

**ATTACHMENT II**  
**Traffic Impact Study**

# *ALPHA INTERNATIONAL ACADEMY*

*121 South 24<sup>th</sup> Avenue  
Hollywood, Florida 33020*

## Traffic Impact Study



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## Introduction

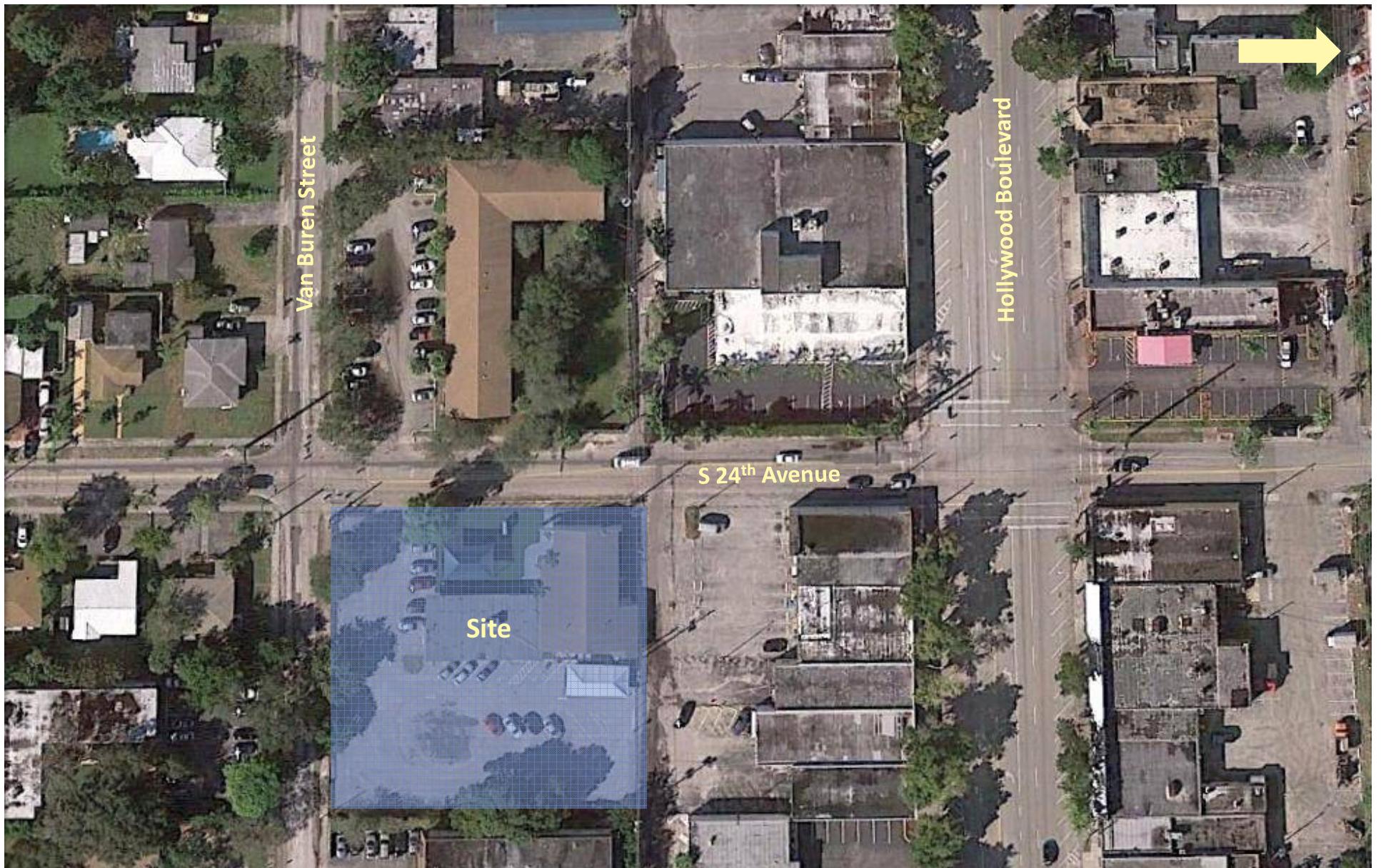
Alpha International Academy proposes to expand their existing facility, which is located next to Faith and Life Fellowship Ministries on the northeast corner of S. 24<sup>th</sup> Avenue and Van Buren Street in the City of Hollywood, Florida. The existing buildings on the project site total 6,249 gross square feet. The proposed expansion will result in a total building area of 19,824 gross square feet. The project site plan may be found in **Appendix G – Site Plan**.

Alpha International Academy currently has 90 students attending classes from Kindergarten to 5<sup>th</sup> grade. With the expansion, enrollment is proposed to increase to 240 students. The students are expected to arrive at school in two groups: 108 grades k-2 students and 132 grades 3-5 students. The two student groups are to be separated by a half hour for the purposes of arrival times. Grades k-2 will arrive on campus between 7:00 a.m. and 7:30 a.m. and will start classes at 8:00 a.m. Grades 3-5 will arrive on campus between 8:00 a.m. and 8:30 a.m. and will start class at 8:30 a.m. Grades k-2 pick-up time will be between 3:00 p.m. and 3:30 p.m. with class ending at 3:00 p.m. Grades 3-5 pick-up time will be between 3:30 p.m. and 4:00 p.m. with class ending at 3:30 p.m. Although the last class ends at 3:30 p.m., some students may remain on site for after school activities until 6:00 p.m.

Access to the project will be via three existing driveways as follows:

- The west side driveway connects to S. 24<sup>th</sup> Avenue and currently provides full access, but will be restricted to right-in/right-out operation during school arrival and departure times after the proposed school expansion. This driveway currently serves as the main access to the school and is expected to continue to be the main access for the expanded school.
- The north side driveway connects to an east-west alley and is planned to be an exit only driveway.
- The south side driveway connects to Van Buren Street and permits left-in and left-out access to/from the site. However, the left-out will not be permitted during student arrival and departure times.

The purpose of this study is to analyze the impacts of trips generated by the proposed expansion of Alpha International Academy on the adjacent roadway network and within the site. A particular issue of concern for school sites is the on-site queuing of traffic during morning and afternoon pick-up/drop-off hours. The study area includes the signalized intersections of S. 24<sup>th</sup> Avenue at Van Buren Street to the immediate south and the intersection of S. 24<sup>th</sup> Avenue at Hollywood Boulevard to the north. **Figure 1 – Site Location**, shows the location of the proposed development.



**Figure 1 – Site Location**  
Alpha International Academy  
Hollywood, Florida

## Data Collection

Four-hour (7-9:00 a.m. and 2-4:00 p.m.), turning-movement counts were collected at the signalized intersections of S. 24<sup>th</sup> Avenue at Van Buren Street and S. 24<sup>th</sup> Avenue at Hollywood Boulevard. Note that 2-4:00 p.m. is not the usual afternoon peak hour count period. However, because the Alpha International Academy ends classes at 3:00 p.m., these hours were considered best to evaluate the impact of the school on the adjacent roadway network. Copies of the traffic counts may be found in **Appendix A – Traffic Counts**.

The turning-movement counts were collected to determine the existing conditions at the significant intersections within the study area.

Existing traffic signal timing and phasing plans were obtained from Broward County's Traffic Engineering Division for the two signalized intersections within the study area. Copies of the existing signal timing and phasing plans may be found in **Appendix B – Existing Signal Timing**.

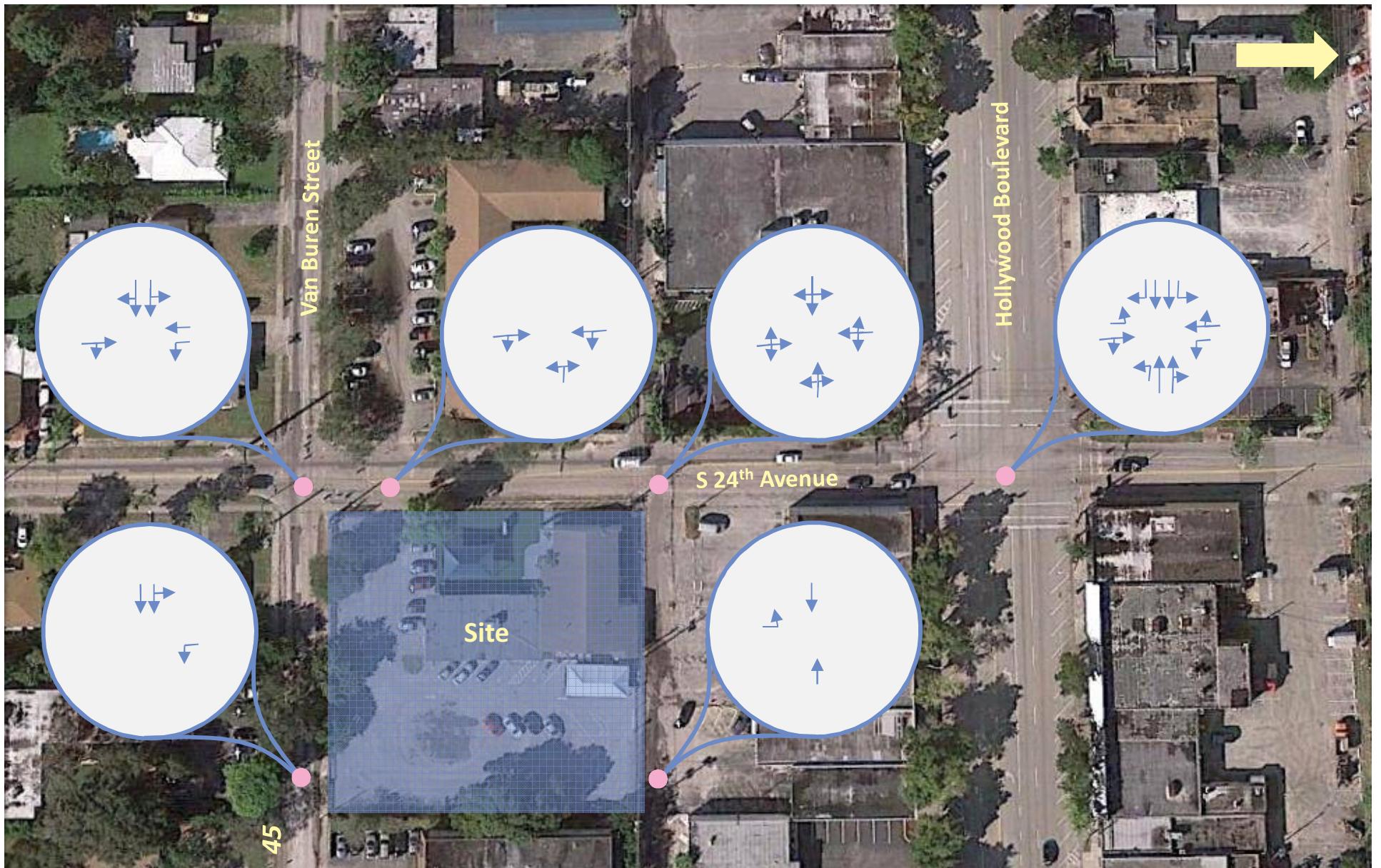
A preliminary field review was conducted on August 31, 2016 to obtain pertinent roadway geometry, traffic signal features, etc. In addition to the field review, aerial maps were consulted to verify intersection spacing, storage lane lengths and lane assignments.

Hollywood Boulevard (SR 820) in the study area is an east-west, four-lane, divided arterial highway with a two-way left-turn lane and a posted speed limit of 35 mph.

S. 24<sup>th</sup> Avenue is a north-south, two-lane, undivided local roadway with a posted speed limit of 30 mph. It widens to provide left-turn lanes at its intersections with Van Buren Street and Hollywood Boulevard.

Van Buren Street is an eastbound, two-lane, one-way local roadway with a posted speed limit of 30 mph.

**Figure 2 – Existing Intersection Permitted Movements** shows the permitted left-turn, right-turn and through movements at the intersections within the study area.



**Figure 2 – Existing Intersection Permitted Movements**

Alpha International Academy  
Hollywood, Florida

## **Analyses**

### ***Adjustment Factors***

The Peak Season Conversion Factor (1.08) obtained from the Florida Department of Transportation's (FDOT) *2015 Peak Season Factor Category Report* was applied to the August and September 2016 turning-movement counts. **Tables 1 and 2 – Turning-movement Counts** shows the peak-hour and mid-afternoon traffic volumes within the study area. Note that the p.m. peak hour of the generator, not the peak hour of the adjacent roadway was used in the analysis of conditions. This was due to the fact that the proposed school will generate a significant volume of traffic up to and including 3:00 p.m., but will generate almost no traffic in the 4:00-6:00 p.m. timeframe that generally contains the peak hour of the adjacent roadways.

Using Annual Average Daily Traffic volumes obtained from FDOT, an Annual Growth Factor (4.04%) was calculated and applied to the adjusted peak season traffic volumes. Copies of the seasonal and annual growth factors are provided in **Appendix C – Adjustment Factors**.

### ***Existing Conditions***

Synchro signal operations analysis software was used to construct a model of the existing roadway network in the study area. The model relied upon the adjusted peak-hour, turning-movement counts shown in Tables 1 and 2 and the existing signal timing and phasing plans provided by Broward County.

Copies of the Synchro reports for existing morning and afternoon peak-hour, peak-season conditions may be found in **Appendix D – Existing Conditions Analyses**. As the Synchro reports indicate, the existing system cycle lengths were used to evaluate the existing intersection operations. Although the existing cycle lengths were used, splits were optimized to reflect the actual actuated operation of the two signalized intersections.

**Table 3, AM Peak Hour Queue Length, Level of Service and Delay Findings** and **Table 4, PM Peak Hour Queue Length, Level of Service and Delay Findings** summarize the critical elements of the analyses. As Tables 3 and 4 show, the existing signalized intersections are both operating at Level of Service (LOS) D or better. The unsignalized intersection of S. 24<sup>th</sup> Avenue at the project entrance also operates at a very good level of service with the westbound left-turn, the most critical movement, operating at LOS B, which indicates minimal delay to drivers attempting to leave the Alpha International Academy and enter the traffic flow on S. 24<sup>th</sup> Avenue. Note that vehicle queue storage at all auxiliary turn lanes is more than sufficient.

**Table 1**  
**AM Peak-Hour Turning-movement Counts**  
**Alpha International Academy**

**Table 2**  
**PM Peak Hour of Generator Turning-movement Counts**  
**Alpha International Academy**

**Table 3**  
**AM Peak Hour Queue Length, Level of Service and Delay Summary**  
**Alpha International Academy**

Intersection	Storage		Existing Conditions			Background Traffic Conditions			Total Traffic Conditions				
	Lane Length	Movement	LOS	Delay	Queue Length	Movement	LOS	Delay	Queue Length	Movement	LOS	Delay	Queue Length
<b>Van Buren Street at S. 24th Avenue</b>	N/A	Overall	A	7.1	N/A	Overall	A	7.6	N/A	Overall	A	8.2	N/A
	N/A	EBLTR	B	10.2	25	EBLTR	B	10.9	28	EBLTR	B	11.6	34
	N/A	NBTR	A	4.6	29	NBTR	A	4.9	32	NBTR	A	5.3	37
	70'	SBL	A	4.2	5	SBL	A	4.4	5	SBL	A	5.0	11
	N/A	SBT	A	4.6	17	SBT	A	4.7	19	SBT	A	5.0	21
<b>Hollywood Boulevard at S. 24th Avenue</b>	N/A	Overall	D	43.1	N/A	Overall	D	42.7	N/A	Overall	D	43.0	N/A
	180'	EBL	D	45.0	101	EBL	D	45.5	105	EBL	D	47.7	106
	N/A	EBT	D	43.5	352	EBT	D	42.0	372	EBT	D	42.8	376
	50'	EBR	A	0.1	0	EBR	A	0.1	0	EBR	A	2.0	6
	170'	WBL	D	49.0	25	WBL	D	48.5	59	WBL	D	52.8	74
	N/A	WBTR	E	59.5	371	WBTR	E	58.4	455	WBTR	E	59.6	455
	175'	NBL	B	18.7	81	NBL	C	20.7	155	NBL	C	22.1	190
	N/A	NBTR	B	16.3	63	NBTR	B	18.1	127	NBTR	B	17.6	141
	105'	SBL	C	25.9	26	SBL	C	28.6	65	SBL	C	30.2	68
	N/A	SBTR	C	22.9	65	SBTR	C	25.6	143	SBTR	C	27.3	155
<b>S. 24th Avenue at Alpha Int. Academy Entrance</b>	N/A	Overall	N/A	1.0	N/A	Overall	N/A	1.1	N/A	Overall	N/A	1.8	N/A
	N/A	WBLR	B	10.2	2	WBLR	B	10.4	4	WBLR	B	10.1	8
	N/A	NBT	A	0	0	NBT	A	0	0	NBT	A	0.0	0
	N/A	NBR	A	0	0	NBR	A	0	0	NBR	A	0.0	0
	60'	SBL	A	7.7	0	SBL	A	7.7	0	SBL	N/A	N/A	N/A
	N/A	SBT	A	0	0	SBT	A	0	0	SBT	A	0.0	0
<b>Van Buren at Alpha Int. Academy Entrance</b>	N/A	Overall	N/A	N/A	N/A	Overall	N/A	N/A	N/A	Overall	N/A	0.0	N/A
	N/A	EBL	N/A	N/A	N/A	EBL	N/A	N/A	N/A	EBL	A	0.0	0
	N/A	EBT	N/A	N/A	N/A	EBT	N/A	N/A	N/A	EBT	A	0.0	0
	N/A	SBL	N/A	N/A	N/A	SBL	N/A	N/A	N/A	SBL	N/A	N/A	N/A

**Table 4**  
**PM Peak Hour of Generator Queue Length, Level of Service and Delay Summary**  
**Alpha International Academy**

Intersection	Storage		Existing Conditions			Background Traffic Conditions			Total Traffic Conditions				
	Lane Length	Movement	LOS	Delay	Queue Length	Movement	LOS	Delay	Queue Length	Movement	LOS	Delay	Queue Length
<b>Van Buren Street at S. 24th Avenue</b>	N/A	Overall	A	8.2	N/A	Overall	A	8.6	N/A	Overall	A	8.9	N/A
	N/A	EBLTR	B	11.2	49	EBLTR	B	11.6	54	EBLTR	B	12.0	58
	N/A	NBTR	A	5.9	56	NBTR	A	6.4	64	NBTR	A	6.7	70
	70'	SBL	A	5.1	11	SBL	A	5.4	12	SBL	A	6.0	17
	N/A	SBT	A	5.5	33	SBT	A	5.8	37	SBT	A	6.0	40
<b>Hollywood Boulevard at S. 24th Avenue</b>	N/A	Overall	D	41.4	N/A	Overall	D	41.3	N/A	Overall	D	41.6	N/A
	180'	EBL	D	44.7	109	EBL	D	46.2	111	EBL	D	48.3	113
	N/A	EBT	D	38.4	307	EBT	D	36.9	322	EBT	D	37.5	325
	50'	EBR	A	0.1	0	EBR	A	0.1	0	EBR	A	0.1	0
	170'	WBL	D	50.9	111	WBL	D	50.9	117	WBL	D	53.0	124
	N/A	WBTR	E	57.7	452	WBTR	E	56.7	480	WBTR	E	57.6	479
	175'	NBL	C	20.2	107	NBL	C	22.1	121	NBL	C	22.6	150
	N/A	NBTR	C	20.0	156	NBTR	C	23.0	177	NBTR	C	22.9	190
	105'	SBL	C	27.5	55	SBL	C	30.2	62	SBL	C	31.6	64
	N/A	SBTR	C	26.3	147	SBTR	C	29.2	167	SBTR	C	30.5	175
<b>S. 24th Avenue at Alpha Int. Academy Entrance</b>	N/A	Overall	N/A	0.9	N/A	Overall	N/A	1.0	N/A	Overall	N/A	1.4	N/A
	N/A	WBLR	B	11.5	4	WBLR	B	11.9	4	WBR	B	10.9	10
	N/A	NBT	A	0	0	NBT	A	0	0	NBT	A	0.0	0
	N/A	NBR	A	0	0	NBR	A	0	0	NBR	A	0.0	0
	60'	SBL	A	7.9	0	SBL	A	8	2	SBL	N/A	N/A	N/A
	N/A	SBT	A	0	0	SBT	A	0	0	SBT	A	0.0	0
<b>Van Buren at Alpha Int. Academy Entrance</b>	N/A	Overall	N/A	N/A	N/A	Overall	N/A	N/A	N/A	Overall	N/A	0.0	N/A
	N/A	EBL	N/A	N/A	N/A	EBL	N/A	N/A	N/A	EBL	A	0.0	0
	N/A	EBT	N/A	N/A	N/A	EBT	N/A	N/A	N/A	EBT	A	0.0	0
	N/A	SBL	N/A	N/A	N/A	SBL	N/A	N/A	N/A	SBL	N/A	N/A	N/A

## ***Background Conditions***

Future build-out year traffic volumes without the project were derived by applying the 4.04 percent annual growth rate to the adjusted peak-season, turning-movement counts. Tables 1 and 2 show the peak-season background traffic volumes expected during the future project build-out year of 2018.

**Appendix E – Background Traffic Conditions Analyses** contains copies of the Synchro reports for the studied intersections. In addition to reporting existing intersection operating conditions, Tables 3 and 4 also provide a summary of the critical elements of the background conditions analyses and demonstrate that, similar to the existing conditions analysis reported previously, all signalized intersections are expected to operate at an acceptable LOS D or better in Year 2018 without the project.

## ***Project Trip Generation***

**Table 5 – Daily Peak Hour Trip Generation** and **Table 6 - A.M. Peak Hour Trip Generation** depict the trip generation for the project site during the peak periods for adjacent street traffic. **Table 7 – P.M. Peak Hour of Generator Trip Generation** provides the trip generation for the afternoon peak hour of the school, which is earlier than the p.m. peak hour of adjacent street traffic.

Trip generation characteristics were obtained from the Institute of Transportation Engineers' (ITE) *Trip Generation* manual, 9<sup>th</sup> Edition. ITE Land Use Code 560 – “Church” was used to estimate trips for Faith and Life Fellowship Ministries. The trip generation characteristics for ITE Land Use Code 534 - “Private School, K-8” were selected for Alpha International Academy. Although the Alpha International Academy will only serve students through the fifth grade, this is the closest available land use provided by ITE.

As the tables show, the proposed Alpha International Academy is anticipated to generate 369 new daily trips, 135 new a.m. peak-hour trips, and 92 trips in the p.m. peak-hour of the generator. Note also that the tables provide a trip generation comparison between the current church/school use on the property and the proposed, expanded church/school use on the property.

## ***Project Distribution and Assignment***

Because Alpha International Academy already exists, it was possible to observe the direction from which drivers approached and departed the project in order to determine a directional distribution of vehicular trips. However, because City of Hollywood staff has requested that the existing intersection of S. 24<sup>th</sup> Avenue at the school entrance driveway be restricted to a right-in/right-out operation in the future, the existing distribution has been modified to reflect the change in access. **Figure 3 – Project Trip Distribution** shows the traffic distribution on study area roadways derived from the field observations.

**Figure 4 – Project Trip Assignment** shows the daily and peak-hour project trips assigned to the study area roadway network in accordance with the trip distribution. It should be noted that Alpha International Academy operates a school bus that will continue to transport students to and from the school. However, as a conservative measure, for the purposes of evaluating roadway impacts of the proposed school, all project trips have been assumed to be passenger vehicles.

**Table 5**  
**Daily Trip Generation**  
**Alpha International Academy**

Land Use	ITE Code	Intensity	Trip Generation Rate <sup>(1)</sup>	Total Trips			Internal Trips				External Trips			Pass-by Trips	New Trips			
				In	Out	Total	In	Out	Total	%	In	Out	Total		In	Out	Total	
<b>Existing Use</b>																		
Private School (K-12)	536	90 students	T=2.48(X) (50/50)	112	111	223	0	0	0	0.0%	112	111	223	0	0.0%	112	111	223
Church	560	4,218 s.f.	T=9.11(X) (50/50)	19	19	38	0	0	0	0.0%	19	19	38	0	0.0%	19	19	38
<b>Sub-Total</b>				<b>131</b>	<b>130</b>	<b>261</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0%</b>	<b>131</b>	<b>130</b>	<b>261</b>	<b>0</b>	<b>0</b>	<b>132</b>	<b>131</b>	<b>262</b>
<b>Proposed Use</b>																		
Private School (K-8)	536	240 students	T=2.48(X) (50/50)	298	297	595	0	0	0	0.0%	298	297	595	0	0.0%	298	297	595
Church	560	3,829 s.f.	T=9.11(X) (50/50)	17	18	35	0	0	0	0.0%	17	18	35	0	0.0%	17	16	35
<b>Sub-Total</b>				<b>315</b>	<b>315</b>	<b>630</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0%</b>	<b>315</b>	<b>315</b>	<b>630</b>	<b>0</b>	<b>0</b>	<b>316</b>	<b>314</b>	<b>630</b>
<b>Net Difference</b>				<b>184</b>	<b>185</b>	<b>369</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0%</b>	<b>184</b>	<b>185</b>	<b>369</b>	<b>0</b>	<b>0</b>	<b>184</b>	<b>183</b>	<b>367</b>

<sup>(1)</sup> Trip generation data obtained from Institute of Transportation Engineer's *Trip Generation* manual, 9th Edition.

**Table 6**  
**AM Peak Hour Trip Generation**  
**Alpha International Academy**

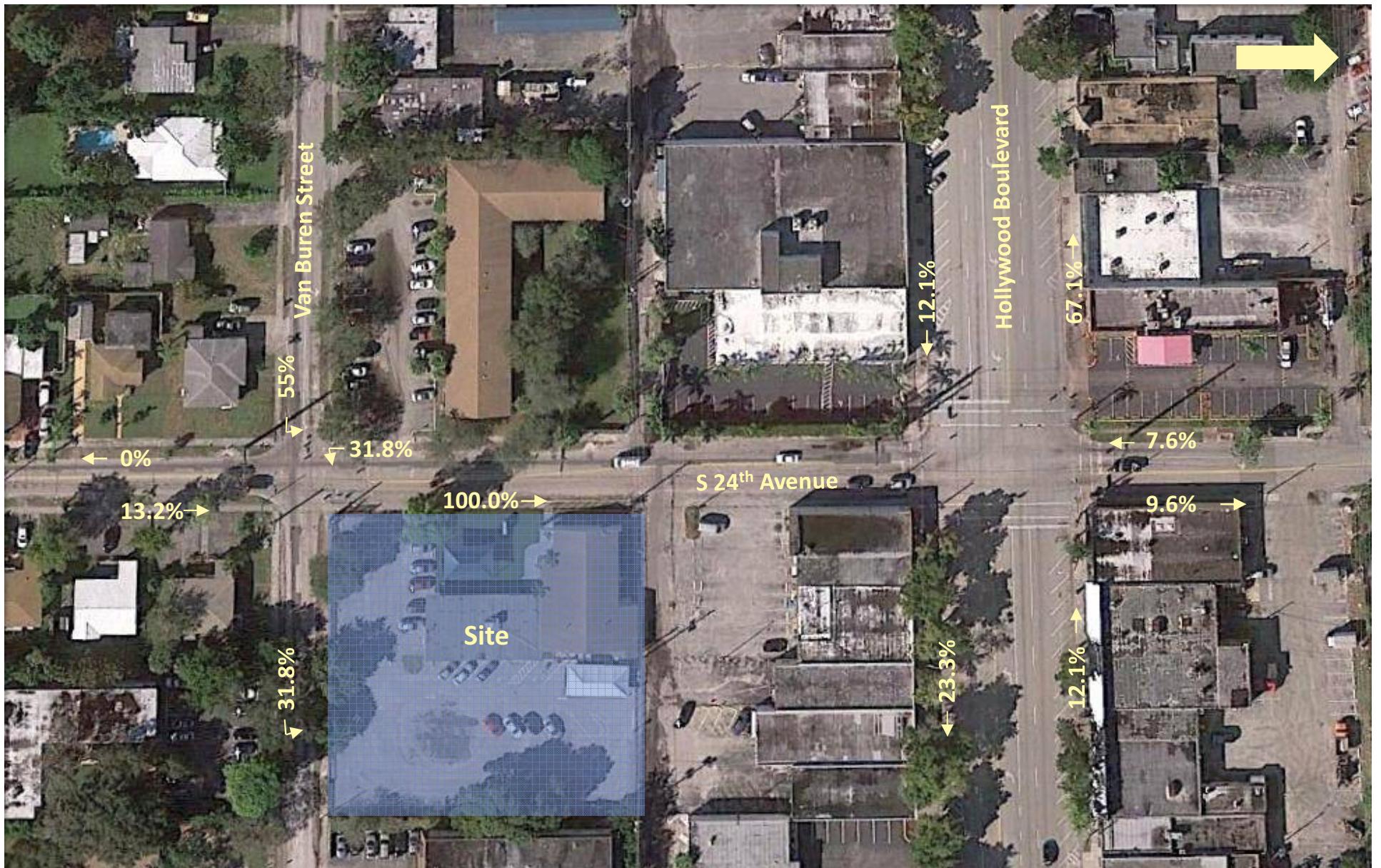
Land Use	ITE Code	Intensity	Trip Generation Rate <sup>(1)</sup>	Total Trips			Internal Trips				External Trips			Pass-by Trips	New Trips			
				In	Out	Total	In	Out	Total	%	In	Out	Total		In	Out	Total	
<b>Existing Use</b>																		
Private School (K-8)	534	90 students	T=0.90(X)+3.01 (55/45)	46	38	84	0	0	0	0.0%	46	38	84	0	0.0%	46	38	84
Church/Synagogue	560	4,218 s.f.	T=0.56(X) (62/38)	1	1	2	0	0	0	0.0%	1	1	2	0	5.0%	1	1	2
<b>Sub-Total</b>				<b>47</b>	<b>39</b>	<b>86</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0%</b>	<b>47</b>	<b>39</b>	<b>86</b>	<b>0</b>	<b>0</b>	<b>47</b>	<b>39</b>	<b>86</b>
<b>Proposed Use</b>																		
Private School (K-8)	534	240 students	T=0.90(X)+3.01 (55/45)	120	99	219	0	0	0	0.0%	120	99	219	0	0.0%	120	99	219
Church/Synagogue	560	3,829 s.f.	T=0.56(X) (62/38)	1	1	2	0	0	0	0.0%	1	1	2	0	5.0%	1	1	2
<b>Sub-Total</b>				<b>122</b>	<b>99</b>	<b>221</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0%</b>	<b>122</b>	<b>99</b>	<b>221</b>	<b>0</b>	<b>0</b>	<b>122</b>	<b>99</b>	<b>221</b>
<b>Net Difference</b>				<b>75</b>	<b>60</b>	<b>135</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0%</b>	<b>75</b>	<b>60</b>	<b>135</b>	<b>0</b>	<b>0</b>	<b>75</b>	<b>60</b>	<b>135</b>

<sup>(1)</sup> Trip generation data obtained from Institute of Transportation Engineer's *Trip Generation* manual, 9th Edition.

**Table 7**  
**PM Peak Hour Generator Trip Generation**  
**Alpha International Academy**

Land Use	ITE Code	Intensity	Trip Generation Rate <sup>(1)</sup>	Total Trips			Internal Trips				External Trips			Pass-by Trips	New Trips			
				In	Out	Total	In	Out	Total	%	In	Out	Total		In	Out	Total	
<b>Existing Use</b>																		
Private School (K-8)	534	90 students	T=0.61(X)-4.70 (47/53)	24	26	50	0	0	0	0.0%	24	26	50	0	0.0%	24	26	50
Church/Synagogue	560	4,218 s.f.	T=0.94(X) (54/46)	2	2	4	0	0	0	0.0%	2	2	4	0	5.0%	2	2	4
<b>Sub-Total</b>				<b>26</b>	<b>28</b>	<b>54</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0%</b>	<b>26</b>	<b>28</b>	<b>54</b>	<b>0</b>	<b>0</b>	<b>26</b>	<b>28</b>	<b>54</b>
<b>Proposed Use</b>																		
Private School (K-8)	534	240 students	T=0.61(X)-4.70 (47/53)	67	75	142	0	0	0	0.0%	67	75	142	0	0.0%	67	75	142
Church/Synagogue	560	3,829 s.f.	T=0.94(X) (54/46)	2	2	4	0	0	0	0.0%	2	2	4	0	5.0%	2	2	4
<b>Sub-Total</b>				<b>69</b>	<b>77</b>	<b>146</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0%</b>	<b>69</b>	<b>77</b>	<b>146</b>	<b>0</b>	<b>0</b>	<b>69</b>	<b>77</b>	<b>146</b>
<b>Net Difference</b>				<b>43</b>	<b>49</b>	<b>92</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0%</b>	<b>43</b>	<b>49</b>	<b>92</b>	<b>0</b>	<b>0</b>	<b>43</b>	<b>50</b>	<b>92</b>

<sup>(1)</sup> Trip generation data obtained from Institute of Transportation Engineer's *Trip Generation* manual, 9th Edition.



**Figure 3 – Project Trip Distribution**

Alpha International Academy  
Hollywood, Florida



**Figure 4 – Project Trip Assignment**

Alpha International Academy  
Hollywood, Florida

## **Total Traffic Conditions**

Future total traffic volumes including project traffic were obtained by adding the 2018 background volumes to the project traffic volumes. The resulting future volumes are shown in the turning-movement count Tables 1 and 2.

**Appendix F – Total Traffic Conditions Analyses** contains copies of the Synchro reports for this second analysis condition with all intersection splits and offsets optimized by Synchro. **Table 3 – AM Peak Hour Queue Length, Level of Service and Delay Summary** and **Table 4 – PM Peak Hour Queue Length, Level of Service and Delay Summary** provide a summary of the critical elements of these analyses and demonstrates that the signalized intersections are expected to continue to operate at the same levels of service as in the existing and background conditions. However, the unsignalized intersection of Van Buren Street at the project entrance is expected to become an important access point in the future due to the change in access at the intersection of S. 24<sup>th</sup> Avenue at the school entrance driveway.

## **Queuing and Circulation Analysis**

A key element of school operations is the queuing of vehicles for the drop-off/pick-up operations by parents. The actual covered drop-off/pick-up area is expected to accommodate at least three vehicles at any one time since it will be approximately eighty feet long and may accommodate four vehicles when smaller vehicles are in the queue.

Field observations were conducted on January 25, 2017 to determine the queue of vehicles required during morning drop off and afternoon pick up times at the Alpha International Academy. The longest queue of vehicle occurring in the morning before classes began at 8:00 a.m. was three vehicles. The same three vehicle queue length occurred at 7:36, 7:38, 7:47 and 8:02 a.m. In the afternoon, the longest queue of vehicles occurred at 2:57 p.m. when seven vehicles were waiting for students to be released from class (the seven vehicles in the queue included the school bus).

It should be noted that a half dozen parents were observed to walk their student(s) to school in the morning and home again in the afternoon. These pedestrian trips were not considered in the current traffic analysis, but, given the school's location immediately adjacent to a large residential area with many apartments and single-family homes, it is expected that some portion of the expanded school's student population will also walk to and from school. The intersection of Van Buren Street and S. 24<sup>th</sup> Avenue provides signal-controlled pedestrian crosswalks to facilitate safe pedestrian access to/from the school. While there are no pedestrian signal features at this intersection signal, the signal timing ensures that there is sufficient time for pedestrians to cross the roadway under the minimum green time plus yellow clearance interval. The timing plans may be found in Appendix B of the report.

A review of the existing signal timing plans for this intersection, shows that the north/south movements have a minimum of 10 seconds green time. The east/west movements have a minimum of 8 seconds green time. Added to these green times is the 4 seconds of yellow clearance interval. So, the north/south movements have 14 seconds minimum to cross the road and the east/west movements have 12 seconds minimum to cross the road.

Van Buren Street is approximately 21' wide. S. 24th Avenue is approximately 24' wide on the south approach and 35' wide on the north approach. Assuming a walking speed of 3.5 feet per second, which is the walking speed used by Broward County to account for elderly pedestrians and children, ( $35 \text{ ft.} / 3.5 \text{ ft./second} = 10 \text{ seconds} + 1 \text{ second of perception/reaction time} = 11 \text{ seconds}$ ). The maximum time required to cross the widest approach to the intersection is less than the minimum time provided. Of course, the traffic signal green time is often longer due to vehicular traffic extending the call, but, at a minimum, more time is provided than is required to cross every approach to the intersection.

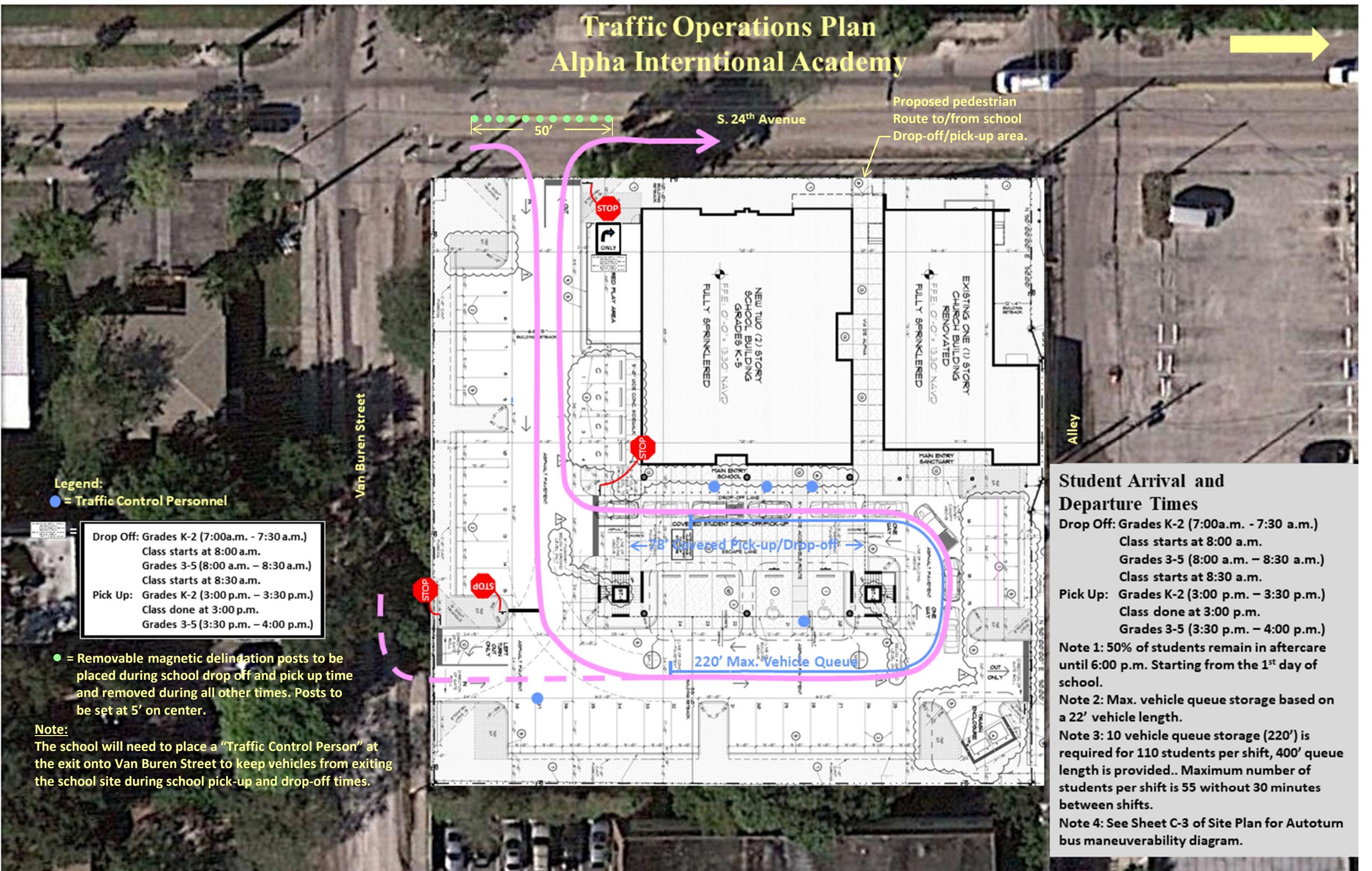
Comparing the peak queue length of seven vehicles to the 90 student population of the school, it would appear that the maximum queue of vehicles equates to 7.78 percent of the student population ( $7 \text{ vehicles} / 90 \text{ students} = 0.0778 \text{ vehicles per students, or } 7.78\%$ ). Applying this percentage to the proposed, maximum student pick-up volume of 132 students in the future at 3:00 p.m. results in an expected vehicle queue storage length of 10 vehicles ( $0.0778 \text{ vehicles per students} \times 132 \text{ students} = 10 \text{ vehicles}$ ), or 220 feet ( $10 \text{ vehicles} \times 22 \text{ feet per vehicle} = 220 \text{ feet}$ ).

However, there is another factor affecting the vehicle storage queue length. As was previously discussed, some portion of the student population is expected to use the school's bus and will, therefore, reduce the number of vehicles in the drop-off/pick-up queue. During the field observations on January 25<sup>th</sup> it was noted that fifteen students rode the bus to and from school. In other words, the 60-passenger bus was 25 percent full. Or, viewed another way, 16.67 percent of the school's student population rode the bus. Applying this percentage to the future maximum student population at any one time of 132 students results in an expected bus ridership of 22 students. Subtracting these 22 students from the 132 students to be picked up at 3:00 p.m. leaves 110 students to be picked up by individual parents. Again, applying the 7.78 percent queue value to the remaining student population results in a total vehicle queue storage requirement of 9 vehicles ( $0.0778 \text{ vehicles per students} \times 110 \text{ students} = 8.56 \text{ vehicles}$ ), or 198 feet ( $9 \text{ vehicles} \times 22 \text{ feet per vehicle} = 198 \text{ feet}$ ). This is less than half of the available 400 feet of vehicle storage on site.

Because the traffic entering and exiting the project site is expected to use two access points, it was necessary to consider how the two access points would affect interior vehicle circulation on the site. **Figure 5 – Traffic Operations Plan** graphically depicts the vehicle circulation. It is expected that approximately 32 percent of project-related vehicle trips will enter the site from Van Buren Street while the remaining 68 percent will continue to use the S. 24<sup>th</sup> Avenue access point.

As Figure 5 illustrates, a new stop sign has been proposed for permanent installation facing eastbound traffic at the east end of the parking aisle by the Van Buren Street exit. This stop condition is advised so that vehicles entering from Van Buren Street are not delayed by queued vehicles. (This is merely a precaution since it is not expected that the queue of vehicles will extend this far back from the pick-up/drop-off area.) Again, traffic control personnel will be posted at this location to ensure that eastbound vehicles do not conflict with entering vehicles from Van Buren Street and to oversee the merge of vehicles queued from S. 24<sup>th</sup> Avenue and those entering from Van Buren Street. Three additional traffic control personnel are expected to be posted at the actual pick-up/drop-off area to ensure the safe arrival or departure of students from their parents' vehicles.

Note that the lone school bus expected to serve the Alpha International Academy will drop off and pick up students at the same pick-up/drop-lane as will be used by other vehicles. There is no separate bus lane; however, the bus pick-up/drop-off area will be on the east side of the vehicle circulation loop since the bus will exit at the northside gate onto the alley north of the school rather than follow the vehicle circulation loop like the passenger vehicles. Traffic control personnel will be posted at the bus pick-up/drop-off area to ensure that students are guided across the interior of the vehicle circulation loop and across the passenger vehicle queue next to the school building where the bussed students join the rest of their classmates.



**Figure 5 – Traffic Operations Plan**  
Alpha International Academy  
Hollywood, Florida

## **Parking Analysis**

Based on City of Hollywood parking requirements, 26 parking spaces and two (2) handicap parking spaces are required for the Alpha International Academy and/or the Faith and Life Fellowship Ministries. The project site plan, however, shows a total of 36 parking spaces and two (2) handicap parking spaces. This is an ample supply of parking for the 24 teachers and staff that will work at Alpha International Academy and is ten more spaces than those required for Faith and Life Fellowship Ministries.

## **Conclusions and Recommendations**

Based on the results of this analysis, it is concluded that the proposed Alpha International Academy will not have a significant impact on the adjacent roadway network. In addition, on-site vehicle queue storage and parking supply are more than adequate for the project's demand. It is recommended that an additional stop sign and stop bar pavement marker be added to the site plan by the Van Buren Street access (as shown in Figure 5).

## **Appendix A – Traffic Counts**

## THOMAS A. HALL, INC.

VAN BUREN ST AT 24 AVE  
BROWARD COUNTY, FLORIDA  
COUNTED BY: SETH HALL  
UNSIGNALLIZED

1355 ADAMS STREET  
HOLLYWOOD, FL 33019  
954-288-4447

Site Code: 10031  
Start Date: 8/31/2016  
File I.D.: HOLLYWOOD  
Page: 1

## ALL VEHICLES

VAN BUREN ST From West				VAN BUREN ST From East				SW 24TH AVE From South				SW 24TH AVE From North				Total	
Date	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	
8/31/2016																	
7:00	0	4	21	5	0	0	0	0	0	0	35	2	0	0	12	0	79
7:15	0	0	28	6	0	0	0	0	0	0	40	1	0	2	13	0	90
7:30	0	2	55	8	0	0	0	0	0	0	44	2	0	4	30	0	145
7:45	0	3	33	7	0	0	0	0	0	0	12	3	0	6	22	0	86
Hr Total	0	9	137	26	0	0	0	0	0	0	131	8	0	12	77	0	400
8:00	0	4	30	7	0	0	0	0	0	0	13	2	0	3	10	0	69
8:15	0	4	30	6	0	0	0	0	0	0	16	1	0	3	10	0	70
8:30	0	3	23	4	0	0	0	0	0	0	10	1	0	0	7	0	48
8:45	0	3	32	5	0	0	0	0	0	0	27	3	0	3	14	0	87
Hr Total	0	14	115	22	0	0	0	0	0	0	66	7	0	9	41	0	274
* BREAK *																	
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hr Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hr Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* BREAK *																	
14:00	0	3	43	14	0	0	0	0	0	0	30	2	0	3	16	0	111
14:15	0	9	35	13	0	0	0	0	0	0	23	5	2	2	21	0	110
14:30	0	4	40	11	0	0	0	0	0	0	37	5	0	7	19	0	123
14:45	0	11	72	16	0	0	0	0	0	0	56	15	0	16	35	0	221
Hr Total	0	27	190	54	0	0	0	0	0	0	146	27	2	28	91	0	565
15:00	0	7	54	13	0	0	0	0	0	0	60	6	0	5	33	0	178
15:15	0	6	57	15	0	0	0	0	0	0	41	1	0	2	29	0	151
15:30	0	4	54	15	0	0	0	0	0	0	48	4	0	5	30	0	160
15:45	0	8	64	23	0	0	0	0	0	0	60	3	0	7	32	0	197
Hr Total	0	25	229	66	0	0	0	0	0	0	209	14	0	19	124	0	686
*TOTAL*	0	75	671	168	0	0	0	0	0	0	552	56	2	68	333	0	1925

VAN BUREN ST AT 24 AVE  
BROWARD COUNTY, FLORIDA  
COUNTED BY:  
UNSIGNALLIZED

THOMAS A. HALL, INC.  
1355 ADAMS STREET  
HOLLYWOOD, FL 33019  
954-288-4447

Site Code: 10031  
Start Date: 8/31/16  
File I.D.: HOLLYWOOD  
Page: 2

ALL VEHICLES

VAN BUREN ST From West		VAN BUREN ST From East		SW 24TH AVE From South		SW 24TH AVE From North						
Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Total
Date	8/31/2016											

Peak Hour Analysis By Entire Intersection for the Period: 07:00 to 09:00 on 8/31/2016

Peak start	07:00	07:00	07:00	07:00	07:00	07:00	07:00	07:00	07:00	07:00	07:00	400
Volume	0	9	137	26	0	0	0	0	0	0	131	8
Percent	0%	5%	80%	15%	#####	#####	#####	#####	0%	0%	94%	6%
Pk total	172				0			139				89
Highest	7:30			8:30			8:45				8:45	
Volume	0	2	55	8	0	0	0	0	0	44	2	0
Hi total	65				0			46				34
PHF	0.66			#####			0.76				0.65	

Peak Hour Analysis By Entire Intersection for the Period: 11:00 to 01:00 on 8/31/2016

Peak start	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	0
Volume	0	0	0	0	0	0	0	0	0	0	0	0
Percent	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
Pk total	0			0			0					0
Highest	12:15			12:45			12:15				12:30	
Volume	0	0	0	0	0	0	0	0	0	0	0	0
Hi total	0			0			0				0	
PHF	#####			#####			#####				#####	

Peak Hour Analysis By Entire Intersection for the Period: 16:00 to 18:00 on 8/31/2016

Peak start	14:45	14:45	14:45	14:45	14:45	14:45	14:45	14:45	14:45	14:45	14:45	710
Volume	0	28	237	59	0	0	0	0	0	205	26	0
Percent	0%	9%	73%	18%	#####	#####	#####	#####	0%	89%	11%	0%
Pk total	324			0			231				155	
Highest	14:45			14:30			14:45				14:45	
Volume	0	11	72	16	0	0	0	0	0	56	15	0
Hi total	99			0			71				51	
PHF	0.82			#####			0.81				0.76	

## THOMAS A. HALL, INC.

HOLLYWOOD BLV AT SW 24TH AVE  
BROWARD COUNTY, FLORIDA  
COUNTED BY:  
SIGNALIZED

1355 ADAMS STREET  
HOLLYWOOD, FL 33019  
954-288-4447

Site Code: 10031  
Start Date: 9/1/2016  
File I.D.: HOLLYWOOD  
Page: 3

## ALL VEHICLES

HOLLYWOOD BLVD From West				HOLLYWOOD BLVD From East				SW 24TH ST From South				SW 24TH ST From North				Total	
Date	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	
9/1/2016																	
7:00	0	6	66	1	0	5	110	0	0	28	13	5	0	3	5	6	248
7:15	0	11	104	4	0	9	122	3	0	35	20	3	0	6	13	5	335
7:30	0	19	141	4	0	5	140	4	0	40	21	2	0	8	15	6	405
7:45	0	25	183	4	0	9	144	4	0	39	26	8	0	13	16	8	479
Hr Total	0	61	494	13	0	28	516	11	0	142	80	18	0	30	49	25	1467
8:00	0	18	134	7	0	7	159	9	0	26	21	12	0	7	18	13	431
8:15	0	18	153	4	0	5	153	6	0	32	21	9	0	10	21	10	442
8:30	0	21	131	3	0	7	115	10	0	33	17	4	0	9	15	8	373
8:45	2	22	150	3	0	10	122	8	0	32	19	12	0	10	26	6	422
Hr Total	2	79	568	17	0	29	549	33	0	123	78	37	0	36	80	37	1668
* BREAK *																	
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hr Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* BREAK *																	
12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hr Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* BREAK *																	
14:00	0	20	157	4	0	7	157	7	0	26	13	9	0	8	14	14	436
14:15	1	25	127	1	0	9	179	12	0	23	22	7	1	7	14	11	439
14:30	0	21	152	11	0	11	167	20	0	26	34	2	0	6	16	11	477
14:45	0	20	136	2	0	36	147	12	0	17	42	4	1	10	28	2	457
Hr Total	1	86	572	18	0	63	650	51	0	92	111	22	2	31	72	38	1809
15:00	1	23	149	3	0	10	162	2	0	37	43	4	0	10	33	10	487
15:15	1	22	135	2	0	9	125	0	0	21	33	5	0	8	22	3	386
15:30	0	20	127	2	0	13	134	3	0	14	22	2	0	5	18	4	364
15:45	1	20	102	4	0	16	142	9	1	17	13	5	0	7	15	4	356
Hr Total	3	85	513	11	0	48	563	14	1	89	111	16	0	30	88	21	1593
*TOTAL*	6	311	2147	59	0	168	2278	109	1	446	380	93	2	127	289	121	6537

## THOMAS A. HALL, INC.

HOLLYWOOD BLV AT SW 24TH AVE  
 BROWARD COUNTY, FLORIDA  
 COUNTED BY:  
 SIGNALIZED

1355 ADAMS STREET  
 HOLLYWOOD, FL 33019  
 954-288-4447

Site Code: 10031  
 Start Date: 9/1/16  
 File I.D.: HOLLYWOOD  
 Page: 4

## ALL VEHICLES

HOLLYWOOD BLVD				HOLLYWOOD BLVD				SW 24TH ST				SW 24TH ST					
From West				From East				From South				From North					
Date	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Total
9/1/2016																	

## Peak Hour Analysis By Entire Intersection for the Period: 07:00 to 09:00 on 9/1/2016

Peak start	7:30								7:45								
Volume	0	80	611	19	0	26	596	23	0	137	89	31	0	38	70	37	1757
Percent	0%	11%	86%	3%	0%	4%	92%	4%	0%	53%	35%	12%	0%	26%	48%	26%	
Pk total	710				645				257				145				
Highest	7:45				8:00				7:45				8:15				
Volume	0	25	183	4	0	7	159	9	0	39	26	8	0	10	21	10	
Hi total	212				175				73				41				
PHF	0.84				0.92				0.88				0.88				

## Peak Hour Analysis By Entire Intersection for the Period: 11:00 to 01:00 on 9/1/2016

Peak start	12:00								12:00								
Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Percent	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	0
Pk total	0				0				0				0				
Highest	12:00				12:00				12:30				12:30				
Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hi total	0				0				0				0				
PHF	#####				#####				#####				#####				

## Peak Hour Analysis By Entire Intersection for the Period: 16:00 to 18:00 on 9/1/2016

Peak start	14:15								14:15								
Volume	2	89	564	17	0	66	655	46	0	103	141	17	2	33	91	34	1860
Percent	0%	13%	84%	3%	0%	9%	85%	6%	0%	39%	54%	7%	1%	21%	57%	21%	
Pk total	672				767				261				160				
Highest	14:30				14:15				15:00				15:00				
Volume	0	21	152	11	0	9	179	12	0	37	43	4	0	10	33	10	
Hi total	184				200				84				53				
PHF	0.91				0.96				0.78				0.75				

DRIVEWAY AT ALPHA INTERNATIONAL ACADEMY  
BROWARD COUNTY, FLORIDA  
COUNTED BY: SETH HALL  
UNSIGNALIZED

THOMAS A. HALL, INC.  
1355 ADAMS STREET  
HOLLYWOOD, FL 33019  
954-288-4447

Site Code: 10031  
Start Date: 9/8/2016  
File I.D.: HOLLYWOOD  
Page: 5

ALL VEHICLES

DRIVEWAY From West				DRIVEWAY From East				DRIVEWAY From South				DRIVEWAY From North						
Date	9/8/2016	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Total
7:00		0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	0	3
7:15		0	0	0	0	0	0	2	0	0	0	0	4	0	1	0	0	7
7:30		0	0	0	0	0	3	0	4	0	0	0	9	0	1	0	0	17
7:45		0	0	0	0	0	6	0	3	0	0	0	8	0	3	0	0	20
Hr Total		0	0	0	0	0	10	0	10	0	0	0	21	0	6	0	0	47
8:00		0	0	0	0	0	6	0	3	0	0	0	5	0	3	0	0	17
8:15		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45		0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	3
Hr Total		0	0	0	0	0	6	0	4	0	0	0	6	0	4	0	0	20
* BREAK *																		
11:00		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hr Total		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hr Total		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* BREAK *																		
14:00		0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	2
14:15		0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	3
14:30		0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	2
14:45		0	0	0	0	0	2	0	3	0	0	0	5	0	4	0	0	14
Hr Total		0	0	0	0	0	0	0	4	0	0	0	8	0	5	0	0	21
15:00		0	0	0	0	0	12	0	7	0	0	0	9	0	6	0	0	34
15:15		0	0	0	0	0	2	0	1	0	0	0	1	0	0	0	0	4
15:30		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
15:45		0	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	3
Hr Total		0	0	0	0	0	16	0	11	0	0	0	10	0	6	0	0	43
<b>*TOTAL*</b>		0	0	0	0	32	0	29	0	0	0	45	0	21	0	0	0	131

DRIVEWAY AT ALPHA INTERNATIONAL ACADEMY  
BROWARD COUNTY, FLORIDA  
COUNTED BY:  
UNSIGNALIZED

THOMAS A. HALL, INC.  
1355 ADAMS STREET  
HOLLYWOOD, FL 33019  
954-288-4447

Site Code: 10031  
Start Date: 9/8/16  
File I.D.: HOLLYWOOD  
Page: 6

ALL VEHICLES

DRIVEWAY From West		DRIVEWAY From East		DRIVEWAY From South		DRIVEWAY From North											
Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Total	
Date	9/8/2016																

Peak Hour Analysis By Entire Intersection for the Period: 07:00 to 09:00 on 9/8/2016

Peak start	7:15	7:15	7:15	7:15	7:15	7:15	7:15	7:15	7:15	7:15	7:15	7:15	7:15	7:15	7:15	61
Volume	0	0	0	0	0	15	0	12	0	0	0	26	0	8	0	0
Percent	#####	#####	#####	#####	0%	56%	0%	44%	0%	0%	0%	100%	0%	100%	0%	0%
Pk total	0				27			26					8			
Highest	7:30				8:00			7:30					7:45			
Volume	0	0	0	0	0	6	0	3	0	0	0	9	0	3	0	0
Hi total	0				9			9					3			
PHF	#####				0.75			0.72					0.67			

Peak Hour Analysis By Entire Intersection for the Period: 11:00 to 01:00 on 9/8/2016

Peak start	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	0
Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Percent	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
Pk total	0				0			0					0			
Highest	12:30				12:30			12:30					12:30			
Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hi total	0				0			0					0			
PHF	#####				#####			#####					#####			

Peak Hour Analysis By Entire Intersection for the Period: 16:00 to 18:00 on 9/8/2016

Peak start	14:15	14:15	14:15	14:15	14:15	14:15	14:15	14:15	14:15	14:15	14:15	14:15	14:15	14:15	14:15	67
Volume	0	0	0	0	0	15	0	15	0	0	0	22	0	15	0	0
Percent	#####	#####	#####	#####	0%	50%	0%	50%	0%	0%	0%	100%	0%	100%	0%	0%
Pk total	0				30			22					15			
Highest	15:00				15:00			15:00					15:00			
Volume	0	0	0	0	0	12	0	7	0	0	0	9	0	6	0	0
Hi total	0				19			9					6			
PHF	#####				0.39			0.61					0.63			

FLORIDA DEPARTMENT OF TRANSPORTATION  
 TRANSPORTATION STATISTICS OFFICE  
 2015 HISTORICAL AADT REPORT

COUNTY: 86 - BROWARD

SITE: 7311 - S 26 AVE, S OF HOLLYWOOD BLVD

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2015	2100 V	0	0	9.00	54.00	3.40
2014	2100 R			9.00	54.20	7.40
2013	2100 T	0	0	9.00	53.60	7.60
2012	2100 S	0	0	9.00	52.20	5.90
2011	2100 F	0	0	9.00	52.50	6.30
2010	2100 C N	0	S 0	8.35	52.69	9.30
2009	2100 F	0	0	8.53	53.89	5.30
2008	2200 C N	0	S 0	8.81	54.16	6.50
2007	2300 C N	0	S 0	8.63	55.75	4.80
2006	2200 C N	0	S 0	8.40	55.34	2.90
2005	2000 C N		S	8.20	51.70	0.00

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE  
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; F = 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  
2015 HISTORICAL AADT REPORT

COUNTY: 86 - BROWARD

SITE: 8148 - DIXIE HIGHWAY, S OF HOLLYWOOD BLVD.

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2015	11000 C	S 11000	0	9.00	99.90	3.40
2014	6000 T	0	0	9.00	99.90	7.40
2013	5900 S	0	0	9.00	99.90	7.60
2012	5900 F	0	0	9.00	99.90	5.90
2011	5900 C	S 5900	0	9.00	99.90	6.30
2010	7100 F	0	0	8.35	99.99	9.30
2009	7100 C	S 7100	0	8.53	99.99	5.30
2008	6800 C	S 6800	0	8.81	99.99	6.50
2007	5900 C	S 5900	0	8.63	99.99	4.80
2006	6100 C	S 6100	0	8.40	99.99	2.90
2005	6400 C	S	0	8.20	99.90	0.00

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

FLORIDA DEPARTMENT OF TRANSPORTATION  
 TRANSPORTATION STATISTICS OFFICE  
 2015 HISTORICAL AADT REPORT

COUNTY: 86 - BROWARD

SITE: 8205 - HOLLYWOOD BLVD, W OF DIXIE HIGHWAY

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2015	22000 C	E 11500	W 10500	9.00	54.00	1.60
2014	19500 X			9.00	54.20	7.40
2013	19500 X	0	0	9.00	53.60	7.60
2012	19500 T	0	0	9.00	52.20	5.90
2011	19500 S	0	0	9.00	52.50	6.30
2010	19500 F	E 10000	W 9500	8.35	52.69	9.30
2009	19500 C	E 10000	W 9500	8.53	53.89	5.30
2008	19500 C	E 10000	W 9500	8.81	54.16	6.50
2007	19300 C	E 10000	W 9300	8.63	55.75	4.80
2006	16900 C	E 8900	W 8000	8.40	55.34	2.90
2005	16700 C	E 8800	W 7900	8.20	51.70	0.00

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE  
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; V = 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  
2015 HISTORICAL AADT REPORT

COUNTY: 86 - BROWARD

SITE:	9632 - WASHINGTON ST, W OF DIXIE HWY		
YEAR	AADT	DIRECTION 1	DIRECTION 2
2015	4600 V	0	0
2014	4500 R	0	0
2013	4500 T	0	0
2012	4500 S	0	0
2011	4500 F	0	0
2010	4500 C	E	W
2009	3600 F	0	0
2008	3700 C	E	W
2007	5200 C	E	W
2006	6000 C	E	W
2005	6300 C	E	W

		*K FACTOR	D FACTOR	T FACTOR
		9.00	54.00	3.40
		9.00	54.20	7.40
		9.00	53.60	7.60
		9.00	52.20	5.90
		9.00	52.50	6.30
		8.35	52.69	9.30
		8.53	53.89	5.30
		8.81	54.16	6.50
		8.63	55.75	4.80
		8.40	55.34	2.90
		8.20	51.70	0.00

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

## **Appendix B – Existing Signal Timing**



**BROWARD COUNTY TRAFFIC ENGINEERING**  
**ACTUATED TRAFFIC SIGNAL TIMING SHEET**

<b>Intersection Number</b>	3123		<b>Initial Operation Date</b>	06/76							
<b>Controller Type</b>	2070 LN		<b>System Number</b>	3123							
<b>Modification Number</b>	6		<b>Modification Date</b>	05/22/2012							
<b>Drawing/Project No</b>	GRP. 1		<b>FPL Grid Number</b>	87572510202							
<b>Intersection</b>	HOLLYWOOD BLVD. (SR 820) and N/S 24 AVENUE										
<b>Municipality</b>	HOLLYWOOD										
<b>Controller Phase</b>	1	2	3	4	5	6	7	8			
<b>Face Number</b>	1	2		4		6	7	8			
<b>Direction</b>	EBL	WB		NB		EB	NBL	SB			
<b>Initial Green(MIN)</b>	4	10		6		10	4	6			
<b>Vehicle Ext.(GAP)</b>	1.5	3.0		2.5		3.0	1.5	2.5			
<b>Maximum Green I</b>	12	35		25		35	12	25			
<b>Maximum Green II</b>											
<b>Yellow Clearance</b>	4.0	4.0		4.0		4.0	4.0	4.0			
<b>All Red Clearance</b>	1.0	1.0		2.0		1.0	2.0	2.0			
<b>Phase Recall</b>	OFF	MIN		OFF		MIN	OFF	OFF			
<b>Detector Delay</b>											
<b>Walk</b>		7		7		7		7			
<b>Pedestrian Clearance</b>		6		21		6		21			
<b>Permissive</b>	5 SECT					5 SECT					
<b>Flash Operation</b>		YELLOW		RED		YELLOW		RED			
<b>Green Return</b>	7	1		5		2	4	6			

**Attachment**

**Channel/Drop**      20 / 7      **IP Address**

**NOTES:**

1. ANTI-BACKDOWN DIODE EASTBOUND; DUAL ENTRY HARDWIRED NORTH/SOUTH.
2. MOD. 6 UPDATES ATMS.NOW PARAMETERS; NO CHANGE IN TIMING.

Submitted By \_\_\_\_\_ Approved By \_\_\_\_\_



**BROWARD COUNTY TRAFFIC ENGINEERING**  
**ACTUATED TRAFFIC SIGNAL TIMING SHEET**

Intersection Number	3208	Initial Operation Date	UNKNOWN								
Controller Type	NEMA 4 PHASE	System Number									
Modification Number	2	Modification Date	12/13/1984								
Drawing/Project No		FPL Grid Number	87571529503								
Intersection	VAN BUREN STREET and S 24 AVENUE										
Municipality	HOLLYWOOD										
Controller Phase	1	2	3	4	5	6	7	8			
Face Number	2,6		4								
Direction	N/S		EB								
Initial Green(MIN)	10		8								
Vehicle Ext.(GAP)	2.5		2.5								
Maximum Green I	36		30								
Maximum Green II											
Yellow Clearance	4.0		4.0								
All Red Clearance											
Phase Recall	MIN		OFF								
Detector Delay											
Walk											
Pedestrian Clearance											
Permissive	YELLOW		RED								
Flash Operation											
Green Return											
Attachment	3208.pdf										
Channel/Drop	/			IP Address							
NOTES:											
Submitted By			Approved By								

Broward County

## Timing Sheet

9/6/2016 10:23:46 AM

Station : 3123 - Hollywood Blvd &amp; 24 Ave ( Standard File )

Phase	1 (EL)	2 (WT)	3	4 (NT)	5	6 (ET)	7 (NL)	8 (ST)	9	10	11	12	13	14	15	16
Walk		7		7		7		7								
Ped Clearance		6		21		6		21								
Min Green	4	10		6		10	4	6								
Gap Ext	1.5	3		2.5		3	1.5	2.5								
Max1	12	35		25		35	12	25								
Max2																
Yellow Clr	4	4	4	4	4	4	4	4	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red Clr	1	1		2		1	2	2	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Red Revert																
Added Initial																
Max Initial																
Time Before Reduce																
Cars Before Reduce																
Time To Reduce																
Reduce By																
Min Gap																
Dynamic Max Limit																
Dynamic Max Step																
Enable	ON	ON		ON		ON	ON	ON								
Auto Flash Entry				ON												
Auto Flash Exit		ON				ON										
Non-Actuated 1																
Non-Actuated 2																
Lock Call									ON							
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry				ON					ON							
Sim Gap Enable	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
Guar Passage																
Rest In Walk		ON				ON										
Cond Service																
Add Init Calc																
Concurrent Ps	1	1	1	1	2	2	2	2								

## Preemption

Channel	1	2	3	4	5	6
Lock Input	ON	ON	ON	ON	ON	ON
Override Auto Flash						
Override Higher Preempt						
Flash in Dwell						
Link to Preempt						
Delay						
Min Duration						
Min Green	6	6			6	6
Min Walk						
Ped Clear						
Track Green						1
Min Dwell	8	8			8	8
Max Presence	180	180			180	180
Track Veh 1						9
Track Veh 2						
Track Veh 3						
Track Veh 4						
Dwell Cyc Veh 1	4	2			4	1
Dwell Cyc Veh 2	8	6			7	6
Dwell Cyc Veh 3						
Dwell Cyc Veh 4						
Dwell Cyc Veh 5						

## Preempt LP

Channel	1	2	3	4
Min				
Max				
Enable				
Lock Mode	MAX	MAX	MAX	MAX
Coord in Preempt				
No Skip				
Priority P1				
Priority P2				
Priority P3				
Priority P4				
Lock				
Headway				
Group Lock				
Queue Jump				
Free Mode				
Alt Table				

Dwell Cyc Veh 6						
Dwell Cyc Veh 7						
Dwell Cyc Veh 8						
Dwell Cyc Veh 9						
Dwell Cyc Veh 10						
Dwell Cyc Veh 11						
Dwell Cyc Veh 12						
Dwell Cyc Ped1						
Dwell Cyc Ped2						
Dwell Cyc Ped3						
Dwell Cyc Ped4						
Dwell Cyc Ped5						
Dwell Cyc Ped6						
Dwell vPed7						
Dwell Cyc Ped8						
Exit 1	1	4			4	2
Exit 2	6	7			8	6
Exit 3						
Exit 4						

Prepared By	Date Implemented
Reviewed By	Traffic Engineer

## Broward County

## Timing Sheet

9/6/2016 10:23:46 AM

**Station :** 3123 - Hollywood Blvd & 24 Ave ( Standard File )

## Coordination

Broward County

## Timing Sheet

9/6/2016 10:23:46 AM

**Station :** 3123 - Hollywood Blvd & 24 Ave ( Standard File )

## Scheduler

12				1			1										1	1	1	1	1	1	1		2	
13				1	1		1										1								2	
14				1	1	1	1	1	1								1								2	
15				1	1													1								2
16				1	1			1											1							2
17																										1
18																										1
19																										1
20																										1
21																										1
22																										1
23																										1
24																										1
25																										1
26																										1
27																										1
28																										1
29																										1
30																										1
31																										1
32																										1

**User Comments:**

Broward County

Timing Sheet

9/6/2016 10:25:06 AM

Station : 3208 - Van Buren St &amp; S 24 Avenue ( Standard File )

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Walk																
Ped Clearance																
Min Green	10		8													
Gap Ext	2.5		2.5													
Max1	36		30													
Max2																
Yellow Clr	4	4	4	4	4	4	4	4	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red Clr	1	1		1				1	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Red Revert																
Added Initial																
Max Initial																
Time Before Reduce																
Cars Before Reduce																
Time To Reduce																
Reduce By																
Min Gap																
Dynamic Max Limit																
Dynamic Max Step																
Enable	ON		ON													
Auto Flash Entry			ON													
Auto Flash Exit	ON															
Non-Actuated 1	ON				ON											
Non-Actuated 2																
Lock Call									ON							
Min Recall	ON															
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry			ON					ON								
Sim Gap Enable			ON					ON	ON	ON	ON	ON	ON	ON	ON	ON
Guar Passage																
Rest In Walk																
Cond Service																
Add Init Calc																
Concurrent Ps	1	1	1	1	2	2	2	2								

**Preemption**

Channel	1	2	3	4	5	6
Lock Input	ON	ON	ON	ON	ON	ON
Override Auto Flash						
Override Higher Preempt						
Flash in Dwell						
Link to Preempt						
Delay						
Min Duration						
Min Green	6	6	6	6	6	6
Min Walk						
Ped Clear						
Track Green						
Min Dwell	8	8	8	8	8	8
Max Presence	180	180	180	180	180	180
Track Veh 1						
Track Veh 2						
Track Veh 3						
Track Veh 4						
Dwell Cyc Veh 1						
Dwell Cyc Veh 2						
Dwell Cyc Veh 3						
Dwell Cyc Veh 4						
Dwell Cyc Veh 5						
Dwell Cyc Veh 6						

**Preempt LP**

Channel	1	2	3	4
Min				
Max				
Enable				
Lock Mode	MAX	MAX	MAX	MAX
Coord in Preempt				
No Skip				
Priority P1				
Priority P2				
Priority P3				
Priority P4				
Lock				
Headway				
Group Lock				
Queue Jump				
Free Mode				
Alt Table				

Dwell Cyc Veh 7							
Dwell Cyc Veh 8							
Dwell Cyc Veh 9							
Dwell Cyc Veh 10							
Dwell Cyc Veh 11							
Dwell Cyc Veh 12							
Dwell Cyc Ped1							
Dwell Cyc Ped2							
Dwell Cyc Ped3							
Dwell Cyc Ped4							
Dwell Cyc Ped5							
Dwell Cyc Ped6							
Dwell vPed7							
Dwell Cyc Ped8							
Exit 1							
Exit 2							
Exit 3							
Exit 4							

Prepared By	Date Implemented
Reviewed By	Traffic Engineer

## Broward County

## Timing Sheet

9/6/2016 10:25:06 AM

**Station :** 3208 - Van Buren St & S 24 Avenue ( Standard File )

## Coordination

## Broward County

## Timing Sheet

9/6/2016 10:25:06 AM

**Station :** 3208 - Van Buren St & S 24 Avenue ( Standard File )

## Scheduler

## **User Comments:**

## **Appendix C – Adjustment Factors**

2015 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL  
 CATEGORY: 8601 CEN.-W OF US1 TO SR7

MOCF: 0.96  
 PSCF

WEEK	DATES	SF	
1	01/01/2015 - 01/03/2015	1.00	1.04
2	01/04/2015 - 01/10/2015	1.00	1.04
3	01/11/2015 - 01/17/2015	0.99	1.03
* 4	01/18/2015 - 01/24/2015	0.98	1.02
* 5	01/25/2015 - 01/31/2015	0.97	1.01
* 6	02/01/2015 - 02/07/2015	0.96	1.00
* 7	02/08/2015 - 02/14/2015	0.95	0.99
* 8	02/15/2015 - 02/21/2015	0.95	0.99
* 9	02/22/2015 - 02/28/2015	0.95	0.99
*10	03/01/2015 - 03/07/2015	0.95	0.99
*11	03/08/2015 - 03/14/2015	0.95	0.99
*12	03/15/2015 - 03/21/2015	0.96	1.00
*13	03/22/2015 - 03/28/2015	0.97	1.01
*14	03/29/2015 - 04/04/2015	0.97	1.01
*15	04/05/2015 - 04/11/2015	0.98	1.02
*16	04/12/2015 - 04/18/2015	0.99	1.03
17	04/19/2015 - 04/25/2015	0.99	1.03
18	04/26/2015 - 05/02/2015	1.00	1.04
19	05/03/2015 - 05/09/2015	1.00	1.04
20	05/10/2015 - 05/16/2015	1.01	1.05
21	05/17/2015 - 05/23/2015	1.01	1.05
22	05/24/2015 - 05/30/2015	1.02	1.06
23	05/31/2015 - 06/06/2015	1.02	1.06
24	06/07/2015 - 06/13/2015	1.03	1.07
25	06/14/2015 - 06/20/2015	1.03	1.07
26	06/21/2015 - 06/27/2015	1.04	1.08
27	06/28/2015 - 07/04/2015	1.05	1.09
28	07/05/2015 - 07/11/2015	1.05	1.09
29	07/12/2015 - 07/18/2015	1.05	1.09
30	07/19/2015 - 07/25/2015	1.05	1.09
31	07/26/2015 - 08/01/2015	1.04	1.08
32	08/02/2015 - 08/08/2015	1.04	1.08
33	08/09/2015 - 08/15/2015	1.04	1.08
34	08/16/2015 - 08/22/2015	1.04	1.08
35	08/23/2015 - 08/29/2015	1.04	1.08
36	08/30/2015 - 09/05/2015	1.04	1.08
37	09/06/2015 - 09/12/2015	1.04	1.08
38	09/13/2015 - 09/19/2015	1.03	1.07
39	09/20/2015 - 09/26/2015	1.03	1.07
40	09/27/2015 - 10/03/2015	1.02	1.06
41	10/04/2015 - 10/10/2015	1.02	1.06
42	10/11/2015 - 10/17/2015	1.01	1.05
43	10/18/2015 - 10/24/2015	1.01	1.05
44	10/25/2015 - 10/31/2015	1.01	1.05
45	11/01/2015 - 11/07/2015	1.01	1.05
46	11/08/2015 - 11/14/2015	1.01	1.05
47	11/15/2015 - 11/21/2015	1.01	1.05
48	11/22/2015 - 11/28/2015	1.01	1.05
49	11/29/2015 - 12/05/2015	1.00	1.04
50	12/06/2015 - 12/12/2015	1.00	1.04
51	12/13/2015 - 12/19/2015	1.00	1.04
52	12/20/2015 - 12/26/2015	1.00	1.04
53	12/27/2015 - 12/31/2015	0.99	1.03

\* PEAK SEASON

03-MAR-2016 11:19:09

830UPD

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**Annual Growth Factor Worksheet**  
**Alpha International Academy**

Count Station	2011 AADT	2015 AADT	Annual Compound Growth	Adjusted Annual Compound Growth
Site 867311 - 26th Ave. S. of Hollywood Blvd.	2100	2100	0.00%	0.00%
Site 868205 - Hollywood Blvd. W. of Dixie Hwy.	19500	22000	2.44%	2.44%
Site 868148 - Dixie Hwy. S. of Hollywood Blvd.	5900	11000	13.27%	13.27%
Site 869632 - Washington St. W. of Dixie Hwy.	4500	4600	0.45%	0.45%
<b>Assumed Annual Compound Growth Rate</b>				<b>4.04%</b>

## **Appendix D – Existing Conditions Analyses**

Lanes, Volumes, Timings  
5: 24th Ave. & Van Buren St.

9/15/2016

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	148	28	0	0	0	0	141	9	13	83	0
Future Volume (vph)	10	148	28	0	0	0	0	141	9	13	83	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	70		0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>				0.978					0.992			
Flt Protected				0.997							0.950	
Satd. Flow (prot)	0	3451	0	0	0	0	0	1830	0	1752	1845	0
Flt Permitted				0.997							0.633	
Satd. Flow (perm)	0	3451	0	0	0	0	0	1830	0	1168	1845	0
Right Turn on Red				Yes			Yes			Yes		Yes
Satd. Flow (RTOR)		42						11				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1172			1193			830			109	
Travel Time (s)		26.6			27.1			18.9			2.5	
Peak Hour Factor	0.66	0.66	0.66	0.92	0.92	0.92	0.76	0.76	0.76	0.65	0.65	0.65
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	15	224	42	0	0	0	0	186	12	20	128	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	281	0	0	0	0	0	198	0	20	128	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1						1		1	1	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	40						40		40	40	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	40						40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		4						2			6	
Permitted Phases		4									6	
Detector Phase	4	4						2		6	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0						10.0		10.0	10.0	
Minimum Split (s)	12.0	12.0						14.0		14.0	14.0	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	18.0	18.0						22.0		22.0	22.0	
Total Split (%)	45.0%	45.0%						55.0%		55.0%	55.0%	
Maximum Green (s)	14.0	14.0						18.0		18.0	18.0	
Yellow Time (s)	4.0	4.0						4.0		4.0	4.0	
All-Red Time (s)	0.0	0.0						0.0		0.0	0.0	
Lost Time Adjust (s)		0.0						0.0		0.0	0.0	
Total Lost Time (s)		4.0						4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.5	2.5						2.5		2.5	2.5	
Recall Mode	None	None						Min		Max	Max	
Act Effect Green (s)		8.2						21.4		21.4	21.4	
Actuated g/C Ratio		0.24						0.62		0.62	0.62	
v/c Ratio		0.33						0.17		0.03	0.11	
Control Delay		10.2						4.6		4.2	4.6	
Queue Delay		0.0						0.0		0.0	0.0	
Total Delay		10.2						4.6		4.2	4.6	
LOS		B						A		A	A	
Approach Delay		10.2						4.6			4.6	
Approach LOS		B						A			A	
Queue Length 50th (ft)		18						14		1	10	
Queue Length 95th (ft)		25						29		5	17	
Internal Link Dist (ft)		1092			1113			750			29	
Turn Bay Length (ft)										70		
Base Capacity (vph)		1425						1139		724	1143	
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		0.20						0.17		0.03	0.11	

#### Intersection Summary

Area Type: Other

Cycle Length: 40

Actuated Cycle Length: 34.5

Natural Cycle: 40

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.33

Intersection Signal Delay: 7.1

Intersection LOS: A

Intersection Capacity Utilization 24.1%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 5: 24th Ave. & Van Buren St.



	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑	↑	↑	↑↑		↑	↑		↑	↑	
Traffic Volume (vph)	86	660	21	28	644	25	148	96	33	41	76	40
Future Volume (vph)	86	660	21	28	644	25	148	96	33	41	76	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		50	170		0	175		0	105		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>			0.850		0.994			0.961			0.948	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3518	0	1752	1773	0	1752	1749	0
Flt Permitted	0.128			0.269			0.621			0.663		
Satd. Flow (perm)	238	3539	1583	501	3518	0	1146	1773	0	1223	1749	0
Right Turn on Red		Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)		61			3			13			15	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1190			1203			364			538	
Travel Time (s)		23.2			23.4			8.3			12.2	
Peak Hour Factor	0.84	0.84	0.84	0.92	0.92	0.92	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	102	786	25	30	700	27	168	109	38	47	86	45
Shared Lane Traffic (%)												
Lane Group Flow (vph)	102	786	25	30	727	0	168	147	0	47	131	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1		1	1	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	40	40	40	40	40		40	30		40	40	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	40	40	40	40	40		40	30		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA	Perm	Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases	5	2			6		3	8			4	
Permitted Phases	2		2	6			8			4		
Detector Phase	5	2	2	6	6		3	8		4	4	
Switch Phase												
Minimum Initial (s)	4.0	10.0	10.0	10.0	10.0		4.0	6.0		6.0	6.0	
Minimum Split (s)	10.0	23.0	23.0	23.0	23.0		11.0	34.0		34.0	34.0	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	19.0	89.0	89.0	70.0	70.0		29.0	71.0		42.0	42.0	
Total Split (%)	11.9%	55.6%	55.6%	43.8%	43.8%		18.1%	44.4%		26.3%	26.3%	
Maximum Green (s)	14.0	84.0	84.0	65.0	65.0		23.0	65.0		36.0	36.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0		6.0	6.0		6.0	6.0	
Lead/Lag	Lead			Lag	Lag		Lead			Lag	Lag	
Lead-Lag Optimize?	Yes			Yes	Yes		Yes			Yes	Yes	
Vehicle Extension (s)	1.5	3.0	3.0	3.0	3.0		1.5	2.5		2.5	2.5	
Recall Mode	None	C-Min	C-Min	C-Min	C-Min		None	Max		Max	Max	
Walk Time (s)		7.0	7.0	7.0	7.0			7.0		7.0	7.0	
Flash Dont Walk (s)		6.0	6.0	6.0	6.0			21.0		21.0	21.0	
Pedestrian Calls (#/hr)	0	0	0	0	0		0			0	0	
Act Effect Green (s)	58.0	58.0	58.0	42.9	42.9		91.0	91.0		77.6	77.6	
Actuated g/C Ratio	0.36	0.36	0.36	0.27	0.27		0.57	0.57		0.48	0.48	
v/c Ratio	0.56	0.61	0.04	0.22	0.77		0.25	0.14		0.08	0.15	
Control Delay	45.0	43.5	0.1	49.0	59.5		18.7	16.3		25.9	22.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	45.0	43.5	0.1	49.0	59.5		18.7	16.3		25.9	22.9	
LOS	D	D	A	D	E		B	B		C	C	
Approach Delay		42.5			59.1			17.6			23.7	
Approach LOS		D			E			B			C	
Queue Length 50th (ft)	72	354	0	25	371		81	63		26	65	
Queue Length 95th (ft)	101	352	0	56	425		137	113		59	125	
Internal Link Dist (ft)		1110			1123			284			458	
Turn Bay Length (ft)	180		50	170			175			105		
Base Capacity (vph)	220	1857	860	203	1430		738	1014		592	855	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.46	0.42	0.03	0.15	0.51		0.23	0.14		0.08	0.15	

#### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 146 (91%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.77

Intersection Signal Delay: 43.1

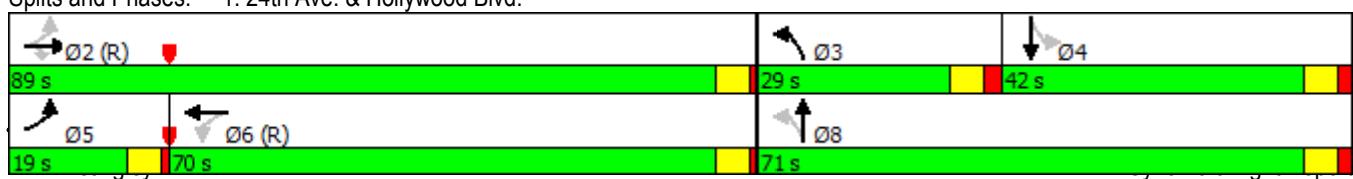
Intersection LOS: D

Intersection Capacity Utilization 59.5%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 1: 24th Ave. & Hollywood Blvd.



**Intersection**

Int Delay, s/veh

1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		B		W	B
Traffic Vol, veh/h	16	13	151	28	9	124
Future Vol, veh/h	16	13	151	28	9	124
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	60	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	88	88	88	88
Heavy Vehicles, %	2	2	3	3	3	3
Mvmt Flow	17	14	172	32	10	141

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	349	188	0 0 203 0
Stage 1	188	-	- - - -
Stage 2	161	-	- - - -
Critical Hdwy	6.42	6.22	- - 4.13 -
Critical Hdwy Stg 1	5.42	-	- - - -
Critical Hdwy Stg 2	5.42	-	- - - -
Follow-up Hdwy	3.518	3.318	- - 2.227 -
Pot Cap-1 Maneuver	648	854	- - 1363 -
Stage 1	844	-	- - - -
Stage 2	868	-	- - - -
Platoon blocked, %		- -	- -
Mov Cap-1 Maneuver	643	854	- - 1363 -
Mov Cap-2 Maneuver	643	-	- - - -
Stage 1	844	-	- - - -
Stage 2	862	-	- - - -

Approach	WB	NB	SB
HCM Control Delay, s	10.2	0	0.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	723	1363	-
HCM Lane V/C Ratio	-	-	0.044	0.008	-
HCM Control Delay (s)	-	-	10.2	7.7	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	256	64	0	0	0	0	221	28	30	137	0
Future Volume (vph)	30	256	64	0	0	0	0	221	28	30	137	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	0	0	0	0	0	0	0	70	0	0
Storage Lanes	0	0	0	0	0	0	0	0	0	1	0	0
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>			0.973						0.985			
Flt Protected			0.996							0.950		
Satd. Flow (prot)	0	3430	0	0	0	0	0	1817	0	1752	1845	0
Flt Permitted			0.996							0.573		
Satd. Flow (perm)	0	3430	0	0	0	0	0	1817	0	1057	1845	0
Right Turn on Red			Yes			Yes			Yes		Yes	
Satd. Flow (RTOR)		71						22				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1172			1193			830			109	
Travel Time (s)		26.6			27.1			18.9			2.5	
Peak Hour Factor	0.82	0.82	0.82	0.92	0.92	0.92	0.81	0.81	0.81	0.76	0.76	0.76
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	37	312	78	0	0	0	0	273	35	39	180	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	427	0	0	0	0	0	308	0	39	180	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1						1		1	1	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	40						40		40	40	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	40						40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		4						2			6	
Permitted Phases		4									6	
Detector Phase	4	4						2		6	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0						10.0		10.0	10.0	
Minimum Split (s)	12.0	12.0						14.0		14.0	14.0	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	17.0	17.0						23.0		23.0	23.0	
Total Split (%)	42.5%	42.5%						57.5%		57.5%	57.5%	
Maximum Green (s)	13.0	13.0						19.0		19.0	19.0	
Yellow Time (s)	4.0	4.0						4.0		4.0	4.0	
All-Red Time (s)	0.0	0.0						0.0		0.0	0.0	
Lost Time Adjust (s)		0.0						0.0		0.0	0.0	
Total Lost Time (s)		4.0						4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.5	2.5						2.5		2.5	2.5	
Recall Mode	None	None						Min		Max	Max	
Act Effect Green (s)		9.1						19.0		19.0	19.0	
Actuated g/C Ratio		0.25						0.53		0.53	0.53	
v/c Ratio		0.47						0.32		0.07	0.19	
Control Delay		11.2						5.9		5.1	5.5	
Queue Delay		0.0						0.0		0.0	0.0	
Total Delay		11.2						5.9		5.1	5.5	
LOS		B						A		A	A	
Approach Delay		11.2						5.9			5.4	
Approach LOS		B						A			A	
Queue Length 50th (ft)		30						25		3	14	
Queue Length 95th (ft)		49						56		11	33	
Internal Link Dist (ft)		1092			1113			750			29	
Turn Bay Length (ft)										70		
Base Capacity (vph)		1282						967		556	972	
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		0.33						0.32		0.07	0.19	

#### Intersection Summary

Area Type: Other

Cycle Length: 40

Actuated Cycle Length: 36.1

Natural Cycle: 40

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.47

Intersection Signal Delay: 8.2

Intersection LOS: A

Intersection Capacity Utilization 41.6%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 5: 24th Ave. & Van Buren St.



Lanes, Volumes, Timings  
1: 24th Ave. & Hollywood Blvd.

9/15/2016

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑↑	↑	↑	↑	↑	↑↑	
Traffic Volume (vph)	98	609	18	71	707	50	111	152	18	38	98	37
Future Volume (vph)	98	609	18	71	707	50	111	152	18	38	98	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		50	170		0	175		0	105		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>			0.850		0.990			0.984			0.959	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3504	0	1752	1815	0	1752	1769	0
Flt Permitted	0.116			0.365			0.569			0.622		
Satd. Flow (perm)	216	3539	1583	680	3504	0	1050	1815	0	1147	1769	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			61		6			4			11	
Link Speed (mph)			35		35			30			30	
Link Distance (ft)			1190		1203			364			538	
Travel Time (s)			23.2		23.4			8.3			12.2	
Peak Hour Factor	0.91	0.91	0.91	0.96	0.96	0.96	0.78	0.78	0.78	0.75	0.75	0.75
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	108	669	20	74	736	52	142	195	23	51	131	49
Shared Lane Traffic (%)												
Lane Group Flow (vph)	108	669	20	74	788	0	142	218	0	51	180	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)			12		12			12			12	
Link Offset(ft)			0		0			0			0	
Crosswalk Width(ft)			16		16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1		1	1	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	40	40	40	40	40		40	30		40	40	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	40	40	40	40	40		40	30		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA	Perm	Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases	5	2			6		3	8			4	
Permitted Phases	2		2	6			8			4		
Detector Phase	5	2	2	6	6		3	8		4	4	
Switch Phase												
Minimum Initial (s)	4.0	10.0	10.0	10.0	10.0		4.0	6.0		6.0	6.0	
Minimum Split (s)	10.0	23.0	23.0	23.0	23.0		11.0	34.0		34.0	34.0	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	19.0	92.0	92.0	73.0	73.0		25.0	68.0		43.0	43.0	
Total Split (%)	11.9%	57.5%	57.5%	45.6%	45.6%		15.6%	42.5%		26.9%	26.9%	
Maximum Green (s)	14.0	87.0	87.0	68.0	68.0		19.0	62.0		37.0	37.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0		6.0	6.0		6.0	6.0	
Lead/Lag	Lead			Lag	Lag		Lead			Lag	Lag	
Lead-Lag Optimize?	Yes			Yes	Yes		Yes			Yes	Yes	
Vehicle Extension (s)	1.5	3.0	3.0	3.0	3.0		1.5	2.5		2.5	2.5	
Recall Mode	None	C-Min	C-Min	C-Min	C-Min		None	Max		Max	Max	
Walk Time (s)		7.0	7.0	7.0	7.0			7.0		7.0	7.0	
Flash Dont Walk (s)		6.0	6.0	6.0	6.0			21.0		21.0	21.0	
Pedestrian Calls (#/hr)		0	0	0	0			0		0	0	
Act Effect Green (s)	61.2	61.2	61.2	45.9	45.9		87.8	87.8		75.1	75.1	
Actuated g/C Ratio	0.38	0.38	0.38	0.29	0.29		0.55	0.55		0.47	0.47	
v/c Ratio	0.59	0.49	0.03	0.38	0.78		0.23	0.22		0.09	0.22	
Control Delay	44.7	38.4	0.1	50.9	57.7		20.2	20.0		27.5	26.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	44.7	38.4	0.1	50.9	57.7		20.2	20.0		27.5	26.3	
LOS	D	D	A	D	E		C	C		C	C	
Approach Delay		38.3			57.1			20.1			26.6	
Approach LOS		D			E			C			C	
Queue Length 50th (ft)	74	280	0	63	399		71	111		29	102	
Queue Length 95th (ft)	109	307	0	111	452		107	156		55	147	
Internal Link Dist (ft)		1110			1123			284			458	
Turn Bay Length (ft)	180		50	170			175				105	
Base Capacity (vph)	218	1924	888	289	1492		659	997		538	836	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.50	0.35	0.02	0.26	0.53		0.22	0.22		0.09	0.22	

#### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 146 (91%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.78

Intersection Signal Delay: 41.4

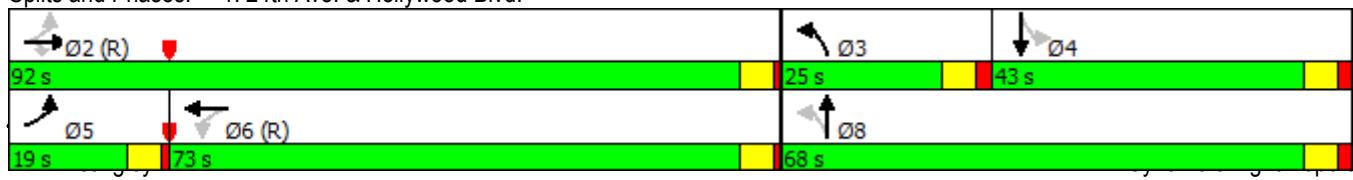
Intersection LOS: D

Intersection Capacity Utilization 59.0%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 1: 24th Ave. & Hollywood Blvd.



**Intersection**

Int Delay, s/veh 0.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		B		W	B
Traffic Vol, veh/h	16	16	252	24	16	188
Future Vol, veh/h	16	16	252	24	16	188
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	60	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	88	88	88	88
Heavy Vehicles, %	2	2	3	3	3	3
Mvmt Flow	17	17	286	27	18	214

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	550	300	0 0 314 0
Stage 1	300	-	- - -
Stage 2	250	-	- - -
Critical Hdwy	6.42	6.22	- - 4.13 -
Critical Hdwy Stg 1	5.42	-	- - -
Critical Hdwy Stg 2	5.42	-	- - -
Follow-up Hdwy	3.518	3.318	- - 2.227 -
Pot Cap-1 Maneuver	496	740	- - 1241 -
Stage 1	752	-	- - -
Stage 2	792	-	- - -
Platoon blocked, %		- -	- -
Mov Cap-1 Maneuver	489	740	- - 1241 -
Mov Cap-2 Maneuver	489	-	- - -
Stage 1	752	-	- - -
Stage 2	781	-	- - -

Approach	WB	NB	SB
HCM Control Delay, s	11.5	0	0.6
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	589	1241	-
HCM Lane V/C Ratio	-	-	0.059	0.015	-
HCM Control Delay (s)	-	-	11.5	7.9	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0	-

## **Appendix E – Background Traffic Conditions Analyses**

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	160	30	0	0	0	0	153	9	14	90	0
Future Volume (vph)	11	160	30	0	0	0	0	153	9	14	90	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	70		0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.978						0.992			
Flt Protected			0.997								0.950	
Satd. Flow (prot)	0	3451	0	0	0	0	0	1830	0	1752	1845	0
Flt Permitted			0.997								0.625	
Satd. Flow (perm)	0	3451	0	0	0	0	0	1830	0	1153	1845	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		45						10				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1172			175			830			109	
Travel Time (s)		26.6			4.0			18.9			2.5	
Peak Hour Factor	0.66	0.66	0.66	0.92	0.92	0.92	0.76	0.76	0.76	0.65	0.65	0.65
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	17	242	45	0	0	0	0	201	12	22	138	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	304	0	0	0	0	0	213	0	22	138	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1						1		1		1
Detector Template	Left	Thru						Thru		Left		Thru
Leading Detector (ft)	20	40						40		40		40
Trailing Detector (ft)	0	0						0		0		0
Detector 1 Position(ft)	0	0						0		0		0
Detector 1 Size(ft)	20	40						40		40		40
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0		0.0
Detector 1 Queue (s)	0.0	0.0						0.0		0.0		0.0
Detector 1 Delay (s)	0.0	0.0						0.0		0.0		0.0
Turn Type	Perm	NA						NA		Perm		NA
Protected Phases		4						2			6	
Permitted Phases		4									6	
Detector Phase	4	4						2		6		6
Switch Phase												
Minimum Initial (s)	8.0	8.0						10.0		10.0		10.0
Minimum Split (s)	12.0	12.0						14.0		14.0		14.0



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	17.0	17.0						23.0		23.0	23.0	
Total Split (%)	42.5%	42.5%						57.5%		57.5%	57.5%	
Maximum Green (s)	13.0	13.0						19.0		19.0	19.0	
Yellow Time (s)	4.0	4.0						4.0		4.0	4.0	
All-Red Time (s)	0.0	0.0						0.0		0.0	0.0	
Lost Time Adjust (s)		0.0						0.0		0.0	0.0	
Total Lost Time (s)		4.0						4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.5	2.5						2.5		2.5	2.5	
Recall Mode	None	None						Min		Max	Max	
Act Effect Green (s)		8.4						19.6		19.6	19.6	
Actuated g/C Ratio		0.23						0.54		0.54	0.54	
v/c Ratio		0.36						0.21		0.04	0.14	
Control Delay		10.9						4.9		4.4	4.7	
Queue Delay		0.0						0.0		0.0	0.0	
Total Delay		10.9						4.9		4.4	4.7	
LOS		B						A		A	A	
Approach Delay		10.9						4.9			4.7	
Approach LOS		B						A			A	
Queue Length 50th (ft)		21						16		2	10	
Queue Length 95th (ft)		28						32		5	19	
Internal Link Dist (ft)		1092			95			750			29	
Turn Bay Length (ft)										70		
Base Capacity (vph)		1275						1000		627	1004	
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		0.24						0.21		0.04	0.14	

#### Intersection Summary

Area Type: Other

Cycle Length: 40

Actuated Cycle Length: 36

Natural Cycle: 40

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.36

Intersection Signal Delay: 7.6

Intersection LOS: A

Intersection Capacity Utilization 25.0%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 5: 24th Ave. & Van Buren St.



Lanes, Volumes, Timings  
1: 24th Ave. & Hollywood Blvd.

03/21/2017

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑↑	↑	↑	↑	↑	↑	↑
Traffic Volume (vph)	94	714	22	30	697	27	160	104	36	44	82	43
Future Volume (vph)	94	714	22	30	697	27	160	104	36	44	82	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		50	170		0	175		0	105		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>			0.850		0.994			0.961			0.948	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3518	0	1752	1773	0	1752	1749	0
Flt Permitted	0.115			0.243			0.605			0.656		
Satd. Flow (perm)	214	3539	1583	453	3518	0	1116	1773	0	1210	1749	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			61		3			13			15	
Link Speed (mph)			35		35			30			30	
Link Distance (ft)			1190		1203			364			538	
Travel Time (s)			23.2		23.4			8.3			12.2	
Peak Hour Factor	0.84	0.84	0.84	0.92	0.92	0.92	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	112	850	26	33	758	29	182	118	41	50	93	49
Shared Lane Traffic (%)												
Lane Group Flow (vph)	112	850	26	33	787	0	182	159	0	50	142	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)			12		12			12			12	
Link Offset(ft)			0		0			0			0	
Crosswalk Width(ft)			16		16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1		1	1	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	40	40	40	40	40		40	30		40	40	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	40	40	40	40	40		40	30		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA	Perm	Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases	5	2			6		3	8			4	
Permitted Phases	2		2	6			8			4		
Detector Phase	5	2	2	6	6		3	8		4	4	
Switch Phase												
Minimum Initial (s)	4.0	10.0	10.0	10.0	10.0		4.0	6.0		6.0	6.0	
Minimum Split (s)	10.0	23.0	23.0	23.0	23.0		11.0	34.0		34.0	34.0	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	19.0	91.0	91.0	72.0	72.0		28.0	69.0		41.0	41.0	
Total Split (%)	11.9%	56.9%	56.9%	45.0%	45.0%		17.5%	43.1%		25.6%	25.6%	
Maximum Green (s)	14.0	86.0	86.0	67.0	67.0		22.0	63.0		35.0	35.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0		6.0	6.0		6.0	6.0	
Lead/Lag	Lead			Lag	Lag		Lead			Lag	Lag	
Lead-Lag Optimize?	Yes			Yes	Yes		Yes			Yes	Yes	
Vehicle Extension (s)	1.5	3.0	3.0	3.0	3.0		1.5	2.5		2.5	2.5	
Recall Mode	None	C-Min	C-Min	C-Min	C-Min		None	Max		Max	Max	
Walk Time (s)		7.0	7.0	7.0	7.0			7.0		7.0	7.0	
Flash Dont Walk (s)		6.0	6.0	6.0	6.0			21.0		21.0	21.0	
Pedestrian Calls (#/hr)		0	0	0	0			0		0	0	
Act Effect Green (s)	61.1	61.1	61.1	45.6	45.6		87.9	87.9		73.7	73.7	
Actuated g/C Ratio	0.38	0.38	0.38	0.28	0.28		0.55	0.55		0.46	0.46	
v/c Ratio	0.61	0.63	0.04	0.26	0.78		0.28	0.16		0.09	0.17	
Control Delay	45.5	42.0	0.1	48.5	58.4		20.7	18.1		28.6	25.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	45.5	42.0	0.1	48.5	58.4		20.7	18.1		28.6	25.6	
LOS	D	D	A	D	E		C	B		C	C	
Approach Delay		41.3			58.0			19.5			26.4	
Approach LOS		D			E			B			C	
Queue Length 50th (ft)	77	380	0	27	401		93	73		29	76	
Queue Length 95th (ft)	105	372	0	59	455		155	127		65	143	
Internal Link Dist (ft)		1110			1123			284			458	
Turn Bay Length (ft)	180		50	170			175			105		
Base Capacity (vph)	217	1902	879	189	1474		700	979		557	813	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.52	0.45	0.03	0.17	0.53		0.26	0.16		0.09	0.17	

#### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 146 (91%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.78

Intersection Signal Delay: 42.7

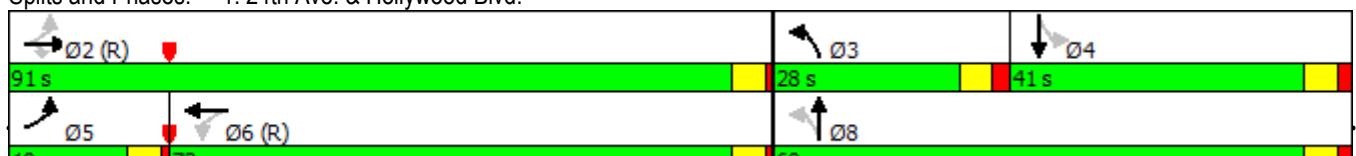
Intersection LOS: D

Intersection Capacity Utilization 62.2%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 1: 24th Ave. & Hollywood Blvd.



**Intersection**

Int Delay, s/veh 1.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		B		W	B
Traffic Vol, veh/h	18	14	164	30	9	134
Future Vol, veh/h	18	14	164	30	9	134
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	60	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	88	88	88	88
Heavy Vehicles, %	2	2	3	3	3	3
Mvmt Flow	20	15	186	34	10	152

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	376	203	0 0 220 0
Stage 1	203	-	- - - -
Stage 2	173	-	- - - -
Critical Hdwy	6.42	6.22	- - 4.13 -
Critical Hdwy Stg 1	5.42	-	- - - -
Critical Hdwy Stg 2	5.42	-	- - - -
Follow-up Hdwy	3.518	3.318	- - 2.227 -
Pot Cap-1 Maneuver	625	838	- - 1343 -
Stage 1	831	-	- - - -
Stage 2	857	-	- - - -
Platoon blocked, %		- -	- -
Mov Cap-1 Maneuver	620	838	- - 1343 -
Mov Cap-2 Maneuver	620	-	- - - -
Stage 1	831	-	- - - -
Stage 2	851	-	- - - -

Approach	WB	NB	SB
HCM Control Delay, s	10.4	0	0.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	700	1343	-
HCM Lane V/C Ratio	-	-	0.05	0.008	-
HCM Control Delay (s)	-	-	10.4	7.7	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	277	69	0	0	0	0	240	30	33	148	0
Future Volume (vph)	33	277	69	0	0	0	0	240	30	33	148	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	0	0	0	0	0	0	0	70	0	0
Storage Lanes	0	0	0	0	0	0	0	0	0	1	0	0
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>			0.973						0.985			
Flt Protected			0.996							0.950		
Satd. Flow (prot)	0	3430	0	0	0	0	0	1817	0	1752	1845	0
Flt Permitted			0.996							0.560		
Satd. Flow (perm)	0	3430	0	0	0	0	0	1817	0	1033	1845	0
Right Turn on Red			Yes			Yes			Yes		Yes	
Satd. Flow (RTOR)		70						21				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1172			165			830			109	
Travel Time (s)		26.6			3.8			18.9			2.5	
Peak Hour Factor	0.82	0.82	0.82	0.92	0.92	0.92	0.81	0.81	0.81	0.76	0.76	0.76
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	40	338	84	0	0	0	0	296	37	43	195	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	462	0	0	0	0	0	333	0	43	195	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12		12		
Link Offset(ft)		0			0			0		0		
Crosswalk Width(ft)		16			16			16		16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1						1		1	1	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	40						40		40	40	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	40						40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		4						2			6	
Permitted Phases		4								6		
Detector Phase		4	4					2		6	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0						10.0		10.0	10.0	
Minimum Split (s)	12.0	12.0						14.0		14.0	14.0	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	17.0	17.0						23.0		23.0	23.0	
Total Split (%)	42.5%	42.5%						57.5%		57.5%	57.5%	
Maximum Green (s)	13.0	13.0						19.0		19.0	19.0	
Yellow Time (s)	4.0	4.0						4.0		4.0	4.0	
All-Red Time (s)	0.0	0.0						0.0		0.0	0.0	
Lost Time Adjust (s)		0.0						0.0		0.0	0.0	
Total Lost Time (s)		4.0						4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.5	2.5						2.5		2.5	2.5	
Recall Mode	None	None						Min		Max	Max	
Act Effect Green (s)		9.4						19.0		19.0	19.0	
Actuated g/C Ratio		0.26						0.52		0.52	0.52	
v/c Ratio		0.50						0.35		0.08	0.20	
Control Delay		11.6						6.4		5.4	5.8	
Queue Delay		0.0						0.0		0.0	0.0	
Total Delay		11.6						6.4		5.4	5.8	
LOS		B						A		A	A	
Approach Delay		11.6						6.4			5.7	
Approach LOS		B						A			A	
Queue Length 50th (ft)		34						28		3	16	
Queue Length 95th (ft)		54						64		12	37	
Internal Link Dist (ft)		1092			85			750			29	
Turn Bay Length (ft)										70		
Base Capacity (vph)		1272						959		540	964	
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		0.36						0.35		0.08	0.20	

#### Intersection Summary

Area Type: Other

Cycle Length: 40

Actuated Cycle Length: 36.4

Natural Cycle: 40

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.50

Intersection Signal Delay: 8.6

Intersection LOS: A

Intersection Capacity Utilization 43.6%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 5: 24th Ave. & Van Buren St.



Lanes, Volumes, Timings  
1: 24th Ave. & Hollywood Blvd.

03/21/2017

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑	↑	↑	↑↑		↑	↑		↑	↑	
Traffic Volume (vph)	106	659	20	77	766	54	120	165	20	41	106	40
Future Volume (vph)	106	659	20	77	766	54	120	165	20	41	106	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		50	170		0	175		0	105		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>			0.850		0.990			0.984			0.959	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3504	0	1752	1815	0	1752	1769	0
Flt Permitted	0.103			0.335			0.548			0.611		
Satd. Flow (perm)	192	3539	1583	624	3504	0	1011	1815	0	1127	1769	0
Right Turn on Red		Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)		61		6			5			11		
Link Speed (mph)		35		35			30			30		
Link Distance (ft)		1190		1203			364			538		
Travel Time (s)		23.2		23.4			8.3			12.2		
Peak Hour Factor	0.91	0.91	0.91	0.96	0.96	0.96	0.78	0.78	0.78	0.75	0.75	0.75
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	116	724	22	80	798	56	154	212	26	55	141	53
Shared Lane Traffic (%)												
Lane Group Flow (vph)	116	724	22	80	854	0	154	238	0	55	194	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		12		12			12			12		
Link Offset(ft)		0		0			0			0		
Crosswalk Width(ft)		16		16			16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1		1	1	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	40	40	40	40	40		40	30		40	40	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	40	40	40	40	40		40	30		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA	Perm	Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases	5	2			6		3	8			4	
Permitted Phases	2		2	6			8			4		
Detector Phase	5	2	2	6	6		3	8		4	4	
Switch Phase												
Minimum Initial (s)	4.0	10.0	10.0	10.0	10.0		4.0	6.0		6.0	6.0	
Minimum Split (s)	10.0	23.0	23.0	23.0	23.0		11.0	34.0		34.0	34.0	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	18.0	92.0	92.0	74.0	74.0		25.0	68.0		43.0	43.0	
Total Split (%)	11.3%	57.5%	57.5%	46.3%	46.3%		15.6%	42.5%		26.9%	26.9%	
Maximum Green (s)	13.0	87.0	87.0	69.0	69.0		19.0	62.0		37.0	37.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0		6.0	6.0		6.0	6.0	
Lead/Lag	Lead			Lag	Lag		Lead			Lag	Lag	
Lead-Lag Optimize?	Yes			Yes	Yes		Yes			Yes	Yes	
Vehicle Extension (s)	1.5	3.0	3.0	3.0	3.0		1.5	2.5		2.5	2.5	
Recall Mode	None	C-Min	C-Min	C-Min	C-Min		None	Max		Max	Max	
Walk Time (s)		7.0	7.0	7.0	7.0			7.0		7.0	7.0	
Flash Dont Walk (s)		6.0	6.0	6.0	6.0			21.0		21.0	21.0	
Pedestrian Calls (#/hr)		0	0	0	0			0		0	0	
Act Effect Green (s)	64.1	64.1	64.1	48.7	48.7		84.9	84.9		71.4	71.4	
Actuated g/C Ratio	0.40	0.40	0.40	0.30	0.30		0.53	0.53		0.45	0.45	
v/c Ratio	0.65	0.51	0.03	0.42	0.80		0.27	0.25		0.11	0.24	
Control Delay	46.2	36.9	0.1	50.9	56.7		22.1	21.9		30.2	29.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	1.0		0.0	0.0	
Total Delay	46.2	36.9	0.1	50.9	56.7		22.1	23.0		30.2	29.2	
LOS	D	D	A	D	E		C	C		C	C	
Approach Delay		37.2			56.2			22.6			29.4	
Approach LOS		D			E			C			C	
Queue Length 50th (ft)	77	298	0	67	432		81	129		33	117	
Queue Length 95th (ft)	111	322	0	117	480		121	177		62	167	
Internal Link Dist (ft)		1110			1123			284			458	
Turn Bay Length (ft)	180		50	170			175			105		
Base Capacity (vph)	205	1924	888	269	1514		624	965		503	795	
Starvation Cap Reductn	0	0	0	0	0		0	501		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.57	0.38	0.02	0.30	0.56		0.25	0.51		0.11	0.24	

#### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 146 (91%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.80

Intersection Signal Delay: 41.3

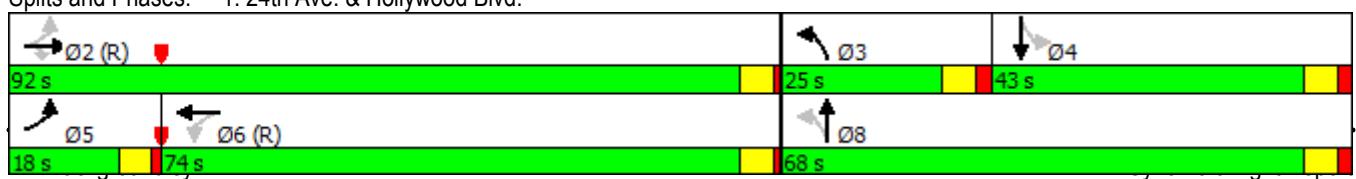
Intersection LOS: D

Intersection Capacity Utilization 62.0%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 1: 24th Ave. & Hollywood Blvd.



**Intersection**

Int Delay, s/veh

1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		B		W	B
Traffic Vol, veh/h	18	18	272	26	18	203
Future Vol, veh/h	18	18	272	26	18	203
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	60	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	88	88	88	88
Heavy Vehicles, %	2	2	3	3	3	3
Mvmt Flow	20	20	309	30	20	231

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	596	324	0 0 339 0
Stage 1	324	-	- - - -
Stage 2	272	-	- - - -
Critical Hdwy	6.42	6.22	- - 4.13 -
Critical Hdwy Stg 1	5.42	-	- - - -
Critical Hdwy Stg 2	5.42	-	- - - -
Follow-up Hdwy	3.518	3.318	- - 2.227 -
Pot Cap-1 Maneuver	466	717	- - 1215 -
Stage 1	733	-	- - - -
Stage 2	774	-	- - - -
Platoon blocked, %		- -	- -
Mov Cap-1 Maneuver	458	717	- - 1215 -
Mov Cap-2 Maneuver	458	-	- - - -
Stage 1	733	-	- - - -
Stage 2	761	-	- - - -

Approach	WB	NB	SB
HCM Control Delay, s	11.9	0	0.7
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	559	1215	-
HCM Lane V/C Ratio	-	-	0.07	0.017	-
HCM Control Delay (s)	-	-	11.9	8	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0.1	-

## **Appendix F – Total Traffic Conditions Analyses**



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	52	160	30	0	0	0	0	163	9	38	90	0
Future Volume (vph)	52	160	30	0	0	0	0	163	9	38	90	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	70		0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>				0.982					0.993			
Flt Protected				0.989							0.950	
Satd. Flow (prot)	0	3437	0	0	0	0	0	1832	0	1752	1845	0
Flt Permitted				0.989							0.617	
Satd. Flow (perm)	0	3437	0	0	0	0	0	1832	0	1138	1845	0
Right Turn on Red				Yes			Yes			Yes		Yes
Satd. Flow (RTOR)		41							10			
Link Speed (mph)		30			30				30			30
Link Distance (ft)		1172			175				830			109
Travel Time (s)		26.6			4.0				18.9			2.5
Peak Hour Factor	0.66	0.66	0.66	0.92	0.92	0.92	0.76	0.76	0.76	0.65	0.65	0.65
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	79	242	45	0	0	0	0	214	12	58	138	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	366	0	0	0	0	0	226	0	58	138	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0				12		12	
Link Offset(ft)		0			0				0		0	
Crosswalk Width(ft)		16			16				16		16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1							1	1	1	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	40						40		40	40	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	40						40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		4						2			6	
Permitted Phases		4									6	
Detector Phase	4	4						2		6	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0						10.0		10.0	10.0	
Minimum Split (s)	12.0	12.0						14.0		14.0	14.0	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	17.0	17.0						23.0		23.0	23.0	
Total Split (%)	42.5%	42.5%						57.5%		57.5%	57.5%	
Maximum Green (s)	13.0	13.0						19.0		19.0	19.0	
Yellow Time (s)	4.0	4.0						4.0		4.0	4.0	
All-Red Time (s)	0.0	0.0						0.0		0.0	0.0	
Lost Time Adjust (s)		0.0						0.0		0.0	0.0	
Total Lost Time (s)		4.0						4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.5	2.5						2.5		2.5	2.5	
Recall Mode	None	None						Min		Max	Max	
Act Effect Green (s)		8.8						19.0		19.0	19.0	
Actuated g/C Ratio		0.25						0.53		0.53	0.53	
v/c Ratio		0.42						0.23		0.10	0.14	
Control Delay		11.6						5.3		5.0	5.0	
Queue Delay		0.0						0.0		0.0	0.0	
Total Delay		11.6						5.3		5.0	5.0	
LOS		B						A		A	A	
Approach Delay		11.6						5.3		5.0	5.0	
Approach LOS		B						A		A		
Queue Length 50th (ft)		27						17		4	11	
Queue Length 95th (ft)		34						37		11	21	
Internal Link Dist (ft)		1092			95			750			29	
Turn Bay Length (ft)										70		
Base Capacity (vph)		1275						977		604	980	
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		0.29						0.23		0.10	0.14	

#### Intersection Summary

Area Type: Other

Cycle Length: 40

Actuated Cycle Length: 35.8

Natural Cycle: 40

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.42

Intersection Signal Delay: 8.2

Intersection LOS: A

Intersection Capacity Utilization 34.3%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 5: 24th Ave. & Van Buren St.



Lanes, Volumes, Timings  
1: 24th Ave. & Hollywood Blvd.

03/21/2017

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑↑	↑	↑	↑	↑	↑↑	
Traffic Volume (vph)	94	714	31	39	697	27	200	110	50	44	88	43
Future Volume (vph)	94	714	31	39	697	27	200	110	50	44	88	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		50	170		0	175		0	105		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>			0.850		0.994			0.953			0.951	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3518	0	1752	1758	0	1752	1754	0
Flt Permitted	0.109			0.239			0.594			0.643		
Satd. Flow (perm)	203	3539	1583	445	3518	0	1096	1758	0	1186	1754	0
Right Turn on Red		Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)		61		3			18			14		
Link Speed (mph)		35		35			30			30		
Link Distance (ft)		1190		1203			364			538		
Travel Time (s)		23.2		23.4			8.3			12.2		
Peak Hour Factor	0.84	0.84	0.84	0.92	0.92	0.92	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	112	850	37	42	758	29	227	125	57	50	100	49
Shared Lane Traffic (%)												
Lane Group Flow (vph)	112	850	37	42	787	0	227	182	0	50	149	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1		1	1	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	40	40	40	40	40		40	30		40	40	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	40	40	40	40	40		40	30		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA	Perm	Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases	5	2			6		3	8			4	
Permitted Phases	2		2	6			8			4		
Detector Phase	5	2	2	6	6		3	8		4	4	
Switch Phase												
Minimum Initial (s)	4.0	10.0	10.0	10.0	10.0		4.0	6.0		6.0	6.0	
Minimum Split (s)	10.0	23.0	23.0	23.0	23.0		11.0	34.0		34.0	34.0	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	18.0	87.0	87.0	69.0	69.0		34.0	73.0		39.0	39.0	
Total Split (%)	11.3%	54.4%	54.4%	43.1%	43.1%		21.3%	45.6%		24.4%	24.4%	
Maximum Green (s)	13.0	82.0	82.0	64.0	64.0		28.0	67.0		33.0	33.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0		6.0	6.0		6.0	6.0	
Lead/Lag	Lead			Lag	Lag		Lead			Lag	Lag	
Lead-Lag Optimize?	Yes			Yes	Yes		Yes			Yes	Yes	
Vehicle Extension (s)	1.5	3.0	3.0	3.0	3.0		1.5	2.5		2.5	2.5	
Recall Mode	None	C-Min	C-Min	C-Min	C-Min		None	Max		Max	Max	
Walk Time (s)		7.0	7.0	7.0	7.0			7.0		7.0	7.0	
Flash Dont Walk (s)		6.0	6.0	6.0	6.0			21.0		21.0	21.0	
Pedestrian Calls (#/hr)		0	0	0	0			0		0	0	
Act Effect Green (s)	60.2	60.2	60.2	44.8	44.8		88.8	88.8		71.8	71.8	
Actuated g/C Ratio	0.38	0.38	0.38	0.28	0.28		0.56	0.56		0.45	0.45	
v/c Ratio	0.63	0.64	0.06	0.34	0.80		0.35	0.19		0.09	0.19	
Control Delay	47.7	42.8	2.0	52.8	59.6		21.1	17.6		30.2	27.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0		1.0	0.0		0.0	0.0	
Total Delay	47.7	42.8	2.0	52.8	59.6		22.1	17.6		30.2	27.3	
LOS	D	D	A	D	E		C	B		C	C	
Approach Delay		41.9			59.2			20.1			28.1	
Approach LOS		D			E			C			C	
Queue Length 50th (ft)	78	384	0	35	405		118	82		30	83	
Queue Length 95th (ft)	106	376	6	74	455		190	141		68	155	
Internal Link Dist (ft)		1110			1123			284			458	
Turn Bay Length (ft)	180		50	170			175			105		
Base Capacity (vph)	203	1813	841	178	1409		723	983		532	794	
Starvation Cap Reductn	0	0	0	0	0		289	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.55	0.47	0.04	0.24	0.56		0.52	0.19		0.09	0.19	

#### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 146 (91%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.80

Intersection Signal Delay: 43.0

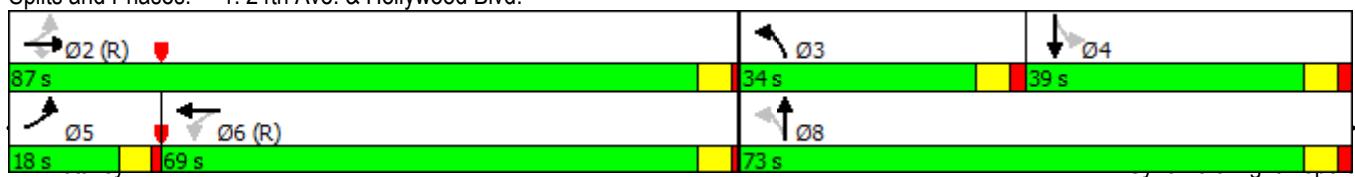
Intersection LOS: D

Intersection Capacity Utilization 64.7%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 1: 24th Ave. & Hollywood Blvd.



**Intersection**

Int Delay, s/veh 1.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↑	↑		↑	↑
Traffic Vol, veh/h	0	92	164	81	0	166
Future Vol, veh/h	0	92	164	81	0	166
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	60	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	88	88	88	88
Heavy Vehicles, %	2	2	3	3	3	3
Mvmt Flow	0	100	186	92	0	189

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	232	0 0 278 0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.22	- - 4.13 -
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.318	- - 2.227 -
Pot Cap-1 Maneuver	0	807	- - 1279 -
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	-	807	- - 1279 -
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.1	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	807	1279	-
HCM Lane V/C Ratio	-	-	0.124	-	-
HCM Control Delay (s)	-	-	10.1	0	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.4	0	-

**Intersection**

Int Delay, s/veh 0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
<b>Lane Configurations</b>						
Traffic Vol, veh/h	24	184		0 0	0	0
Future Vol, veh/h	24	184		0 0	0	0
Conflicting Peds, #/hr	0	0		0 0	0	0
Sign Control	Free	Free		Free Free	Stop	Stop
RT Channelized	-	None		- None	-	None
Storage Length	-	-		- -	0	-
Veh in Median Storage, #	-	0		- -	0	-
Grade, %	-	0		0 -	0	-
Peak Hour Factor	66	66		92 92	92	92
Heavy Vehicles, %	2	2		2 2	2	2
Mvmt Flow	36	279		0 0	0	0

Major/Minor	Major1	Minor2
Conflicting Flow All	0 0	212 -
Stage 1	- -	0 -
Stage 2	- -	212 -
Critical Hdwy	4.14 -	6.84 -
Critical Hdwy Stg 1	- -	- -
Critical Hdwy Stg 2	- -	5.84 -
Follow-up Hdwy	2.22 -	3.52 -
Pot Cap-1 Maneuver	- -	757 0
Stage 1	- -	- 0
Stage 2	- -	803 0
Platoon blocked, %	-	
Mov Cap-1 Maneuver	- -	757 -
Mov Cap-2 Maneuver	- -	757 -
Stage 1	- -	- -
Stage 2	- -	803 -

Approach	EB	SB
HCM Control Delay, s		0
HCM LOS		A

Minor Lane/Major Mvmt	EBL	EBT	SBLn1
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	0
HCM Lane LOS	-	-	A
HCM 95th %tile Q(veh)	-	-	-

Lanes, Volumes, Timings  
5: 24th Ave. & Van Buren St.

03/22/2017

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	57	277	69	0	0	0	0	246	30	46	148	0
Future Volume (vph)	57	277	69	0	0	0	0	246	30	46	148	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	70		0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>				0.974					0.985			
Flt Protected				0.993							0.950	
Satd. Flow (prot)	0	3423	0	0	0	0	0	1817	0	1752	1845	0
Flt Permitted				0.993							0.552	
Satd. Flow (perm)	0	3423	0	0	0	0	0	1817	0	1018	1845	0
Right Turn on Red				Yes			Yes			Yes		Yes
Satd. Flow (RTOR)		64							21			
Link Speed (mph)		30			30				30			30
Link Distance (ft)		1172			165			830				109
Travel Time (s)		26.6			3.8			18.9				2.5
Peak Hour Factor	0.82	0.82	0.82	0.92	0.92	0.92	0.81	0.81	0.81	0.76	0.76	0.76
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	70	338	84	0	0	0	0	304	37	61	195	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	492	0	0	0	0	0	341	0	61	195	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1						1		1	1	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	40						40		40	40	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	40						40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		4						2			6	
Permitted Phases		4									6	
Detector Phase	4	4						2		6	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0						10.0		10.0	10.0	
Minimum Split (s)	12.0	12.0						14.0		14.0	14.0	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	17.0	17.0						23.0		23.0	23.0	
Total Split (%)	42.5%	42.5%						57.5%		57.5%	57.5%	
Maximum Green (s)	13.0	13.0						19.0		19.0	19.0	
Yellow Time (s)	4.0	4.0						4.0		4.0	4.0	
All-Red Time (s)	0.0	0.0						0.0		0.0	0.0	
Lost Time Adjust (s)		0.0						0.0		0.0	0.0	
Total Lost Time (s)		4.0						4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.5	2.5						2.5		2.5	2.5	
Recall Mode	None	None						Min		Max	Max	
Act Effect Green (s)		9.7						19.1		19.1	19.1	
Actuated g/C Ratio		0.26						0.52		0.52	0.52	
v/c Ratio		0.52						0.36		0.12	0.20	
Control Delay		12.0						6.7		6.0	6.0	
Queue Delay		0.0						0.0		0.0	0.0	
Total Delay		12.0						6.7		6.0	6.0	
LOS		B						A		A	A	
Approach Delay		12.0						6.7			6.0	
Approach LOS		B						A			A	
Queue Length 50th (ft)		37						31		5	17	
Queue Length 95th (ft)		58						70		17	40	
Internal Link Dist (ft)		1092			85			750			29	
Turn Bay Length (ft)										70		
Base Capacity (vph)		1254						951		527	955	
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		0.39						0.36		0.12	0.20	

#### Intersection Summary

Area Type: Other

Cycle Length: 40

Actuated Cycle Length: 36.8

Natural Cycle: 40

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.52

Intersection Signal Delay: 8.9

Intersection LOS: A

Intersection Capacity Utilization 44.6%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 5: 24th Ave. & Van Buren St.



Lanes, Volumes, Timings  
1: 24th Ave. & Hollywood Blvd.

03/22/2017

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑↑	↑	↑	↑	↑	↑↑	
Traffic Volume (vph)	106	659	25	82	766	54	154	169	32	41	109	40
Future Volume (vph)	106	659	25	82	766	54	154	169	32	41	109	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		50	170		0	175		0	105		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>			0.850		0.990			0.976			0.960	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3504	0	1752	1800	0	1752	1771	0
Flt Permitted	0.100			0.332			0.540			0.600		
Satd. Flow (perm)	186	3539	1583	618	3504	0	996	1800	0	1107	1771	0
Right Turn on Red		Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)		61		6			7			11		
Link Speed (mph)		35		35			30			30		
Link Distance (ft)		1190		1203			364			538		
Travel Time (s)		23.2		23.4			8.3			12.2		
Peak Hour Factor	0.91	0.91	0.91	0.96	0.96	0.96	0.78	0.78	0.78	0.75	0.75	0.75
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	116	724	27	85	798	56	197	217	41	55	145	53
Shared Lane Traffic (%)												
Lane Group Flow (vph)	116	724	27	85	854	0	197	258	0	55	198	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1		1	1	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	40	40	40	40	40		40	30		40	40	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	40	40	40	40	40		40	30		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA	Perm	Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases	5	2			6		3	8			4	
Permitted Phases	2		2	6			8			4		
Detector Phase	5	2	2	6	6		3	8		4	4	
Switch Phase												
Minimum Initial (s)	4.0	10.0	10.0	10.0	10.0		4.0	6.0		6.0	6.0	
Minimum Split (s)	10.0	23.0	23.0	23.0	23.0		11.0	34.0		34.0	34.0	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	17.0	90.0	90.0	73.0	73.0		29.0	70.0		41.0	41.0	
Total Split (%)	10.6%	56.3%	56.3%	45.6%	45.6%		18.1%	43.8%		25.6%	25.6%	
Maximum Green (s)	12.0	85.0	85.0	68.0	68.0		23.0	64.0		35.0	35.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0		6.0	6.0		6.0	6.0	
Lead/Lag	Lead			Lag	Lag		Lead			Lag	Lag	
Lead-Lag Optimize?	Yes			Yes	Yes		Yes			Yes	Yes	
Vehicle Extension (s)	1.5	3.0	3.0	3.0	3.0		1.5	2.5		2.5	2.5	
Recall Mode	None	C-Min	C-Min	C-Min	C-Min		None	Max		Max	Max	
Walk Time (s)		7.0	7.0	7.0	7.0			7.0		7.0	7.0	
Flash Dont Walk (s)		6.0	6.0	6.0	6.0			21.0		21.0	21.0	
Pedestrian Calls (#/hr)		0	0	0	0			0		0	0	
Act Effect Green (s)	63.4	63.4	63.4	48.1	48.1		85.6	85.6		69.9	69.9	
Actuated g/C Ratio	0.40	0.40	0.40	0.30	0.30		0.54	0.54		0.44	0.44	
v/c Ratio	0.67	0.52	0.04	0.46	0.81		0.34	0.27		0.11	0.25	
Control Delay	48.3	37.5	0.1	53.0	57.6		22.6	21.7		31.6	30.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	1.2		0.0	0.0	
Total Delay	48.3	37.5	0.1	53.0	57.6		22.6	22.9		31.6	30.5	
LOS	D	D	A	D	E		C	C		C	C	
Approach Delay		37.8			57.1			22.8			30.7	
Approach LOS		D			E			C			C	
Queue Length 50th (ft)	78	301	0	73	435		106	139		34	122	
Queue Length 95th (ft)	113	325	0	124	479		150	190		64	175	
Internal Link Dist (ft)		1110			1123			284			458	
Turn Bay Length (ft)	180		50	170			175			105		
Base Capacity (vph)	192	1880	869	262	1492		641	966		483	780	
Starvation Cap Reductn	0	0	0	0	0		0	495		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.60	0.39	0.03	0.32	0.57		0.31	0.55		0.11	0.25	

#### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 146 (91%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.81

Intersection Signal Delay: 41.6

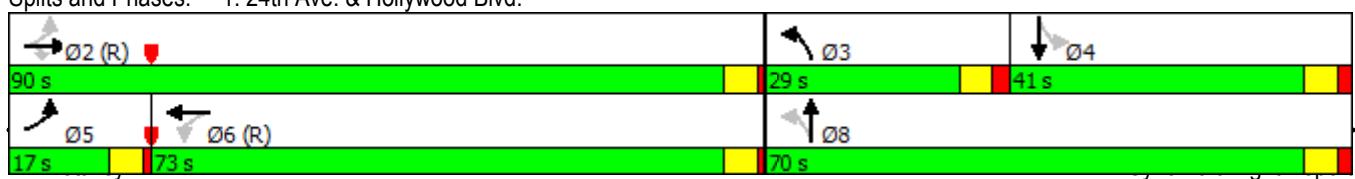
Intersection LOS: D

Intersection Capacity Utilization 63.8%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 1: 24th Ave. & Hollywood Blvd.



**Intersection**

Int Delay, s/veh 1.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		B		W	B
Traffic Vol, veh/h	0	86	272	56	0	234
Future Vol, veh/h	0	86	272	56	0	234
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	60	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	88	88	88	88
Heavy Vehicles, %	2	2	3	3	3	3
Mvmt Flow	0	93	309	64	0	266

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	607	341	0 0 373 0
Stage 1	341	-	- - - -
Stage 2	266	-	- - - -
Critical Hdwy	6.42	6.22	- - 4.13 -
Critical Hdwy Stg 1	5.42	-	- - - -
Critical Hdwy Stg 2	5.42	-	- - - -
Follow-up Hdwy	3.518	3.318	- - 2.227 -
Pot Cap-1 Maneuver	460	701	- - 1180 -
Stage 1	720	-	- - - -
Stage 2	779	-	- - - -
Platoon blocked, %		- -	- -
Mov Cap-1 Maneuver	460	701	- - 1180 -
Mov Cap-2 Maneuver	460	-	- - - -
Stage 1	720	-	- - - -
Stage 2	779	-	- - - -

Approach	WB	NB	SB
HCM Control Delay, s	10.9	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	701	1180	-
HCM Lane V/C Ratio	-	-	0.133	-	-
HCM Control Delay (s)	-	-	10.9	0	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.5	0	-

---

Intersection

Int Delay, s/veh 0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	13	340		0 0	0	0
Future Vol, veh/h	13	340		0 0	0	0
Conflicting Peds, #/hr	0	0		0 0	0	0
Sign Control	Free	Free		Free Free	Stop	Stop
RT Channelized	-	None		- None	-	None
Storage Length	-	-		- -	0	-
Veh in Median Storage, #	-	0		- -	0	-
Grade, %	-	0		0 -	0	-
Peak Hour Factor	82	82		92 92	92	92
Heavy Vehicles, %	2	2		2 2	2	2
Mvmt Flow	16	415		0 0	0	0

Major/Minor	Major1	Minor2
Conflicting Flow All	0 0	239 -
Stage 1	- -	0 -
Stage 2	- -	239 -
Critical Hdwy	4.14 -	6.84 -
Critical Hdwy Stg 1	- -	- -
Critical Hdwy Stg 2	- -	5.84 -
Follow-up Hdwy	2.22 -	3.52 -
Pot Cap-1 Maneuver	- -	728 0
Stage 1	- -	- 0
Stage 2	- -	778 0
Platoon blocked, %	-	
Mov Cap-1 Maneuver	- -	728 -
Mov Cap-2 Maneuver	- -	728 -
Stage 1	- -	- -
Stage 2	- -	778 -

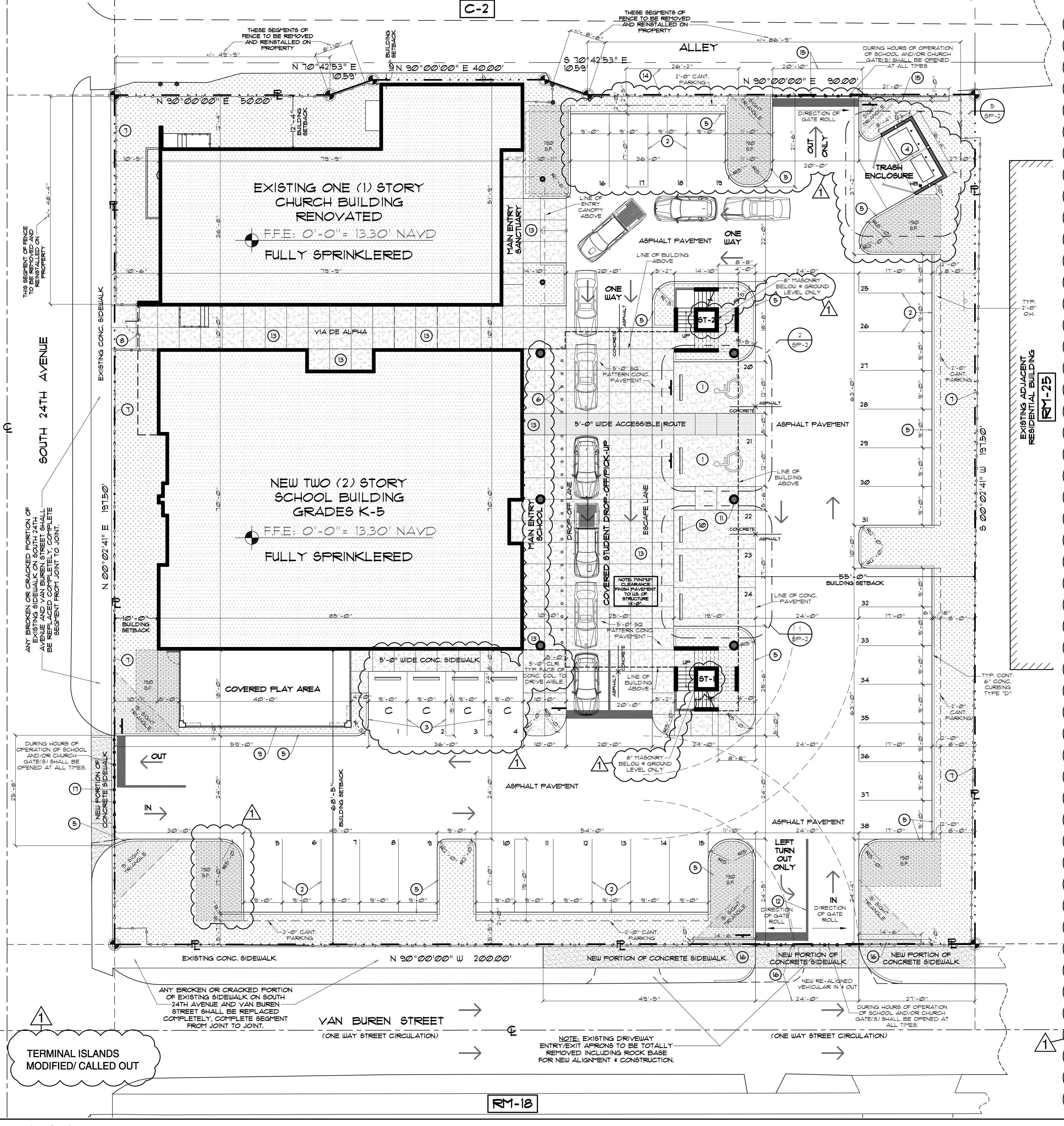
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Approach	EB	SB
HCM Control Delay, s		0
HCM LOS		A

---

Minor Lane/Major Mvmt	EBL	EBT	SBLn1
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	0
HCM Lane LOS	-	-	A
HCM 95th %tile Q(veh)	-	-	-

## **Appendix G – Site Plan**



# NEW SITE PLAN

Revision type	Date	by
 TAC COMMENTS	8/12/16	JP/RD

TO THE BEST OF THE ARCHITECT OR ENGINEERS KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE MINIMUM CODES AND THE APPLICABLE FIRE SAFETY STANDARDS AT THE TIME OF THEIR PREPARATION AS DETERMINED BY THE LOCAL AUTHORITIES IN ACCORDANCE WITH SECTION 105 (F.B.C.) FLORIDA BUILDING CODE AND 633 FLORIDA STATUTES.

NOTE: AUTHENTIC COPIES OF THIS DOCUMENT SHALL BEAR THE SIGNATURE IN ORIGINAL AND THE RAISED SEAL OR STAMP OF THE ATTESTING ARCHITECT OR ENGINEER OF RECORD AND BE DATED.

ALL DESIGNS AND DETAILS INDICATED BY AND REPRESENTED BY THIS DRAWING ARE FOR USE ON AND IN CONJUNCTION WITH THE SPECIFIED PROJECT. ALL DRAWINGS CONTAINED HEREIN ARE THE PROPERTY OF FRANK COSTOYA ARCHITECT, P.A. AND NOT TO BE USED OR REPRODUCED IN WHOLE OR IN PART WITHOUT THE ADVANCED WRITTEN PERMISSION AND CONSENT FROM THE FIRM. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS.

The logo for Frank Costoya Architect, P.A. consists of a stylized graphic of the letters 'FCA' where the 'C' and 'A' are joined together. Below this graphic, the text 'FRANK COSTOYA ARCHITECT, P.A.' is written in a bold, serif font. Underneath the company name, the services offered are listed as 'Architecture - Land Planning'. The address '5230 South University Drive - Suite 103' is followed by the city 'Davie, Florida 33328'. At the bottom, the contact information 'Tel: (954) 680-4440 / Fax: (954) 680-4441' is provided.

**Project Title:** Site Plan Approval Documents for:  
Existing Church Renovations and New 2 Story Charter School Building for:  
**FAITH and LIFE FELLOWSHIP MINISTRIES, INC.**  
AND  
**ALPHA INTERNATIONAL ACADEMY**  
**CHARTER SCHOOL**

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Drawing date: SEPTEMBER 19, 2016	
Drwn by: RKD / JP	Chkd by: FC
Drawing Scale: 1" = 10'-0"	
Project Number: FCA-1615	

<p><b>Sheet title:</b></p> <ul style="list-style-type: none"> <li>• NEW SITE PLAN</li> <li>• SITE/BUILDING DATA</li> <li>• KEY NOTES</li> <li>• LEGEND</li> <li>• ZONING MAP</li> </ul>	<p><b>Seal /Signature</b></p> <p>FRANK COSTOYA, JR.</p> <p>FL. REG. NO. AR00123</p> <p><b>Date:</b></p>
---	---

**Sheet Number:**  
**SP-1**  
consecutive  
of sheets

# GENERAL SITE PLAN NOTES

- THIS SITE IS TO BE READ AND COORDINATED IN CONJUNCTION WITH ALL RELATED DISCIPLINES INCLUDING SURVEY, DEMOLITION PLAN, TREE DISPOSITION PLAN, CIVIL ENGINEERING, LANDSCAPE, IRRIGATION, SITE PHOTOMETRICS / LIGHTING AND ARCHITECTURE.

SITE LIGHTING PHOTOMETRICS SHALL NOT EXCEED 0.5 FOOT CANDLES @ PROPERTY LINES ABUTTING RESIDENTIAL ZONED PROPERTIES.

ALL NEW SITE DEVELOPMENT CONSTRUCTION SHALL COMPLY OR EXCEED STANDARDS SET BY THE CITY OF HOLLYWOOD'S GREEN BUILDING ORDINANCE.

CONSTRUCTION WILL BE PERFORMED ALL AT ONE (1) TIME / PHASE. PROPERTY WILL BE VACATED, SCHOOL & CHURCH WILL RELOCATE UNTIL CONSTRUCTION IS COMPLETED AND CERTIFICATE OF OCCUPANCY ISSUED.

MASS OR CELEBRATIONS WILL NOT OCCUR AT CHURCH DURING SCHOOL HOURS MONDAY THRU FRIDAY 1:00 AM THRU 3:30 PM.

INDICATES OPEN / GREEN AREA

# SITE KEYNOTES LEGEND

- A PARKING STALL (12'-0" x 18'-0") W/ STANDARD 5'-0" WIDE AISLE ON  
ECESSIBLE ROUTE TO BUILDING. REFER TO DETAILS ON SHEET SP-3.

NDARD PARKING STALL 9'-0" WIDE X 16'-0" DEPTH (PAVEMENT) W/ 2'-0"  
TILEYER OVER CONCRETE CURB. REFER TO DETAILS ON SHEET SP-3.

NDARD COMPACT PARKING STALL 9'-0" WIDE BY 15'-0" OVERALL DEPTH.

SH ENCLOSURE (6 C.Y. CONTAINER FOR TRASH AND 2 C.Y. CONTAINER FOR  
CYCLING) REFER TO SHEET SP-3 FOR PLAN, ELEVATIONS AND SECTIONS AND  
CIFICATIONS OF ENCLOSURE.

ICAL TYPE 'D' CONTINUOUS CONCRETE CURBING.

. 6" DIAMETER STEEL PIPE BOLLARD, CONCRETE FILLED, 36" HIGH, PAINT WITH  
IGHT TRAFFIC ENAMEL YELLOW PAINT AT COVERED DROP-OFF/PICK-UP.

STING METAL FENCING TO REMAIN.

METAL FENCE W/ 3'-0" WIDE GATE HEIGHT DESIGN AND COLOR TO MATCH  
STING FENCING. PROVIDE SPRING HINGE ADJUSTED TO PRESSURE NOT BUILDING  
PE (ADA) PERMITTED PRESSURE. FENCE LINE / DOOR SWING OUT SHALL BE  
D BACK 5'-0" OFF PROPERTY.

EEN WALL - REFER TO FLOOR PLAN EXTERIOR ELEVATIONS FOR HEIGHT,  
IGN MATERIALS, ETC.

ICAL CONCRETE WHEEL STOPPER.

ICAL 2'-0" DIAMETER CONCRETE COLUMN / STUCCO SMOOTH / PAINT.

ICAL STOP SIGN BAR AND STRIPPING. REFER TO CIVIL DRAWINGS FOR  
AILS.

CONCRETE FLATWORK/ SIDEWALKS, PAVEMENT IN 5'-0" x 5'-0" GRID SCORED  
TERN IN BROOM FINISH WITH SMOOTH TROWEL (POLISH) PICTURE FRAME. REFER  
SHEET SP-3 FOR DETAILS.

SEGMENT OF METAL FENCE. APPROX. 5'-0" HIGH, BLACK PICKET FENCE TO  
CH EXISTING IN HEIGHT, STYLE & FINISH EXACTLY.

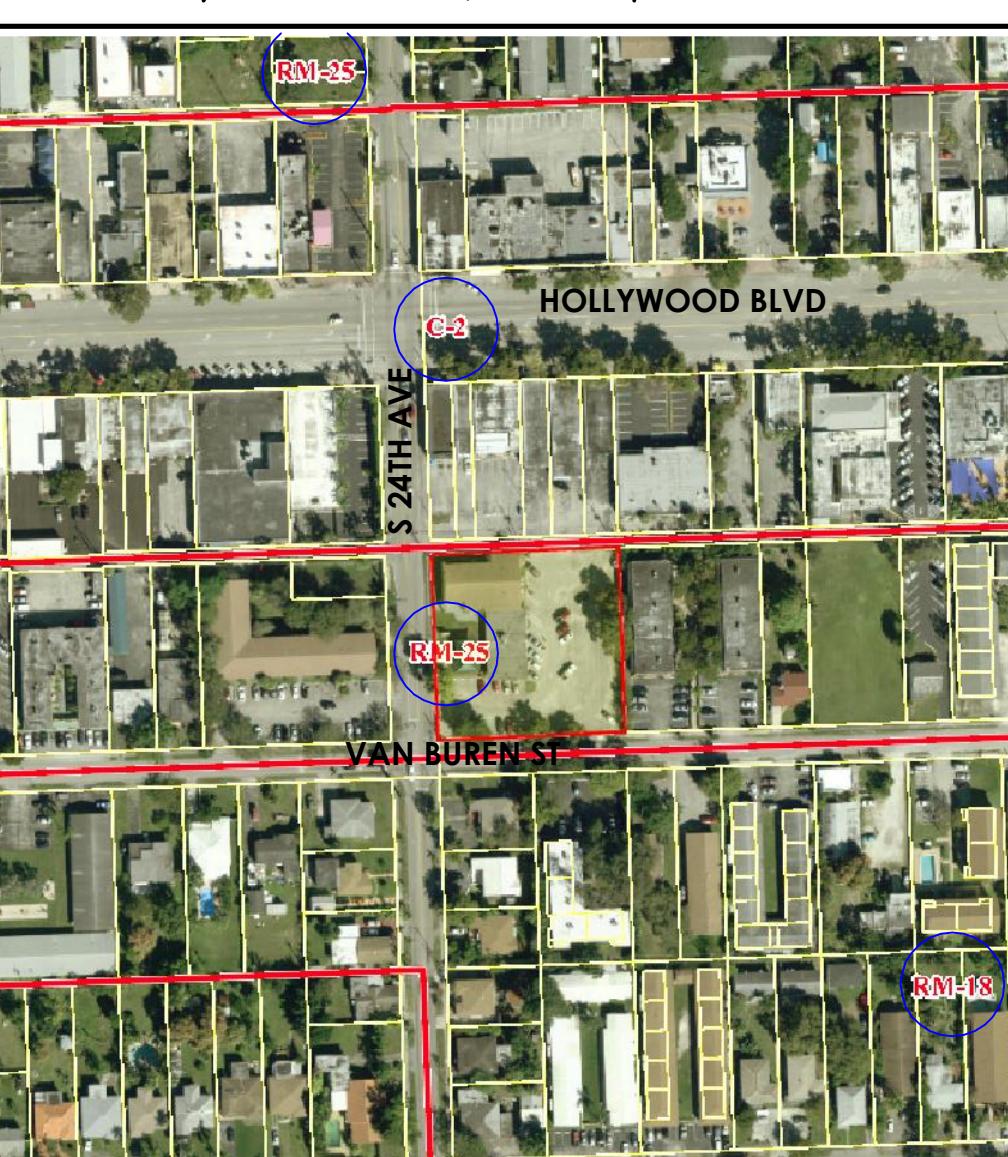
STING ROLLING GATE RELOCATED FROM SOUTH SIDE OF PROPERTY TO NORTH  
E @ NEW EXIT. ADJUST EXISTING FENCING AS NECESSARY TO ACCOMODATE  
E AT NEW LOCATION. PROVIDE NEW 1'-0" WIDE REINF. CONC. PAD, FLUSH W/  
EMENT, FOR ROLLING GATE WHEN IN OPEN POSITION. DURING HOURS OF  
ERATION OF SCHOOL AND/OR CHURCH GATE SHALL BE OPENED AT ALL TIMES.

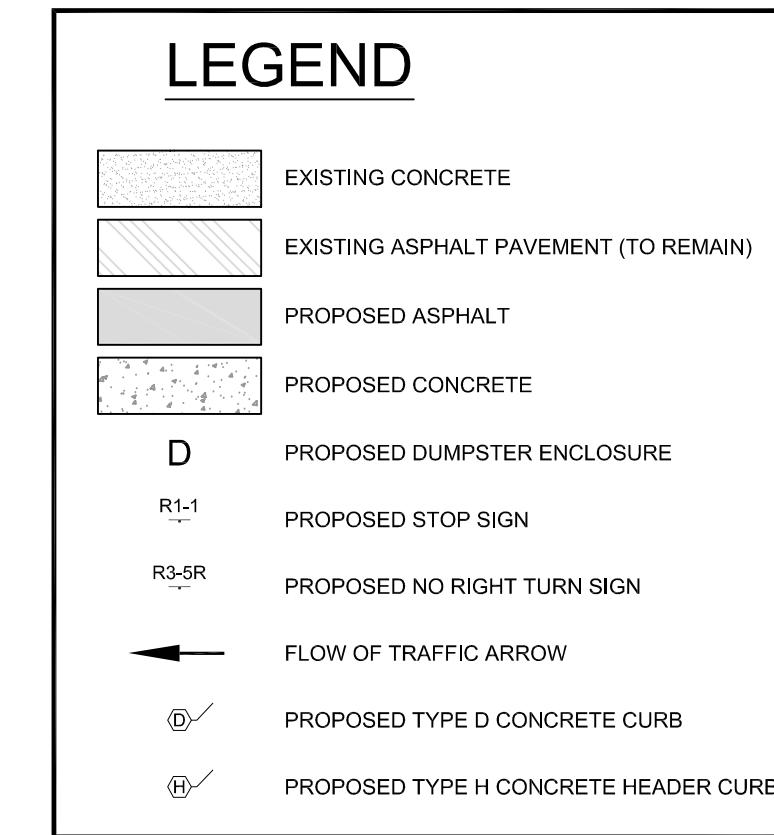
STING ROLLING GATES RELOCATED FROM NORTH SIDE OF PROPERTY TO SOUTH  
E @ NEW ENTRY/EXIT. ADJUST EXISTING FENCING AS NECESSARY TO  
COMODATE GATES AT NEW LOCATION. PROVIDE TWO (2) NEW 1'-0" WIDE REINF.  
C. PADS, FLUSH W/ PAVEMENT, ONE (1) @ EACH SIDE, FOR ROLLING GATES WHEN  
PEN POSITION. DURING HOURS OF OPERATION OF SCHOOL AND/OR CHURCH  
ES SHALL BE OPENED AT ALL TIMES.

STING ROLLING GATES TO REMAIN. DURING HOURS OF OPERATION OF SCHOOL  
AND/OR CHURCH GATES SHALL BE OPENED AT ALL TIMES.

NOTE: MAXIMUM 0.5 FOOT CANDLE  
LIGHTING LEVEL AT ALL PROPERTY  
LINES ABUTTING RESIDENTIALLY  
ZONED PROPERTIES.

# SITE PARTIAL AREA ZONING MAP

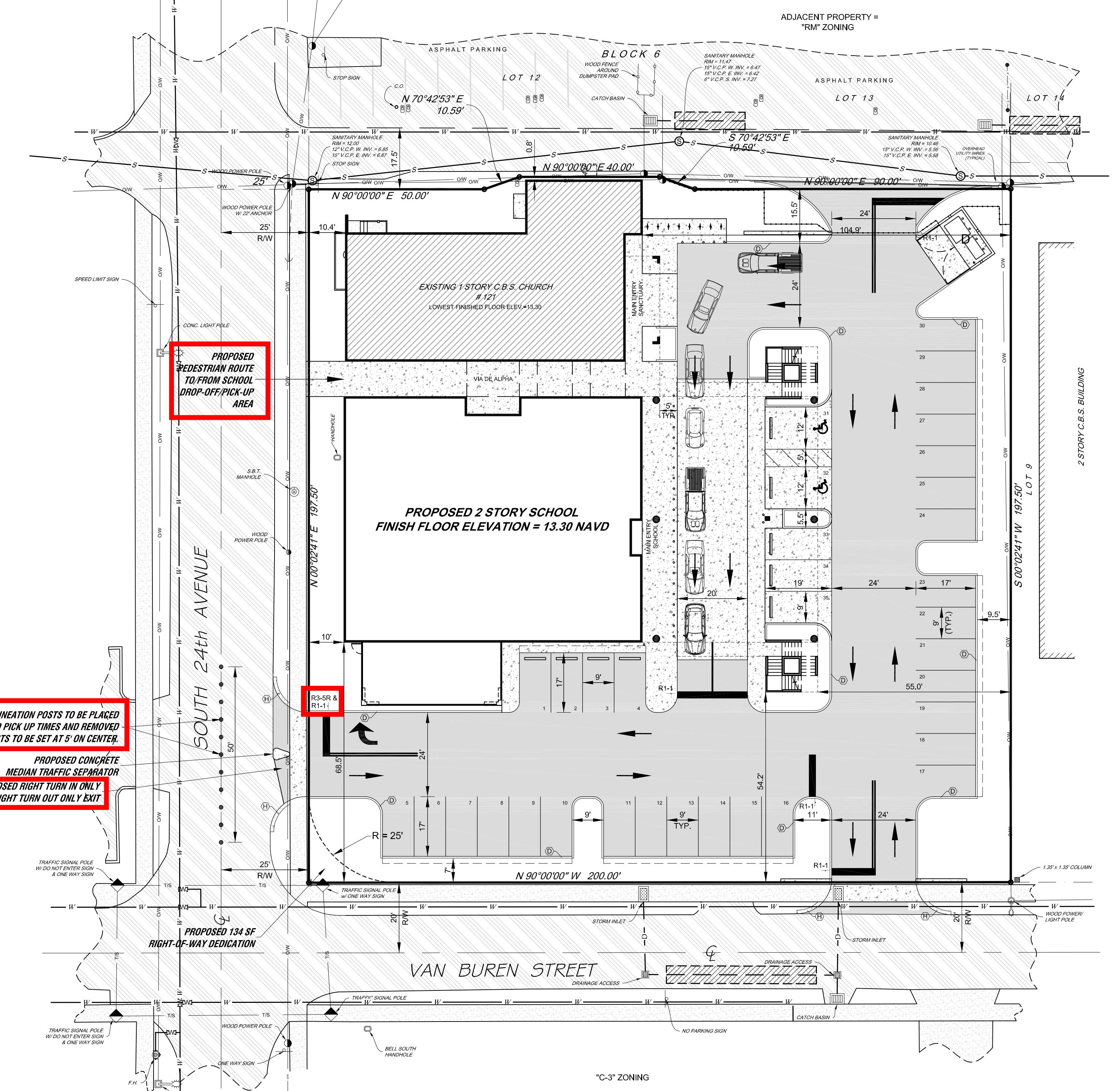




NORTH

GRAPHIC SCALE  
0 20 30 40 60 100  
(IN FEET)  
1 inch = 20 ft.

**SEE SHEET D-1 AS PREPARED BY FRANK COSTOYA ARCHITECT, P.A.  
FOR SITE DATA INFORMATION**



**NOTE:**

THE SCHOOL WILL NEED TO PLACE A "TRAFFIC CONTROL PERSON" AT THE EXIT ONTO VAN BUREN STREET TO KEEP VEHICLES FROM EXITING THE SCHOOL SITE ONTO VAN BUREN STREET DURING SCHOOL PICK-UP AND DROP-OFF TIMES.

REMOVABLE DELINEATION POSTS TO BE GORILLA POST MAGNETIC BASE DELINEATORS (<http://www.gorillapost.com/products/magnetic-base-delineators>), OR APPROVED EQUAL.

**McLAUGHLIN ENGINEERING COMPANY**  
1700 NW 6th STREET, SUITE 400, FORT LAUDERDALE, FLORIDA 33309-3807  
PHONE: (954) 763-2611  
FAX: (954) 763-2615  
E-B & E-B205

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**ALPHA INTERNATIONAL ACADEMY CHARTER SCHOOL** for  
**FAITH AND LIFE FELLOWSHIP MINISTRIES, INC.**

CITY OF HOLLYWOOD  
BROWARD COUNTY, FLORIDA  
**SITE PLAN**

DATE 4/19/17  
Professional Engineer No. 36762  
State of Florida  
Drawing No. 4338

PROJECT NO. U7183  
DATE 6/11/16  
REVISION  
9/19/16 4/19/17  
11/19/16  
11/15/17  
1/27/16  
DRAWING

**SP**

SHEET  
1 OF 1