



Traffic Impact Analysis

Sistrunk Restaurant

Fort Lauderdale, Florida

21 December 2019



TRAFFIC IMPACT
GROUP, LLC

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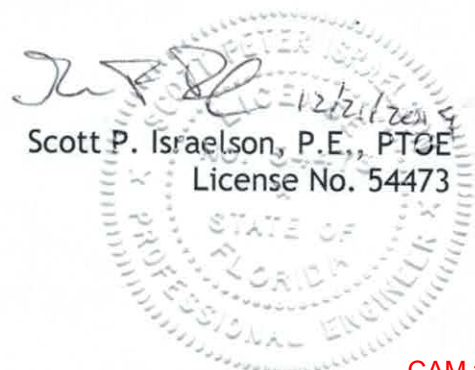
CAM #20-0654
Exhibit 9
Page 1 of 33



Sistrunk Restaurant - Fort Lauderdale

Project Number 19-FL20177-1

I hereby certify that this report was prepared by me
or under my direct supervision, and that I am a duly
Licensed Professional Engineer under the laws of the
State of Florida.



Executive Summary

Project Description

Sistrunk Restaurant is a proposed development in Fort Lauderdale, Florida. The proposed development will consist of a 1,850 SF restaurant with drive-through window. The site is in the southwest corner of NW 6th Street (Sistrunk Boulevard) & NW 20th Avenue.

Access to the site is proposed via an existing enter-only driveway to NW 6th Street and two exit-only driveways to NW 20th Avenue.

The City of Fort Lauderdale requires a Traffic Impact Study for developments that generate over 1,000 daily trips. Additionally, city staff have expressed concerns about driveway proximity to the intersection of NW 6th Street & NW 20th Avenue.

Trip Generation

The proposed new development is expected to generate 24 entering trips and 22 exiting trips in the AM peak hour, and 19 entering and 17 exiting trips in the PM peak hour. This site will also experience pass-by and diverted link trips, which have also been included in the driveway analysis.

Traffic Impacts

NW 6th Street & NW 20th Avenue

Analysis shows that vehicles currently ignore the right-turn only sign at NW 6th Street & NW 20th Avenue. For Full Build 2021 conditions, assuming westbound vehicles turn left at the intersection, the northbound approach is expected to see LOS F with a 95th percentile queue of about three car lengths.

The site plan shows that the exit-only Access B to NW 20th Avenue is proposed to be located 104 feet south of NW 6th Street. This is greater than the expected max queue from NW 6th Street, so the driveway is expected to function acceptably. Cars will not be hindered trying to exit the development.

The City could consider constructing a small concrete directional pork-chop to prevent northbound vehicles turning left at NW 6th Street & NW 20th Avenue.

Table of Contents

I. Introduction	2
Figure 1 - Site Plan	3
Figure 2 - Vicinity Map	4
II. Existing Conditions	5
A. Existing Roadway Conditions	5
B. Existing Intersection Geometry	5
C. Traffic Volumes	5
Figure 3 - Existing Traffic Volumes	6
III. Methodology.....	7
A. Base Assumptions	7
B. Background Growth	7
C. Trip Generation	7
D. Trip Distribution	9
Figure 4 - Pass-by/Diverted Link Trips	10
Figure 5 - Site Trips	11
Figure 6 - Full Build 2021 Volumes.....	12
V. Capacity Analysis.....	13
A. NW 6th Street & NW 20th Avenue.....	14
VI. Summary and Conclusion	15
Appendix.....	16

I. Introduction

A restaurant is proposed to be developed in Fort Lauderdale, Florida. The site is located in the southwest corner NW 6th Street (Sistrunk Boulevard) & NW 20th Avenue. The address is 2012-2014 NW 6th St.

The site consists of three parcels and currently consists of a restaurant and barber shop under one roof, plus surface parking. The proposed development would add a 1,850 SF fast-food restaurant with drive-through window. Access to the property will be via an enter-only access to NW 6th Street and two exit-only accesses to NW 20th Avenue.

The City of Fort Lauderdale requires a Traffic Impact Study for developments that generate over 1,000 daily trips. Additionally, city staff have expressed concerns about driveway proximity to the intersection of NW 6th Street & NW 20th Avenue.

The study area included the following intersections:

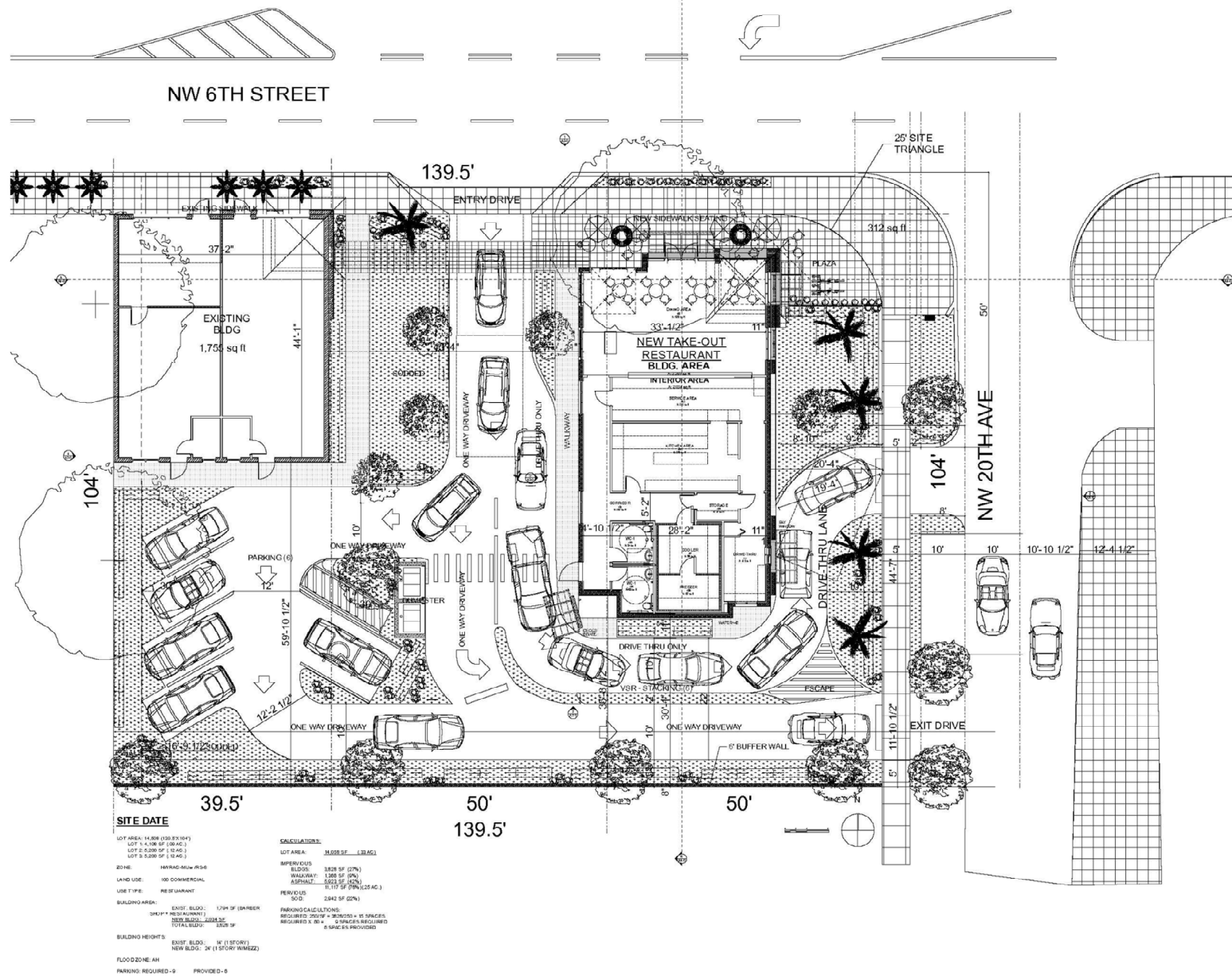
- NW 6th Street & NW 20th Avenue
- NW 6th Street & Access A
- NW 20th Avenue & Accesses B and C

The study analyzed the following scenarios:

- 2019 Existing Conditions
- Full Build 2021 Conditions

The AM peak hour and PM peak hour were analyzed.

Figure 1 shows the most recent site plan. **Figure 2** shows the project vicinity map.



2012-14 Base Plan R3a.pln; First Floor; 1 : 208; SITE PLAN, LEWARS DESIGN LLC.

Site Plan

Figure 1

Sistrunk Restaurant - Fort Lauderdale

Project No: 19-FL20177-1

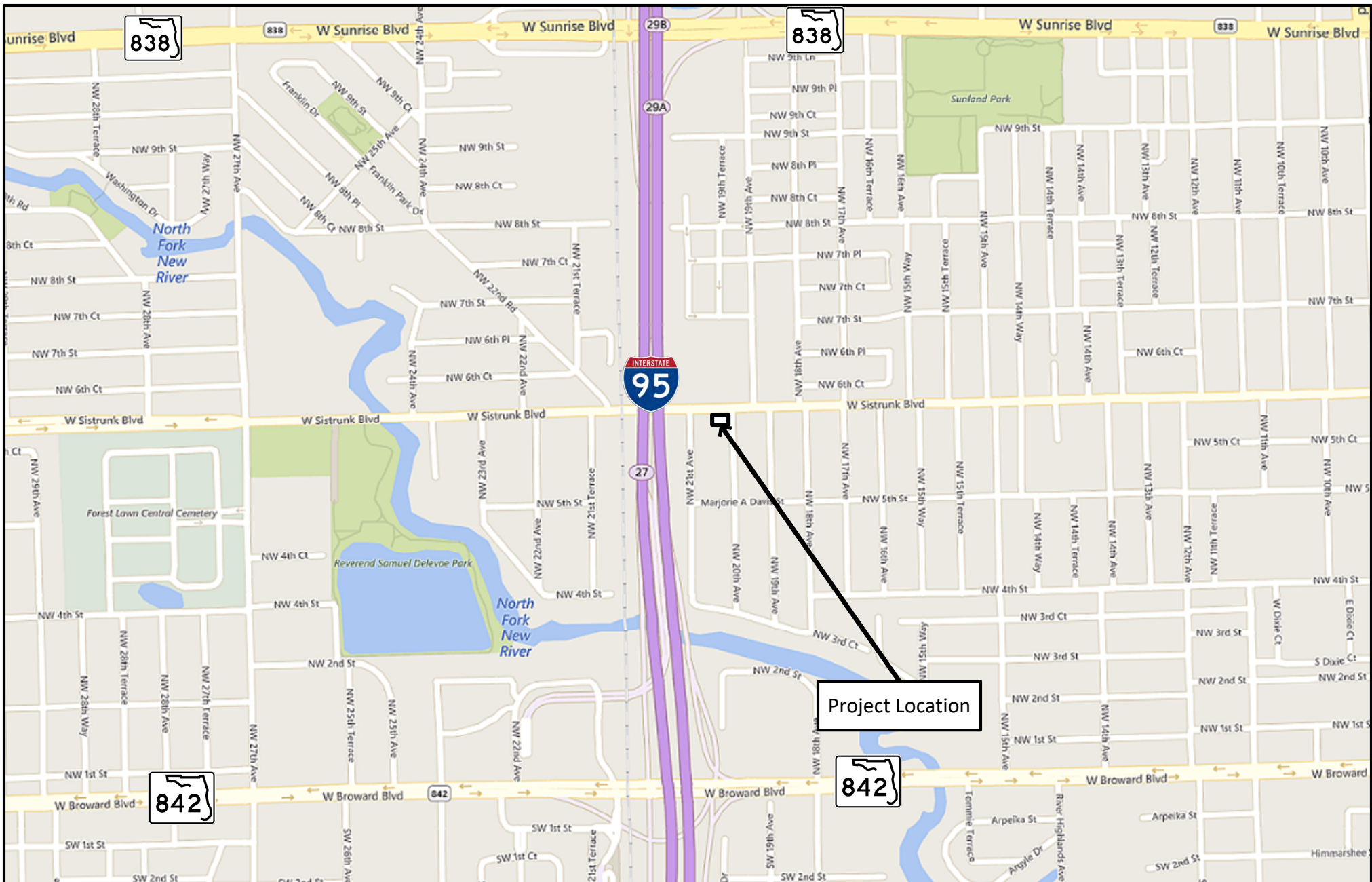
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Exhibit 9

Page 6 of 33



Vicinity Map

Figure 2

Sistrunk Restaurant - Fort Lauderdale

Project No: 19-FL20177-1

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CAM #20-0654

Exhibit 9

Page 7 of 33

II. Existing Conditions

A. EXISTING ROADWAY CONDITIONS

Table 2.1 presents a summary of the existing roadway conditions in the study area.

Table 2.1 - Existing Roadways				
Street Name	Functional Class	Typical Section	Posted Speed	AADT
NW 6th Street (Sistrunk Boulevard)	Minor Collector	Five-lane with two-way left-turn lane	30 mph	12,400
NW 20th Avenue	Local Street	Two-lane undivided	25 mph	n/a

B. EXISTING INTERSECTION GEOMETRY

NW 6th Street & NW 20th Avenue is unsignalized. Northbound NW 20th Avenue is signed as right-turn only.

Access A is an existing full-access driveway to the surface parking lot from NW 6th Street. The roadway has a westbound left-turn lane to the driveway. This driveway will be changed to entrance-only as part of development.

Access B will be an exit-only driveway to NW 20th Avenue. It is proposed to be located 104 feet south of NW 6th Street and will serve as access for vehicles exiting the drive-through window.

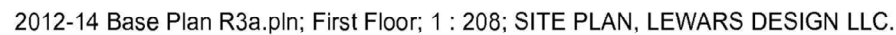
Access C will be an exit-only driveway located approximately 100 feet south of Access B. This driveway will serve as access for vehicles that exit the site without using the drive-through window. These two driveways will replace the existing full-access driveway.

C. TRAFFIC VOLUMES

Traffic data collection for study area intersections was performed on November 14, 2019. **Figure 4** displays existing traffic volumes. These volumes can be found in the Appendix.

Current Average Annual Daily Traffic (AADT) volumes were retrieved from the FDOT Planning Office website.

FDOT produces Peak Season Correction Factors (PSCF) to account for seasonal variations in traffic volumes. The PSCF for the week of November 11th in Broward County is 1.03. The volumes collected as part of this study have been increased by 3% to approximate design traffic volumes for existing conditions.



Sistrunk Restaurant - Fort Lauderdale

III. Methodology

A. BASE ASSUMPTIONS

Intersection capacity analysis was conducted using Synchro v10.0. Trip generation was calculated using the 10th edition of the Institute of Transportation Engineers (ITE) *Trip Generation Manual*.

B. BACKGROUND GROWTH

The average annual background growth rate is calculated using historical AADT volumes. Calculations show that the background growth on Sistrunk Boulevard is -3.27% per year. These calculations can be found in the Appendix.

No increase to existing volumes were applied for background growth for Full Build 2021 conditions.

C. TRIP GENERATION

The development is proposed to consist of a 1,850 SF restaurant with drive-through window.

The *ITE Trip Generation Manual, 10th Edition* was used to estimate the projected trips by this development.

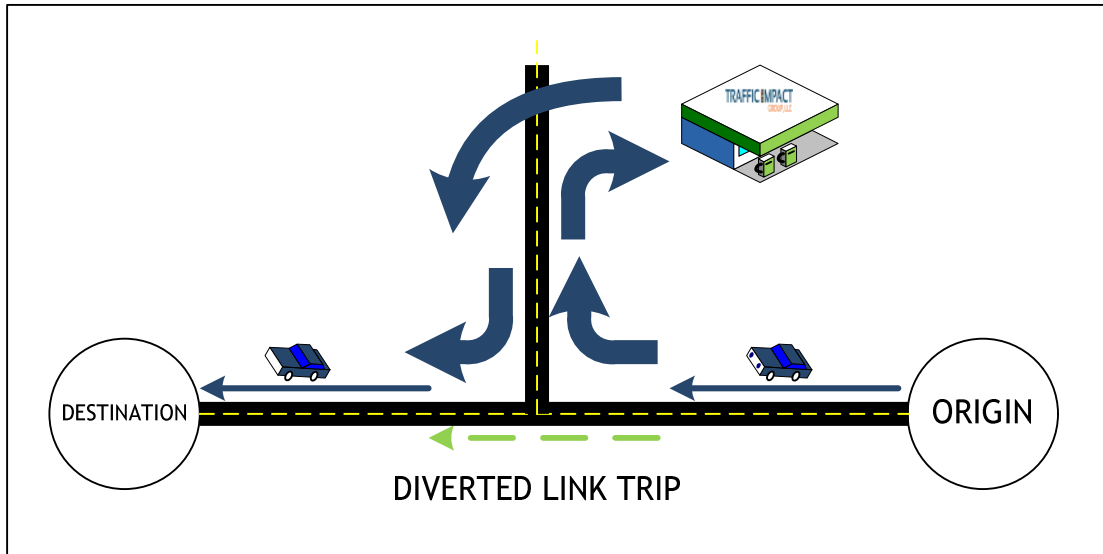
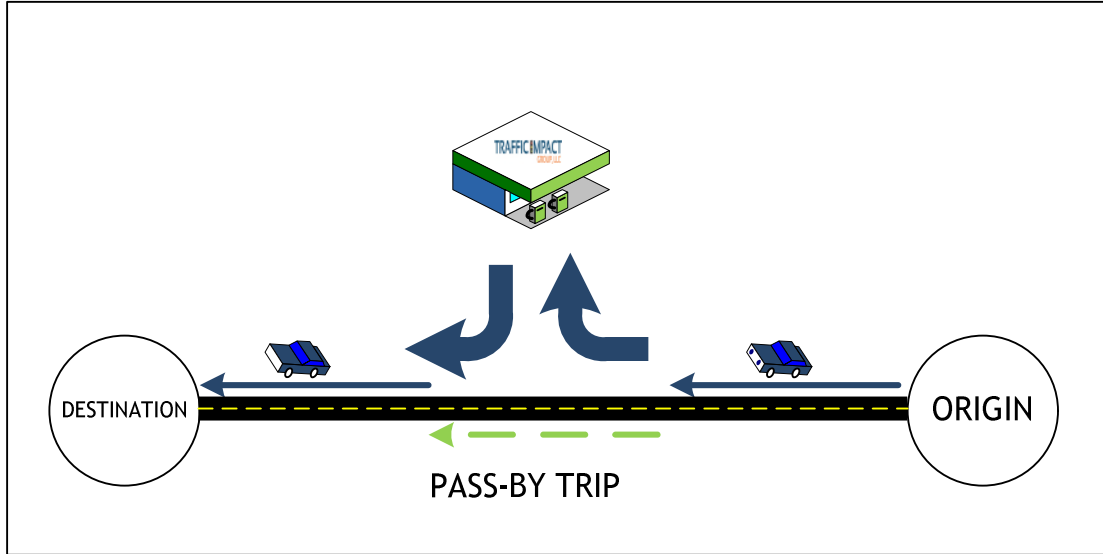
Table 3.1 contains the summary of the land uses and sizes used for trip generation estimates.

Table 3.1 - ITE Trip Generation								
Average Weekday Driveway Volumes					AM Peak Hour		PM Peak Hour	
Land Use	ITE Code	Size		Daily Trips	Enter	Exit	Enter	Exit
Fast-Food Restaurant with Drive-Through Window	934	1.85	Th.Sq.Ft.GFA	1036	45	43	37	35
Driveway Peak Hour Trips					45	43	37	35
Pass-By/Diverted Link Reduction - from ITE Manual								
Pass-By/Diverted Link Reduction		Fast-Food Restaurant			-21	-21	-18	-18
Total New Peak Hour Trips to Adjacent Network					24	22	19	17

This retail/office/residential development generates “internal capture” trips summarized in the table above. Internal capture trip reduction is a method to estimate interaction between different uses within the same development. While each land use in a development generates vehicle trips, some people will visit more than one land use within the development. This phenomenon of multiple land uses adjacent to each other ultimately results in fewer vehicle trips to the external road network, and less impact, than free-standing retail, office, or residential areas. This reduction was calculated in accordance with the *NCHRP Report No. 684, Enhancing Internal Trip Capture for Mixed-use Development*.

Pass-by reductions are included to account for the phenomenon where land uses such as convenience stores or other similar uses attract vehicles whose ultimate destination is elsewhere. These driveway turning movement trips replace what would otherwise be “through” movements, but do not contribute to “new trips” on the roadway network. This reduction was calculated in accordance with the *ITE Trip Generation Handbook, 3rd Edition*.

The following graphic illustrates how pass-by and diverted link trips affect traffic calculations at the project driveways and adjacent intersection.



The percentages and directionality of pass-by and diverted link trips is based on the count data collected in the PM peak. Table 3.3 summarizes the calculation.

Table 3.3 - Pass-by/Diverted Link Trips							
Roadway	Direction	AM Volume	% of total AM	AM Pass-by Trips	PM Volume	% of total PM	PM Pass-by Trips
NW 6th St	EB Through	1456	68.6%	14	653	35.7%	6
	WB Through	638	30.1%	6	1131	61.8%	11
NW 20th Ave	NB Through	11	0.5%	0	22	1.2%	0
	SB Through	18	0.8%	0	24	1.3%	0

Pass-by trips are shown in Figure 4.

D. TRIP DISTRIBUTION

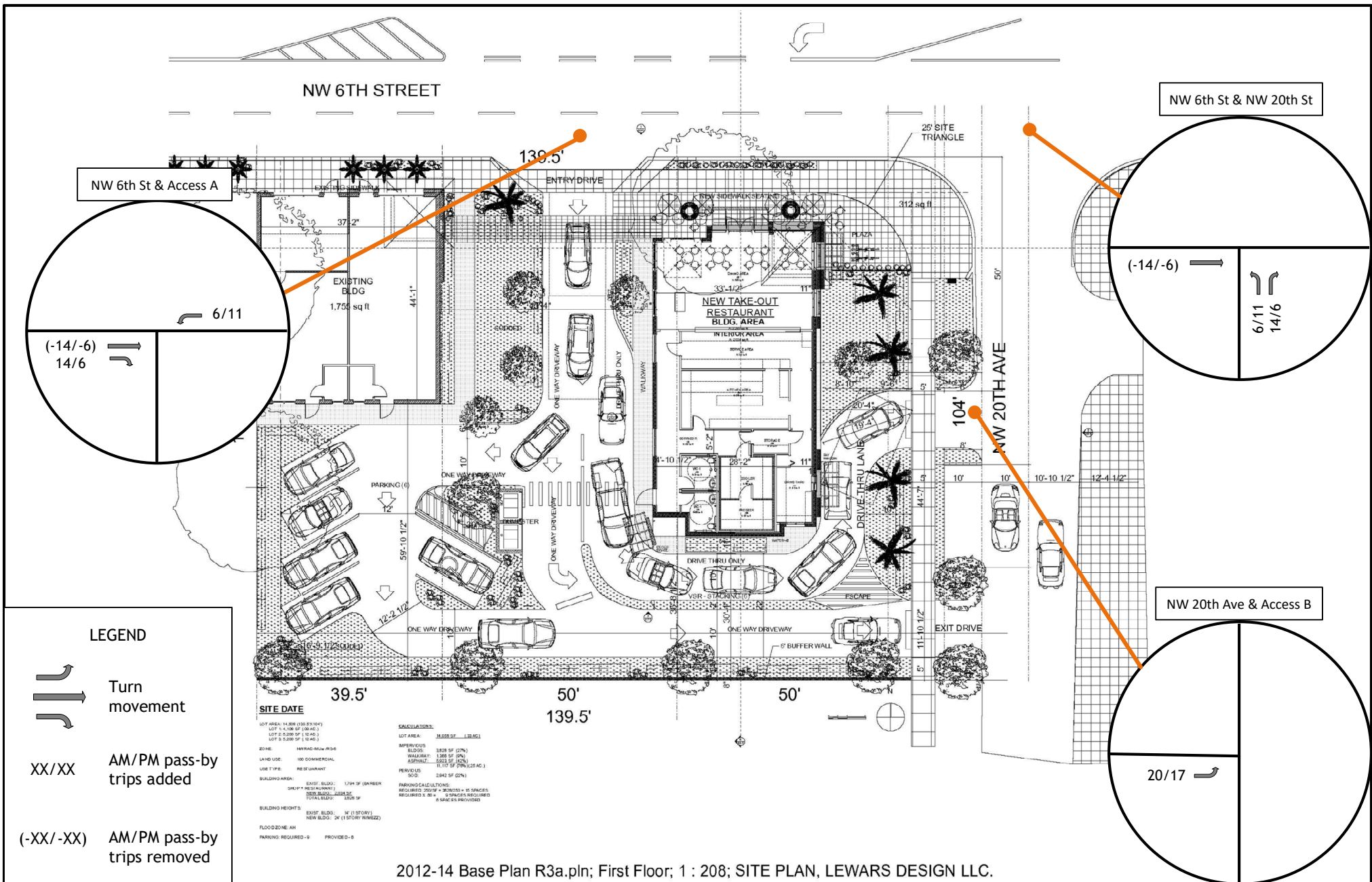
Trips for this proposed development were assigned to the surrounding roadway network based on engineering judgment.

- 50% to/from the west on NW 6th Street
- 45% to/from the east on NW 6th Street
- 5% to/from the south on NW 20th Avenue

The projected site trips are shown in Figure 5. Full Build 2021 volumes are shown in Figure 6.



NW 6th Street & NW 20th Avenue - looking east



Pass-by/Diverted Link Trip Reductions

Figure 4

Sistrunk Restaurant - Fort Lauderdale

Project No: 19-FL20177-1

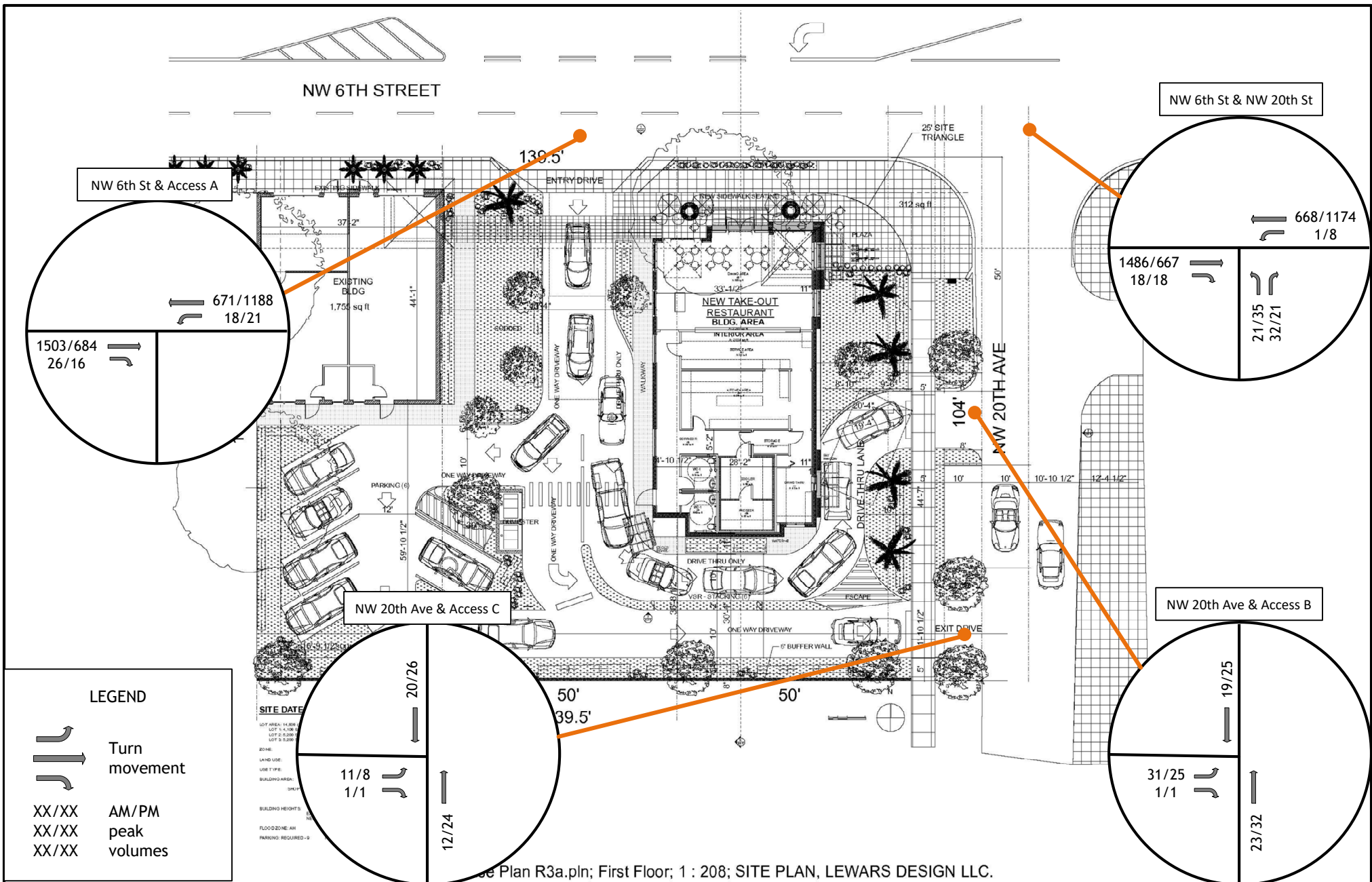
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Exhibit 9

Page 13 of 33



Full Build 2021 Volumes

Project No: 19-FL20177-1

Figure 6

Date: 22 November 2019

Sistrunk Restaurant - Fort Lauderdale

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CAM #20-0654

Exhibit 9

Page 15 of 33

V. Capacity Analysis

The Transportation Research Board's Highway Capacity Manual (HCM) utilizes a term "level of service" (LOS) to measure how traffic operates in intersections. There are currently six levels of service ranging from A to F. Level of Service "A" represents the best conditions and Level of Service "F" represents the worst. Synchro software was used to determine the level of service for intersections in the study area. All worksheet reports from the analyses can be found in the Appendix.

Table 5.1 shows the control delay per vehicle associated with LOS A through F for signalized and unsignalized intersections.

Table 5.1 - Highway Capacity Manual Levels of Service and Control Delay			
Signalized Intersection		Unsignalized Intersection	
Level of Service	Control Delay per Vehicle (sec)	Level of Service	Control Delay per Vehicle (sec)
A	≤ 10	A	≤ 10
B	> 10 and ≤ 20	B	> 10 and ≤ 15
C	> 20 and ≤ 35	C	> 15 and ≤ 25
D	> 35 and ≤ 55	D	> 25 and ≤ 35
E	> 55 and ≤ 80	E	> 35 and ≤ 50
F	> 80	F	> 50

A. NW 6TH STREET & NW 20TH AVENUE

NW 6th Street & NW 20th Avenue is unsignalized. Northbound NW 20th Avenue is signed as right-turn only, but it should be noted that this signage is routinely ignored as demonstrated by existing traffic data.

Table 5.2 shows the current LOS, control delay, and 95th percentile queue length for existing conditions.

Table 5.2 - Intersection LOS, Delay, and Queue by Movement - 2019 Existing								
Intersection	Approach	Movement	AM			PM		
			LOS	Delay	Queue	LOS	Delay	Queue
NW 6th St & NW 20th Ave	EB	TH	Free					
		RT						
	WB	LT	B	14.3	-	A	9.0	-
		TH	Free					
	NB	LT	D	34.8	-	D	25.0	10'
		RT						

Table 5.3 shows the expected LOS, control delay, and 95th percentile queue length for Full Build 2021 conditions.

Table 5.3 - Intersection LOS, Delay, and Queue by Movement - 2020 Full Build								
Intersection	Approach	Movement	AM			PM		
			LOS	Delay	Queue	LOS	Delay	Queue
NW 6th St & NW 20th Ave	EB	TH	Free					
		RT						
	WB	LT	B	14.1	-	A	9.0	-
		TH	Free					
	NB	LT	F	75.5	65'	D	27.8	25'
		RT						

Analysis shows that vehicles currently ignore the right-turn only sign at NW 6th Street & NW 20th Avenue. For Full Build 2021 conditions, assuming westbound vehicles turn left at the intersection, the northbound approach is expected to see LOS F with a 95th percentile queue of about three car lengths.

The site plan shows that the exit-only Access B to NW 20th Avenue is proposed to be located 104 feet south of NW 6th Street. This is greater than the expected max queue from NW 6th Street, so the driveway is expected to function acceptably. Cars will not be hindered trying to exit the development.

The City could consider constructing a small concrete directional pork-chop to prevent northbound vehicles turning left at NW 6th Street & NW 20th Avenue.

VI. Summary and Conclusion

This study serves as an analysis of the traffic impacts from the proposed Sistrunk Restaurant development in Fort Lauderdale, Florida.

This analysis was necessary due to City of Fort Lauderdale guidelines that require a TIA for developments that generate 1,000 daily trips. Additionally, city staff have expressed concerns about driveway proximity to the intersection of NW 6th Street & NW 20th Avenue.

The proposed development is expected to generate 24 entering trips and 22 exiting trips in the AM peak hour, and 19 entering and 17 exiting trips in the PM peak hour. This site will also experience pass-by and diverted link trips, which have also been included in the driveway analysis.

Analysis shows that vehicles currently ignore the right-turn only sign at NW 6th Street & NW 20th Avenue. For Full Build 2021 conditions, assuming westbound vehicles turn left at the intersection, the northbound approach is expected to see LOS F with a 95th percentile queue of about three car lengths.

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NW 6th Street & NW 20th Avenue - looking north

Appendix

Background Information

Traffic Volumes

Trip Generation

Capacity Analysis

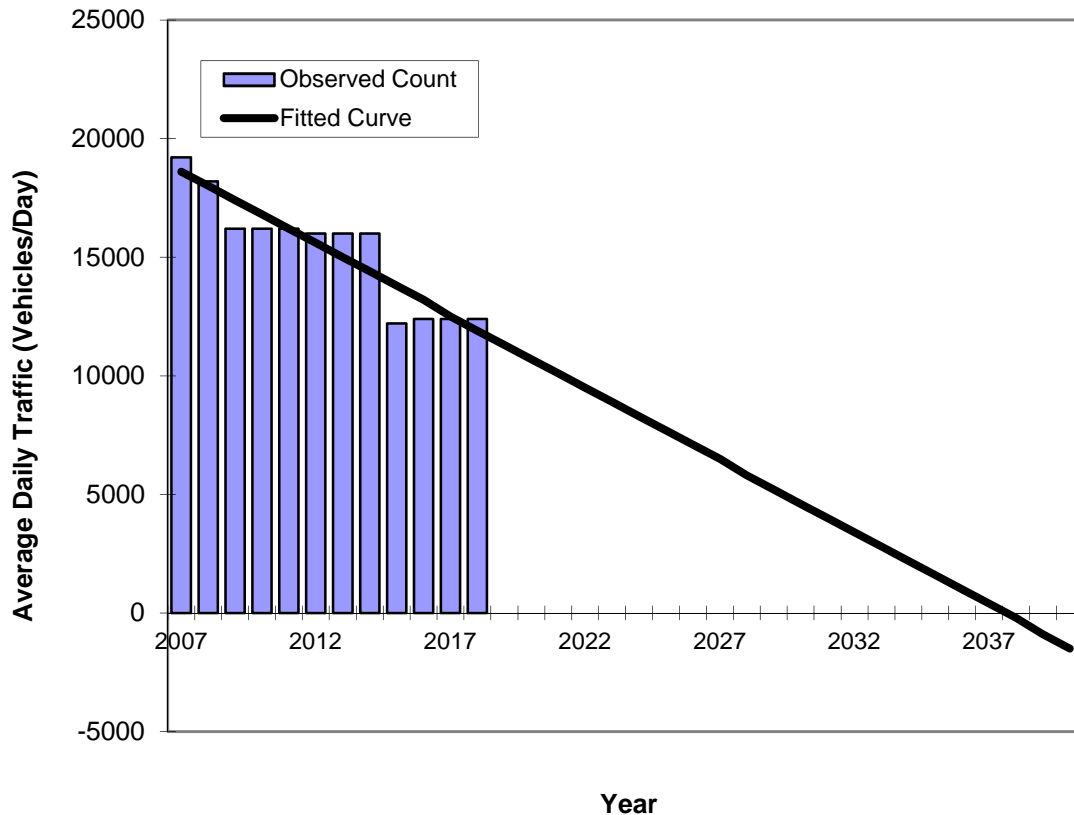
BACKGROUND INFORMATION

Traffic Trends - V2.0

Sistrunk Blvd -- east of I-95

Location	0
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County:	Broward
Station #:	869042
Highway:	Sistrunk Blvd



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2007	19200	18600
2008	18200	18000
2009	16200	17400
2010	16200	16800
2011	16200	16200
2012	16000	15600
2013	16000	15000
2014	16000	14400
2015	12200	13800
2016	12400	13200
2017	12400	12500
2018	12400	11900
2007 Opening Year Trend		
2007	N/A	18600
2019 Mid-Year Trend		
2019	N/A	11300
2022 Design Year Trend		
2022	N/A	9500
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	-609
Trend R-squared:	85.08%
Trend Annual Historic Growth Rate:	-3.27%
Trend Growth Rate (2019 to Design Year):	-5.31%
Printed:	20-Nov-19
Straight Line Growth Option	

*Axle-Adjusted

2018 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
 CATEGORY: 8601 CEN.-W OF US1 TO SR7

WEEK	DATES	SF	MOCF: 0.98	
			PSCF	
1	01/01/2018 - 01/06/2018	1.00	1.02	
2	01/07/2018 - 01/13/2018	1.01	1.03	
3	01/14/2018 - 01/20/2018	1.01	1.03	
4	01/21/2018 - 01/27/2018	1.00	1.02	
* 5	01/28/2018 - 02/03/2018	0.99	1.01	
* 6	02/04/2018 - 02/10/2018	0.97	0.99	
* 7	02/11/2018 - 02/17/2018	0.96	0.98	
* 8	02/18/2018 - 02/24/2018	0.96	0.98	
* 9	02/25/2018 - 03/03/2018	0.96	0.98	
*10	03/04/2018 - 03/10/2018	0.97	0.99	
*11	03/11/2018 - 03/17/2018	0.97	0.99	
*12	03/18/2018 - 03/24/2018	0.97	0.99	
*13	03/25/2018 - 03/31/2018	0.98	1.00	
*14	04/01/2018 - 04/07/2018	0.98	1.00	
*15	04/08/2018 - 04/14/2018	0.98	1.00	
*16	04/15/2018 - 04/21/2018	0.99	1.01	
*17	04/22/2018 - 04/28/2018	1.00	1.02	
18	04/29/2018 - 05/05/2018	1.01	1.03	
19	05/06/2018 - 05/12/2018	1.02	1.04	
20	05/13/2018 - 05/19/2018	1.03	1.05	
21	05/20/2018 - 05/26/2018	1.03	1.05	
22	05/27/2018 - 06/02/2018	1.03	1.05	
23	06/03/2018 - 06/09/2018	1.02	1.04	
24	06/10/2018 - 06/16/2018	1.02	1.04	
25	06/17/2018 - 06/23/2018	1.02	1.04	
26	06/24/2018 - 06/30/2018	1.02	1.04	
27	07/01/2018 - 07/07/2018	1.02	1.04	
28	07/08/2018 - 07/14/2018	1.03	1.05	
29	07/15/2018 - 07/21/2018	1.03	1.05	
30	07/22/2018 - 07/28/2018	1.02	1.04	
31	07/29/2018 - 08/04/2018	1.02	1.04	
32	08/05/2018 - 08/11/2018	1.01	1.03	
33	08/12/2018 - 08/18/2018	1.01	1.03	
34	08/19/2018 - 08/25/2018	1.01	1.03	
35	08/26/2018 - 09/01/2018	1.02	1.04	
36	09/02/2018 - 09/08/2018	1.02	1.04	
37	09/09/2018 - 09/15/2018	1.03	1.05	
38	09/16/2018 - 09/22/2018	1.02	1.04	
39	09/23/2018 - 09/29/2018	1.01	1.03	
40	09/30/2018 - 10/06/2018	1.01	1.03	
41	10/07/2018 - 10/13/2018	1.00	1.02	
42	10/14/2018 - 10/20/2018	1.00	1.02	
43	10/21/2018 - 10/27/2018	1.00	1.02	
44	10/28/2018 - 11/03/2018	1.00	1.02	
45	11/04/2018 - 11/10/2018	1.01	1.03	
46	11/11/2018 - 11/17/2018	1.01	1.03	
47	11/18/2018 - 11/24/2018	1.01	1.03	
48	11/25/2018 - 12/01/2018	1.01	1.03	
49	12/02/2018 - 12/08/2018	1.00	1.02	
50	12/09/2018 - 12/15/2018	1.00	1.02	
51	12/16/2018 - 12/22/2018	1.01	1.03	
52	12/23/2018 - 12/29/2018	1.01	1.03	
53	12/30/2018 - 12/31/2018	1.01	1.03	

* PEAK SEASON

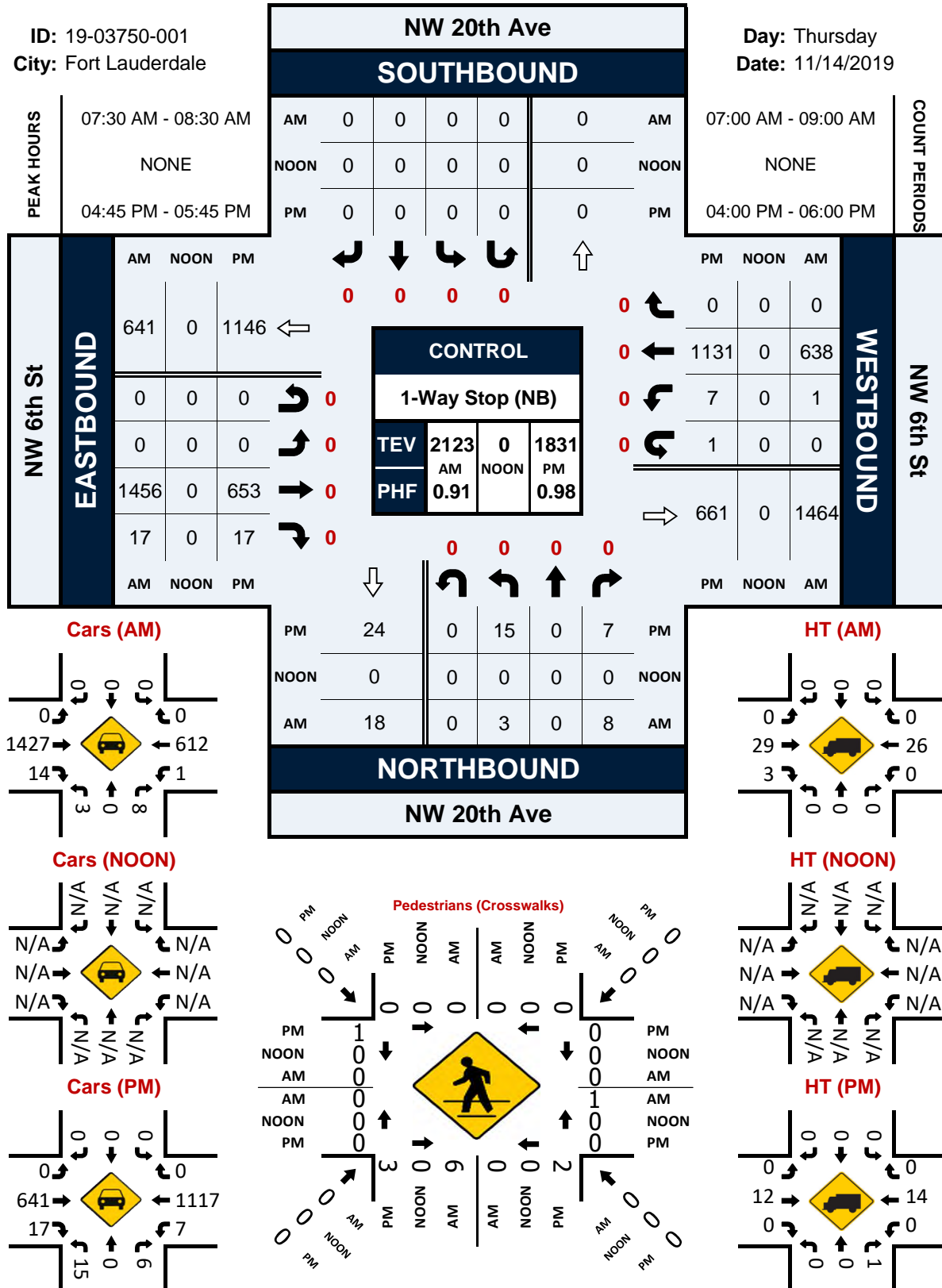
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TRAFFIC VOLUMES

Day: Thursday
Date: 11/14/2019



TRIP GENERATION

Project Information	
Project Name:	Fort Lauderdale Sistrunk
No:	19-FL20177-1
Date:	8/19/2019
City:	Fort Lauderdale
State/Province:	FL
Zip/Postal Code:	
Country:	
Client Name:	Lewars
Analyst's Name:	SPI
Edition:	Trip Generation Manual, 10th Ed

Land Use	Size	Daily		AM		PM	
		Entry	Exit	Entry	Exit	Entry	Exit
934 - Fast-Food Restaurant with Drive-Through Window (General Urban/Suburban)	2.2 1000 Sq. Ft. GFA	518	518	45	43	37	35
Reduction		0	0	0	0	0	0
Internal		0	0	0	0	0	0
Pass-by		0	0	22	21	18	18
Non-pass-by		518	518	23	22	19	17
Total		518	518	45	43	37	35
Total Reduction		0	0	0	0	0	0
Total Internal		0	0	0	0	0	0
Total Pass-by		0	0	22	21	18	18
Total Non-pass-by		518	518	23	22	19	17

CAPACITY ANALYSIS

Existing Conditions

Intersection

Int Delay, s/veh 0.2

Movement EBT EBR WBL WBT NBL NBR

Lane Configurations	↑↑		↑	↑↑	↑	
Traffic Vol, veh/h	1500	18	1	657	3	8
Future Vol, veh/h	1500	18	1	657	3	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	10	0	4	0	0
Mvmt Flow	1648	20	1	722	3	9

Major/Minor Major1 Major2 Minor1

Conflicting Flow All	0	0	1668	0	2021	834
Stage 1	-	-	-	-	1658	-
Stage 2	-	-	-	-	363	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	390	-	52	316
Stage 1	-	-	-	-	143	-
Stage 2	-	-	-	-	680	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	390	-	52	316
Mov Cap-2 Maneuver	-	-	-	-	52	-
Stage 1	-	-	-	-	143	-
Stage 2	-	-	-	-	680	-

Approach EB WB NB

HCM Control Delay, s	0	0	34.8
HCM LOS			D

Minor Lane/Major MvmNBLn1 EBT EBR WBL WBT

Capacity (veh/h)	133	-	-	390	-
HCM Lane V/C Ratio	0.091	-	-	0.003	-
HCM Control Delay (s)	34.8	-	-	14.3	-
HCM Lane LOS	D	-	-	B	-
HCM 95th %tile Q(veh)	0.3	-	-	0	-

Intersection

Int Delay, s/veh 0.4

Movement EBT EBR WBL WBT NBL NBR

Lane Configurations	↑↑			↑↑	↑↑	↑↑
Traffic Vol, veh/h	673	18	8	1165	15	7
Future Vol, veh/h	673	18	8	1165	15	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	0	0	1	0	2
Mvmt Flow	687	18	8	1189	15	7

Major/Minor Major1 Major2 Minor1

Conflicting Flow All	0	0	705	0	1307	353
Stage 1	-	-	-	-	696	-
Stage 2	-	-	-	-	611	-
Critical Hdwy	-	-	4.1	-	6.8	6.94
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.32
Pot Cap-1 Maneuver	-	-	902	-	154	643
Stage 1	-	-	-	-	461	-
Stage 2	-	-	-	-	510	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	902	-	153	643
Mov Cap-2 Maneuver	-	-	-	-	153	-
Stage 1	-	-	-	-	457	-
Stage 2	-	-	-	-	510	-

Approach EB WB NB

HCM Control Delay, s	0	0.1	25
HCM LOS			D

Minor Lane/Major MvmNBLn1 EBT EBR WBL WBT

Capacity (veh/h)	202	-	-	902	-
HCM Lane V/C Ratio	0.111	-	-	0.009	-
HCM Control Delay (s)	25	-	-	9	-
HCM Lane LOS	D	-	-	A	-
HCM 95th %tile Q(veh)	0.4	-	-	0	-

Full Build 2021 Conditions

Intersection

Int Delay, s/veh 1.8

Movement

	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↑	↑↑	↑	
Traffic Vol, veh/h	1486	18	1	668	21	32
Future Vol, veh/h	1486	18	1	668	21	32
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	10	0	4	0	0
Mvmt Flow	1633	20	1	734	23	35

Major/Minor

	Major1	Major2	Minor1
Conflicting Flow All	0	0	1653
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.1
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.2
Pot Cap-1 Maneuver	-	-	396
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	396
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach

	EB	WB	NB
HCM Control Delay, s	0	0	75.5
HCM LOS			F

Minor Lane/Major MvmNBLn1

	EBT	EBR	WBL	WBT
Capacity (veh/h)	105	-	-	396
HCM Lane V/C Ratio	0.555	-	-	0.003
HCM Control Delay (s)	75.5	-	-	14.1
HCM Lane LOS	F	-	-	B
HCM 95th %tile Q(veh)	2.6	-	-	0

Intersection

Int Delay, s/veh 0.9

Movement EBT EBR WBL WBT NBL NBR

Lane Configurations	↑↑			↑↑	↑↑	↑↑
Traffic Vol, veh/h	667	18	8	1174	35	21
Future Vol, veh/h	667	18	8	1174	35	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	0	0	1	0	2
Mvmt Flow	681	18	8	1198	36	21

Major/Minor Major1 Major2 Minor1

Conflicting Flow All	0	0	699	0	1305	350
Stage 1	-	-	-	-	690	-
Stage 2	-	-	-	-	615	-
Critical Hdwy	-	-	4.1	-	6.8	6.94
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.32
Pot Cap-1 Maneuver	-	-	907	-	154	646
Stage 1	-	-	-	-	465	-
Stage 2	-	-	-	-	507	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	907	-	153	646
Mov Cap-2 Maneuver	-	-	-	-	153	-
Stage 1	-	-	-	-	461	-
Stage 2	-	-	-	-	507	-

Approach EB WB NB

HCM Control Delay, s	0	0.1	27.8
HCM LOS			D

Minor Lane/Major MvmNBLn1 EBT EBR WBL WBT

Capacity (veh/h)	214	-	-	907	-
HCM Lane V/C Ratio	0.267	-	-	0.009	-
HCM Control Delay (s)	27.8	-	-	9	-
HCM Lane LOS	D	-	-	A	-
HCM 95th %tile Q(veh)	1	-	-	0	-