BERCOW RADELL FERNANDEZ & LARKIN
ZONING, LAND USE AND ENVIRONMENTAL LAW
DIRECT LINE: (305) 377-6227
E-Mail: MTapanes@BRZoningLaw.com

VIA HAND-DELIVERY

November 30, 2017

Mr. Francisco Garcia
Director
Miami Riverside Center
City of Miami Planning Department
444 SW 2nd Avenue, 3rd Floor
Miami, FL 33130-1910

Re: Warrant to Permit an Elementary and Middle School at 1109 SW 4 Avenue, 1131 SW 4 Avenue, and lot identified by Folio No. 01-4138-169-0001 in Miami, Florida

Dear Mr. Garcia:

This law firm represents KLA Holding, LLC (the "Applicant") in connection with the properties located at 1109 S.W. 4 Avenue, 1131 S.W. 4 Avenue and a lot on the southeast corner of S.W. 12 Street and S.W. 4 Avenue (collectively, the "Property") in the City of Miami (the "City"). See Exhibit A, Miami-Dade Property Appraiser Summaries. This letter shall serve as the Applicant's required letter of intent in support of a (1) Warrant pursuant to Article 7, Section 7.1.2.4 of Miami 21 to allow an elementary and middle school at the Property as well as a (2) Waiver of the required maximum pedestrian entrance spacing and a (3) Waiver to permit dominant setbacks along SW 4th Avenue.

Property. The Property, further identified by Miami-Dade County Folio Nos. 01-0208-030-1080, 01-0208-030-1070 and 01-4138-169-0001 is zoned T5-L ("Urban Center Zone"). The Property is approximately 27,787 square feet and is partially developed with residential single and multi-family. The remainder of the Property is an undeveloped lot. The Property is located in the City's Little Havana neighborhood just west of I-95 and blocks south of S.W. 8th Street, a major section line road in the City. The Property's location across the street from Triangle Park makes it the ideal setting for a community use, such as an

elementary and middle school. In addition, the proposed use will include a pre-school use, and pre-school uses are permitted at the Property as of right. Accordingly, the proposed elementary and middle school use is consistent with currently permitted educational uses and compatible as an amenity to the increasing population in the surrounding area.

Proposal. The Applicant proposes to utilize the Property as a pre-school, elementary and middle school ("KLA Academy") for approximately six hundred (600) students that will be served by forty-five (45) staff members. See Proposed Plans. Initially, the Applicant will only have students from infants through 5th grade but would like the opportunity to potentially accommodate 6th through 8th in the future. The total number of students will remain the same at 600 students. KLA Academy will become the new home of the existing, established and renowned KLA School located at 600-625 SW 1st Avenue in West Brickell along the Miami River. KLA Academy will provide a Pre-K through 8th grade feeder system ideal for families residing in the urban core of Little Havana, West Brickell and Brickell. The Applicant intends to redevelop the Property to provide a state-of-the-art institution to satisfy the increasing demand for superior education within the City. Specifically, KLA Academy will satisfy the incredible need for schools in the urban core where population has substantially increased without the provision of new schools. The lack of educational facilities forces families to commute to schools outside of the neighborhood causing additional traffic in the area or move to bedroom communities outside of the urban core also causing additional traffic in the area as the same residents commute to the employment centers of Downtown and Brickell.

The proposed development will consists of a five (5) story building with an indoor pool at the ground level, classrooms and indoor play areas on floors two (2) through five (5) and an outdoor recreational area on the rooftop including a turf soccer field and youth-sized basketball court.

Parking & Traffic. KLA Academy will provide a total of sixty-one (61) parking spaces, ten (10) of which are existing on-street parking spaces abutting to the Property. See Exhibit B, MPA Off-Street Parking Letter. The Applicant has engaged the services of Traf Tech Engineering, Inc. to conduct a traffic analysis in connection with the proposed educational uses at the Property. See Exhibit C, Traffic Study & TOP. In addition, KLA Academy met with Miami-Dade County's (the "County") Traffic Engineering Division and incorporated staff's comments into the proposed site plan and Traffic Operations Plan ("TOP") in order to improve onsite queuing and circulation. It is worth noting that because

pre-school uses are permitted as of right any traffic impact from the proposed elementary and middle school will be minimal in comparison.

KLA Academy has incorporated the following traffic ameliorating measures into the operation and development of the proposed school. The proposed site plan includes a 296 foot queuing area for arrival and dismissal within the Property that will approximately accommodate approximately 13 vehicles on site for a total on-site accumulation capacity of approximately 64 vehicles, 51 parked vehicles plus 13 queued vehicles. In addition, there are ten (10) on-street parking spaces immediately adjacent to the school available for use by the school. To expedite and streamline onsite queuing, KLA Academy will assign four staff members to assist in the arrival and dismissal of students in the queuing line. Additionally, the site entrance along S.W. 15th Road will be a right-out only during arrival and dismissal. A traffic control officer or off-duty police officer will be engaged to direct traffic along S.W. 15th Road during arrival and dismissal. To further alleviate any potential effects on traffic in the area, KLA Academy will operate in three (3) shifts for arrival and dismissal with approximately two-hundred (200) students per shift, with each shift being 30 minutes apart. As a result, the area will not be impacted by the arrival and dismissal of all students at once. KLA Academy has worked with City and County staff to ensure that proper measures are set in place to eliminate any potential impact to the area.

Warrant. Pursuant to Article 4, Table 3 of Miami 21, pre-school uses are permitted in T5-L as of right, while elementary and middle school uses are permitted through the Warrant process. In accordance with Article 7, Section 7.1.2.4.d, Warrants must be reviewed in light of the nature of the Warrant and the particular circumstances of the case. The application must reviewed for compliance with Miami 21, the intent of the transect, the guiding principles of Miami 21 and the manner in which the proposed use will operate given its specific location and proximity to less intense uses.

As previously mentioned, KLA Academy will be a Pre-K through 8th grade school, where pre-school is permitted as of right. The Urban Center Zone consists of higher density mixed-use building types. Residential, hotel, office, restaurant, and other commercial uses are permitted as of right within the T5 Urban Center zone. The Property's neighborhood is comprised of residential and civic uses. Triangle Park and the Property are the transition between I-95 and the multi-family, duplex, and single family residential uses to the West. North to South, the Property abuts 4th Avenue, I-95's perimeter road between West Brickell and the bedroom community of The Roads, which is the arterial

connector between two major section roads, SW 8 Street and Coral Way. A pre-school through 8th grade school is compatible with the neighborhood and will provide families with a much needed school option within close proximity to major transportation and transit infrastructure, as well as employment centers.

The proposed educational uses meet the Design Review Criteria outlined in Article 4, Table 12 of Miami 21. The building and proposed use responds to the physical context of transportation and transit infrastructure (including the scale and massing of I-95) as well as the surrounding existing urban form by providing an in-demand educational amenity within as a transition to connect bedroom communities to densely populated urban and employment centers. Therefore, the use of the Property as an elementary and middle school is compatible with the neighborhood context, the intent of the Urban Center transect zone, and the guiding principles of Miami 21.

First-Floor Height. As described above, Article 7, Section 7.1.2.4.d, requires that this Warrant be reviewed in light of the proposed school use and the particular circumstances which accompany such a use. Particularly, a Warrant for an educational use requires special safety and security considerations. In accordance with Fire Code, 2012 Edition, Section 18.2.3.4.1.2 it is necessary for the first floor height of the proposed school to be at least 16'. A slight deviation from the permitted 14' first floor height is needed in order to provide the required clearance for emergency vehicles. Section 18.2.3.4.1.2 of the Fire Code requires a 13'-6" unobstructed vertical clearance in order to provide access for emergency vehicles. Buildings typically have approximately 2' of plumbing and/or electrical conduits in the ceiling. Accordingly, the actual first floor height will be approximately 14' in order to allow the required clearance for emergency vehicles. The overall height of the proposed building will remain under the maximum allowed height of 80'.

In this particular circumstance where the proposed use is for a school, the maximum height of 14' creates an adverse condition for a school by not permitting emergency vehicles to enter the building. Said condition conflicts with the guiding principles of Miami 21 that encourage the internalization of uses, including queuing. In addition, because the school is located in an urban setting, the location of the ground floor pool would benefit from the proposed additional height. An on-site pool provides a much-needed recreational amenity to children that furthers the civic goals of public health and safety.

The proposed use is permitted through a Warrant process because there are particular circumstances which must be reviewed and approved on an

individual basis. In this case, the first floor height must be reviewed in light of the proposed school uses and the need for emergency vehicles to have access to the building. The 16' first floor height is consistent with the Warrant review standards outlined in Article 7, Section 7.1.2.4.d and the overall height will not exceed the permitted height for the transect.

Pedestrian Entrance Spacing Waiver. In accordance with Article 5, Section 5.5.1.f of Miami 21, the Applicant requests a Waiver of the required 75' maximum spacing between pedestrian entrances. The irregular shaped lot, Property configuration and additional security required by a school use presents a practical difficulty in meeting the required maximum 75' pedestrian entrance. However, in lieu of pedestrian entrances, the elevation provides windows and landscaping to advance the sense of place for pedestrians. In addition, the attractive building façade provides an aesthetic backdrop to Triangle Park while providing a sound and visual buffer from I-95. The granting of this Waiver promotes the intent of the T5 transect and is consistent with the guiding principles of Miami 21, including encouraging walkability and use of public spaces. Accordingly, the Applicant respectfully requests approval of this waiver.

Dominant Setback Waiver. Article 5, Section 5.5.1.g of Miami 21 provides that where the property to be developed abuts a structure other than a sign, a Waiver may be granted so the proposed structure matches the ground level dominant setback of the block and its context. The Applicant seeks a Waiver to permit the proposed building's setback, along SW 4th Avenue, to match the ground level dominant setback of the block and its context. This setback will allow the placement of an attractive fence to provide heightened security for the safety of students, faculty and staff. Immediately abutting the Property to the west is Triangle Park. Triangle Park has a five (5) foot side-walk and a fence along the first layer. See Exhibit D, Context Photos. The Applicant seeks to maintain the dominant setback of the block and provide a five (5) foot setback and similar fence along SW 4th Avenue to ensure the security of the school and students.

KLA Academy will satisfy the need for a private pre-k through 8 educational facility in the area, while providing an inspiring curriculum, a nurturing environment, and high quality education to its students. The proposed redevelopment of the Property will beautify the neighborhood and deliver an exceptional learning environment with seamless transition between educational levels.

Conclusion. The proposed plans satisfy the criteria set forth in Article 7, Section 7.1.2.4.d of Miami 21 for approval of a Warrant to permit an elementary and middle school at the Property, and are compatible with the neighborhood context, the intent of the Urban Center transect zone, and the guiding principles of Miami 21.

Accordingly, we respectfully request the expeditious review and approval of the requested Warrant and Waivers. Should you have any questions or comments, please do not hesitate to phone me at 305.377.6227.

Very truly yours,

for

Melissa Tapanes Llahues

Enclosures

cc: Jorge Ortega
Rolando Llanes
Joaquin Vargas
Maritza Haro

OFFICE OF THE PROPERTY APPRAISER

Summary Report

Exhibit A

Generated On : 8/9/2017

Property Information	
Folio:	01-0208-030-1080
Property Address:	1109 SW 4 AVE Miami, FL 33130-3908
Owner	LUIS GARCIA & KELLY HENDRICKSON
Mailing Address	280 SW 20 RD #506 MIAMI, FL 33129-1420
PA Primary Zone	6107 RESIDENTIAL-MEDIUM RETAIL
Primary Land Use	0803 MULTIFAMILY 2-9 UNITS : MULTIFAMILY 3 OR MORE UNITS
Beds / Baths / Half	5 / 3 / 0
Floors	2
Living Units	3
Actual Area	Sq.Ft
Living Area	Sq.Ft
Adjusted Area	2,742 Sq.Ft
Lot Size	7,500 Sq.Ft
Year Built	1948

Assessment Information			
Year	2017	2016	2015
Land Value	$450,000	$450,000	$450,000
Building Value	$1,000	$87,942	$56,920
XF Value	$0	$2,390	$1,840
Market Value	$451,000	$540,332	$508,760
Assessed Value	$300,898	$273,544	$248,677

Taxable Value Information			
	2017	2016	2015
County			
Exemption Value	$0	$0	$0
Taxable Value	$300,898	$273,544	$248,677
School Board			
Exemption Value	$0	$0	$0
Taxable Value	$451,000	$540,332	$508,760
City			
Exemption Value	$0	$0	$0
Taxable Value	$300,898	$273,544	$248,677
Regional			
Exemption Value	$0	$0	$0
Taxable Value	$300,898	$273,544	$248,677

Benefits Information				
Benefit	Type	2017	2016	2015
Non-Homestead Cap	Assessment Reduction	$150,102	$266,788	$260,083

Note: Not all benefits are applicable to all Taxable Values (i.e. County, School Board, City, Regional).

Sales Information			
Previous Sale	Price	OR Book-Page	Qualification Description
01/01/2007	$550,000	25264-1691	Sales which are qualified
10/01/1984	$94,000	12309-0006	Sales which are qualified
11/01/1976	$1	00000-00000	Sales which are disqualified as a result of examination of the deed

Short Legal Description
CITY OF MIAMI SOUTH PB B-41
N100FT LOT 10 & N100FT OF W1/2
OF LOT 9 BLK 83
LOT SIZE 75.000 X 100
OR 12309-6 1084 1

Version:

OFFICE OF THE PROPERTY APPRAISER

Summary Report

Exhibit A

Generated On : 8/9/2017

Property Information	
Folio:	01-0208-030-1070
Property Address:	1131 SW 4 AVE Miami, FL 33130-3908
Owner	LUIS GARCIA & KELLY HENDRICKSON
Mailing Address	1011 SUNNYBROOK RD STE 905 MIAMI, FL 33136-2121
PA Primary Zone	6107 RESIDENTIAL-MEDIUM RETAIL
Primary Land Use	0802 MULTIFAMILY 2-9 UNITS : 2 LIVING UNITS
Beds / Baths / Half	4 / 2 / 0
Floors	1
Living Units	2
Actual Area	Sq.Ft
Living Area	Sq.Ft
Adjusted Area	1,693 Sq.Ft
Lot Size	8,693 Sq.Ft
Year Built	1948

Assessment Information			
Year	2017	2016	2015
Land Value	$521,580	$521,580	$521,580
Building Value	$42,156	$42,156	$42,156
XF Value	$490	$492	$454
Market Value	$564,226	$564,228	$564,190
Assessed Value	$312,268	$283,880	$258,073

Benefits Information				
Benefit	Type	2017	2016	2015
Non-Homestead Cap	Assessment Reduction	$251,958	$280,348	$306,117

Note: Not all benefits are applicable to all Taxable Values (i.e. County, School Board, City, Regional).

Short Legal Description
CITY OF MIAMI SOUTH PB B-41 LOT 7 LESS R/W & S50FT OF LOTS 8-9 & 10 BLK 83 LOT SIZE 8693 SQ FT COC 25264-1739 01 2007 1

Taxable Value Information			
	2017	2016	2015
County			
Exemption Value	$0	$0	$0
Taxable Value	$312,268	$283,880	$258,073
School Board			
Exemption Value	$0	$0	$0
Taxable Value	$564,226	$564,228	$564,190
City			
Exemption Value	$0	$0	$0
Taxable Value	$312,268	$283,880	$258,073
Regional			
Exemption Value	$0	$0	$0
Taxable Value	$312,268	$283,880	$258,073

Sales Information			
Previous Sale	Price	OR Book-Page	Qualification Description
01/01/2007	$450,000	25264-1739	Sales which are qualified

Version:

OFFICE OF THE PROPERTY APPRAISER

Summary Report

Exhibit A

Generated On : 8/9/2017

Property Information	
Folio:	01-4138-169-0001
Property Address:	
Owner	REF ONLY
Mailing Address	
PA Primary Zone	0000
Primary Land Use	0000 REFERENCE FOLIO
Beds / Baths / Half	0 / 0 / 0
Floors	0
Living Units	0
Actual Area	0 Sq.Ft
Living Area	0 Sq.Ft
Adjusted Area	0 Sq.Ft
Lot Size	0 Sq.Ft
Year Built	0

Assessment Information			
Year	2017	2016	2015
Land Value	$0		
Building Value	$0		
XF Value	$0		
Market Value	$0		
Assessed Value	$0		

Taxable Value Information			
	2017	2016	2015
County			
Exemption Value	$0		
Taxable Value	$0		
School Board			
Exemption Value	$0		
Taxable Value	$0		
City			
Exemption Value	$0		
Taxable Value	$0		
Regional			
Exemption Value	$0		
Taxable Value	$0		

Benefits Information				
Benefit	Type	2017	2016	2015
Note: Not all benefits are applicable to all Taxable Values (i.e. County, School Board, City, Regional).				

Sales Information			
Previous Sale	Price	OR Book-Page	Qualification Description

Short Legal Description
TRIPARK RESIDENCES@WEST
BRICKELL CONDO
CITY OF MIAMI SOUTH PB B-41
LOTS 11 & 12 BLK 83
AS DESC IN DECL OR 30194-2362

Version:

Exhibit B

40 N.W. Third Street
Miami, Fl 33128
Phone (305) 373-6789
Fax (305) 371-9451
www.miamiparking.com

Date: 10/11/2017

City of Miami
Department of Planning and Zoning
444 SW 2nd Avenue
Miami, Florida 33128

Re: Parking Spaces at **375 Sw 15 Rd, 1109 Sw 4 Ave, and 1131 Sw 4 Ave**, Miami, FL.

This letter is being submitted as proof that **Melissa Tapanes Llahues** has contacted the Miami Parking Authority in order to verify the number of parking spaces available for use by customers of this prospective business to be located at **375 Sw 15 Rd, 1109 Sw 4 Ave, and 1131 Sw 4 Ave**, Miami, FL. After carefully reviewing the site plans provided by the customer, we have confirmed that there are **3 spaces on Sw 15 Rd and 7 spaces on Sw 4 Ave** that will be readily available once the construction is completed.

Should any other information be required of this office regarding this application, please do not hesitate to contact me directly at 305-373-6789.

Respectfully,

Humberto Escandon
Senior Manager of Operations

Exhibit C

KLA (K-5) School of Miami

375 SW 15th Road

Miami, Florida

traffic study

prepared for:

KLA Schools

Traf Tech

ENGINEERING, INC.

Revised November 2017

Traf Tech
ENGINEERING, INC.

November 29, 2017

Mr. Roberto Ortega
KLA Schools
1750 Coral Way, Suite 301
Coral Gables, FL 33145

Re: KLA (K-5) School of Miami – Revised Traffic Impact Study

Dear Roberto:

Traf Tech Engineering, Inc. is pleased to provide you with the results of the revised Traffic Impact Study undertaken for the proposed KLA (K-5) School of Miami to be located at 375 SW 15th Road in the City of Miami in Miami Dade County, Florida.

It has been a pleasure working with KLA Schools on this project.

Sincerely,

TRAF TECH ENGINEERING, INC.

Joaquin E. Vargas, P.E.
Senior Transportation Engineer

8400 North University Drive, Suite 309, Tamarac, Florida 33321
Tel: (954) 582-0988 Fax: (954) 582-0989

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INTRODUCTION

KLA School of Miami is a proposed educational institution planned to be located at 375 SW 15th Road in the City of Miami in Miami Dade County, Florida. The location of the project site is illustrated in Figure 1 on the following page.

Traf Tech Engineering, Inc. was retained by KLA Schools to conduct a traffic study in connection with this education facility. The subject school will have a capacity of 600 students. This study addresses trip generation and the traffic impacts created by the proposed project on the nearby transportation network. This study is divided into eight (8) sections, as listed below:

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

Traf Tech
ENGINEERING, INC.

PROJECT LOCATION MAP

FIGURE 1
KLA School
Miami, Florida

INVENTORY

Existing Land Use

The existing site is currently developed with several residential buildings and vacant land.

Proposed Land Use and Access

The site will be re-developed with an education facility housing 600 students (pre-K through 5th Grade). The school will operate with three shifts, pre-K will start classes at 8:45 AM and will end at 2:30 PM, K through 2nd Grade will commence at 8:15 AM and will end at 3:30 PM, and 3rd Grade through 5th Grade will start classes at 7:45 AM and will terminate at 3:00 PM. Each shift will have the same number of students with 200 students each and will be separated by 30 minutes in order to minimize overlaps between shifts. The proposed project is anticipated to be built and occupied in the Fall of 2020. Ingress to the site will be provided via a driveway off of SW 11th Street and egress will be provided via a driveway off of SW 15th Road. Appendix A contains the proposed site plan for the proposed educational development. As shown in the site plan, approximately 12 on-street parking spaces will be provided, plus six (6) parking stalls at the small surface parking lot located within the site. Together with the proposed underground-level parking garage, at least 53 parking spaces will be available for staff, visitors, and parents to park. The proposed 296-foot drop-off/pick-up area can accommodate approximately 13 vehicles on site for a total on-site accumulation capacity of approximately 66 vehicles (53 parked vehicles plus 13 queued vehicles).

EXISTING CONDITIONS

This section addresses the existing roadway system located in the vicinity of the project site and nearby intersections.

Roadway System

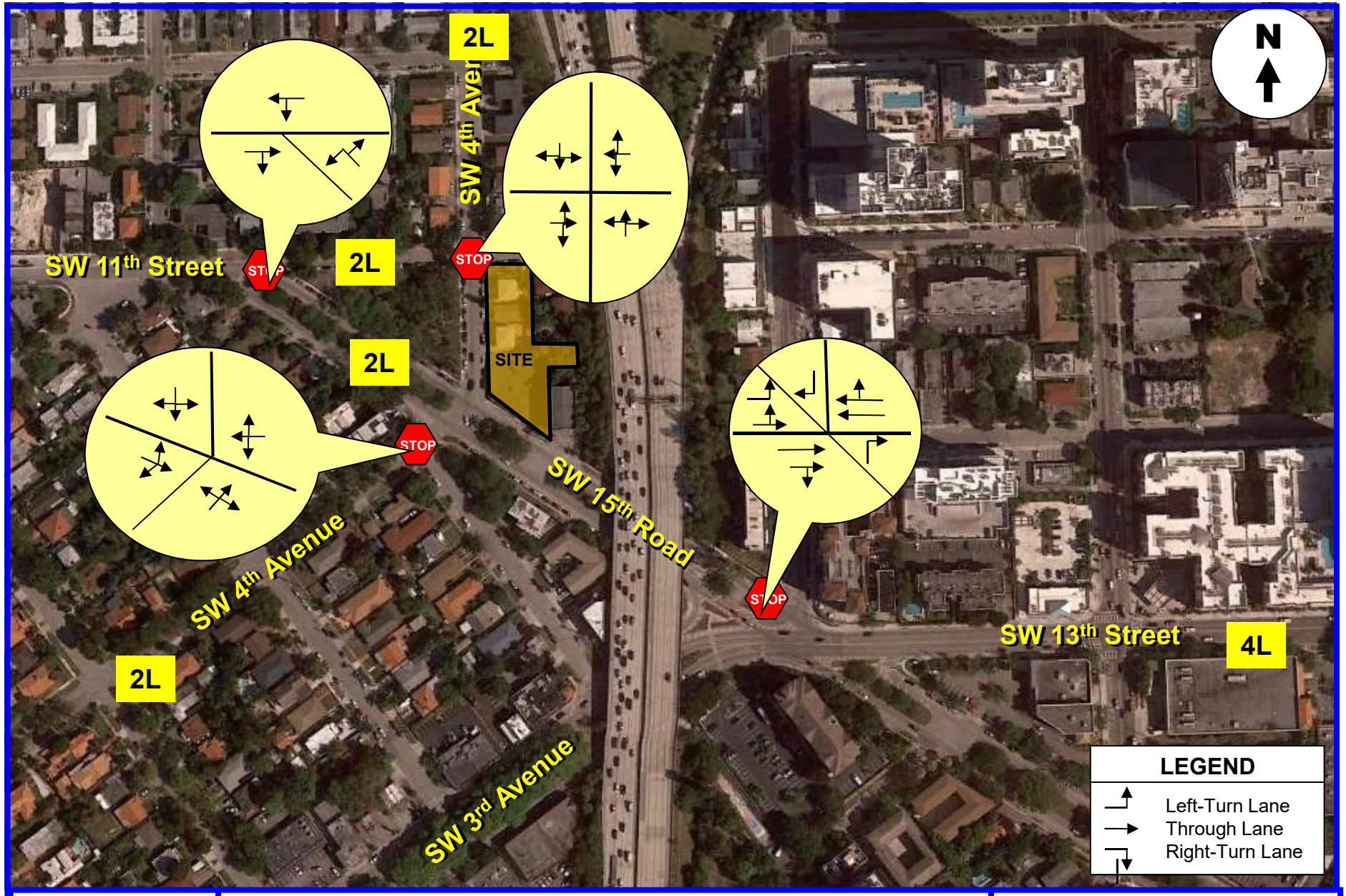
The roadway system located near the project site includes SW 15th Road, SW 13th Street/SW 3rd Avenue, SW 11th Street, and SW 4th Avenue. In the vicinity of the project site, SW 15th Road is a divided two-lane facility oriented in the northwest-southeast direction. SW 13th Street/SW 3rd Avenue is a four-lane facility in the east-west direction. SW 11th Street and SW 4th Avenue are two-lane local streets.

Nearby Intersections

The KLA School is surrounded by the following intersections:

1. SW 13th Street/SW 3rd Avenue & SW 15th Road (Stop controlled)
2. SW 15th Road and SW 4th Ave (Stop controlled)
3. SW 15th Road and SW 11th Street (Stop controlled)
4. SW 4th Avenue & SW 11th Street (Stop controlled)

Figure 2 shows the existing lane geometry of the intersections surrounding the project site.



Traf Tech
ENGINEERING, INC.

EXISTING LANE GEOMETRY

FIGURE 2
KLA School
Miami, Florida

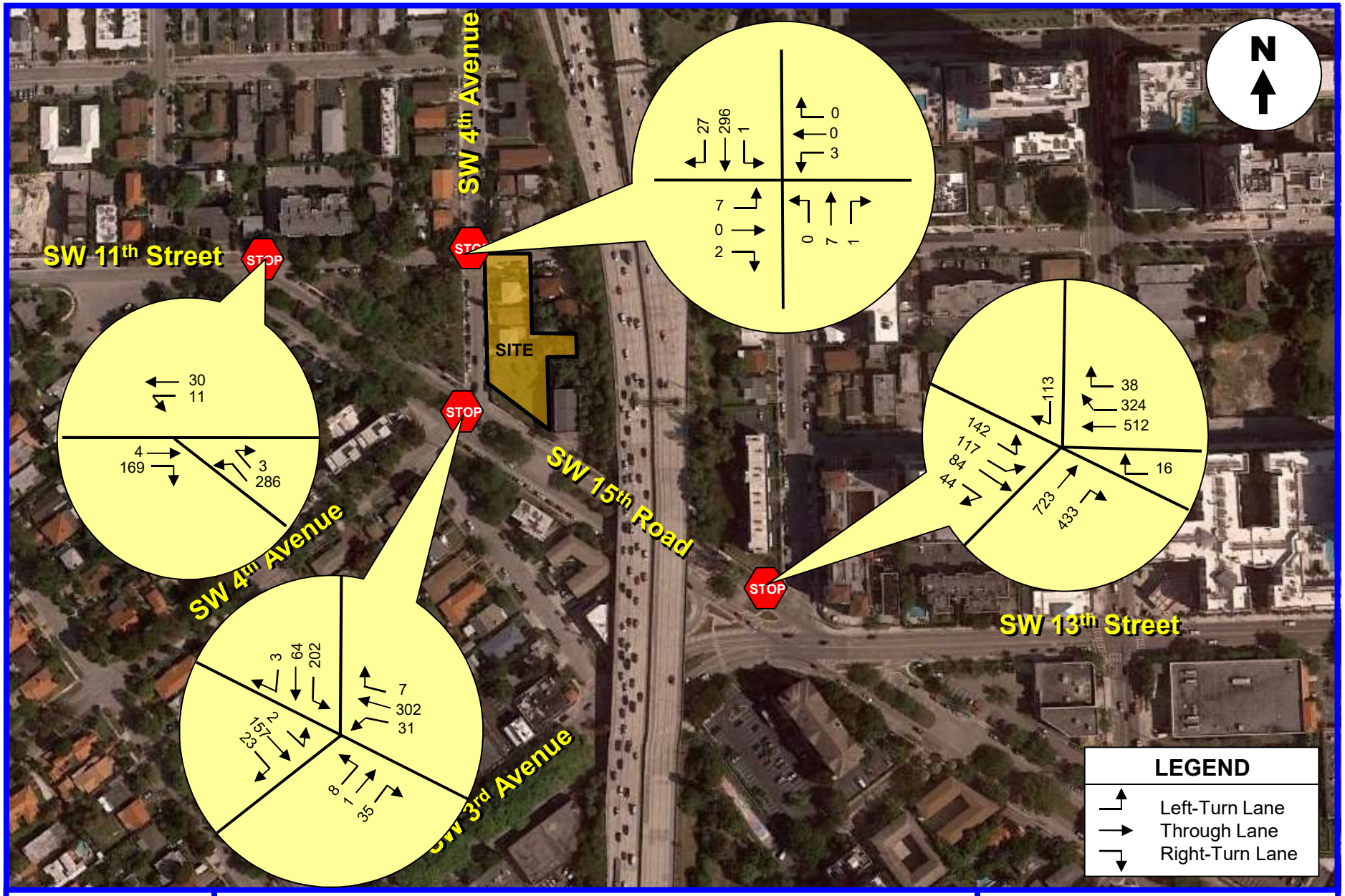
TRAFFIC COUNTS

Traf Tech Engineering, Inc., in association with Traffic Survey Specialists, Inc. and Video Data Solutions, Inc collected traffic data at the following intersections:

1. SW 13th Street/SW 3rd Avenue & SW 15th Road
2. SW 15th Road and SW 4th Avenue
3. SW 15th Road and SW 11th Street
4. SW 4th Avenue & SW 11th Street

The intersection turning movement counts performed by Traffic Survey Specialists, Inc., and Video Data Solutions, Inc. were collected on Thursday, April 20, 2017 and Tuesday, July 25, 2017 during the AM peak period (7:00 AM to 9:00 AM). A comparison between the April (during school session) and July (schools not in session) traffic counts indicate that an additional 12% adjustment factor should be applied to the July traffic counts in order to reflect peak season conditions when school are in session.

Figure 3 summarizes the results of the intersection turning movement counts undertaken during the AM peak hour. Appendix B contains the intersection turning movement counts, as collected in the field.



Traf Tech
ENGINEERING, INC.

EXISTING TRAFFIC COUNTS – AM Peak Hour

FIGURE 3
KLA School
Miami, Florida

TRIP GENERATION

The trip generation for the proposed school was based on traffic counts collected at the KLA school located at 600 SW 1st Avenue in the City of Miami (i.e., a surrogate location for trip generation rates). The subject school currently has 200 students and these students will relocate to the site located at 375 SW 15th Road. Traffic counts were conducted on May 13, 2017 at the existing 200-student KLA School and yielded the following trip generation rates (refer to Appendix F):

- 0.51 trips per student in the inbound direction
- 0.42 trips per student in the outbound direction

Using the above-listed rates, a trip generation analysis was undertaken for the proposed school project. Even though each shift will have 200 students, for purposes of this traffic study the impacts were generated for 300 students (conservative approach). The results of the trip generation analysis are documented in Table 1.

TABLE 1
Trip Generation Summary – Driveway Trips
KLA (K-5) School

Land Use	Size	Daily Trips	AM Peak Hour Trips		
			Ins	Out	Total
School (conservative)	300	-	153	126	279
Total	**300**	**-**	**153**	**126**	**279**

As indicated in Table 1, the proposed school is projected to generate approximately 279 AM peak hour driveway trips during each shift (153 inbound and 126 outbound). In order to manage traffic impacts, the three start times and end times should be separated by at least 30 minutes in order to minimize overlapping of trips between shifts).

TRIP DISTRUBUTION AND TRAFFIC ASSIGNMENT

The trip distribution and traffic assignment for the project were based on Miami-Dade County's Cardinal Distribution information for the study area. Table 2 summarizes the County's cardinal distribution data for Traffic Analysis Zone 593, which is applicable to the project site from the latest SERPM data published by Miami-Dade County.

TABLE 2
Project Trip Distribution
KLA (K-5) School

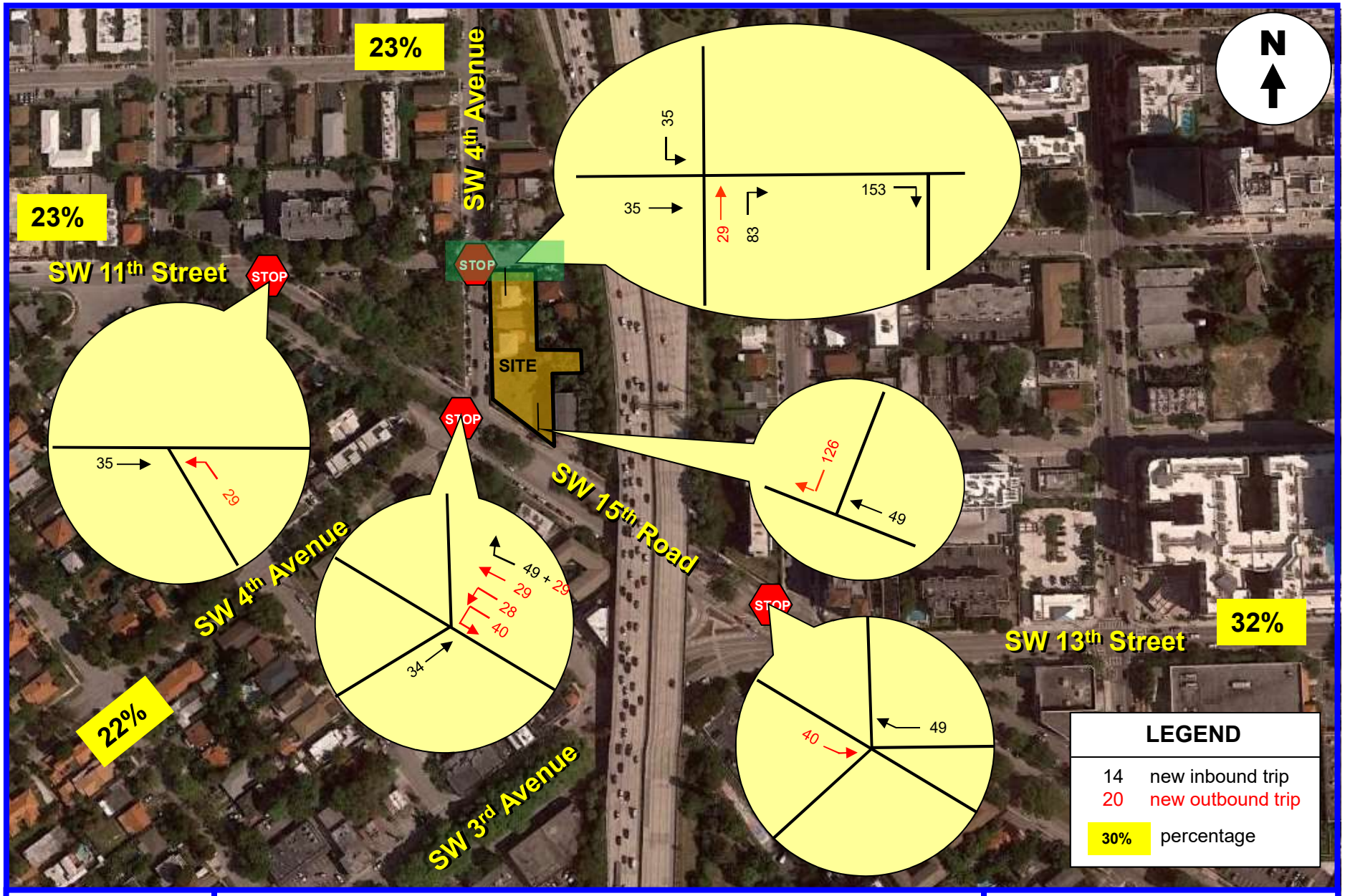
Direction		% of Total Trips
North:	Northwest	22.6
	Northeast	16.1
South:	Southwest	4.1
	Southeast	2.1
East:	Northeast	10.0
	Southeast	4.7
West:	Northwest	23.1
	Southwest	17.3
	Total	100.00%

Source: Miami-Dade County (2040 SERPM)

Based on the above, the following traffic assignment was assumed for the proposed development:

- 23% to and from the north via SW 4th Avenue
- 21% to and from the southwest via SW 4th Avenue
- 32% to and from the southeast via SW 13th Street
- 23% to and from the west via SW 11th Street

The new peak hour traffic generated by the project was assigned to the nearby transportation network using the traffic assignment documented above. The new project traffic assignment is summarized in Figure 4.



Traf Tech
ENGINEERING, INC.

NEW PROJECT TRAFFIC ASSIGNMENT
Weekday New Peak Hour Trips AM

FIGURE 4
KLA School
Miami, Florida

TRAFFIC ANALYSIS

This section of the study is divided into two (2) parts. The first part consists of developing the future conditions traffic volumes for the study area. The second part includes level-of-service analyses for existing and future conditions.

Future Conditions Traffic Volumes

Two sets of future traffic volumes were developed. The first set includes project buildout conditions without the proposed project and the second set adds the new trips anticipated to be generated by the project.

In order to develop year 2020 traffic volumes (project anticipated to be built and occupied by the year 2020), without the proposed project, two separate analyses were undertaken. The first analysis converts the existing peak hour traffic counts collected in the field during the months of April and July to average peak season conditions. Based on FDOT's Peak Season Factor Category report, 0.99 and 1.03 factors are required to convert traffic counts collected during the third week of April and fourth week of July to average peak season conditions (refer to Appendix C). The second analysis includes a growth factor to project 2017 peak season traffic volumes to the year 2020. For purposes of this traffic study, a 1.5% growth rate was applied to the 2017 traffic counts in order to develop 2020 background traffic conditions. The traffic growth rate is considered conservative since one nearby traffic count station has reflected negligible traffic growth along SW 15th Road (refer to Appendix C). The 1.5% traffic growth rate also conservatively accounts for unforeseen approved project (committed trips) that may impact the study intersections.

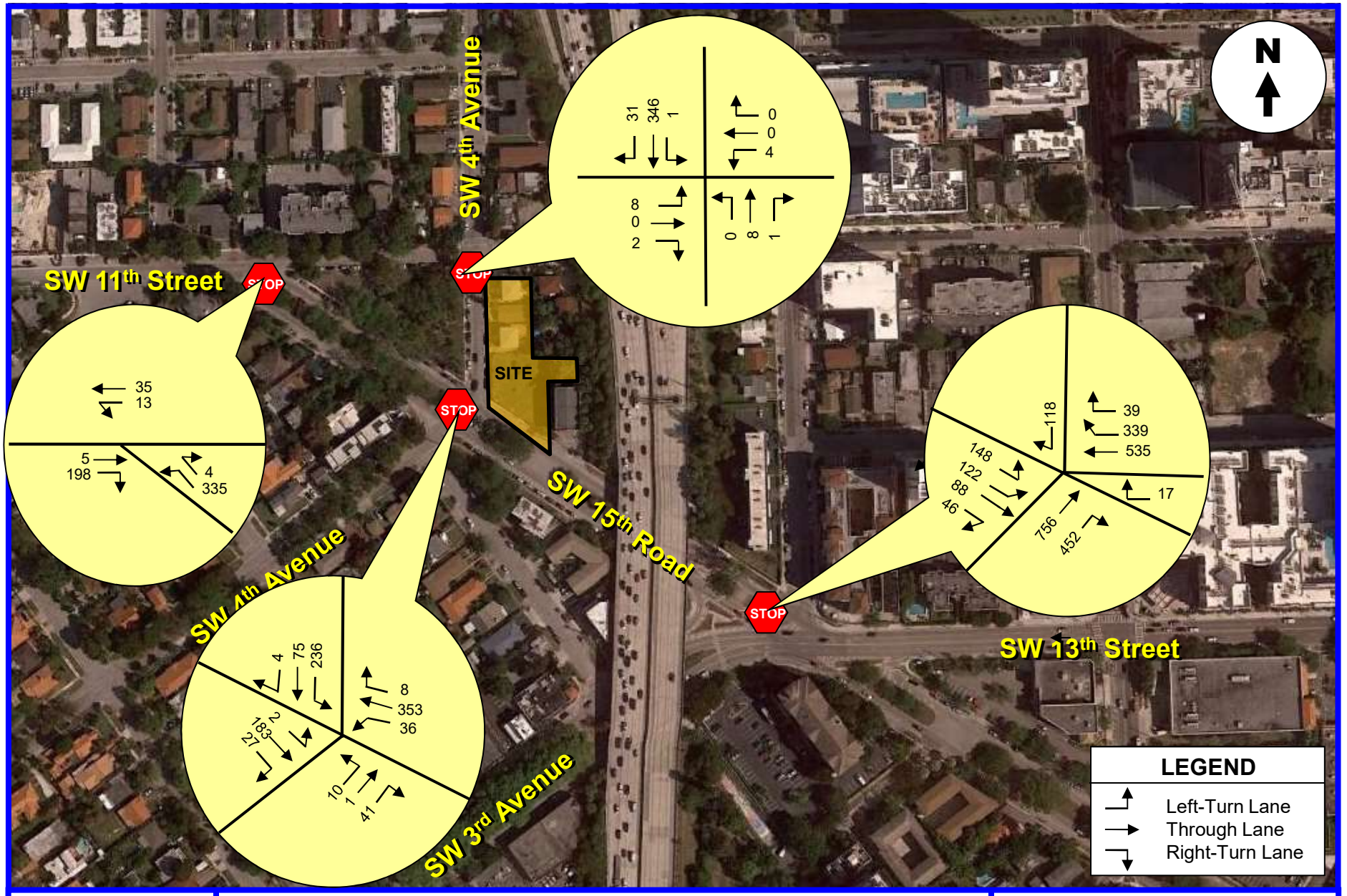
In addition, a review of committed developments located in the vicinity of the proposed project was performed by analyzing readily available data provided by two websites. The review of the following websites did not indicate any approved projects within the past five years:

http://maps.miamigov.com/miamizoning/index.htm
https://www.gridics.com/development/map

The future traffic calculations (peak season adjustments, traffic growth, and the traffic associated with the proposed development) for the study intersections are contained in Appendix D in tabular format.

The new trips generated by the project (refer to Figure 4) were added to the 2020 background traffic in order to develop total traffic conditions. The future traffic projections for the study intersections (peak season adjustments, traffic growth rates, and project traffic) are presented in tabular format in Appendix D. Figures 5 and 6 present the year 2020 future traffic volumes for the study area.

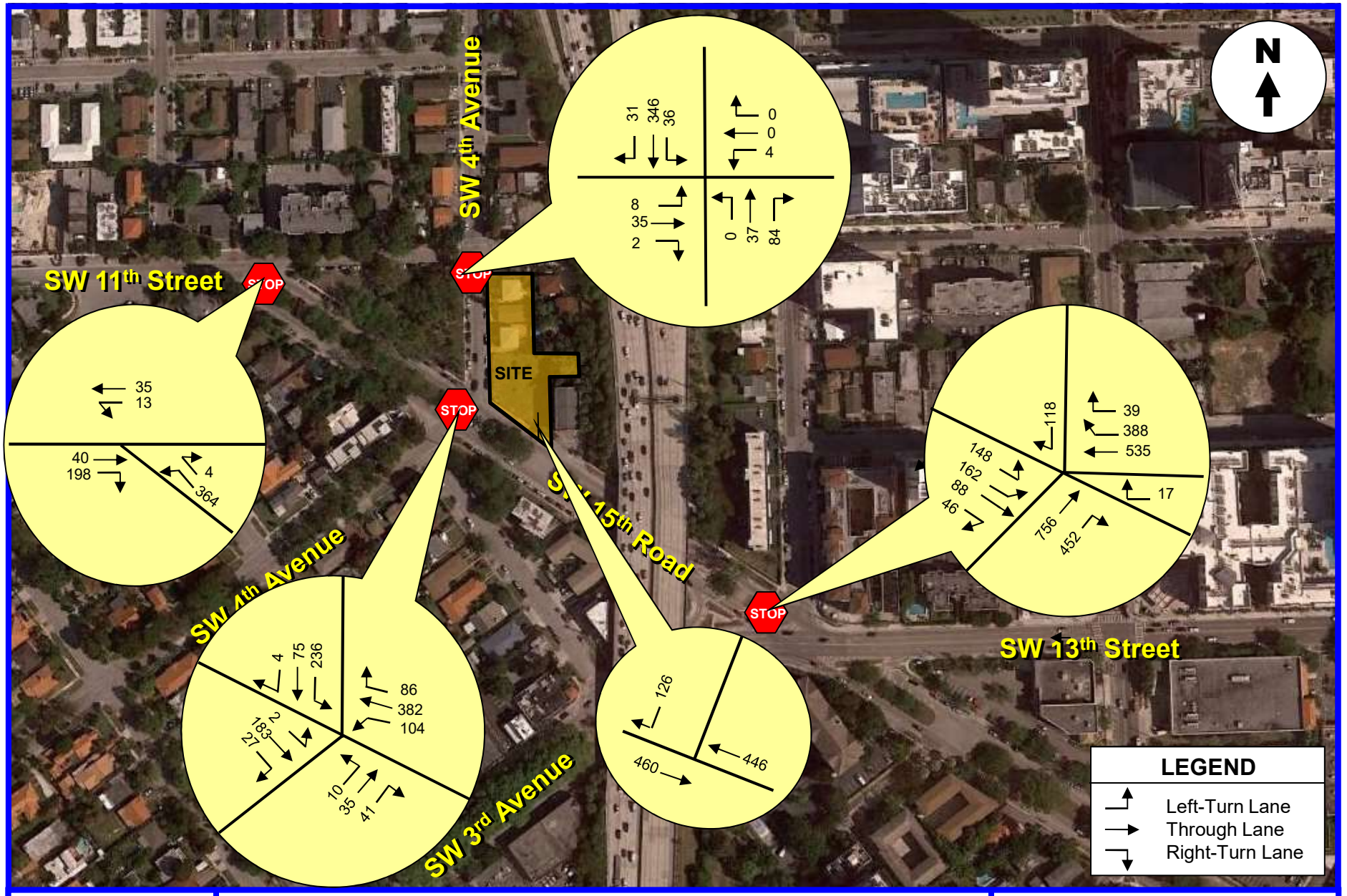
Figure 5 includes background traffic only (without the proposed project) and Figure 6 includes the additional traffic anticipated to be generated by the proposed project.



Traf Tech
ENGINEERING, INC.

BACKGROUND TRAFFIC – Year 2020
AM Peak Hour

FIGURE 5
KLA School
Miami, Florida



Traf Tech
ENGINEERING, INC.

TOTAL TRAFFIC with PROJECT – Year 2020
AM Peak Hour

FIGURE 6
KLA School
Miami, Florida

Level of Service Analyses

Intersection capacity/level of service analyses were conducted for the study intersections. The analyses were undertaken following the capacity/level of service procedures outlined in the Highway Capacity Manual (HCM) using the SYNCHRO software. The results of the capacity analyses are summarized in Table 3.

As indicated in Table 3, all intersections are currently operating adequately and will continue to operate at an acceptable level of service in the year 2020 with the proposed project in place, except for one intersection. The exception is SW 13th Street/SW 3rd Avenue and SW 15th Road. The south-eastbound approach of the intersection is currently operating at a deficient level of service and will continue to operate deficiently with the proposed school in place.

The southbound approach at the intersection of SW 4th Street and SW 15th Road school is projected to operate with typical school delay conditions. Therefore, it is recommended, if feasible, that a police officer controls the southbound traffic during the school's morning peak period. With police control, the intersection is projected to function at level of service "B".

The exit-only driveway off of SW 15th Road is projected to operate at level of service "B" as a stop-control intersection during the AM peak hour. Appendix E contains the results of the SYNCHRO analyses.

TABLE 3 Intersection Level of Service Results KLA (K-5) School			
Intersection		**Future Traffic Conditions**	
	2017 Existing	**2020 w/o Project**	**2020 With Project**
SW 13th St/SW 3rd Ave & SW 15th Rd			
- NB	B	B	B
- SEB	F	F	F
SW 15th Rd and SW 4th Ave			
- NB	B	B	C
- SB	D	D	F*
SW 15th Rd and SW 11th St			
- NWB	B	B	C
SW 4th Ave & SW 11th St			
- EB	B	B	B
- WB	B	B	B
SW 15th Rd and Egress Driveway			
- SB			B

Source: Highway Capacity Manual. LEGEND: AM Peak
Note: * With police control, the intersection is projected to function at level of service "B".

ACCUMULATION ANALYSIS

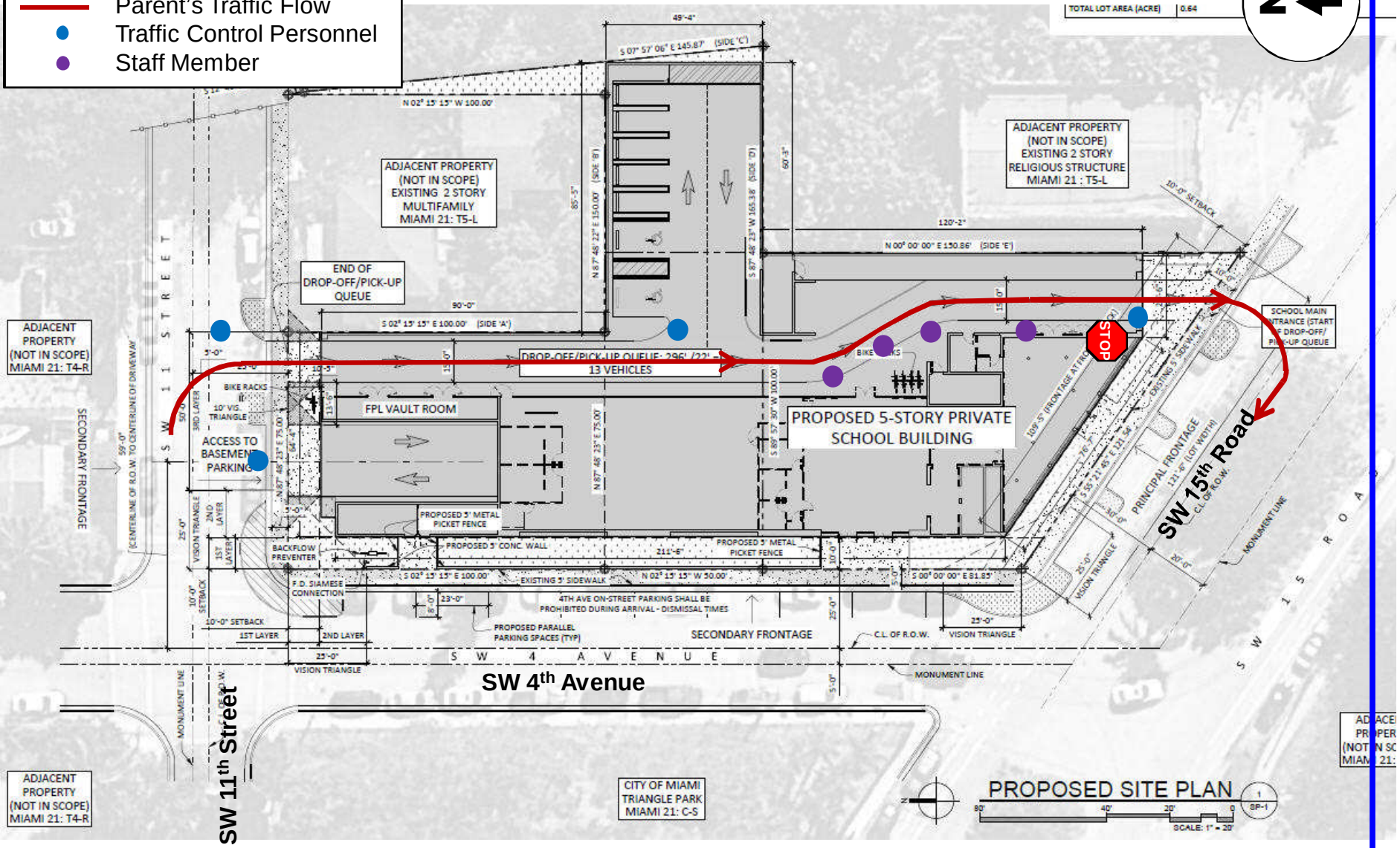
A vehicle accumulation study was conducted for the 600-student school pick-up period. The vehicle accumulation was based on results of vehicle stacking counts conducted by Traf Tech Engineering, Inc. at other South Florida schools that have the same grades and characteristics as the proposed KLA School. Based on vehicles counts conducted at other charter schools, we noted that during the PM peak period, 600 students resulted in 104 accumulated vehicles (actual count of parked vehicles and vehicles in queue at another school), without buses. Then 300 students (used 300 students instead of 200 students in order to be conservative) would theoretical result in approximately 52 vehicles (parked and in queue). Since the KLA (K-5) School is design to accommodate at least 66Pag on-site vehicles[1] within the stacking lanes, stacking can be managed on site during the PM peak hour with three end times. A queuing analysis (Appendix G) indicates that traffic queues can be managed within the proposed drop-off/pick-up lane.

Moreover, well over 100 parking spaces are available within walking distance from the school along SW 15th Road (both sides), SW 11th Street (both sides), SW 4th Avenue (both sides) and a public parking lot located under the I-95 overpass.

School Traffic Operations Plan

The on-site traffic circulation is projected to function adequately for a school of this size. Figure 7 shows the school Traffic Operations Plan (TOP).

[1] The parent's queuing capacity of the school is approximately 296 feet (13 cars, assuming 22 feet per vehicle) + 53 parking spaces = 66 vehicles.



TraffTech ENGINEERING, INC.

TRAFFIC OPERATIONS PLAN

FIGURE 7
KLA Academy
Miami-Dade County, Florida

CONCLUSIONS

KLA School of Miami is a proposed educational institution planned to be located at 375 SW 15th Road in the City of Miami in Miami Dade County, Florida. The study addresses trip generation and the traffic impacts created by the proposed project on the nearby transportation network.

The site will be developed with an education facility housing 600 students (pre-K through 5th Grade). The school will operate with three shifts, pre-K will start classes at 8:45 AM and will end at 2:30 PM, K through 2nd Grade will commence at 8:15 AM and will end at 3:30 PM, and 3rd Grade through 5th Grade will start classes at 7:45 AM and will terminate at 3:00 PM. Each shift will have the same number of students with 200 students each and will be separated by 30 minutes in order to minimize overlaps between shifts. The proposed project is anticipated to be built and occupied in the Fall of 2020. Ingress to the site will be provided via a driveway off of SW 11th Street and egress will be provided via a driveway off of SW 15th Road.

The conclusions of the traffic study are presented below:

- In order to manage traffic impacts, three start and three end times should be implemented, separated by 30 minutes between them. In order to assess impacts with a conservative approach, 300 students were used for trip generation purposes and the 300 students is projected to generate approximately 279 AM peak hour trips (153 inbound and 126 outbound).

- All intersections are currently operating adequately and will continue to operate at acceptable level of service in the year 2020 with the proposed project in place, except for one intersection. The exception is SW 13th Street/SW 3rd Avenue and SW 15th Road. The south-eastbound approach of the intersection is currently operating at deficient level of service and will continue to operate deficiently with the proposed project in place.

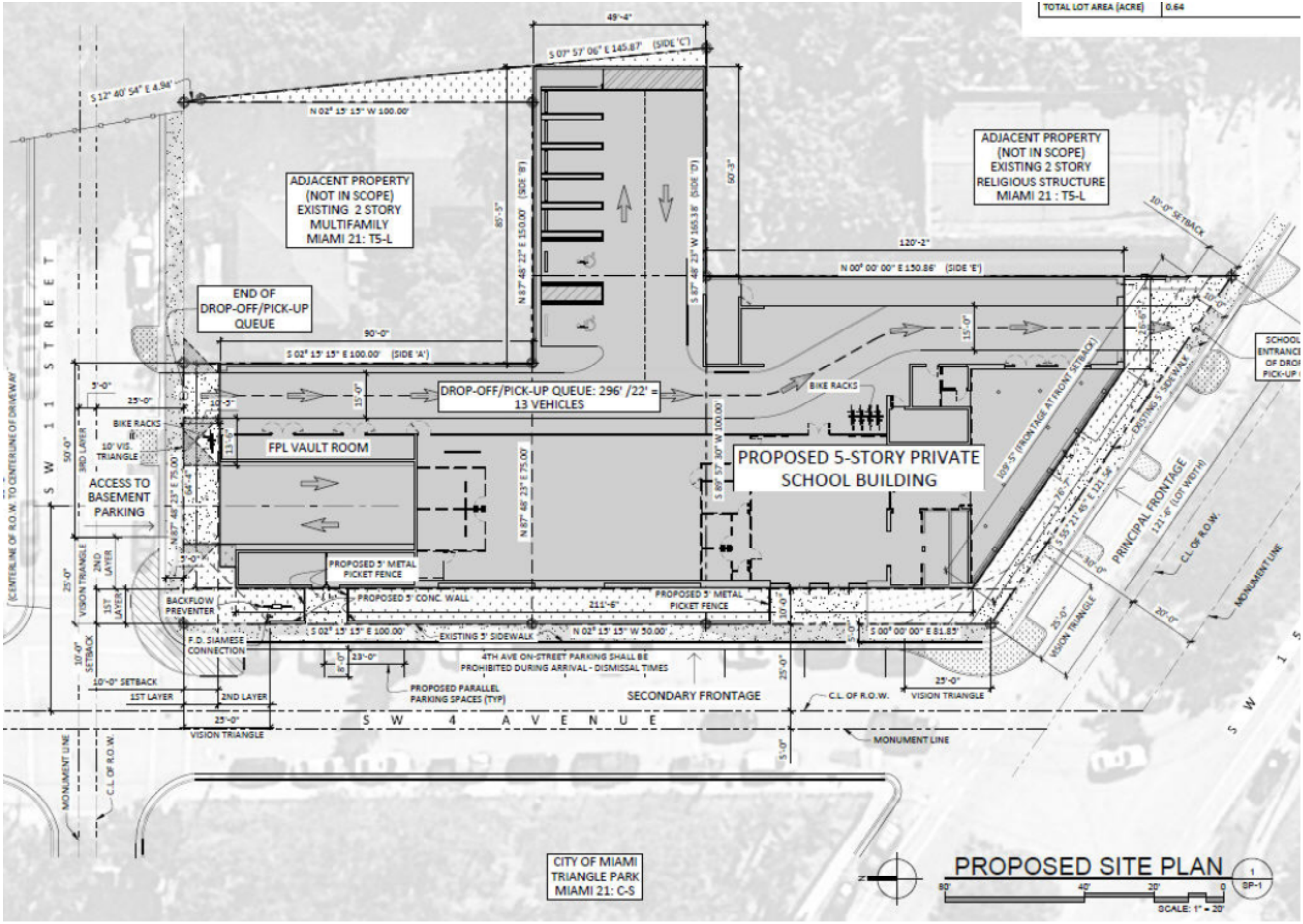
- The southbound approach at the intersection of SW 4th Street and SW 15th Road school is projected to operate with typical school delay conditions.

  Therefore, it is recommended, if feasible, that a police officer controls the southbound traffic during the school's morning peak period. With police control, the intersection is projected to function at level of service "B".

- The access driveway off of SW 15th Road is projected to operate at level of service "B" as a stop-control intersection during the AM peak hour. No turn lanes are required at the access driveway.

APPENDIX A

Site Plan – KLA (K-5) School


TOTAL LOT AREA (ACRE) 0.64
ADJACENT PROPERTY (NOT IN SCOPE) EXISTING 2 STORY MULTIFAMILY MIAMI 21: T5-L
ADJACENT PROPERTY (NOT IN SCOPE) EXISTING 2 STORY RELIGIOUS STRUCTURE MIAMI 21 : T5-L
END OF DROP-OFF/PICK-UP QUEUE
DROP-OFF/PICK-UP QUEUE: 296' /22' = 13 VEHICLES
PROPOSED 5-STORY PRIVATE SCHOOL BUILDING
FPL VAULT ROOM
ACCESS TO BASEMENT PARKING
BIKE RACKS
PROPOSED 5' METAL PICKET FENCE
PROPOSED 5' CONC. WALL
BACKFLOW PREVENTER
F.D. SIAMESE CONNECTION
EXISTING 5' SIDEWALK
4TH AVE ON-STREET PARKING SHALL BE PROHIBITED DURING ARRIVAL - DISMISSAL TIMES
PROPOSED PARALLEL PARKING SPACES (TYP)
SECONDARY FRONTAGE
PRINCIPAL FRONTAGE
121'-6" (LOT WIDTH)
C.L. OF R.O.W.
MONUMENT LINE
VISION TRIANGLE
SETBACK
1ST LAYER
2ND LAYER
3RD LAYER
S W 11 STREET
S W 4 AVENUE
CITY OF MIAMI TRIANGLE PARK MIAMI 21: C-S
PROPOSED SITE PLAN
SCALE: 1" = 20'
SP-1

APPENDIX B

Intersection Turning Movement Counts

Traffic Survey Specialists, Inc.

SW 13TH STREET& SW 15TH ROAD & SW 3RD AV
MIAMI, FLORIDA
COUNTED BY: J. SHEA & S. SALVO
NOT SIGNALIZED

85 SE 4th Avenue, Unit 109
Delray Beach, Florida 33483
(561)272-3255

Study Name: 13ST3AVE
Site Code : 00170081
Start Date: 04/20/17
Page : 1

ALL VEHICLES

	SW 3RD AVENUE From North				SW 13TH STREET From East				SW 3RD AVE From South		SW 13TH STREET From West				SW 15TH ROAD From Northwest				
Start Time	Left	Thru	Right	HARD RIGHT	Left	Thru	SOFT RIGHT	RIGHT	Left	Right	HARD LEFT	LEFT	THRU	RIGHT	HARD LEFT	SOFT LEFT	THRU	HARD RIGHT	Intvl Total
04/20/17																			
07:00	0	0	0	3	1	54	59	2	0	3	2	0	69	17	9	12	16	4	251
07:15	0	0	0	10	0	67	49	1	0	1	2	0	88	27	12	20	18	7	302
07:30	0	0	0	10	0	79	67	4	1	0	2	0	122	41	8	33	27	7	401
07:45	0	0	0	10	1	91	71	4	4	3	6	2	161	66	19	27	32	8	505
Hour	0	0	0	33	2	291	246	11	5	7	12	2	440	151	48	92	93	26	1459
08:00	0	0	0	16	0	117	67	8	4	2	6	2	171	96	25	36	17	7	574
08:15	0	0	0	36	1	130	89	10	1	6	12	1	179	107	37	19	27	7	662
08:30	0	0	0	25	1	136	87	10	3	5	14	1	189	128	41	25	23	11	699
08:45	0	0	0	37	0	134	84	10	0	3	16	3	191	106	40	38	18	19	699
Hour	0	0	0	114	2	517	327	38	8	16	48	7	730	437	143	118	85	44	2634
Total	0	0	0	147	4	808	573	49	13	23	60	9	1170	588	191	210	178	70	4093
% Apr.	-	-	-	100.0	0.2	56.3	39.9	3.4	36.1	63.8	3.2	0.4	64.0	32.1	29.4	32.3	27.4	10.7	-
% Int.	-	-	-	3.5	-	19.7	14.0	1.1	0.3	0.5	1.4	0.2	28.5	14.3	4.6	5.1	4.3	1.7	-

Traffic Survey Specialists, Inc.

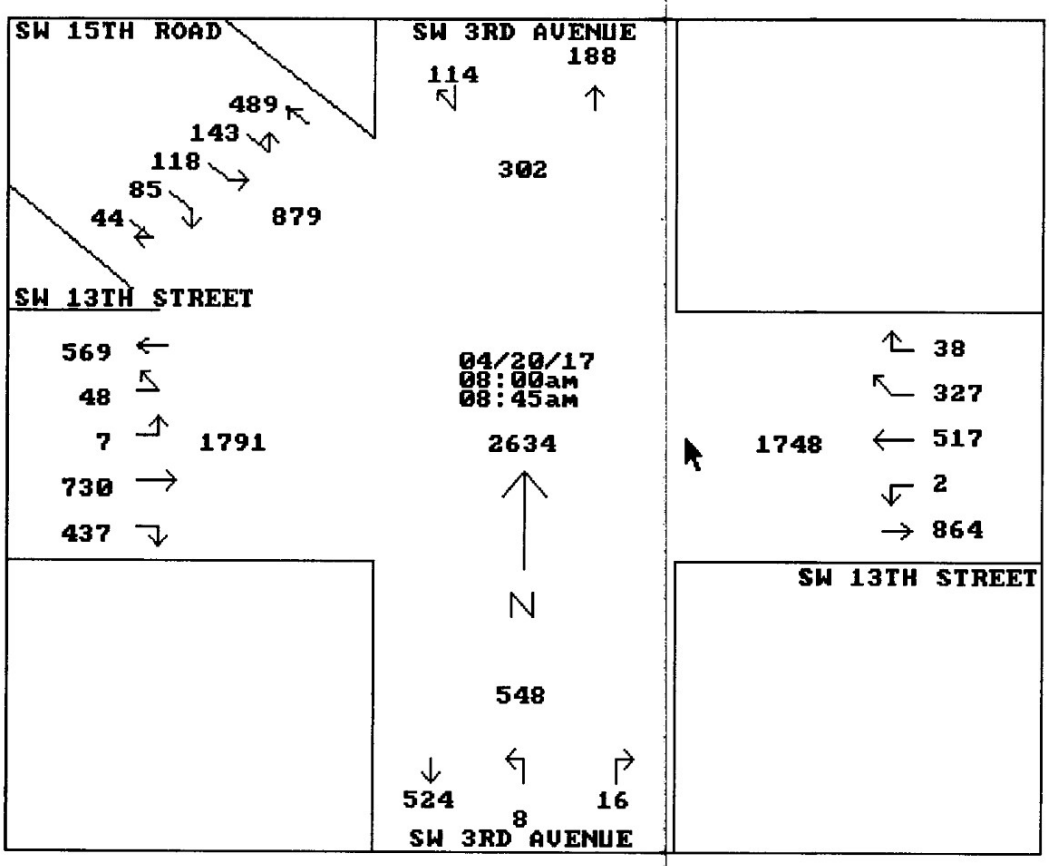
SW 13TH STREET& SW 15TH ROAD & SW 3RD AV
MIAMI, FLORIDA
COUNTED BY: J. SHEA & S. SALVO
NOT SIGNALIZED

85 SE 4th Avenue, Unit 109
Delray Beach, Florida 33483
(561)272-3255

Study Name: 13ST3AVE
Site Code : 00170081
Start Date: 04/20/17
Page : 2

ALL VEHICLES

	SW 3RD AVENUE From North				SW 13TH STREET From East				SW 3RD AVE From South		SW 13TH STREET From West				SW 15TH ROAD From Northwest				
Start Time	Left	Thru	Right	HARD RIGHT	Left	Thru	RIGHT	SOFT RIGHT	Left	Right	HARD LEFT	LEFT	THRU	RIGHT	HARD LEFT	SOFT LEFT	THRU	HARD RIGHT	Intvl Total
Peak Hour Analysis By Entire Intersection for the Period: 07:00 on 04/20/17 to 08:45 on 04/20/17																			
Time	08:00				08:00				08:00		08:00				08:00				
Vol.	0	0	0	114	2	517	327	38	8	16	48	7	730	437	143	118	85	44	
Pct.	0.0	0.0	0.0	100.0	0.2	58.4	36.9	4.2	33.3	66.6	3.9	0.5	59.7	35.7	36.6	30.2	21.7	11.2	
Total	114				884				24		1222				390				
High	08:45				08:30				08:30		08:30				08:45				
Vol.	0	0	0	37	1	136	87	10	3	5	14	1	189	128	40	38	18	19	
Total	37				234				8		332				115				
PHF	0.770				0.944				0.750		0.920				0.848				



Video Data Solutions, Inc.

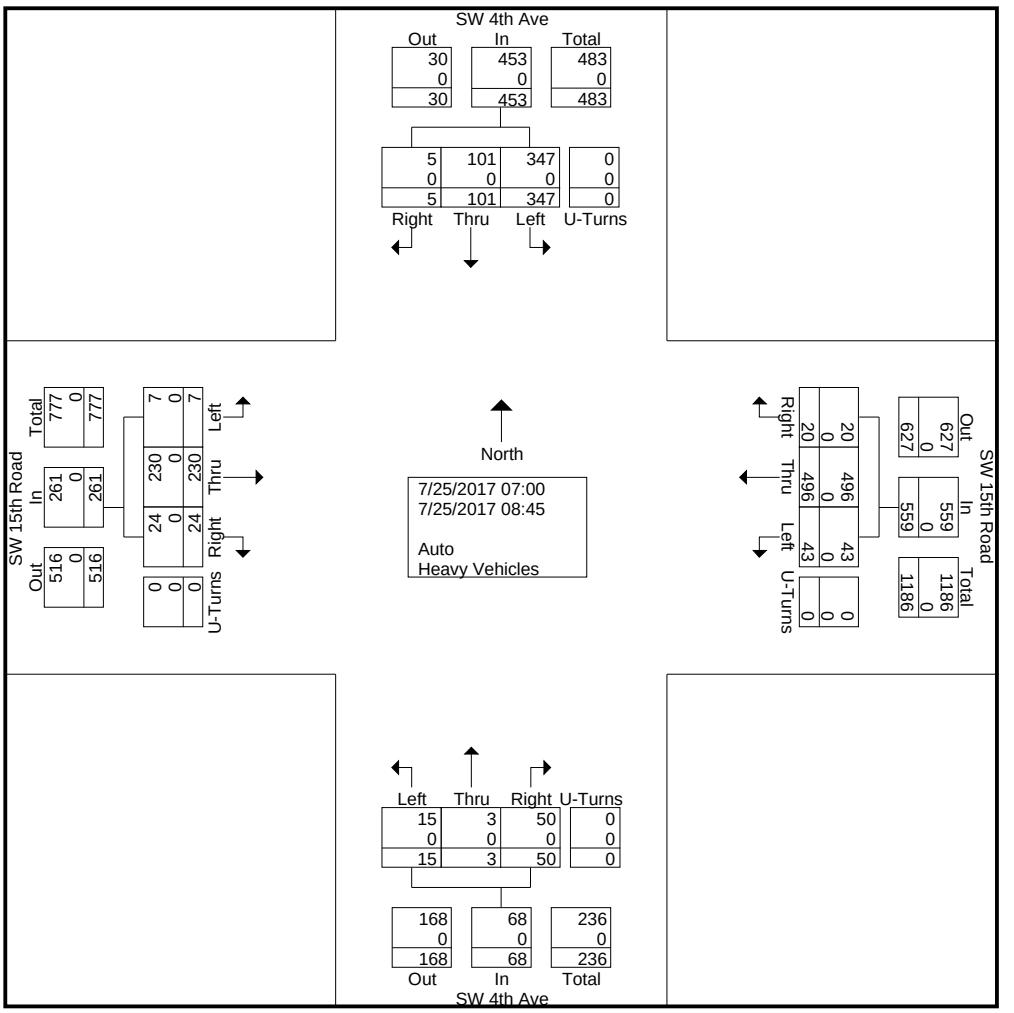
A Traffic Data Collection Company
O.(305)235-1553 F.(305)235-7703

CLIENT : Traf Tech Engineering, Inc.
JOB NO : 2017-53
PROJECT: The Roads
COUNTY: Miami-Dade

File Name : 3- SW 4th Ave & SW 15th Road
Site Code : 00000000
Start Date : 7/25/2017
Page No : 1

Groups Printed- Auto - Heavy Vehicles

	SW 4th Ave From North					SW 15th Road From East					SW 4th Ave From South					SW 15th Road From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
07:00	1	10	36	0	47	2	39	2	0	43	6	1	1	0	8	0	11	2	0	13	111
07:15	0	8	34	0	42	4	42	3	0	49	3	0	2	0	5	0	19	0	0	19	115
07:30	1	9	36	0	46	5	60	3	0	68	2	0	1	0	3	1	23	1	0	25	142
07:45	0	12	45	0	57	2	62	5	0	69	5	1	3	0	9	1	25	2	0	28	163
Total	2	39	151	0	192	13	203	13	0	229	16	2	7	0	25	2	78	5	0	85	531
08:00	2	15	54	0	71	2	74	9	0	85	8	1	3	0	12	7	22	1	0	30	198
08:15	0	16	53	0	69	2	73	7	0	82	9	0	2	0	11	3	41	0	0	44	206
08:30	1	19	42	0	62	1	79	8	0	88	10	0	1	0	11	8	45	1	0	54	215
08:45	0	12	47	0	59	2	67	6	0	75	7	0	2	0	9	4	44	0	0	48	191
Total	3	62	196	0	261	7	293	30	0	330	34	1	8	0	43	22	152	2	0	176	810
Grand Total	5	101	347	0	453	20	496	43	0	559	50	3	15	0	68	24	230	7	0	261	1341
Apprch %	1.1	22.3	76.6	0		3.6	88.7	7.7	0		73.5	4.4	22.1	0		9.2	88.1	2.7	0		
Total %	0.4	7.5	25.9	0	33.8	1.5	37	3.2	0	41.7	3.7	0.2	1.1	0	5.1	1.8	17.2	0.5	0	19.5	
Auto	5	101	347	0	453	20	496	43	0	559	50	3	15	0	68	24	230	7	0	261	1341
% Auto	100	100	100	0	100	100	100	100	0	100	100	100	100	0	100	100	100	100	0	100	100
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



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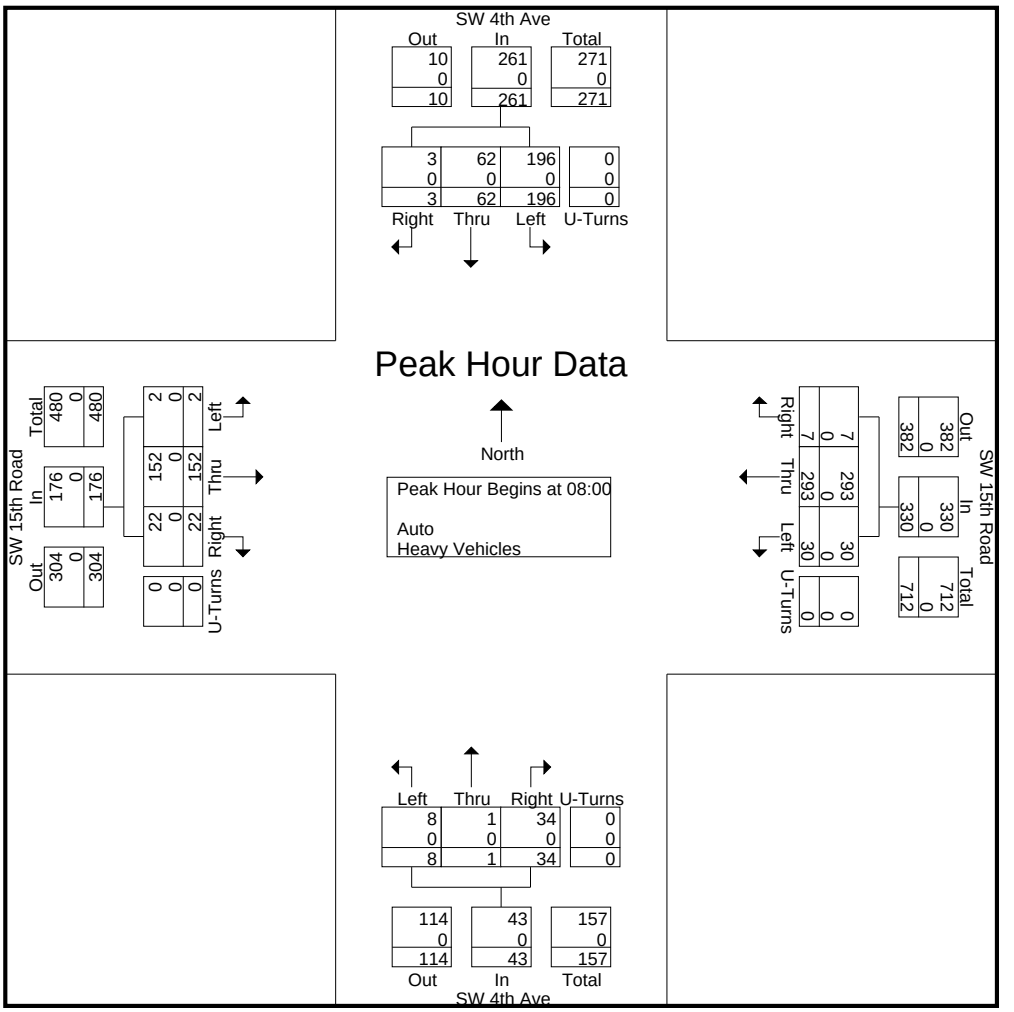
	SW 4th Ave From North					SW 15th Road From East					SW 4th Ave From South					SW 15th Road From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00																					
08:00	2	15	54	0	71	2	74	9	0	85	8	1	3	0	12	7	22	1	0	30	198
08:15	0	16	53	0	69	2	73	7	0	82	9	0	2	0	11	3	41	0	0	44	206
08:30	1	19	42	0	62	1	79	8	0	88	10	0	1	0	11	8	45	1	0	54	215
08:45	0	12	47	0	59	2	67	6	0	75	7	0	2	0	9	4	44	0	0	48	191
Total Volume	3	62	196	0	261	7	293	30	0	330	34	1	8	0	43	22	152	2	0	176	810
% App. Total	1.1	23.8	75.1	0		2.1	88.8	9.1	0		79.1	2.3	18.6	0		12.5	86.4	1.1	0		
PHF	.375	.816	.907	.000	.919	.875	.927	.833	.000	.938	.850	.250	.667	.000	.896	.688	.844	.500	.000	.815	.942
Auto	3	62	196	0	261	7	293	30	0	330	34	1	8	0	43	22	152	2	0	176	810
% Auto	100	100	100	0	100	100	100	100	0	100	100	100	100	0	100	100	100	100	0	100	100
Heavy Vehicles																					
% Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



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COUNTY: Miami-Dade

File Name : 3- SW 4th Ave & SW 15th Road
Site Code : 00000000
Start Date : 7/25/2017
Page No : 1

Groups Printed- Peds

	SW 4th Ave From North				SW 15th Road From East				SW 4th Ave From South				SW 15th Road From West				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
07:00	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	2
07:30	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	3
07:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Total	0	0	0	1	0	0	0	1	0	0	0	3	0	0	0	1	6
08:00	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0	3
08:30	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	3
Total	0	0	0	0	0	0	0	1	0	0	0	4	0	0	0	1	6
Grand Total	0	0	0	1	0	0	0	2	0	0	0	7	0	0	0	2	12
Apprch %	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	
Total %	0	0	0	8.3	0	0	0	16.7	0	0	0	58.3	0	0	0	16.7	

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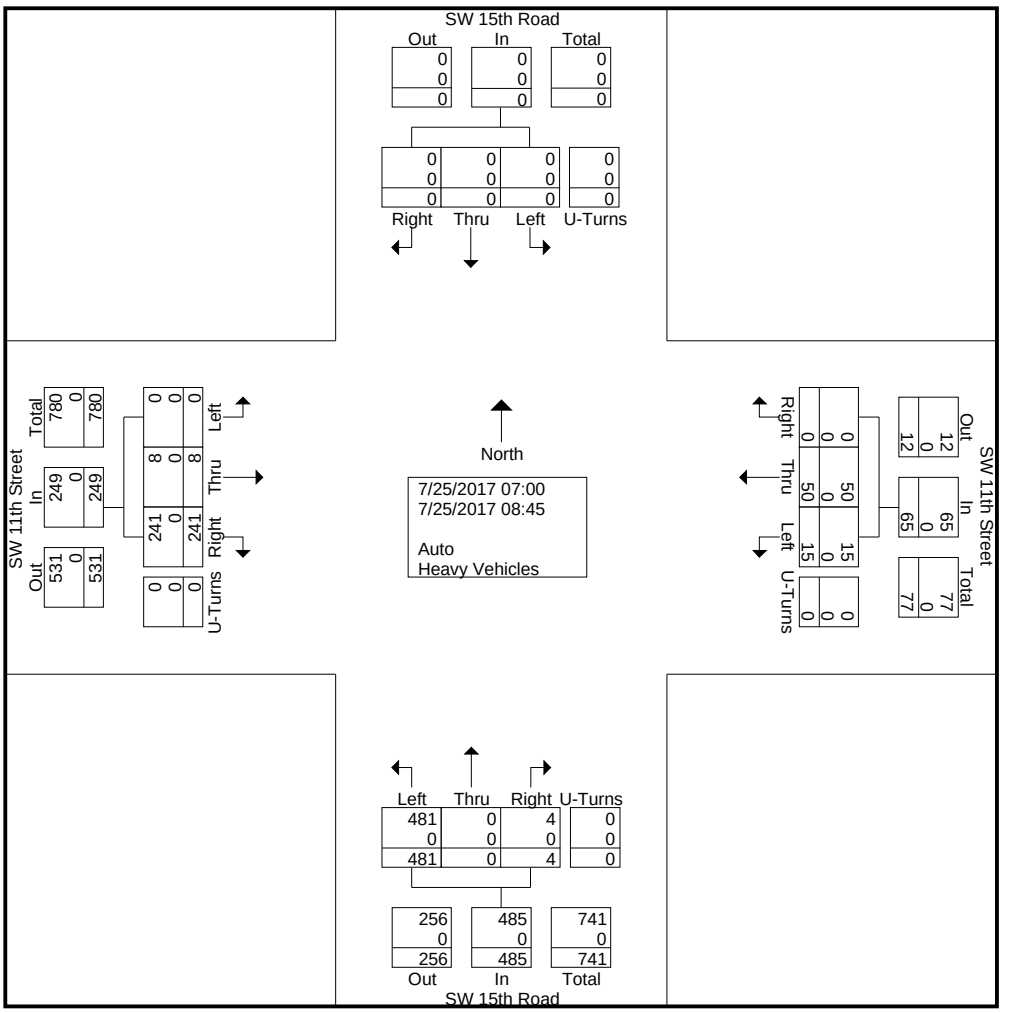
Site Code : 00000000
Start Date : 7/25/2017
Page No : 1

Groups Printed- Auto - Heavy Vehicles

	SW 15th Road From North					SW 11th Street From East					SW 15th Road From South					SW 11th Street From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
07:00	0	0	0	0	0	0	3	1	0	4	1	0	37	0	38	10	1	0	0	11	53
07:15	0	0	0	0	0	0	5	0	0	5	0	0	41	0	41	18	0	0	0	18	64
07:30	0	0	0	0	0	0	7	1	0	8	0	0	63	0	63	23	2	0	0	25	96
07:45	0	0	0	0	0	0	6	2	0	8	0	0	62	0	62	26	1	0	0	27	97
Total	0	0	0	0	0	0	21	4	0	25	1	0	203	0	204	77	4	0	0	81	310
08:00	0	0	0	0	0	0	4	2	0	6	1	0	65	0	66	28	0	0	0	28	100
08:15	0	0	0	0	0	0	8	3	0	11	0	0	70	0	70	39	2	0	0	41	122
08:30	0	0	0	0	0	0	10	6	0	16	2	0	78	0	80	50	2	0	0	52	148
08:45	0	0	0	0	0	0	7	0	0	7	0	0	65	0	65	47	0	0	0	47	119
Total	0	0	0	0	0	0	29	11	0	40	3	0	278	0	281	164	4	0	0	168	489
Grand Total	0	0	0	0	0	0	50	15	0	65	4	0	481	0	485	241	8	0	0	249	799
Apprch %	0	0	0	0		0	76.9	23.1	0		0.8	0	99.2	0		96.8	3.2	0	0		
Total %	0	0	0	0	0	0	6.3	1.9	0	8.1	0.5	0	60.2	0	60.7	30.2	1	0	0	31.2	
Auto	0	0	0	0	0	0	50	15	0	65	4	0	481	0	485	241	8	0	0	249	799
% Auto	0	0	0	0	0	0	100	100	0	100	100	0	100	0	100	100	100	0	0	100	100
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



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File Name : 1- SW 11th St & SW 15th Road
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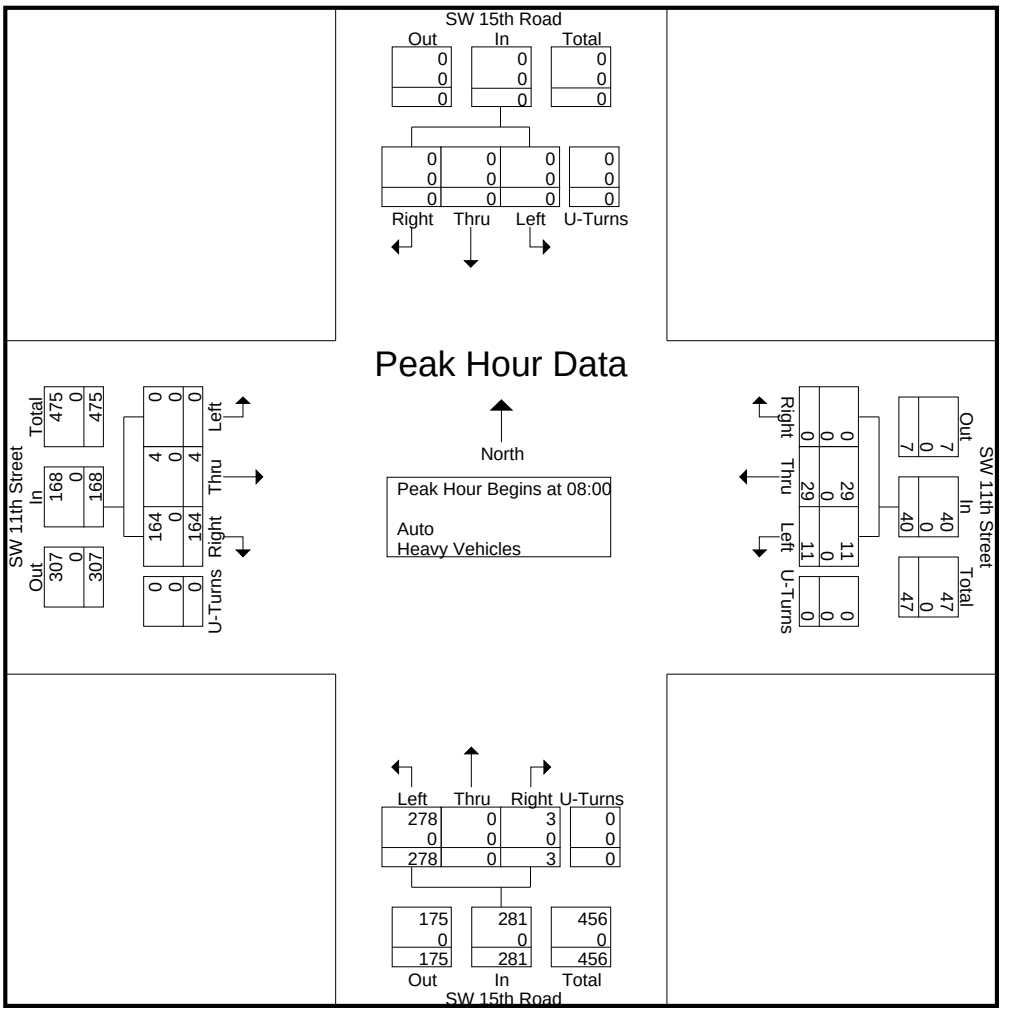
Page No : 2

	SW 15th Road From North					SW 11th Street From East					SW 15th Road From South					SW 11th Street From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00																					
08:00	0	0	0	0	0	0	4	2	0	6	1	0	65	0	66	28	0	0	0	28	100
08:15	0	0	0	0	0	0	8	3	0	11	0	0	70	0	70	39	2	0	0	41	122
08:30	0	0	0	0	0	0	10	6	0	16	2	0	78	0	80	50	2	0	0	52	148
08:45	0	0	0	0	0	0	7	0	0	7	0	0	65	0	65	47	0	0	0	47	119
Total Volume	0	0	0	0	0	0	29	11	0	40	3	0	278	0	281	164	4	0	0	168	489
% App. Total	0	0	0	0		0	72.5	27.5	0		1.1	0	98.9	0		97.6	2.4	0	0		
PHF	.000	.000	.000	.000	.000	.000	.725	.458	.000	.625	.375	.000	.891	.000	.878	.820	.500	.000	.000	.808	.826
Auto	0	0	0	0	0	0	29	11	0	40	3	0	278	0	281	164	4	0	0	168	489
% Auto	0	0	0	0	0	0	100	100	0	100	100	0	100	0	100	100	100	0	0	100	100
Heavy Vehicles																					
% Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Video Data Solutions, Inc.

A Traffic Data Collection Company
O.(305)235-1553 F.(305)235-7703

CLIENT : Traf Tech Engineering, Inc.
JOB NO : 2017-53
PROJECT: The Roads
COUNTY: Miami-Dade

File Name : 1- SW 11th St & SW 15th Road
Site Code : 00000000
Start Date : 7/25/2017
Page No : 1

Groups Printed- Peds

	SW 15th Road From North				SW 11th Street From East				SW 15th Road From South				SW 11th Street From West				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
07:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
07:30	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	2
07:45	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	4
08:00	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0	0	3
08:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Total	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	4
Grand Total	0	0	0	0	0	0	0	4	0	0	0	4	0	0	0	0	8
Apprch %	0	0	0	0	0	0	0	100	0	0	0	100	0	0	0	0	
Total %	0	0	0	0	0	0	0	50	0	0	0	50	0	0	0	0	

Video Data Solutions, Inc.

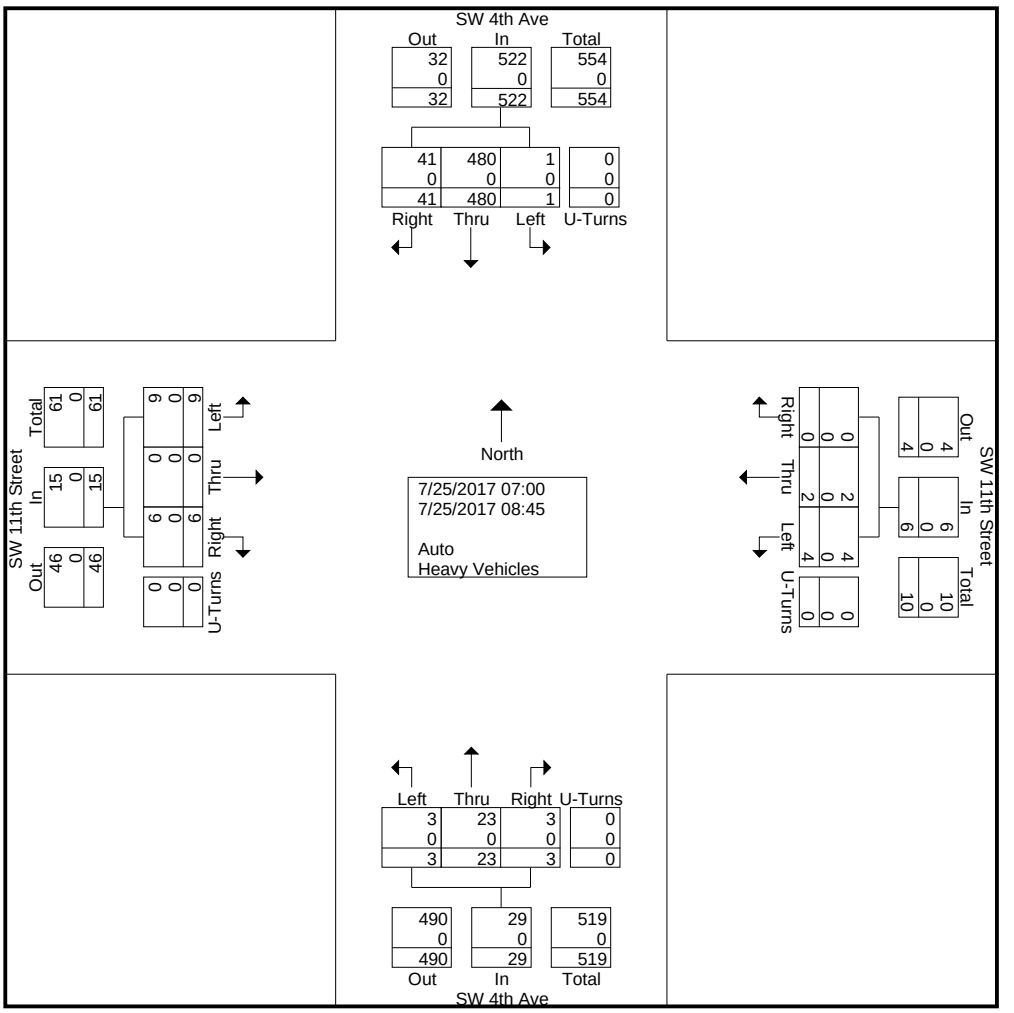
A Traffic Data Collection Company
O.(305)235-1553 F.(305)235-7703

CLIENT : Traf Tech Engineering, Inc.
JOB NO : 2017-53
PROJECT: The Roads
COUNTY: Miami-Dade

File Name : 2- SW 4th Ave & SW 11th St
Site Code : 00000000
Start Date : 7/25/2017
Page No : 1

Groups Printed- Auto - Heavy Vehicles

	SW 4th Ave From North					SW 11th Street From East					SW 4th Ave From South					SW 11th Street From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
07:00	4	47	0	0	51	0	1	1	0	2	1	2	1	0	4	1	0	0	0	1	58
07:15	3	45	0	0	48	0	0	0	0	0	1	3	0	0	4	0	0	1	0	1	53
07:30	3	46	0	0	49	0	1	0	0	1	0	7	1	0	8	1	0	1	0	2	60
07:45	5	55	0	0	60	0	0	0	0	0	0	4	1	0	5	2	0	0	0	2	67
Total	15	193	0	0	208	0	2	1	0	3	2	16	3	0	21	4	0	2	0	6	238
08:00	3	72	0	0	75	0	0	0	0	0	0	3	0	0	3	0	0	1	0	1	79
08:15	6	73	0	0	79	0	0	2	0	2	0	2	0	0	2	1	0	0	0	1	84
08:30	8	70	1	0	79	0	0	1	0	1	1	1	0	0	2	1	0	4	0	5	87
08:45	9	72	0	0	81	0	0	0	0	0	0	1	0	0	1	0	0	2	0	2	84
Total	26	287	1	0	314	0	0	3	0	3	1	7	0	0	8	2	0	7	0	9	334
Grand Total	41	480	1	0	522	0	2	4	0	6	3	23	3	0	29	6	0	9	0	15	572
Apprch %	7.9	92	0.2	0		0	33.3	66.7	0		10.3	79.3	10.3	0		40	0	60	0		
Total %	7.2	83.9	0.2	0	91.3	0	0.3	0.7	0	1	0.5	4	0.5	0	5.1	1	0	1.6	0	2.6	
Auto	41	480	1	0	522	0	2	4	0	6	3	23	3	0	29	6	0	9	0	15	572
% Auto	100	100	100	0	100	0	100	100	0	100	100	100	100	0	100	100	0	100	0	100	100
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



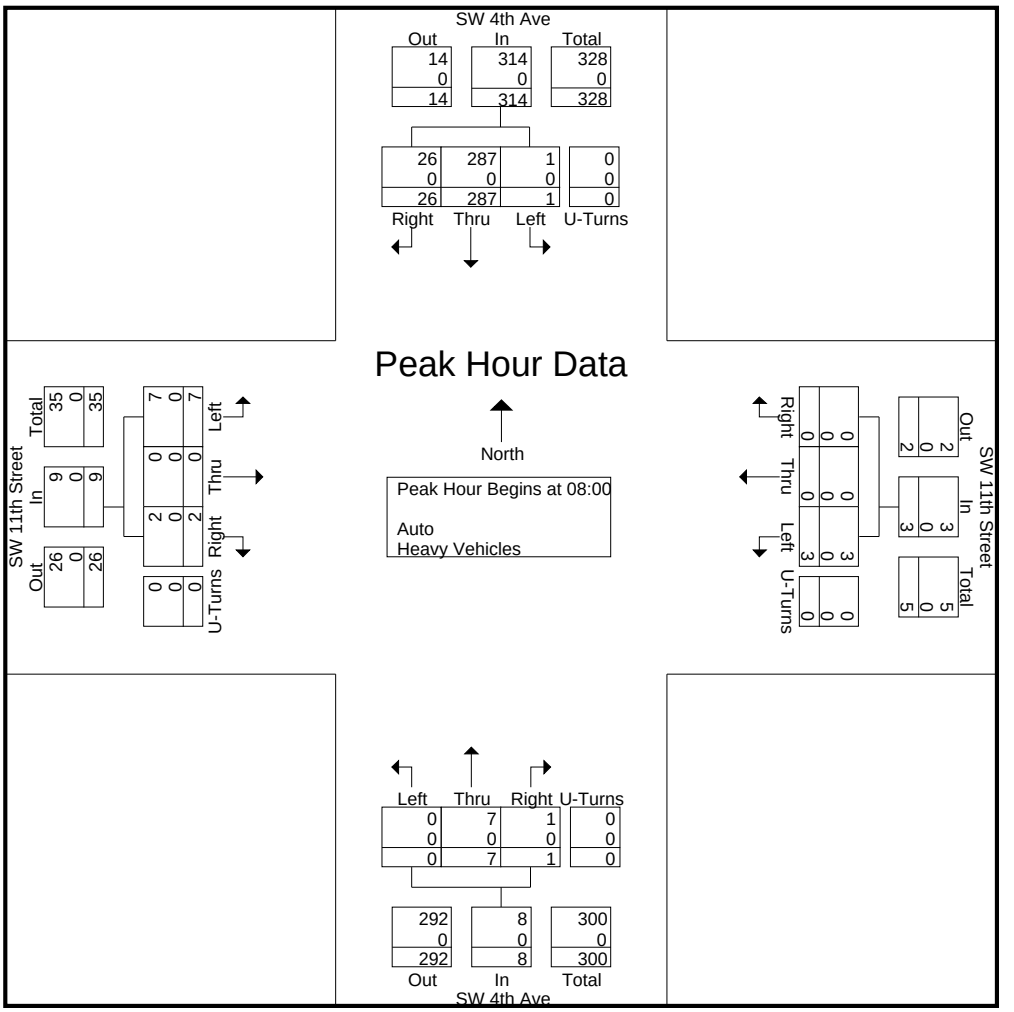
Video Data Solutions, Inc.

A Traffic Data Collection Company
O.(305)235-1553 F.(305)235-7703

CLIENT : Traf Tech Engineering, Inc.
JOB NO : 2017-53
PROJECT: The Roads
COUNTY: Miami-Dade

File Name : 2- SW 4th Ave & SW 11th St
Site Code : 00000000
Start Date : 7/25/2017
Page No : 2

	SW 4th Ave From North					SW 11th Street From East					SW 4th Ave From South					SW 11th Street From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00																					
08:00	3	72	0	0	75	0	0	0	0	0	0	3	0	0	3	0	0	1	0	1	79
08:15	6	73	0	0	79	0	0	2	0	2	0	2	0	0	2	1	0	0	0	1	84
08:30	8	70	1	0	79	0	0	1	0	1	1	1	0	0	2	1	0	4	0	5	87
08:45	9	72	0	0	81	0	0	0	0	0	0	1	0	0	1	0	0	2	0	2	84
Total Volume	26	287	1	0	314	0	0	3	0	3	1	7	0	0	8	2	0	7	0	9	334
% App. Total	8.3	91.4	0.3	0		0	0	100	0		12.5	87.5	0	0		22.2	0	77.8	0		
PHF	.722	.983	.250	.000	.969	.000	.000	.375	.000	.375	.250	.583	.000	.000	.667	.500	.000	.438	.000	.450	.960
Auto	26	287	1	0	314	0	0	3	0	3	1	7	0	0	8	2	0	7	0	9	334
% Auto	100	100	100	0	100	0	0	100	0	100	100	100	0	0	100	100	0	100	0	100	100
Heavy Vehicles																					
% Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Video Data Solutions, Inc.

A Traffic Data Collection Company
O.(305)235-1553 F.(305)235-7703

CLIENT : Traf Tech Engineering, Inc.
JOB NO : 2017-53
PROJECT: The Roads
COUNTY: Miami-Dade

File Name : 2- SW 4th Ave & SW 11th St
Site Code : 00000000
Start Date : 7/25/2017
Page No : 1

Groups Printed- Peds

	SW 4th Ave From North				SW 11th Street From East				SW 4th Ave From South				SW 11th Street From West				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
07:00	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	3
07:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
07:30	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	4
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	0	0	1	0	0	0	4	0	0	0	1	0	0	0	3	9
08:00	0	0	0	1	0	0	0	2	0	0	0	1	0	0	0	0	4
08:15	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	2	4
08:30	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1	3
Total	0	0	0	3	0	0	0	3	0	0	0	2	0	0	0	3	11
Grand Total	0	0	0	4	0	0	0	7	0	0	0	3	0	0	0	6	20
Apprch %	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	
Total %	0	0	0	20	0	0	0	35	0	0	0	15	0	0	0	30	

KLA SCHOOLS, 600 SW 1ST AVENUE, MIAMI, FL 33130

	ENTER			EXIT		
TIME	DROPOFF	PK LOT	PEDS	PICKUP	PK LOT	PEDS
800-815	4	1	1	0	0	0
815-830	7	7	5	0	0	0
830-845	14	7	4	0	0	0
845-900	19	9	2	0	2	0
900-0915	21	15	3	0	3	0
915-930	15	2	1	0	9	0
1130-1145	0	0	0	3	0	0
1145-1200	0	0	0	2	3	0
1200-1215	0	1	0	6	1	7
1215-1230	0	1	0	8	2	2
1230-1245	0	0	0	4	0	0
1245-1300	0	0	0	9	0	2
1300-1315	0	0	0	4	2	0
1315-1330	0	0	0	1	0	0
1330-1345	0	3	0	0	2	1
1345-1400	0	0	0	0	0	0
1400-1415	0	2	0	1	1	0
1415-1430	0	0	0	0	0	1
1430-1445	0	0	0	0	3	0
1445-1500	0	6	0	15	4	2
1500-1515	0	0	0	10	3	1
1515-1530	0	0	0	4	0	0
1530-1545	0	0	0	0	0	1
1545-1600	0	0	0	1	0	0
1600-1615	0	0	0	4	1	0
1615-1630	0	0	0	2	2	0
1630-1645	0	0	0	5	6	1
1645-1700	0	0	0	3	1	2
1700-1715	0	0	0	2	2	5
1715-1730	0	0	0	9	1	1
1730-1745	0	0	0	4	1	0
1745-1800	0	0	0	3	0	2
1800-1815	0	0	0	3	1	0
1815-1830	0	0	0	1	1	1

APPENDIX C

Historical Traffic Counts Peak Season and Conversion Factors

2016 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
CATEGORY: 8701 MIAMI-DADE SOUTH

MOCF: 0.99

WEEK	DATES	SF	PSCF
1	01/01/2016 - 01/02/2016	0.99	1.00
2	01/03/2016 - 01/09/2016	1.00	1.01
3	01/10/2016 - 01/16/2016	1.02	1.03
4	01/17/2016 - 01/23/2016	1.01	1.02
5	01/24/2016 - 01/30/2016	1.01	1.02
6	01/31/2016 - 02/06/2016	1.00	1.01
7	02/07/2016 - 02/13/2016	0.99	1.00
* 8	02/14/2016 - 02/20/2016	0.99	1.00
* 9	02/21/2016 - 02/27/2016	0.99	1.00
*10	02/28/2016 - 03/05/2016	0.99	1.00
*11	03/06/2016 - 03/12/2016	0.99	1.00
*12	03/13/2016 - 03/19/2016	0.99	1.00
*13	03/20/2016 - 03/26/2016	0.99	1.00
*14	03/27/2016 - 04/02/2016	0.99	1.00
*15	04/03/2016 - 04/09/2016	0.98	0.99
*16	04/10/2016 - 04/16/2016	0.98	0.99
*17	04/17/2016 - 04/23/2016	0.98	0.99
*18	04/24/2016 - 04/30/2016	0.99	1.00
*19	05/01/2016 - 05/07/2016	0.99	1.00
*20	05/08/2016 - 05/14/2016	0.99	1.00
21	05/15/2016 - 05/21/2016	1.00	1.01
22	05/22/2016 - 05/28/2016	1.00	1.01
23	05/29/2016 - 06/04/2016	1.00	1.01
24	06/05/2016 - 06/11/2016	1.00	1.01
25	06/12/2016 - 06/18/2016	1.00	1.01
26	06/19/2016 - 06/25/2016	1.01	1.02
27	06/26/2016 - 07/02/2016	1.02	1.03
28	07/03/2016 - 07/09/2016	1.02	1.03
29	07/10/2016 - 07/16/2016	1.03	1.04
30	07/17/2016 - 07/23/2016	1.03	1.04
31	07/24/2016 - 07/30/2016	1.02	1.03
32	07/31/2016 - 08/06/2016	1.02	1.03
33	08/07/2016 - 08/13/2016	1.01	1.02
34	08/14/2016 - 08/20/2016	1.01	1.02
35	08/21/2016 - 08/27/2016	1.01	1.02
36	08/28/2016 - 09/03/2016	1.02	1.03
37	09/04/2016 - 09/10/2016	1.02	1.03
38	09/11/2016 - 09/17/2016	1.03	1.04
39	09/18/2016 - 09/24/2016	1.02	1.03
40	09/25/2016 - 10/01/2016	1.01	1.02
41	10/02/2016 - 10/08/2016	1.00	1.01
42	10/09/2016 - 10/15/2016	1.00	1.01
43	10/16/2016 - 10/22/2016	1.00	1.01
44	10/23/2016 - 10/29/2016	1.00	1.01
45	10/30/2016 - 11/05/2016	1.00	1.01
46	11/06/2016 - 11/12/2016	1.00	1.01
47	11/13/2016 - 11/19/2016	1.01	1.02
48	11/20/2016 - 11/26/2016	1.00	1.01
49	11/27/2016 - 12/03/2016	1.00	1.01
50	12/04/2016 - 12/10/2016	0.99	1.00
51	12/11/2016 - 12/17/2016	0.99	1.00
52	12/18/2016 - 12/24/2016	1.00	1.01
53	12/25/2016 - 12/31/2016	1.02	1.03

* PEAK SEASON

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2016 HISTORICAL AADT REPORT

COUNTY: 87 - MIAMI-DADE

SITE: 1035 - SR 972/SW 3 AV, 200' NE SW 18 RD

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2016	21300 C	N 9800	S 11500	9.00	56.10	4.80
2015	21000 C	N 10000	S 11000	9.00	57.40	5.00
2014	18200 C	N 8800	S 9400	9.00	59.30	14.80
2013	20900 C	N 9900	S 11000	9.00	58.90	2.20
2012	20500 C	N 9500	S 11000	9.00	59.70	2.50
2011	21000 C	N 10000	S 11000	9.00	58.20	3.70
2010	22500 C	N 11000	S 11500	7.87	58.27	3.70
2009	21000 C	N 10500	S 10500	7.98	59.96	4.40
2008	21000 C	N 10500	S 10500	8.07	66.31	3.20
2007	20900 C	N 9900	S 11000	7.90	63.12	1.10
2006	20600 C	N 11000	S 9600	7.39	58.66	1.60
2005	20400 C	N 9900	S 10500	7.70	65.70	3.70
2004	20000 C	N 9500	S 10500	8.20	67.10	3.70
2003	17700 C	N 8300	S 9400	8.10	72.30	3.20
2002	19000 C	N 9400	S 9600	9.20	68.00	6.20
2001	19500 C	N 9000	S 10500	8.20	53.50	3.10

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2016 HISTORICAL AADT REPORT

COUNTY: 87 - MIAMI-DADE

SITE: 8234 - SW 15TH ROAD, 100' WEST OF SW 2ND AVENUE

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2016	4600 T	N 1100	S 3500	9.00	56.10	4.30
2015	4700 S	N 1100	S 3600	9.00	57.40	7.30
2014	4700 F	N 1100	S 3600	9.00	59.30	19.10
2013	4700 C	N 1100	S 3600	9.00	58.90	16.20
2012	4200 F	N 1000	S 3200	9.00	59.70	16.00
2011	4200 C	N 1000	S 3200	9.00	58.20	14.70

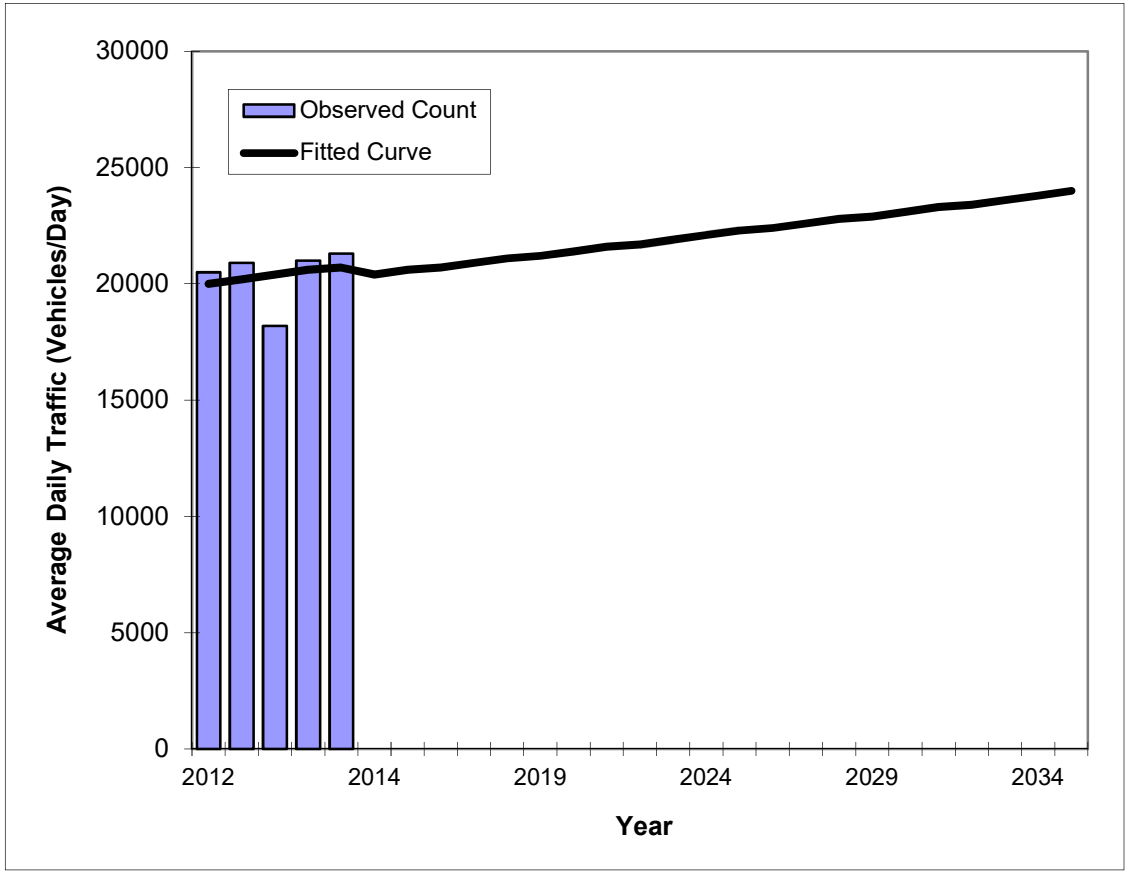
AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

Traffic Trends - V2.0

SR 972/SW 3 AVE -- 200' NE SW 18 RD

PIN#	0
Location	2

County:	Broward
Station #:	1035
Highway:	SR 972/SW 3 AVE



Year	Traffic (ADT/AADT) Count*	Trend**
2012	20500	20000
2013	20900	20200
2014	18200	20400
2015	21000	20600
2016	21300	20700
2017 Opening Year Trend		
2017	N/A	20900
2018 Mid-Year Trend		
2018	N/A	21100
2020 Design Year Trend		
2020	N/A	21400
TRANPLAN Forecasts/Trends		

**** Annual Trend Increase:**	170
Trend R-squared:	4.61%
Trend Annual Historic Growth Rate:	0.88%
Trend Growth Rate (2016 to Design Year):	0.85%
Printed:	26-Jul-17

Straight Line Growth Option

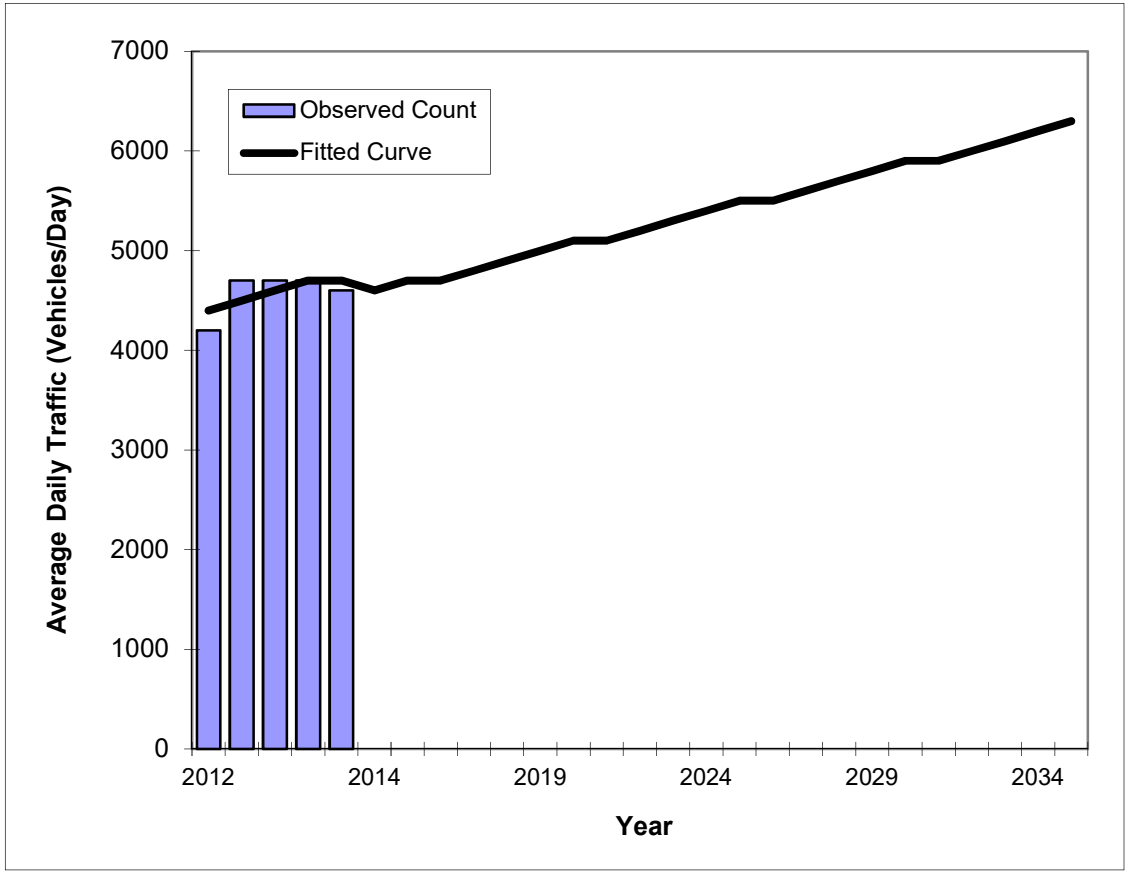
***Axle-Adjusted**

Traffic Trends - V2.0

SW 15 ROAD -- 100' WEST OF SW 2ND AVENUE

PIN#	0
Location	1

County:	Broward
Station #:	8234
Highway:	SW 15 ROAD



Year	Traffic (ADT/AADT) Count*	Trend**
2012	4200	4400
2013	4700	4500
2014	4700	4600
2015	4700	4700
2016	4600	4700
2017 Opening Year Trend		
2017	N/A	4800
2018 Mid-Year Trend		
2018	N/A	4900
2020 Design Year Trend		
2020	N/A	5100
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

**** Annual Trend Increase:**	80
Trend R-squared:	34.04%
Trend Annual Historic Growth Rate:	1.70%
Trend Growth Rate (2016 to Design Year):	2.13%
Printed:	26-Jul-17

Straight Line Growth Option

Growth Rate Trend Analysis Calcualtions

Description	Station #		
	1035	8234	
Trend Growth Rate(1)	0.85	2.13	
Adjusted Trend Growth Rate	0.85	2.13	
Average Growth Rate			1.49
Growth Rate Used			**1.50**

Notes:

1: Refer to Trend Analysis Chart

APPENDIX D

Projected Turning Movement Volumes

FUTURE TURNING MOVEMENT VOLUME ANALYSIS

SW15th Road and SW 11th Street
AM Peak Hour

Description	SW 15th Road Northwestbound						SW 11th Street Eastbound			SW 11th Street Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing Traffic (7/25/2017)	278		3				0	4	164	11	29	0
Season Adjustment Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Non School to School Adjustment	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
2017 Peak Season Traffic	321	0	3	0	0	0	0	5	189	13	33	0
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
2020 Background Traffic	335	0	4	0	0	0	0	5	198	13	35	0
School	29							35				
2020 Total Traffic	**364**	**0**	**4**	**0**	**0**	**0**	**0**	**40**	**198**	**13**	**35**	**0**

FUTURE TURNING MOVEMENT VOLUME ANALYSIS

SW 4th Avenue and SW 11th Street
AM Peak Hour

Description	SW 4th Avenue Northbound			SW 4th Avenue Southbound			SW 11th Street Eastbound			SW 11th Street Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing Traffic (7/25/2017)	0	7	1	1	287	26	7	0	2	3	0	0
Season Adjustment Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Non School to School Adjustment	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
2017 Peak Season Traffic	0	8	1	1	331	30	8	0	2	3	0	0
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
2020 Background Traffic	0	8	1	1	346	31	8	0	2	4	0	0
School		29	83	35				35				
2020 Total Traffic	**0**	**37**	**84**	**36**	**346**	**31**	**8**	**35**	**2**	**4**	**0**	**0**

FUTURE TURNING MOVEMENT VOLUME ANALYSIS

SW15th Road and SW 4th Avenue
AM Peak Hour

Description	SW 15th Road Northwestbound			SW 15th Road Southeastbound			SW 4th Avenue Northeastbound			SW 4th Avenue Southbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing Traffic (7/25/2017)	30	293	7	2	152	22	8	1	34	196	62	3
Season Adjustment Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Non School to School Adjustment	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
2017 Peak Season Traffic	35	338	8	2	175	25	9	1	39	226	72	3
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
2020 Background Traffic	36	353	8	2	183	27	10	1	41	236	75	4
School	68	29	78					34				
2020 Total Traffic	**104**	**382**	**86**	**2**	**183**	**27**	**10**	**35**	**41**	**236**	**75**	**4**

FUTURE TURNING MOVEMENT VOLUME ANALYSIS

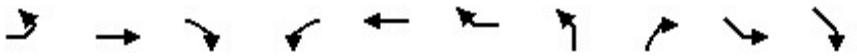
SW15th Road and SW 3rd Avenue
AM Peak Hour

Description	SW 15th Road Southeastbound				SW 15th Road Northwestbound			SW 3rd Avenue Southbound			SW 3th Avenue Eastbound				SW 13th Street Westbound			
	H-Left	Left	Right	H-Right	Left	Through	Right	Left	Through	Right	H-Left	Left	Through	Right	Left	Through	Right	H-Right
Existing Traffic (4/20/2017)	143	118	85	44			16			114			730	437		517	327	38
Season Adjustment Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
2017 Peak Season Traffic	142	117	84	44	0	0	16	0	0	113	0	0	723	433	0	512	324	38
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
2020 Background Traffic	148	122	88	46	0	0	17	0	0	118	0	0	756	452	0	535	339	39
School		40															49	
2020 Total Traffic	**148**	**162**	**88**	**46**	**0**	**0**	**17**	**0**	**0**	**118**	**0**	**0**	**756**	**452**	**0**	**535**	**388**	**39**

APPENDIX E

Intersection Capacity Analyses

HCM Unsignalized Intersection Capacity Analysis
201: SW 15th Road & SW 3rd Avenue & SW 13th Street



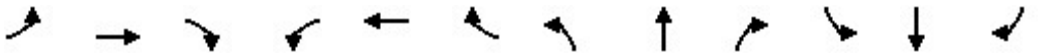
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SEL	SER
Lane Configurations										
Traffic Volume (veh/h)	0	723	433	0	512	437	0	16	117	84
Future Volume (Veh/h)	0	723	433	0	512	437	0	16	117	84
Sign Control		Free			Free		Stop		Stop	
Grade		0%			0%		0%		0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	0	769	461	0	545	465	0	17	124	89
Pedestrians										
Lane Width (ft)										
Walking Speed (ft/s)										
Percent Blockage										
Right turn flare (veh)										
Median type		None			None					
Median storage veh)										
Upstream signal (ft)										
pX, platoon unblocked										
vC, conflicting volume	1010			1230			2010	615	1179	2008
vC1, stage 1 conf vol										
vC2, stage 2 conf vol										
vCu, unblocked vol	1010			1230			2010	615	1179	2008
tC, single (s)	4.1			4.1			6.5	6.9	*6.5	6.5
tC, 2 stage (s)										
tF (s)	2.2			2.2			4.0	3.3	3.5	4.0
p0 queue free %	100			100			100	96	37	0
cM capacity (veh/h)	682			562			58	434	197	59

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SE 1
Volume Total	513	717	363	647	17	213
Volume Left	0	0	0	0	0	124
Volume Right	0	461	0	465	17	0
cSH	1700	1700	1700	1700	434	99
Volume to Capacity	0.30	0.42	0.21	0.38	0.04	2.15
Queue Length 95th (ft)	0	0	0	0	3	464
Control Delay (s)	0.0	0.0	0.0	0.0	13.6	619.3
Lane LOS					B	F
Approach Delay (s)	0.0		0.0		13.6	619.3
Approach LOS					B	F

Intersection Summary				
Average Delay	53.5			
Intersection Capacity Utilization	52.1%	ICU Level of Service		A
Analysis Period (min)	15			

* User Entered Value

HCM Unsignalized Intersection Capacity Analysis
202: SW 4th Avenue & SW 15th Road

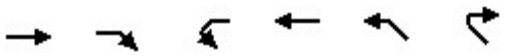


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	175	25	35	338	8	9	1	39	226	72	3
Future Volume (Veh/h)	2	175	25	35	338	8	9	1	39	226	72	3
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	2	186	27	37	360	9	10	1	41	240	77	3
Pedestrians		1			1			4				
Lane Width (ft)		12.0			12.0			12.0				
Walking Speed (ft/s)		3.5			3.5			3.5				
Percent Blockage		0			0			0				
Right turn flare (veh)												
Median type		Raised			Raised							
Median storage veh)		1			1							
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	369			217			688	650	204	684	660	366
vC1, stage 1 conf vol							208	208		438	438	
vC2, stage 2 conf vol							481	443		246	221	
vCu, unblocked vol	369			217			688	650	204	684	660	366
tC, single (s)	4.1			4.1			*6.5	6.5	6.2	*6.5	6.5	6.2
tC, 2 stage (s)							5.5	5.5		5.5	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			97			98	100	95	49	83	100
cM capacity (veh/h)	1190			1348			426	452	832	474	446	679

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	215	406	52	320
Volume Left	2	37	10	240
Volume Right	27	9	41	3
cSH	1190	1348	694	469
Volume to Capacity	0.00	0.03	0.07	0.68
Queue Length 95th (ft)	0	2	6	127
Control Delay (s)	0.1	1.0	10.6	27.6
Lane LOS	A	A	B	D
Approach Delay (s)	0.1	1.0	10.6	27.6
Approach LOS			B	D

Intersection Summary			
Average Delay	9.9		
Intersection Capacity Utilization	64.6%	ICU Level of Service	C
Analysis Period (min)	15		

* User Entered Value

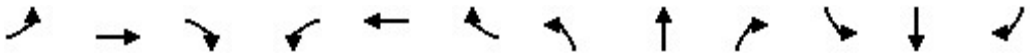


Movement	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (veh/h)	5	189	13	33	321	3
Future Volume (Veh/h)	5	189	13	33	321	3
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Hourly flow rate (vph)	6	230	16	40	391	4
Pedestrians	2				1	
Lane Width (ft)	12.0				12.0	
Walking Speed (ft/s)	3.5				3.5	
Percent Blockage	0				0	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			237		196	122
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			237		196	122
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		50	100
cM capacity (veh/h)			1329		781	928

Direction, Lane #	EB 1	WB 1	NW 1
Volume Total	236	56	395
Volume Left	0	16	391
Volume Right	230	0	4
cSH	1700	1329	782
Volume to Capacity	0.14	0.01	0.50
Queue Length 95th (ft)	0	1	72
Control Delay (s)	0.0	2.3	14.2
Lane LOS		A	B
Approach Delay (s)	0.0	2.3	14.2
Approach LOS			B

Intersection Summary			
Average Delay	8.4		
Intersection Capacity Utilization	37.8%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis
204: SW 4th Avenue & SW 11th Street



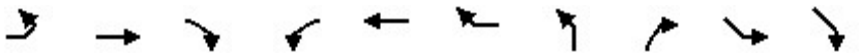
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	0	2	3	0	0	0	8	1	1	331	30
Future Volume (Veh/h)	8	0	2	3	0	0	0	8	1	1	331	30
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	8	0	2	3	0	0	0	8	1	1	345	31
Pedestrians		3			3			2			3	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		3.5			3.5			3.5			3.5	
Percent Blockage		0			0			0			0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	377	378	366	378	392	14	379			12		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	377	378	366	378	392	14	379			12		
tC, single (s)	*6.5	6.5	6.2	*6.5	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	100	100	100	100	100	100			100		
cM capacity (veh/h)	613	551	676	611	540	1059	1176			1602		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	10	3	9	377
Volume Left	8	3	0	1
Volume Right	2	0	1	31
cSH	625	611	1176	1602
Volume to Capacity	0.02	0.00	0.00	0.00
Queue Length 95th (ft)	1	0	0	0
Control Delay (s)	10.9	10.9	0.0	0.0
Lane LOS	B	B		A
Approach Delay (s)	10.9	10.9	0.0	0.0
Approach LOS	B	B		

Intersection Summary				
Average Delay	0.4			
Intersection Capacity Utilization	31.0%	ICU Level of Service	A	
Analysis Period (min)	15			

* User Entered Value

HCM Unsignalized Intersection Capacity Analysis
201: SW 3rd Avenue/SW 13th Street



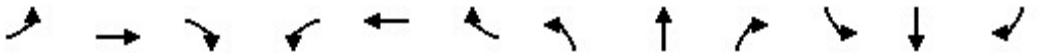
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SEL	SER
Lane Configurations										
Traffic Volume (veh/h)	0	756	452	0	535	457	0	17	122	88
Future Volume (Veh/h)	0	756	452	0	535	457	0	17	122	88
Sign Control		Free			Free		Stop		Stop	
Grade		0%			0%		0%		0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	0	804	481	0	569	486	0	18	130	94
Pedestrians										
Lane Width (ft)										
Walking Speed (ft/s)										
Percent Blockage										
Right turn flare (veh)										
Median type		None			TWLTL					
Median storage veh)					2					
Upstream signal (ft)										
pX, platoon unblocked										
vC, conflicting volume	1055			1285			2100	642	1232	2097
vC1, stage 1 conf vol							1044		812	812
vC2, stage 2 conf vol							1055		420	1285
vCu, unblocked vol	1055			1285			2100	642	1232	2097
tC, single (s)	4.1			4.1			6.5	6.9	*6.5	6.5
tC, 2 stage (s)							5.5		5.5	5.5
tF (s)	2.2			2.2			4.0	3.3	3.5	4.0
p0 queue free %	100			100			100	96	66	53
cM capacity (veh/h)	656			536			213	416	379	200

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SE 1
Volume Total	536	749	379	676	18	224
Volume Left	0	0	0	0	0	130
Volume Right	0	481	0	486	18	0
cSH	1700	1700	1700	1700	416	275
Volume to Capacity	0.32	0.44	0.22	0.40	0.04	0.81
Queue Length 95th (ft)	0	0	0	0	3	163
Control Delay (s)	0.0	0.0	0.0	0.0	14.0	57.0
Lane LOS					B	F
Approach Delay (s)	0.0		0.0		14.0	57.0
Approach LOS					B	F

Intersection Summary				
Average Delay	5.0			
Intersection Capacity Utilization	54.2%	ICU Level of Service		A
Analysis Period (min)	15			

* User Entered Value

HCM Unsignalized Intersection Capacity Analysis
202: SW 4th Avenue & SW 15th Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	164	24	32	316	8	9	1	37	211	67	3
Future Volume (Veh/h)	2	164	24	32	316	8	9	1	37	211	67	3
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	2	174	26	34	336	9	10	1	39	224	71	3
Pedestrians		1			1			4				
Lane Width (ft)		12.0			12.0			12.0				
Walking Speed (ft/s)		3.5			3.5			3.5				
Percent Blockage		0			0			0				
Right turn flare (veh)												
Median type		Raised			Raised							
Median storage veh)		1			1							
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	345			204			643	608	192	640	616	342
vC1, stage 1 conf vol							195	195		408	408	
vC2, stage 2 conf vol							448	413		232	208	
vCu, unblocked vol	345			204			643	608	192	640	616	342
tC, single (s)	4.1			4.1			*6.5	6.5	6.2	*6.5	6.5	6.2
tC, 2 stage (s)							5.5	5.5		5.5	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			98			98	100	95	55	85	100
cM capacity (veh/h)	1214			1362			451	470	846	496	464	700

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	202	379	50	298
Volume Left	2	34	10	224
Volume Right	26	9	39	3
cSH	1214	1362	710	489
Volume to Capacity	0.00	0.02	0.07	0.61
Queue Length 95th (ft)	0	2	6	100
Control Delay (s)	0.1	0.9	10.5	23.2
Lane LOS	A	A	B	C
Approach Delay (s)	0.1	0.9	10.5	23.2
Approach LOS			B	C

Intersection Summary			
Average Delay	8.4		
Intersection Capacity Utilization	61.6%	ICU Level of Service	B
Analysis Period (min)	15		

* User Entered Value

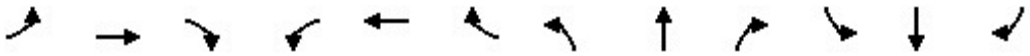
HCM Unsignalized Intersection Capacity Analysis
203: SW 15th Road & SW 11th Street

Movement	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (veh/h)	4	177	12	31	299	3
Future Volume (Veh/h)	4	177	12	31	299	3
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Hourly flow rate (vph)	5	216	15	38	365	4
Pedestrians	2				1	
Lane Width (ft)	12.0				12.0	
Walking Speed (ft/s)	3.5				3.5	
Percent Blockage	0				0	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			222		184	114
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			222		184	114
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		54	100
cM capacity (veh/h)			1346		794	938

Direction, Lane #	EB 1	WB 1	NW 1
Volume Total	221	53	369
Volume Left	0	15	365
Volume Right	216	0	4
cSH	1700	1346	795
Volume to Capacity	0.13	0.01	0.46
Queue Length 95th (ft)	0	1	62
Control Delay (s)	0.0	2.2	13.4
Lane LOS		A	B
Approach Delay (s)	0.0	2.2	13.4
Approach LOS			B

Intersection Summary			
Average Delay	7.9		
Intersection Capacity Utilization	35.6%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis
204: SW 4th Avenue & SW 11th Street

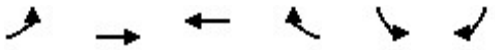


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (veh/h)	8	0	2	3	0	0	0	8	1	1	309	28
Future Volume (Veh/h)	8	0	2	3	0	0	0	8	1	1	309	28
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	8	0	2	3	0	0	0	8	1	1	322	29
Pedestrians		3			3			2			3	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		3.5			3.5			3.5			3.5	
Percent Blockage		0			0			0			0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	353	354	342	354	368	14	354			12		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	353	354	342	354	368	14	354			12		
tC, single (s)	*6.5	6.5	6.2	*6.5	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	100	100	100	100	100	100			100		
cM capacity (veh/h)	633	568	698	631	558	1059	1201			1602		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	10	3	9	352
Volume Left	8	3	0	1
Volume Right	2	0	1	29
cSH	645	631	1201	1602
Volume to Capacity	0.02	0.00	0.00	0.00
Queue Length 95th (ft)	1	0	0	0
Control Delay (s)	10.7	10.7	0.0	0.0
Lane LOS	B	B		A
Approach Delay (s)	10.7	10.7	0.0	0.0
Approach LOS	B	B		

Intersection Summary				
Average Delay	0.4			
Intersection Capacity Utilization	29.7%	ICU Level of Service	A	
Analysis Period (min)	15			

* User Entered Value

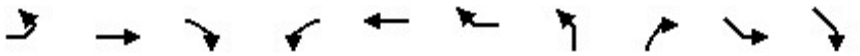


Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑			↱
Traffic Volume (veh/h)	0	460	446	0	0	126
Future Volume (Veh/h)	0	460	446	0	0	126
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	0	489	474	0	0	134
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		Raised	Raised			
Median storage veh)		1	1			
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	474				963	474
vC1, stage 1 conf vol					474	
vC2, stage 2 conf vol					489	
vCu, unblocked vol	474				963	474
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	77
cM capacity (veh/h)	1088				413	590

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	489	474	134
Volume Left	0	0	0
Volume Right	0	0	134
cSH	1700	1700	590
Volume to Capacity	0.29	0.28	0.23
Queue Length 95th (ft)	0	0	22
Control Delay (s)	0.0	0.0	12.9
Lane LOS			B
Approach Delay (s)	0.0	0.0	12.9
Approach LOS			B

Intersection Summary			
Average Delay	1.6		
Intersection Capacity Utilization	37.9%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis
201: SW 15th Rd & SW 3rd Avenue/SW 13th Street



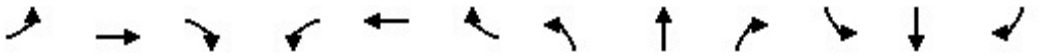
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SEL	SER
Lane Configurations										
Traffic Volume (veh/h)	0	756	452	0	535	427	0	17	162	88
Future Volume (Veh/h)	0	756	452	0	535	427	0	17	162	88
Sign Control		Free			Free		Stop		Stop	
Grade		0%			0%		0%		0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	0	804	481	0	569	454	0	18	172	94
Pedestrians										
Lane Width (ft)										
Walking Speed (ft/s)										
Percent Blockage										
Right turn flare (veh)										
Median type		None			None					
Median storage veh)										
Upstream signal (ft)										
pX, platoon unblocked										
vC, conflicting volume	1023			1285			2068	642	1216	2081
vC1, stage 1 conf vol										
vC2, stage 2 conf vol										
vCu, unblocked vol	1023			1285			2068	642	1216	2081
tC, single (s)	4.1			4.1			6.5	6.9	*6.5	6.5
tC, 2 stage (s)										
tF (s)	2.2			2.2			4.0	3.3	3.5	4.0
p0 queue free %	100			100			100	96	8	0
cM capacity (veh/h)	674			536			54	416	186	53

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SE 1
Volume Total	536	749	379	644	18	266
Volume Left	0	0	0	0	0	172
Volume Right	0	481	0	454	18	0
cSH	1700	1700	1700	1700	416	98
Volume to Capacity	0.32	0.44	0.22	0.38	0.04	2.71
Queue Length 95th (ft)	0	0	0	0	3	624
Control Delay (s)	0.0	0.0	0.0	0.0	14.0	865.5
Lane LOS					B	F
Approach Delay (s)	0.0		0.0		14.0	865.5
Approach LOS					B	F

Intersection Summary				
Average Delay	88.9			
Intersection Capacity Utilization	56.4%	ICU Level of Service		B
Analysis Period (min)	15			

* User Entered Value

HCM Unsignalized Intersection Capacity Analysis
202: SW 4th Avenue & SW 15th Road

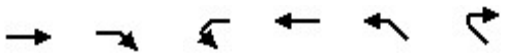


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	183	27	104	382	86	10	35	41	236	75	4
Future Volume (Veh/h)	2	183	27	104	382	86	10	35	41	236	75	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	2	195	29	111	406	91	11	37	44	251	80	4
Pedestrians		1			1			4				
Lane Width (ft)		12.0			12.0			12.0				
Walking Speed (ft/s)		3.5			3.5			3.5				
Percent Blockage		0			0			0				
Right turn flare (veh)												
Median type		Raised			Raised							
Median storage veh)		1			1							
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	497			228			936	936	214	950	906	452
vC1, stage 1 conf vol							218	218		674	674	
vC2, stage 2 conf vol							718	719		277	232	
vCu, unblocked vol	497			228			936	936	214	950	906	452
tC, single (s)	4.1			4.1			*6.5	6.5	6.2	*6.5	6.5	6.2
tC, 2 stage (s)							5.5	5.5		5.5	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			92			96	89	95	25	76	99
cM capacity (veh/h)	1067			1335			296	326	822	334	331	607

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	226	608	92	335
Volume Left	2	111	11	251
Volume Right	29	91	44	4
cSH	1067	1335	451	335
Volume to Capacity	0.00	0.08	0.20	1.00
Queue Length 95th (ft)	0	7	19	280
Control Delay (s)	0.1	2.2	15.0	85.2
Lane LOS	A	A	C	F
Approach Delay (s)	0.1	2.2	15.0	85.2
Approach LOS			C	F

Intersection Summary			
Average Delay	24.8		
Intersection Capacity Utilization	76.7%	ICU Level of Service	D
Analysis Period (min)	15		

* User Entered Value

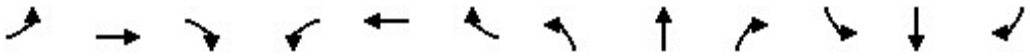


Movement	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (veh/h)	40	198	13	35	364	4
Future Volume (Veh/h)	40	198	13	35	364	4
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Hourly flow rate (vph)	49	241	16	43	444	5
Pedestrians	2				1	
Lane Width (ft)	12.0				12.0	
Walking Speed (ft/s)	3.5				3.5	
Percent Blockage	0				0	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			291		248	170
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			291		248	170
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		39	99
cM capacity (veh/h)			1270		730	872

Direction, Lane #	EB 1	WB 1	NW 1
Volume Total	290	59	449
Volume Left	0	16	444
Volume Right	241	0	5
cSH	1700	1270	731
Volume to Capacity	0.17	0.01	0.61
Queue Length 95th (ft)	0	1	107
Control Delay (s)	0.0	2.2	17.4
Lane LOS		A	C
Approach Delay (s)	0.0	2.2	17.4
Approach LOS			C

Intersection Summary			
Average Delay	10.0		
Intersection Capacity Utilization	41.5%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis
204: SW 4th Avenue & SW 11th Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	35	2	4	0	0	0	37	84	36	346	31
Future Volume (Veh/h)	8	35	2	4	0	0	0	37	84	36	346	31
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	8	36	2	4	0	0	0	39	88	38	360	32
Pedestrians		3			3			2			3	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		3.5			3.5			3.5			3.5	
Percent Blockage		0			0			0			0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	541	585	381	560	557	89	395			130		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	541	585	381	560	557	89	395			130		
tC, single (s)	*6.5	6.5	6.2	*6.5	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	98	91	100	99	100	100	100			97		
cM capacity (veh/h)	481	409	663	437	425	963	1160			1451		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	46	4	127	430
Volume Left	8	4	0	38
Volume Right	2	0	88	32
cSH	428	437	1160	1451
Volume to Capacity	0.11	0.01	0.00	0.03
Queue Length 95th (ft)	9	1	0	2
Control Delay (s)	14.4	13.3	0.0	0.9
Lane LOS	B	B		A
Approach Delay (s)	14.4	13.3	0.0	0.9
Approach LOS	B	B		

Intersection Summary				
Average Delay	1.8			
Intersection Capacity Utilization	44.3%	ICU Level of Service	A	
Analysis Period (min)	15			

* User Entered Value

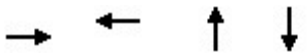
Timings
202: SW 4th Avenue & SW 15th Road

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	2	183	104	382	10	35	236	75
Future Volume (vph)	2	183	104	382	10	35	236	75
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		2		6		8		4
Permitted Phases	2		6		8		4	
Detector Phase	2	2	6	6	8	8	4	4
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0
Total Split (s)	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0
Total Split (%)	58.3%	58.3%	58.3%	58.3%	41.7%	41.7%	41.7%	41.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0		0.0		0.0		0.0
Total Lost Time (s)		6.0		6.0		6.0		6.0
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)		23.5		23.5		16.6		16.6
Actuated g/C Ratio		0.45		0.45		0.32		0.32
v/c Ratio		0.28		0.83		0.17		0.79
Control Delay		9.5		24.1		9.8		34.3
Queue Delay		0.0		0.0		0.0		0.0
Total Delay		9.5		24.1		9.8		34.3
LOS		A		C		A		C
Approach Delay		9.5		24.1		9.8		34.3
Approach LOS		A		C		A		C

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 52.5	
Natural Cycle: 60	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay: 23.2	Intersection LOS: C
Intersection Capacity Utilization 81.4%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 202: SW 4th Avenue & SW 15th Road

Queues
202: SW 4th Avenue & SW 15th Road



Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	226	608	92	335
v/c Ratio	0.28	0.83	0.17	0.79
Control Delay	9.5	24.1	9.8	34.3
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	9.5	24.1	9.8	34.3
Queue Length 50th (ft)	41	162	11	101
Queue Length 95th (ft)	78	#334	40	#235
Internal Link Dist (ft)	188	98	401	70
Turn Bay Length (ft)				
Base Capacity (vph)	1048	935	635	503
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.22	0.65	0.14	0.67

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis
202: SW 4th Avenue & SW 15th Road

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	183	27	104	382	86	10	35	41	236	75	4
Future Volume (vph)	2	183	27	104	382	86	10	35	41	236	75	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0			6.0			6.0			6.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		1.00			1.00			0.99			1.00	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.98			0.98			0.94			1.00	
Flt Protected		1.00			0.99			0.99			0.96	
Satd. Flow (prot)		1824			1808			1714			1790	
Flt Permitted		1.00			0.89			0.94			0.72	
Satd. Flow (perm)		1816			1619			1619			1339	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	2	195	29	111	406	91	11	37	44	251	80	4
RTOR Reduction (vph)	0	9	0	0	11	0	0	30	0	0	1	0
Lane Group Flow (vph)	0	217	0	0	597	0	0	62	0	0	334	0
Confl. Peds. (#/hr)			4	4			1		1	1		1
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)		23.5			23.5			16.6			16.6	
Effective Green, g (s)		23.5			23.5			16.6			16.6	
Actuated g/C Ratio		0.45			0.45			0.32			0.32	
Clearance Time (s)		6.0			6.0			6.0			6.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		819			730			515			426	
v/s Ratio Prot												
v/s Ratio Perm		0.12			c0.37			0.04			c0.25	
v/c Ratio		0.26			0.82			0.12			0.78	
Uniform Delay, d1		8.9			12.4			12.6			16.1	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.2			7.1			0.1			9.2	
Delay (s)		9.1			19.5			12.7			25.3	
Level of Service		A			B			B			C	
Approach Delay (s)		9.1			19.5			12.7			25.3	
Approach LOS		A			B			B			C	

Intersection Summary			
HCM 2000 Control Delay	18.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	52.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	81.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

APPENDIX F

Traffic Counts at Surrogate School Located at 600 SW 1st Avenue (Existing KLA with 200 Students)

KLA SCHOOLS, 600 SW 1ST AVENUE, MIAMI, FL 33130

	ENTER			EXIT		
TIME	DROPOFF	PK LOT	PEDS	PICKUP	PK LOT	PEDS
800-815	4	1	1	0	0	0
815-830	7	7	5	0	0	0
830-845	14	7	4	0	0	0
845-900	19	9	2	0	2	0
900-0915	21	15	3	0	3	0
915-930	15	2	1	0	9	0
	69 in / 69 out	33 in			14 out	
1130-1145	0	0	0	3	0	0
1145-1200	0	0	0	2	3	0
1200-1215	0	1	0	6	1	7
1215-1230	0	1	0	8	2	2
1230-1245	0	0	0	4	0	0
1245-1300	0	0	0	9	0	2
1300-1315	0	0	0	4	2	0
1315-1330	0	0	0	1	0	0
1330-1345	0	3	0	0	2	1
1345-1400	0	0	0	0	0	0
1400-1415	0	2	0	1	1	0
1415-1430	0	0	0	0	0	1
1430-1445	0	0	0	0	3	0
1445-1500	0	6	0	15	4	2
1500-1515	0	0	0	10	3	1
1515-1530	0	0	0	4	0	0
1530-1545	0	0	0	0	0	1
1545-1600	0	0	0	1	0	0
1600-1615	0	0	0	4	1	0
1615-1630	0	0	0	2	2	0
1630-1645	0	0	0	5	6	1
1645-1700	0	0	0	3	1	2
1700-1715	0	0	0	2	2	5
1715-1730	0	0	0	9	1	1
1730-1745	0	0	0	4	1	0
1745-1800	0	0	0	3	0	2
1800-1815	0	0	0	3	1	0
1815-1830	0	0	0	1	1	1

Note: 102 ins with 200 students = 0.51 trips/student & 83 out with 200 students = 0.42 trips/student

APPENDIX G

Queuing Analysis

Queuing Analysis based on ITE Procedures
KLA Academy on SW 15th Road

q = 102 veh/20 minutes (demand rate*)

Q = 40 veh/20 minutes (service rate**)

$$p = \frac{q}{NQ} = 0.6275 \text{ (N = 4 traffic control personnel)}$$

$$Q_M = 0.6275$$

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

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

$$M = \left(\frac{Ln(0.05) - Ln(0.6275)}{Ln(0.6275)} \right) - 1$$

$$M = \left(\frac{-2.9957 - (-0.4660)}{-0.4660} \right) - 1$$

M = 5.4 – 1 = 3.4, say 4 vehicles and the drop-off
Pick-up area can accommodate 13 vehicles

* 200 students/shift x 0.51 trips inbound per students (refer to traffic study) = 102 trips inbound (assumed to arrive in 20 minutes)

** 1 traffic control personnel at drop-off/pick-up at 30 seconds per vehicle = 40 vehicles in 20 minutes can be processed

Traf Tech
ENGINEERING, INC.

School Traffic Operation Plan (TOP) Form

This form has been created by Miami-Dade County Department of Transportation and Public Works (DTPW) to document a school's traffic operations and commitments. All form worksheets and illustrations have been completed for the operation at KLA ACADEMY

Contents

1.0 Definitions

For the purpose of this document, the following definitions for terms used herein shall apply to all sections unless the context clearly indicates otherwise:

(1) *Educational program:* A planned curriculum with specific instructional beginning, progression and ending for the enrolled students.

(2) *Schedule Shift:* A period of time when students are anticipated to be at the school facility to engage in programed activities

(2.1) *Instructional Shift*: A period of time when students enrolled in a particular educational program must be in attendance. The beginning of this shift is often referred to as the "first bell" and the ending of this shift is often referred to as a "last bell."

(2.2) *Early Arrival Shift*: A period of time when students are allowed into the facility prior to the start of an instructional shift. This period may include other types of programs (e.g. breakfast, before care, etc.).

(2.3) *After School Shift*: A period of time when students are allowed to remain at the facility after the end of all instructional shifts. This period may include other types of programs (e.g. after care, extra-curricular, sports, etc.)

(2.4) *Study Hall:* A scheduled period of time, which begins with the school's first instructional shift (arrival time) and ends at the school's last instructional shift (dismissal time), where car-pooling students that arrive prior to their instructional shift and/or are dismissed earlier than their pick-up time (due to co-passenger students) are provided free of charge care.

(2.5) *Arrival Period*: A time or period of time when students come to school to participate in an educational program. The time or period of time is set by the beginning of one or more instructional shifts.

(2.6) *Dismissal Period:* A time or period of time when students leave school due to the end of an educational program. The time or period of time is set by the end of one or more instructional shifts.

(3) *Vehicle Route*: A maneuverable continuous vehicle path that provides access to the stacking and staging spaces.

(4) *Vehicle Stacking Space:* A space in which pickup and delivery of children can take place.

(5) *Vehicle Queuing Space***:** A space where a vehicle can idle while waiting to enter into a stacking space.

(6) *Vehicle Staging Space*: A space where a service vehicle may remain idle while providing their service.

(7) *Parked Stacking Space*: A parking space designated for student drop-off and pick-up use during the arrival and dismissal operations.

(8) *By-Pass Lane**:*** A minimum 10 foot wide vehicle travel lane adjacent to stacking and queuing spaces whose direction of travel is in the same direction as the stacking and queuing vehicles.

(9) *Open Parking Space*: A parking space that has no assigned use during the arrival and dismissal operations.

(10) *Staff Parking Space*: A parking space designated for staff use during the school's hours of operation.

(12) *Student Parking*: A parking space designated for student use during the school's hours of operation.

(13) *Pedestrian Route***:** A continuous exclusive walking path that provides access from the public right-of-way to a school building entrance.

(14) *Bicycle Route:* A continuous biking path that provides access from the public right-of-way to the school's bicycle storage.

(15) *Bicycle Storage*: A designated area where bicycles may be secured and remain in place for the school day.

(16) *School Traffic Personnel:* A school employee who reinforces the onsite traffic operations by guiding vehicles and pedestrians along designated routes within the school property.

(17) *Traffic Control Officer:* An individual who has been authorized by a police department to direct traffic or operate a traffic control device as per section 316.640 of Florida Statute.

(18) *School Special Event:* An organized event at a school facility that generates a peak vehicle trip count or a vehicle accumulation demand greater than the traffic parameters established by the school traffic operation plan.

(19) *School Crossing:* An official school student crossing on an adopted school route plan of a school safety program. Any crossing not so officially designated is termed a "pedestrian crossing."

2.0 School Location

Specify the school's name, site address, folio and hours of operation within the **Table 2.0-1**.

3.0 Educational Program and Enrollment

A school provides instructions to students through its *educational programs* (Elementary, Middle, High, ect*)*. Specify the school's educational programs and maximum enrollment by completing **Table 3.0-1**. Indicate the school's programs by entering the student enrollment associated with each program and/or enter "None" for student enrollment if a particular program does not operate at the school.

School may offer educational programs that vary substantially from programs typically offered in schools. Provide a description of the school's educational programs in **Table 3.0-2.**

4.0 School Schedule

A school schedule is composed of *schedule shifts*. A schedule shift may be classified as either a non-instructional shift (Breakfast Program, After School Care, or Extra Curricular Activity) or an *instructional shift*. The educational programs are scheduled by *instructional shifts*. Therefore, every schedule will include at least one instructional shift. A school's *arrival period*, as well as *dismissal period*, should not exceed 1.5 hours because of its effect on school speed zone hours. The different educational programs may be scheduled independently or concurrently, but an educational program may not be divided by multiple instructional shifts. Instructional shifts must be scheduled a minimum of 20 minutes apart to have their vehicle accumulation events be considered as independent events. The schedule may also include an *early arrival shift* and an *after school shift*. A school that proposes to operate with multiple instructional shifts must enact the multiple shifts from inauguration, regardless of student enrollment. For example, a K-8 school, which has two educational programs (K-5 and 6-8), may operate with one or two instructional shifts, but may not operate with three instructional shifts.

A school's schedule may often be influenced by the site's vehicle accumulation capacity and other off-site traffic operational factors. A site's vehicle accumulation capacity and other factors are typically defined within a traffic study conducted by the school.

Schools that operate with multiple instructional shifts are required to operate a "*study hall*" period. The study hall period begins with the school's first arrival time and ends at the school's last dismissal time. This period must be provided free of charge for car-pooling students that arrive prior to their instructional shift and/or are dismissed earlier than their pick-up time due to co-passenger students.

4.1 School Schedule Commitment

The school schedule will maintain the maximum number of students allowed per instructional shift and operate with the number of instructional shifts stated in **Table 4.1-1,** with a minimum 20 minute separation between any two instructional shifts. Parental vehicular access to onsite passenger loading facilities shall be open a minimum of 30 minutes prior to all arrival and dismissal time(s).

The school will operate a "study hall" period when its schedule has more than one instructional shift.

4.2 School Schedule Example

The school is required to maintain the schedule commitment at all times. This commitment will define the school staggered shift schedule format, but actual start and end times may differ. Provide an example of the school schedule at full capacity in **Table 4.2-1**.

School may offer educational programs that vary substantially from programs typically offered in schools. Provide a description of the school's schedule shifts in **Table 4.22.**

5.0 Vehicle Operations

A school has various vehicle types that access the site regularly. These vehicle types may include automobiles, school buses, and service vehicles such as food delivery trucks and trash collecting trucks. The various vehicles require clear traffic patterns to maintain the site's safety and maneuverability when accessing the site. These patterns are termed *vehicle routes*. Once vehicles are on site, they accumulate as parking, *stacking*, *queuing*, or *staging*. The following section will formally define these vehicle routes and spaces within the TOP.

5.1 Vehicle Routes

Vehicle routes consist of an entry, a pathway, and an exit. All routes must provide the appropriate geometry (e.g. lane width, effective radii) to accommodate the intended vehicles. The route should minimize the number of conflict throughout its pathway. Each portion of the route must be identified using the following formats stated below.

Vehicle Route Naming Format: Each route must be assigned a name that indicates its intended "purpose" and "service". Use the abbreviations contained in **Table 5.1-1** to appropriately name the routes. For example, a curbside automobile passenger loading zone that is to be used by parents dropping-off elementary school students would be named "A(K-5)".

Table 5.1-1 Route Name Key

"Purpose"		"Service"	
A	**Automobile Loading Zone**	**K-12**	**Student Passengers –specify grade range**
B	**Bus Loading Zone**	**Food**	**Food Delivery**
P	**Parking**	**Trash**	**Garbage Pick-up**
S	**Service Vehicle**	**Delivery**	**General Delivery**
PED	**Pedestrian Pathway**		
BIK	**Bicycle Pathway**		

Route Entry and Exit Label Format: Each route's entry and exit location must be assigned a label. Each location label will be composed of an abbreviated location type and a number. Use **Table 5.1-2** to provide the correct abbreviated location type and number. **Route names, entries, and exits must be illustrated in a plan view and attached to this document**.

Table 5.1-2 Route Entry and Exit Location - Labeling Key

Location Type		Number
DW	**Driveway accessing the site**	**Number all the locations sequentially for each "location type" set. Start with the number 1. Begin numbering from the NE corner of the plan and increase the numbers sequentially in a clock-wise direction until all locations are labeled.**
P	**Point located within a plan**	
E	**Pedestrian and Bicycle Entrance and/or Exit**	

Example: The entry and exit locations for a site that has two driveways (DW-1, DW-2) connecting to the public right-of-way, an internal drive aisle (P-1) connecting to the adjacent property, and a sidewalk connecting the main entrance (E-1) to the public right-of-way (E-2); will have three vehicle locations labeled as DW-1, DW-2, and P-1 and two pedestrian locations labeled E1 and E2.

Entry and exit points along the vehicle route may have operational restrictions. The restrictions may be in place permanently or only during the times when the TOP is in effect. Use **Table 5.1-3** to better understand the restriction notes to be used throughout this form.

Table 5.1-3 Route Restrictions Note Key

Restriction Note	Description
Right In Only	**Vehicles may only enter into this location via a right turn movement.**
One Way Only	**All traffic is moving solely in one direction at this location.**
Right Out Only	**Vehicles may only exit out of this location via a right turn movement.**

5.2 Vehicle Stacking and Staging Spaces

All stacking and staging spaces must be accessed through a vehicle route. The stacking, queuing, and staging spaces along a vehicle route may not impede the operations of any other concurrently operating vehicle route or space operation. For example, a stacked or queued vehicle may not be located within the maneuvering "back-out" area of a parking space designated as a *parked stacking space*.

Vehicle stacking spaces within passenger loading zones must have a passenger landing area for entering and exiting the vehicle. A 10 foot minimum *by-pass lane* must be provided for passenger loading zones whose combined stacking and queuing spaces are longer than 3 consecutive vehicle spaces. Parking spaces may be designated as stacking spaces. Access to the vehicle stacking spaces must be opened 30 minutes before the first scheduled time of use.

5.3 Automobile Curbside Passenger Loading Zone Operations

An automobile passenger loading zone is a designated area for stacking automobiles and vans to load and unload passengers to and from a prescribed landing area. The pedestrian landing area for automobile loading zones must be located on the right side of the vehicle and should have a minimum size of 5 feet by 5 feet. Typically these landing areas are considered curbside passenger loading areas because the vehicles stack adjacent to a curbed sidewalk. Automobile passenger loading zones that have a by-pass lane should taper the head of the zone (the front space of the stacking line) towards the by-pass lane to merge the exiting stacked vehicles into the by-pass lane.

Specify if the school operates one or more automobile passenger loading zones by providing information of the vehicle route that provides access to the zone within the **Table 5.3-1**, or indicate no zone by entering "None" for the route name. **The vehicle route must be illustrated in a plan view and attached to this document**.

The use of automobile passenger loading zones are limited to automobiles and vans only. Each vehicle space is measured at 22 feet long and 8 feet wide. If the school operates with an automobile passenger loading zone, indicate its capacity in **Table 5.3-2.** Enter zero (0) for the total capacity if the school does not have an automobile passenger loading zone.

5.4 School Bus Passenger Loading Zone Operations

A school bus passenger loading zone is a designated zone for stacking school buses to load and unload passengers to and from a prescribed landing area. The pedestrian landing area for school bus passenger loading zones must be located on the right side of the vehicle and should have a minimum size of 8 feet by 8 feet.

Specify if the school operates one or more school bus passenger loading zones by providing information of the vehicle route that provides access to the zone within the **Table 5.4-1**, or indicate no zone by entering "None" for the route name. **The vehicle route must be illustrated in a plan view and attached to this document**.

The use of school bus passenger loading zones are limited to only school buses during arrival and dismissal operations. Each bus vehicle space measures 50 feet long and 10 feet wide unless otherwise stated in **Table 5.4a-2**. If the school operates with a school bus passenger loading zone, indicate its capacity in **Table 5.4-2.** Enter zero (0) for the total capacity if the school does not have a school bus passenger loading zone.

The school's bus operations may be voluntary, recommended in a traffic study, and/or mandated by zoning resolution. Complete the section 5.4a to specify the minimum number of school buses required to operate at the school.

5.4a School Bus Commitment

Specify the school's busing commitment by completing **Table 5.4a-1** and **Table 5.4a-2**. Report zero (0) number of buses if the school has no busing commitment. Standard bus types have been provided in **Table 5.4a-2** for convenience.

The school is required to provide a school bus program that maintains the required minimum bus ridership participation reported in **Table 5.4a-1** and **Table 5.4a-2**; and manage the program to ensure that bus accumulations are contained within the designated bus stacking and queuing spaces.

5.5 Parking Stall Operations

All parking spaces used during the school's operation must be identified. The parking spaces must meet all governing parking stall codes.

Parked stacking spaces must have an unobstructed vehicle route to access these spaces during arrival and dismissal shifts. Parking spaces that have no assigned use during arrival and dismissal operations due to vehicle route obstructions will be termed *open parking spaces*. A cross parking agreement is required for all off-site privately managed parking spaces.

Specify the school's parking space usage and quantities by completing **Table 5.5-1**. **The parking spaces must be illustrated in a plan view and attached to this document.**

If the school has parked stacking spaces or *student parking spaces*, specify the route information that provides access to those spaces within the **Table 5.5-2**, or indicate no routes by entering "None" for the route name. **The vehicle route must be illustrated in a plan view and attached to this document.**

5.6 Service Vehicle Operations

Schools often require service vehicles to enter and maneuver within the site to provide facility services. Specify the school's service vehicle routes by providing the vehicle route information within the **Table 5.6-1**, or indicate no routes by entering "None" for the route name. **The vehicle route must be illustrated in a plan view and attached to this document.**

6.0 Pedestrian and Bicycle Facilities

A *pedestrian route* originating from the public right-of-way must be provided to all school building entrances. The route should be a minimum of 5 feet wide and have all the required elements when crossing a motorized vehicle travel lane (crosswalk, pedestrian ramp, etc.). All student entrances to the school site and buildings must be labeled by using **Table 5.1-2**. Only the main entrance is required to be labeled when multiple buildings are interconnected with pedestrian pathways.

Bicycle routes that are combined with pedestrian traffic must have an eight (8) foot minimum width.

For sites that have a bicycle storage area and that only provide standard pedestrian path widths are required to instate the following policy: "*All bicyclists must dismount their bicycles and walk their bicycles to the designated bicycle storage when entering or exiting to the school site.*"

Specify the pedestrian routes by providing the route information within the **Table 6.0-1**. **The pedestrian route must be illustrated in a plan view and attached to this document.**

Specify the bicycle routes by providing the route information within the **Table 6.0-2**, or indicate no routes by entering "None" for the route name. **The bicycle route must be illustrated in a plan view and attached to this document.**

Identify the *bicycle storage* locations throughout the site by labeling each location according to the following instructions: Each location must be label with the letters BS followed by a number (e.g. BS1). Begin with number 1. Do not repeat any location labels. List the storage locations and its capacity in **Table 6.0-3**. Enter "none" for the location to indicate no bicycle storage. **The bicycle storage location must be illustrated in a plan view and attached to this document.**

7.0 Onsite Traffic Personnel & Devices

A functioning school TOP requires adherence to the prescribed routes and operations. Often *school traffic personnel* is required to guide pedestrians within passenger loading zones, assist with traffic flow at route conflict points, and encourage adherence to prescribed routes in areas not defined by the infrastructure's geometry. The school shall supply staff to direct any vehicles which may stage or stack in through travel lanes or non-designated parking areas within the public rights-of-way onto the school site.

School traffic personnel should be stationed and assigned the following duties at the corresponding locations: assist students entering and exiting vehicles at loading zones (loading); guide traffic at points where active route pathways intersect (conflict); and encourage adherence at pathway decision points along the route (diverting). School traffic personnel school be on duty at least 30 minutes prior to scheduled shifts.

Identify the school traffic personnel stations throughout the site by labeling each station according to the following instructions: Each station must be label with the letter S followed by a number (e.g. S1). Begin with number 1. Do not repeat any station labels. List the station locations and personnel duties in **Table 7.0-1**. Enter "none" for the location to indicate no school traffic personnel stations. **The school traffic personnel stations must be illustrated in a plan view and attached to this document.**

Temporary traffic control devices (e.g. parking cones) may be useful at points within the routes that are not defined by the infrastructure's geometry and where school traffic personnel are not stationed. These temporary traffic devices may not be used in the public right-of-way unless managed by a traffic control officer.

Identify the temporary traffic control devices located throughout the site by labeling each location according to the following instructions: Each location must be label with the letter C followed by a number (e.g. C1). Begin with number 1. Do not repeat any station labels. List the device location and description in **Table 7.0-2.** Enter "none" for the location to indicate that no devices will be used. **The device locations must be illustrated in a plan view and attached to this document.**

7.1 School Personnel Commitment

The school is required to provide the school traffic personnel and temporary traffic control devices stated in **Table 7.0-1** and **Table 7.0-2**. School traffic personnel must direct the school's traffic into onsite by-pass lanes or any available vehicle staging spaces during peak traffic generation periods to create additional onsite accumulation capacity when school related vehicle are queuing within non-designated areas of the right-of-way and/or through travel lanes.

8.0 School Zone and Crossings

School zones may be provided for schools to alert drivers that they will be traveling near a school. A school zone is composed of signs and pavement markings. The school zone may also include a speed zone component that requires driver to reduce their travel speed. The speed zone is often enacted to provide control at designated *school crossings* serving elementary and middle schools. The school speed zone component may be composed of signs, pavement markings, and flashing beacons (as per the governing standard). The speed zone is required to be installed for school crossings when applicable.

Indicate the existing and/or proposed school crossing(s) serving the school site within **Table 8.0-1**. Enter "none" for the road name to indicate that no school crossing exists or is proposed for this school. **The school crossing locations must be illustrated in a plan view and attached to this document.**

Indicate the existing and/or proposed school zones associated with the school site within **Table 8.0-2**. Enter "none" for the road name to indicate that no school zone exists or is proposed for this school. Indicate if a speed zone is a component of the school zone by marking the appropriate check box.

A school speed zone should not have a continuous duration longer than two hours. If this school is served by a school speed zone, then specify the zone's posted hours in **Table 8.0-3**. Enter "none" for the period to indicate no posted hours. Use DTPW School Speed Zone Policy to determine appropriate time periods. Note that if the school is located in close proximity to an existing school speed zone (less than 300 feet), the zone and time period may be modified to cover both schools. Indicate below if the times are paired. If paired, provide areal illustrating adjacent school(s).

9.0 Offsite Traffic Control Officers

Enforcement of the TOP routes and operations within the public right-of-way may only be performed by *traffic control officers* as per section 316.640 of the Florida Statute. Traffic control officers should be present during the start of each semester (first two weeks) to reinforce the traffic patterns established by the TOP. Specify the number, location, and duration of traffic control officers required to adequately enforce the TOP within **Table 9.0-1**.

The school's endorsement of the traffic control officer enforcement plan must be stated within **Table 9.0-2**.

A traffic control officer may be stationed at an intersection to improve vehicle delays and operations during a peak traffic demand period. Schools may be required to provide the officer, or may do so voluntarily. Specify the commitment, location, and duration of the traffic control officer stations required for LOS management within **Table 9.0-3**. Enter "none" for the intersection to indicate that no officer management is voluntarily offered or required.

9.1 State Crossing Guards

A school may implement a crossing guard program to assist young (K-8) students traversing school crossings when walking to and from school. A crossing guard is not traffic control officer, unless the guard is trained as a traffic control officer and employed subject to the conditions described in section 316.640, F.S. Specify the crossing guard stations and duration within **Table 9.1-1**. Enter "none" for the station to indicate that no crossing guards are stationed to serve the school.

10.0 School Special Events

Planned school events, such as sporting events, school assemblies, and ceremonies may often generate larger peak traffic volumes and vehicle accumulations than a typical school day. The school will be required to manage the traffic impacts produced by a *school special event* within its neighborhood. Specify the special event types and provisions selected to mitigate its traffic impacts within **Table 10.0-1.** Enter "none" for event type to indicate that no school special events will planned at the school site.

11.0 Parent Traffic Handbook

The Parent Traffic Handbook specifies a parent's child safety responsibilities and commitment to achieve an efficient traffic flow during the arrival and dismissal times. Parents of new students should be issued a Parent Traffic Handbook containing this TOP and are required to sign a contract with the school, which includes adherence to pick-up and drop-off procedures. Additionally, parents should be reissued the Parent Traffic Handbook and contract each new school year. The handbook and contract should be reviewed and signed during Parent Orientation prior to the start of school. **A sample of the Parent Traffic Handbook and contact must be attached to this document.**

12.0 Table Worksheets

Complete this worksheet as per the instructions provided in sections 1.0 through 11.0 of this document.

Educational Program Worksheet

Table 2.0-1 School Location

Name	KLA ACADEMY
Address	375 SW 15 Road, 1131 & 1109 SW 4th Avenue
Folio Number(s)	01-4138-169-0001, 01-0208-030-1070,01-0208-030-1080
Hours of Operations	6:00 AM to 6:00 PM

Table 3.0-1 Educational Program and Enrollment

Educational Program	Grades	Average Maximum Enrollment per Grade	Maximum Enrollment
Pre-K/Elementary	Pre-K to 5th	60	600
Total Facility Enrollment			600

Table 3.0-2 Educational Program Descriptions

Educational Program	Description
Pre-K/Elementary	Instructional Typical

School Schedule Worksheet

Table 4.1-1 School Schedule Commitment

Period	Maximum Number of Students Allowed within a Schedule Shift	Minimum Number of Instructional Shifts at Full Enrollment
Arrival	200	3
Dismissal	200	3

Table 4.2-1 School Schedule Example at Full Capacity

Schedule Shift	Grades	Days [M, Tu, W, Th, F]	Begin Time	End Time	No. of Students
Shift 1	3-5	M,Tu,W,Th,F	7:45	3:00	200
Shift 2	K-2	M,Tu,W,Th,F	8:15	3:30	200
Shift 3	Pre-K	M,Tu,W,Th,F	8:45	2:30	200

Automobile Passenger Curbside Loading Zone Worksheet

Table 5.3-1 Automobile Loading Zone Route Description

Route Name	Entrance Point	[X]	Restriction	Exit Point	[X]	Restriction	Description
Garage	DW-1	☑	Right In Only	DW-1	☐	Right Out Only	Will Operate as RT in LT Out
		☐	One Way Only		☐	One Way Only	
Main	DW-2	☑	Right In Only	DW-3	☑	Right Out Only	
		☐	One Way Only		☐	One Way Only	
		☐	Right In Only		☐	Right Out Only	
		☐	One Way Only		☐	One Way Only	
		☐	Right In Only		☐	Right Out Only	
		☐	One Way Only		☐	One Way Only	

Table 5.3-2 Automobile Loading Zone Vehicle Capacity Summary (Automobiles and Vans)

Route Name	Stacking Space Capacity	Queuing Spaces Capacity	Total Capacity
Main	4	9	13

Bus Passenger Loading Zone Worksheet

Table 5.4-1 School Bus Passenger Loading Zone Route Description

Route Name	Entrance Point	[X]	Restriction	Exit Point	[X]	Restriction
None		☐	Right In Only		☐	Right Out Only
		☐	One Way In		☐	One Way Out
		☐	Right In Only		☐	Right Out Only
		☐	One Way In		☐	One Way Out
		☐	Right In Only		☐	Right Out Only
		☐	One Way In		☐	One Way Out

Table 5.4-2 Bus Loading Zone Vehicle Accumulation Capacity Summary

Route Name	Stacking Spaces Capacity	Queuing Spaces Capacity	Bus Capacity
None		0	

Table 5.4a-1 Bussing Commitment

Minimum Number of Inbound Buses Required During the Arrival Period	Minimum Number of Outbound Buses Required During the Dismissal Period
None	

Table 5.4a-2 Bus Type and Capacity

Quantity	Bus Type	Length	Width	Capacity	Student Total by Type
None	S-BUS-11 [S-BUS-36]	45	10	65	
	S-BUS-12 [S-BUS-40]	50	10	84	
	Small Buses	30	9	24	
				Students Grand Total	

Parking Summary Worksheet

Table 5.5-1 Proposed Parking Use Summary

Parking Space Use	Onsite			Offsite
	Req. by Code	Req. by Study	Provided	Provided
Staff	45		45	
Student				
Parked Stacking				
Open	6		6	12
Total	51		51	12

Table 5.5-2 Parked Loading Zone Route Description

Route Name	Entrance Point	[X]	Restriction	Exit Point	[X]	Restriction
Ps	P-1	☑	Right In Only	P-1	☐	Right Out Only
		☐	One Way In		☐	One Way Out
		☐	Right In Only		☐	Right Out Only
		☐	One Way In		☐	One Way Out
		☐	Right In Only		☐	Right Out Only
		☐	One Way In		☐	One Way Out

Service Vehicle, Pedestrian and Bicycle Routes Worksheet

Table 5.6-1 Service Vehicle Route Description

Route Name	Entrance Point	[X]	Restriction	Exit Point	[X]	Restriction	Operation Period (times)
S	DW-2	☑	Right In Only	DW-3	☐	Right Out Only	Off Peak
		☐	One Way In		☐	One Way Out	
		☐	Right In Only		☐	Right Out Only	
		☐	One Way In		☐	One Way Out	
		☐	Right In Only		☐	Right Out Only	
		☐	One Way In		☐	One Way Out	

Table 6.0-1 Pedestrian Route Description

Route Name	Off-Site Entrance Point	Building Entrance Point	Operation Period (0:00-0:00)
PED	PED-1	S-1	6:00 AM to 6:00PM

Table 6.0-2 Bicycle Route Description

Route Name	Entrance Point	Exit Point	Operation Period (0:00 – 0:00)
BIK	BIK-1	BIK-1	6:00 AM to 6:00 PM

Table 6.0-3 Bicycle Storage Description

Bicycle Storage Location	Bicycle Capacity
South Side	10 Bikes

Traffic Personnel, Equipment, Enforcement Worksheet

Table 7.0-1 Onsite School Traffic Personnel

Station Label	Personnel Duties (Loading, Conflict, Diverting)	Arrival Duty Period		Dismissal Duty Period	
		From	To	From	To
A	Loading/Off Loading	7:00	9:00	2:15	4:00

Table 7.0-2 Onsite Temporary Traffic Control Devices

Location Label	Device Description (Number of Cones, Barricades, or Gates)	Arrival Duty Period		Dismissal Duty Period	
		From	To	From	To
None					

Table 8.0-1 School Crossing Description

Location	East-West	North-South	Mid-Block	Uncontrolled
SW 4 Ave & SW 11 Street	☑	☑	☐	☑
SW 15 Road & SW 13 Street	☑	☑	☐	☑
	☐	☐	☐	☐
	☐	☐	☐	☐
	☐	☐	☐	☐
	☐	☐	☐	☐

Table 8.0-2 School Zone Description

Location	Existing [x]	Proposed [x]	Signs & Markings [x]	Speed Zone [x]	Flashing Beacons [x]
SW 15 Road	☐	☑	☑	☑	☐
SW 4 Avenue	☐	☑	☑	☑	☐
	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐

Table 8.0-3 School Speed Zone Posted Times **Is this a paired Zone? No** ☑ **Yes** ☐

Days of the Week	Arrival Period AM		Dismissal Period PM	
	From	To	From	To
Monday	7:15	9:00	2:00	4:00
Tuesday	7:15	9:00	2:00	4:00
Wednesday	7:15	9:00	2:00	4:00
Thursday	7:15	9:00	2:00	4:00
Friday	7:15	9:00	2:00	4:00

Table 9.0-1 Traffic Control Officer Enforcement Plan

No. of Officers	Intersection or Segment with Boundaries	Arrival	Dismissal	Semester Start	All Year
	None	☐	☐	☐	☐
		☐	☐	☐	☐
		☐	☐	☐	☐
		☐	☐	☐	☐

Table 9.0-2 Traffic Control Officer Reinforcement Commitment

Check Box [x]	Reinforcement Commitment
☐	By marking this check box, the school agrees to provide all necessary resources to ensure traffic control officers will be present to enforce the TOP, as stated in **Table 9.0-1.**

Table 9.0-3 Traffic Control Officer Stations for LOS Management Plan

Intersection	Required (R) Voluntarily (V)	Arrival Time Period		Dismissal Time Period	
		From	To	From	To
None					

Table 9.1-1 Crossing Guard Stations

No. of Guards	School Crossing Station (Intersection)	Arrival AM Time Period		Dismissal PM Time Period	
		From	To	From	To
None	None				

Table 10.0-1 School Special Event Provisions

Event Type	Provision Descriptions
None	None

13.0 Attachments

The following documents are required to be attached to the TOP.

1. A plan sheet showing all required illustrations stated within this TOP form. (It is suggested that TOP operations that vary by instructional shifts be shown in independent plan sheets.)
2. A Parent Traffic Handbook and contract sample.
3. A Cross-parking agreement (if utilized).

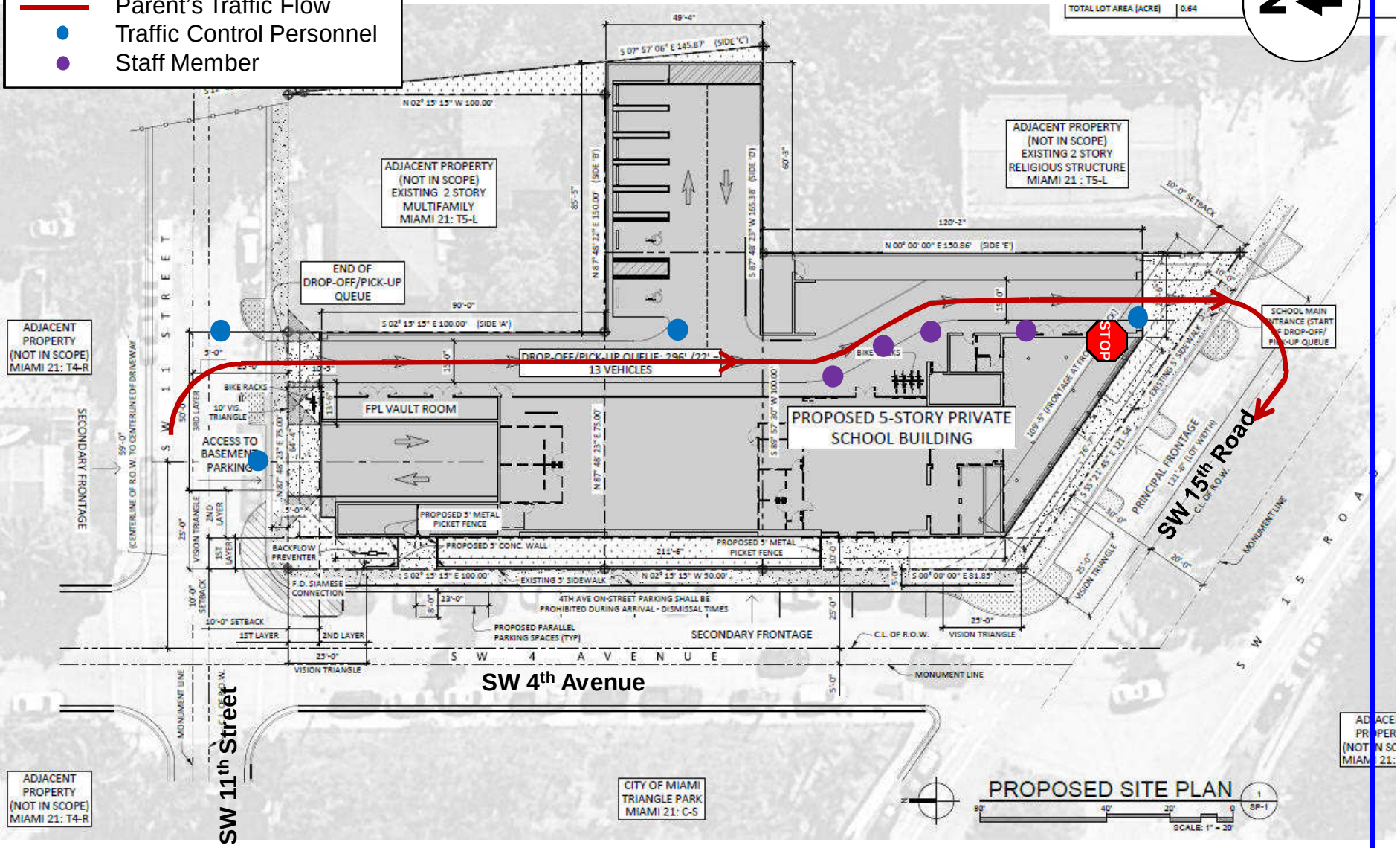
14.0 Endorsement

By signing below, the school owner agrees to operate the school as prescribed within this document and will uphold all commitments specified herein.

Signature

Date

Print Owner Name



TraffTech ENGINEERING, INC.

TRAFFIC OPERATIONS PLAN

FIGURE 1
KLA Academy
Miami-Dade County, Florida

Traf Tech
ENGINEERING, INC.

November 29, 2017

Mr. Jon Orue
Traffic Engineering Division
Miami-Dade County
Department of Transportation and Public Works
111 NW 1st Street, Suite 1510
Miami, Florida 33128-1970

Re: KLA Academy - 375 SW 15th Road - Traffic Review

Dear Jon:

We received traffic-related comments (e-mail dated November 9, 2017) in connection with the KLA Academy - 375 SW 15th Road project. The responses to the traffic-related comments are provided below:

Comment 1: Proposed Land Use and Access - Page 3:

a. Please note that the Site Plan included in the package provides for a maximum capacity of 624 students instead of 600 included in the Traffic Study and TOP Plan. Please modify and resubmit.

Response: The correct number of students is 600. The site plan will be revised and submitted by other team members.

b. Please note that the Site Plan included in the package provides 296 feet of drop-off/pick-up area instead of 260 feet included in the report. Please modify and resubmit.

Response: The text in the report was revised accordingly.

c. The report states that the parking garage will have at least 50 parking spaces for parents to parked and drop-off/pick-up their children. However, staff will require 45 parking spaces. Please advise.

Response: There will be 51 parking spaces provided on-site for staff, visitors, and parents to park. A text in the report was added to clarify the required parking spaces. Since 45 parking spaces are required for staff, 18 parking spaces will be available for parents plus stacking for 13 vehicles for a total of 31 vehicle on-site stacking capacity, including 12 on-street parking spaces adjacent to the site. Moreover, well over 100 parking spaces are available within walking distance from the school along SW 15th Road (both sides), SW 11th Street (both sides), SW 4th Avenue (both sides) and a public parking lot located under the I-95 overpass. Additionally, the new plan calls for three (3) shifts of 200 students each, separated by 30 minutes between shifts and there will be four (4) staff members assisting vehicles during the drop-off/pick-up operation. A queuing analysis

(attached) indicates that traffic queues can be managed within the proposed drop-off/pick-up lane.

Comment 2: Traffic counts – Page 6:

a. **Please explain why only AM peak was included in the analysis.**

Response: Typically, the morning period is analyzed when a proposed development is an educational facility because the morning peak period is considered the most critical time of the day for educational facilities. This is consistent with other school studies undertaken in Miami-Dade County.

b. **Please note that three (3) of the intersections were collected in July 2017 and 12% adjustment factor would need to be applied. However, Figure 3 and Synchro for existing conditions shows raw data instead of the adjusted 2017 volumes as shown in Appendix D. Please revise Figure 3 and Synchro files and resubmit.**

Response: Figure 3 and the Synchro files were revised.

Comment 3: Trip generation – Page 8: Please confirm and include in the report if the KLA School located in 600 SW 1 Avenue use as surrogate for trip generation rates includes the same grades as the proposed school.

Response: A text in the report was added to explain that the school located at 600 SW 1 Avenue was used as surrogate school to estimate the trip generation rates.

Comment 4: Trip distribution and traffic assignment – Page 9:

a. **Please considered the Miami Dade County TAZ Trip Distribution Tables, project trip distribution using the current Miami-Dade MPO published TAZ cardinal percentage, or FSUTMS transportation model. In addition, educational facility trip distribution must take into consideration the residential densities surrounding the school site when determining the school trip distribution.**

Response: The distribution was revised based on Miami-Dade County's Cardinal Distribution information for the study area.

b. **Please consider trips arriving from the north.**

Response: The distribution was revised. A total of 23% was assigned to and from the north via SW 4th Avenue.

Comment 5: New Project Traffic Assignment - Figure 4:

a. **Please correct the label for SW 13 Street.**

Response: The label in Figure 4 was corrected accordingly.

b. Please considered restricting left turn movement exiting the driveway as the median opening only stores one vehicle and could cause delay and safety concerns.

Response: Left-turn movements were restricted at the driveways as recommended by the reviewer.

Comment 6: Future conditions traffic volumes – Page 11: As the 1.5% is the average of the two count station, please include City of Miami committed development for 2020 background analysis.

Response: Based on traffic volume data published by the FDOT for nearby traffic count stations, traffic volumes have not substantially increased during the past five years. However, for purposes of this traffic study, a growth rate of 1.5 % was applied to develop 2020 background traffic conditions in the study area and to conservatively account for unforeseen approved projects (committed trips) that may impact the study intersections.

In addition, a review of committed developments located in the vicinity of the proposed project was performed by analyzing readily available data provided by two City of Miami websites. The review of the following websites did not indicate any approved projects within the past five years near the subject school site:

http://maps.miamigov.com/miamizoning/index.htm
https://www.gridics.com/development/map

Comment 7: Accumulation Analysis – Page 17:
The consultant refers to the other charters schools, please confirm and include in the report if these schools are the same grades as the proposed school and similar characteristics.
Similar to comment 1.c, if 45 parking spaces will be for staff, please explain how the 50 parking spaces will accommodate staff and the parents dropping off/picking children.

Response: There will be 51 parking spaces provided on-site for staff, visitors, and parents to park. A text in the report was added to clarify the required parking spaces. Since 45 parking spaces are required for staff, 18 parking spaces will be available for parents plus stacking for 13 vehicles for a total of 31 vehicle on-site stacking capacity, including 12 on-street parking spaces adjacent to the site. Moreover, well over 100 parking spaces are available within walking distance from the school along SW 15th Road (both sides), SW 11th Street (both sides), SW 4th Avenue (both sides) and a public parking lot located under the I-95 overpass. Additionally, the new plan calls for three (3) shifts of 200

students each, separated by 30 minutes between shifts and there will be four (4) staff members assisting vehicles during the drop-off/pick-up operation. A queuing analysis (attached) indicates that traffic queues can be managed within the proposed drop-off/pick-up lane.

Comment 8: Appendix A – Please replace with the most updated site plan.
Response: The latest site plan was included in the revised report.

Comment 9: Appendix E:

a. **Please revise node 201 for all scenarios as the SB left turn (113, 118 and 118 trips) and SE movements (hard left and hard right) are not included in the analysis.**

Response: The intersection of SW 15th Road and SE 3rd Avenue/SE 13th Street has an atypical lane configuration (i.e., five-leg intersection). Intersections with more than four legs are not supported by the High Capacity Manual methodology. Thus, some movements were removed to access the intersection's level of service. The impact of the removed movements was accounted for in other movements.

b. **Please revise "Existing AM Peak Hour" intersections volumes to be consistent with Appendix D 2017 volume adjustments.**

Response: The existing AM volumes were revised accordingly.

Comment 10: School Traffic Operation Plan (TOP) comments: Please note that the Site Plan included in the package provides for a maximum capacity of 624 students instead of 600 included shown in Page 10 and 11 of the TOP. Please modify and resubmit or explain the discrepancies.

Response: The correct number of students is 600. The revised site plan is included.

Comment 11: Site Plan comments: Please clarify if the garage will be gated. If so considered analyzing to avoid spillback.

Response: This comment will be addressed by other team members.

Please call me if you have any questions.

TRAF TECH ENGINEERING, INC.

Joaquin E. Vargas, P.E.
Senior Transportation Engineer

Neighborhood Context
KLA Academy

Exhibit D