PM			3:41 PM	1		4:31 PM		
2:52 PM			3:42 PM	1		4:32 PM		
2:53 PM			3:43 PM	1		4:33 PM		
2:54 PM	1		3:44 PM	1		4:34 PM		
2:55 PM	1		3:45 PM	1		4:35 PM	1	
2:56 PM			3:46 PM	1		4:36 PM	1	
2:57 PM			3:47 PM	1		4:37 PM		
2:58 PM			3:48 PM	1		4:38 PM		
2:59 PM			3:49 PM	1		4:39 PM		
3:00 PM			3:50 PM	1		4:40 PM		
3:01 PM			3:51 PM	1		4:41 PM		
3:02 PM			3:52 PM	1		4:42 PM		
3:03 PM			3:53 PM	1		4:43 PM		
3:04 PM			3:54 PM	1		4:44 PM		
3:05 PM			3:55 PM	1		4:45 PM		
3:06 PM			3:56 PM	1		4:46 PM		
3:07 PM			3:57 PM	1		4:47 PM		
3:08 PM			3:58 PM	1		4:48 PM		
3:09 PM			3:59 PM	1		4:49 PM		
3:10 PM			4:00 PM	1		4:50 PM		
3:11 PM			4:01 PM			4:51 PM		
3:12 PM			4:02 PM			4:52 PM		
3:13 PM			4:03 PM			4:53 PM		
3:14 PM			4:04 PM			4:54 PM		
3:15 PM			4:05 PM			4:55 PM		
3:16 PM			4:06 PM			4:56 PM		
3:17 PM			4:07 PM			4:57 PM		
3:18 PM			4:08 PM			4:58 PM		
3:19 PM			4:09 PM			4:59 PM		

Note: Highlighted values are maximum queues.

Miami Beach Study

Location: 3120 Collins Ave
City: Miami Beach

Day: Saturday
Date: 12/14/2019

TIME	Collins Avenue just S/o 32nd St QUEUE	NOTES	TIME	Collins Avenue just S/o 32nd St QUEUE	NOTES	TIME	Collins Avenue just S/o 32nd St QUEUE	NOTES
5:00 PM			5:50 PM	1		6:40 PM	1	Car block entrance driveway from 5:57-6:45pm
5:01 PM			5:51 PM	1		6:41 PM	1	Car block entrance driveway from 5:57-6:45pm
5:02 PM			5:52 PM			6:42 PM	1	Car block entrance driveway from 5:57-6:45pm
5:03 PM			5:53 PM	1		6:43 PM	1	Car block entrance driveway from 5:57-6:45pm
5:04 PM			5:54 PM	1		6:44 PM	1	Car block entrance driveway from 5:57-6:45pm
5:05 PM			5:55 PM			6:45 PM	1	Car block entrance driveway from 5:57-6:45pm
5:06 PM			5:56 PM			6:46 PM		
5:07 PM			5:57 PM	1	Car block entrance driveway from 5:57-6:45pm	6:47 PM	1	
5:08 PM			5:58 PM	1	Car block entrance driveway from 5:57-6:45pm	6:48 PM	1	
5:09 PM			5:59 PM	1	Car block entrance driveway from 5:57-6:45pm	6:49 PM	2	
5:10 PM			6:00 PM	1	Car block entrance driveway from 5:57-6:45pm	6:50 PM	2	
5:11 PM			6:01 PM	1	Car block entrance driveway from 5:57-6:45pm	6:51 PM	1	
5:12 PM			6:02 PM	1	Car block entrance driveway from 5:57-6:45pm	6:52 PM	1	
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5:15 PM			6:05 PM	1	Car block entrance driveway from 5:57-6:45pm	6:55 PM	1	
5:16 PM			6:06 PM	1	Car block entrance driveway from 5:57-6:45pm	6:56 PM	1	
5:17 PM			6:07 PM	1	Car block entrance driveway from 5:57-6:45pm	6:57 PM		
5:18 PM			6:08 PM	1	Car block entrance driveway from 5:57-6:45pm	6:58 PM		
5:19 PM			6:09 PM	1	Car block entrance driveway from 5:57-6:45pm	6:59 PM		
5:20 PM			6:10 PM	1	Car block entrance driveway from 5:57-6:45pm			
5:21 PM			6:11 PM	1	Car block entrance driveway from 5:57-6:45pm			
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