

August 4, 2020

Mr. Joseph N. Biordi
Adache Group Architects
550 S. Federal Highway
Fort Lauderdale, FL 33301

**Re: Bahia Cabana - Fort Lauderdale, Florida
Trip Generation Statement**

Dear Mr. Biordi:

Pursuant to your request, Daniels Consulting Engineers, Inc. (DC Engineers, Inc.) has prepared this trip generation statement specific to development of a 124-room resort hotel, 43 multifamily dwelling units of which six (6) units are waterside, and a 2,355 square foot cafe (accessible and open to the public) planned to be located along Harbor Drive west of Seabreeze Boulevard (SR A1A) within municipal limits of the City of Fort Lauderdale, Florida. Figure 1, included as Attachment A, shows the location of the project site. This trip generation statement provides a comparison of vehicle trips generated by the onsite uses (now demolished) and the expected trip generation of the uses proposed as well as a comparison of existing vehicle trips and vehicle trips expected from those uses proposed within the Central Beach RAC, exclusively.

The following is a summary of our findings.

Trip Generation

Estimates of trip generation were determined using rates and formulae published in the Institute of Transportation Engineers (ITE) report *Trip Generation* (10th Edition). Based upon this information, the weekday, AM peak hour, and PM peak hour trip generation rates for existing and proposed land uses are as follows:

Resort Hotel – ITE Land Use #330

- Weekday: *not available. See Tables 1 and 2 for methodology.
where T = number of trips and X = rooms
- AM Peak Hour: $T = 0.32(X)$ (72% in / 28% out)
- PM Peak Hour: $T = 0.41(X)$ (43% in / 57% out)

High-Turnover (Sit-Down) Restaurant - ITE Land Use #932

- Weekday: $T = 112.18(X)$
where T = number of trips, $X = 1,000$ sf gross floor area
- AM Peak Hour: $T = 9.94(X)$ (55% entering/45% exiting)
- PM Peak Hour: $T = 9.77(X)$ (62% entering/38% exiting)

Multifamily Housing (Mid-Rise) - ITE Land Use #221

- Weekday: $T = 5.45(X) - 1.75$
where T = number of trips, X = dwelling units
- AM Peak Hour: $\ln(T) = 0.98\ln(X) - 0.98$ (26% entering/74% exiting)
- PM Peak Hour: $\ln(T) = 0.96\ln(X) - 0.63$ (61% entering/39% exiting)

12743 NW 13th Court, Coral Springs, Florida 33071
Tel: (954) 798-0926

Internal Capture

Internal capture is expected between complimentary land uses within a multi-use project and are those vehicle trip ends that can be satisfied onsite without impact to the adjacent roadway network. Internal capture trips are determined using methodologies contained within the *ITE Trip Generation Handbook*, 3rd Edition.

Pass-By Capture

Pass-by capture rates recommended within ITE's *Trip Generation Handbook*, 3rd Edition are reflected within the trip generation analysis provided herein. Pass-by capture trips are those vehicle trips already on the roadway network that when passing by a property will spontaneously decide to visit one of the establishments onsite. The standard pass-by capture rate of 43 percent (43.0%) for High Turnover (Sit-Down) Restaurant (LUC 932) has been utilized.

Central Beach RAC Trip Comparison

Table 1, included as Attachment B, summarizes trip generation results for the now-demolished Bahia Cabana Beach Resort comprised of 48 hotel rooms, 500 square feet of retail space, and a 14,000 square foot restaurant. As shown in Table 1, the mixed-use development likely produced 1,126 vehicle trips per day (vpd) with 154 vehicle trips occurring during the AM peak hour (87 entering and 67 exiting) and 86 vehicle trips occurring during the PM peak hour (51 entering and 35 exiting). Similarly, Table 2 summarizes trip generation results for the proposed development located within the Central Beach RAC (124 hotel rooms, six (6) multifamily dwelling units, and a 2,355 square foot cafe). These waterside uses are expected to generate 895 vpd with 63 vehicle trips occurring during the AM peak hour (42 entering and 21 exiting) and 64 vehicle trips occurring during the PM peak hour (30 entering and 34 exiting).

As shown in Table 2 net new vehicle trips attributable to the waterside uses (located within the Central Beach RAC) proposed are expected to total 231 vpd less than existing uses. Peak hour project trips are shown to be 91 vph and 22 vph less than existing uses during AM and PM peak hours, respectively. As shown, the existing development, now removed, is estimated to have produced more vehicle trips than that proposed with this application.

Total Project Trip Comparison

Table 1, included as Attachment B, summarizes trip generation results for the now-demolished Bahia Cabana Beach Resort as described above. Similarly, Table 3 (reflecting all uses proposed) summarizes trip generation results for the 124 hotel rooms, 43 multifamily dwelling units and 2,355 square feet of restaurant space. These uses are expected to generate 1,029 vpd with 71 vehicle trips occurring during the AM peak hour (43 entering and 28 exiting) and 76 vehicle trips occurring during the PM peak hour (38 entering and 38 exiting).

As shown in Table 3 net new vehicle trips attributable to the development proposed are expected to total 97 vpd less than existing uses. Peak hour project trips are shown to be 83 vph and 10 vph less than existing uses during AM and PM peak hours, respectively. As shown, the existing development, now removed, is estimated to have produced more vehicle trips than that proposed with this application in its entirety.

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Queue Analysis

A queue analysis has been completed to determine the appropriateness of the number of vehicle queue spaces provided at the hotel's front entryway. According to the current site plan, the proposed development will have two (2) entry lanes within the porte cochere area with the potential for six (6) on site spaces for vehicles to queue.

The trip generation analysis for this site indicates that peak inbound traffic may occur during the AM peak hour with 43 vehicles expected to enter the project site. However, as most AM entering trips are expected to be employee or delivery-related and not likely to queue within the hotel entryway, the PM peak hour is examined herein. During the PM peak hour 48 gross inbound vehicle trips are noted (reference Table 3). Removing those trips considered internal to the project site (and therefore, not impacting the external roadway) and entering trips attributable to the residential use (as they will park within the garage on the south side of Harbor Drive), yields 33 entering vehicle trips that may utilize the hotel's front entryway. While we are confident that some vehicles will use the onsite valet within the garage, to provide a conservative analysis, all 33 vehicle trips have been treated as if they are a taxi, rideshare service, or private vehicle that is dropping off passengers or luggage at the front of the hotel.

The length of queue anticipated on site was determined using information contained in ITE's *Transportation and Land Development*, Chapter 8 – Drive-In Facilities (equation 8-9b and Table 8-11). For this analysis, the following input variables were used:

- **Demand Rate:** Based on ITE's *Trip Generation* (10th Edition), the maximum inbound traffic flow anticipated at the proposed hotel entryway is approximately 33 vehicles.
- **Service Rate:** It was assumed that the average time a taxi, rideshare, or private vehicle would take to offload a passenger with or without luggage averages two (2) minutes.

With a 95% confidence level, it is projected that the maximum queue noticed at any one time during the PM peak hour is three (3) vehicles. Appendix C includes queue analysis worksheets and a current site plan.

Conclusion

Based upon the foregoing analysis, the following can be concluded:

- That portion of the proposed project that is located within the Central Beach RAC is not expected to generate vehicular trips in excess of those produced by the prior use (now demolished).

In addition, the proposed project should not require a comprehensive traffic impact study for the following reasons:

- Unified Land Development Regulations (ULDR's) specific to the City of Fort Lauderdale stipulate that when a proposed project generates more than 1,000 net new vehicle trips per day, a comprehensive traffic study is required. The subject project is expected to produce less than 1,000 vehicle trips per day with prior uses considered.

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- And, if the net new vehicle trips are less than 1,000 vehicle trips per day and more than 20 percent of the daily trips are anticipated to arrive or depart, or both, within one-half hour, a comprehensive traffic study is required. As shown in Tables 2 and 3, 20 percent of daily trips are not expected to arrive or depart (or both) within one-half hour.

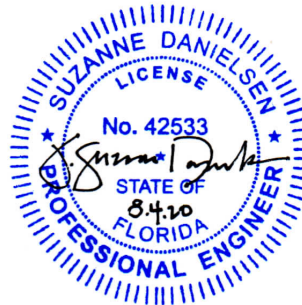
And lastly, with a 95% confidence level, it is projected that the maximum queue noticed at any one time during the PM peak hour is expected to be three (3) vehicles, which can easily be accommodated on site without impact to the adjacent roadway.

Of course, please call or email with any questions you may have.

DANIELSEN CONSULTING ENGINEERS, INC.



J. Suzanne Daniels, P.E.
Senior Transportation Engineer



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Florida Registration Number 42533
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CA # 3202

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Attachment A

Figure 1 - Project Location



Attachment B

Trip Generation Tables

Existing Trip Generation
Central Beach RAC Review
Total Project Traffic

Table 1: Trip Generation Summary Existing Uses

Land Use	Scale	Units	AM Peak Hour			PM Peak Hour			Daily
			Total Trips	Inbound	Outbound	Total Trips	Inbound	Outbound	Total Trips
Resort Hotel (LUC 330)	48	rm	15	11	4	20	9	11	277
Retail (LUC 820)	0.500	ksf	0	0	0	2	1	1	19
High Turnover (Sit-Down) Rest. (LUC 932)	14.000	ksf	139	76	63	137	85	52	1,571
Subtotal			154	87	67	159	95	64	1,867
Internal (0%, 11%)			0	0	0	(18)	(10)	(8)	(103)
Subtotal			154	87	67	141	85	56	1,764
Pass-by (43%) LUC 932						(55)	(34)	(21)	(638)
Total			154	87	67	86	51	35	1,126

Source: ITE Trip Generation Manual (10th Edition)

LUC 330 - Daily rate developed by applying peak to daily ratio specific to LUC 310 to PM peak hour trips noted above.

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Table 2: Trip Generation Summary Proposed Uses within Central Beach RAC

Land Use	Scale	Units	AM Peak Hour			PM Peak Hour			Daily
			Total Trips	Inbound	Outbound	Total Trips	Inbound	Outbound	Total Trips
Resort Hotel (LUC 330)	124	rm	40	29	11	51	22	29	741
Multifamily Housing (Mid-Rise) (LUC 221)	6	du	2	1	1	3	2	1	31
High Turnover (Sit-Down) Rest. (LUC 932)	2.355	ksf	23	13	10	23	14	9	264
Subtotal			65	43	22	77	38	39	1,036
Internal (3%, 5%)			(2)	(1)	(1)	(4)	(2)	(2)	(41)
Subtotal			63	42	21	73	36	37	995
Pass-by (43%) LUC 932						(9)	(6)	(3)	(100)
Total			63	42	21	64	30	34	895
Net New Vehicle Trips			-91	-45	-46	-22	-21	-1	-231

Source: ITE Trip Generation Manual (10th Edition)

LUC 330 - Daily rate developed by applying peak to daily ratio specific to LUC 310 to PM peak hour trips noted above.

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Table 3: Trip Generation Summary Total

Land Use	Scale	Units	AM Peak Hour			PM Peak Hour			Daily
			Total Trips	Inbound	Outbound	Total Trips	Inbound	Outbound	Total Trips
Resort Hotel (LUC 330)	124	rm	40	29	11	51	22	29	741
Multifamily Housing (Mid-Rise) (LUC 221)	43	du	15	4	11	20	12	8	232
High Turnover (Sit-Down) Rest. (LUC 932)	2.355	ksf	23	13	10	23	14	9	264
Subtotal			78	46	32	94	48	46	1,237
Internal (9%, 11%)			(7)	(3)	(4)	(10)	(5)	(5)	(124)
Subtotal			71	43	28	84	43	41	1,113
Pass-by (43%) LUC 932						(8)	(5)	(3)	(84)
Total			71	43	28	76	38	38	1,029
Net New Vehicle Trips			-83	-44	-39	-10	-13	3	-97

Source: ITE Trip Generation Manual (10th Edition)

LUC 330 - Daily rate developed by applying peak to daily ratio specific to LUC 310 to PM peak hour trips noted above.

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Attachment C

Queue Analysis and Site Plan

Bahia Cabana – Ft. Lauderdale
Queuing Analysis based on ITE Procedures

$q = 33 \text{ veh/hr}$ (demand rate)

$Q = 30 \text{ veh/hr}$ (service rate @ 2 min/veh)

$$p = \frac{q}{NQ} = 0.550 \text{ (N = two)}$$

$$Q_M = 0.387 \text{ (for N = 2)}$$

Using Acceptable Probability of 5% (95% Confidence Level)

$$M = \left(\frac{\ln(x > M) - \ln(Q_M)}{\ln(p)} \right) - 1$$

$$M = \left(\frac{\ln(0.05) - \ln(0.387)}{\ln(0.550)} \right) - 1$$

$$M = \left(\frac{-2.996 - (-0.949)}{-0.598} \right) - 1$$

$$M = 3.423 - 1 = 2.423 \text{ vehicles}$$

or, 3 vehicles

DC Engineers, Inc.

PROJECT DESIGN TEAM

ARCHITECTS

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True and accurate data and preliminary concepts can only result from a thorough design process involving collaboration with engineers and governmental authorities having jurisdiction over this site. All conceptual plans, elevations, and data are based upon assumptions and unconfirmed preliminary information and are subject to change.

SITE 1- PROJECT DATA

DEVELOPMENT/ PROJECT NAME	BAHIA CABANA HOTEL	SITE PLAN LEVEL IV
DEVELOPMENT/ PROJECT ADDRESS	3001 HARBOR DRIVE, FT LAUDERDALE, FL; 3007 HARBOR DRIVE, 33316	
LEGAL DESCRIPTION	OCEAN HARBOR 26-39 B LOT 12, OCEAN HARBOR 26-39 B LOT 13	
TAX ID FOLIO NUMBERS <small>(FOR ALL PARCELS IN DEVELOPMENT)</small>	FOLIO NUMBER: 504212240100, FOLIO NUMBER: 504212240090	
REQUEST/ DESCRIPTION OF PROJECT	MIXED USE: LEVEL 1: HOTEL LOBBY/ RESTAURANT; LEVEL 2: MEETING ROOMS, SPA , GYM; LEVEL 3-7: 1-STORY HOTEL ROOMS; LEVEL 8-9: RESIDENCES BUILDING DESIGN MAINTAINS WATERWAY VIEWS BY MEANS OF TRANSPARENT ELEMENTS IN THE FACADE, OPEN PLAZA AND HEIGHT OF THE FIRST LEVEL. THE DESIGN ENCOURAGES THE PRESERVATION OF THE WATERWAYS MAINTAINING THE EXISTING DESIGNATED AREA FOR BOAT DOCKS AND ITS PEDESTRIAN ACCESS.	
BUILDING TYPE	• Mixed-use Hotel R-1, Residences R-2 Occupancy • Construction Type: I.B., Noncombustible, sprinklered • Allowable Height: 180 ft • FBC Table 504.3 • Allowable Stories: 12 • FBC Table 504.4 • Allowable Area: Unlimited • FBC Table 506.2 • FBC Table 601 • Structural frame: 2 hrs • Bearing Walls: 2 hrs, or 1 hr where supporting a roof only • Floor construction: 2 hrs • Roof: 1 hr	
APPLICABLE CODES	2017 FLORIDA BUILDING CODE (6TH EDITION), Residential units to comply with with Fair Housing Provisions per FBC Accessibility Code	

	EXISTING	PROPOSED
LAND USE DESIGNATION	CENTRAL BEACH REGIONAL ACTIVITY CENTER	CENTRAL BEACH REGIONAL ACTIVITY CENTER
ZONING DESIGNATION	SBMHA	SBMHA
USE OF PROPERTY/ OCCUPANCY	10 - Commercial - Vacant Commercial	COMMERCIAL- RESIDENTIAL (R-1)
RESIDENTIAL SF (AND TYPE)	RESIDENCES= 16,636 SF TERRACES AND BALCONIES=	5,200 SF
NUMBER OF RESIDENTIAL UNITS	DWELLING UNITS= 6	
NON-RESIDENTIAL SF (AND TYPE)	HOTEL ROOMS (INCLUDING TERRACES & BALCONIES)= 61,698 SF KEYS= 124 SERVICE & COMMON AREAS= 117,470 SF	
TOTAL BLDG. SF. <small>(INCLUDE STRUCTURED PARKING)</small>	129,365 SF (NOT INCLUDING LANDSCAPE OR OUTDOOR AREAS)	
SITE ADJACENT TO WATERWAY	Yes	

DIMENSIONAL REQUIREMENTS	REQUIRED/ PERMITTED	PROPOSED																									
LOT SIZE (SF/ ACREAGE)		42,626SF/ 43,560=0.978 ACRE																									
LOT DENSITY RESIDENTIAL	48 UNITS P/ACRE X 0.987 ACRE= 46.94 DWELLING UNITS	DWELLING UNITS=																									
LOT DENSITY HOTEL	N/A	124 HOTEL UNITS																									
LOT WIDTH	211'-0" AVERAGE	211'-0" AVERAGE																									
BUILDING HEIGHT (FEET/ LEVELS)	120'-0"	117'-0" (MEASURED FROM GRADE)																									
STRUCTURE LENGTH	200'-0"	180'-0"																									
STRUCTURE WIDTH	200'-0"	194'-6"																									
FLOOR AREA RATIO	5 MAX	129,365 SF/ 42,626 SF= 3.02 F.A.R.																									
LOT COVERAGE	N/A	21,746 SF 51%																									
OPEN SPACE	N/A	20,877 SF 49%																									
LANDSCAPE AREA	25%	<table><tr><td>AREA</td><td>LOT SF</td><td>LOT %</td></tr><tr><td>10,656.5 SF</td><td>42,626 SF</td><td>25.0%</td></tr></table>	AREA	LOT SF	LOT %	10,656.5 SF	42,626 SF	25.0%																			
AREA	LOT SF	LOT %																									
10,656.5 SF	42,626 SF	25.0%																									
PARKING SPACES	98No parking on this site-Required Parking provided on site 2	98 PROVIDED ON SITE 2- SEE CHART																									
PARKING SPACES CALCULATION (Restaurant, Dining areas and Roof top Bars are for guest use only. No additional parking provided.) Bicycle Parking see Sheet A-6.01		<table><tr><td></td><td>BEDROOMS</td><td>KEYS</td><td>FACTOR</td><td></td></tr><tr><td>GUESTROOMS</td><td>N/A</td><td>124</td><td>0.67</td><td>84</td></tr><tr><td>RESIDENCES</td><td>3</td><td>4</td><td>2.1</td><td>9</td></tr><tr><td></td><td>4</td><td>2</td><td>2.2</td><td>5</td></tr><tr><td></td><td></td><td></td><td></td><td>98</td></tr></table>		BEDROOMS	KEYS	FACTOR		GUESTROOMS	N/A	124	0.67	84	RESIDENCES	3	4	2.1	9		4	2	2.2	5					98
	BEDROOMS	KEYS	FACTOR																								
GUESTROOMS	N/A	124	0.67	84																							
RESIDENCES	3	4	2.1	9																							
	4	2	2.2	5																							
				98																							
LOADING ZONE	LOADING ZONE TYPE II	LOADING ZONE ,TYPE II- 12' x 45'																									

	REQUIRED/ PERMITTED	PROPOSED
* SEE SETBACK STUDY SHEET A-1.02		
FRONT [S]	20'-0"	20'-0" SETBACK 27'-10" STEPBACK ROOF TOP (SEE SHEET A-1.02 SETBACK STUDY)
SIDE [W]	15'-0" OR 1/2 BLDG HEIGHT	15' SETBACK/ 20' STEPBACK MAX HEIGHT 40' 30' STEPBACK MAX HEIGHT 60'/ 40' STEPBACK MAX HEIGHT 80' / 51'-2" STEPBACK MAX HEIGHT 102'-4" 57'-6" STEPBACK ROOF HEIGHT 115'-0"
REAR [N]	20'-0" OR 1/2 BLDG HEIGHT	20' SETBACK/ 30' STEPBACK MAX HEIGHT 60' 40' STEPBACK MAX HEIGHT 80' 51'-2" STEPBACK MAX HEIGHT 102'-4" 57'-6" STEPBACK ROOF HEIGHT 115'-0"
SIDE [E]	20'-0" OR 1/2 BLDG HEIGHT	30' SETBACK/ 40' STEPBACK MAX HEIGHT 80' 51'-2" STEPBACK MAX HEIGHT 102'-4" 57'-6" STEPBACK ROOF HEIGHT 115'-0"

HOTEL BUILDING AREAS	HOTEL BUILDING AREAS	HOTEL BUILDING AREAS	HOTEL BUILDING AREAS	HOTEL ROOM KEY COUNT
AMENITIES GYM 1,554 SF SPA 2,286 SF 3,840 SF AMENITIES-OUTDOORS OUTDOOR PRIVATE PLAZA 4,777 SF TERRACE 3,560 SF 8,337 SF ASSEMBLY 984 SF DROP-OFF 3,045 SF LOBBY 247 SF LOBBY ENTRANCE 4,276 SF ASSEMBLY - POOL 3,913 SF LANDSCAPE/ POOL DECK LAWN 1,990 SF LOUNGE 3,347 SF POOL 9,250 SF BOH 177 SF L.C. 232 SF LAUNDRY 1,043 SF LOADING DOCK 280 SF RAMP 99 SF LUGGAGE 120 SF OFFICE 31 SF RESTROOM 42 SF TR 214 SF TRASH ROOM 2,238 SF	BUSINESS 115 SF BOARD ROOM 362 SF COVERED TERRACE 2,017 SF MEETING ROOM 4,453 SF OFFICE 407 SF OFFICES 235 SF PREFUNCTION 1,024 SF TERRACE 1,909 SF 10,523 SF CIRCULATION 13,534 SF CORRIDOR 1,457 SF DRIVEWAY 188 SF ELECT. MDF 3,594 SF ELEV. VEST. 202 SF MECH. 606 SF OUTDOOR AREA 610 SF SIDEWALK 446 SF STAIRS 20,638 SF 20,638 SF CORES & VERTICAL CIRCULATION 2,150 SF ELEV. 409 SF ELEV. VEST. 72 SF S.E 6,706 SF STAIRS 9,337 SF HOTEL - GUESTROOMS 7,929 SF GUEST ROOM 48,987 SF TERRACE 4,782 SF 61,698 SF KITCHEN COMMERCIAL 336 SF BAR 993 SF	1,329 SF LANDSCAPE 6,268 SF LANDSCAPE 781 SF PLANTER 7,049 SF MECHANICAL 701 SF CONTROL ROOM 626 SF DOMESTIC WATER 141 SF ELEC/ LV 1,011 SF ELECT. 404 SF FIRE COMMAND 241 SF FIRE PUMP 202 SF FPL 423 SF GEN. 409 SF GREASE 66 SF LV 131 SF MECH. 1,773 SF OUTSIDE AIR UNIT 121 SF POOL EQUIPMENT 70 SF 6,319 SF RESIDENTIAL 3,365 SF PH1 2,798 SF PH2 2,157 SF PH3 3,263 SF PH4 2,897 SF PH5 2,157 SF 16,636 SF RESIDENTIAL BALCONY 1,770 SF BALCONY 3,430 SF TERRACE	5,200 SF RESTAURANT - DINING 3,356 SF BAR 1,060 SF CAFE/BAR 1,002 SF TERRACE 3,378 SF RESTAURANT/ BAR 3,406 SF 12,201 SF RESTROOMS 1,010 SF MEN 1,103 SF WOMEN 2,113 SF RETAIL 293 SF GRAB & GO 207 SF RETAIL 500 SF STORAGE 1,469 SF ST 876 SF STORAGE/ PANTRY 165 SF VEND 175 SF 2,685 SF TRASH ROOM 138 SF TRASH RECYCLE ROOM 299 SF 397 SF 184,568 SF	Level 3 SD 6 SK 22 28 Level 4 SD 5 SK 22 27 Level 5 SD 6 SK 19 25 Level 6 SD 5 SK 17 22 Level 7 SD 5 SK 17 22 124 FEMA Flood Elevation: Property is located in Zone AE 6 on the December 2019 Preliminary FIRM, Panel 576J (6.00 NAVD) Grade Elevation: Property is located landward of the CCCL (Coastal Construction Central Line) therefore the grade elevation should be BFE + 1 (6.00 NAVD + 1.00 = 7.00 NAVD)

SCHEMATIC DESIGN
74.06A_HOTEL
06/23/20

BAHIA CABANA HOTEL
3001-3007 HARBOR DRIVE, FORT LAUDERALE, FL 33316

COVER SHEET

A-0.00

adache
group architects

PROJECT DESIGN TEAM

ARCHITECTS

ADACHE GROUP ARCHITECTS
550 SOUTH FEDERAL HIGHWAY, FT. LAUDERDALE, FL 33301
PH: (954) 525-8133 FAX: (954) 728-8159
EMAIL: info@adache.com www.adache.com
LISCENCE #: AR0007073

CIVIL ENGINEER

GRAEF

9400 SOUTH DADELAND BLVD., SUITE 601, MIAMI, FL 33156
PH: 305 / 378 5555
EMAIL: nelson.ortiz@graef-usa.com graef-usa.com

SURVEYOR

McLAUGHLIN ENGINEERING CO
1700 NW 64TH ST SUITE 400
PH: 954.763.7611 FAX: 954.763.7615
EMAIL: admin@meco400.com www.meco400.com

STRUCTURAL ENGINEER

MASTER CONSULTING ENGINEERING
4101 RAVENSWOOD RD, SUITE 307, FT LAUDERDALE
PH: 954 / 210-7671
EMAIL: ARMANDO.CASTELLON@MCEBGINEERS.COM

MECHANICAL, ELECTRICAL , PLUMBING ENGINEER

JOHNSON, AVEDANO, LOPEZ, RODRIGUEZ & WALEWSKI
ENGINEERING GROUP, INC
2510 NW 97TH AVENUE, SUITE 220, DORAL, FLORIDA 33172-1407
PH: 305/ 597-0660
EMAIL: AHLOPEZ@JALRW.COM WWW.JALRW.COM

LANDSCAPE ARCHITECT

TOPO-GRAPHIC LLC
PUNTA GORDA, FLORIDA
PH: 561 840 0248 (954) 728-8159
EMAIL: INFO@TOPO-GRAPHIC.COM WWW.TOPO-GRAPHIC.COM

TRAFFIC STUDY

SUZANNE DANIELSEN

PH: 954 798 0926
EMAIL: jsdanielsen12@outlook.com

OWNER

3001-18 HARBOR DRIVE LLC
1199 SOUTH FEDERAL HIGHWAY, SUITE 384, BOCA RATON, FL, 33432
PH:
EMAIL:

FEMA Flood Elevation:
Property is located in Zone AE
6 on the December 2019
Preliminary FIRM, Panel 576J
(6.00 NAVD)

Grade Elevation: Property is
located landward of the CCCL
(Coastal Construction Central
Line) therefore the grade
elevation should be BFE + 1
(6.00 NAVD + 1.00 = 7.00
NAVD)

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A.3.01 SECTIONS

A-3.01	PARKING/APARTMENTS - SECTIONS
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A.5 SITE STUDIES

A-5.00	SUN STUDIES
A-5.00B	PARKING VENTILATION STUDY
A-5.01	LOGISTICS STUDY

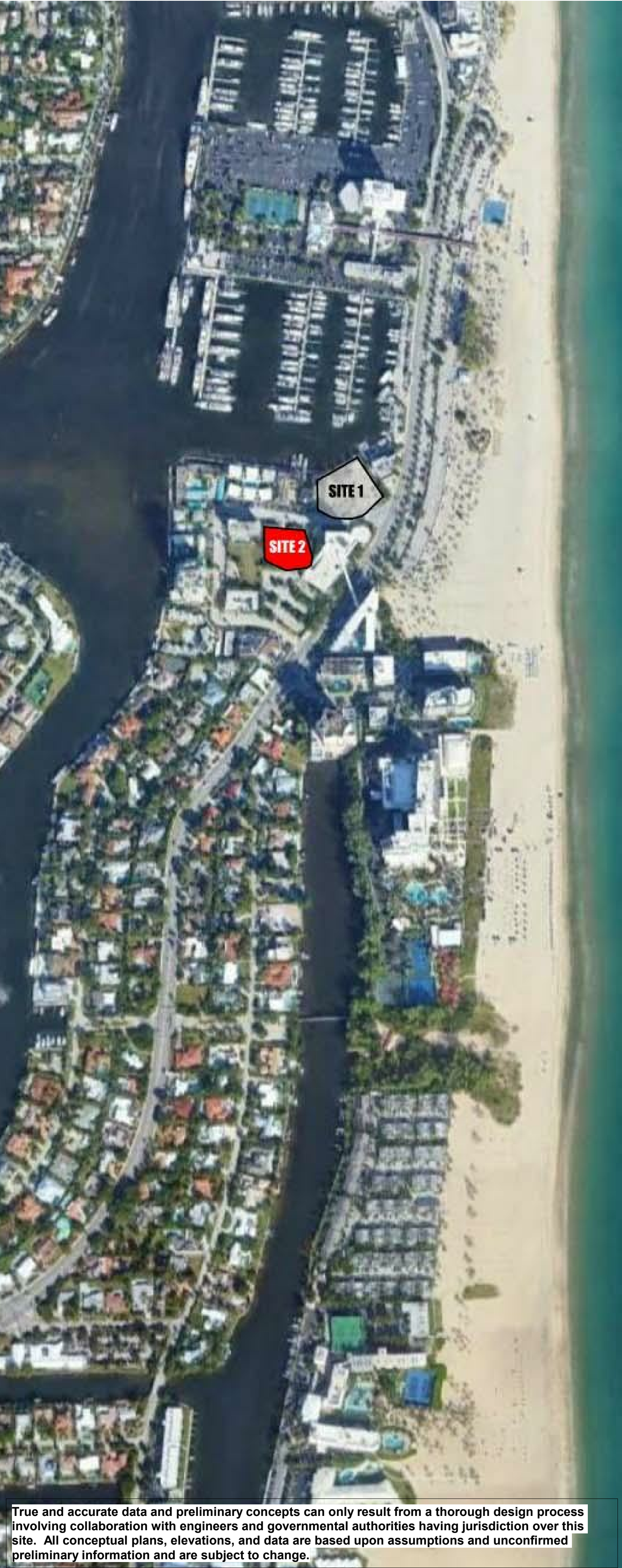
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A-7.1.03	LIFE SAFETY

ADA REQUIREMENTS :
(FBC ACCESSIBILITY 2008.2) FOR BUILDINGS WITH 201-300 SPACES, 7
PARKING SPACES ARE REQUIRED TO BE ADA.
(FBC ACCESSIBILITY 502) OF THE ADA SPACES, 1 IN 6 MUST BE ADA VAN
ACCESSIBLE



True and accurate data and preliminary concepts can only result from a thorough design process involving collaboration with engineers and governmental authorities having jurisdiction over this site. All conceptual plans, elevations, and data are based upon assumptions and unconfirmed preliminary information and are subject to change.

SITE DATA CHART		
DEVELOPMENT/ PROJECT NAME	BAHIA CABANA APARTMENT BUILDING SITE PLAN LEVEL III	
DEVELOPMENT/ PROJECT ADDRESS	3018 HARBOR DRIVE, 3012 HARBOR DRIVE FT LAUDERDALE, FL, 33316	
LEGAL DESCRIPTION	OCEAN HARBOR 26-39 B LOT 12, OCEAN HARBOR 26-39 B LOT 13	
TAX ID FOLIO NUMBERS (FOR ALL PARCELS IN DEVELOPMENT)	FOLIO NUMBER: 504212240220, FOLIO NUMBER: 504212240240	
REQUEST/ DESCRIPTION OF PROJECT	12 STORY BLDG [6-STORY PARKING GARAGE, 5 STORIES FOR RESIDENTIAL USE, 1 STORY COMMON ROOF TERRACE]	
BUILDING YPE	•Apartment Bldg, R-2 Occupancy • Construction Type:IB , Noncombustible, sprinklered • Allowable Height - 180 ft - FBC Table 504.3 • Allowable Stories - 12 - FBC Table 504.4 • Allowable Area - Unlimited - FBC Table 506.2 • FBC Table 601 • Structural frame - 2 hours • Bearing Walls - 2 hrs, or 1 hr where supporting a roof only • Floor construction - 2 hrs • Roof - 1 hr	
APPLICABLE CODES	2017 FLORIDA BUILDING CODE (6TH EDITION), Residential units to comply with with Fair Housing Provisions per FBC Accessibility Code	

	EXISTING	PROPOSED
LAND USE DESIGNATION	RMH-60	RMH-60
ZONING DESIGNATION	RMH-60 Res. Multifam.High Rise/High Dens.	RMH-60 Res. Multifam. High Rise/High Dens.
USE OF PROPERTY/ OCCUPANCY	00 RESIDENTIAL VACANT RESIDENTIAL	00 RESIDENTIAL VACANT RESIDENTIAL
RESIDENTIAL SF (AND TYPE)	APARTMENTS= 26,322 SF	BALCONIES AND TERRACES= 12,094 SF
NUMBER OF RESIDENTIAL UNITS	37 DWELLING UNITS	
NON-RESIDENTIAL SF (AND TYPE)	COMMON & SERVICE AREAS= 46,933 SF	PARKING= 84,109 SF
TOTAL BLDG. SF. (INCLUDE STRUCTURED PARKING)	167,364 SF	
SITE ADJACENT TO WATERWAY	No	

DIMENSIONAL REQUIREMENTS	REQUIRED/ PERMITTED	PROPOSED						
LOT SIZE (SF/ ACREAGE)	5,000 SF MIN	35,605 SF/ 43,560=0.817 ACRE						
LOT DENSITY RESIDENTIAL	48 D/UNITS PER ACRE X 0.817 ACRE=39 DWELLING UNITS	37 DWELLING UNITS						
LOT WIDTH	50 MIN	120'-0"						
BUILDING HEIGHT (FEET/ LEVELS)	120' TO 240' UNDER COND. USE PERMIT	120'-0" (TO GRADE)						
STRUCTURE LENGTH	200'	141'-9"						
STRUCTURE WIDTH	200'	156'-6"						
FLOOR AREA RATIO	N/A	166,943 SF / 35,594 SF= 4.6 F.A.R.						
LOT COVERAGE	N/A	21,835 SF = 61%						
OPEN SPACE	N/A	13,770 SF						
LANDSCAPE AREA	35% MIN.	<table><tr><th>NAME</th><th>AREA</th><th>%</th></tr><tr><td>LANDSCAPE</td><td>12,379 SF</td><td>35%</td></tr></table>	NAME	AREA	%	LANDSCAPE	12,379 SF	35%
NAME	AREA	%						
LANDSCAPE	12,379 SF	35%						
PARKING SPACES	180 (FOR SITES 1&2 SEE CHART CALCULATION BELOW)	224 FOR SITES 1 AND 2 (SEE CHART)						
PARKING SPACES CALCULATION	65 TOTAL PARKING SPACES REQUIRED (SEE CHART CALCULATION BELOW)							
LOADING ZONE	NO LOADING ZONE REQUIRED TAB.1 SEC.47-20	NO LOADING ZONE REQUIRED TAB.1 SEC.47-20						

	REQUIRED/ PERMITTED	PROPOSED
* SEE SETBACK STUDY SHEETA-1.02		
FRONT [N]	60'-0" (1/2 BLDG HEIGHT)	PARKING GARAGE: 20'-0" TOWER: 55'-0" ROOF TERRACE: 60'-0"
SIDE [E]	60'-0" (1/2 BLDG HEIGHT)	PARKING GARAGE: 20'-0" POOL DECK: 45'-0" TOWER: 55'-0" ROOF TERRACE: 60'-0"
REAR [S]	60'-0" (1/2 BLDG HEIGHT)	PARKING GARAGE: 20'-0" TOWER: 55'-0" ROOF TERRACE: 60'-0"
SIDE [W]	60'-0" (1/2 BLDG HEIGHT)	PARKING GARAGE: 20'-0" POOL DECK: 45'-0" TOWER: 55'-0" ROOF TERRACE: 60'-0"

CONDO BLDG...	CONDO BLDG...	CONDO BLDG...	CONDO BLDG...	PARKING REQ'D HOTEL_GUESTROOM																																																																																																										
AMENITIES RESTROOM 120 SF 120 SF AMENITIES-OUTDOORS CLUB HOUSE 770 SF COMMON TERRACE 5,488 SF POOL 835 SF POOL DECK 3,394 SF 10,487 SF BOH DROP-OFF 1,315 SF ELEV. VEST. 893 SF GOLF CART STORAGE 257 SF LAUNDRY 1,688 SF LOADING AREA 463 SF LOADING DOCK 1,380 SF STORAGE 129 SF WASTE / RECYCLE 302 SF 6,447 SF BUSINESS OFFICE 294 SF 294 SF CIRCULATION DRIVEWAY 2,047 SF LOADING DOCK/RAMP 495 SF PEDESTRIAN ACCESS 111 SF 2,653 SF	CORES & VERTICAL CIRCULATION ELEV. 2,832 SF ELEV. 163 SF STAIR 4,921 SF 7,917 SF CORRIDOR 3,450 SF CORRIDOR 3,450 SF LANDSCAPE 12,772 SF PLANTER 384 SF RAISED PLANTER 520 SF 13,675 SF LOBBY ADA LIFT 44 SF ADMIN. OFFICES 671 SF LOBBY 1,577 SF MAIL 119 SF RESTROOM 453 SF 2,864 SF MECH. DOM. WATER 144 SF FIRE COMMAND 242 SF FIRE PUMP 177 SF FPL 408 SF GEN. 452 SF MAINT. 327 SF MDF 234 SF MECH. 1,909 SF	MECH. ROOF 2,419 SF POOL BOX 1,140 SF POOL EQUIP. 983 SF STORAGE 9,621 SF PARKING PARKING 82,935 SF PARKING RAMP 1,174 SF 84,109 SF RESIDENTIAL BALCONY 3,746 SF PRIVATE TERRACE 8,223 SF UNIT 701 624 SF UNIT 702 1,201 SF UNIT 704 1,136 SF UNIT 704 757 SF UNIT 705 1,207 SF UNIT 801 628 SF UNIT 802 812 SF UNIT 803 786 SF UNIT 804 520 SF UNIT 805 584 SF UNIT 806 612 SF UNIT 807 712 SF UNIT 808 700 SF UNIT 901 628 SF UNIT 902 812 SF UNIT 903 782 SF UNIT 904 519 SF UNIT 905 563 SF UNIT 906 612 SF UNIT 907 712 SF	UNIT 908 700 SF UNIT 1001 634 SF UNIT 1002 812 SF UNIT 1003 786 SF UNIT 1004 520 SF UNIT 1005 584 SF UNIT 1006 612 SF UNIT 1007 712 SF UNIT 1008 698 SF UNIT 1101 634 SF UNIT 1102 812 SF UNIT 1103 786 SF UNIT 1104 520 SF UNIT 1105 584 SF UNIT 1106 612 SF UNIT 1107 712 SF UNIT 1108 698 SF 38,291 SF STORAGE ELEV. CONTROL ROOM 135 SF LONG TERM BIKE STORAGE 212 SF STO. 384 SF STORAGE 184 SF VALET 34 SF VEST. 48 SF 997 SF 180,924 SF	<table><tr><th>UNIT TYPE</th><th>COUNT</th><th>PARKING FACTOR</th><th>PARKING REQ'D CALC</th></tr><tr><td>HOTEL - GUESTROOMS</td><td>124</td><td>0.67</td><td>84</td></tr><tr><th colspan="4">PARKING REQ'D HOTEL_RESIDENTIAL</th></tr><tr><th>UNIT TYPE</th><th>BEDS</th><th>Dens</th><th>COUNT</th><th>PARKING FACTOR</th><th>PARKING REQ'D</th></tr><tr><td>PH</td><td>3</td><td>1</td><td>4</td><td>2.1</td><td>9</td></tr><tr><td>PH</td><td>4</td><td>1</td><td>2</td><td>2.2</td><td>5</td></tr><tr><td colspan="4">TOTAL # OF UNITS & PARKING REQ'D</td><td>6</td><td>14</td></tr></table> <table><tr><th colspan="4">PARKING REQUIRED _APARTMENT BUILDING</th></tr><tr><th>UNIT TYPE DESCRIPTION</th><th>UNIT COUNT</th><th>PARKING FACTOR</th><th>PARKING REQ'D CALC</th></tr><tr><td>1 BED/ 1 DEN</td><td>2</td><td>2</td><td>4</td></tr><tr><td>1 BEDROOM</td><td>35</td><td>1.75</td><td>61</td></tr><tr><td>TOTAL # OF UNITS & PARKING REQ'D</td><td>37</td><td></td><td>65</td></tr><tr><td colspan="4">VISITOR (10% REQ)</td><td></td><td>17</td></tr><tr><td colspan="4">TOTAL PARKING REQUIRED (84+14+65+17)</td><td></td><td>180</td></tr></table> <table><tr><th colspan="4">PARKING PROVIDED</th></tr><tr><td>8' - 8" x 18' ADA PARKING</td><td></td><td></td><td>7</td></tr><tr><td>8' - 8" x 18' LIFT 10' - 6" CLR</td><td></td><td></td><td>26</td></tr><tr><td>8' - 8" x 18' LIFT 12' - 2" CLR</td><td></td><td></td><td>20</td></tr><tr><td>8' - 8" x 18' LIFT 14' - 0" CLR</td><td></td><td></td><td>12</td></tr><tr><td>8' - 8" x 18' TYPICAL PARKING</td><td></td><td></td><td>157</td></tr><tr><td>12' - 0" x 18' ADA VAN ACCESSIBLE</td><td></td><td></td><td>2</td></tr><tr><td colspan="4"></td><td></td><td>224</td></tr></table>					UNIT TYPE	COUNT	PARKING FACTOR	PARKING REQ'D CALC	HOTEL - GUESTROOMS	124	0.67	84	PARKING REQ'D HOTEL_RESIDENTIAL				UNIT TYPE	BEDS	Dens	COUNT	PARKING FACTOR	PARKING REQ'D	PH	3	1	4	2.1	9	PH	4	1	2	2.2	5	TOTAL # OF UNITS & PARKING REQ'D				6	14	PARKING REQUIRED _APARTMENT BUILDING				UNIT TYPE DESCRIPTION	UNIT COUNT	PARKING FACTOR	PARKING REQ'D CALC	1 BED/ 1 DEN	2	2	4	1 BEDROOM	35	1.75	61	TOTAL # OF UNITS & PARKING REQ'D	37		65	VISITOR (10% REQ)					17	TOTAL PARKING REQUIRED (84+14+65+17)					180	PARKING PROVIDED				8' - 8" x 18' ADA PARKING			7	8' - 8" x 18' LIFT 10' - 6" CLR			26	8' - 8" x 18' LIFT 12' - 2" CLR			20	8' - 8" x 18' LIFT 14' - 0" CLR			12	8' - 8" x 18' TYPICAL PARKING			157	12' - 0" x 18' ADA VAN ACCESSIBLE			2						224
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06/23/20

BAHIA CABANA APARTMENT BUILDING
3012-3018 HARBOR DRIVE, FORT LAUDERALE, FL 33316

COVER SHEET

A-0.00 adache
group architects



SCOPE OF WORK

SEE SETBACK STUDIES ON SHEET A-1.02

 SITE PLAN
SCALE: 1" = 30'-0"

SCHEMATIC DESIGN
74.06A_HOTEL
02/12/20

BAHIA CABANA HOTEL
3001-3007 HARBOR DRIVE, FORT LAUDERALE, FL 33316

SITE PLAN

A-1.00

adache
group architects