OLIVE | JUDD

April 14, 2022

Via Electronic Mail

Ms. Karlanne Grant, Planner
City of Fort Lauderdale
Urban Design and Planning Division
700 NW 19th Avenue
Fort Lauderdale, FL 33301

Re: 2851 and 2901 NE 9th Court Project, also referred to as Ocean Park Hotel and Residence; UDP-S21031 (the "Project")

Dear Ms. Grant,

This firm represents the interests of Le Club International Condominium Association, Inc. ("Le Club") as they relate to the development project identified above. The Le Club International Condominium is located at 2845 NE 9th Street, Fort Lauderdale, Florida 33304, and is substantially affected by the potential impacts associated with the Project.

The Project is generally located at 2851 NE 9th Court, Fort Lauderdale, Florida, containing the following proposed uses on a development site consisting of only 1.2596 acres:

1. East Tower (Hotel Use): 12-story, 122,815 SF building, which is 120 feet tall and containing 100 hotel rooms and 4,698 SF of commercial space and associated ancillary uses.

2. West Tower (Residential): 12-story, 114,564 building, which is 120 feet tall and containing 54 residential condominiums and associated ancillary uses.

The 1.2596-acre development site currently contains a small, one-story commercial strip center consisting of 14,952 SF of building area (per survey) containing six (6) commercial uses with two of the main uses having been vacant for several years.

Le Club held a duly noticed Owners' Meeting and the Owners unanimously voted to object to the Project on the following grounds:

A. The Project is too Dense for the 1.2596 Acre Parcel

The development site is a narrow parcel of approximately 100 feet deep and 550 feet long consisting of a mere 1.2596 acres. Pursuant to Section 4-12.5(C)3 of the ULDR, the density limits for a development projected located in the SLA zoning district are:

a. Residential: 48 dwelling units per acre

b. Hotels: 90 hotel rooms per acre
c. Commercial retail: Floor Area Ratio of 2.0

Use	Maximum Density	Provided by Project
Residential Building	Max 48 dwelling units per acre 1.2596 acres * 48 = 60 units	54 Units
Hotel Building	Max 90 hotel rooms per acre 1.2596 acres * 90 = 113 rooms	100 Rooms
Commercial Retail	Max Floor Area Ratio of 2.0. 2 * 54,868 SF = 109,736 SF	4,698 SF

The density limits set forth above constitute the maximum number of developable units permitted in a specific area of land. The Project proposes 54 residential units (90% of the maximum density allowed), 100 hotel units (89% of the maximum density allowed), and 4,698 square feet of restaurant/retail use (4% of the maximum density allowed). Combining these uses would suggest that the Project should be constructed on an area of land at least twice the size of the existing 1.2596 acres. If a developer was submitting an application to the City for the development of a residential project only, the developer would be limited to a development consisting of 60 residential units and no more. The Developer proposes a development that layers the maximum permitted density for each use in its mixed-used project. This calculation defies logic. Simply put, the Project is too dense for the proposed site.

The Mixed-Use Section of the ULDR (Section 47-18.21) provides further support to the claim that the project is too dense for the proposed location. Pursuant to Section 47-18.21 (F) of the ULDR, "the maximum density for mixed use east of the Intracoastal Waterway shall be twenty-five (25) units per gross acre." The proposed 54 residential units nearly doubles the 31 units permitted under Mixed-Use Development section of the ULDR.

The gross floor area of the proposed two buildings is 237,349 SF resulting in a whopping Floor Area Ratio of 4.33. This exceeds the maximum Floor Area Ratio for commercial uses by 216%!

The footprint of the existing buildings on the site total 14,952 SF per the survey. The proposed footprint of the two buildings total 20,793 SF. This is a **139% increase** over existing conditions. Additionally, the proposed buildings will cover nearly 40% of the site – which does not include driveways and other hardscapes.

The gross floor area of the existing buildings on the site is 14,952 SF. The gross floor area of the proposed two buildings is 237,349 SF. This is a **1,587% increase** over existing conditions.

For reasons set forth above, together with insufficient setbacks, parking and traffic as described below, the Project is just too dense for a 1.2596-acre site.

B. The Proposed Setbacks Do Not Sufficient Support the Scope of the Project

The Project is located in the Central Beach Regional Activity Center (RAC) within the Sunrise Lane Area (SLA) zoning district. The Project provides the following bare minimum setbacks:

1.	Front Yard (NE 9th Court)	20 Feet
2.	East Side Yard	39.75 Feet
3.	West Side Yard	10.1 Feet
4.	Rear Yard (Sunrise Boulevard)	20 Feet

Le Club believes that the provided setbacks do not support the scope of the Project. Generally, proper setbacks improve safety, allow space for drainage and utilities, reduce impacts from noise, preserve/improve aesthetics, and provide space for screening and landscaping from adjacent lots. The minimal setbacks provided by the Project do none of these things to protect adjoining properties from the impacts of two very tall towers.

Pursuant to Sec. 47-12.5(C) of the ULDR, "unless otherwise approved as a Site Plan Level IV development, in no case shall the yard setback requirements be less than an amount equal to one-half the height of the building when this is greater than the above minimums." Accordingly, the front, side and rear setbacks should be equal to one-half the height of the building, or 60 feet. The City Commission does have the right to modify this setback requirement pursuant to the Site Plan Level IV process but should only do so upon a proper demonstration by the Developer that the setbacks proposed for the Project meet the intent of the ULDR and protect the nearby properties. Accordingly, it is incumbent upon the Developer to prove it is entitled to relief from the setback requirements of Sec. 47-12.5(C). Le Club suggests that the proposed minimum setbacks will result in significant negative impacts to nearby properties and do not meet the intent of the ULDR.

C. The Project Proposes Insufficient Parking

The Residential Building and the Hotel Building share an underground parking facility which will contain 205 parking spaces. Section 47-18.21 of the ULDR serves to demonstrate that the proposed parking is insufficient. Pursuant to Section 47-18.21 (G) of the ULDR, "*The total number of required off-street parking spaces for an MXU shall be equal to the sum of the required parking for each use as if provided separately. See Section 47-20, Parking and Loading Requirements*." The Developer suggests that only 196 are required as a result of a parking study and shared parking analysis prepared by DC Engineers, Inc. However, the Developer cannot apply a shared use analysis for a mixed-use development.

Accordingly, the required parking for the Project, pursuant to Section 47-20.2 of the ULDR, is 215, calculated on the following table:

Condo Units	Required Parking	Total required
16 One Bedroom plus Den Units	2/dwelling unit	32
17 Two Bedroom Units	2/dwelling unit	34
21 Three Bedroom Units	2.1/dwelling unit	45

Condo Units	Required Parking	Total required
100 Hotel Rooms	.67/Room	67
3,210 SF restaurant	1/150	22
663 SF pool bar	1/70 sf gfa	10
825 SF retail	1/500 sf gfa	2
TOTAL		**212**

Alternatively, Section 47-20.2 requires Mixed Use Developments in the SLA to provide parking at a rate of 1/333 sf gfa. The total Gross Floor Area of the Project is 242,545 SF, resulting in a parking requirement of 729 parking spaces. While Le Club acknowledges that this is a ridiculous parking requirement it does serve as compelling evidence of how dense the project is for the proposed site.

Of even more concern, of the 205 parking spaces provided, 150 of them are either tandem spaces or lift spaces. *This represents nearly 75% of the provided parking spaces*. This is a further indication that the Project is too dense for the site as the Developer cannot even provide the requisite number of parking spaces without resorting to tandem and lift parking spaces. The vast amount of tandem and lift parking spaces also causes grave concerns from an operational standpoint. The Project proposes to be served by 24-hour valet service. There are only 48 standard parking spaces serving the entire Project. The rest of the spaces are either tandem or lift spaces. The vehicle stacking area on site consists of only 6 spaces. We believe the dearth of standard parking spaces will result in extraordinary wait times causing significant traffic back up onto NE 9th Court.

The Project's proposed parking does not meet the standards and requirements of the ULDR.

D. Responses to Required Elements of the Adequacy Review Criteria are Inadequate.

Adequacy Review requirements of Sec. 47-25.2 are used by the City to evaluate the demand created on public services and facilities created by the proposed development. The Developer submitted a Revised Adequacy Requirements Narrative on March 2, 2022. We have the following comments:

1. Drainage Facilities.

Pursuant to Sec. 47-25.2. C, "Adequacy of stormwater management facilities shall be evaluated based upon the adopted level of service requiring the retention of the first inch of runoff from the entire site or two and one-half (2 ½) inches of runoff from the impervious surface whichever is greater." Developer responded to this requirement as follows:

"Application will be made to Broward County and the developer will satisfy all current criteria for surface water requirements and obtain all local and state licenses so as to ensure that the stormwater management facilities comply with the City's adopted level of service standards."

During the public participation meeting, the neighbors reporting flooding on NE 9th Court and Birch Road. The flooding on NE 9th Court would be directed to the Intracoastal Waterway which raises environmental concerns as there is no indication how the water would be pretreated before drainage

to the Waterway. Also, the flooding on Birch Road was not addressed by the Developer and should be addressed by the Developer before approval by the Planning and Zoning Board. We believe this is necessary in that Birch Road is the sole source of access for approximately 556 units (residential and time share).

2. Traffic Impact Study.

Le Club residents, as well as many of the neighbors who attended the Public Participation Meeting, expressed concerns regarding the existing congested traffic conditions on Sunrise Blvd. and Birch Road and the volume of vehicles that will be attracted by the Project. As previously stated, Birch Road is the sole source of ingress/egress for approximately 556 units (residential and time share) in the neighborhood. The intersection at Sunrise Boulevard currently is a bottleneck for persons who want to get in and out of their homes.

Despite what the Developer claims, the Project will add a great deal of additional traffic to an already overly taxed intersection. The Developer has submitted an updated Traffic Impact Study to the City prepared by Danielsen Consulting Engineers, Inc. ("Traffic Study") concluding that the Project would **only yield 14 new vehicle trips per day**, zero net new AM peak hour trips, and 19 net new PM peak hour trips. In order to get to this conclusion, the traffic engineer used a 26% internal capture rate. What the Developer is asking you to believe is that the projected total traffic to be generated by the hotel, residential and commercial uses of the Project should be reduced by 26% *merely because they are located on the same plot of land*. It is non-sensical to believe that the occupants of the residential tower will use the hotel and that the hotel occupants will use the residential tower to such an extent that would justify a 26% reduction in the projected traffic trips for the Project. In fact, it is more likely that there would be no cross use between the hotel and residential uses.

Le Club engaged its own traffic engineer, Caltran Engineering Group, Inc. ("Caltran"), to conduct a review of the developer's Traffic Study. A copy of Caltran's report is attached hereto as **Exhibit "A"**. According to Caltran's Report, the following aspects of the Traffic Study should be revisited:

(1) The Traffic Study should include the traffic counts to be collected at Sunrise Boulevard and the Fire Station within the TMC for existing conditions. Analysis should redirect these volumes for proposed conditions accordingly.

(2) The Traffic study should use the latest Institute of Transportation Engineer's (ITE) Trip Generation 11th Edition for the analysis.

(3) Review of the existing building footprint suggests that there is a discrepancy in size. It is advised that the Engineer includes evidence of the existing building footprint for each land use within the report.

(4) Based on a field visit to the location, the existing restaurants (previously an Italian Restaurant and a Mexican Restaurant) are currently vacant. Evidence suggests that both restaurants were vacant at the time of data collection. It is highly advised to remove the High-Turnover (Sit Down) Restaurant from the existing condition analysis in order to reflect actual impacts to the intersections in concern. Field visit pictures and documentation are attached.

(5) As an additional note, evidence suggests that both vacant restaurants did not open before 12 pm. Per ITE 11th Edition Land Use 932, restaurants that are not open during the AM Peak hour (breakfast) do not generate AM trips. Therefore, it is highly advised to remove the High-Turnover (Sit Down) Restaurant from the existing condition analysis in order to reflect actual impacts to the intersections in concern. Field visit pictures and documentation are attached.

(6) The Traffic Study should further explain and detail how the 68% and 32% distribution was determined along Sunrise Boulevard from Birch Road. Evidence suggests that a higher percent of vehicles should be arriving and departing from the west.

(7) The Traffic Study should include a turn lane analysis section within the report for the intersections in concern – most notably the Sunrise Boulevard/Birch Road intersection. The Traffic Study should verify that all existing stacking storage lengths for left turn movements provided at the intersection of Sunrise Boulevard and Birch Road are adequate the proposed condition 95th queues length.

(8) The Traffic Study should re-assess internal trip calculations (Origin-Destination) based on Table 6.1 and Table 6.2 of the ITE Trip Generation handbook, 3rd edition. Internal capture of 26% for the PM peak hour appears to be too high.

Caltran's Report concludes that the Developer's Traffic Study does not deliver sufficient information to support the conclusion that the Project will not adversely affect the surrounding roadwork network. If fact, in Caltran's opinion, the opposite result will occur.

E. The Developer's Neighborhood Compatibility Review Does Not Address, Acknowledge or Consider the Neighboring Residential Units

The Developer submitted a Neighborhood Compatibility Narrative on March 2, 2022 as required by Sec. 47-25.3 of the ULDR. Many of the listed criteria set forth under the "Design and Performance Standards" impose obligations on projects that abut "residential property". The Developer argues that it is exempt from these criteria arguing that the Project is "not considered abutting residential property."

This position is based upon the City's ULDR Sec. 47-35.1's definition of "residential property" which

states "property which is zoned RS-4.4, RS-8, RD-15, RC-15, RM-15, RML-25, RMM-25, RMH-25, RMH-60, or MHP and which is used for a residential use or which is vacant." The Developer concludes that because the SLA zoning district is not specifically listed in the definition of "residential property" the residential developments developed thereon are not considered "residential" for purposes of the ULDR or the Compatibility Requirements of this project.

The SLA District permits residential uses. If fact, properties to the Project to the East and South are residential condominiums. The purpose of the Neighborhood Compatibility requirements is to protect residential properties from the impacts of proposed developments. In fact, the Project is surrounded by a total of 278 residential units.

To allow the Developer to disregard the Neighborhood Compatibility requirements because the project does not abut residentially zoned property is to clearly ignore the obvious and to intentionally disregard the intent of the of Sec. 47-25.3.

F. The Proposed Rooftop Bar is not Compatible with the Neighboring Residential Units.

The application states that both towers have usable rooftops. The Residential Tower will have a pool and sun deck for use by the residents. The Hotel Tower will incorporate a recreational pool deck with a "small rooftop bar". The Developer has indicated that the roof top restaurant and bar will be open for public use and are not limited to hotel guests.

Concerns were raised by many of the neighborhood residents at the public participation meeting on January 20, 2022 regarding the noise generated from the rooftop bar. The Developer has stated that the bar would close at 10:00 PM on weekdays and 12:00 AM on weekends.

It should be noted that Developer has made the argument that the Project does not abut "residential property". As such, special attention should be made to confirm the hours of operation are regulated to and, at the very least, conform with the Noise Ordinance as it relates to residential property.

G. Conclusion

In conclusion, the Project does not meet the standards and requirements of the ULDR and the criteria for Site Plan Level IV development for the following reasons:

1. The Project is too dense.
2. The proposed setbacks for the new towers are not nearly sufficient to provide adequate protection to the surrounding neighborhood.
3. The parking is woefully deficient.
4. The Project will add significant traffic to an already over-capacitated intersection.
5. The Project fails to address drainage impacts.
6. The Project fails to address Neighborhood Compatibility requirements.

As such, the Planning and Zoning Board is required to deny recommendation of the Project to the City Commission.

Sincerely,
OLIVE JUDD, P.A.

Stephen Hoffman

Stephen V. Hoffman
Kristy E. Armada
For the Firm

Enc.

cc: City Commissioners
City Planning and Zoning Board Members

Memorandum

DATE: April 14th, 2022

FROM: Juan S. Calderon, PE, PTOE, Project Manager

TO: Olive Judd
Le Club International Condominium
Association, Inc.
2845 NE 9th Street
Fort Lauderdale, FL 33304

SUBJECT: Ocean Park Hotel – Traffic Study Review

CALTRAN Engineering Group, Inc. (CALTRAN) was retained by Le Club International Association, Inc. in order to evaluate the adequacy assessment of the proposed **Ocean Park Hotel** development, to be located at 2851 and 2901 NE 9th Court, Fort Lauderdale, FL 33304.

The Traffic Impact Study (TIS) was originally conducted by DC Engineers Inc., in December 2021 which concluded with the statement for signalized and unsignalized intersections within the study "are expected to continue operating within acceptable levels upon buildout of the project as proposed" and "the unsignalized primary project driveway is expected operate within acceptable levels of service upon buildout of the project as proposed".

However, the residents of Le Club International Condominium are concerned about the volume of vehicles that will be attracted by this new development and the impacts to surrounding area. Consequently, this memorandum evaluates the adequacy of the proposed development and to serve as peer review to the mentioned TIS report.

As collected by DC Engineering; existing traffic data, growth rate, trip generation and distribution in addition to future volumes and queues were reviewed and evaluated. The comments and concerns are highlighted in this memorandum.

In summary, the issues observed as part of the analysis are as follows:

- Inadequate ITE land use and trip generation.
- Unreasonable or undefined trip distribution.
- Estimated over-capacity of links and segments as a result of inadequate land use.
- Lack of additional information and analysis within the report.

The following aspects should be re-visited as part of this TIS as well as by the City review process:

- Traffic Study should include the traffic counts to be collected at Sunrise Boulevard and Fire station within the TMC for existing condition. Analysis should redirect these volumes for proposed conditions accordingly.

- Traffic study should use the latest Institute of Transportation Engineer's (ITE) Trip Generation 11th Edition for the analysis accordingly.

- Review of the existing building footprint suggests that there is a discrepancy in size. It is advised that the Engineer includes evidence of the existing building footprint for each land use within the report.

- Based on a field visit to the location, the existing restaurants (previously an Italian Restaurant and a Mexican Restaurant) are currently vacant. Evidence suggests that both restaurants were vacant at the time of data collection. It is highly advised to remove the High-Turnover (Sit Down) Restaurant from the existing condition analysis in order to reflect actual impacts to the intersections in concern. Field visit pictures and documentation are attached.

- As an additional note, evidence suggest that both vacant restaurants did not open before 12 pm. Per ITE 11th Edition Land Use 932, restaurants that are not open during the AM Peak hour (breakfast) do not generate trips. Therefore, it is highly advised to remove the High-Turnover (Sit Down) Restaurant from the existing condition analysis in order to reflect actual impacts to the intersections in concern. Field visit pictures and documentation are attached.

- Traffic study should further explain and detail how the 68% and 32% distribution was determined along Sunrise Boulevard from Birch Road. Evidence suggest that a higher percent of vehicles should be arriving and departing from the west.

- Traffic study should include a turn lane analysis section within the report for the intersections in concern. Study should verify that all existing staking storage lengths for left turn movements provided at the intersection of Sunrise Boulevard and Birch Road are adequate for contain the proposed condition 95th queues length.

- Traffic study should re-assess internal trip calculations (Origin-Destination) based on Table 6.1 and Table 6.2 of the ITE Trip Generation handbook, 3rd edition. Internal capture of 26% for the PM peak hour appears to be too high.

Based on the results provided in this memorandum, the TIS report for Ocean Park Hotel does not deliver sufficient information to support the conclusion that this development will not adversely affect the surrounding roadway network.

In fact, our evaluation would suggest the opposite result will occur. Considering the trip generation to be applied, this development is expected to adversely impact the surrounding roadway network.

1. BACKGROUND

A multi-land use development (Ocean Park Hotel) is proposed to be developed at 2851 and 2901 NE 9th Court, on the south side of East Sunrise Boulevard between North Birch Road and Coral Bay River. The total gross area of all parcels proposed to be re-developed is about 55,000 square feet (1.26 acres). The proposed development is to be comprised of 54 multifamily dwelling units, 100 hotel rooms, a 3,210 square foot restaurant, a 663 square foot pool bar and 825 square feet of retail space.

The residents of Le Club International Condominium are concerned about the volume of vehicles that will be attracted to the community and surrounding area. There are current concerns of long queues & delays occurring at the intersection of North Birch Road and East Sunrise Boulevard.

Figure 1 shows the location of the proposed site. Site plan is provided within the appendix of the DC Engineers report in **Appendix A**.

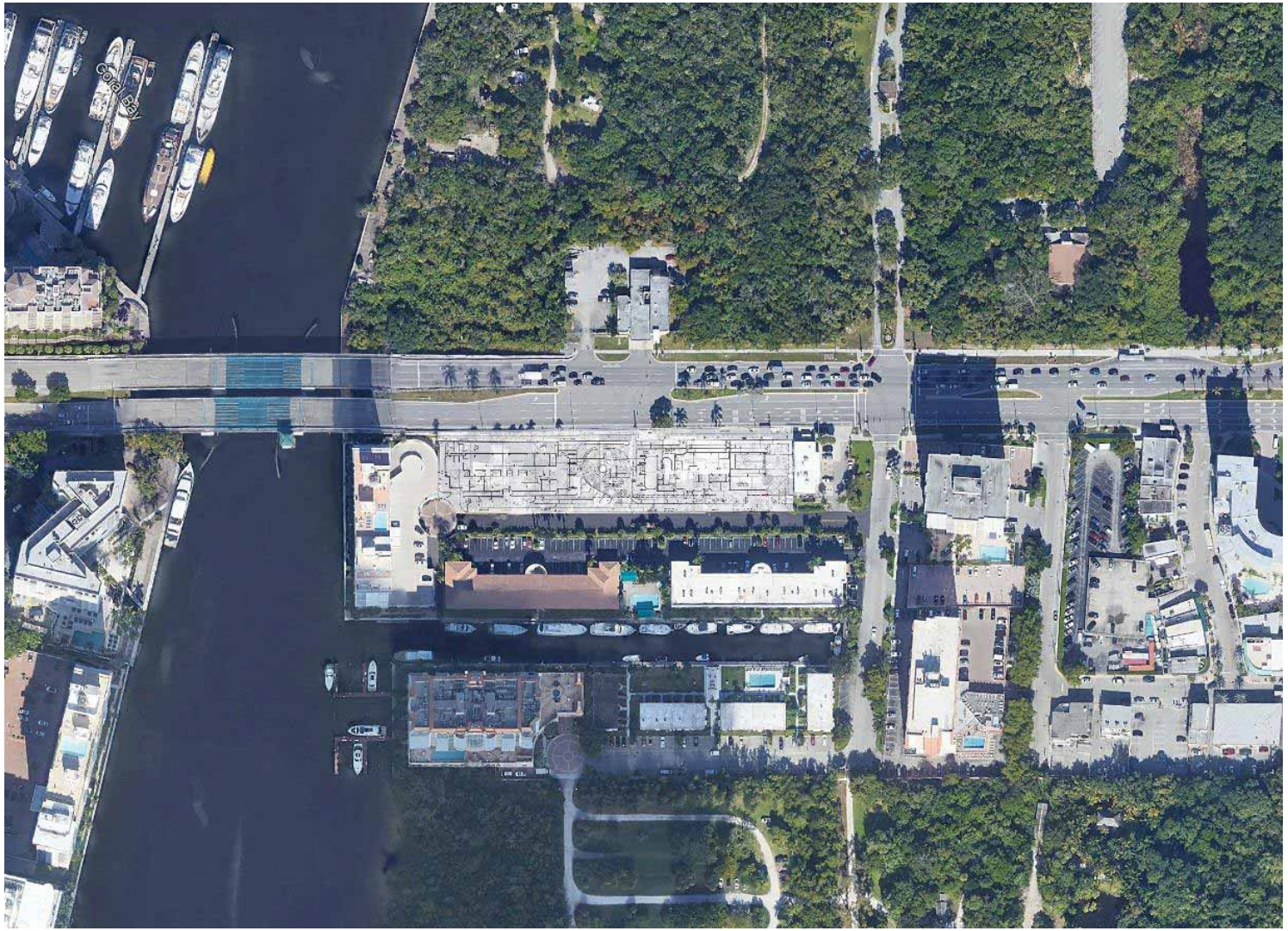

Figure 1: Site Location

2. ADEQUACY ASSESSMENT

2.1. FIELD OBSERVATION AND DESKTOP REIVEW

A field review was performed on March 3rd, 2022 during the afternoon to assess the site and existing conditions. One of the concerns as given by the community is that the existing site was underperforming and had vacant buildings, in particular, the existing restaurants which will be identified here forth as the Italian restaurant and the Mexican restaurant, respectively.

Based on the field review it was determined that both the Italian and Mexican restaurants were permanently closed-vacant as given by the removal of signs, lack of activity and closed shutters. In the case of the Mexican Restaurant, pictures are provided showing the inside with no condition to service patrons.

As part of the desktop review, this vacancy is further confirmed as given by DC Engineering report that shows Turning Movement Count (TMC) data at the intersection of East Sunrise Boulevard and the Fire Station confirming that both restaurants were closed at the time of data collection. Volumes entering and exiting the parking lot during the AM and PM peak hour in the TMCs show a significant lack of activity for this site. **Figure 2** shows the comparison of the ITE Existing Trip Generation being proposed by DC Engineering Inc. in relation to the collected TMCs.

Therefore, it is highly advised to remove the credited High-Turnover (Sit Down) Restaurant trips from the existing condition analysis in order to reflect actual impacts to the intersections in concern. Documentation of field visit and vacant restaurants is provided in **Appendix B**.

Table 1: Trip Generation Summary Existing and Proposed Uses

Land Use	Scale	Units	AM Peak Hour			PM Peak Hour		
			Total Trips	Inbound	Outbound	Total Trips	Inbound	Outbound
High-Turnover (Sit-Down) Restaurant (LUC 932)	7.927	ksf	79	43	36	77	48	29
Shopping Center (LUC 820)	7.909	ksf	7	4	3	30	14	16
Subtotal			86	47	39	107	62	45
Internalization (0%, 6%)			0	0	0	6	3	3
Total			86	47	39	101	59	42

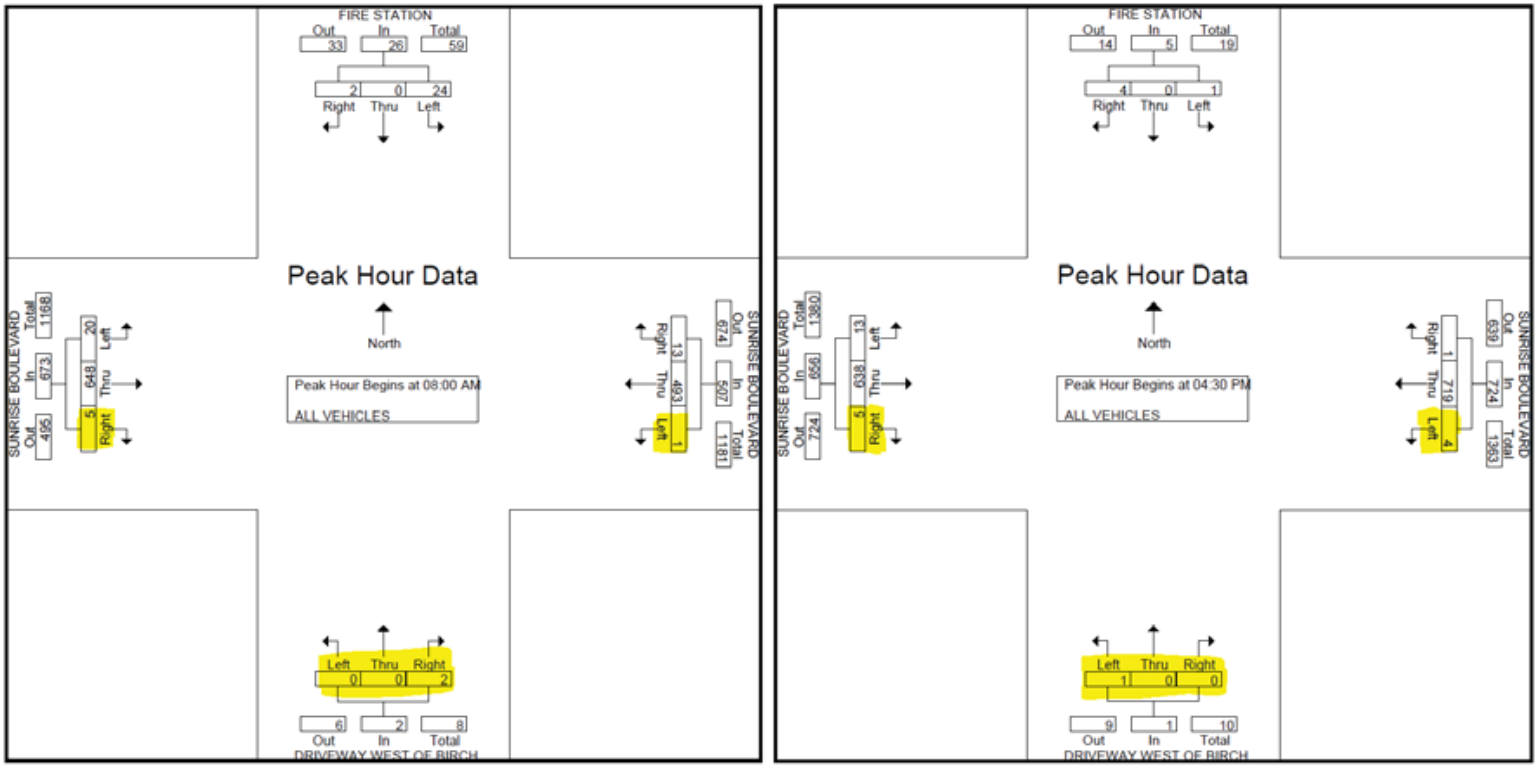

Figure 2: Proposed ITE Reduction vs Actual Trips occurring at Restaurant (AM & PM Peak)

2.2. TRIP GENERATION

The traffic impact study used the Institute of Transportation Engineering (ITE) Trip Generation Manual (10th Edition) to estimate trip generated from the buildings. *As to be noted now, the latest version ITE Trip Generation Manual (11th Edition) is available and should be used in place of the 10th Edition.*

According to ITE and as given in the report, the most appropriate land use categories for the existing and proposed development are as follow;

Existing Conditions;

- 932 'High-Turnover (Sit-Down) Restaurant - 7,927 Square Feet
- 820 'Shopping Center' for the retail component - 7,909 Square Feet

Proposed Conditions

- 222 'Multifamily Housing (High-Rise)' – 54 Dwelling Units
- 310 'Hotel' – 100 Rooms
- 925 'Drinking Place' – 663 Square Feet
- 932 'High-Turnover (Sit-Down) Restaurant – 3.210 Square Feet
- 820 'Shopping Center' for the retail component – 825 Square Feet

As mentioned in the field review section, both restaurants are vacant and collected TMC by DC Engineering provides proof of this. Therefore, use of 932 'High-Turnover (Sit-Down) Restaurant as part of the existing condition significantly overestimates the number of trips that can be credited/subtracted and does not replicate the real impacts to this development on the existing and proposed network. **Figure 3** provides the ITE Trip Generation table per report with required revisions.

In addition, desktop review of the existing building footprint suggests that there is a discrepancy in size. It is advised that the Engineer includes evidence of the existing building footprint for each land use within the report.

It is also noted that evidence suggest both restaurants did not open before 12 PM. Per ITE 11th Edition Land Use 932, restaurants that are not open during the AM Peak hour (breakfast) do not generate trips.

In conclusion, it is highly advised to remove the High-Turnover (Sit Down) Restaurant from the existing condition analysis in order to reflect actual impacts to the intersections in concern.

Table 1: Trip Generation Summary Existing and Proposed Uses

Land Use	Scale	Units	AM Peak Hour Total Trips	AM Peak Hour Inbound	AM Peak Hour Outbound	PM Peak Hour Total Trips	PM Peak Hour Inbound	PM Peak Hour Outbound	Daily
~~High-Turnover (Sit-Down) Restaurant (LUC 932)~~	~~7.927~~	~~ksf~~	~~79~~	~~43~~	~~36~~	~~77~~	~~48~~	~~29~~	~~889~~
Shopping Center (LUC 820)	7.909	ksf	7	4	3	30	14	16	299
Subtotal			86	47	39	107	62	45	1,188
Internalization (0%, 6%)			~~0~~	~~0~~	~~0~~	~~6~~	~~3~~	~~3~~	~~36~~
Total			86	47	39	101	59	42	1,152

Land Use	Scale	Units	AM Peak Hour Total Trips	AM Peak Hour Inbound	AM Peak Hour Outbound	PM Peak Hour Total Trips	PM Peak Hour Inbound	PM Peak Hour Outbound	Daily
Multifamily Housing (High-Rise) (LUC 222)	54	du	17	4	13	19	12	7	240
Drinking Place (LUC 925)	0.663	ksf	0	0	0	8	5	3	89
High-Turnover (Sit-Down) Restaurant (LUC 932)	3.210	ksf	32	18	14	31	19	12	360
Retail (LUC 820)	0.825	ksf	1	1	0	3	1	2	31
Hotel (LUC 310)	100	rooms	45	27	18	49	25	24	702
Subtotal			95	50	45	110	62	48	1,422
Internalization (10%, 26%)			9	4	5	28	14	14	256
Total			86	46	40	82	48	34	1,166

Source: ITE report Trip Generation (10th Edition)

Net New Vehicle Trips			0	-1	1	-19	-11	-8	14

Update all values to follow ITE 11th Edition.

Remove 932 'High-Turnover (Sit-Down) Restaurant.

Revise Totals, accordingly

Revise Net New Vehicle Trips, accordingly.

Revise TMC and Trip Distribution figures accordingly.

Figure 3: Revisions to ITE Trip Generation Table

2.3. TRIP DISTRIBUTION

A review of the trip distribution was performed for the TIS report. The TIS trip distribution section from the report indicated that "A distribution of 68 percent to and from the west and 32 percent to and from the east was utilized". The report also states "the distribution and assignment of project-related vehicle trips are based on current travel patterns documented at the intersection of Sunrise Boulevard (SR 838) and Birch Road". However, no direct documentation of how these percentages were determined at the time of this review.

As such, distribution appears to be estimated based on the TMCs collected at the intersection approach along North Birch Road and East Sunrise Boulevard. **Figure 3** below provides the collected TMCs and approach percentages recommended to be used.

Groups Printed- ALL VEHICLES

	BIRCH ROAD From North				SUNRISE BOULEVARD From East				BIRCH ROAD From South				SUNRISE BOULEVARD From West				
Start Time	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Int. Total
Grand Total	0	16	0	46	5	55	2093	22	0	123	2	68	18	56	2243	116	4863
Apprch %	0	25.8	0	74.2	0.2	2.5	96.2	1	0	63.7	1	35.2	0.7	2.3	92.2	4.8	
Total %	0	0.3	0	0.9	0.1	1.1	43	0.5	0	2.5	0	1.4	0.4	1.2	46.1	2.4	

$$66\% = \left(\frac{116 + 123}{116 + 123 + 68 + 55}\right)$$

$$34\% = \left(\frac{68 + 55}{116 + 123 + 68 + 55}\right)$$

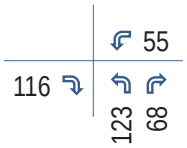

Figure 3: Trip Distribution Calculation

Based on these movements, approximately 66% of trips will arrive and depart from the west along East Sunrise Boulevard. Conversely, 34% of the trips will arrive and depart from the east along East Sunrise Boulevard. It is recommended that the report provide calculations for the distribution utilized or redistribute based on the above calculations.

2.4. ADDITIONAL CONSIDERATIONS

Additional considerations are provided based on the review of the TIS report and recommendations given as part of this peer-review.

Turn Lane Analysis Needed: Upon re-assessment of existing conditions Land Use 932 'High-Turnover (Sit-Down) Restaurant, it is anticipated that the proposed built-out conditions of Ocean Park Hotel could generate a significant impact on left and right turn lanes at the intersection of Birch Road and East Sunrise Boulevard.

Therefore, the traffic study should include a turn lane analysis section within the report for the intersections in concern. The TIS should verify that all existing storage lengths provided at the intersection of Sunrise Boulevard and Birch Road are adequate for retaining the proposed condition queues. In the case that turn lanes are inadequate, proposed improvements with conceptual plans should be provided.

Reassessment of Internal Trips (O-D) Analysis: A review of the Internal Trips Origin-Destination analysis was performed using the ITE Trip Generation handbook, 3rd edition as specified in the report. Based on Table 6.1 and Table 6.2 of the ITE Trip Generation handbook discrepancies were noted for the PM peak analysis and it is recommended to re-evaluate the internal capture. **Appendix C** of this document provides documentation and markups for the Internal Trips Analysis.

3. CONCLUSION

CALTRAN Engineering Group, Inc. (CALTRAN) was retained by Le Club International Association, Inc. in order to evaluate the adequacy assessment of the proposed Ocean Park Hotel development, to be located at 2851 and 2901 NE 9th Court, Fort Lauderdale, FL 33304. The Traffic Impact Study (TIS) was completed in December 2021 which concluded that intersections within the study area “are expected to continue operating within acceptable levels upon buildout of the project as proposed” and “the unsignalized primary project driveway is expected operate within acceptable levels of service upon buildout of the project as proposed”.

Based on the results provided in this peer-review memorandum, the TIS report for Ocean Park Hotel does not provide sufficient information to support the conclusion that this development will not adversely affect the surrounding roadway network.

In fact, our evaluation would suggest the opposite result could occur. Considering the trip generation to be applied, this development is expected to adversely impact the surrounding roadway network.

Appendix A: Original Traffic Impact Study
Ocean Park Hotel

DC Engineers, Inc.

Traffic Impact Study

Ocean Park Hotel and Residences

Fort Lauderdale, Florida

December, 2021

Prepared for:

Sunrise FTL Ventures LLLP

Ocean Park Hotel and Residences

NE 9 Court

Fort Lauderdale, Florida

Traffic Impact Study

December 2021

Prepared for:
Sunrise FTL Ventures LLLP

Prepared by:
Danielsen Consulting Engineers, Inc.
12743 NW 13th Court
Coral Springs, Florida

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INTRODUCTION

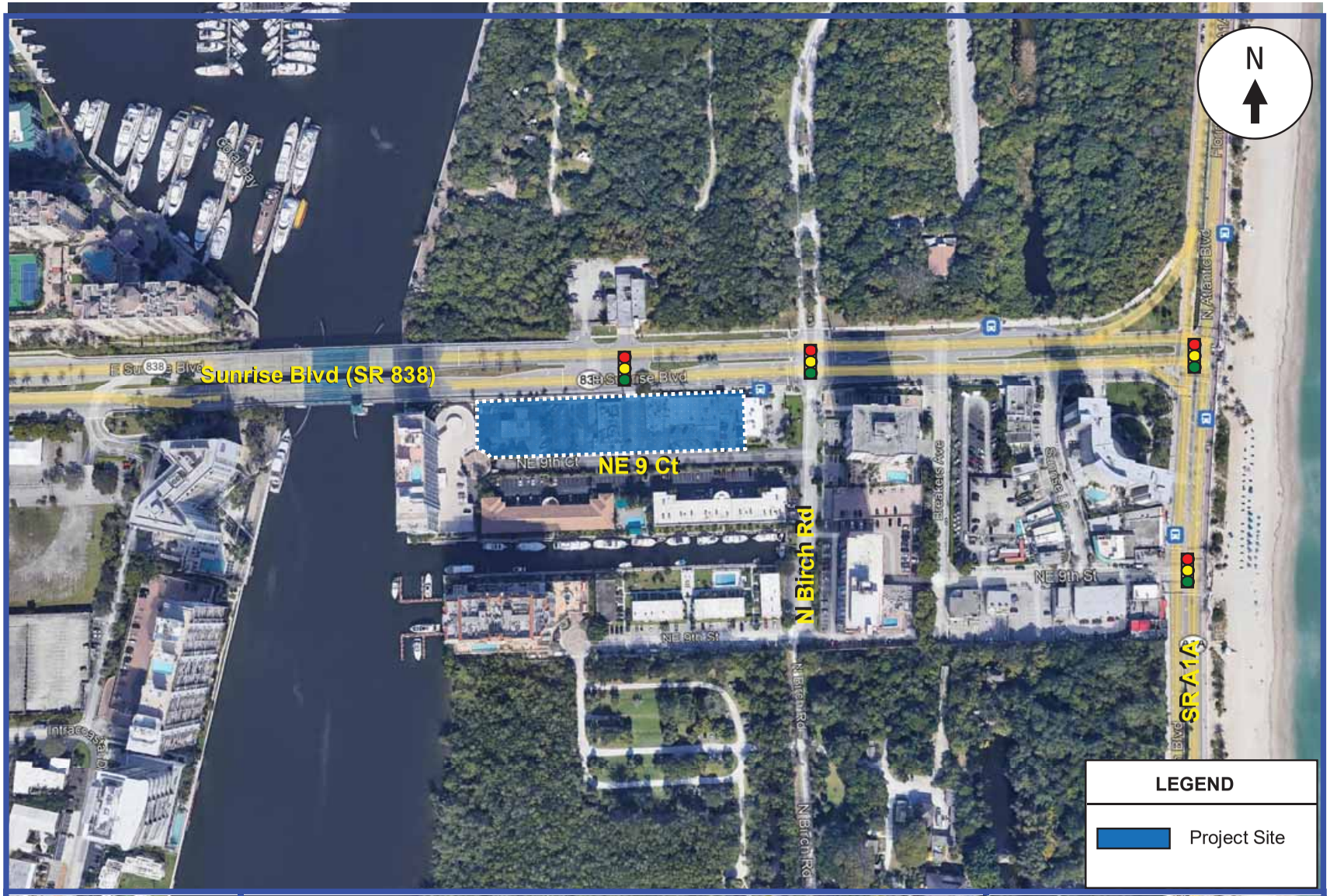
Sunrise FTL Ventures LLLP proposes to construct 54 multifamily dwelling units, 100 hotel rooms, a 3,210 square foot restaurant, a 663 square foot pool bar and 825 square feet of retail space at 2851 and 2901 NE 9 Court (along the west side of Birch Road between NE 9 Court and Sunrise Boulevard (SR 838)) within municipal limits of the City of Fort Lauderdale. Figure 1 on the following page shows the location of the project site as well as the transportation network in the immediate vicinity.

Danielsen Consulting Engineers, Inc. has been retained by Sunrise FTL Ventures LLLP to conduct a traffic study in connection with the proposed development[1]. This study addresses trip generation, site access, expected impacts to the adjacent roadway network, and potential improvements intended to mitigate new trips generated by the project.

This study is divided into seven (7) sections, as listed below:

1. Inventory
2. Existing Conditions
3. Traffic Counts
4. Trip Generation
5. Trip Distribution and Traffic Assignment
6. Traffic Analysis
7. Conclusions

[1] A traffic study methodology meeting was held on Tuesday July 20, 2021 with City staff and the City's traffic engineering consultant. The agreed upon methodology is included as Appendix A.



DC Engineers, Inc.	Project Location Map	FIGURE 1 Ocean Park Fort Lauderdale, Florida

INVENTORY

Existing Land Use and Access

The subject 1.26-acre site is currently occupied by surface parking spaces and a variety of businesses including: two (2) restaurants, a massage center, a car rental agency, a palm reader, and a scooter rental center. Vehicular access to the site is provided at two (2) locations along Sunrise Boulevard (SR 838) and along the NE 9 Court frontage.

Proposed Land Uses and Access

The project site is proposed to be redeveloped with the following:

- 54 multifamily dwelling units,
- 100 hotel rooms,
- a 3,210 square foot restaurant,
- a 663 square foot pool bar, and
- 825 square feet of retail space.

Access to the mixed-use development is proposed as follows:

- One (1) two-way, two-lane driveway on NE 9 Court accessing the parking garage and hotel loading area,
- One (1) two-way, two-lane driveway on NE 9 Court serving the resident and hotel drop-off areas, and
- One (1) single lane service driveway along the west property line.

Upon accessing the parking garage, a valet attendant will take each vehicle to an available parking space.

The project is anticipated to be built and occupied by the year 2024. The site plan for the proposed Ocean Park Hotel and Residences is included as Appendix B.

EXISTING CONDITIONS

This section addresses the roadway system adjacent to and surrounding the project site.

Roadway System

The transportation network within the study area includes two (2) state minor arterials (Sunrise Boulevard (SR 838) and North Fort Lauderdale Beach Boulevard (SR A1A)) and local roadways including Birch Road and NE 9 Court.

Sunrise Boulevard (SR 838) is a six (6) lane state maintained facility adjacent to the project site. This arterial has a posted speed limit of 35 miles per hour (mph) and a current (2019) AADT of 25,000 vehicles per day (vpd).

North Fort Lauderdale Beach Boulevard (SR A1A) is a four (4) lane state maintained facility south of Sunrise Boulevard (SR 838) transitioning to two (2) lanes with on-street parking north of Sunrise Boulevard (SR 838). This arterial has a posted speed limit of 30 mph and a current (2019) AADT of 27,500 vpd south of Sunrise Boulevard (SR 838) and 18,800 vpd north of Sunrise Boulevard (SR A1A).

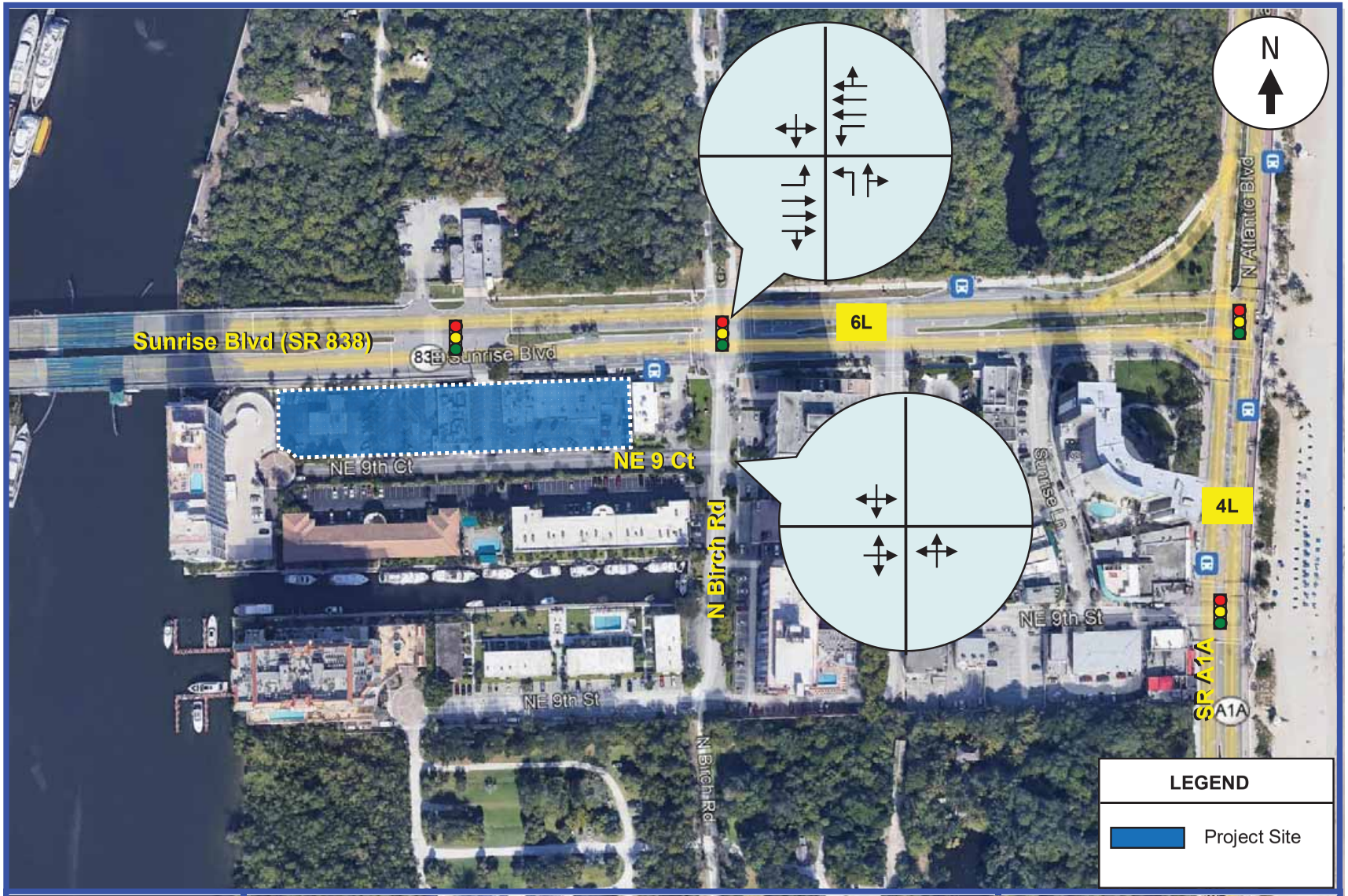
Due to abnormal conditions 2019 (rather than 2020) volumes are referenced. The Florida Department of Transportation (FDOT) is the source of all AADT volumes.

Study Intersections

For purposes of this study, the following two (2) intersections were selected for detailed analysis.

- Sunrise Boulevard (SR 838) at Birch Road, and
- NE 9 Court at Birch Road.

Figure 2 shows approach lanes at each intersection under study and the number of through lanes on corresponding roadway segments.



DC Engineers, Inc.	**Existing Lane Geometry**	**FIGURE 2** **Ocean Park** Fort Lauderdale, Florida

Transit Service and Facilities

Three (3) traditional Broward County Transit routes serve the project site as follows:

- **Route 36** traverses central Broward County primarily along Sunrise Boulevard (SR 838) between NW 136 Avenue (Panther Parkway) and North Fort Lauderdale Beach Boulevard (SR A1A).
- **Route 40** traverses central Broward County from the Lauderhill Mall on SR 441 to Galleria Fort Lauderdale via NW 19 Street, Sistrunk Boulevard, the 17th Street Causeway, SR A1A and Sunrise Boulevard (SR 838) adjacent to the project site.
- **Route 11** covers Broward County from US 441 (SR 7) to the Pompano Citi Centre along Prospect Road, NW 21 Avenue, Sistrunk Boulevard, Las Olas Boulevard and SR A1A near the project site.

Fixed route schedules are included as Appendix C.

Broward County Transit's community shuttle service increases the number of destinations accessible to residents through public transit. The Beach Link trolley traverses the SE 17 Street Causeway, Fort Lauderdale Beach Boulevard (SR A1A), Seabreeze Boulevard, Sunrise Boulevard (SR 838) and the Galleria Fort Lauderdale property on a continuous loop and is active Monday through Sunday between 10:30 AM and 5:00 PM. The Beach Link trolley provides convenient connection to the Las Olas Link, the Downtown Link, the Neighborhood Link and the NW Community Link.

TRAFFIC COUNTS

Danielsen Consulting Engineers, Inc., in association with Traffic Survey Specialists, Inc., collected turning movement count data at the following locations:

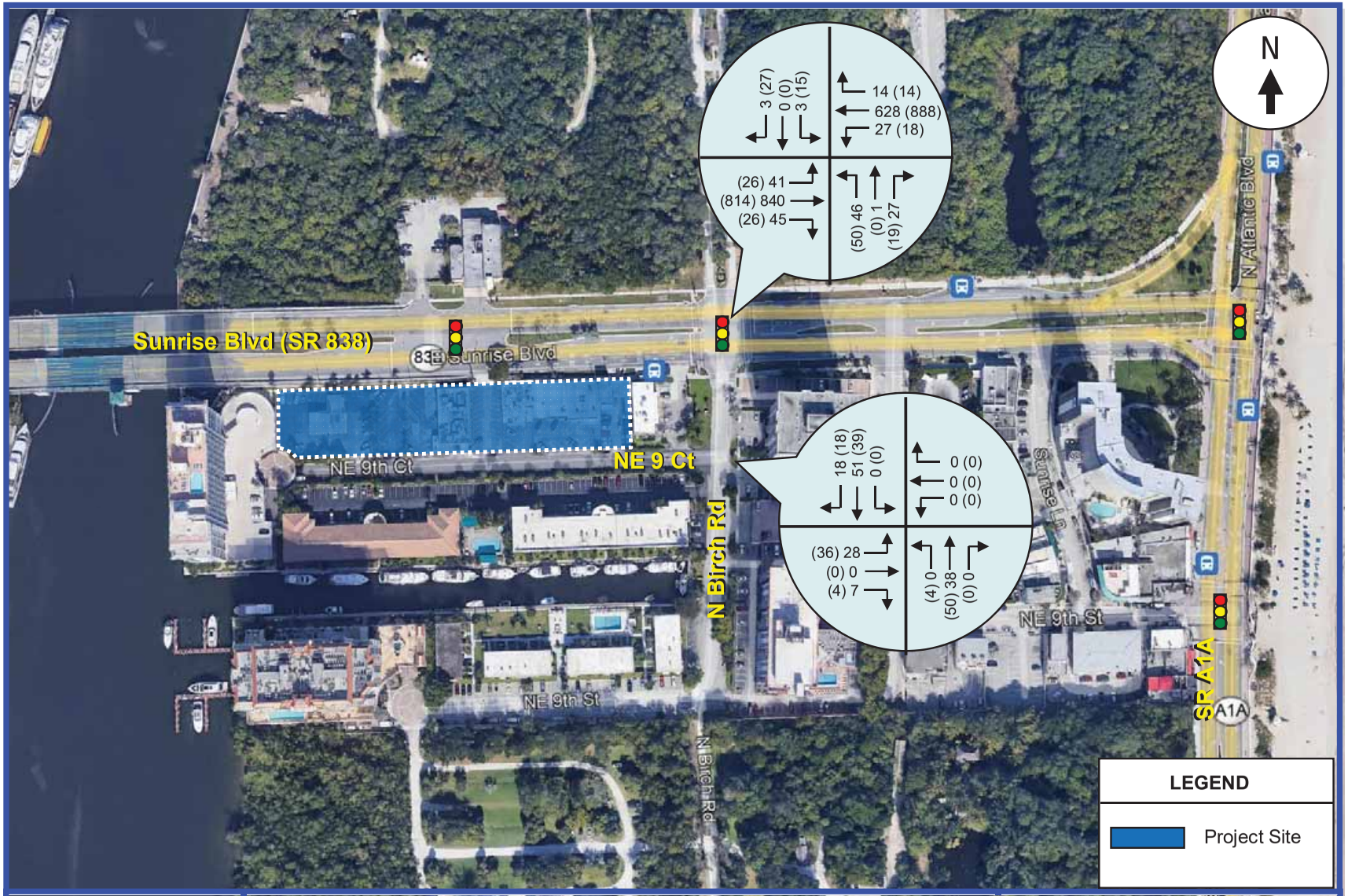
- Sunrise Boulevard (SR 838) at Birch Road, and
- NE 9 Court at Birch Road.

Intersection turning movements including bicycles and pedestrians were documented on Tuesday September 14, 2021. Data was collected during both AM (7:00 to 9:00) and PM (4:00 to 6:00) peak periods. Existing peak hour traffic volumes adjusted to peak season are shown in Figure 3 and are included as Appendix D. Signal timing plans obtained from Broward County Traffic Engineering Division (BCTED) are also contained within Appendix D.

The proposed project will eliminate two (2) existing driveway locations along Sunrise Boulevard (SR 838).

The western driveway (opposite Fire Station 13) providing access to a paved surface parking area was counted on Tuesday September 14, 2021 during both AM and PM peak hours. The data, as collected, is included within Appendix D. The counts show eight (8) vehicles utilized the driveway during the AM peak hour (six (6) entering and two (2) exiting) and 10 vehicles used the driveway during the PM peak (nine (9) entering and one (1) exiting). As the observed volumes are minimal they were not redirected to adjacent intersections.

The eastern driveway, serving the car rental company, is still active but is often blocked off with cones. Once this business relocates, the vehicles accessing the site will no longer traverse area roadways or intersections. To provide a conservative analysis, these vehicles were not removed from existing turning movement counts.



DC Engineers, Inc.	**Existing (2021) AM and PM Peak Hour Peak Season Traffic Counts**	**FIGURE 3** **Ocean Park** Fort Lauderdale, Florida

TRIP GENERATION

Trip generation for the proposed development is based upon rates and formulae published in the Institute of Transportation Engineer's (ITE) report *Trip Generation* (10th Edition). According to ITE, the most appropriate land use categories for the proposed development are Land Use Code (LUC) 222 'Multifamily Housing (High-Rise)', LUC 310 'Hotel', LUC 925 'Drinking Place', LUC 932 'High-Turnover (Sit-Down) Restaurant and LUC 820 'Shopping Center' for the retail component. Trip generation equations for the proposed land uses as published by ITE, are as follows:

Multifamily Housing (High-Rise) – ITE Land Use #222

- Weekday: T = 4.45 (X)
  where T = number of trips and X = dwelling units

- AM Peak Hour: T = 0.31 (X) (24% in / 76% out)
- PM Peak Hour: T = 0.36 (X) (61% in / 39% out)

Drinking Place – ITE Land Use #925

- Weekday: *not available. See Table 2 for methodology
  where T = number of trips and X = 1,000 sf gross floor area

- AM Peak Hour: *not applicable
- PM Peak Hour: T = 11.36 (X) (66% in / 34% out)

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

- Weekday: T = 112.18 (X)
  where T = number of trips and X = 1,000 sf gross floor area

- AM Peak Hour: T = 9.94 (X) (55% in / 45% out)
- PM Peak Hour: T = 9.77 (X) (62% in / 38% out)

Shopping Center – ITE Land Use #820

- Weekday: T = 37.75 (X)
  where T = number of trips and X = 1,000 sf gross leasable area

- AM Peak Hour: T = 0.94 (X) (62% in / 38% out)
- PM Peak Hour: T = 3.81 (X) (48% in / 52% out)

Hotel – ITE Land Use #310

- Weekday: T = 11.29 (X) - 426.97
  where T = number of trips and X = rooms

- AM Peak Hour: T = 0.50 (X) - 5.34 (59% in / 41% out)
- PM Peak Hour: T = 0.75 (X) - 26.02 (51% in / 49% out

Using the above trip generation formulae from the ITE document, a trip generation analysis was undertaken for the proposed development. The results of this effort are documented in report Table 1. As shown in Table 1, the proposed development is expected to produce 1,166 vehicle trips per day, approximately 86 AM peak hour trips (46 inbound and 40 outbound), and approximately 82 PM peak hour trips (48 inbound and 34 outbound).

Vehicle trips produced by existing uses to be removed are also shown in Table 1. Incorporating these existing trips yields 14 net new vehicle trips per day (vpd), zero (0) net new AM peak hour trips, and -19 net new PM peak hour trips (-11 inbound and -8 outbound). Although several existing establishments are still open for business including 'Hot Scooter Rental' and 'aCar Rental', vehicle trips from existing uses are provided for informational purposes only.

Internal Capture

Internal capture is expected between complementary 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 based upon methodologies contained within the ITE *Trip Generation Handbook*, 3rd Edition. Internal capture calculations are included as Appendix E.

Although applicable, to provide a conservative analysis reductions have not been considered for pass-by capture or mode split.

Table 1: Trip Generation Summary Existing and Proposed Uses

Land Use	Scale	Units	AM Peak Hour			PM Peak Hour			Daily
			Total Trips	Inbound	Outbound	Total Trips	Inbound	Outbound	
High-Turnover (Sit-Down) Restaurant (LUC 932)	7.927	ksf	79	43	36	77	48	29	889
Shopping Center (LUC 820)	7.909	ksf	7	4	3	30	14	16	299
Subtotal			**86**	**47**	**39**	**107**	**62**	**45**	**1,188**
Internalization (0%, 6%)			0	0	0	6	3	3	36
Total			**86**	**47**	**39**	**101**	**59**	**42**	**1,152**

Land Use	Scale	Units	AM Peak Hour			PM Peak Hour			Daily
			Total Trips	Inbound	Outbound	Total Trips	Inbound	Outbound	
Multifamily Housing (High-Rise) (LUC 222)	54	du	17	4	13	19	12	7	240
Drinking Place (LUC 925)	0.663	ksf	0	0	0	8	5	3	89
High-Turnover (Sit-Down) Restaurant (LUC 932)	3.210	ksf	32	18	14	31	19	12	360
Retail (LUC 820)	0.825	ksf	1	1	0	3	1	2	31
Hotel (LUC 310)	100	rooms	45	27	18	49	25	24	702
Subtotal			**95**	**50**	**45**	**110**	**62**	**48**	**1,422**
Internalization (10%, 26%)			9	4	5	28	14	14	256
Total			**86**	**46**	**40**	**82**	**48**	**34**	**1,166**

Source: ITE report *Trip Generation (10th Edition)*

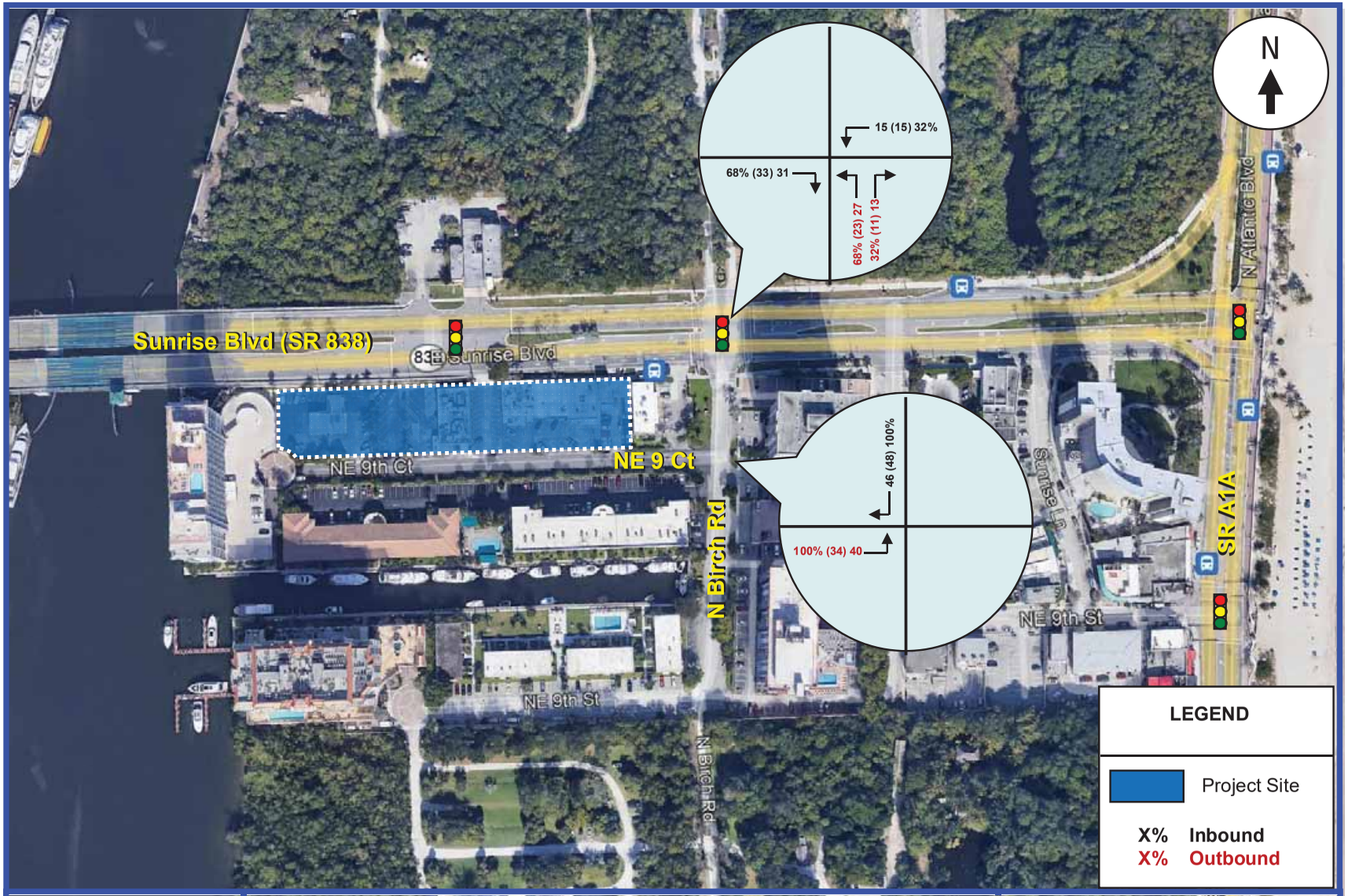
Net New Vehicle Trips			**0**	**-1**	**1**	**-19**	**-11**	**-8**	**14**

TRIP DISTRIBUTION AND TRAFFIC ASSIGNMENT

For purposes of this study, the distribution and assignment of project-related vehicle trips are based on current travel patterns documented at the intersection of Sunrise Boulevard (SR 838) and Birch Road. A distribution of 68 percent to and from the west and 32 percent to and from the east was utilized as shown in Figure 4.

Peak hour trips generated by the proposed development were assigned to area roadways and intersections using the traffic assignment detailed above and project trips shown in Table 1. Project traffic assignment is summarized in Figure 5.

DC Engineers, Inc.	**Project Traffic Distribution**	**FIGURE 4** **Ocean Park** Fort Lauderdale, Florida



DC Engineers, Inc.	Project Traffic Assignment	FIGURE 5 Ocean Park Fort Lauderdale, Florida

TRAFFIC ANALYSIS

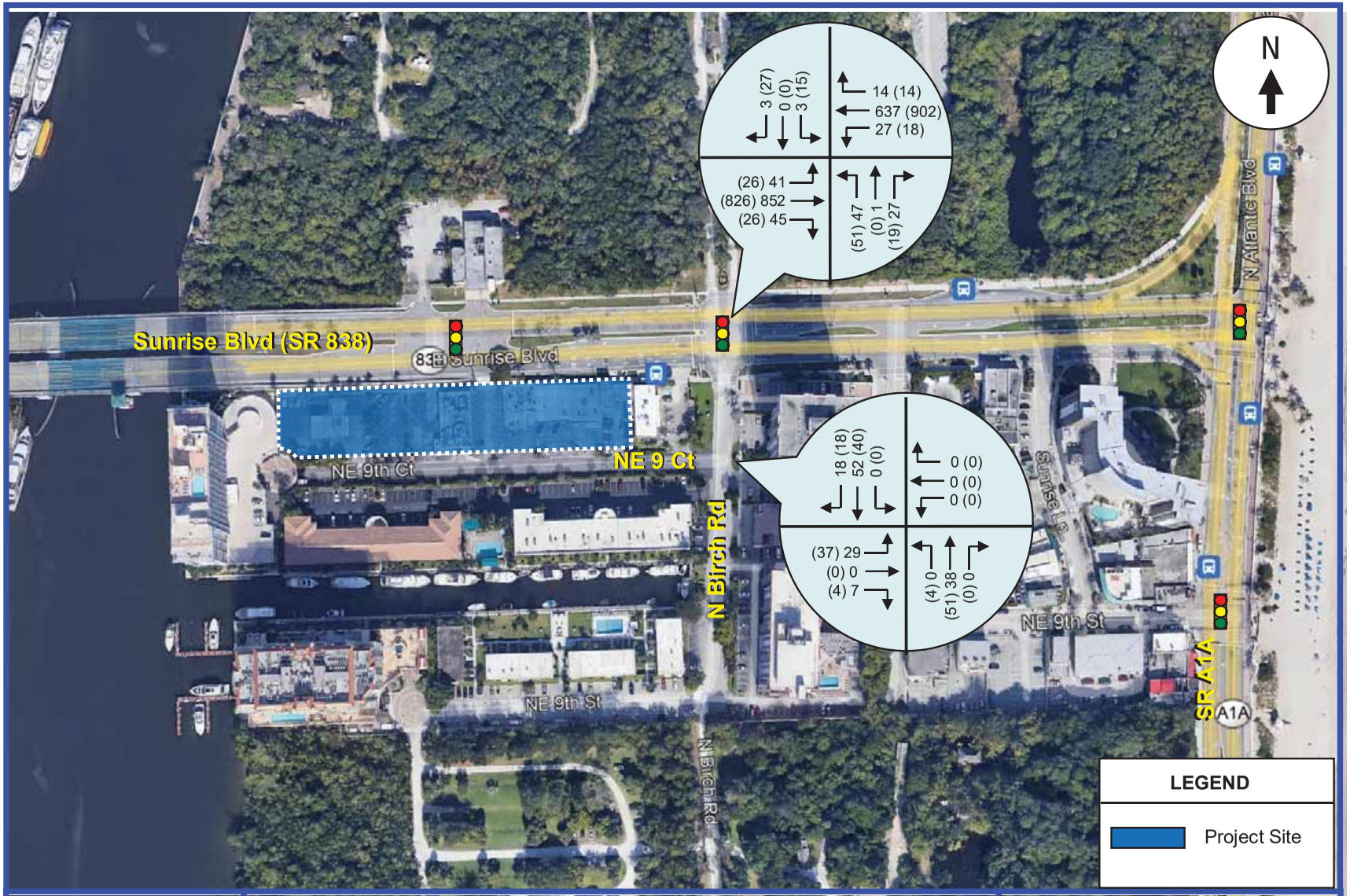
This section of the study is divided into two (2) distinct parts. The first part involves development of future (2024) traffic volumes for the study area. The second part includes level-of-service analyses for both existing and future year conditions.

Future Conditions Traffic Volumes

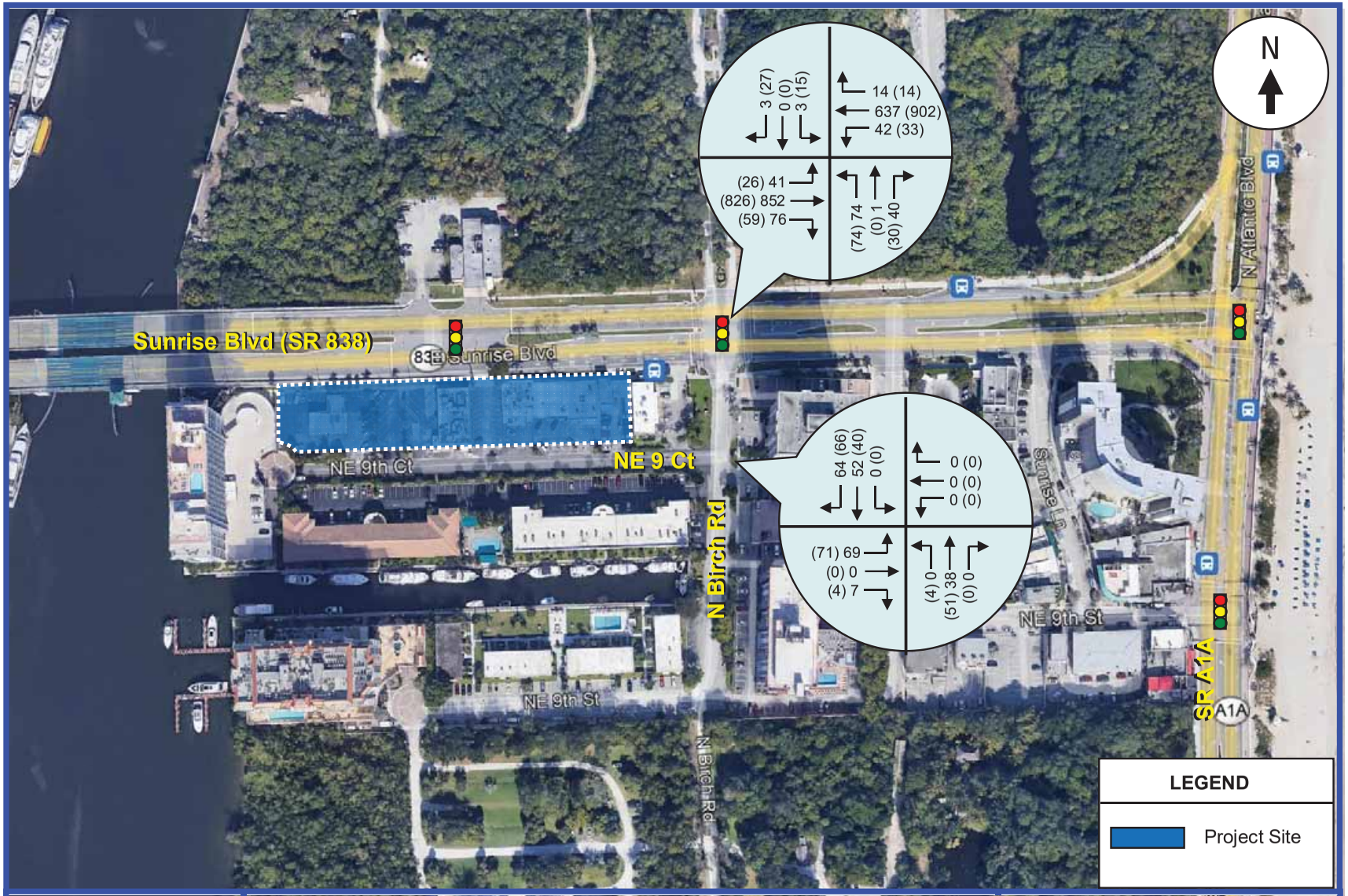
Future, build-out year (2024) traffic volumes were developed for the project study area in the following manner:

- **Average Peak Season Conversion Factor:** Traffic data collected on Tuesday September 14, 2021 was reviewed with respect to average peak season conditions. According to the FDOT Peak Season Factor Category (PSFC) report (Appendix D), an adjustment factor of 1.35 is required to convert traffic counts collected during this time period to average peak season conditions.
- **Historic Growth:** FDOT maintains three (3) traffic count stations on roadways within the identified study area. Annual Average Daily Traffic Volumes at these count stations for the past five (5) years (2015-2019) yield an annual average growth of -1.53 percent per year. To provide a conservative analysis, an annual average growth of 0.50 percent was utilized. The data from FDOT and the growth rate analysis are included as Appendix F.
- **Committed Development:** Vehicle trips associated with approved but unbuilt projects within the immediate area are typically added to peak season volumes to produce 2024 background traffic conditions for the study area. At this time no approved but unbuilt projects have been identified.

Volume development worksheets (detailing peak season adjustments, traffic growth and traffic associated with the proposed project) are attached as Appendix G. Figures 6 and 7 include future traffic volumes for the study area. Figure 6 provides projected background traffic (without the proposed project) and Figure 7 includes the additional traffic anticipated to be generated by the proposed Ocean Park Hotel and Residences.



DC Engineers, Inc.	**Future (2024) Background Traffic (w/out Project)** **AM and PM Peak Hour Traffic Volumes**	**FIGURE 6** **Ocean Park** Fort Lauderdale, Florida



DC Engineers, Inc.	**Future (2024) Total Traffic (with Project)** **AM and PM Peak Hour Traffic Volumes**	**FIGURE 7** **Ocean Park** Fort Lauderdale, Florida

Detailed Intersection and Driveway Level of Service Analyses

Intersection capacity analyses were performed for both study intersections and the primary project driveway. The driveway accessing the drop-off area has not been analyzed as daily use is expected to be sporadic. The analyses were undertaken following the capacity/level of service procedures outlined in the current (6th) edition of the Highway Capacity Manual using the SYNCHRO 11 software. The results of the intersection analyses are summarized in report Table 2.

According to the City of Fort Lauderdale Comprehensive Plan (Transportation Element), LOS 'D' is acceptable within the project study area and is thus applicable to the analysis contained herein. As shown in Table 2 both study intersections and the primary project driveway are expected to operate within this acceptable level of service in future year 2024 with traffic from the project as proposed. Appendix H includes Synchro summary sheets.

Table 2: Intersection Levels of Service

Intersection/Approaches	Existing (2021)	Future Traffic Conditions		
		Year 2024 Without Project	Year 2024 With Project	Year 2024 With Project Improvement
Sunrise Blvd at Birch Rd	A\6.5 (B\11.1)	A\6.5 (B\11.1)	A\7.5 (B\11.7)	
- *NB Approach*	C (C)	C (C)	C (C)	
- *SB Approach*	C (C)	C (C)	C (C)	
- *EB Approach*	A (B)	A (B)	A (B)	
- *WB Approach*	A (A)	A (A)	A (A)	
NE 9 Ct at Birch Rd				
- *EB Approach*	A (A)	A (A)	A (A)	
NE 9 Ct at Project Dwy				
- *SB Approach*	NA	NA	A (A)	

Source: HCM 6. LEGEND: AM Peak Hour (PM Peak Hour);vehicular delay (sec\veh)

CONCLUSIONS AND RECOMMENDATONS

Sunrise FTL Ventures LLLP proposes to construct 54 multifamily dwelling units, 100 hotel rooms, a 3,210 square foot restaurant, a 663 square foot pool bar and 825 square feet of retail space at 2851 and 2901 NE 9 Court (along the west side of Birch Road between NE 9 Court and Sunrise Boulevard (SR 838)) within municipal limits of the City of Fort Lauderdale. The proposed project is expected to be built and occupied by 2024.

Access to the mixed-use development is proposed as follows:

- One (1) two-way, two-lane driveway on NE 9 Court accessing the parking garage and hotel loading area,
- One (1) two-way, two-lane driveway on NE 9 Court serving the resident and hotel drop-off areas, and
- One (1) single lane service driveway along the west property line.

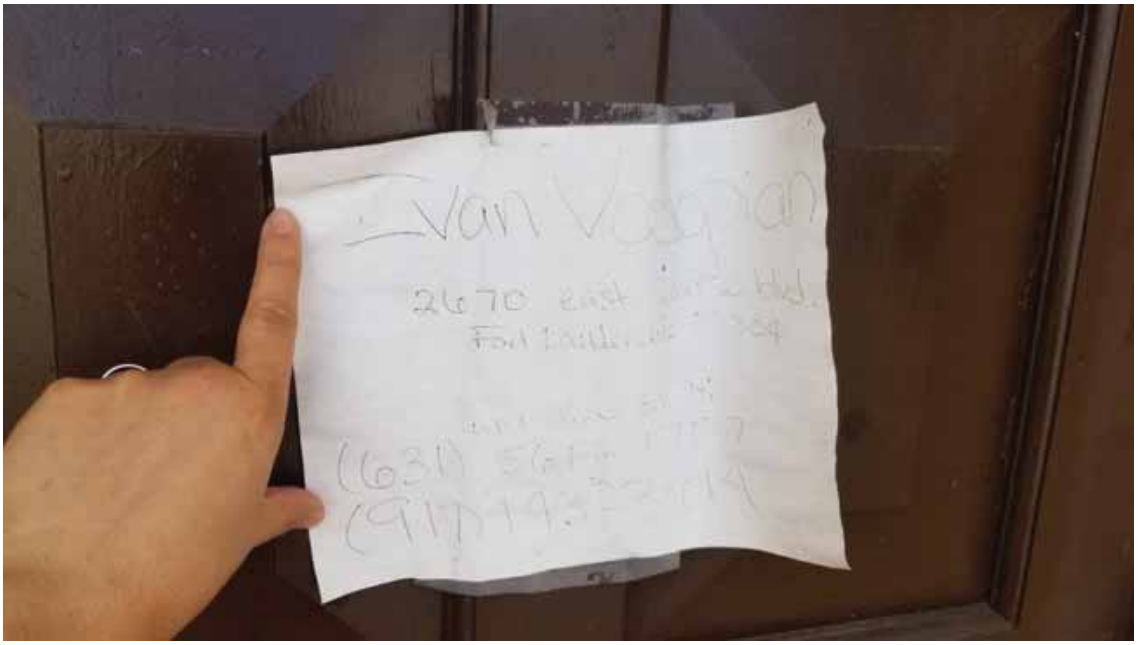
Conclusions and recommendations of the traffic study are as follows:

- As shown in Table 1, the proposed Ocean Park Hotel and Residences is expected to produce 1,166 vehicle trips per day, approximately 86 AM peak hour trips (46 inbound and 40 outbound), and approximately 82 PM peak hour trips (48 inbound and 34 outbound).
- Provided for informational purposes only are vehicle trips produced by existing retail and restaurant uses to be removed. Incorporating these existing trips yields 14 net new vehicle trips per day (vpd), zero (0) net new AM peak hour trips, and -19 net new PM peak hour trips (-11 inbound and -8 outbound).
- Signalized and unsignalized intersections within the study area currently operate within acceptable levels overall and are expected to continue operating within acceptable levels upon buildout of the project as proposed.

- The unsignalized primary project driveway is expected operate within acceptable levels of service upon buildout of the project as proposed.
- It is recommended that after the project is built and occupied, the development team contact BCTED to request the signal timing of area wide traffic signals be reviewed and optimized.

Appendix B: Field Review and Documentation of Vacant Restaurants

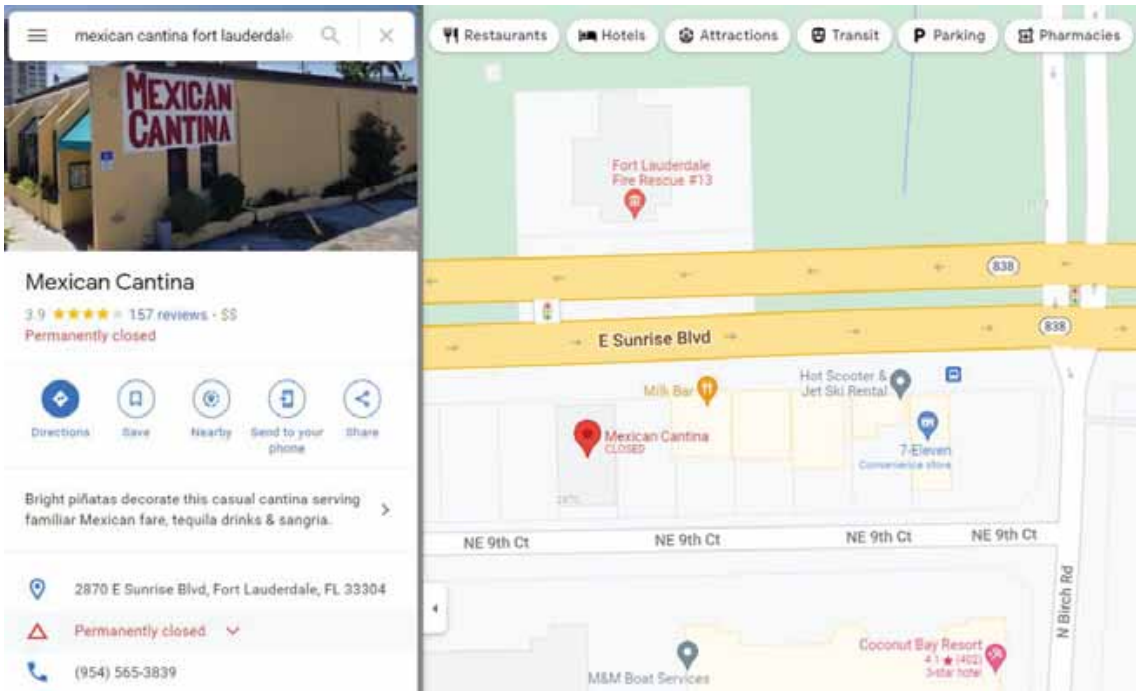
Pictures of outside vacant Mexican Restaurant

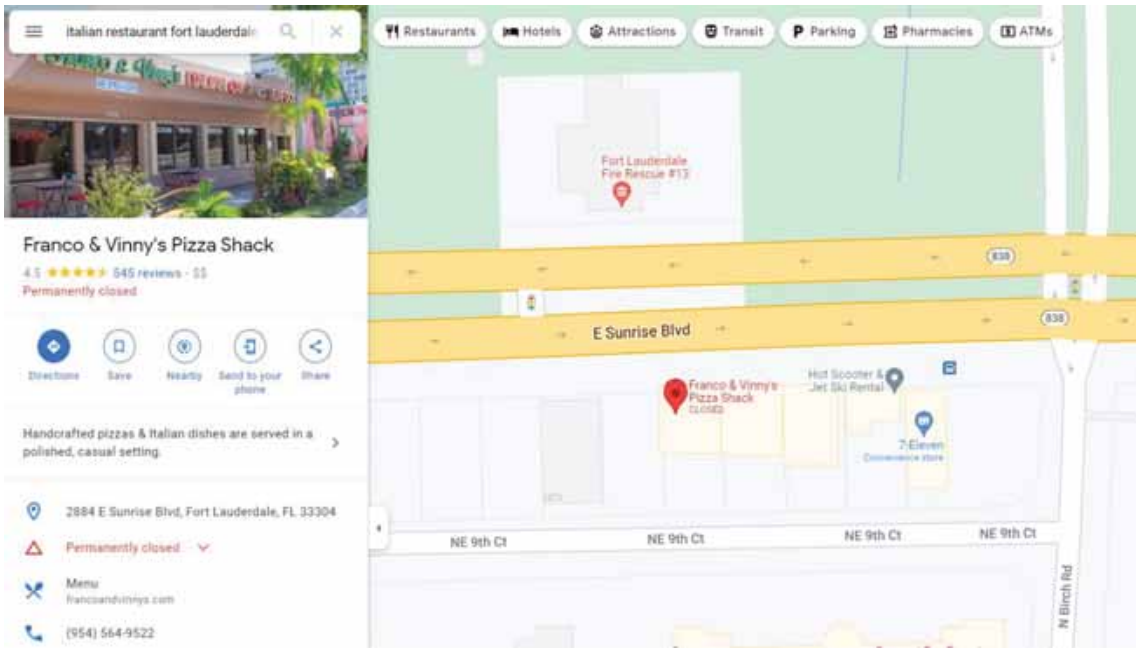


Pictures of inside vacant Mexican Restaurant

Pictures of outside vacant Italian Restaurant

Documentation of both Restaurant vacancy





Appendix C: Internal Trips Review Comments

Table 6.1 Unconstrained Internal Person Trip Capture Rates for Trip Origins within a Mixed-Use Development

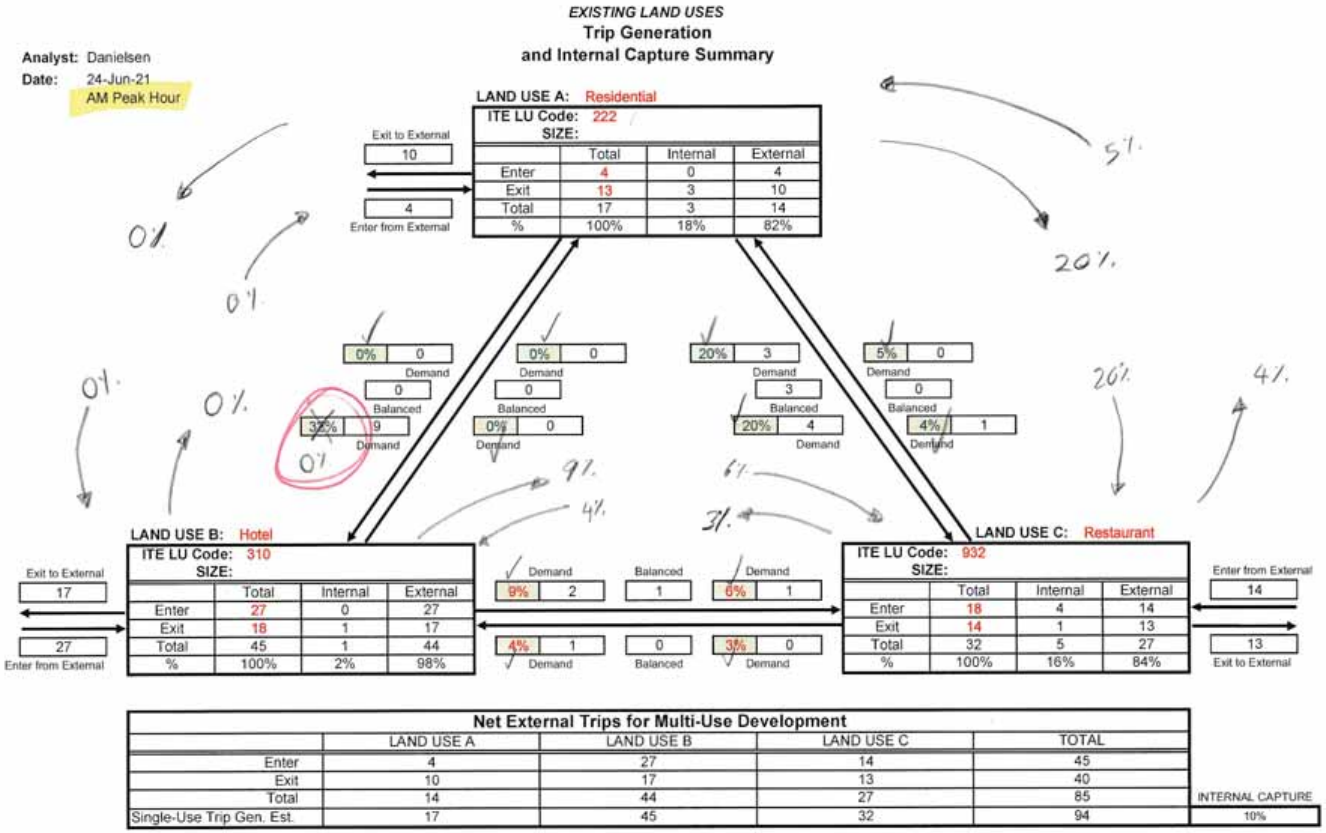
		WEEKDAY	
		AM Peak Hour	PM Peak Hour
From OFFICE	To Retail	28%	20%
	To Restaurant	63%	4%
	To Cinema/Entertainment	0%	0%
	To Residential	1%	2%
	To Hotel	0%	0%
From RETAIL	To Office	29%	2%
	To Restaurant	13%	29%
	To Cinema/Entertainment	0%	4%
	To Residential	14%	26%
	To Hotel	0%	5%
From RESTAURANT	To Office	31%	3%
	To Retail	14%	41%
	To Cinema/Entertainment	0%	8%
	To Residential	4%	18%
	To Hotel	3%	7%
From CINEMA/ENTERTAINMENT	To Office	0%	2%
	To Retail	0%	21%
	To Restaurant	0%	31%
	To Residential	0%	8%
	To Hotel	0%	2%
From RESIDENTIAL	To Office	2%	4%
	To Retail	1%	42%
	To Restaurant	20%	21%
	To Cinema/Entertainment	0%	0%
	To Hotel	0%	3%
From HOTEL	To Office	75%	0%
	To Retail	14%	16%
	To Restaurant	9%	68%
	To Cinema/Entertainment	0%	0%
	To Residential	0%	2%

Source: Bochner, B., K. Hooper, B. Sperry, and R. Dunphy. NCHRP Report 684: *Enhancing Internal Trip Capture Estimation for Mixed-Use Developments.* Washington, DC: Transportation Research Board, Tables 99 and 100, 2011.

Table 6.2 Unconstrained Internal Person Trip Capture Rates for Trip Destinations within a Mixed-Use Development

		Weekday	
		AM Peak Hour	PM Peak Hour
To OFFICE	From Retail	4%	31%
	From Restaurant	14%	30%
	From Cinema/Entertainment	0%	6%
	From Residential	3%	57%
	From Hotel	3%	0%
To RETAIL	From Office	32%	8%
	From Restaurant	8%	50%
	From Cinema/Entertainment	0%	4%
	From Residential	17%	10%
	From Hotel	4%	2%
To RESTAURANT	From Office	23%	2%
	From Retail	50%	29%
	From Cinema/Entertainment	0%	3%
	From Residential	20%	14%
	From Hotel	6%	5%
To CINEMA/ENTERTAINMENT	From Office	0%	1%
	From Retail	0%	26%
	From Restaurant	0%	32%
	From Residential	0%	0%
	From Hotel	0%	0%
To RESIDENTIAL	From Office	0%	4%
	From Retail	2%	46%
	From Restaurant	5%	16%
	From Cinema/Entertainment	0%	4%
	From Hotel	0%	0%
To HOTEL	From Office	0%	0%
	From Retail	0%	17%
	From Restaurant	4%	71%
	From Cinema/Entertainment	0%	1%
	From Residential	0%	12%

Source: Bochner, B., K. Hooper, B. Sperry, and R. Dunphy. NCHRP Report 684: *Enhancing Internal Trip Capture Estimation for Mixed-Use Developments*. Washington, DC: Transportation Research Board, Tables 101 and 102, 2011.

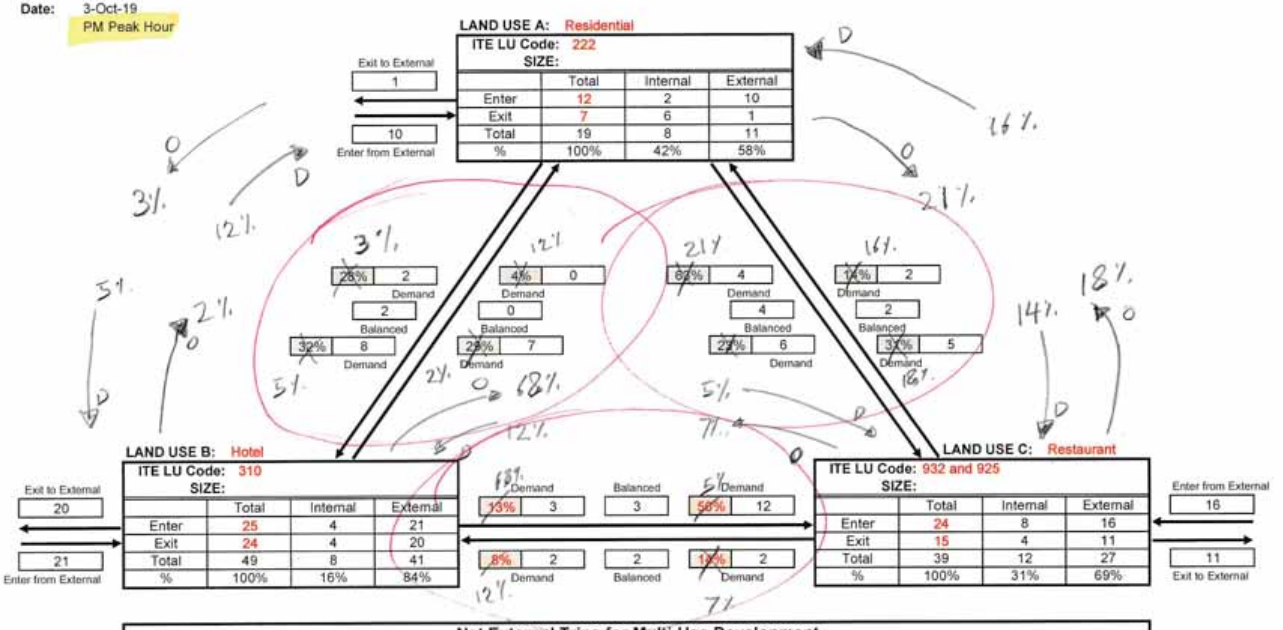


Net External Trips for Multi-Use Development					
	LAND USE A	LAND USE B	LAND USE C	TOTAL	
Enter	4	27	14	45	
Exit	10	17	13	40	
Total	14	44	27	85	INTERNAL CAPTURE
Single-Use Trip Gen. Est.	17	45	32	94	10%

EXISTING LAND USES

Trip Generation and Internal Capture Summary

Analyst: Danielsen
Date: 3-Oct-19
PM Peak Hour



Net External Trips for Multi-Use Development

	LAND USE A	LAND USE B	LAND USE C	TOTAL	
Enter	10	21	16	47	
Exit	1	20	11	32	
Total	11	41	27	79	INTERNAL CAPTURE
Single-Use Trip Gen. Est.	19	49	39	107	26%