

FONTAINEBLEAU MIAMI BEACH

F&B Summary 2018

Time: December

F&B BY OUTLET

	Month to Date					Year to Date				
	Actual	Budget	Prior Year	Var + (-)	%	Actual	Budget	Prior Year	Var + (-)	%
Covers - Breakfast	13,234	13,289	12,007	(55)	-0.4 %	125,885	146,095	129,688	(20,210)	-13.8 %
Covers - Lunch	4,839	6,923	4,307	(2,084)	-30.1 %	55,070	67,252	55,469	(12,182)	-18.1 %
Covers - Dinner	5,916	5,941	5,393	(25)	-0.4 %	49,131	59,680	49,856	(10,549)	-17.7 %
Avg Food Check					3.0 %					3.2 %
Avg. - Breakfast Cover					17.9 %					8.0 %
Avg. - Lunch Cover					-10.4 %					4.2 %
Avg. - Dinner Cover					-4.3 %					-5.9 %
Avg Beverage Check					29.0 %					9.2 %
Avg. Total Cover					6.2 %					3.8 %
Cost of Sales - Food					5.8 %					-10.1 %
Cost of Sales - Beverage					20.8 %					-14.2 %
Cost of Sales - Other					0.0 %					0.0 %
Cost of Sales					6.7 %					-10.4 %
Cost of Food %					12.0 %					3.4 %
Cost of Beverage %					2.0 %					-6.7 %
Cost of Other %					0.0 %					0.0 %
Total Payroll, Taxes & Benefit					-2.9 %					-2.6 %
Other Operating Expenses					2.5 %					-3.0 %
Total Expenses					0.4 %					-4.7 %
Profit					-20.3 %					-82.8 %
Margin										

La Cote

Food Revenue					54.6 %					1.7 %
Food Revenue - Lunch					11.5 %					-6.1 %
Food Revenue - Dinner					0.0 %					0.0 %
Beverage Revenue					69.4 %					15.3 %
Other F&B Revenue					0.0 %					0.0 %
Total Revenue					77.4 %					9.1 %
Covers	12,323	13,355	13,380	-1,032	-7.7 %	137,250	145,138	132,666	-7,888	-5.4 %
Covers - Lunch	12,155	13,355	13,085	-1,200	-9.0 %	131,649	145,138	126,250	-13,489	-9.3 %
Covers - Dinner	133	0	273	133	0.0 %	5,325	0	6,234	5,325	0.0 %
Avg Food Check					67.5 %					7.6 %
Avg. - Lunch Cover					22.2 %					3.3 %
Avg. - Dinner Cover					NaN					NaN
Avg Beverage Check					83.6 %					22.0 %
Avg. Total Cover					92.2 %					15.3 %
Cost of Sales - Food					53.3 %					0.7 %
Cost of Sales - Beverage					55.4 %					5.9 %
Cost of Sales - Other					0.0 %					0.0 %
Cost of Sales					53.8 %					2.4 %
Cost of Food %					-0.9 %					-1.0 %
Cost of Beverage %					-8.3 %					-8.2 %
Cost of Other %					0.0 %					0.0 %
Total Payroll, Taxes & Benefit					19.3 %					-1.6 %
Other Operating Expenses					40.1 %					3.5 %
Total Expenses					34.2 %					0.7 %
Profit					233.1 %					31.9 %
Margin										

Beach Food

Food Revenue					485.3 %					-0.8 %
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	Actual	Budget	Prior Year	Var + (-)	%	Actual	Budget	Prior Year	Var + (-)	%
Beverage Revenue					-28.7 %					-16.9 %
Other F&B Revenue					0.0 %					0.0 %
Total Revenue					181.0 %					-10.3 %
Cost of Sales - Food					0.0 %					0.0 %
Cost of Sales - Beverage					0.0 %					0.0 %
Cost of Sales - Other					0.0 %					0.0 %
Cost of Sales					0.0 %					0.0 %
Cost of Food %					0.0 %					0.0 %
Cost of Beverage %					0.0 %					0.0 %
Other Operating Expenses					-40.5 %					-48.5 %
Total Expenses					-40.5 %					-48.5 %
Profit					200.5 %					-7.0 %
Margin										
<u>Solo</u>										
Food Revenue					0.0 %					0.0 %
Other F&B Revenue					0.0 %					0.0 %
Total Revenue					0.0 %					0.0 %
Checks					0.0 %					0.0 %
Avg. Food Cover					0.0 %					0.0 %
Avg. Total Cover					0.0 %					0.0 %
Cost of Sales - Food					0.0 %					0.0 %
Cost of Sales					0.0 %					0.0 %
Cost of Food %					0.0 %					0.0 %
Total Payroll, Taxes & Benefit					0.0 %					0.0 %
Other Operating Expenses					0.0 %					0.0 %
Total Expenses					0.0 %					0.0 %
Profit					0.0 %					0.0 %
Margin										
<u>Fresh</u>										
Food Revenue					16.4 %					-7.1 %
Total Revenue					17.6 %					-7.1 %
Checks	8,370	6,572	8,225	1,798	27.4 %	86,253	87,960	85,196	-1,707	-1.9 %
Avg. Food Cover					-8.6 %					-5.2 %
Avg. Total Cover					-7.7 %					-5.3 %
Cost of Sales - Food					10.8 %					-2.0 %
Cost of Sales					10.5 %					-2.1 %
Cost of Food %					-4.8 %					5.4 %
Total Payroll, Taxes & Benefit					8.7 %					-6.3 %
Other Operating Expenses					46.6 %					0.0 %
Total Expenses					20.4 %					-3.0 %
Profit					10.4 %					-16.5 %
Margin										
<u>Dine In</u>										
Food Revenue					-0.6 %					-9.7 %
Beverage Revenue					-2.3 %					6.6 %
Other F&B Revenue					13.9 %					-4.6 %
Total Revenue					0.6 %					-7.2 %

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	Month to Date					Year to Date				
	Actual	Budget	Prior Year	Var + (-)	%	Actual	Budget	Prior Year	Var + (-)	%
Covers	15,524	18,928	14,510	(\$3,404)	-18.0 %	148,608	176,454	151,244	(\$27,846)	-15.8 %
Avg. Food Cover					21.2 %					7.2 %
Avg. Beverage Cover					19.1 %					26.6 %
Avg. Total Cover					22.6 %					10.2 %
Cost of Sales - Food					5.1 %					-6.6 %
Cost of Sales - Beverage					-13.6 %					1.3 %
Cost of Sales - Other					0.0 %					0.0 %
Cost of Sales					3.0 %					-6.5 %
Cost of Food %					5.7 %					3.5 %
Cost of Beverage %					-11.5 %					-5.0 %
Cost of Other %					0.0 %					0.0 %
Total Payroll, Taxes & Benefit					9.7 %					0.4 %
Other Operating Expenses					31.8 %					8.4 %
Total Expenses					11.6 %					0.1 %
Profit					-84.4 %					-102.6
Margin										
<u>Private Bar</u>										
Food Revenue					4.3 %					3.1 %
Beverage Revenue					4.2 %					9.2 %
Other F&B Revenue					-70.2 %					-63.9 %
Total Revenue					0.6 %					0.3 %
Cost of Sales - Food					5.3 %					-0.1 %
Cost of Sales - Beverage					7.1 %					7.4 %
Cost of Sales - Other					-77.2 %					-28.1 %
Cost of Sales					2.1 %					0.6 %
Cost of Food %					1.0 %					-3.2 %
Cost of Beverage %					2.8 %					-1.6 %
Cost of Other %					-23.6 %					99.0 %
Total Payroll, Taxes & Benefit					8.8 %					0.8 %
Other Operating Expenses					7.5 %					-5.4 %
Total Expenses					5.5 %					-0.2 %
Profit					-3.1 %					0.8 %
Margin										
<u>Glow Bar</u>										
Beverage Revenue					-27.4 %					-5.3 %
Other F&B Revenue					160.6 %					10.1 %
Total Revenue					-25.9 %					-5.2 %
Checks	6,853	10,000	6,977	(\$3,147)	-31.5 %	114,650	124,955	111,508	(\$10,305)	-8.2 %
Avg. Beverage Cover					5.9 %					3.2 %
Avg. Total Cover					8.1 %					3.3 %
Cost of Sales - Beverage					-18.4 %					2.2 %
Cost of Sales - Other					0.0 %					0.0 %
Cost of Sales					-23.4 %					6.2 %
Cost of Beverage %					12.5 %					7.9 %
Cost of Other %					0.0 %					0.0 %
Total Payroll, Taxes & Benefit					63.9 %					13.6 %
Other Operating Expenses					17.7 %					1.2 %
Total Expenses					13.0 %					7.9 %

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	Month to Date					Year to Date				
	Actual	Budget	Prior Year	Var + (-)	%	Actual	Budget	Prior Year	Var + (-)	%
Profit					-41.6 %					-10.1 %
Margin										

Bleau Bar

Beverage Revenue					12.1 %					1.6 %
Other F&B Revenue					0.0 %					80.6 %
Total Revenue					13.5 %					2.2 %
Checks	18,553	18,785	15,579	(\$232)	-1.2 %	188,917	201,271	171,599	(\$12,354)	-6.1 %
Avg. Beverage Cover					13.5 %					8.2 %
Avg. Total Cover					14.9 %					8.9 %
Cost of Sales - Beverage					6.5 %					-3.5 %
Cost of Sales - Other					0.0 %					0.0 %
Cost of Sales					6.5 %					-3.5 %
Cost of Beverage %					-5.0 %					-5.0 %
Cost of Other %					0.0 %					0.0 %
Total Payroll, Taxes & Benefit					25.5 %					1.1 %
Other Operating Expenses					24.4 %					6.1 %
Total Expenses					15.6 %					-0.1 %
Profit					12.4 %					3.4 %
Margin										

Chez Bon Bon

Food Revenue					8.7 %					-0.9 %
Other F&B Revenue					291.5 %					16.3 %
Total Revenue					9.7 %					-0.9 %
Checks	28,367	25,161	24,979	\$3,206	12.7 %	277,249	275,546	265,288	\$1,703	0.6 %
Avg. Food Cover					-3.6 %					-1.5 %
Avg. Total Cover					-2.7 %					-1.5 %
Cost of Sales - Food					1.3 %					-3.9 %
Cost of Sales - Other					-100.0					-29.6 %
Cost of Sales					1.0 %					-3.8 %
Cost of Food %					-6.8 %					-3.0 %
Cost of Other %					-100.0					-39.5 %
Total Payroll, Taxes & Benefit					23.1 %					-19.9 %
Other Operating Expenses					62.0 %					19.9 %
Total Expenses					28.6 %					1.2 %
Profit					-16.3 %					-4.6 %
Margin										

Michael Mina Pizza & Bu

Food Revenue					47.5 %					1.1 %
Beverage Revenue					47.8 %					26.8 %
Other F&B Revenue					4363.5					22.7 %
Total Revenue					50.3 %					13.5 %
Checks	11,068	8,198	9,088	\$2,870	35.0 %	120,234	113,972	106,024	\$6,262	5.5 %
Avg. Food Cover					9.2 %					-4.2 %
Avg. Beverage Cover					9.5 %					20.2 %
Avg. Total Cover					11.3 %					7.6 %
Cost of Sales - Food					61.1 %					1.9 %

Time: December

Month to Date					Year to Date					
Actual	Budget	Prior Year	Var + (-)	%	Actual	Budget	Prior Year	Var + (-)	%	
					44.5 %					19.5 %
					0.0 %					0.0 %
					64.4 %					9.3 %
					9.2 %					0.8 %
					-2.2 %					-5.8 %
					0.0 %					0.0 %
					46.7 %					3.1 %
					51.9 %					26.3 %
					52.4 %					11.8 %
					18.5 %					19.9 %
					0.0 %					0.0 %
					0.0 %					0.0 %
					0.0 %					0.0 %
					0.0 %					0.0 %
					-57.7 %					10.4 %
					-2.3 %					5.2 %
					-2814.6					-285.3
					-2814.6					-285.3
					0.0 %					0.0 %
					0.0 %					0.0 %
					0.0 %					0.0 %
					0.0 %					0.0 %
					9.8 %					10.4 %
					11.0 %					6.1 %
					929.4 %					-107.2
					929.4 %					-107.2
					11.5 %					-5.3 %
					-1.5 %					16.3 %
					9.7 %					-2.1 %
17,577	22,468	17,606	(\$4,891)	-21.8 %	210,585	201,738	159,598	\$8,847	4.4 %	
					42.5 %					-9.3 %
					40.2 %					-6.2 %
					15.6 %					5.9 %
					15.6 %					6.0 %
					3.7 %					11.9 %
					0.0 %					0.0 %
					41.1 %					6.1 %
					45.3 %					9.8 %
					40.8 %					8.8 %
					-34.5 %					-19.5 %

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	Month to Date					Year to Date				
	Actual	Budget	Prior Year	Var + (-)	%	Actual	Budget	Prior Year	Var + (-)	%
Banquets										
Food Revenue					70.6 %					-7.2 %
Food Revenue - Allowance					198.8 %					-16.6 %
Local Food Revenue					200.4 %					84.4 %
Food Rev - Coffee Local Bnq					307.0 %					-23.6 %
Food Rev - Reception Local B					492.9 %					-2.2 %
Food Rev - Cont Breakfast Loc					0.0 %					0.0 %
Food Rev - Breakfast Local Bn					210.5 %					129.0 %
Food Rev - Lunch Local Bnq					779.0 %					229.0 %
Food Rev - Dinner Local Bnq					110.5 %					145.9 %
Group Food Revenue					60.3 %					-9.8 %
Food Rev - Coffee Group Bnq					95.7 %					-0.3 %
Food Rev - Reception Group					125.3 %					-20.9 %
Food Rev - Cont Breakfast Gr					-100.0					-100.0
Food Rev - Breakfast Group B					67.6 %					-3.7 %
Food Rev - Lunch Group Bnq					39.7 %					-8.1 %
Food Rev - Dinner Group Bnq					10.1 %					-14.0 %
Beverage Revenue					55.1 %					-26.5 %
Local Beverage Revenue					125.1 %					48.0 %
Beverage Rev - Beer Local					0.0 %					267.9 %
Beverage Rev - Wine Local					-23.3 %					28.5 %
Beverage Rev - Liquor Local					262.8 %					50.4 %
Group Beverage Revenue					44.1 %					-29.5 %
Beverage Revenue - Allowanc					0.0 %					0.0 %
Beverage Rev - Beer Group					27.6 %					-19.4 %
Beverage Rev - Wine Group					884.9 %					-33.1 %
Beverage Rev - Liquor Group					-2.3 %					-29.5 %
Other Revenue					48.5 %					-10.0 %
Public Room Rental					0.0 %					0.0 %
Service Charge Revenue					535.3 %					79.1 %
Public Room Rental - Group					35.7 %					-30.6 %
Service Charge Rev - Group					81.3 %					-12.1 %
Service Charge Revenue					0.0 %					0.0 %
Other Revenue - F&B					-8.3 %					-11.7 %
Other Rev - F&B Group					0.0 %					0.0 %
Total Revenue					64.6 %					-10.5 %
1) Group					57.0 %					-13.2 %
2) Local					99.4 %					25.5 %
3) Allowance					198.8 %					-16.6 %
Covers	13,269	9,685	7,069	3,584	37.0 %	291,910	309,347	225,300	-17,437	-5.6 %
Local Covers	748	598	1,395	150	25.1 %	8,324	5,180	7,219	3,144	60.7 %
Covers - Cont. Breakfast	0	0	0	0	0.0 %	0	0	0	0	0.0 %
Covers - Breakfast	259	14	42	245	1750.0	1,211	498	635	713	143.2 %
Covers - Lunch	285	51	319	234	458.8 %	2,589	1,361	1,444	1,228	90.2 %
Covers - Dinner	204	533	1,034	-329	-61.7 %	4,524	3,321	5,140	1,203	36.2 %
Group Covers	12,521	9,087	5,674	3,434	37.8 %	283,586	304,167	218,081	-20,581	-6.8 %
Covers - Cont. Breakfast	0	0	0	0	0.0 %	0	0	0	0	0.0 %
Covers - Breakfast	4,753	3,086	2,946	1,667	54.0 %	120,259	130,117	81,895	-9,858	-7.6 %
Covers - Lunch	5,209	3,159	2,029	2,050	64.9 %	114,601	119,515	84,999	-4,914	-4.1 %
Covers - Dinner	2,559	2,842	699	-283	-9.9 %	48,726	54,535	51,187	-5,809	-10.7 %
Avg Food Check					24.5 %					-1.6 %
Avg. Local Cont. Bkfst Cover					0.0 %					0.0 %
Avg. Local Breakfast Cover					-83.2 %					-5.8 %
Avg. Local Lunch Cover					57.3 %					72.9 %

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				449.9 %					80.5 %
				0.0 %					0.0 %
				8.9 %					4.2 %
				-15.3 %					-4.1 %
				22.2 %					-3.7 %
				13.2 %					-22.1 %
				20.2 %					-5.2 %
				29.4 %					-7.4 %
				32.8 %					-20.1 %
				-41.7 %					6.3 %
				12.7 %					-7.3 %
				-24.1 %					-0.3 %
				-14.4 %					8.7 %
				-60.7 %					18.0 %
				57.4 %					0.4 %
				28.8 %					-8.2 %
				39.5 %					-3.7 %
				145.7 %					-16.4 %

MBCC VALET PARKING PLAN

MIAMI BEACH



1

MBCC VALET PARKING PLAN

Priorities:

- Expedited Vehicle Arrival and Departure.
- Accessible Valet Storage and Traffic Patterns.
- Streamline Convention Center Drive and Washington Avenue.
- Valet Parking "White Glove" Experience.

Strategies:

- Event Based - Identify Creative Solutions based on event intensity and transportation and parking needs
- Use of Expanded Vehicle Storage Capacity and Passenger Loading Areas
- Control of Traffic Circulation
- Weekly Meetings with MBCC Events staff to refine valet plan for current conditions

2

VALET VENUES – COMPARABLES

Venues:

- Loews
- Fontainebleau
- Mandarin Oriental Miami
- JW Marriott Marquis
- Trump National Doral

Events:

- Gala
- Corporate events
- Weddings
- Art Basel (2016)
- MBSH Prom

Mode of Arrival (Galas):

Valet Parking:	40%
Shared-ride:	40%
Self-park:	20%
Total:	100%

3

GRAND BALLROOM – PEAK EVENT

Demand:

- Attendees: 3,600
- Vehicles (2 per vehicle): 1,800

Arrival Modes:

- Valet Vehicles: 720
- Self-park Vehicles: + 360
- Total parking spaces: 1,080

- Shared Ride/Black Car: + 720

Total Vehicles: 1,800

4

GRAND BALLROOM PEAK EVENT

Valet Vehicle Storage:

- MBCC Garage (4th & 5th Levels): 440 spaces = 551 vehicles stacked.
- P-29 (CCD at 17th Street): 160 spaces = 200 vehicles stacked.
- Convention Center Drive: 24 spaces = 60 vehicles stacked.
- **Total:** 624 spaces = 811 vehicles stacked.

Self-Parking

- Entrance on Washington Avenue (East - Hellix)
- MBCC Garage 5th Level: 360 Spaces Reserved.
- Shared-Ride Space- Convention Center Drive and Washington Avenue

5

GRAND BALLROOM – PEAK EVENT

Based on research, Galas typically offer Pre-Event Reception

Valet Arrivals (1 Hour Pre-Event):

- 1st 20 Mins: 144 Vehicles (20%)
- 2nd 20 Mins: 144 Vehicles (20%)
- 3rd 20 Mins: 216 Vehicles (30%)
- 20 Mins late: 216 Vehicles (30%)

6

Sarah Fiol

From: Dan Stevens <dstevens@fbdev.com>
Sent: Tuesday, October 15, 2019 2:53 PM
To: Kevin Bryant; Juan Espinosa
Cc: Alejandro Matos Fermin; Timothy J. Plummer
Subject: RE: Parking Survey - 2016
Attachments: Trip Gen Analysis.pdf

Juan,

Per 2016 survey, 36% employees used public transportation or carpooled. Can you please send updated trip gen analysis based on the information provided for review. For grand ballroom use 16,247 and jr use 9,038 s.f.

Thanks,

From: Dan Stevens
Sent: Tuesday, October 15, 2019 2:46 PM
To: Kevin Bryant <kbryant@fontainebleau.com>
Cc: Silvia Pereda <SPereda@fontainebleau.com>
Subject: RE: Parking Survey - 2016

Understood.

Based on call you indicated full time employees of approximately 2,400.

Per below that would work out to approx. 528 using public transportation (22%) and 336 carpooling (14%) = 36% or 864.

From: Kevin Bryant <kbryant@fontainebleau.com>
Sent: Tuesday, October 15, 2019 11:44 AM
To: Dan Stevens <dstevens@fbdev.com>
Cc: Silvia Pereda <SPereda@fontainebleau.com>
Subject: FW: Parking Survey - 2016

Dan,

See below. This is from an employee survey that was done a few years ago. Silvia has the backup data if needed. I would suggest we triple the numbers below to scale up to our full employee count. This would include all our third party vendors for departments that our outsourced (Beach operations, valet, overnight housekeeping).

Call me if you would like to discuss.

Kevin

KEVIN BRYANT | VICE PRESIDENT, SALES

Fontainebleau Miami Beach | 4441 Collins Avenue | Miami Beach FL 33140
O 305 535 3222 | F 305 675 8218 | kbryant@fontainebleau.com
fontainebleau.com | #fontainebleau | #bleaulive

Valet Operation

[illegible]

RPAS

[illegible]

RPAS

[illegible]

RPAS

[illegible]

RPAS

[illegible]

RPAS

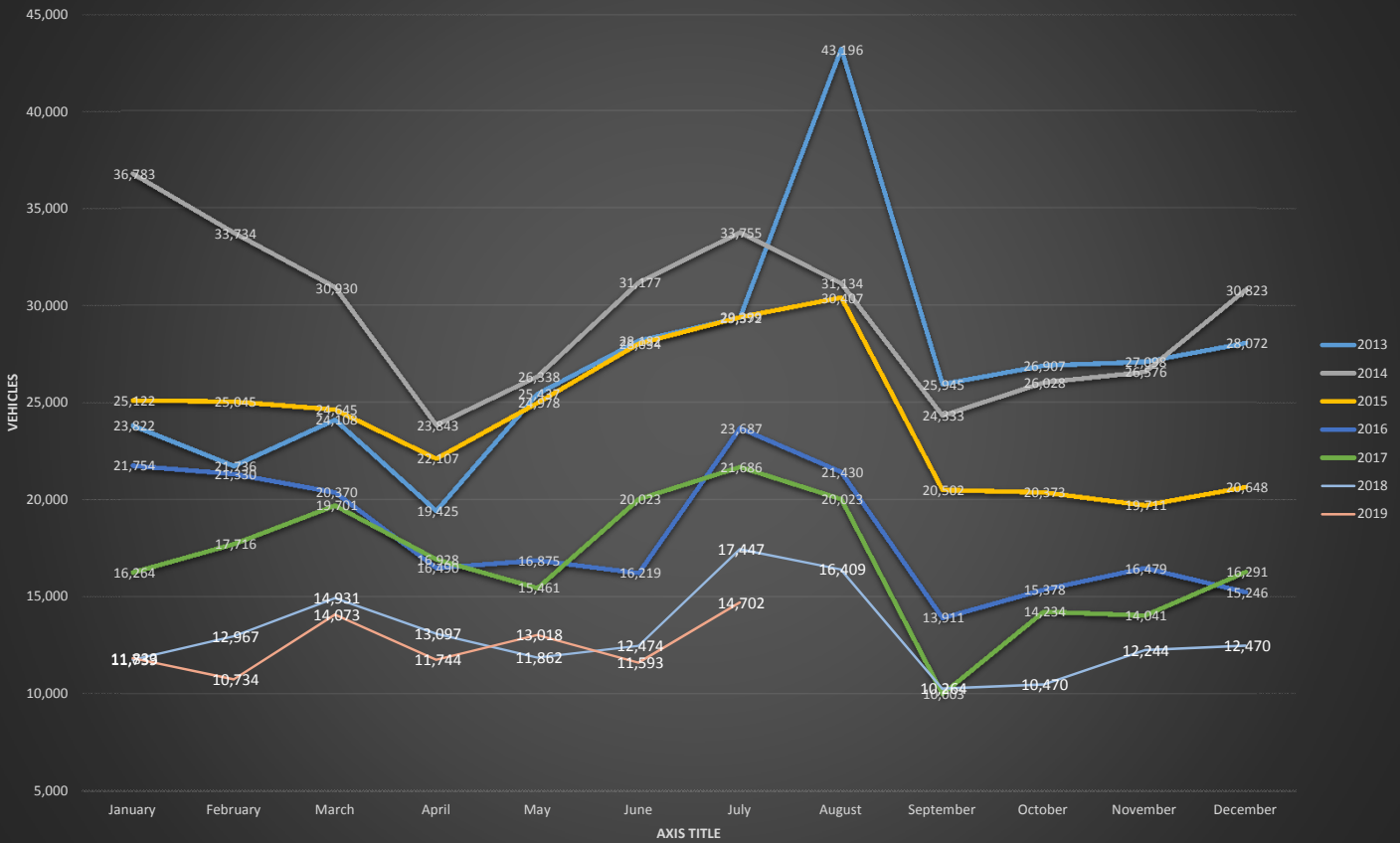
[illegible]

RPAS

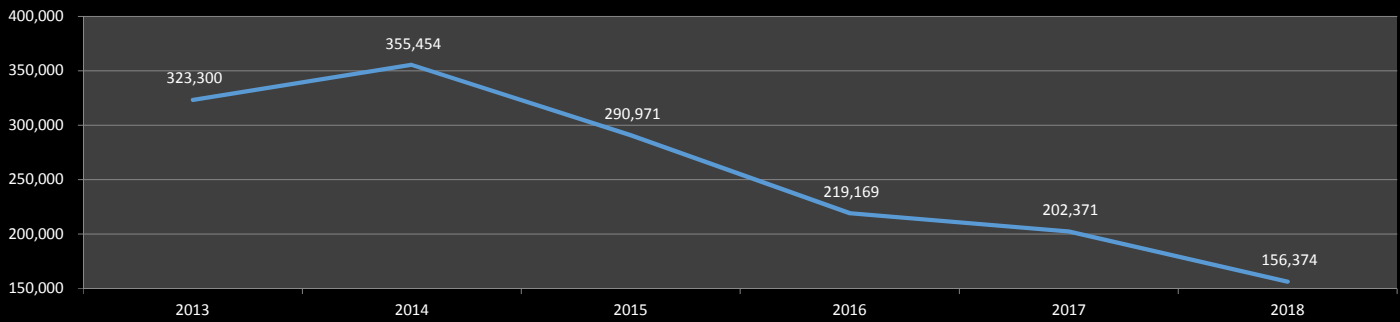
[illegible]

RPAS

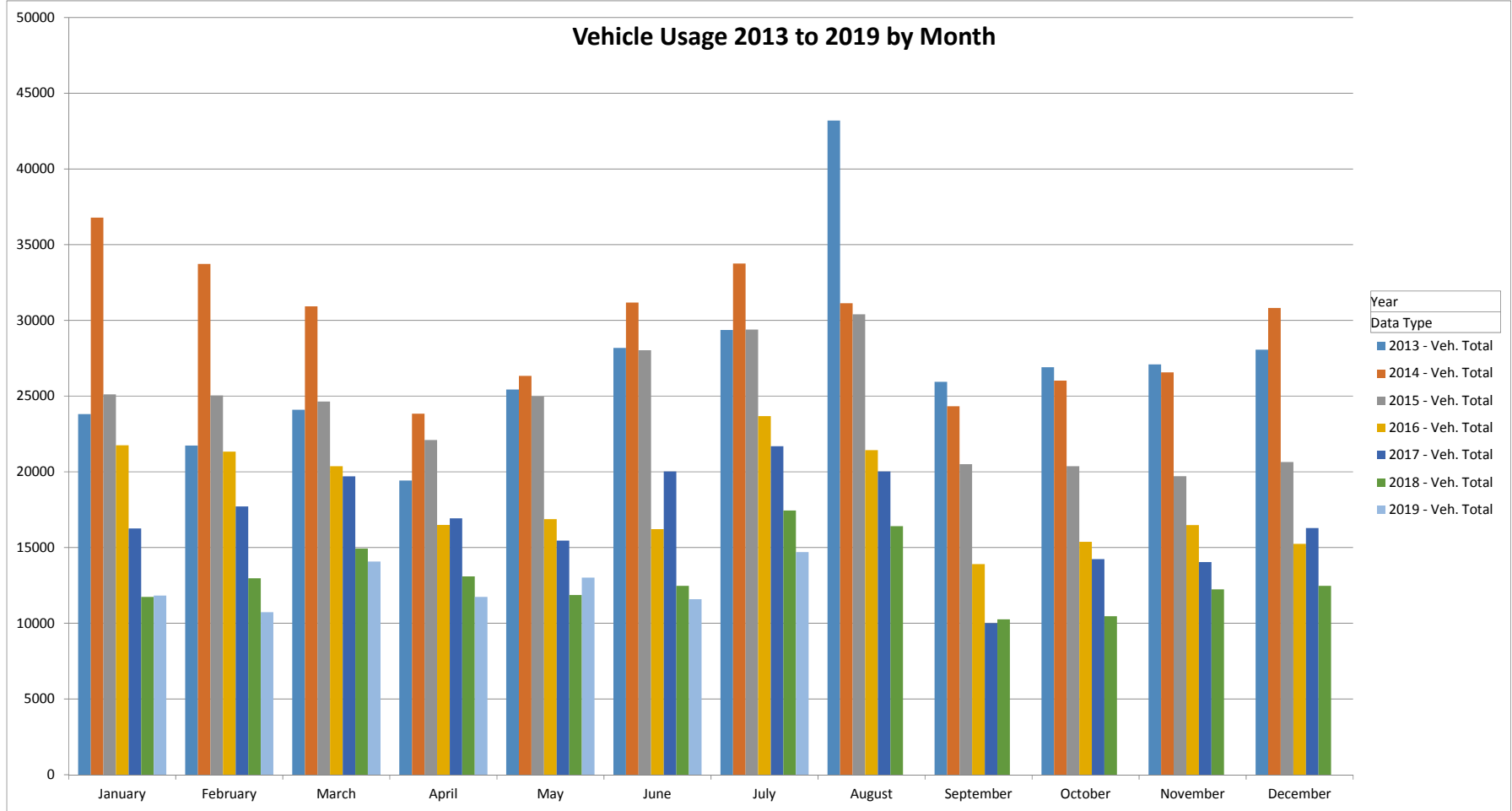
2013-2019 Vehicles by Month



Total Vehicle Full Year



Vehicle Usage 2013 to 2019 by Month



ATTACHMENT E

AutoTURN Analysis

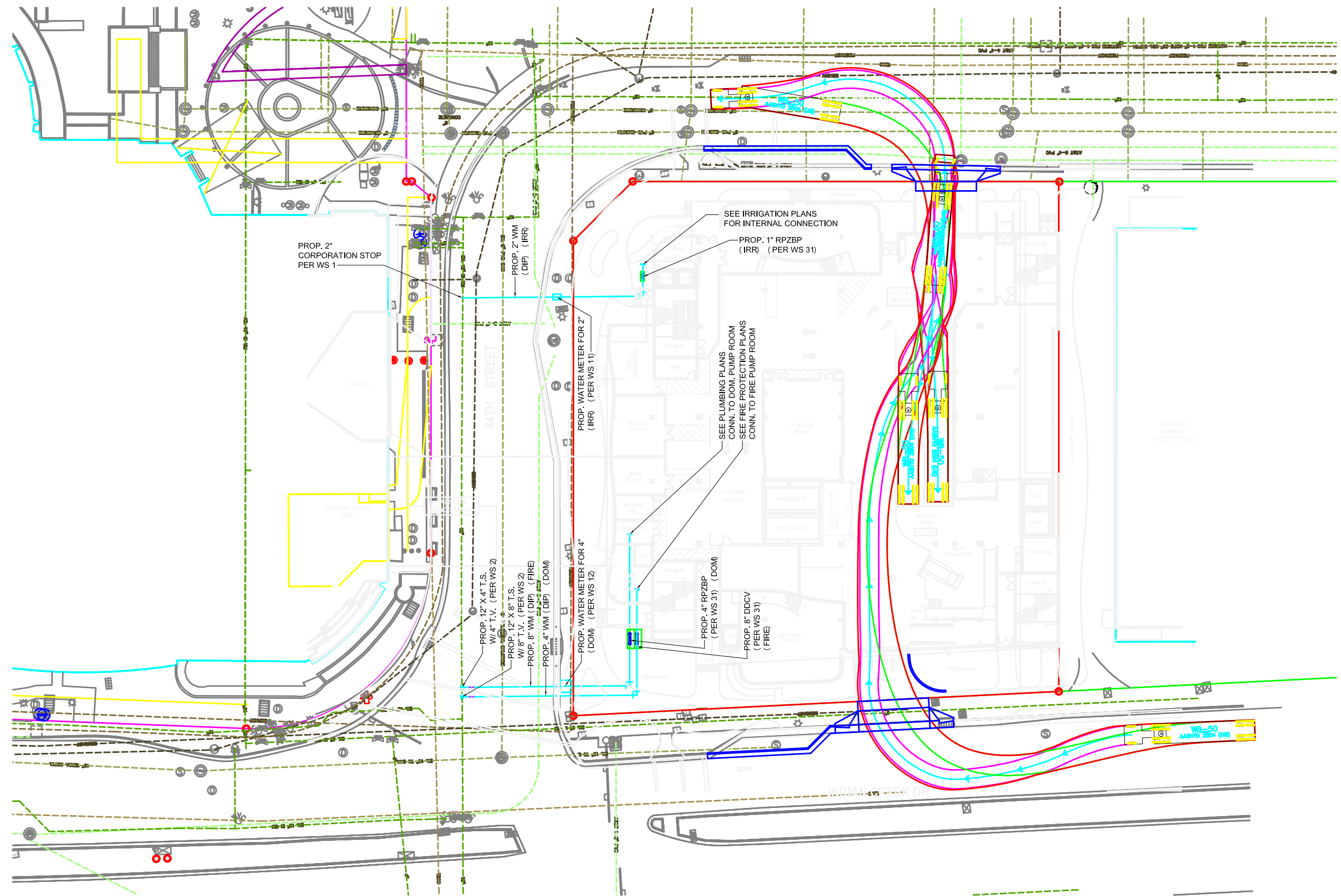
WB-50

	feet		
Tractor Width	: 8.00	Lock to Lock Time	: 6.0
Trailer Width	: 8.50	Steering Angle	: 17.7
Tractor Track	: 8.00	Articulating Angle	: 70.0
Trailer Track	: 8.50		



INDIAN CREEK DR

C:\Users\lamatosfermin\Documents\PARKING & BALLROOM
11/13/2019 5:25:27 PM @nbww.com.rvt



1 WATER DISTRIBUTION PLAN
A-701 1" = 20'-0"

**NICHOLS
BROSCH
WURST
WOLFE
& ASSOCIATES, INC.**
Architects & Planning
161 Alhambra Avenue
Coral Gables, FL 33134
(305) 443-5206
(305) 443-5108
FAC 000081

Todd Seymour
P.E. No. 52098

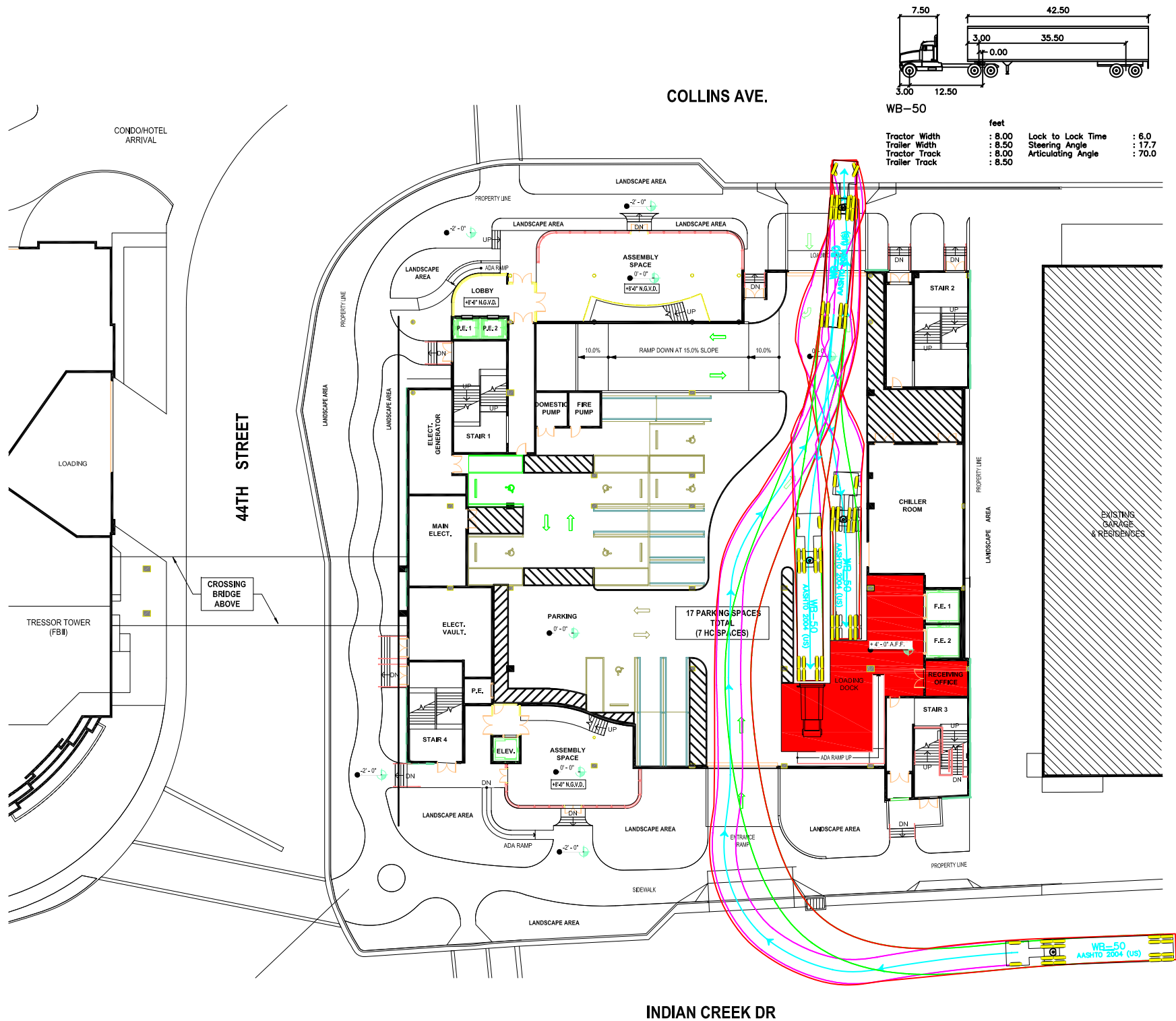
**FONTAINEBLEAU GARAGE &
BALLROOM EXPANSION**
4441 COLLINS AVE. MIAMI BEACH, FLORIDA
DEVELOPED BY: FONTAINEBLEAU DEVELOPMENT

Revisions		
#	Description	Date

**DAVID PLUMMER
& ASSOCIATES**
1750 PONCE DE LEON
CORAL GABLES, FL 33134
(305) 447-8900
http://www.dplummer.com
CERTIFICATE
EB 2690

19012

C-701



COLLINS AVE.

WB-50

	feet		
Tractor Width	: 8.00	Lock to Lock Time	: 6.0
Trailer Width	: 8.50	Steering Angle	: 17.7
Tractor Track	: 8.00	Articulating Angle	: 70.0
Trailer Track	: 8.50		

INDIAN CREEK DR

ATTACHMENT F

Transit

103 Route C
 - Weekday (Northbound)
COLLINS AV 43 ST



6:37 AM

Dest: C- Mt Sinai

7:08 AM

Dest: C- Mt Sinai

7:39 AM

Dest: C- Mt Sinai

8:10 AM

Dest: C- Mt Sinai

8:40 AM

Dest: C- Mt Sinai

9:11 AM

Dest: C- Mt Sinai

9:43 AM

Dest: C- Mt Sinai

10:13 AM

Dest: C- Mt Sinai

10:43 AM

Dest: C- Mt Sinai

11:13 AM

Dest: C- Mt Sinai

11:43 AM (16 min)

Dest: C- Mt Sinai

12:13 PM

Dest: C- Mt Sinai

12:43 PM

Dest: C- Mt Sinai

1:13 PM

Dest: C- Mt Sinai

1:43 PM

Dest: C- Mt Sinai

2:13 PM

Dest: C- Mt Sinai

2:43 PM

Dest: C- Mt Sinai

3:13 PM

Dest: C- Mt Sinai

3:43 PM

Dest: C- Mt Sinai

4:13 PM

Dest: C- Mt Sinai

4:43 PM

Dest: C- Mt Sinai

5:13 PM

Dest: C- Mt Sinai

5:43 PM

Dest: C- Mt Sinai

6:13 PM

Dest: C- Mt Sinai

6:43 PM

Dest: C- Mt Sinai

7:10 PM

Dest: C- Mt Sinai

7:38 PM

Dest: C- Mt Sinai

8:08 PM

Dest: C- Mt Sinai

8:53 PM

Dest: C- Mt Sinai

9:38 PM

Dest: C- Mt Sinai

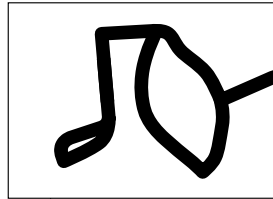
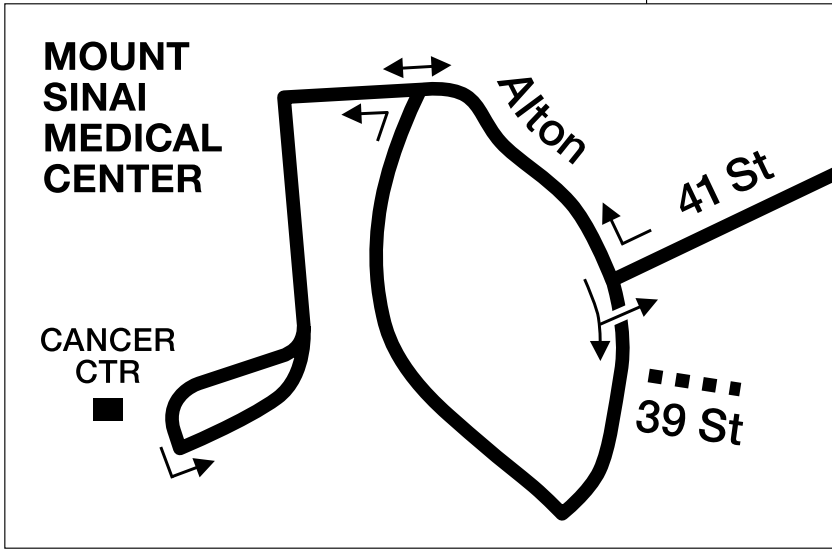
10:24 PM

Dest: C- Mt Sinai





C



MID
BEACH

44 St

41 St

Indian Crk Dr

Collins Ave

17 St

Lincoln Rd

SOUTH
BEACH

Washington Ave

5 St

Alton Rd

South Pointe Dr



NORTH
08/2017





110 Route J
- Weekday (Eastbound)
COLLINS AV 43 ST


Map

5:02 AM
Dest: J - Beach / 41 St

5:53 AM
Dest: J - Beach / 41 St

6:33 AM
Dest: J - Beach / 41 St

6:55 AM
Dest: J - Beach / 41 St

7:14 AM
Dest: J - Beach / 41 St

7:35 AM
Dest: J - Beach / 41 St

7:55 AM
Dest: J - Beach / 41 St

8:15 AM
Dest: J - Beach / 41 St

8:35 AM
Dest: J - Beach / 41 St

8:55 AM
Dest: J - Beach / 41 St

9:17 AM
Dest: J - Beach / 41 St

9:37 AM
Dest: J - Beach / 41 St

9:57 AM
Dest: J - Beach / 41 St

10:17 AM
Dest: J - Beach / 41 St

10:37 AM
Dest: J - Beach / 41 St

11:07 AM
Dest: J - Beach / 41 St

11:37 AM
Dest: J - Beach / 41 St

12:07 PM
Dest: J - Beach / 41 St

12:37 PM (27 min)
Dest: J - Beach / 41 St

1:07 PM
Dest: J - Beach / 41 St

1:37 PM
Dest: J - Beach / 41 St

2:07 PM
Dest: J - Beach / 41 St

2:37 PM

Dest: J - Beach / 41 St

3:07 PM

Dest: J - Beach / 41 St

3:38 PM

Dest: J - Beach / 41 St

4:09 PM

Dest: J - Beach / 41 St

4:29 PM

Dest: J - Beach / 41 St

4:49 PM

Dest: J - Beach / 41 St

5:09 PM

Dest: J - Beach / 41 St

5:29 PM

Dest: J - Beach / 41 St

5:49 PM

Dest: J - Beach / 41 St

6:09 PM

Dest: J - Beach / 41 St

6:26 PM

Dest: J - Beach / 41 St

6:45 PM

Dest: J - Beach / 41 St

7:05 PM

Dest: J - Beach / 41 St

7:22 PM

Dest: J - Beach / 41 St

7:49 PM

Dest: J - Beach / 41 St

8:29 PM

Dest: J - Beach / 41 St

9:24 PM

Dest: J - Beach / 41 St

10:21 PM

Dest: J - Beach / 41 St

11:20 PM

Dest: J - Beach / 41 St

12:24 AM

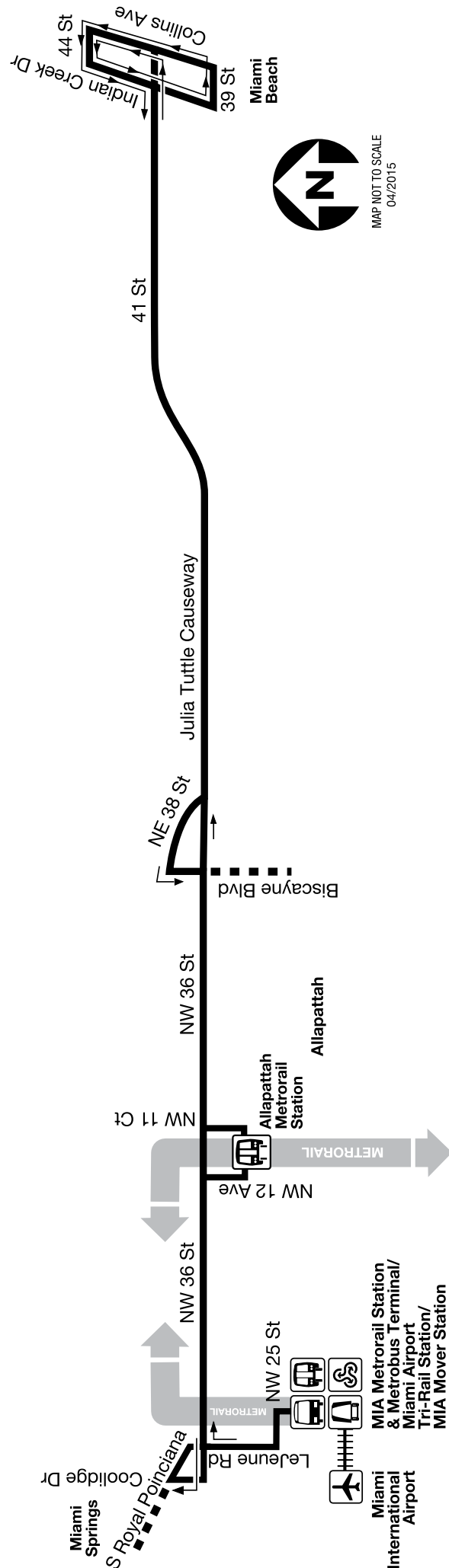
Dest: J - Beach / 41 St

12:48 AM

Dest: J - Beach / 41 St



Route J



MAP NOT TO SCALE
04/2015

112 Route L
 - Weekday (Eastbound)
COLLINS AV 4500 BLK

**5:36 AM**

Dest: L - Lincoln Road

5:57 AM

Dest: L - Lincoln Road

6:22 AM

Dest: L - Lincoln Road

6:32 AM

Dest: L - Lincoln Road

6:46 AM

Dest: L - Lincoln Road

6:56 AM

Dest: L - Lincoln Road

7:10 AM

Dest: L - Lincoln Road

7:22 AM

Dest: L - Lincoln Road

7:34 AM

Dest: L - Lincoln Road

7:46 AM

Dest: L - Lincoln Road

7:58 AM

Dest: L - Lincoln Road

8:10 AM

Dest: L - Lincoln Road

8:22 AM

Dest: L - Lincoln Road

8:34 AM

Dest: L - Lincoln Road

8:46 AM

Dest: L - Lincoln Road

8:58 AM

Dest: L - Lincoln Road

9:10 AM

Dest: L - Lincoln Road

9:22 AM

Dest: L - Lincoln Road

9:34 AM

Dest: L - Lincoln Road

9:46 AM

Dest: L - Lincoln Road

10:00 AM

Dest: L - Lincoln Road

10:15 AM

Dest: L - Lincoln Road

10:30 AM

Dest: L - Lincoln Road

10:45 AM Dest: L - Lincoln Road
11:00 AM Dest: L - Lincoln Road
11:15 AM Dest: L - Lincoln Road
11:30 AM Dest: L - Lincoln Road
11:45 AM (14 min) Dest: L - Lincoln Road
12:00 PM Dest: L - Lincoln Road
12:15 PM Dest: L - Lincoln Road
12:30 PM Dest: L - Lincoln Road
12:45 PM Dest: L - Lincoln Road
1:00 PM Dest: L - Lincoln Road
1:15 PM Dest: L - Lincoln Road
1:30 PM Dest: L - Lincoln Road
1:45 PM Dest: L - Lincoln Road
2:00 PM Dest: L - Lincoln Road
2:16 PM Dest: L - Lincoln Road
2:31 PM Dest: L - Lincoln Road
2:47 PM Dest: L - Lincoln Road
2:59 PM Dest: L - Lincoln Road
3:10 PM Dest: L - Lincoln Road
3:21 PM Dest: L - Lincoln Road
3:33 PM Dest: L - Lincoln Road
3:46 PM Dest: L - Lincoln Road
3:59 PM Dest: L - Lincoln Road
4:11 PM Dest: L - Lincoln Road
4:23 PM Dest: L - Lincoln Road

4:36 PM

Dest: L - Lincoln Road

4:47 PM

Dest: L - Lincoln Road

4:59 PM

Dest: L - Lincoln Road

5:11 PM

Dest: L - Lincoln Road

5:23 PM

Dest: L - Lincoln Road

5:35 PM

Dest: L - Lincoln Road

5:47 PM

Dest: L - Lincoln Road

5:59 PM

Dest: L - Lincoln Road

6:11 PM

Dest: L - Lincoln Road

6:23 PM

Dest: L - Lincoln Road

6:36 PM

Dest: L - Lincoln Road

6:48 PM

Dest: L - Lincoln Road

7:11 PM

Dest: L - Lincoln Road

7:24 PM

Dest: L - Lincoln Road

7:40 PM

Dest: L - Lincoln Road

8:06 PM

Dest: L - Lincoln Road

8:42 PM

Dest: L - Lincoln Road

9:09 PM

Dest: L - Lincoln Road

9:42 PM

Dest: L - Lincoln Road

10:24 PM

Dest: L - Lincoln Road

10:42 PM

Dest: L - Lincoln Road

11:22 PM

Dest: L - Lincoln Road

12:02 AM

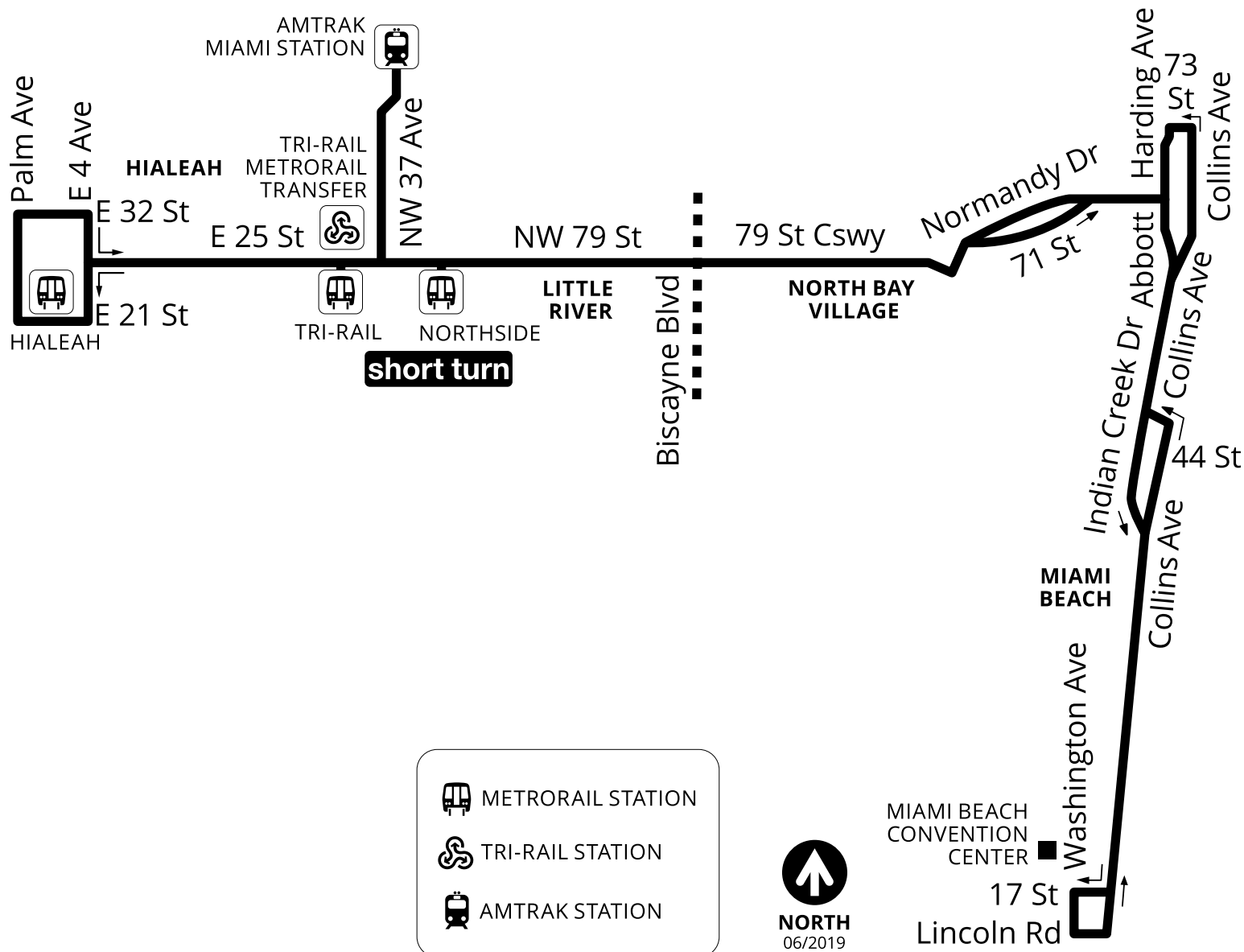
Dest: L - Lincoln Road

1:14 AM

Dest: L - Lincoln Road

2:14 AM

Dest: L - Lincoln Road



@GoMiamiDade



MDT Tracker | EASY Pay Miami

www.miamidade.gov/transit



311 or 305.468.5900 TTY/Fla Relay: 711



113 Route M
- Weekday (Eastbound)
COLLINS AV 43 ST**6:34 AM**

Dest: M - Mt Sinai Hospital

7:19 AM

Dest: M - Mt Sinai Hospital

7:58 AM

Dest: M - Mt Sinai Hospital

8:50 AM

Dest: M - Mt Sinai Hospital

9:36 AM

Dest: M - Mt Sinai Hospital

10:22 AM

Dest: M - Mt Sinai Hospital

11:02 AM

Dest: M - Mt Sinai Hospital

12:02 PM (27 min)

Dest: M - Mt Sinai Hospital

1:02 PM

Dest: M - Mt Sinai Hospital

2:02 PM

Dest: M - Mt Sinai Hospital

3:02 PM

Dest: M - Mt Sinai Hospital

4:02 PM

Dest: M - Mt Sinai Hospital

4:48 PM

Dest: M - Mt Sinai Hospital

5:38 PM

Dest: M - Mt Sinai Hospital

6:23 PM

Dest: M - Mt Sinai Hospital

7:08 PM

Dest: M - Mt Sinai Hospital

7:48 PM

Dest: M - Mt Sinai Hospital

8:36 PM

Dest: M - Mt Sinai Hospital

9:36 PM

Dest: M - Mt Sinai Hospital

10:32 PM

Dest: M - Mt Sinai Hospital



NORTH
MAP NOT TO SCALE
06/2017

06/2017

DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS

MDT TRACKER | EASY PAY MIAMI | MDT TRANSIT WATCH

 INFORMATION: INFORMACION: ENFOMASYON
311 OR 305.468.5900 (TDD: 305.468.5402)



19 Route S**- Weekday (Northbound)****COLLINS AV # 4441(FONTAINEBLEAU)**

Map

5:34 AM

Dest: S - Aventura Mall

5:58 AM

Dest: S - Aventura Mall

6:13 AM

Dest: S - Aventura Mall

6:27 AM

Dest: S - Aventura Mall

6:42 AM

Dest: S - Aventura Mall

6:58 AM

Dest: S - Aventura Mall

7:13 AM

Dest: S - Aventura Mall

7:31 AM

Dest: S - Aventura Mall

7:46 AM

Dest: S - Aventura Mall

8:03 AM

Dest: S - Aventura Mall

8:19 AM

Dest: S - Aventura Mall

8:35 AM

Dest: S - Aventura Mall

8:51 AM

Dest: S - Aventura Mall

9:08 AM

Dest: S - Aventura Mall

9:25 AM

Dest: S - Aventura Mall

9:41 AM

Dest: S - Aventura Mall

9:58 AM

Dest: S - Aventura Mall

10:13 AM

Dest: S - Aventura Mall

10:28 AM

Dest: S - Aventura Mall

10:43 AM

Dest: S - Aventura Mall

10:58 AM

Dest: S - Aventura Mall

11:13 AM

Dest: S - Aventura Mall

11:28 AM

Dest: S - Aventura Mall

11:43 AM (5 min)

Dest: S - Aventura Mall

11:58 AM

Dest: S - Aventura Mall

12:13 PM

Dest: S - Aventura Mall

12:28 PM

Dest: S - Aventura Mall

12:43 PM

Dest: S - Aventura Mall

12:58 PM

Dest: S - Aventura Mall

1:13 PM

Dest: S - Aventura Mall

1:28 PM

Dest: S - Aventura Mall

1:43 PM

Dest: S - Aventura Mall

1:58 PM

Dest: S - Aventura Mall

2:15 PM

Dest: S - Aventura Mall

2:31 PM

Dest: S - Aventura Mall

2:47 PM

Dest: S - Aventura Mall

3:02 PM

Dest: S - Aventura Mall

3:17 PM

Dest: S - Aventura Mall

3:32 PM

Dest: S - Aventura Mall

3:47 PM

Dest: S - Aventura Mall

4:02 PM

Dest: S - Aventura Mall

4:16 PM

Dest: S - Aventura Mall

4:31 PM

Dest: S - Aventura Mall

4:43 PM

Dest: S - Aventura Mall

4:55 PM

Dest: S - Aventura Mall

5:07 PM

Dest: S - Aventura Mall

5:19 PM

Dest: S - Aventura Mall

5:31 PM

Dest: S - Aventura Mall

5:43 PM

Dest: S - Aventura Mall

5:55 PM

Dest: S - Aventura Mall

6:07 PM

Dest: S - Aventura Mall

6:19 PM

Dest: S - Aventura Mall

6:31 PM

Dest: S - Aventura Mall

6:43 PM

Dest: S - Aventura Mall

6:55 PM

Dest: S - Aventura Mall

7:06 PM

Dest: S - Aventura Mall

7:17 PM

Dest: S - Aventura Mall

7:28 PM

Dest: S - Aventura Mall

7:37 PM

Dest: S - Aventura Mall

7:50 PM

Dest: S - Aventura Mall

8:06 PM

Dest: S - Aventura Mall

8:20 PM

Dest: S - Aventura Mall

8:38 PM

Dest: S - Aventura Mall

9:00 PM

Dest: S - Aventura Mall

9:25 PM

Dest: S - Aventura Mall

9:50 PM

Dest: S - Aventura Mall

10:15 PM

Dest: S - Aventura Mall

10:37 PM

Dest: S - Aventura Mall

11:01 PM

Dest: S - Aventura Mall

11:26 PM

Dest: S - Aventura Mall

11:56 PM

Dest: S - Aventura Mall

12:22 AM

Dest: S - Aventura Mall

12:50 AM

Dest: S - Aventura Mall

1:20 AM

Dest: S - Aventura Mall

1:50 AM

Dest: S - Aventura Mall

2:50 AM

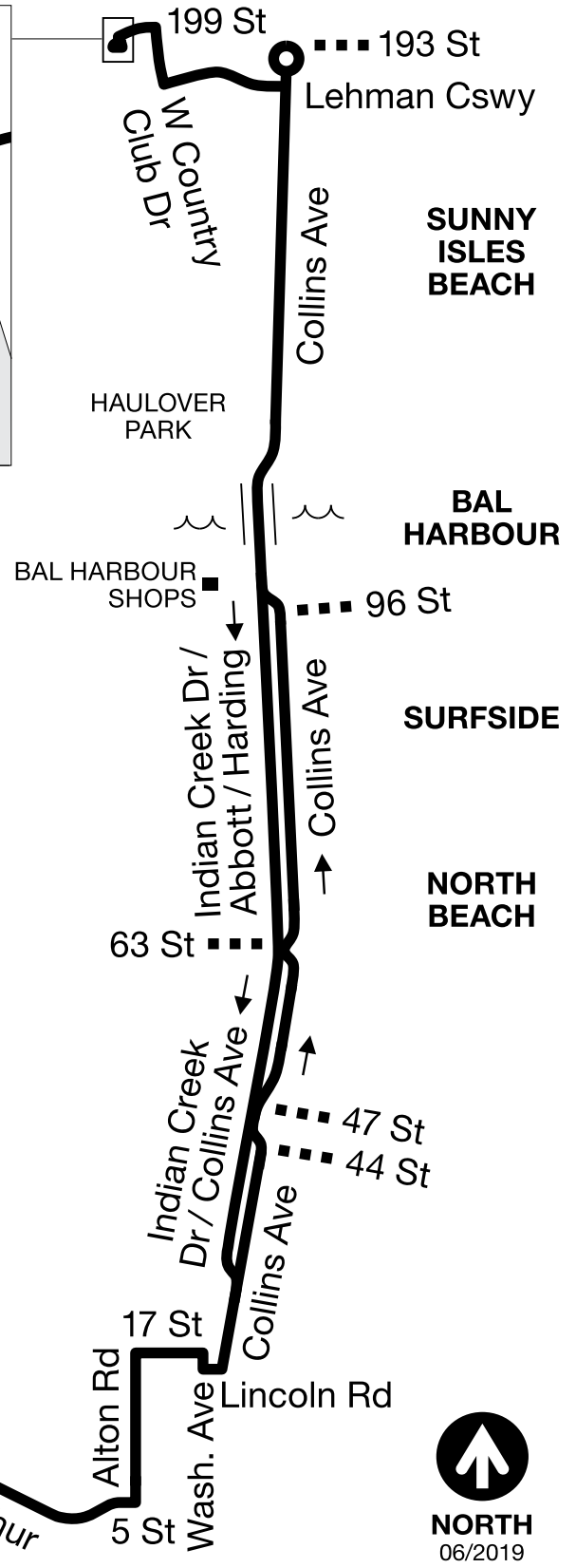
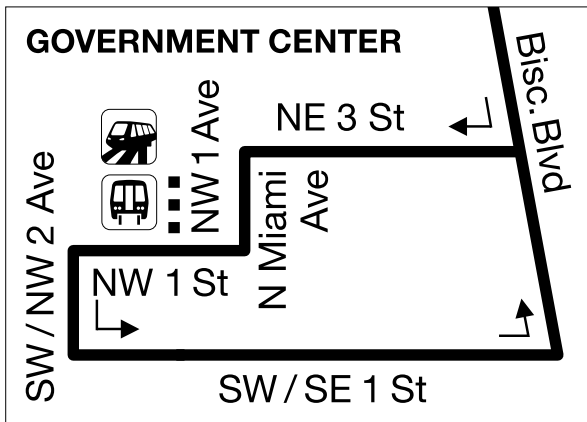
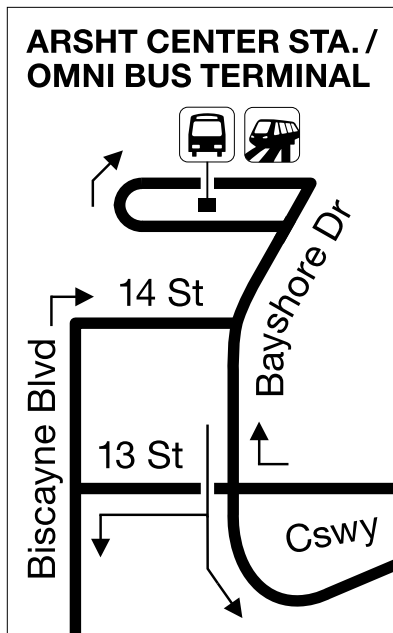
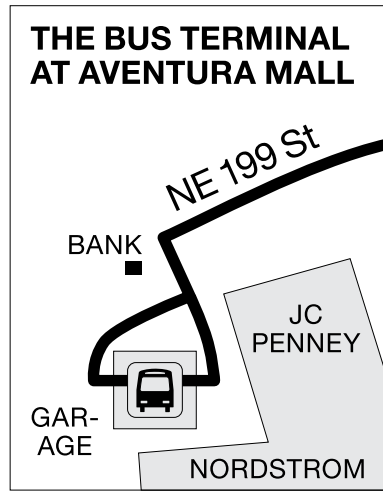
Dest: S - Aventura Mall

3:50 AM

Dest: S - Aventura Mall

4:50 AM

Dest: S - Aventura Mall



NORTH
06/2019



@GoMiamiDade



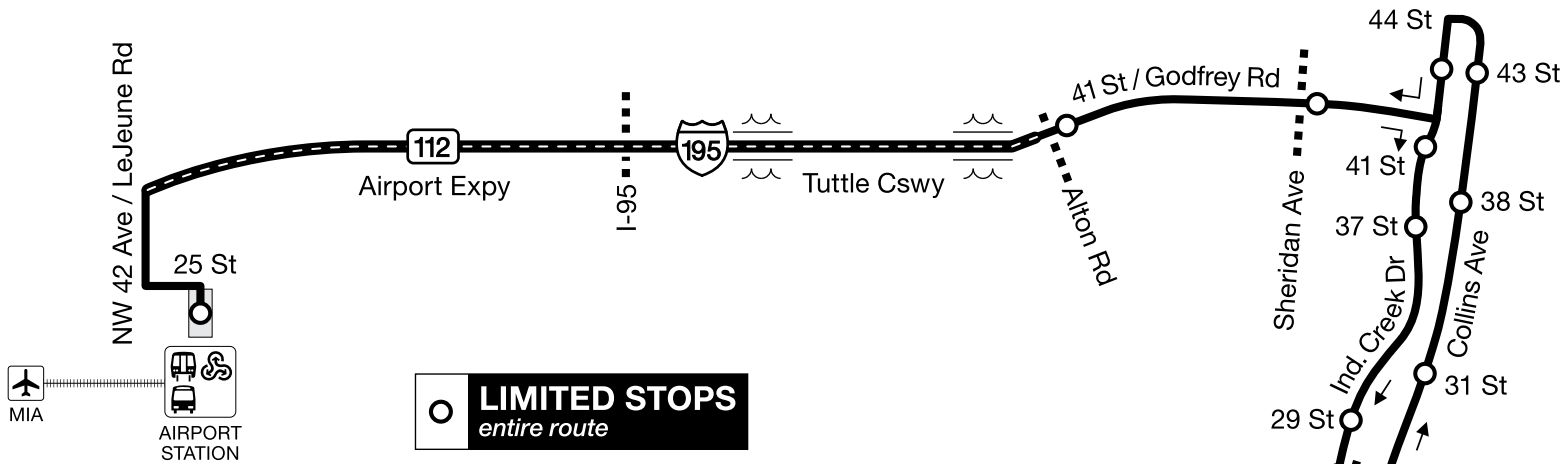
MDT Tracker | EASY Pay Miami

www.miamidade.gov/transit



311 or 305.468.5900 TTY/Fla Relay: 711





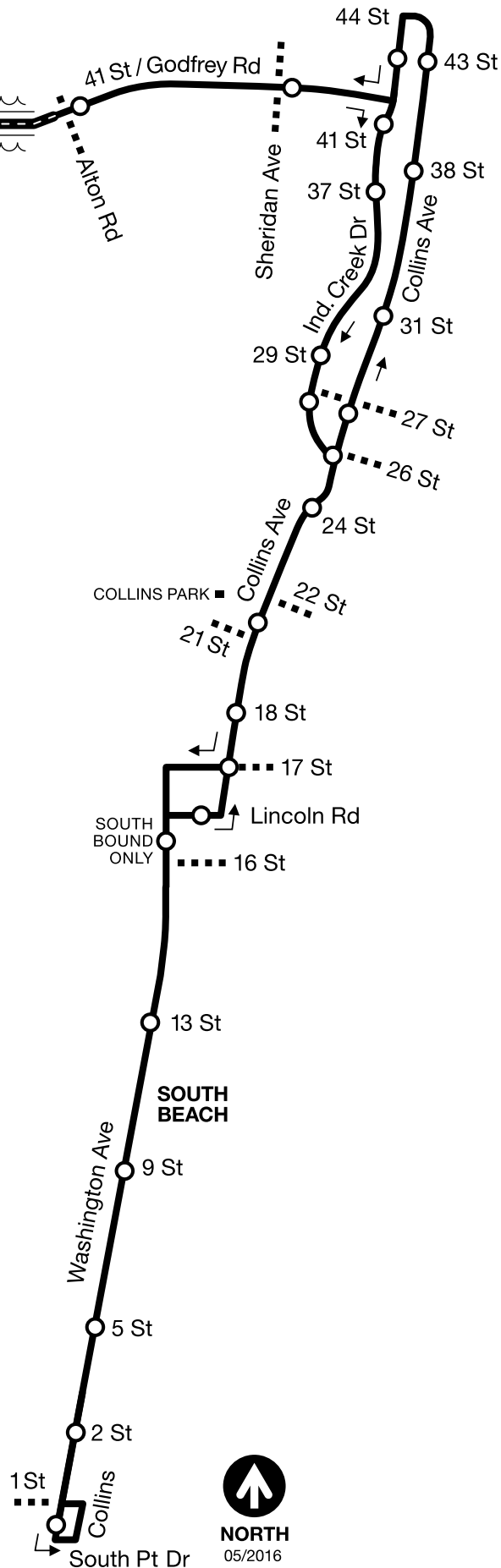
150

MIAMI BEACH
AIRPORT EXPRESS

SEVEN DAYS A WEEK LOS SIETE DIAS SET JOU YON SEMEN	EVERY/CADA/CHAK 20m	
EASTBOUND RUMBO ESTE/DIREKSYON IS	FROM DESDE • DE	UNTIL* HASTA • A
MIA METRORAIL STATION	6:00 a.m.	11:40 p.m.
41 ST & ALTON RD	6:14 a.m.	11:52 p.m.
41 ST & INDIAN CREEK	6:20 a.m.	11:57 p.m.
LINCOLN RD & WASHINGTON AVE	6:29 a.m.	12:06 a.m.
SOUTH POINTE DR & WASHINGTON AVE	6:39 a.m.	12:16 a.m.
WESTBOUND RUMBO OESTE/DIREKSYON WES	FROM DESDE • DE	UNTIL* HASTA • A
SOUTH POINTE DR & WASHINGTON AVE	5:10 a.m.	10:55 p.m.
LINCOLN RD & WASHINGTON AVE	5:20 a.m.	11:05 p.m.
41 ST & INDIAN CREEK	5:29 a.m.	11:14 p.m.
41 ST & ALTON RD	5:33 a.m.	11:18 p.m.
MIA METRORAIL STATION	5:45 a.m.	11:30 p.m.

*LAST FOUR TRIPS 30 MINUTES APART/ULTIMOS CUATRO VIAJES 30 MINUTOS APARTE/DENYE KAT SOTI 30 MINIT APA

Frecuencias son aproximadas, pues dependen del trafico y otras condiciones de las vias/Asosye yo apwoksimatif epi yo ka varye selon kondisyon sikilasyon sou wout yo



NORTH
05/2016

www.miamidade.gov/transit

DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS

[f](#) [t](#) [i](#) @GoMiamiDade

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App Store

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MDT TRACKER | EASY PAY MIAMI | MDT TRANSIT WATCH



INFORMATION : INFORMACION : ENFOMASYON
311 (305.468.5900) TDD: 305.468.5402





COLLINS EXPRESS



TROLLEY CONNECTIONS

NORTH
BEACH
LOOP



COLLINS
EXPRESS

COLLINS
EXPRESS



MIDDLE
BEACH
LOOP

MIDDLE
BEACH
LOOP

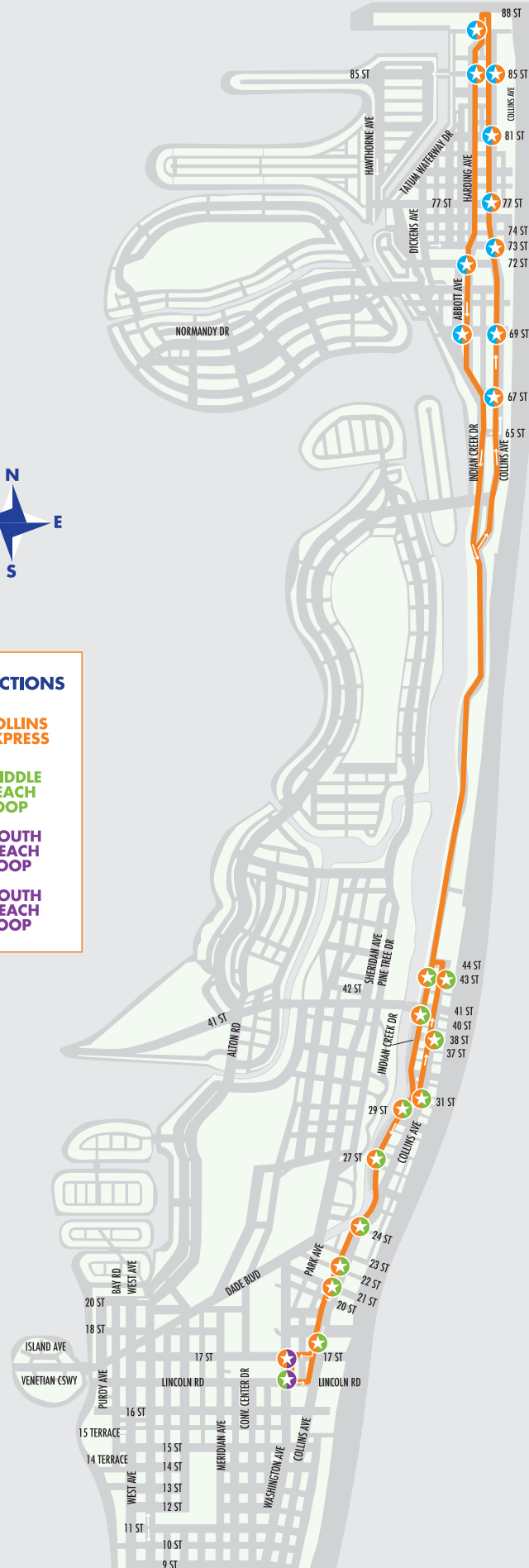


SOUTH
BEACH
LOOP

COLLINS
EXPRESS



SOUTH
BEACH
LOOP





MIDDLE BEACH LOOP

TROLLEY CONNECTIONS

- COLLINS EXPRESS  MIDDLE BEACH LOOP
- MIDDLE BEACH LOOP  SOUTH BEACH LOOP
- COLLINS EXPRESS  SOUTH BEACH LOOP





MIAMI BEACH TROLLEY

LEGEND

- NORTH BEACH LOOP**
- COLLINS EXPRESS**
- MIDDLE BEACH LOOP**
- SOUTH BEACH LOOPS**

TRANSFER POINTS

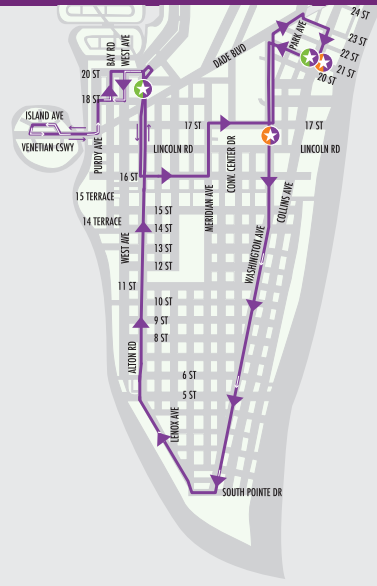
- COLLINS EXPRESS**
- MIDDLE BEACH LOOP**
- SOUTH BEACH LOOPS**
- SOUTH BEACH LOOPS**



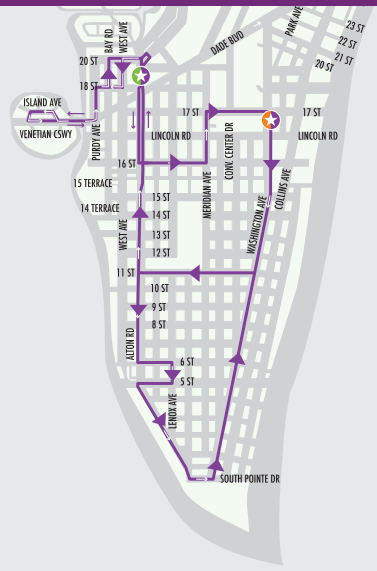
See detailed route maps for South Beach Loops ▶



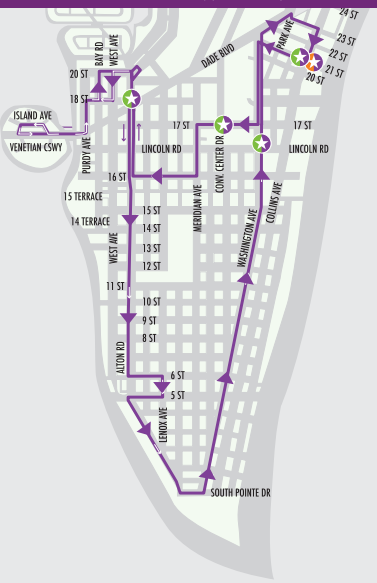
SOUTH BEACH LOOP - A (Clockwise - Approximately 20 minutes)



SOUTH BEACH LOOP - VIA 11 ST (Approximately 40 minutes)



SOUTH BEACH LOOP - B (Counter Clockwise - Approximately 20 minutes)



ATTACHMENT G

Queuing

Grand Beach Hotel

Date: July 20,2011
Observer: J. Espinosa (DPA)

Vehicle	In	Out	Type	Arrival Time	Processing Time	Notes
1		X	Car	8:34 AM	0:00:37	Valet Return
2		X	Car	8:35 AM	0:01:06	Valet Return
3		X	Car	8:36 AM	0:00:25	Valet Return
4		X	Car	8:36 AM	0:00:38	Pick Up (Personal)
5	X		Car	8:41 AM	0:00:18	Guest In
6		X	Car	8:45 AM	0:00:30	Valet Return
7	X		Car	8:52 AM	0:01:17	Check In
8		X	Car	9:02 AM	0:01:46	Check Out
9	X		Car	9:04 AM	0:01:01	Check In
10	X		Car	9:05 AM	0:00:51	Check In
11		X	Van	9:06 AM	0:00:32	Tour
12		X	Taxi	9:09 AM	0:00:26	Guest Out
13	X		Car	9:09 AM	0:02:34	Check In
14		X	Car	9:10 AM	0:00:26	Valet Return
15		X	Car	9:11 AM	0:00:37	Valet Return
16	X		Car	9:14 AM	0:00:28	Guest In
17		X	Car	9:14 AM	0:00:22	Valet Return
18	X		Car	9:18 AM	0:01:02	Check In
19		X	Car	9:18 AM	0:00:36	Valet Return
20		X	Taxi	9:21 AM	0:00:22	Guest Out
21		X	Car	9:21 AM	0:01:26	Check Out
22		X	Car	9:22 AM	0:00:44	Valet Return
23	X		Car	9:25 AM	0:01:21	Check In
24		X	Car	9:25 AM	0:01:06	Valet Return
25		X	Car	9:26 AM	0:00:23	Valet Return
26		X	Car	9:28 AM	0:00:25	Valet Return
27		X	Car	9:29 AM	0:00:22	Valet Return
28		X	Car	9:29 AM	0:00:21	Valet Return
29		X	Car	9:34 AM	0:00:46	Valet Return
30	X		Car	9:38 AM	0:01:04	Check In
31		X	Car	9:38 AM	0:00:36	Valet Return
32		X	Car	9:39 AM	0:00:21	Valet Return
33		X	Car	9:41 AM	0:00:34	Guest Out
34		X	Car	9:43 AM	0:00:14	Valet Return
35		X	Car	9:45 AM	0:02:04	Check Out
36	X		Car	9:45 AM	0:01:20	Check In
37		X	Taxi	9:48 AM	0:00:48	Check Out
38		X	Car	9:49 AM	0:00:26	Guest Out
39		X	Car	9:49 AM	0:00:48	Valet Return
40	X		Car	9:51 AM	0:00:37	Check In
41		X	Car	9:51 AM	0:00:30	Valet Return
42		X	Car	9:57 AM	0:00:28	Valet Return
43		X	Car	9:58 AM	0:01:22	Check Out
44		X	Car	10:02 AM	0:00:32	Valet Return
45		X	Car	10:03 AM	0:00:35	Valet Return
46		X	Van	10:04 AM	0:00:46	Valet Return
47	X		Car	10:06 AM	0:00:39	Check In
48		X	Car	10:08 AM	0:01:58	Check Out
49		X	Taxi	10:08 AM	0:01:48	Check Out
50		X	Car	10:09 AM	0:00:41	Valet Return
51		X	Car	10:10 AM	0:00:44	Valet Return
52		X	Car	10:12 AM	0:00:26	Valet Return
53	X		Taxi	10:13 AM	0:00:42	Check In
54		X	Taxi	10:14 AM	0:02:21	Check Out
55			Taxi	10:16 AM	0:01:48	Check Out
56		X	Car	10:18 AM	0:00:37	Valet Return
57		X	Car	10:18 AM	0:00:56	Valet Return
58	X		Car	10:20 AM	0:00:40	Guest In
59		X	Car	10:24 AM	0:00:57	Valet Return

Total Processing Time: 0:50:10
Average Processing Time: 0:00:51

Shops at Merrick Park Aurora Parking Garage

Garage Entrance Processing Time

Date: 2-May-17

Time: 5 - 6 pm

Car	Processing Time (sec)	Transaction Type	Car	Processing Time (sec)	Transaction Type
1	6.32	T	21	6.92	T
2	9.57	T	22	6.27	T
3	7.47	T	23	6.58	T
4	6.18	T	24	6.16	T
5	8.54	T	25	4.64	C
6	6.61	C	26	3.84	C
7	4.2	C	27	3.43	C
8	6.6	T	28	7.18	C
9	10.66	T	29	3.74	C
10	9.94	T	30	7.23	T
11	4.77	C	31	3.2	C
12	6.51	T	32	3.11	C
13	6.33	T	33	7.17	T
14	5.4	T	34	9.4	T
15	6.28	T	35	5.84	C
16	3.24	C	36	3.57	C
17	3.37	C			
18	7.97	T			
19	3.04	C			
20	6.07	T			

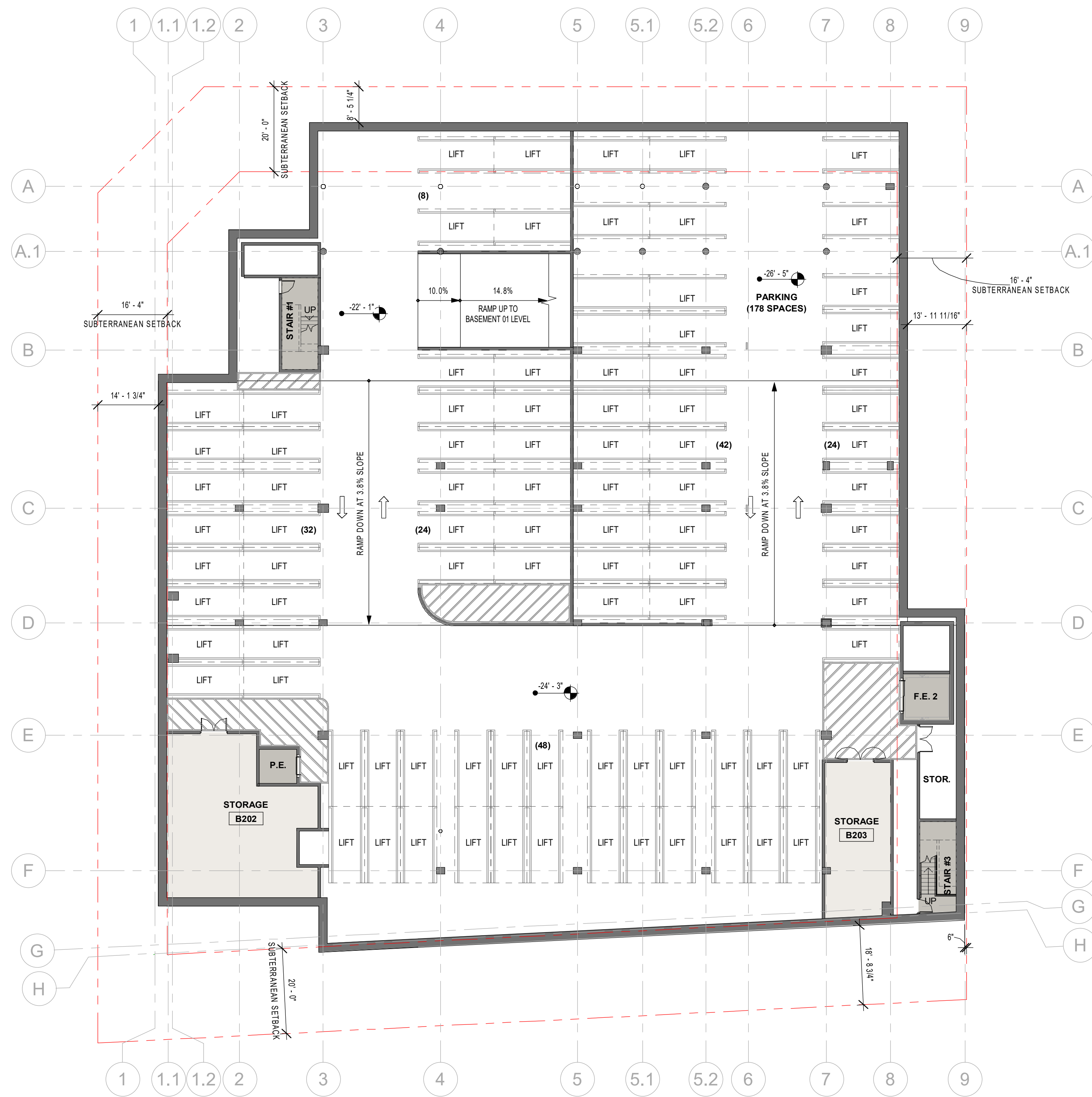
T= Ticket Dispenser

C= Card Reader

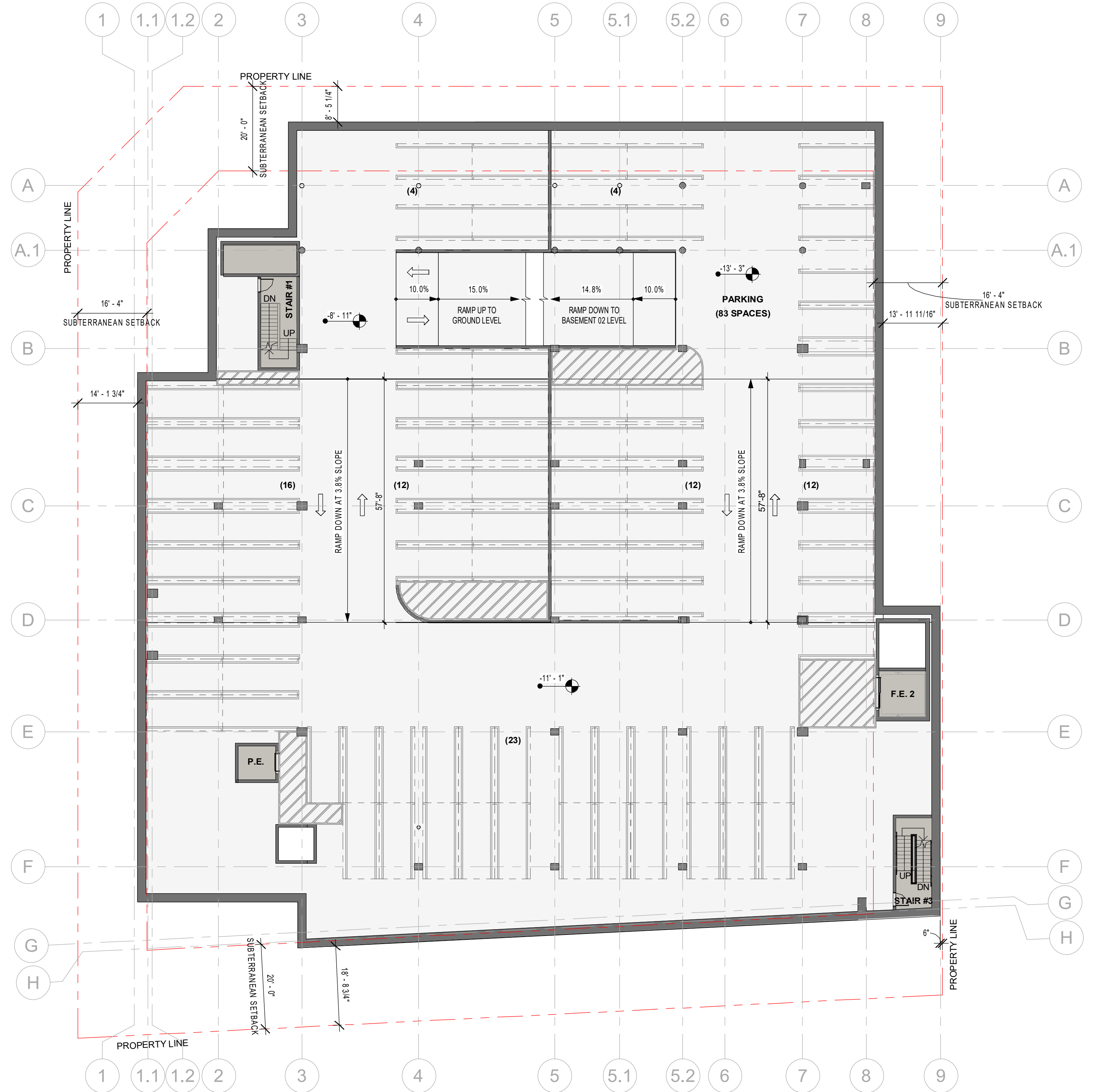
Ticket Dispenser Average 7.31 sec

Card Reader Average 4.25 sec

Combined Average 6.04 sec



1
A1.00
BASEMENT LEVEL 2 - FLOOR PLAN
1/16" = 1'-0"



2
A1.00
BASEMENT LEVEL 1 - FLOOR PLAN
1/16" = 1'-0"



location, a 5% probability of back-up onto the adjacent street is judged to be acceptable. Demand on the system for design is expected to be 110 vehicles in a 45-minute period. Average service time was expected to be 2.2 minutes. Is the queue storage adequate?

Such problems can be quickly solved using Equation (8-9b) given in Table 8-10 and repeated below for convenience.

$$M = \left[\frac{\ln P(x > M) - \ln Q_M}{\ln \rho} \right] - 1$$

where:

M = queue length which is exceeded p percent of the time

N = number of service channels (drive-in positions)

Q = service rate per channel (vehicles per hour)

$\rho = \frac{\text{demand rate}}{\text{service rate}} = \frac{q}{NQ}$ = utilization factor

q = demand rate on the system (vehicles per hour)

Q_M = tabled values of the relationship between queue length, number of channels, and utilization factor (see Table 8.11)

TABLE 8-11
Table of Q_M Values

ρ	$N = 1$	2	3	4	6	8	10
0.0	0.0000	0.0000	0.0000	0.0000			
0.1	.1000	.0182	.0037	.0008	.0000	0.0000	0.0000
.2	.2000	.0666	.0247	.0096	.0015	.0002	.0000
.3	.3000	.1385	.0700	.0370	.0111	.0036	.0011
.4	.4000	.2286	.1411	.0907	.0400	.0185	.0088
.5	.5000	.3333	.2368	.1739	.0991	.0591	.0360
.6	.6000	.4501	.3548	.2870	.1965	.1395	.1013
.7	.7000	.5766	.4923	.4286	.3359	.2706	.2218
.8	.8000	.7111	.6472	.5964	.5178	.4576	.4093
.9	.9000	.8526	.8172	.7878	.7401	.7014	.6687
1.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

$$\rho = \frac{q}{NQ} = \frac{\text{arrival rate, total}}{(\text{number of channels})(\text{service rate per channel})}$$

N = number of channels (service positions)

Solution

Step 1: $Q = \frac{60 \text{ min/hr}}{2.2 \text{ min/service}} = 27.3 \text{ services per hour}$

Step 2: $q = (110 \text{ veh/45 min}) \times (60 \text{ min/hr}) = 146.7 \text{ vehicles per hour}$

Step 3: $\rho = \frac{q}{NQ} = \frac{146.7}{(6)(27.3)} = 0.8956$

Step 4: $Q_M = 0.7303$ by interpolation between 0.8 and 0.9 for $N = 6$ from the table of Q_M values (see Table 8-11).

Step 5: The acceptable probability of the queue, M , being longer than the storage, 18 spaces in this example, was stated to be 5%. $P(x > M) = 0.05$, and:

$$M = \left[\frac{\ln 0.05 - \ln 0.7303}{\ln 0.8956} \right] - 1 = \left[\frac{-2.996 - (-0.314)}{-0.110} \right] - 1$$

$$= 24.38 - 1 = 23.38, \text{ say } 23 \text{ vehicles.}$$

						DRAFT		
Ground Level	17	self park temp short term/non-shift						
B1	83	self park - attendant/valet assist						
B2 (employee)	133	valet park (90 surface spaces + 45 stacker)						
B2 (long term guest)	45							
	278							
			South Lot Current (spaces under current use)			Post Construction (below grade employee)		
			148			216	1.46	68
AM/PM Shifts (6am - 10pm)								
	Condo		5			7		
	Bleau Bar		3			4		
	Banquets		45			66		
	Concierge		1			1		
	Engineering		11			16		
	Finance		8			12		
	Bell Services		11			16		
	Pool		8			12		
	Restaurant		31			45		
	Housekeeping		47			69		
	Room Services		12			18		
	Internal Maint.		2			3		
	Reservations		2			3		
	Retail		3			4		
	Sales		1			1		
	Salon		2			3		
	Security		1			1		
	Spa		3			4		
	PBX		1			1		
	Warehouse		3			4		
			200	1.35		292	1.35	92
Shift Breakdown			Current			Post		
	7am - 3:30pm		38			55		
	8am - 4:30pm		58			85		
	9am - 5:30pm		25			36		
	10am - 6:30pm		15			22		
	11am - 7:30pm		13			19		
	3pm - 11:30pm		32			47		
	4pm - 12:30am		14			20		
	5pm - 1:30am		5			7		
			200			292		92

Queuing Analysis

19185	Fontainebleau Hotel Ballroom & Parking Garage	2/14/2020
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Existing Fontainebleau Hotel Arrival (AM)

1	LookUp	N	RHO
Veh/hr 8		2	
% 100%			
time (min) 3.69			0
N 2			{ 0 - 0.1 }
Qm 0.0994	Qm		0.1
Lanes 1			{ 0.1 - 0.2 }
			0.2
Q 16.25616	0.09939		{ 0.2 - 0.3 }
			0.3
q 8			{ 0.3 - 0.4 }
			0.4
rho 0.246061			{ 0.4 - 0.5 }
			0.5
M -0.51			{ 0.5 - 0.6 }
			0.6
			{ 0.6 - 0.7 }
			0.7
			{ 0.7 - 0.8 }
			0.8
			{ 0.8 - 0.9 }
			0.9
			{ 0.9 - 1.0 }
			1

Existing Fontainebleau Hotel Departure (AM)

2	LookUp	N	RHO
Veh/hr 18		2	
% 100%			
time (min) 2.98			0
N 2			{ 0 - 0.1 }
Qm 0.2779	Qm		0.1
Lanes 1			{ 0.1 - 0.2 }
			0.2
Q 20.12962			{ 0.2 - 0.3 }
			0.3
q 18			{ 0.3 - 0.4 }
			0.4
rho 0.447102	0.27792		{ 0.4 - 0.5 }
			0.5
M 1.13089			{ 0.5 - 0.6 }
			0.6
			{ 0.6 - 0.7 }
			0.7
			{ 0.7 - 0.8 }
			0.8
			{ 0.8 - 0.9 }
			0.9
			{ 0.9 - 1.0 }
			1

Future Fontainebleau Hotel Arrival (AM)

1	LookUp	N	RHO
Veh/hr 13		2	
% 100%			
time (min) 3.69			0
N 2			{ 0 - 0.1 }
Qm 0.2285	Qm		0.1
Lanes 1			{ 0.1 - 0.2 }
			0.2
Q 16.25616			{ 0.2 - 0.3 }
			0.3
q 13	0.22846		{ 0.3 - 0.4 }
			0.4
rho 0.399848			{ 0.4 - 0.5 }
			0.5
M 0.65747			{ 0.5 - 0.6 }
			0.6
			{ 0.6 - 0.7 }
			0.7
			{ 0.7 - 0.8 }
			0.8
			{ 0.8 - 0.9 }
			0.9
			{ 0.9 - 1.0 }
			1

Future Fontainebleau Hotel Departure (AM)

2	LookUp	N	RHO
Veh/hr 19		2	
% 100%			
time (min) 2.98			0
N 2			{ 0 - 0.1 }
Qm 0.3039	Qm		0.1
Lanes 1			{ 0.1 - 0.2 }
			0.2
Q 20.12962			{ 0.2 - 0.3 }
			0.3
q 19			{ 0.3 - 0.4 }
			0.4
rho 0.471941	0.30392		{ 0.4 - 0.5 }
			0.5
M 1.40345			{ 0.5 - 0.6 }
			0.6
			{ 0.6 - 0.7 }
			0.7
			{ 0.7 - 0.8 }
			0.8
			{ 0.8 - 0.9 }
			0.9
			{ 0.9 - 1.0 }
			1

Existing Fontainebleau Hotel Arrival (PM)

1	LookUp	N	RHO
Veh/hr 33		4	
% 100%			
time (min) 3.69			0
N 4			{ 0 - 0.1 }
Qm 0.1824	Qm		0.1
Lanes 1			{ 0.1 - 0.2 }
			0.2
Q 16.25616			{ 0.2 - 0.3 }
			0.3
q 33			{ 0.3 - 0.4 }
			0.4
rho 0.5075			{ 0.4 - 0.5 }
			0.5
M 0.90795	0.18238		{ 0.5 - 0.6 }
			0.6
			{ 0.6 - 0.7 }
			0.7
			{ 0.7 - 0.8 }
			0.8
			{ 0.8 - 0.9 }
			0.9
			{ 0.9 - 1.0 }
			1

Existing Fontainebleau Hotel Departure (PM)

1	LookUp	N	RHO
Veh/hr 35		4	
% 100%			
time (min) 2.98			0
N 4			{ 0 - 0.1 }
Qm 0.1196	Qm		0.1
Lanes 1			{ 0.1 - 0.2 }
			0.2
Q 20.12962			{ 0.2 - 0.3 }
			0.3
q 35			{ 0.3 - 0.4 }
			0.4
rho 0.434683	0.11956		{ 0.4 - 0.5 }
			0.5
M 0.04636			{ 0.5 - 0.6 }
			0.6
			{ 0.6 - 0.7 }
			0.7
			{ 0.7 - 0.8 }
			0.8
			{ 0.8 - 0.9 }
			0.9
			{ 0.9 - 1.0 }
			1

Future Fontainebleau Hotel Arrival (PM)

3	LookUp	N	RHO
Veh/hr 35		4	
% 100%			
time (min) 3.69			0
N 4			{ 0 - 0.1 }
Qm 0.2172	Qm		0.1
Lanes 1			{ 0.1 - 0.2 }
			0.2
Q 16.25616			{ 0.2 - 0.3 }
			0.3
q 35			{ 0.3 - 0.4 }
			0.4
rho 0.538258			{ 0.4 - 0.5 }
			0.5
M 1.37102	0.21717		{ 0.5 - 0.6 }
			0.6
			{ 0.6 - 0.7 }
			0.7
			{ 0.7 - 0.8 }
			0.8
			{ 0.8 - 0.9 }
			0.9
			{ 0.9 - 1.0 }
			1

Future Fontainebleau Hotel Departure (PM)

4	LookUp	N	RHO
Veh/hr 39		4	
% 100%			
time (min) 2.98			0
N 4			{ 0 - 0.1 }
Qm 0.1609	Qm		0.1
Lanes 1			{ 0.1 - 0.2 }
			0.2
Q 20.12962			{ 0.2 - 0.3 }
			0.3
q 39			{ 0.3 - 0.4 }
			0.4
rho 0.484361	0.16089		{ 0.4 - 0.5 }
			0.5
M 0.61215			{ 0.5 - 0.6 }
			0.6
			{ 0.6 - 0.7 }
			0.7
			{ 0.7 - 0.8 }
			0.8
			{ 0.8 - 0.9 }
			0.9
			{ 0.9 - 1.0 }
			1

Valet Time Main Fontainebleau Hotel (Arrival) Garage Parking Space**Minutes**

<i>Processing time :</i>	51 seconds	0.0167 min/ seconds			0.85
<i>Driving time (most distant space) :</i>	1000 Feet	0.00019 miles/ feet	0.06666667 hr / miles	60 min / hr	0.76
<i>Mechanical Lift Processing Time:</i>	30 sec/ lift	0.0167 min/ seconds	0 # lifts		0
<i>Park Processing Time :</i>			0 movement	0.15	0
<i>Mechanical Arm Lift Time:</i>	4.25 sec/arm	0 gates	0.0167 min/ sec		0.00
<i>Walking time:</i>	1000 feet	0.125 seconds/ feet	0.0167 min/ sec		2.08
Total					3.69

Valet Time Main Fontainebleau Hotel (Departure) Garage Parking Space**Minutes**

<i>Processing time :</i>	51 seconds	0.0167 min/ seconds			0.85
<i>Driving time (most distant space) :</i>	750 Feet	0.000189394 miles/ feet	0.06666667 hr / miles	60 min / hr	0.57
<i>Mechanical Lift Processing Time:</i>	30 sec/ lift	0.0167 min/ seconds	0 # lifts		0
<i>Park Processing Time :</i>			0 movement	0.15	0
<i>Mechanical Arm Lift Time:</i>	4.25 sec/arm	0 gates	0.0167 min/ sec		0.00
<i>Walking time:</i>	750 feet	0.125 seconds/ feet	0.0167 min/ sec		1.56
Total					2.98