



# Southwest Ranches Town Council

## REGULAR MEETING

Agenda of June 25, 2020

Southwest Ranches Council Chambers  
7:00 PM Thursday

13400 Griffin Road  
Southwest Ranches, FL 33330

<u>Mayor</u>	<u>Town Council</u>	<u>Town Administrator</u>	<u>Town Attorney</u>
Doug McKay	Delsa Amundson	Andrew D. Berns	Keith M. Poliakoff, J.D.
<u>Vice Mayor</u>	Bob Hartmann	<u>Town Financial</u>	<u>Assistant Town</u>
Denise Schroeder	Gary Jablonski	<u>Administrator</u>	<u>Administrator/Town Clerk</u>
		Martin Sherwood, CPA CGFO	Russell C. Muniz, MMC

In accordance with the Americans with Disabilities Act of 1990, persons needing special accommodation, a sign language interpreter or hearing impaired to participate in this proceeding should contact the Town Clerk at (954) 434-0008 for assistance no later than four days prior to the meeting.

1. **Call to Order/Roll Call**
2. **Pledge of Allegiance**
3. **Marty Kiar, Broward County Property Appraiser**
4. **Sikh Youth Association Society Donation to Town College Scholarship Fund**
5. **2020 Town College Scholarship Fund Recipients**

### Quasi-Judicial Hearings

Please be advised that the following item on the Council agenda is quasi-judicial in nature. All witnesses who will testify on any item in this portion of the Agenda will be sworn. Participants who are members of the general public need not be sworn and will not be subject to cross-examination if they are not sworn. However, the Council shall not assign un-sworn testimony the same weight or credibility as sworn testimony in its deliberations.

The applicant has the burden of proof. After the applicant's concluding remarks, the hearing will be closed and no additional testimony, material or argument will be allowed unless the Council chooses to request additional testimony. The members of the Town Council will then deliberate.

All evidence relied upon by reasonably prudent persons in the conduct of their affairs may be considered in these proceedings, regardless of whether such evidence would be admissible in a court. Hearsay evidence may supplement or explain other evidence, but shall not alone support a conclusion unless it would be admissible over objection in court. The material in the Town Council agenda will be considered as evidence without authentication.

Anyone representing an organization must present written evidence of his or her authority to speak on behalf of the organization in regard to the matter under consideration. Each person who appears during a public hearing shall identify himself or herself and give their address, and if appearing on behalf of an organization state the name and mailing address of the organization. The Council may, on its own motion or at the request of any person, continue the hearing to a fixed date, time and place.

No notice shall be required if a hearing is continued to a fixed date, time and place. Any Applicant shall have the right to request and be granted one continuance; however, all subsequent continuance shall be granted at the discretion of the Council and only upon good cause shown.

**6. Archbishop McCarthy High School - Delegation Request**

A RESOLUTION AND FINAL ORDER OF THE TOWN COUNCIL OF THE TOWN OF SOUTHWEST RANCHES, FLORIDA, GRANTING A PORTION OF APPLICATION NO. DG-23-20 BY ARCHBISHOP EDWARD A. MCCARTHY HIGH SCHOOL BY AMENDING THE RESTRICTIVE NOTE FOR PARCEL "A" OF THE BROWARD CENTRAL CATHOLIC HIGH SCHOOL PLAT FROM 184,900 SQUARE FEET OF HIGH SCHOOL USE TO 200,000 SQUARE FEET OF HIGH SCHOOL USE; AUTHORIZING THE MAYOR, TOWN ADMINISTRATOR, AND TOWN ATTORNEY TO EXECUTE ANY AND ALL DOCUMENTS NECESSARY TO EFFECTUATE THE INTENT OF THIS RESOLUTION; AND PROVIDING AN EFFECTIVE DATE.

**7. Archbishop McCarthy High School -Site Plan Modification**

A RESOLUTION AND FINAL ORDER OF THE TOWN COUNCIL OF THE TOWN OF SOUTHWEST RANCHES, FLORIDA, APPROVING APPLICATION NO. SP-72-18 BY ARCHBISHOP EDWARD A. MCCARTHY HIGH SCHOOL TO AMEND ITS SITE PLAN BY REPLACING ITS EXISTING 5,820 SQUARE FEET OF MODULAR CLASSROOMS WITH 18,552 SQUARE FEET OF NEW MODULAR CLASSROOMS AND EXPANDING THE ATHLETIC TRAINING FACILITY BY 1,830 SQUARE FEET; AUTHORIZING THE MAYOR, TOWN ADMINISTRATOR, AND TOWN ATTORNEY TO EXECUTE ANY AND ALL DOCUMENTS NECESSARY TO EFFECTUATE THE INTENT OF THIS RESOLUTION; AND PROVIDING AN EFFECTIVE DATE.

**8. Public Comment**

- All Speakers are limited to 3 minutes.
- Public Comment will last for 30 minutes.
- All comments must be on non-agenda items.
- All Speakers must fill out a request card prior to speaking.
- All Speakers must state first name, last name, and mailing address.
- Speakers will be called in the order the request cards were received.
- Request cards will only be received until the first five minutes of public comment have concluded.

**9. Board Reports**

**10. Council Member Comments**

**11. Legal Comments**

**12. Administration Comments**

### **Ordinance - 2nd Reading**

13. AN ORDINANCE OF THE TOWN OF SOUTHWEST RANCHES, FLORIDA, AMENDING ORDINANCE 2002-005 AND THE TOWN'S COMPREHENSIVE EMERGENCY MANAGEMENT PLAN (CEMP) AND ADOPTING A NEW CONTINUITY OF OPERATIONS PLAN (COOP) IN ORDER TO MINIMIZE HUMAN AND PROPERTY LOSSES AND TO PRESERVE THE CONTINUANCE OF THE TOWN'S MUNICIPAL ESSENTIAL OPERATIONS IN THE EVENT OF A NATURAL OR MAN-MADE DISASTER; AUTHORIZING THE MAYOR, TOWN ADMINISTRATOR, AND TOWN ATTORNEY TO APPROVE THE PLANS; AND PROVIDING AN EFFECTIVE DATE. {Approved on First Reading - June 11, 2020}

### **Ordinance - 1st Reading**

14. AN ORDINANCE OF THE TOWN OF SOUTHWEST RANCHES, FLORIDA, AMENDING THE TOWN OF SOUTHWEST RANCHES CODE OF ORDINANCES, BY CREATING CHAPTER 9 ENTITLED "NOISE" TO ESTABLISH STANDARDS FOR THE ACCEPTABLE LEVELS OF NOISE AND TO PREVENT NUISANCES THAT MAY ADVERSELY AFFECT THE QUIET ENJOYMENT AND QUALITY OF LIFE EXPECTED BY TOWN RESIDENTS; PROVIDING FOR SEVERABILITY AND PROVIDING AN EFFECTIVE DATE. {Second Reading to be held July 9, 2020}

### **Resolutions**

15. A RESOLUTION OF THE TOWN COUNCIL OF THE TOWN OF SOUTHWEST RANCHES, FLORIDA, CONSENTING TO THE CITY OF COOPER CITY PROVIDING WATER SERVICE TO THE FARMER'S MARKET LOCATED AT 5150 SW 124 AVENUE, LYING WITHIN THE TOWN OF SOUTHWEST RANCHES, FLORIDA; PROVIDING THAT NO FURTHER EXPANSION OF SERVICE SHALL BE PERMITTED WITHOUT THE EXPLICIT WRITTEN CONSENT OF THE TOWN; PROVIDING FOR A CERTIFIED COPY OF THIS RESOLUTION TO BE FURNISHED TO THE CITY OF COOPER CITY; AND PROVIDING AN EFFECTIVE DATE.

### **16. Adjournment**

PURSUANT TO FLORIDA STATUTES 286.0105, THE TOWN HEREBY ADVISES THE PUBLIC THAT IF A PERSON DECIDES TO APPEAL ANY DECISION MADE BY THIS COUNCIL WITH RESPECT TO ANY MATTER CONSIDERED AT ITS MEETING OR HEARING, HE OR SHE WILL NEED A RECORD OF THE PROCEEDINGS, AND THAT FOR SUCH PURPOSE, THE AFFECTED PERSON MAY NEED TO ENSURE THAT A VERBATIM RECORD OF THE PROCEEDING IS MADE, WHICH RECORD INCLUDES THE TESTIMONY AND EVIDENCE UPON WHICH THE APPEAL IS TO BE BASED. THIS NOTICE DOES NOT CONSTITUTE CONSENT BY THE TOWN FOR THE INTRODUCTION OR ADMISSION OF OTHERWISE INADMISSIBLE OR IRRELEVANT EVIDENCE, NOR DOES IT AUTHORIZE CHALLENGES OR APPEALS NOT OTHERWISE ALLOWED BY LAW.

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**Town of Southwest Ranches**  
**13400 Griffin Road**  
**Southwest Ranches, FL 33330-2628**

**(954) 434-0008 Town Hall**  
**(954) 434-1490 Fax**

**Town Council**  
**Doug McKay, Mayor**  
**Denise Schroeder, Vice Mayor**  
**Delsa Amundson, Council Member**  
**Bob Hartmann, Council Member**  
**Gary Jablonski, Council Member**

**Andrew D. Berns, Town Administrator**  
**Keith M. Poliakoff, JD, Town Attorney**  
**Russell Muniz, Assistant Town Administrator/Town Clerk**  
**Martin D. Sherwood, CPA, CGMA, CGFO, Town Financial Administrator**

## **COUNCIL MEMORANDUM**

**TO:** Honorable Mayor McKay and Town Council  
**VIA:** Andrew Berns  
**FROM:** Jeff Katims  
**DATE:** 6/25/2020  
**SUBJECT:** Archbishop McCarthy High School - Delegation Request

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### **Recommendation**

Staff recommends denial of the request as submitted, but approval of a lesser request as enumerated in the staff report.

### **Unanimous Vote of the Town Council Required?**

Yes

### **Strategic Priorities**

A. Sound Governance

### **Background**

The high school was platted in 1997 as the Broward Central Catholic High School Plat. Each plat has a development limitation known as a restrictive use note. The original restrictive use note on the plat, which has never been amended, limits development to 184,900 square feet of high school use, based upon the school's original site plan buildout. The high school now desires to amend the restrictive use note to allow 217,590 square feet of high school use.

### **Fiscal Impact/Analysis**

N/A

### **Staff Contact:**

Jeff Katims

**ATTACHMENTS:**

Description	Upload Date	Type
Delegation Request Resolution - TA Approved	6/18/2020	Resolution
Staff report	5/21/2020	Executive Summary

**RESOLUTION NO. 2020-XXX**

**A RESOLUTION AND FINAL ORDER OF THE TOWN COUNCIL OF THE TOWN OF SOUTHWEST RANCHES, FLORIDA, GRANTING A PORTION OF APPLICATION NO. DG-23-20 BY ARCHBISHOP EDWARD A. MCCARTHY HIGH SCHOOL BY AMENDING THE RESTRICTIVE NOTE FOR PARCEL "A" OF THE BROWARD CENTRAL CATHOLIC HIGH SCHOOL PLAT FROM 184,900 SQUARE FEET OF HIGH SCHOOL USE TO 200,000 SQUARE FEET OF HIGH SCHOOL USE; AUTHORIZING THE MAYOR, TOWN ADMINISTRATOR, AND TOWN ATTORNEY TO EXECUTE ANY AND ALL DOCUMENTS NECESSARY TO EFFECTUATE THE INTENT OF THIS RESOLUTION; AND PROVIDING AN EFFECTIVE DATE.**

**WHEREAS**, Archdiocese of Miami, Edward A. McCarthy High School is the current owner ("Owner") of Broward Central Catholic High School Plat, as recorded in Plat Book 163 Page 32 of the Broward County, Florida Public Records ("Plat"); and

**WHEREAS**, Owner requests modification of the restrictive use note on the face of the Plat to allow 217,590 square-feet of high school use where 184,900 square feet are currently authorized; and

**WHEREAS**, the Town Council of the Town of Southwest Ranches, Florida ("Town Council") finds that the proposed plat note amendment is inconsistent with the site improvements proposed in corresponding Application No. SP-72-18 and conditions of approval thereof, and instead finds that a plat note restricting development to 200,000 square feet of high school use is consistent and appropriate.

**NOW, THEREFORE BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF SOUTHWEST RANCHES, FLORIDA:**

**Section 1.** That the foregoing "WHEREAS" clauses are hereby ratified and confirmed as being true and correct and are hereby made a specific part of this Resolution.

**Section 2.** That, upon reviewing the application, analysis of the Town Staff, testimony and the evidence submitted at a duly noticed public hearing held on May 28, 2020 the Town Council hereby approves a portion of the plat note amendment requested in Application No. DG-23-20, authorizing a restrictive use note for 200,000 square feet of high school use.

**Section 3.** The Mayor, Town Administrator, and Town Attorney are each authorized to execute any and all documents necessary to effectuate the intent of this Resolution.

**Section 4.** This Resolution shall become effective immediately upon adoption.

**PASSED** by the Town Council of the Town of Southwest Ranches, Florida, this 25<sup>th</sup> day

of June, 2020, on a motion by \_\_\_\_\_ and seconded

by \_\_\_\_\_.

McKay \_\_\_\_\_  
Schroeder \_\_\_\_\_  
Amundson \_\_\_\_\_  
Hartmann \_\_\_\_\_  
Jablonski \_\_\_\_\_  
\_\_\_\_\_

Ayes \_\_\_\_\_  
Nays \_\_\_\_\_  
Absent \_\_\_\_\_  
Abstaining \_\_\_\_\_

\_\_\_\_\_  
Doug McKay, Mayor

ATTEST:

\_\_\_\_\_  
Russell Muniz, Assistant Town Administrator/Town Clerk

Approved as to Form and Correctness:

\_\_\_\_\_  
Keith Poliakoff, Town Attorney  
37105799.1

**TOWN OF SOUTHWEST RANCHES  
TOWN COUNCIL AGENDA REPORT**

**DATE:** May 28, 2020

**SUBJECT:** Delegation Request Application DG-23-20; Archbishop Edward A. McCarthy High School

**ADDRESS:** 5451 S. Flamingo Road

**PETITIONER:** Suzanne Dockerty, Esq.  
J. Patrick Fitzgerald & Associates, P.A.  
110 Merrick Way, Suite 3-B  
Coral Gables, FL 33134

**OWNER:** Archdiocese of Miami

**ZONING:** CF, Community Facility

**LAND USE PLAN  
DESIGNATION:** CF, Community Facilities

**REQUEST:** Amend the restrictive use note on the high school plat from 184,900 square feet to 217,590 square feet.

**EXHIBITS:** Staff Report, Aerial Photograph.

**BACKGROUND AND REQUEST DETAILS:**

Archbishop Edward A. McCarthy High School was platted in 1997 as the Broward Central Catholic High School Plat. The original restrictive use note on the plat, which has never been amended, limits development to 184,900 square feet of high school use, based upon the school's original site plan buildout.

During the past 20 years, the original site plan was realized in phases, starting with the north classroom wing in 1999, east administration and library wing in 2001, and cafeteria in 2009, leaving all but part the two-story south classroom wing built. Over the last decade, the Town Council approved several modifications to the original site plan, for facilities that include the following:

Freestanding locker room facility: 4,912 square feet

Modular storage buildings	2,400 square feet
Classrooms over the locker room	<u>7,650 square feet</u>
	14,962 square feet

Given these originally unplanned facilities, the high school now comprises 178,662 square feet in area – just 6,238 square feet under its original buildout size, even though the south two-story classroom wing has yet to be constructed.

Concurrent Application No. SP-72-18 seeks approval to add the following facilities to the high school campus:

Modular classroom building "A"	8,712 square
Modular classroom building "B":	9,840 square feet
Fitness facility addition:	<u>1,830 square feet</u>
	20,382 square feet

These improvements would increase the size of the high school to 199,044 square feet, which exceeds the plat note restriction of 184,900 square feet. The school cannot construct these improvements unless the Town Council and the Broward County Commission approve a revision to the plat note.

Since the school still desires to build the south two-story classroom wing at some future date, the school is requesting Town Council approve a plat note revision that accommodates both the improvements requested in Application No. SP-72-18 and the future 27,258 square-foot classroom wing (itself approximately 10,000 square feet larger than the originally proposed wing), for a total area of 217,590 square feet. Note that modular classroom Building "A" proposed in Application No. SP-72-18 will be removed if and when the permanent south classroom wing is built.

## **ANALYSIS:**

The proposed plat note amendment increases the school's permitted floor area by 32,690 square feet, of which 18,456 is for the future two-story classroom wing. Since the staff recommendations for approval of Application No. SP-72-18 limit enrollment to 1,800 students, it is unlikely that the two-story classroom wing and its estimated 20 classrooms will be constructed with the enrollment cap in place. Staff therefore recommends limiting the plat note to accommodate the current proposed site plan modification only, resulting in a plat note rounded to 200,000 square feet.

## **STAFF RECOMMENDATION:**

Staff finds that the application for delegation request complies with the applicable regulations in the Unified Land Development Code, and recommends approval of Application No. DG-23-20 with an alternate plat note allowing 200,000 square feet instead of the requested 217,590 square feet.



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**13400 Griffin Road**  
**Southwest Ranches, FL 33330-2628**

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## **COUNCIL MEMORANDUM**

**TO:** Honorable Mayor McKay and Town Council  
**VIA:** Andrew Berns  
**FROM:** Jeff Katims  
**DATE:** 6/25/2020  
**SUBJECT:** Archbishop McCarthy High School -Site Plan Modification

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### **Recommendation**

Staff recommends approval, with conditions as enumerated in the staff report.

### **Unanimous Vote of the Town Council Required?**

Yes

### **Strategic Priorities**

A. Sound Governance

### **Background**

The high school requests approval of two classroom buildings totaling 18,552 square feet in area and a 1,830 square-foot addition to the athletic training/weight room. One of the proposed buildings will replace the existing 5,820 square-feet of modular classrooms.

### **Fiscal Impact/Analysis**

N/A

### **Staff Contact:**

Jeff Katims

**ATTACHMENTS:**

Description	Upload Date	Type
Site Plan Resolution - TA Approved	6/18/2020	Resolution
Staff Report	5/22/2020	Executive Summary
Site Plan Cover Sheet	5/21/2020	Exhibit
Overall Site Plan A01	5/21/2020	Exhibit
Site Plan A02a- Partial Site Plan	5/21/2020	Exhibit
Site Plan A02b - Partial Site Plan	5/21/2020	Exhibit
Building A Floor Plan	5/21/2020	Exhibit
Building A Elevations	5/21/2020	Exhibit
Building B Floor Plan	5/21/2020	Exhibit
Building B Elevations	5/21/2020	Exhibit
Weight Room Floor Plan	5/21/2020	Exhibit
Weight Room Elevations	5/21/2020	Exhibit
Landscape Plans	5/21/2020	Exhibit
Mail Notice Map	5/21/2020	Backup Material
Traffic Study	5/21/2020	Backup Material



## **RESOLUTION NO. 2020-XXX**

**A RESOLUTION AND FINAL ORDER OF THE TOWN COUNCIL OF THE TOWN OF SOUTHWEST RANCHES, FLORIDA, APPROVING APPLICATION NO. SP-72-18 BY ARCHBISHOP EDWARD A. MCCARTHY HIGH SCHOOL TO AMEND ITS SITE PLAN BY REPLACING ITS EXISTING 5,820 SQUARE FEET OF MODULAR CLASSROOMS WITH 18,552 SQUARE FEET OF NEW MODULAR CLASSROOMS AND EXPANDING THE ATHLETIC TRAINING FACILITY BY 1,830 SQUARE FEET; AUTHORIZING THE MAYOR, TOWN ADMINISTRATOR, AND TOWN ATTORNEY TO EXECUTE ANY AND ALL DOCUMENTS NECESSARY TO EFFECTUATE THE INTENT OF THIS RESOLUTION; AND PROVIDING AN EFFECTIVE DATE.**

**WHEREAS**, Archdiocese of Miami, Edward A. McCarthy High School is the current owner ("Owner") of Broward Central Catholic High School Plat, as recorded in Plat Book 163 Page 32 of the Broward County, Florida Public Records ("Property"); and

**WHEREAS**, Owner requests modification of its existing approved site plan to erect two multiple-classroom modular buildings totaling 18,522 square feet in floor area and a 1,830 square-foot addition to its athletic training facility; and

**WHEREAS**, the Town Council of the Town of Southwest Ranches, Florida ("Town Council") finds that the proposed site plan amendment will comply with the requirements of the Town's Unified Land Development Code ("ULDC") upon implementation of the conditions set forth herein.

### **NOW, THEREFORE BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF SOUTHWEST RANCHES, FLORIDA:**

**Section 1.** That the foregoing "WHEREAS" clauses are hereby ratified and confirmed as being true and correct and are hereby made a specific part of this Resolution.

**Section 2.** That, upon reviewing the application, analysis of the Town Staff, testimony and the evidence submitted at a duly noticed public hearing held on May 28, 2020 the Town Council hereby approves Site Plan Modification Application No. SP-72-18, in accordance with the following stipulated conditions to be satisfied prior to issuance of a building permit for any of the proposed improvements:

1. Execute a Declaration of Restrictive Covenants that restricts the school's capacity to its 2019-2020 level of 1,700 students prior to completion and county or state

acceptance of the roadway improvements required herein and subsequently to 1,800 students, and requires regular reporting in a form determined acceptable by the Town Attorney, which at a minimum shall be the enrollment list thirty (30) days prior to the fall semester and thirty (30) days prior to the spring semester. The Town shall be allowed to seek an updated enrollment list at any time.

2. Revise the site plan to reflect the 1,800-student enrollment cap, subject to the requirements contained herein.
3. Comply with technical corrections to the site plan documents pursuant to the final Development Review Comments memorandum dated May 15, 2020, to be approved administratively, including requirement for a tree relocation permit.
4. Construct/implement the following improvements:
  - a. Extend the southbound right turn lane on Flamingo Road at the main entrance to the longest distance feasible which is approximately 450 feet of storage plus 50 feet of taper.
  - b. Extend the southbound left turn lane on Flamingo Road at the main entrance/SW 53rd Street for a total of approximately 450 feet of storage plus 50 feet of taper.
  - c. Extend the southbound left turn lane on Flamingo Road at SW 55th Street to run "back to back" with the northbound left turn lane on Flamingo Road at the main school entrance. This improvement includes modifying the existing taper from approximately 175 feet to 50 feet with the remaining 125 feet converting to vehicle storage for the southbound left turn lane.
  - d. Coordinate with Broward County to optimize signal timing at the intersections of Flamingo Road at Griffin Road and SW 55th Street.
5. Submit an action plan to the Town Administrator for directing higher utilization of north school driveway, particularly during school dismissal to help alleviate traffic backup onto Flamingo Road and improve overall efficiency of the roadway corridor. Implement the plan following the Town Administrator's approval. It is noted that the north school driveway has approximately 71 queueing spaces onsite compared to just 30 queueing spaces for the main driveway. The action plan may be amended by the Town at any time to satisfy its traffic and life safety concerns.
6. Adjust the start and end times of the high school and adjacent St. Marks school as approved by the Town's Administrator based upon the traffic engineer's recommendations.
7. Retain a certified school safety expert, approved by the Town Administrator, to perform a Florida Safe School Assessment, in accordance with Section 1006.1493 Florida Statutes, and to implement such recommendations in accordance with the Marjory Stoneman Douglas High School Public Safety Act. In the event that the recommendations cannot be readily implemented, Owner shall propose a

timeline to bring the property into compliance, which shall be subject to the approval of the Town Administrator.

**Section 3.** The Mayor, Town Administrator, and Town Attorney are each authorized to execute any and all documents necessary to effectuate the intent of this Resolution.

**Section 4.** This Resolution shall become effective immediately upon adoption.

**PASSED** by the Town Council of the Town of Southwest Ranches, Florida, this 25<sup>th</sup> day of June, 2020, on a motion by \_\_\_\_\_ and seconded by \_\_\_\_\_.

McKay \_\_\_\_\_  
Schroeder \_\_\_\_\_  
Amundson \_\_\_\_\_  
Hartmann \_\_\_\_\_  
Jablonski \_\_\_\_\_

Ayes \_\_\_\_\_  
Nays \_\_\_\_\_  
Absent \_\_\_\_\_  
Abstaining \_\_\_\_\_

\_\_\_\_\_  
Doug McKay, Mayor

ATTEST:

\_\_\_\_\_  
Russell Muniz, Assistant Town Administrator/Town Clerk

Approved as to Form and Correctness:

\_\_\_\_\_  
Keith Poliakoff, Town Attorney

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**TOWN OF SOUTHWEST RANCHES  
TOWN COUNCIL AGENDA REPORT**

**DATE:** May 28, 2020

**SUBJECT:** Site Plan Modification Application SP-72-18; Archbishop Edward A. McCarthy High School

**ADDRESS:** 5451 S. Flamingo Road

**PETITIONER:** Suzanne Dockerty, Esq.  
J. Patrick Fitzgerald & Associates, P.A.  
110 Merrick Way, Suite 3-B  
Coral Gables, FL 33134

**OWNER:** Archdiocese of Miami

**ZONING:** CF, Community Facility

**LAND USE PLAN  
DESIGNATION:** CF, Community Facilities

**REQUEST:** Site plan modification to replace the existing cluster of modular classroom buildings with two larger modular classroom buildings and to expand the weight room.

**EXHIBITS:** Staff Report, Aerial Photograph, Site Plan, Traffic Study, and Mail Notification Radius Map and Mailing List.

**DETAILED REQUEST:**

The high school requests approval for the following improvements:

- Classroom Building "A": 6 classrooms and band practice room in a single-story, 8,712 square-foot modular building. This building will be removed if and when the originally planned two-story classroom wing is eventually built.
- Classroom Building "B": 10 classrooms in a single-story, 9,840 square-foot modular building, sited on the west side of the cafeteria. This building will remain indefinitely.
- 1,830 square-foot addition to the athletic training/weight room.

## **BACKGROUND:**

The high school has a 5,820 square-foot cluster of modular classrooms situated in the planned location of a two-story classroom wing extension that was shown on the original site plan and is still planned for construction if and when funding allows. The modulares have provided economical interim classroom capacity.

## **ANALYSIS:**

### *Classrooms and capacity.*

The two proposed modular buildings will increase the number of classrooms on campus from 56 to 73, and will include a large band room. Proposed modular classroom Building "A" replaces the cluster of existing modulares in the footprint of the planned two story permanent classroom wing. Proposed modular classroom Building "B" is sited west of the cafeteria, and will remain if and when the two-story classroom wing is eventually constructed.

The additional classrooms can support a student body that is larger than the 1,800 student design capacity of the 60 classrooms included on the original site plan. Using the same ratio of students to classrooms, the proposed modulares would increase the school's capacity to approximately 2,200 students.

### *Traffic and circulation.*

Staff required a traffic study as part of the application. The study found that Flamingo Road between Griffin and Stirling roads currently operates within the accepted/adopted level of service standard established by Broward County for the roadway (Level of Service "D"), and would continue to do so with the increased student population. An intersection analysis found that the intersection of Flamingo and Griffin roads currently operates at a failing level of service, and will continue to do so with or without a student increase. Finally, an evaluation of the turn lanes into the site found them inadequate to handle the increased student capacity.

Several recommendations result from the study's findings, and are enumerated in the staff recommendations in this report. The recommendations fall into three categories: 1) limiting student enrollment to 1,800 students, which is the original design capacity of the school, and approximately 100 more students than enrolled during the 2019-2020, school year; 2) increasing the physical capacity of turn lanes into the site; and 3) developing and implementing plans to divert more school traffic to the north driveway where the most internal queuing capacity exists, and coordinate start and end times with St. Marks pre-K – 8 school immediately to the south.

Staff recommends limiting enrollment to 1,800 students to allow the Town to monitor traffic conditions and determine the effectiveness of the traffic recommendations in this report before allowing additional enrollment, and to provide the school with a small

degree of enrollment flexibility, as last year's enrollment was approximately 1,700 students.

*Parking.*

The site plan modification increases the parking requirement from 527 parking spaces to 544 spaces based upon staff's recommendation to limit capacity to 1,800 students, whereas the school has 629 spaces onsite. Accordingly, no additional parking spaces need to be provided.

*Plat.*

The existing plat note restricts development to 184,900 square feet of high school. The site plan amendment would increase the school's floor area to 199,044 square feet, thereby requiring an amendment to the restrictive note. Application DG-23-20 accompanies this application.

*Site development regulations.*

The site plan modification complies with zoning and site development regulations, as follows:

	<u>Permitted/Required</u>	<u>Proposed</u>	<u>Result</u>
Setbacks:	25-50 feet minimum	275 feet	Complies
Floor area ratio:	0.35 maximum	0.14	Complies
Impervious area:	60% maximum	41.26%	Complies
Plot coverage:	35% maximum	11.04%	Complies
Building height:	35 feet maximum	15 feet	Complies

*Landscaping.*

The Petitioner submitted a plan for tree relocation where needed and new landscaping around the new construction. A tree relocation permit is required prior to removal of any trees.

*Drainage.*

The additional proposed building area amounts to less than one-half of one percent of the high school site, with no additional pavement. Accordingly, the Town Engineer has approved the site plan subject to review of construction drawings.

**STAFF RECOMMENDATION:**

Staff finds that the proposed addition complies with the requirements of the Unified Land Development Code subject to the following conditions that the high school must satisfy prior to issuance of a building permit:

1. Execute a Declaration of Restrictive Covenants that restricts the school's capacity

to its 2019-2020 level of 1,700 students prior to completion and county or state acceptance of the roadway improvements required herein and subsequently to 1,800 students, and requires regular reporting in a form determined acceptable by the Town Attorney, which at a minimum shall be the enrollment list thirty (30) days prior to the fall semester and thirty (30) days prior to the spring semester. The Town shall be allowed to seek an updated enrollment list at any time.

2. Revise the site plan to reflect the 1,800-student enrollment cap, subject to the requirements contained herein.
3. Comply with technical corrections to the site plan documents pursuant to the final Development Review Comments memorandum dated May 15, 2020, to be approved administratively, including requirement for a tree relocation permit.
4. Construct/implement the following improvements:
  - a. Extend the southbound right turn lane on Flamingo Road at the main entrance to the longest distance feasible which is approximately 450 feet of storage plus 50 feet of taper.
  - b. Extend the southbound left turn lane on Flamingo Road at the main entrance/SW 53rd Street for a total of approximately 450 feet of storage plus 50 feet of taper.
  - c. Extend the southbound left turn lane on Flamingo Road at SW 55th Street to run "back to back" with the northbound left turn lane on Flamingo Road at the main school entrance. This improvement includes modifying the existing taper from approximately 175 feet to 50 feet with the remaining 125 feet converting to vehicle storage for the southbound left turn lane.
  - d. Coordinate with Broward County to optimize signal timing at the intersections of Flamingo Road at Griffin Road and SW 55th Street.
5. Submit an action plan to the Town Administrator for directing higher utilization of north school driveway, particularly during school dismissal to help alleviate traffic backup onto Flamingo Road and improve overall efficiency of the roadway corridor. Implement the plan following the Town Administrator's approval. It is noted that the north school driveway has approximately 71 queueing spaces onsite compared to just 30 queueing spaces for the main driveway. The action plan may be amended by the Town at any time to satisfy its traffic and life safety concerns.
6. Adjust the start and end times of the high school and adjacent St. Marks school as approved by the Town's Administrator based upon the traffic engineer's recommendations.
7. Retain a certified school safety expert, approved by the Town Administrator, to perform a Florida Safe School Assessment, in accordance with Section 1006.1493 Florida Statutes, and to implement such recommendations in accordance with the Marjory Stoneman Douglas High School Public Safety Act.

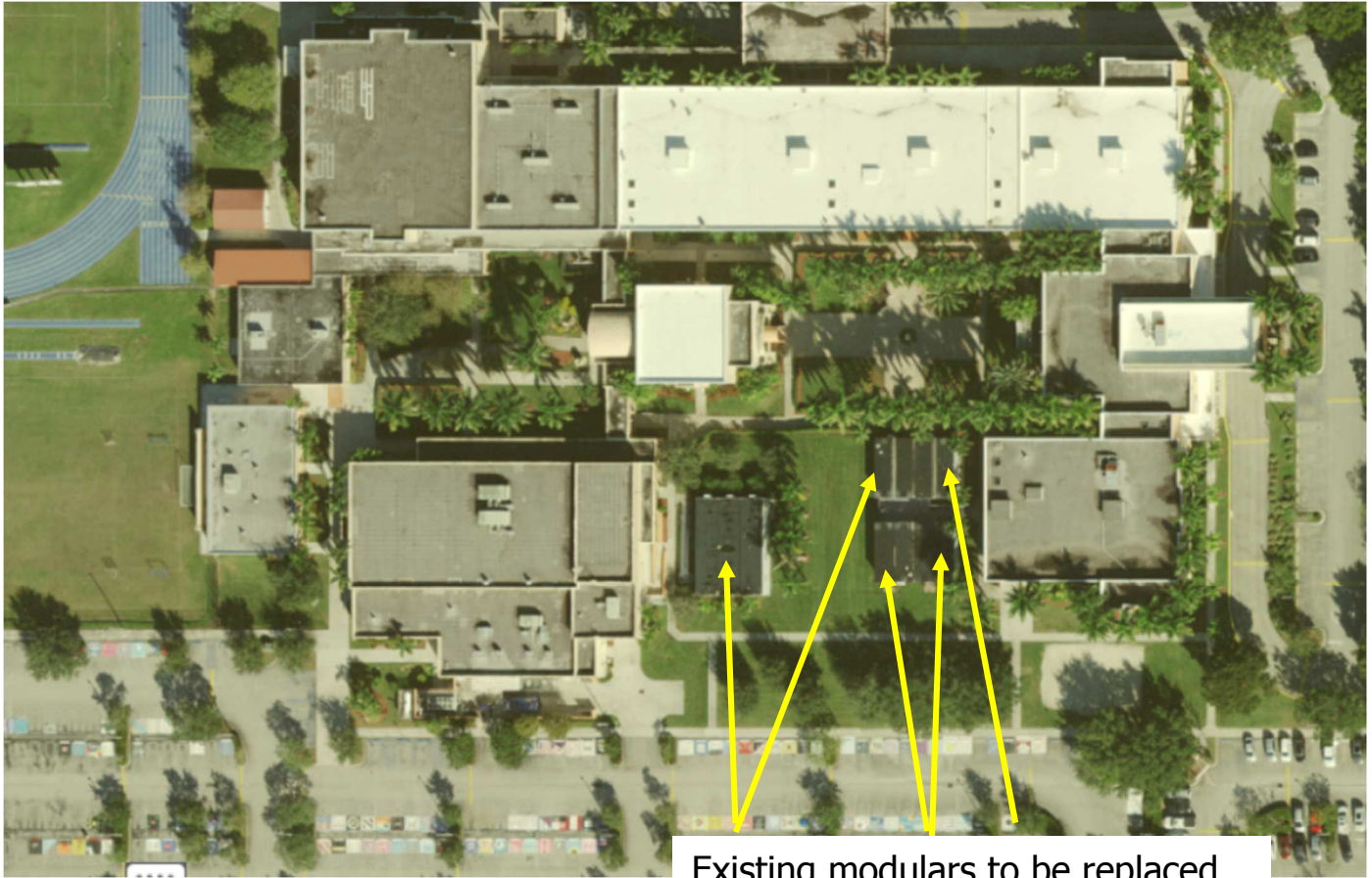


In the event that the recommendations cannot be readily implemented, Owner shall propose a timeline to bring the property into compliance, which shall be subject to the approval of the Town Administrator.

## SP-72-18 AERIAL LOCATION MAP



## CLOSEUP AERIAL MAP



Existing modulares to be replaced

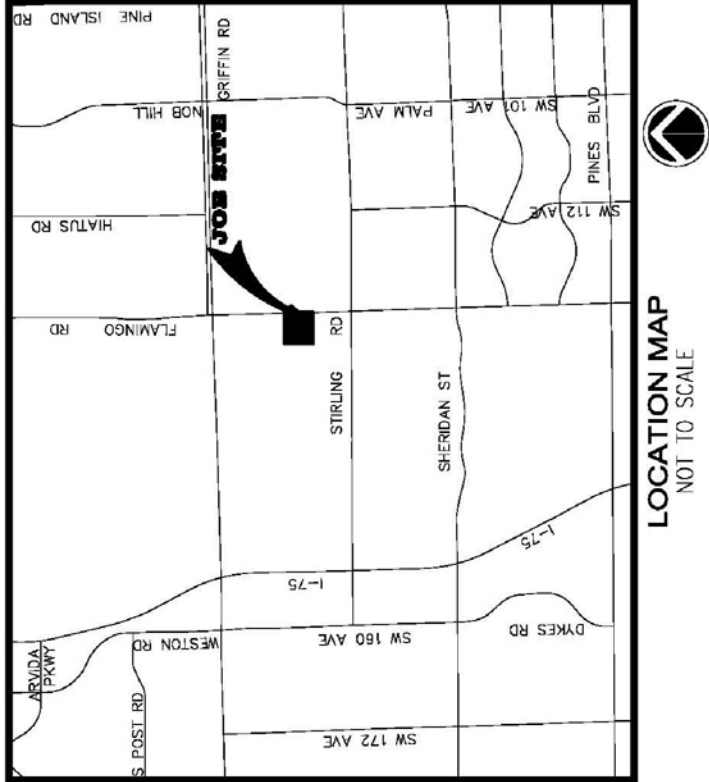


PROPOSED

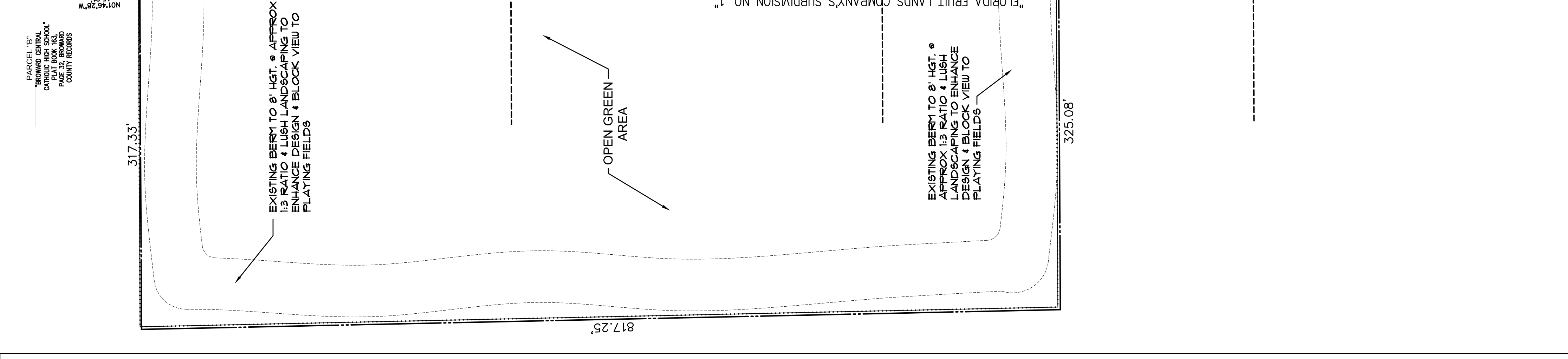
SITE PLAN APPROVAL - MODIFICATION

ARCHBISHOP EDWARD A. MCCARTHY HIGH SCHOOL  
5451 SW 124th AVENUE - SOUTHWEST RANCHES, FLORIDA

OWNER: MOST REVEREND THOMAS G. WENSKI, ARCHBISHOP OF MIAMI  
ARCHDIOCESE OF MIAMI, 9401 BISCAYNE BLVD., MIAMI SHORES, FL 33138



DRAWING INDEX	
ARCHITECTURAL	
A-1: MASTER SITE PLAN	
A-2a: PARTIAL SITE PLAN	
A-2b: PROJECT AREA PARTIAL SITE PLANS & SITE CALCULATIONS	
A-3: PROPOSED MODULAR BUILDING 'A' FLOOR PLAN	
A-4: PROPOSED MODULAR BUILDING 'A' ELEVATIONS	
A-5: PROPOSED MODULAR BUILDING 'B' FLOOR PLAN	
A-6: PROPOSED MODULAR BUILDING 'B' ELEVATIONS	
A-7: PROPOSED BUILDING 'C' FLOOR PLAN	
A-8: PROPOSED BUILDING 'C' ELEVATIONS	
A-9: EXISTING SCHOOL MASTER FLOOR PLAN - 1st FLOOR	
A-10: EXISTING SCHOOL MASTER 2nd FLOOR PLAN - 2nd FLOOR	
FIRE PROTECTION	
FP-1 TO FP-3: FIRE PROTECTION SITE PLANS	
LANDSCAPE	
TD-1 TO TD-4 AND L-1 TO L-4	

[illegible]




"BROWARD CENTRAL CATHOLIC HIGH SCHOOL"  
PLAT BOOK 163, PAGE 32, BROWARD COUNTY  
RECORDS

FOOTBALL GOAL  
POST (2)

20.0'

# FUTURE BASKETBALL

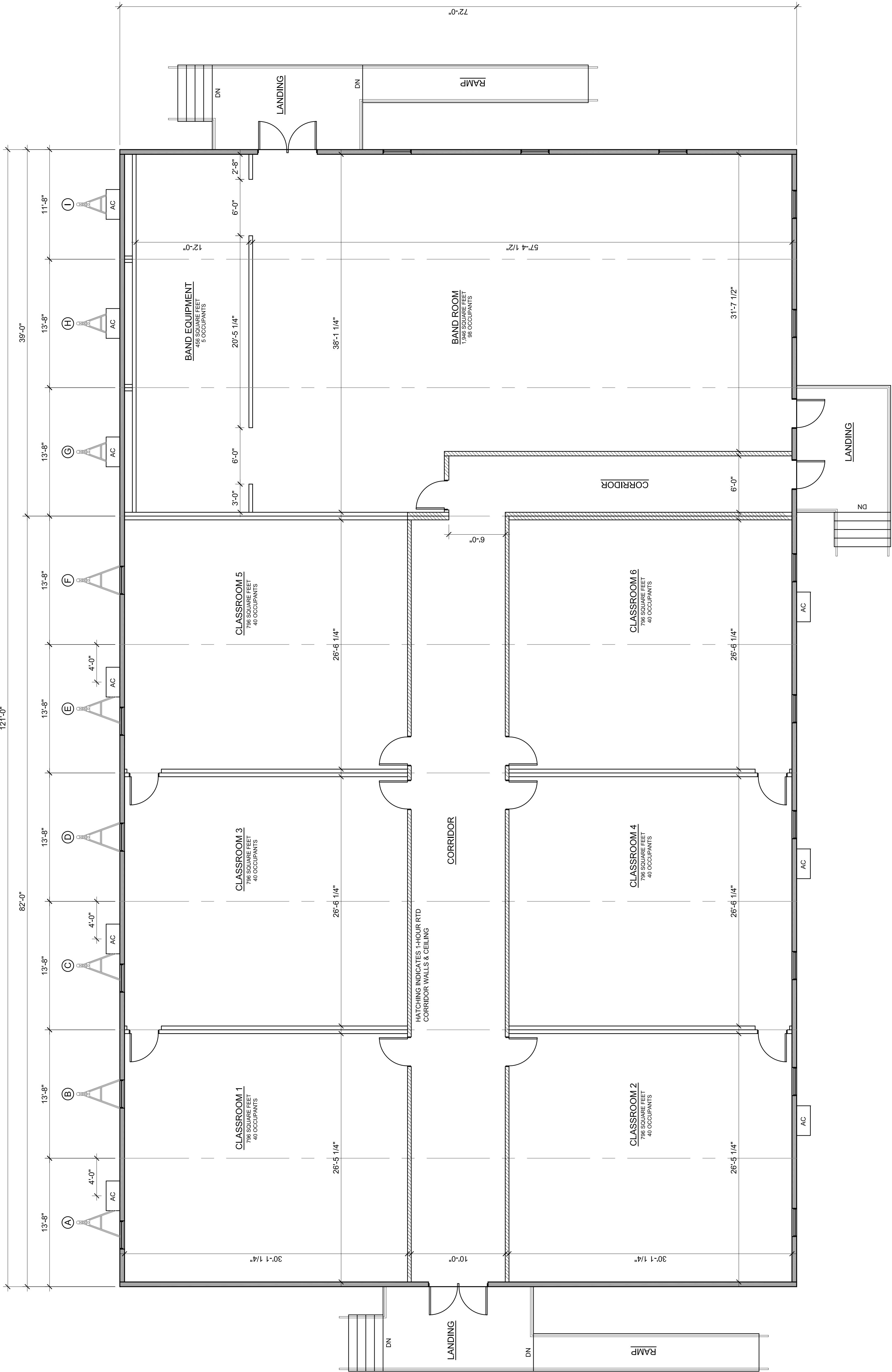
ASPHALT PARKING


 PARTIAL SITE PLAN \_\_\_\_\_ 1"=30'-0"

PARTIAL SITE PLAN \_\_\_\_\_ 1"=30'-0"







PROPOSED MODULAR BUILDING 'A' - PHASE 1  
FLOOR PLAN  
8,712 SF  
3/16" = 1'-0"

REVISIONS :

03/20/2019 - PLANNING

07/05/2019 - PLANNING

SITE PLAN APPROVAL - MODIFICATION

ARCHBISHOP EDWARD A. MCCARTHY HIGH SCHOOL

5451 SW 124th AVENUE - SOUTHWEST RANCHES, FLORIDA

OWNER: MOST REVEREND THOMAS G. WENSKI, ARCHBISHOP OF MIAMI

ARCHDIOCESE OF MIAMI, 9401 BISCAYNE BLVD., MIAMI SHORES, FL 33138

Corporation Licence  
#AA0003589

Architectural Seal

JORGE L VILLAVIGENCIO  
NO. AR0012110

VILLA & ASSOCIATES INC.

ARCHITECTURE - PLANNING - INTERIOR DESIGN

7344 SW 48 ST # 201 - MIAMI, FLORIDA 33155 - 305.661.8181

CONSULTANT :

DATE: 03-20-'19

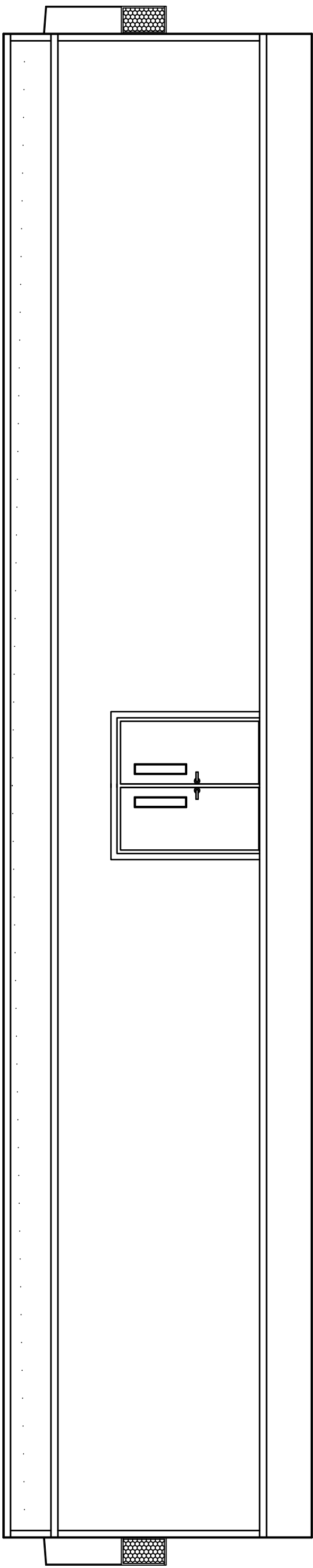
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DATE SUBMITTED FOR BIDS: --

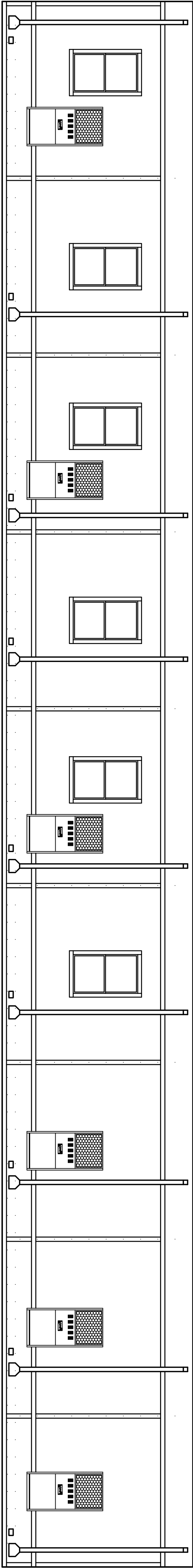
DRAWING NO :

A-4

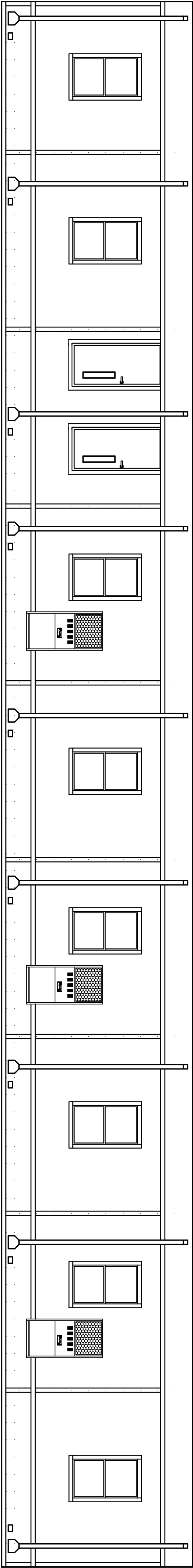
OF 10



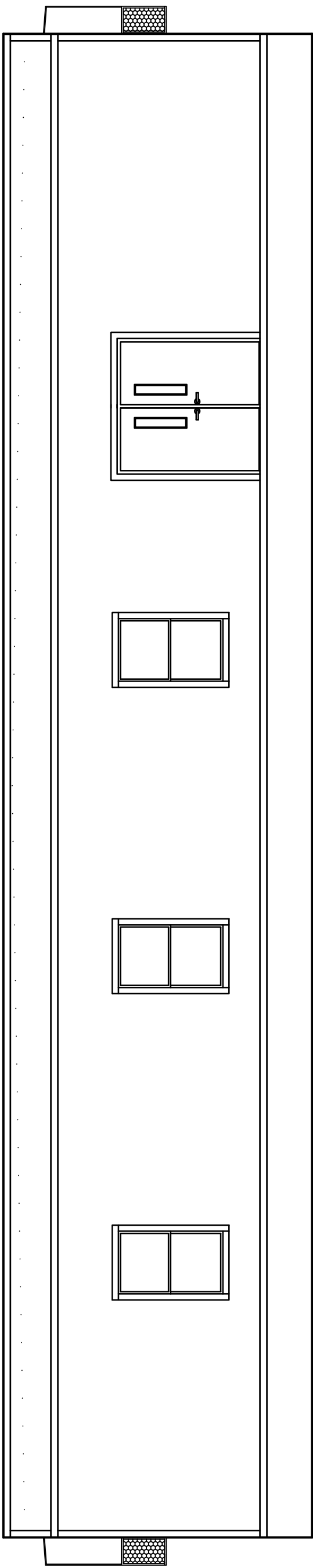
FRONT ELEVATION  
SCALE: 3/16"=1'-0"



SIDE ELEVATION  
SCALE: 3/16"=1'-0"



SIDE ELEVATION  
SCALE: 3/16"=1'-0"

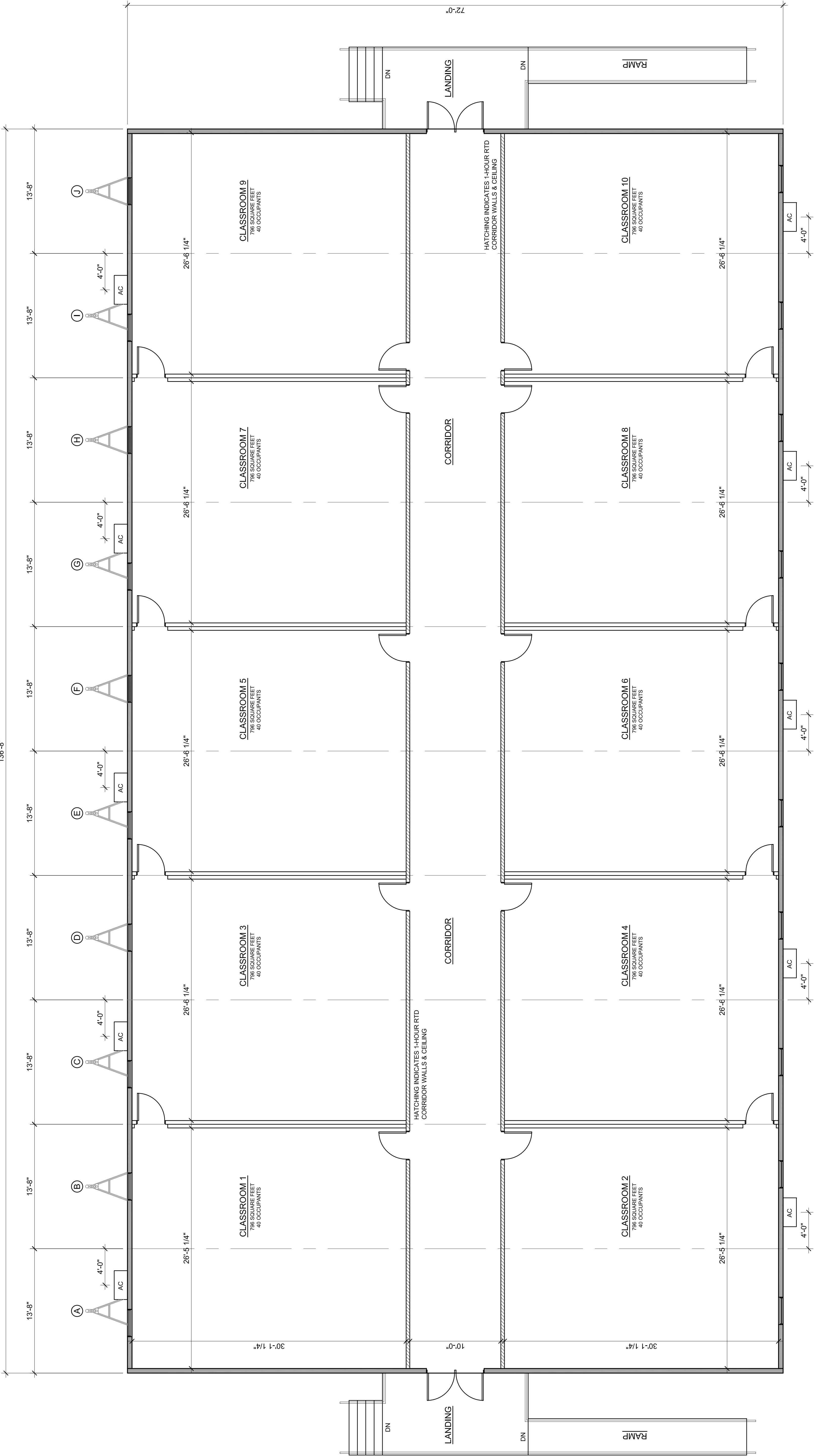


REAR ELEVATION  
SCALE: 3/16"=1'-0"

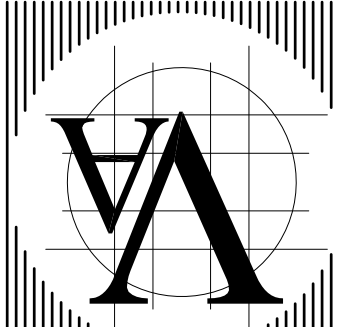
PROPOSED MODULAR BUILDING 'A' - PHASE 1  
EXTERIOR ELEVATIONS

3/16" = 1'-0"





PROPOSED MODULAR BUILDING 'B' - PHASE 1  
FLOOR PLAN  
9,840 SF



**VILLA & ASSOCIATES INC.**  
ARCHITECTURE - PLANNING - INTERIOR DESIGN  
7344 SW 48 ST # 201 - MIAMI, FLORIDA 33155 - 305.661.8181

CONSULTANT :

Corporation Licence  
#AA0003589

Architectural Seal

JORGE L VILLAVENCIO  
NO. AR0012110

**SITE PLAN APPROVAL - MODIFICATION**  
**ARCHBISHOP EDWARD A. MCCARTHY HIGH SCHOOL**  
5451 SW 124th AVENUE - SOUTHWEST RANCHES, FLORIDA  
OWNER: MOST REVEREND THOMAS G. WENSKI, ARCHBISHOP OF MIAMI  
ARCHDIOCESE OF MIAMI, 9401 BISCAYNE BLVD., MIAMI SHORES, FL 33138

REVISIONS :  
03/20/2019 - PLANNING  
07/05/2019 - PLANNING

DATE :  
03-20-19

SCALE :

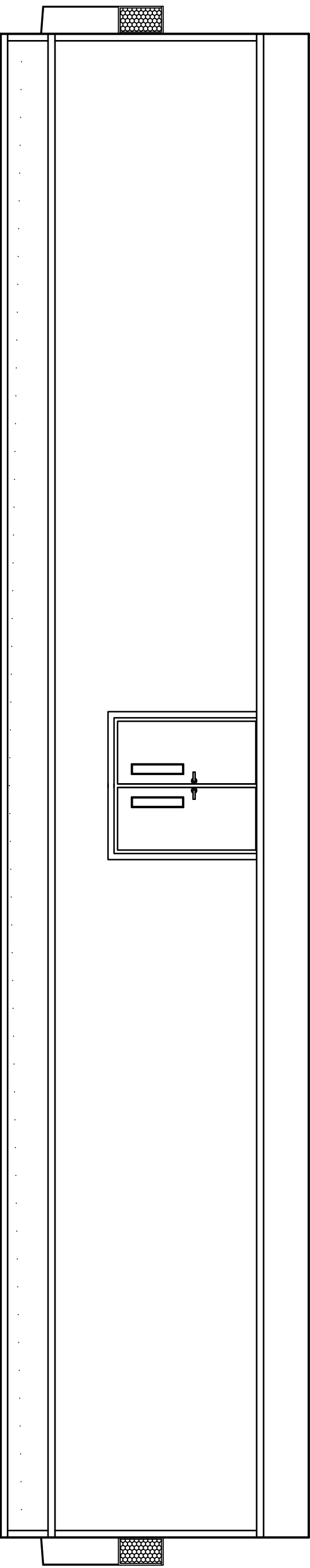
3/16"

DATE SUBMITTED FOR BIDS:

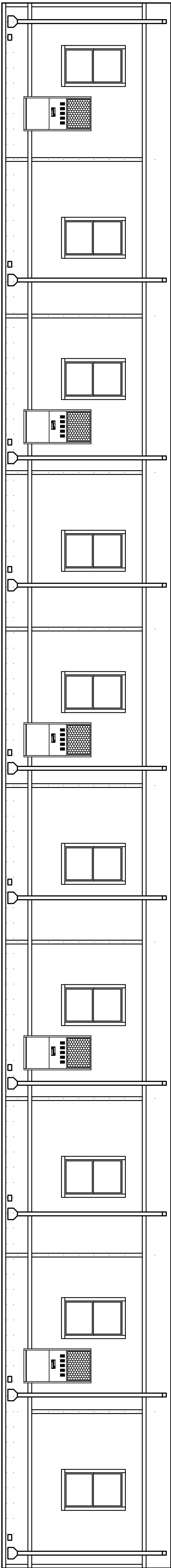
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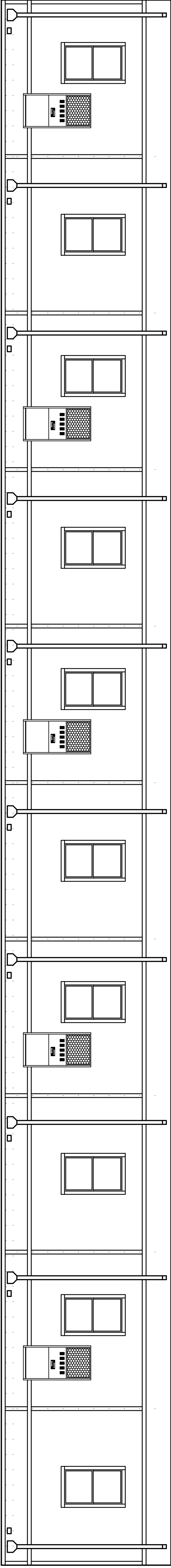
**A-5** OF 10



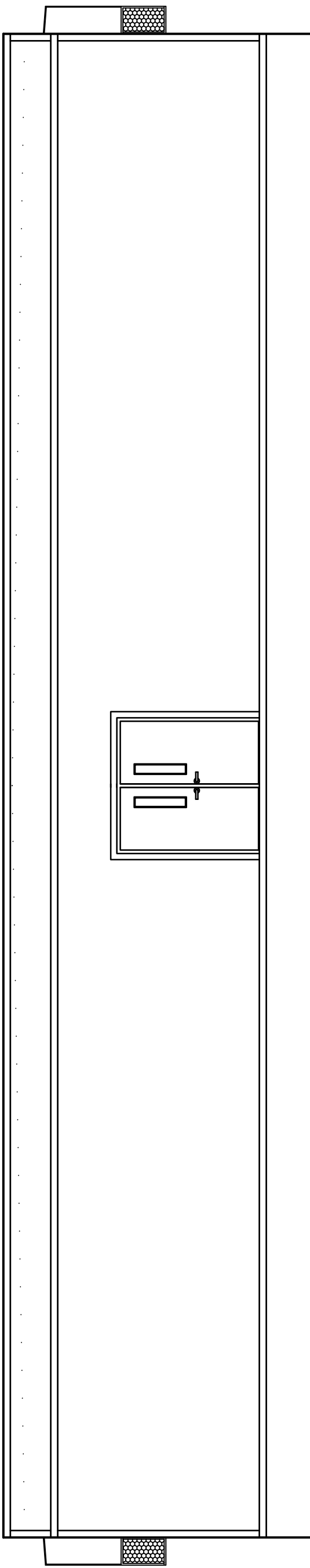
FRONT ELEVATION  
SCALE: 3/16"=1'-0"



SIDE ELEVATION  
SCALE: 3/16"=1'-0"




SIDE ELEVATION  
SCALE: 3/16"=1'-0"

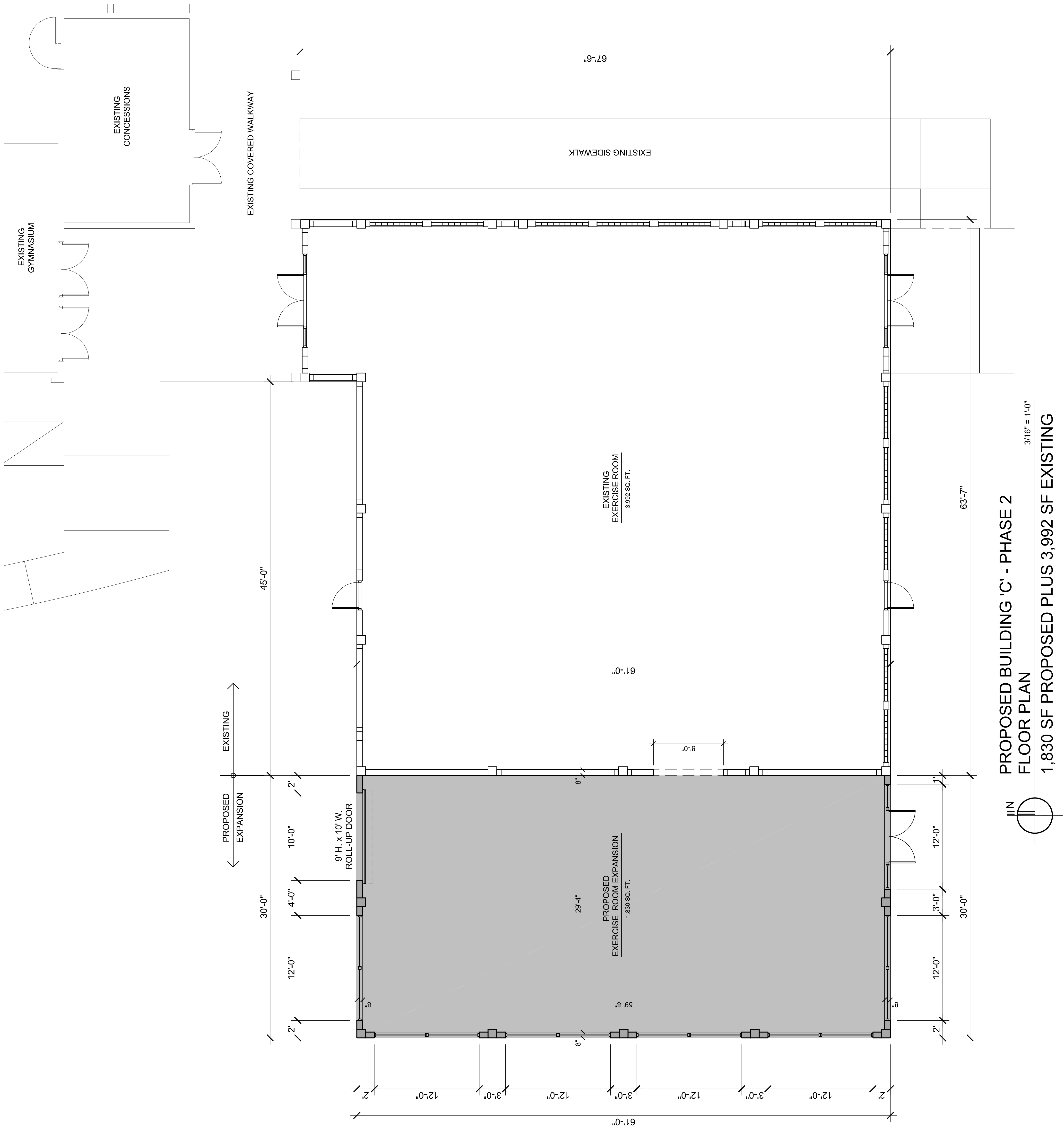


REAR ELEVATION  
SCALE: 3/16"=1'-0"

PROPOSED MODULAR BUILDING 'B' - PHASE 1  
EXTERIOR ELEVATIONS

3/16" = 1'-0"

REVISIONS : 03/20/2019 - PLANNING 07/05/2019 - PLANNING		SITE PLAN APPROVAL - MODIFICATION ARCHBISHOP EDWARD A. MCCARTHY HIGH SCHOOL 5451 SW 124th AVENUE - SOUTHWEST RANCHES, FLORIDA OWNER: MOST REVEREND THOMAS G. WENSKI, ARCHBISHOP OF MIAMI ARCHDIOCESE OF MIAMI, 9401 BISCAYNE BLVD., MIAMI SHORES, FL 33138	
Corporation License #AA0003589 Architectural Seal		JORGE L VILLAVENCIO NO. AR0012110	
VILLA & ASSOCIATES INC. INTERIOR DESIGN 7344 SW 48 ST # 201 - MIAMI, FLORIDA 33155 - 305.661.8181 ARCHITECTURE - PLANNING - CONSULTANT:			
DATE: 03-20-19 SCALE: 3/16"		DATE SUBMITTED FOR BIDS: -- DRAWING NO.: A-7 of 10	



REVISIONS :  
03/20/2019 - PLANNING  
07/05/2019 - PLANNING

SITE PLAN APPROVAL - MODIFICATION

ARCHBISHOP EDWARD A. MCCARTHY HIGH SCHOOL  
5451 SW 124th AVENUE - SOUTHWEST RANCHES, FLORIDA  
OWNER: MOST REVEREND THOMAS G. WENSKI, ARCHBISHOP OF MIAMI  
ARCHDIOCESE OF MIAMI, 9401 BISCAYNE BLVD., MIAMI SHORES, FL 33138

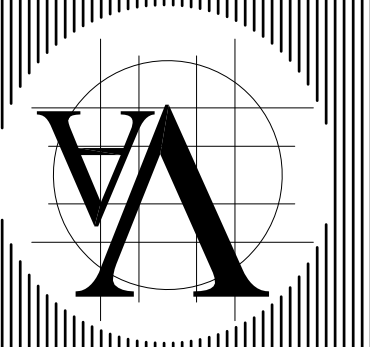
Corporation License  
#AA0003589

Architectural Seal

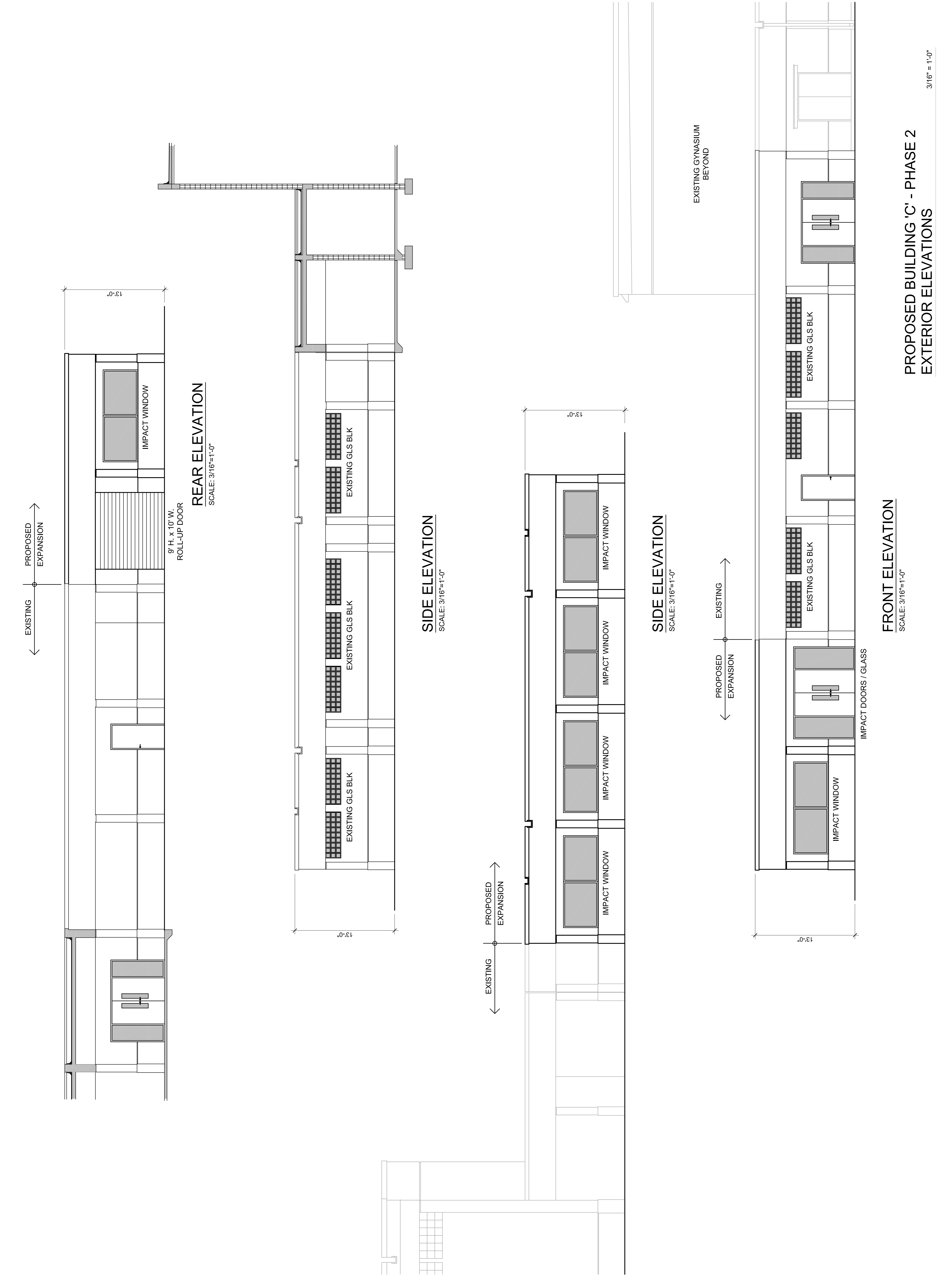
JORGE L VILLAVIGENCIO  
NO. AR0012110

VILLA & ASSOCIATES INC.  
ARCHITECTURE - PLANNING - INTERIOR DESIGN  
7344 SW 48 ST # 201 - MIAMI, FLORIDA 33155 - 305.661.8181

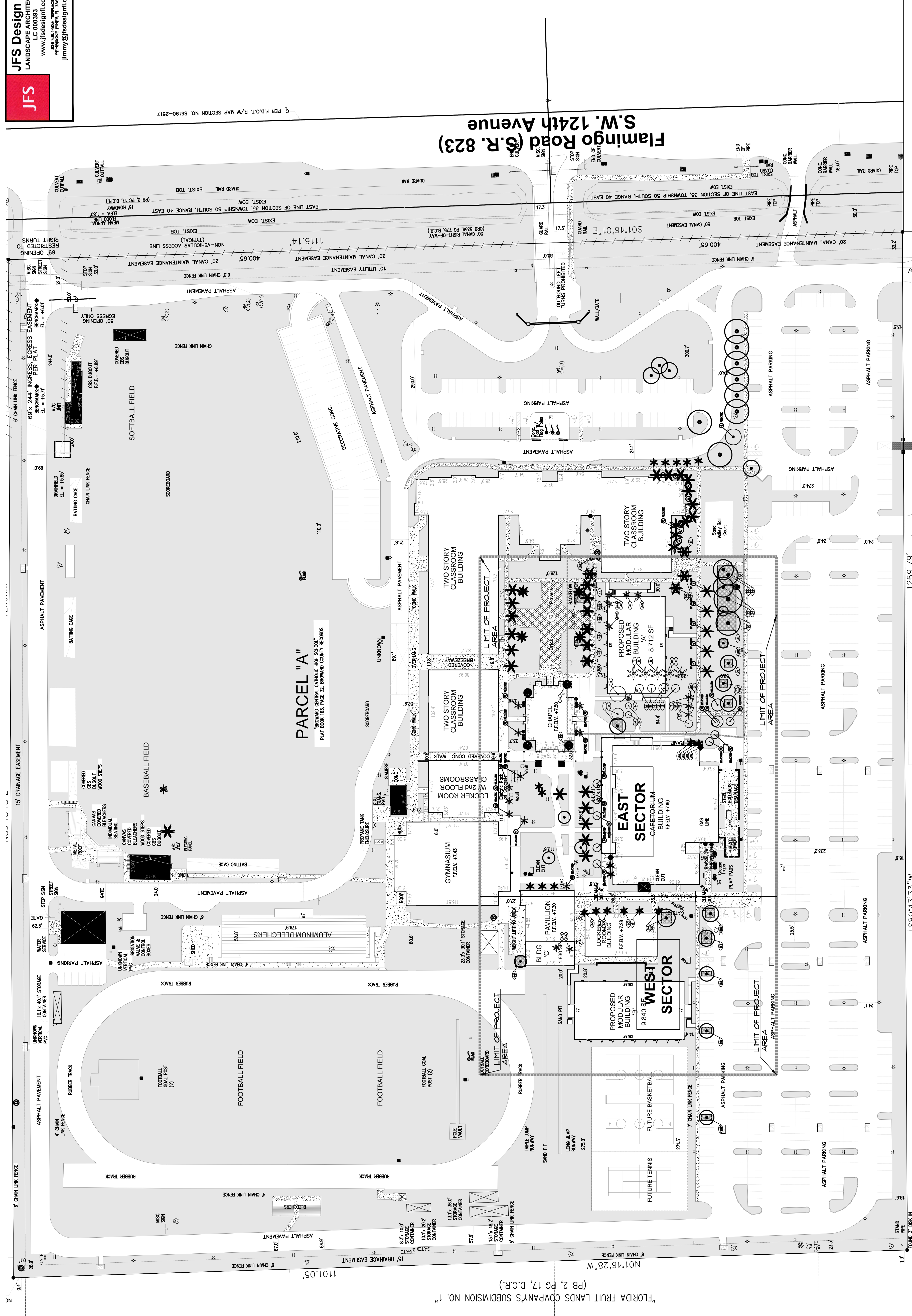
CONSULTANT :



DATE : 03-20-'19  
SCALE : 3/16"  
DATE SUBMITTED FOR BIDS: --  
DRAWING NO : A-8 OF 10





[illegible]

SEE SHEETS TD-2, TD-3 FOR SECTOR TREE DISPOSITION PLANS AND SHEET TD-4 FOR RELOCATION NOTES, SPECIFICATIONS, ETC.

SEE LANDSCAPE PLANS FOR PROPOSED PLANTINGS, LANDSCAPE LEGEND, DETAILS, NOTES, ETC.

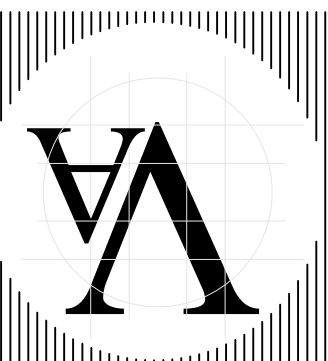
**SPECIFIC AREA  
TREE DISPOSITION PLAN**



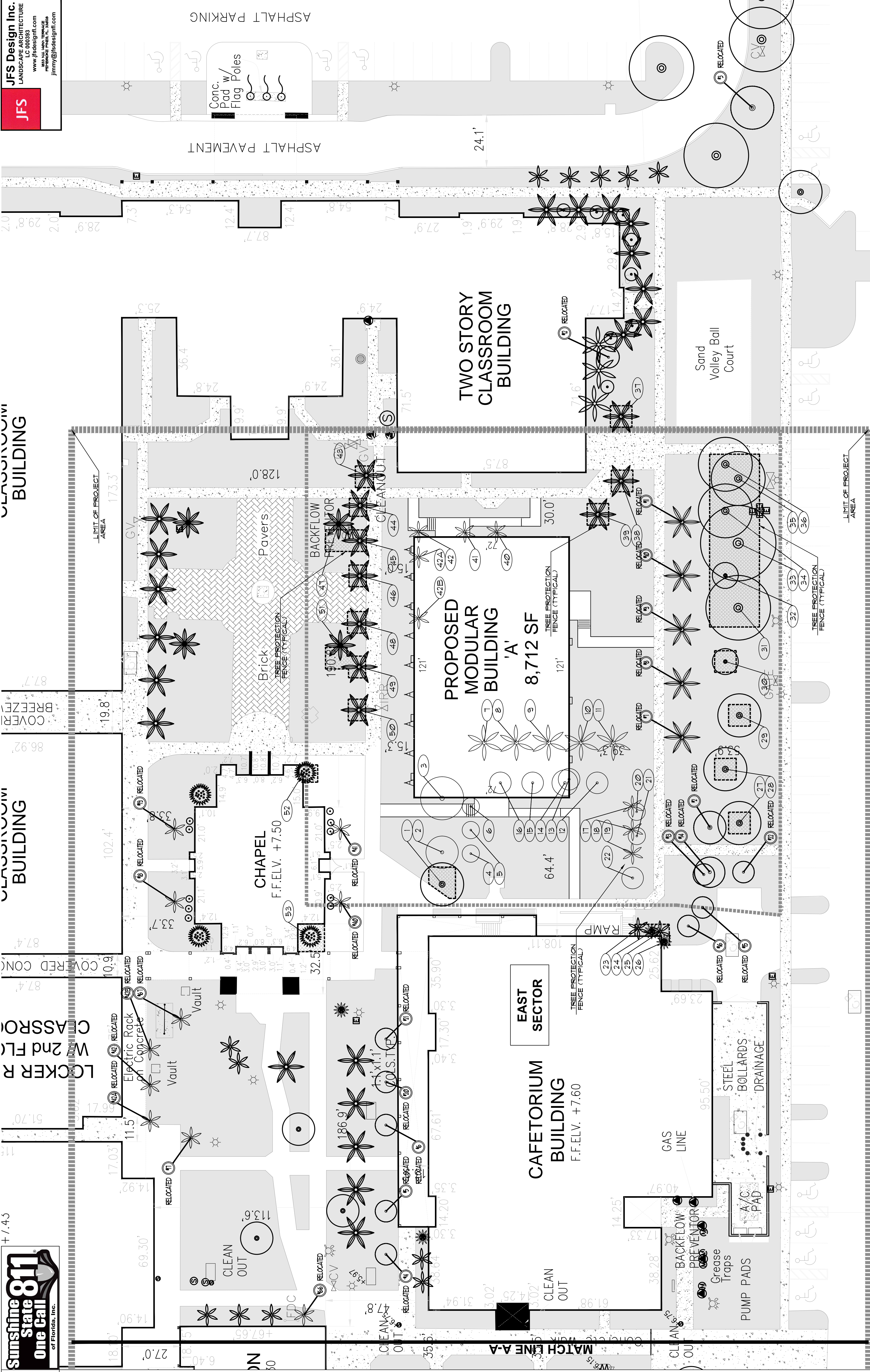
SITE PLAN APPROVAL - MODIFICATION  
ARCHBISHOP EDWARD A. MCCARTHY HIGH SCHOOL  
5451 SW 124th AVENUE - SOUTHWEST RANCHES, FLORIDA  
OWNER: MOST REVEREND THOMAS G. WENSKI, ARCHBISHOP OF MIAMI  
ARCHDIOCESE OF MIAMI, 9401 BISCAYNE BLVD., MIAMI SHORES, FL 33138

JFS Corporation Licence  
#LC000373  
JAMES F. SOGASH  
FLA # 000192

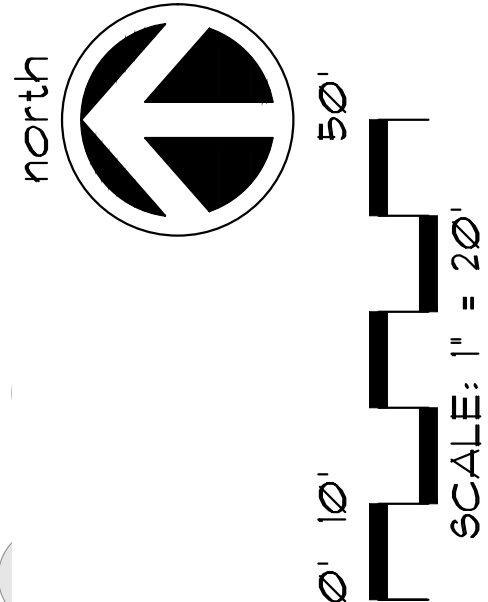
VILLA & ASSOCIATES INC.  
ARCHITECTURE - PLANNING - INTERIOR DESIGN  
7344 SW 48 ST # 201 - MIAMI, FLORIDA 33155 - 305.661.8181  
CONSULTANT :



DATE : 07-17-18  
SCALE :  
DATE SUBMITTED FOR BIDS:  
TD-2

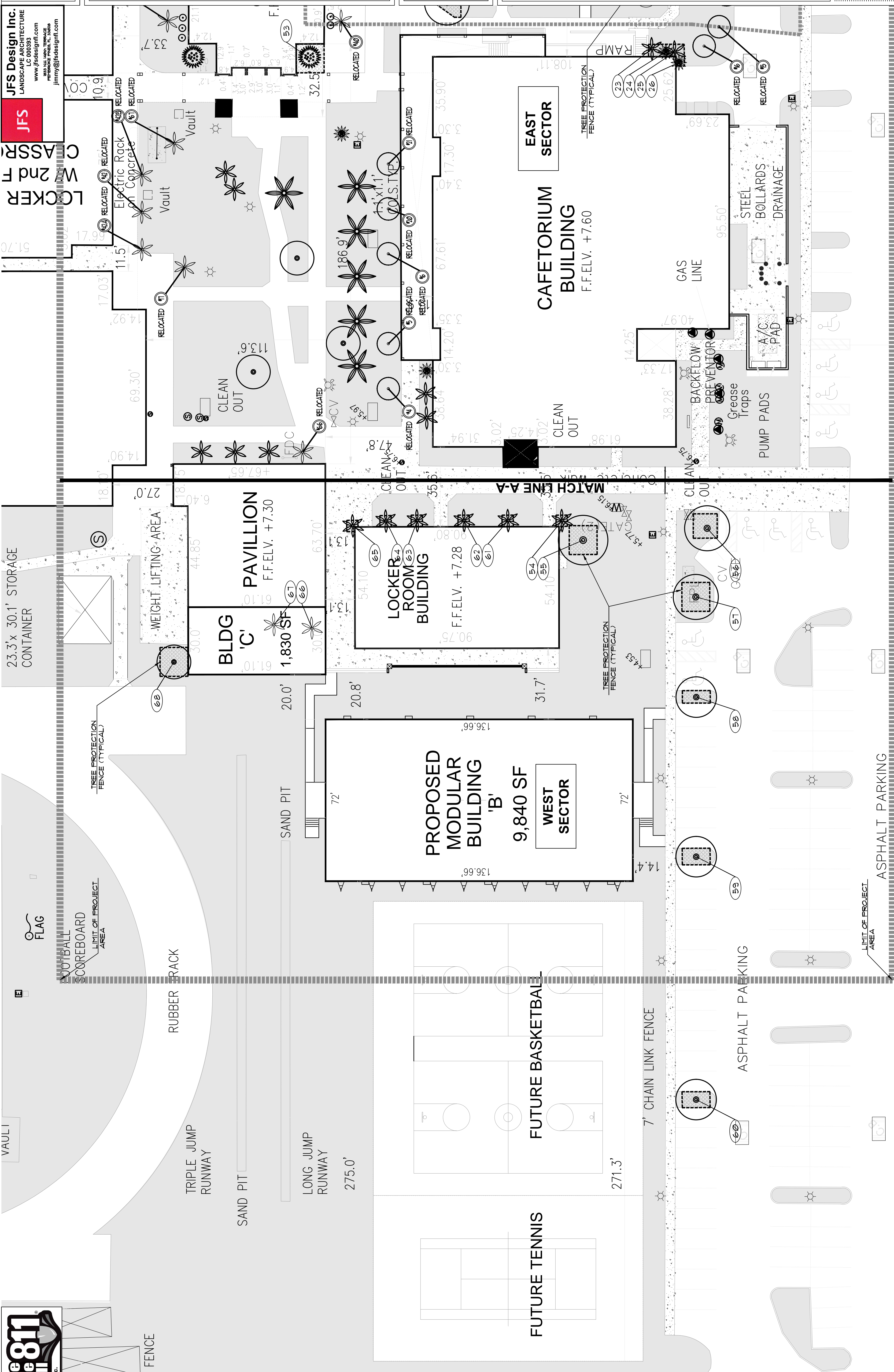


A WRITTEN TREE REMOVAL PERMIT IS REQUIRED FROM THE TOWN OF SOUTHWEST RANCHES PRIOR TO REMOVAL OF ANY TREES FROM THIS SITE.  
SEE LANDSCAPE PLANS FOR PROPOSED PLANTINGS, LANDSCAPE LEGEND, DETAILS, NOTES, ETC.

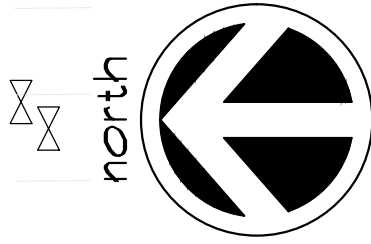


# EAST SECTOR TREE DISPOSITION PLAN





A WRITTEN TREE REMOVAL PERMIT IS REQUIRED FROM THE TOWN OF SOUTHWEST RANCHES PRIOR TO REMOVAL OF ANY TREES FROM THIS SITE. SEE LANDSCAPE PLANS FOR PROPOSED PLANTINGS, LANDSCAPE LEGEND, DETAILS, NOTES, ETC.



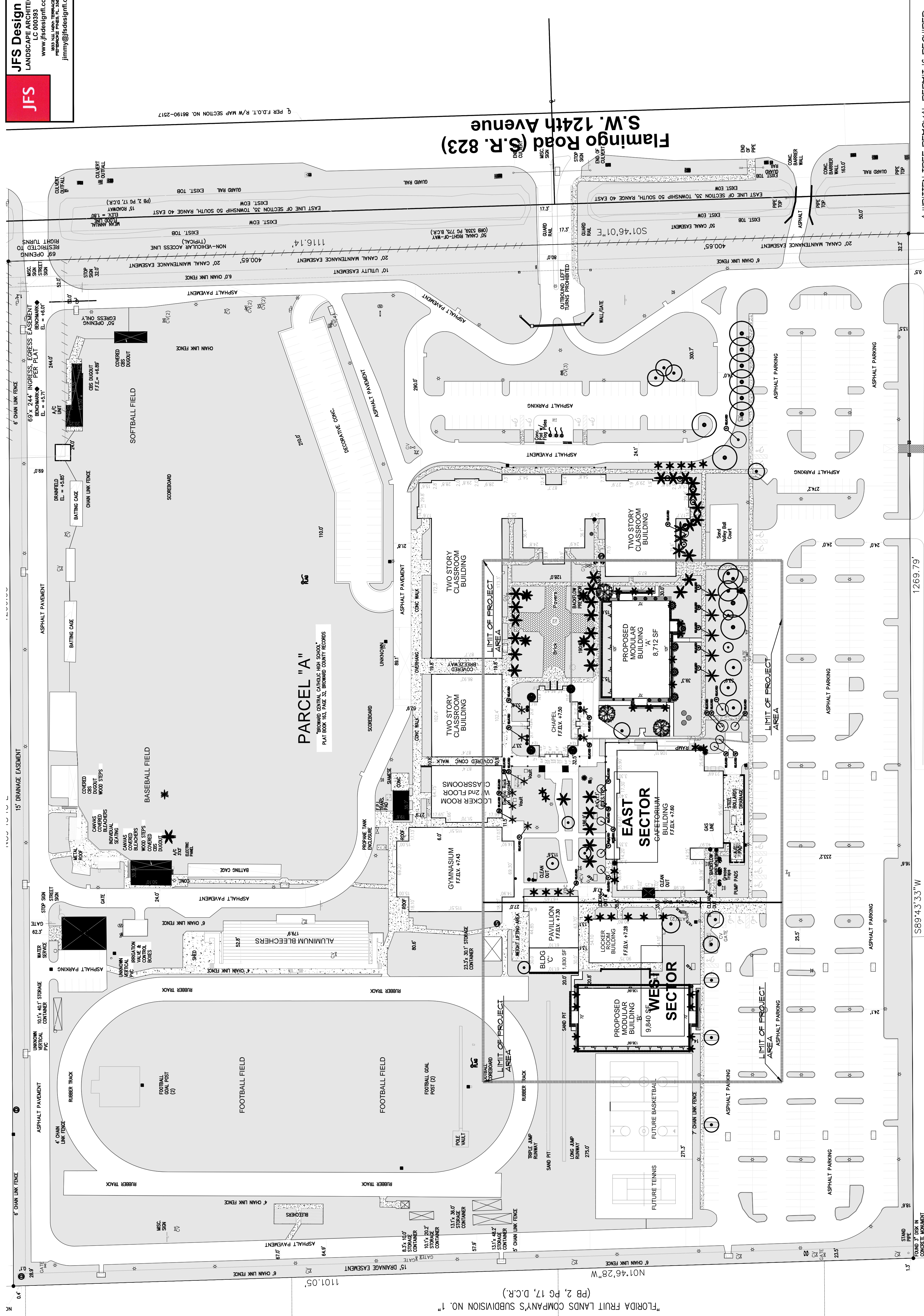
WEST SECTOR  
TREE DISPOSITION PLAN



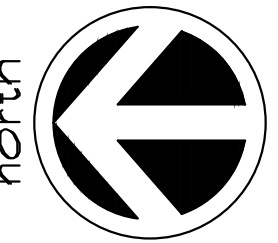




## SPECIFIC AREA LANDSCAPE PLAN



SEE SHEETS L-2, L-3 FOR SECTOR LANDSCAPE PLANS AND SHEET L-4 FOR PLANTLIST, NOTES, SPECIFICATIONS, ETC.



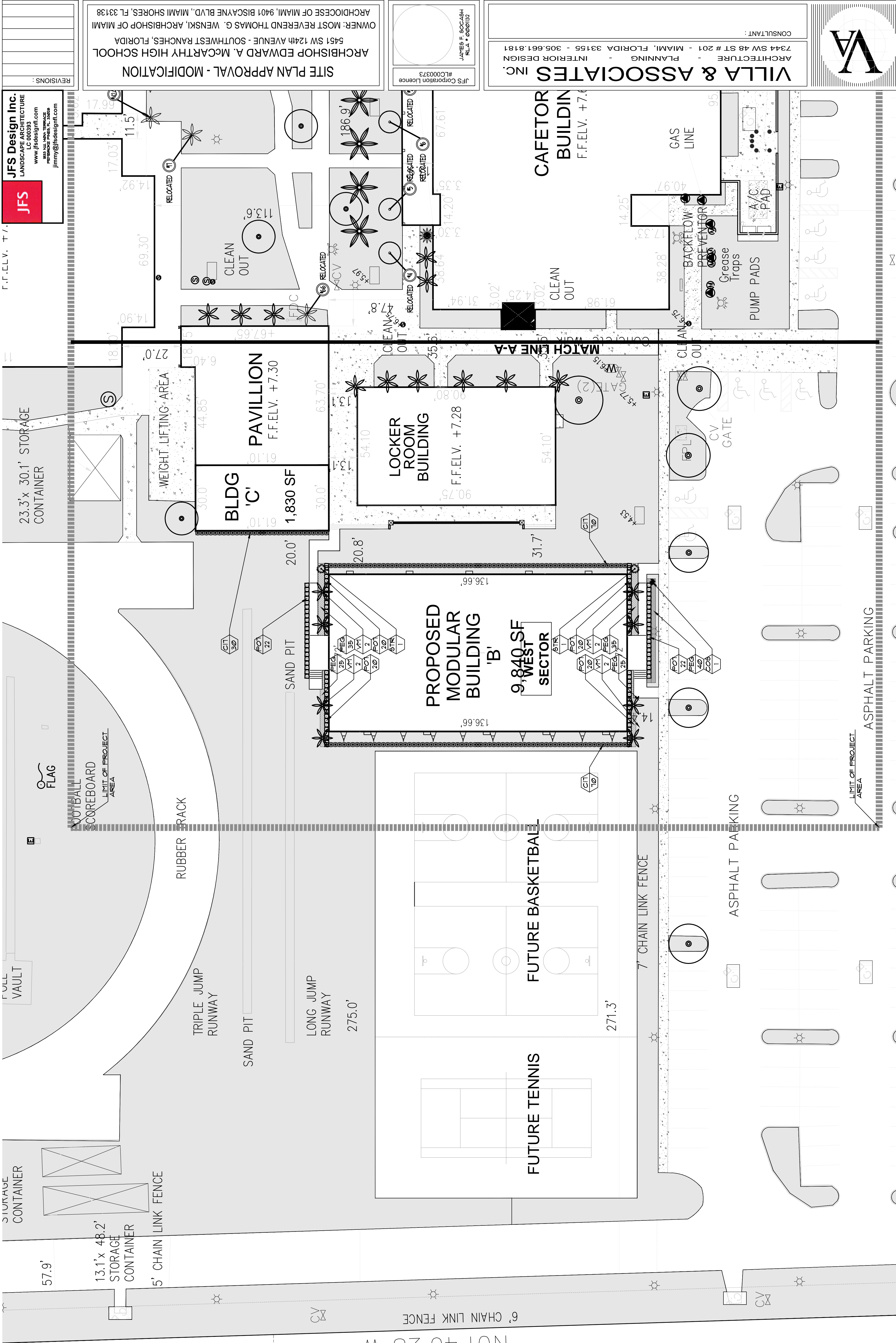






"FLORIDA FRUIT LANDS COMPANY'S SUBDIVISIONS"  
(PB 2, PG 17, D.C.R.)

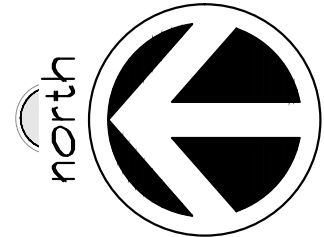
N01°46'28"W



PLANTLIST		
SYM. NATIVE	NAME	SPECIFICATION
ACCENT PLANTS AND GROUNDCOVERS		
COT	Conoclinium octocoloratum	1 gal. 30" x 30" 3 oz. full
COB	Cordia alliodora	1 gal. 24" x 24" 24 oz. full
BLS	Blueberry Flax Lily	3 gal. 12" x 12" 12 oz. full
PLA	Plantain	12 x 12" 12 oz. full
FEA	Feathergrass	5 gal. 24" x 24" 12 oz. full
SIK	Stipa capensis	1 gal. 24" x 24" 12 oz. full

PLANTLIST		
SYM. NATIVE	NAME	SPECIFICATION
PROPOSED TREES		
LIS	Lagerströmia speciosa	10' x 6" 12" full head
BIS	Banksia laevis 'Silver'	8' x 6" full head specimen
VTI	Viburnum tinifolium	6 gal. 12" x 12" 12 oz. full
SHR	Shrub	1 gal. 30" x 24" full 24 oz.
CIT	Citrus	1 gal. 30" x 24" full 24 oz.
SIK	Stipa capensis	1 gal. 24" x 24" full 12 oz.

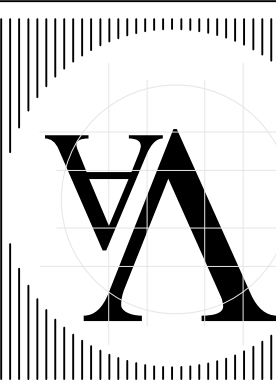
A WRITTEN TREE REMOVAL PERMIT IS REQUIRED FROM THE TOWN OF SOUTHWEST RANCHES PRIOR TO REMOVAL OF ANY TREES FROM THIS SITE. SEE SHEET L-3 FOR WEST SECTOR LANDSCAPE PLAN. SEE SHEET L-4 FOR PLANTLIST, QUANTITIES, LANDSCAPE DETAILS, SPECIFICATIONS, ETC.



0' 10' 50' SCALE: 1" = 20'

# WEST SECTOR LANDSCAPE PLAN

DATE:	07-17-18
SCALE:	
DATE SUBMITTED FOR BIDS:	
L-3	



VILLA & ASSOCIATES INC. ARCHITECTURE - PLANNING - INTERIOR DESIGN 7344 SW 48 ST # 201 - MIAMI, FLORIDA 33155 - 305.661.8181 CONSULTANT:

JFS Corporation Licence #C0000373 JAMES F. SOCCASH R.L.A. #000193

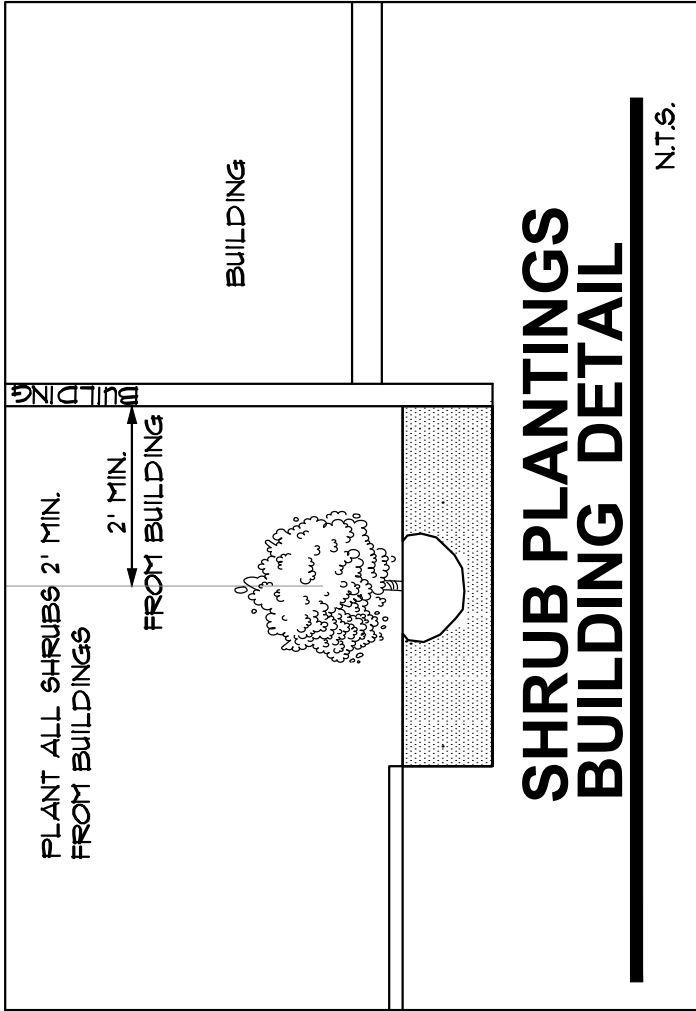
SITE PLAN APPROVAL - MODIFICATION ARCHBISHOP EDWARD A. MCCARTHY HIGH SCHOOL 5451 SW 124th AVENUE - SOUTHWEST RANCHES, FLORIDA OWNER: MOST REVEREND THOMAS G. WENSKI, ARCHBISHOP OF MIAMI ARCHDIOCESE OF MIAMI, 9401 BISCAYNE BLVD., MIAMI SHORES, FL 33138

JFS Design Inc. LANDSCAPE ARCHITECTURE LC 000393 www.jfsdesigninc.com 305.441.1000 jfsdesigninc.com



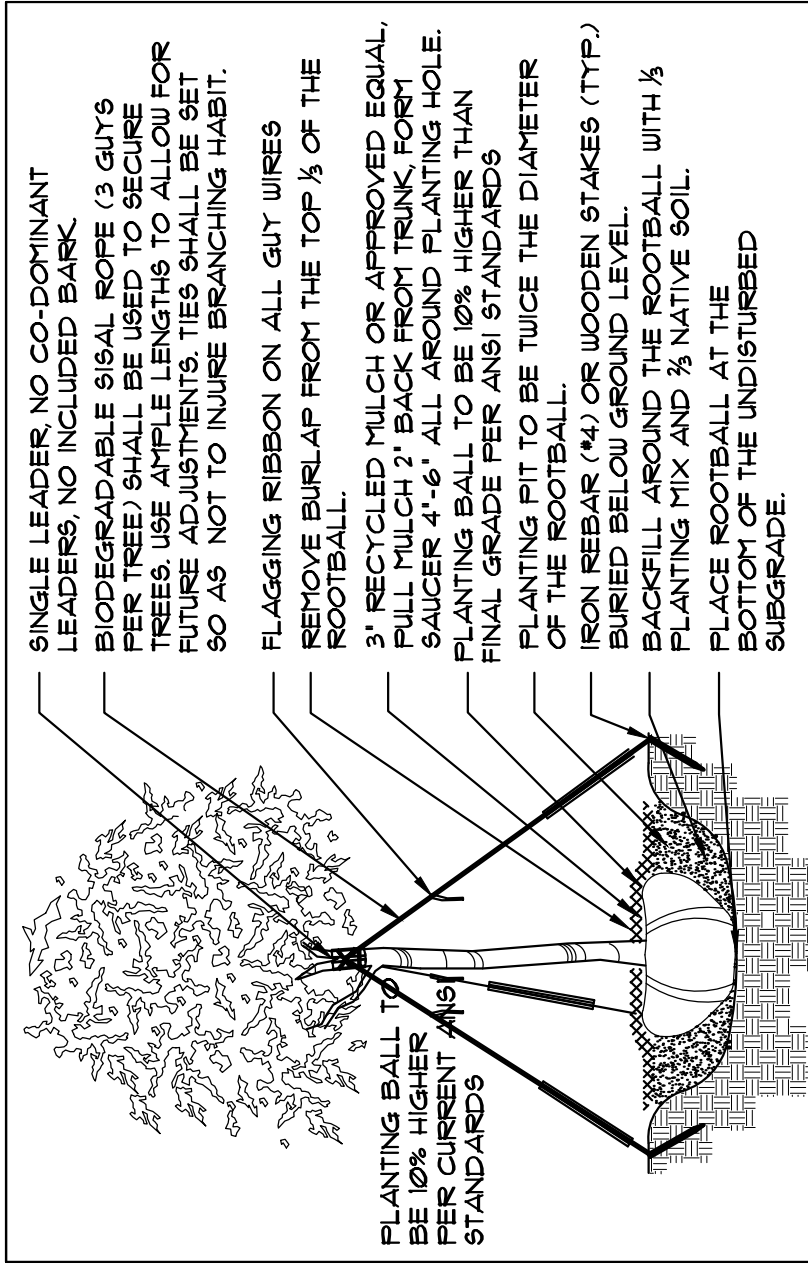
FERTILIZATION:

ONE COMPLETE APPLICATION OF GRANULAR FERTILIZER SHALL BE APPLIED PRIOR TO FINAL ARCHITECTURAL AND APPROVAL BY THE LANDSCAPE ARCHITECT. AN ADDITIONAL APPLICATION OF FERTILIZER SHALL BE APPLIED PRIOR TO THE PROJECT MANAGER FOR AN ANNUAL FERTILIZATION APPLICATION PROGRAM. FERTILIZERS SHALL BE FER ATLANTIC - AFEC FERTILIZER & CHEMICAL (AFEC) OR FERTILIZER (AF) AS A SEPARATE ITEM IN THE BID. FERTILIZATION SHALL BE AS FOLLOWS: TREES: 12-06-08 (AFEC \*5331) (RATE: 15 LBS. / INCH DIA.) 15 LBS. / INCH OF DIA. \* DBH (SHRUBS AND GROUNDCOVERS): (12-06-08 AFEC \* 5331) (RATE: 15 OZ. / FT. OF HEIGHT



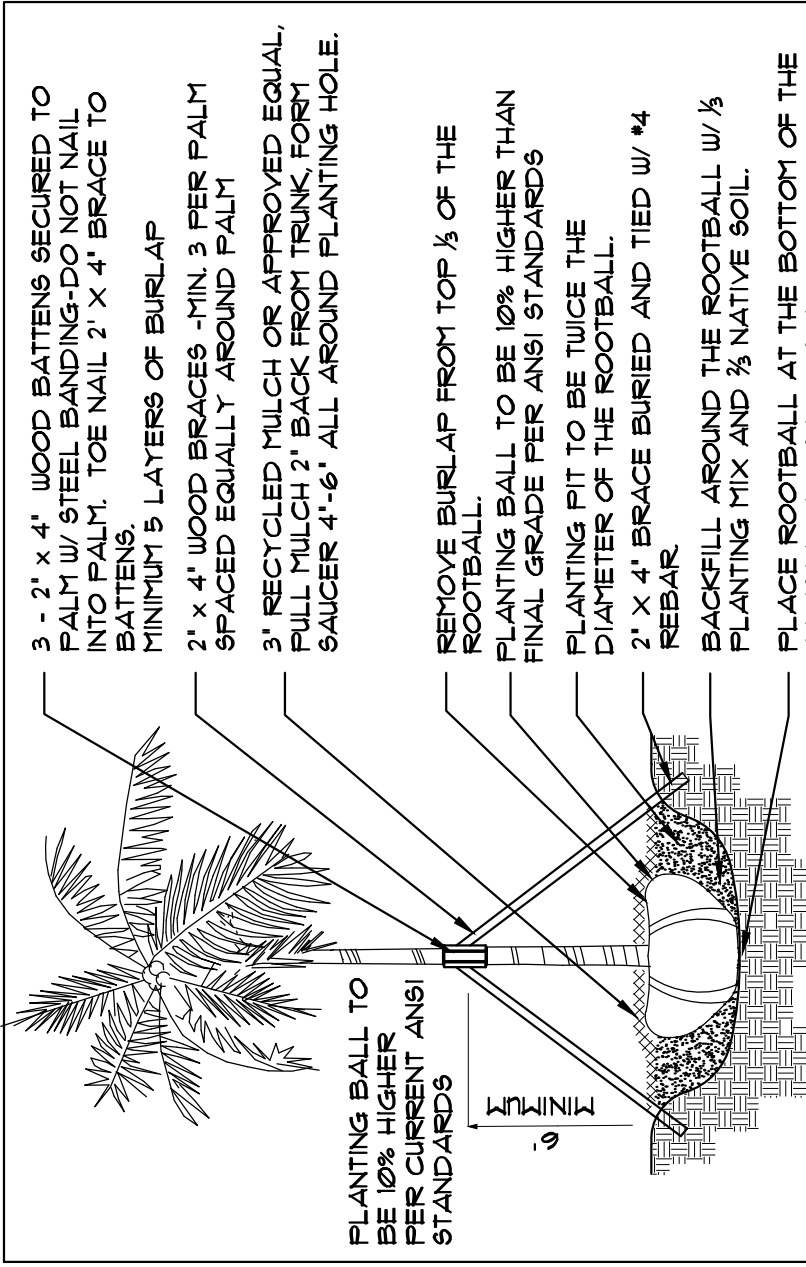
SHRUB PLANTINGS  
BUILDING DETAIL

NT.S.



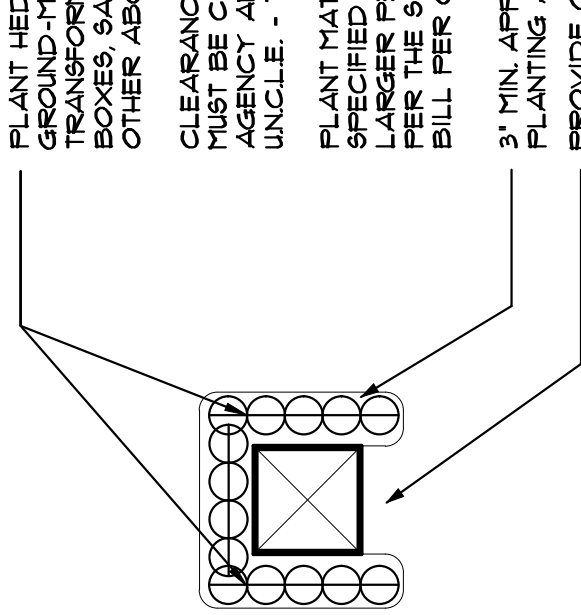
TREE PLANTING DETAIL

NT.S.



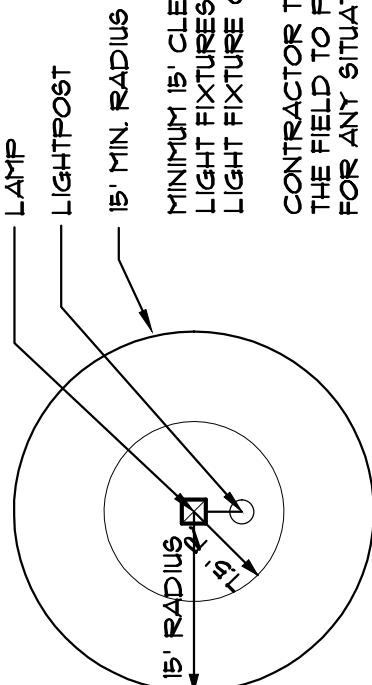
PALM PLANTING DETAIL

NT.S.



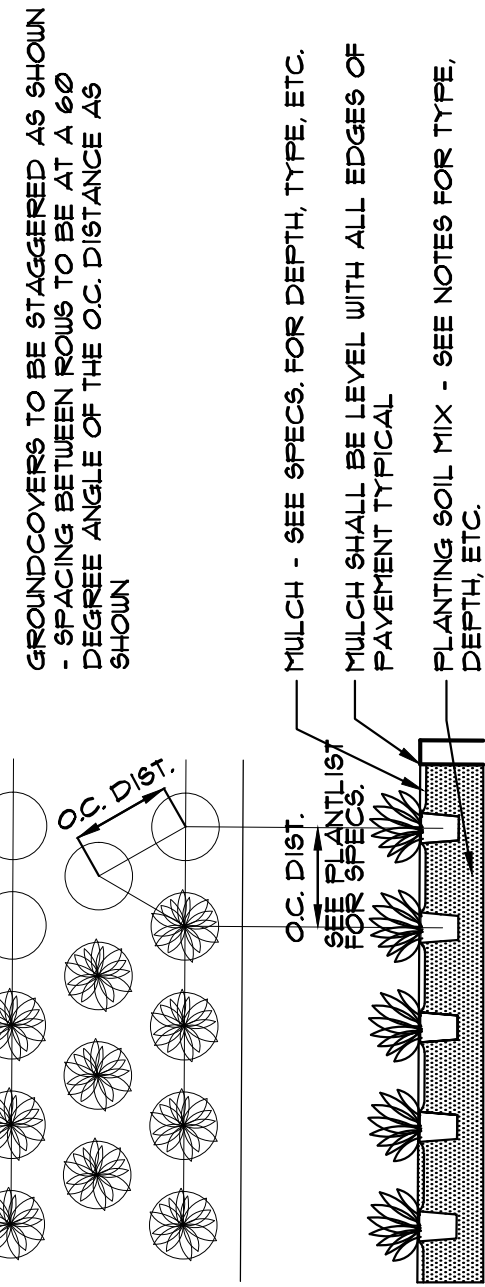
TYPICAL PLANTINGS FOR  
GROUND-MOUNTED EQUIPMENT

NT.S.



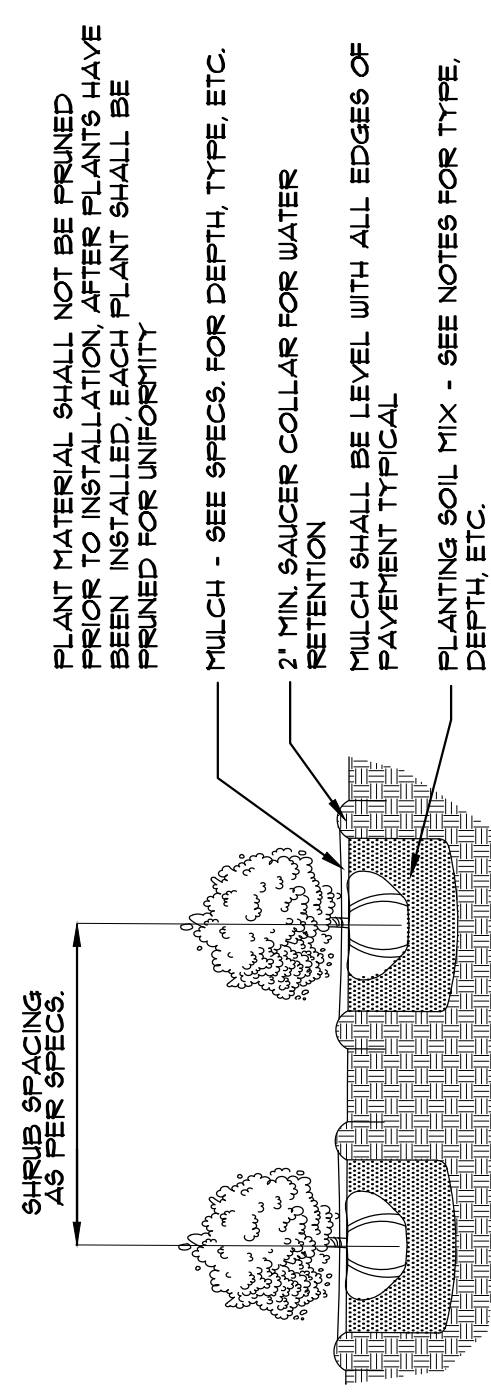
MINIMUM TREE CLEARANCE  
FROM LIGHT FIXTURES

NT.S.



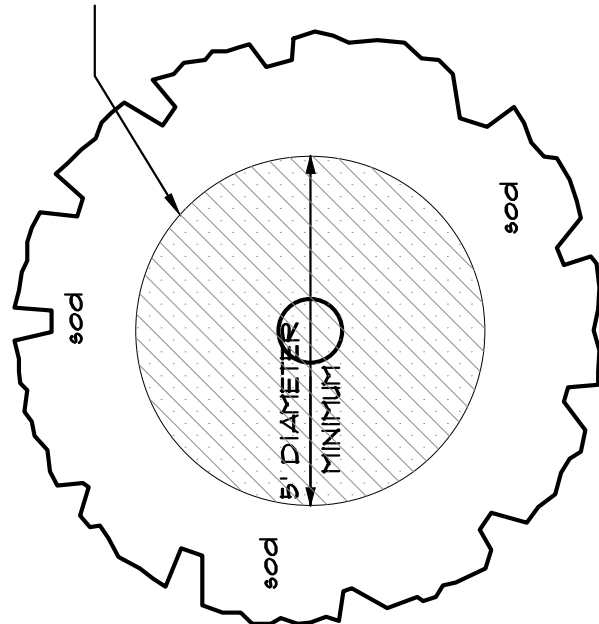
GROUNDCOVER DETAIL

NT.S.



SHRUB PLANTING DETAIL

NT.S.



TYPICAL MULCH RING FOR  
FREE-STANDING TREES AND PALMS

NT.S.

LANDSCAPE NOTES

1. ALL PLANT MATERIAL SHALL BE FLORIDA NO. 1 GRADE OR BETTER.
2. CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE LOCATION OF AND AVOID AND PROTECT UTILITY LINES, BURIED CABLES, AND OTHER UTILITIES.
3. TREE PALM, ACCENT AND BED LINES ARE TO BE LOCATED IN THE FIELD AND APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
4. ALL PLANTING SOIL SHALL BE 50/50 TOPSOIL:AND MIX, FREE OF CLAY, STONES, ROCKS OR OTHER FOREIGN MATTER. THIS SPECIFICATION INCLUDES ALL BACKFILL FOR BERTS AND OTHER LANDSCAPE AREAS.
5. SODDED-LAWN AREAS:  
GROUNDCOVER PLANTING BEDS:  
6" DEPTH PLANTING SOIL SPREAD IN PLACE- THROUGHOUT.  
SHRUB AND HEDGE PLANTING AREAS:  
24" DEPTH PLANTING SOIL SPREAD IN PLACE- THROUGHOUT.  
TREES:  
24" DEPTH PLANTING SOIL SPREAD IN PLACE OR TO THE DEPTH OF THE ROOTBALL OR CONTAINER WHICHEVER IS GREATER.  
LANDSCAPE ISLANDS AND BUILDING FOUNDATIONS:  
36" DEPTH PLANTING SOIL SPREAD IN PLACE- THROUGHOUT.  
BUILDING FOUNDATIONS SHALL BE THE SAME DEPTH TO A WIDTH OF 36" FROM THE BUILDING BASE.
6. THE SITE CONTRACTOR SHALL BE RESPONSIBLE TO BRING ALL GRADES TO WITHIN 2" OF FINAL GRADES. THIS SHALL INCLUDE A 2" APPLICATION OF 50/50 TOPSOIL:AND MIX FOR ALL LANDSCAPE AND AREAS TO BE SODDED.
7. THE LANDSCAPE CONTRACTOR SHALL CALCULATE AND SUBMIT AN ITEMIZED PRICE FOR THE 2" APPLICATION OF 50/50 MIX FOR ALL SOD AREAS AS A REFERENCE IN THE CASE THAT THERE WOULD BE A DISCREPANCY BETWEEN SITE AND LANDSCAPE CONTRACTORS AND NOTIFY THE SITE CONTRACTOR OR DESIGNER IMMEDIATELY AS TO THIS DISCREPANCY. IT WILL THEN BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE THE 2" TOPSOIL:AND APPLICATION AND SUBSEQUENT PATIENT.
8. OTHER PLANTING SOIL MIXES TO BE ADDED (I.E. FOR TREES, PALMS, SPECIFIC PLANTS, SHRUBS AND GROUNDCOVERS) SHALL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR AND BE INCLUSIVE WITH THE LANDSCAPE BID.
9. CONTRACTOR SHALL COORDINATE WITH THE IRRIGATION CONTRACTOR AND LEAVE PROVISIONS FOR ALL, INCLUDING UNDERGROUND UTILITY LINE LOCATIONS, DRAINAGE, AND OTHER REQUIREMENTS.
10. ALL PLANTING BEDS SHALL BE MULCHED TO A DEPTH OF 3" WITH AN APPROVED RECYCLED MULCH BY THE PRESIDING GOVERNING AGENCY. NO HEAVY METALS, I.E. ARSENIC, LEAD, ETC. ARE TO BE CONTAINED IN THE MULCH. CONTRACTOR SHALL PROVIDE PROOF OF ANALYSIS TO THE PRESIDING AGENCY. ALL MULCH IS FREE OF HEAVY METALS OR SIMILAR ENVIRONMENTAL CONTAMINANTS.
11. SOD SHALL BE ARGENTINE "BAHIA" OR ST. AUGUSTINE "FLORATAM" AS SHOWN ON THE PLANS. STRONGLY ROOTED, FREE FROM WEED, INSECTS AND DISEASE. SOD SHALL BE 12" X 12" X 1/2". SOD SHALL BE DETERMINED BY THE TOTAL MEASURED SODDED AREAS X THE UNIT PRICE SUBMITTED AND FIELD VERIFIED.
12. SOD SHALL BE INSTALLED IN ACCORDANCE WITH THE SPECIFICATIONS AS DEFINED BY FDOT. SOD SHALL CARRY A 5-YEAR WARRANTY.
13. ALL TREES, PALMS, SHRUBS AND GROUNDCOVERS SHALL CARRY A ONE-YEAR WARRANTY FROM THE DATE OF FINAL ACCEPTANCE.
14. ALL TREES AND PALMS SHALL BE STAKED PER ACCEPTED STANDARDS BY THE FLORIDA NURSERYMEN & GROUERS LANDSCAPE ASSOCIATION (FLGLA). THERE SHALL BE ONE FINAL INSPECTION FOR APPROVAL BY THE PRESIDING GOVERNING AGENCY. CONTRACTOR SHALL INURE TO AND PROVIDE ALL THE NECESSARY LANDSCAPE AND IRRIGATION INSTALLATION IS COMPLIANT TO ALL ITEMS AS DIRECTED ON THE PLANS PRIOR TO SCHEDULING OF THE FINAL INSPECTION.
15. THE PLANT LIST IS INTENDED ONLY AS AN AID TO BIDDING. ANY DISCREPANCIES FOUND BETWEEN THE QUANTITIES ON THE PLAN AND PLANT LIST, THE QUANTITIES ON THE PLAN SHALL BE HELD VALID.
16. IRRIGATION SHALL PROVIDE FOR A 100% COVERAGE WITH A 100% EFFICIENCY. THE IRRIGATION SYSTEM SHALL BE DESIGNED BY THE LANDSCAPE ARCHITECT. ALL FLORIDA BUILDING CODE APPENDIX "F" IRRIGATION REQUIREMENTS SHALL BE STRICTLY ADHERED TO FOR INSTALLATION AND PREVAILING WATER MANAGEMENT DISTRICT RESTRICTIONS AND REGULATIONS SHALL BE IN COMPLIANCE FOR POST-INSTALLATION WATERING SCHEDULES.
17. EXISTING IRRIGATION SYSTEM (IF APPLICABLE) SHALL BE RETROFITTED TO COMPLY WITH THOSE SPECIFICATIONS AS OUTLINED ABOVE.
18. CONTRACTOR SHALL PROVIDE A WATER TRUCK DURING PLANTING TO INSURE PROPER WATERING IN DURING INSTALLATION AND WILL BE RESPONSIBLE FOR CONTINUAL WATERING UNTIL FINAL ACCEPTANCE BY THE OWNER.
19. ALL EXISTING TREES, PALMS AND PLANT MATERIAL TO REMAIN SHALL BE PROTECTED DURING CONSTRUCTION. CONTRACTOR SHALL INSTALL PROTECTIVE BARRIERS SUCH AS "TENA"X PROTECTIVE FENCING OR AS SHOWN ON THE DETAILS TO BE INSTALLED AT THE BEGINNING OF THE PROJECT. BARRIERS SHALL BE LOCATED TO INCLUDE THE DEPTH OF THE TREES, PALMS AND SHRUBS. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL PLANTS AND CAUTION TO PREVENT ANY DAMAGE TO THE TRUNK, BRANCHES, ROOTS, ROOT ZONE AREAS AND ADJACENT GRADES.
20. EXISTING TREES AND PALMS TO REMAIN SHALL BE TREATED PER ANSI-3600 STANDARDS. SUPERVISION OF THE TRIPPING SHALL BE PERFORMED BY AN ISA-CERTIFIED ARBORIST.
21. ALL EXISTING TREES AND PALMS SHALL BE LIFTED AND THINNED TO MAINTAIN A MINIMUM CLEARANCE FOR ROADWAYS, DRIVEWAYS, AND ALL VEHICULAR USE AREAS.
22. REMOVAL OF ANY TREES OR PALMS WILL REQUIRE A WRITTEN TREE REMOVAL PERMIT FROM THE LOCAL GOVERNING AGENCY PRIOR TO REMOVAL.
23. ALL PLANTINGS IN NON-IRRIGATED AREAS (I.E. RIGHTS OF WAY, SWALES, ETC. SHALL BE WATERED IN THOROUGHLY AND CONTINUED TO BE WATERED THROUGHOUT THE GROWING SEASON. CONTRACTOR SHALL PROVIDE PROJECT MANAGER TO PROVIDE POST CO-WATERING TO INSURE PLANT ESTABLISHMENT FOR A MINIMUM OF ONE YEAR AFTER CERTIFICATE OF OCCUPANCY ACCEPTANCE.

JFS

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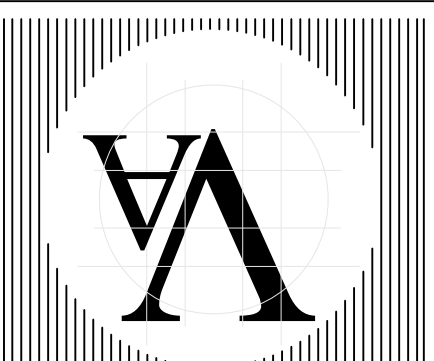
ARCHBISHOP EDWARD A. MCCARTHY HIGH SCHOOL  
5451 SW 124th AVENUE - SOUTHWEST RANCHES, FLORIDA  
ARCHBISHOP OF MIAMI, 9401 BISCAYNE BLVD., MIAMI SHORES, FL 33138  
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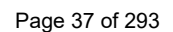
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CONSULTANT :



DATE : 07-17-18  
SCALE :  
DATE SUBMITTED FOR BIDS:  
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# TRAFFIC IMPACT STATEMENT

## ARCHBISHOP MCCARTHY HIGH SCHOOL EXPANSION SOUTHWEST RANCHES, FLORIDA

### Prepared for:

The Mellgren Planning Group  
3350 NW 53<sup>rd</sup> Street  
Suite 101  
Fort Lauderdale, Florida 33309

Job No. 19-105

Date: February 7, 2020  
Revised: March 23, 2020

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Bryan Kelley, P.E.  
FL Registration No. 74006

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## 1.0 INTRODUCTION

The subject parcel is located on the west side of Flamingo Road approximately  $\frac{3}{4}$  miles south of Griffin Road in the Town of Southwest Ranches, Florida. The property is currently developed with a 1691 student private high school. The proposed plan of development entails the expansion of the high school by 109 students for a total of 1800 students with an estimated buildout of 2021 for purposes of this traffic study. The location of the existing school is depicted in Figure 1 attached to this report.

## 2.0 EXISTING SCHOOL OPERATIONS

The school administration provided details including a school access map for the existing school operations. The school has three (3) access connections to Flamingo Road as shown in Figure 2. Student drop off and pick up is available at both north and main (middle) entrance locations. The south school driveway is restricted for student drivers and faculty only. When exiting any of the school's three driveways, motorists must turn southbound on Flamingo Road. For motorists destined to the north, a U-turn can be made at the main school entrance/SW 53<sup>rd</sup> Street or at SW 55<sup>th</sup> Street. Due to the high congestion of Flamingo Road and school traffic, an off-duty police officer directs traffic at the main school entrance. Additionally, the police officer closes down one southbound lane on Flamingo Road to allow for a free-flow right turn out of the main school driveway. The school access map is included in Appendix "A".

## 3.0 DATA COLLECTION

Traffic data was collected for the project on Tuesday, September 17, 2019 and Thursday, September 19, 2019 from 6:30 to 8:30 A.M. and from 1:30 to 3:30 P.M. (unless otherwise noted) at the following locations and times:

- Flamingo Road and Griffin Road
- Flamingo Road and north school entrance (southbound right and eastbound right movements only)
- Flamingo Road and main school entrance (southbound right, southbound left, northbound left, and eastbound right movement only)
- Flamingo Road and south school entrance (southbound right and eastbound right movements only)
- Flamingo Road at SW 55<sup>th</sup> Street
- Flamingo Road 24-hour bi-directional counts between the north and main school entrances.
- Queue data for north drop off location
- Queue data for main entrance drop off location

A Peak Season Correction Factor (PSCF) of 1.04 obtained for the FDOT was applied to the existing counts for all volumes except the school driveway trips. The existing traffic counts are attached to the report and the data collection sheets are provided in Appendix "B".

## 4.0 EXISTING CONDITIONS

### Link Level of Service Analysis

The roadway link Level of Service (LOS) analysis was performed for the aforementioned roadway segments on Griffin Road and Flamingo Road. The LOS D thresholds were taken from the 2013 FDOT Quality/Level of Service Handbook which is provided in Appendix "C". The roadway classifications are based on the posted speed limit of the roadways. The roadway link volumes were derived from the turning movement counts conducted for this traffic study. A summary of the link analyses is provided in Table 1. All roadway segments currently operate at an acceptable Level of Service.

**Table 1**  
**Existing (2019) Link Level of Service Analysis**

Roadway	Segment	Dir.	# of Lanes	Speed Limit	Road Class	AM Peak	PM Peak	Adopted LOS "D" Threshold	Meets Standard?
<b>Griffin Road</b>	West of Flamingo Road	EB	6	45	I	1563	1193	3020	Yes
		WB	6	45	I	1559	1099	3020	Yes
	East of Flamingo Road	EB	6	45	I	1540	1239	3020	Yes
		WB	6	45	I	1549	1003	3020	Yes
<b>Flamingo Road</b>	N. of Griffin Road	NB	6	45	I	2002	1458	3020	Yes
		SB	6	45	I	1813	1481	3020	Yes
	Griffin Road to School Site	NB	6	45	I	1811	1740	3020	Yes
		SB	6	45	I	1988	1496	3020	Yes
	School Site to Stirling Road	NB	6	45	I	2042	1767	3020	Yes
		SB	6	45	I	2106	1775	3020	Yes

### Intersection Level of Service Analysis

An intersection LOS analysis was performed for both the A.M and school P.M. peak hours for the study intersections. Synchro 10 software with the HCM 6<sup>th</sup> edition methodology was utilized for the results. The peak hour factor (PHF) used was based on calculations from the collected traffic data. The results of the intersection analysis are provided in Tables 2 and 3 for the A.M. and P.M. peak hours, respectively. Note that the intersection of Flamingo Road and the main school driveway was treated as a signalized intersection due to the presence of an off-duty police officer controlling traffic. However, the analysis provided for the main driveway is an estimate due to the discretion that the police officer has in controlling traffic and clearing turn lane queues. The actual operations for this intersection will vary. The Synchro printouts for the existing conditions analysis are included in Appendix "D".

#### 4.0 EXISTING CONDITIONS (CONTINUED)

**Table 2**  
**Existing 2019 Intersection Operational Analysis – A.M. Peak Hour**

Intersection	Traffic Control	Overall		EB		WB		NB		SB	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Flamingo Rd at Griffin Rd	Signal	73.9	E	74.3	E	66.0	E	80.2	F	72.7	E
Flamingo Rd at North School Driveway	TWSC	N/A	N/A	55.7	F	N/A	N/A	N/A	N/A	N/A	N/A
Flamingo Rd at Main School Driveway	Police Controlled	N/A	N/A	N/A	N/A	N/A	N/A	70.4 (NBL)	F	N/A	N/A
Flamingo Rd at South School Driveway	TWSC	N/A	N/A	41.3	E	N/A	N/A	N/A	N/A	N/A	N/A
Flamingo Rd at SW 55 <sup>th</sup> St	Signal	50.2	D	82.4	F	57.4	E	33.2	C	63.2	E

Note: TWSC = Two Way Stop Control

**Table 3**  
**Existing 2019 Intersection Operational Analysis – P.M. Peak Hour**

Intersection	Traffic Control	Overall		EB		WB		NB		SB	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Flamingo Rd at Griffin Rd	Signal	58.2	E	78.3	E	65.4	E	46.9	D	50.4	D
Flamingo Rd at North School Driveway	TWSC	N/A	N/A	13.9	B	N/A	N/A	N/A	N/A	N/A	N/A
Flamingo Rd at Main School Driveway	Police Controlled	N/A	N/A	N/A	N/A	N/A	N/A	80.0 (NBL)	E	N/A	N/A
Flamingo Rd at South School Driveway	TWSC	N/A	N/A	68.3	F	N/A	N/A	N/A	N/A	N/A	N/A
Flamingo Rd at SW 55 <sup>th</sup> St	Signal	25.9	C	75.1	E	68.9	E	19.1	B	19.9	B

As shown above, the intersection of Flamingo Road and Griffin Road is currently operating below the LOS D standard during both peak hours. Additionally, the eastbound right turns at the school driveways also experience high delays. However, the delays for the north and south school driveways are internal to the school site and do not have an impact on the Flamingo Road corridor operations.

## 5.0 BACKGROUND CONDITIONS

For the purposes of this traffic study, the project buildout was estimated to be 2021. Historical traffic volumes on Flamingo Road collected by the FDOT were reviewed to determine an appropriate background growth rate. The data for nearby roadway segments showed that growth has been minimal over the last several years. Therefore, a nominal background growth rate of 1.0% was utilized to project the 2021 background volumes. Note that the growth rate was not applied to the school driveway volumes. The intersection volume development tables are included in Appendix "E".

### Link Level of Service Analysis

The roadway link LOS analysis was performed for the A.M. and P.M. peak hours for the background (2021) traffic conditions. The results are summarized in Table 4. All study roadway links continue to perform at an acceptable Level of Service standard.

**Table 4**  
**Background (2021) Link Level of Service Analysis**

Roadway	Segment	Dir.	# of Lanes	Speed Limit	Road Class	AM Peak	PM Peak	Adopted LOS "D" Threshold	Meets Standard?
<b>Griffin Road</b>	West of Flamingo Road	EB	6	45	I	1624	1241	3020	Yes
		WB	6	45	I	1620	1143	3020	Yes
	East of Flamingo Road	EB	6	45	I	1601	1289	3020	Yes
		WB	6	45	I	1610	1042	3020	Yes
<b>Flamingo Road</b>	N. of Griffin Road	NB	6	45	I	2081	1515	3020	Yes
		SB	6	45	I	1883	1541	3020	Yes
	Griffin Road to School Site	NB	6	45	I	1882	1809	3020	Yes
		SB	6	45	I	2047	1550	3020	Yes
	School Site to Stirling Road	NB	6	45	I	2122	1837	3020	Yes
		SB	6	45	I	2187	1836	3020	Yes

### Intersection Level of Service Analysis

An intersection LOS analysis was also performed for both the A.M and school P.M. peak hours for the study intersections for the background (2021) traffic conditions. The existing geometry and signal timing were utilized in the analysis. The Synchro printouts are included in Appendix "F" and the results are summarized in Tables 5 and 6 for the A.M and P.M. peak hours, respectively.

## 5.0 BACKGROUND CONDITIONS (CONTINUED)

**Table 5**  
**Background 2021 Intersection Operational Analysis – A.M. Peak Hour**

Intersection	Traffic Control	Overall		EB		WB		NB		SB	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Flamingo Rd at Griffin Rd	Signal	78.2	E	77.9	E	68.8	E	87.1	F	76.1	E
Flamingo Rd at North School Driveway	TWSC	N/A	N/A	62.6	F	N/A	N/A	N/A	N/A	N/A	N/A
Flamingo Rd at Main School Driveway	Police Controlled	N/A	N/A	N/A	N/A	N/A	N/A	72.4 (NBL)	E	N/A	N/A
Flamingo Rd at South School Driveway	TWSC	N/A	N/A	45.7	E	N/A	N/A	N/A	N/A	N/A	N/A
Flamingo Rd at SW 55 <sup>th</sup> St	Signal	53.4	D	83.0	F	56.5	E	34.9	C	68.7	E

**Table 6**  
**Background 2021 Intersection Operational Analysis – P.M. Peak Hour**

Intersection	Traffic Control	Overall		EB		WB		NB		SB	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Flamingo Rd at Griffin Rd	Signal	59.8	E	81.4	F	65.9	E	48.1	D	52.0	D
Flamingo Rd at North School Driveway	TWSC	N/A	N/A	14.3	B	N/A	N/A	N/A	N/A	N/A	N/A
Flamingo Rd at Main School Driveway	Police Controlled	N/A	N/A	N/A	N/A	N/A	N/A	80.0 (NBL)	E	N/A	N/A
Flamingo Rd at South School Driveway	TWSC	N/A	N/A	79.5	F	N/A	N/A	N/A	N/A	N/A	N/A
Flamingo Rd at SW 55 <sup>th</sup> St	Signal	26.7	C	74.5	E	68.1	E	19.9	B	21.1	C

Similar to the existing conditions, the intersection of Flamingo Road at Griffin Road will continue to operate below LOS D standards for the background conditions.

## 6.0 TOTAL TRAFFIC CONDITIONS

### **Traffic Generation**

The traffic generation for the proposed private high school expansion was determined by collected traffic data. The existing school driveway trips may be summarized as follows:

### **Existing Trips**

A.M. Peak Hour Traffic Generation = 2120 pht (1177 In/943 Out)  
P.M. Peak Hour Traffic Generation = 1254 pht (480 In/774 Out)

Therefore, the trip generation rate for the 1691 student private school may be calculated as follows:

### **Trip Generation Rate**

AM Peak:  $T = 1.25X$  (55.5%% In/44.5% Out)  
PM Peak:  $T = 0.74X$  (38.3% In/61.7% Out)

X = Number of students

The trip generation increase associated with the proposed 109 student expansion may be summarized as follows:

### **New Trips**

A.M. Peak Hour Traffic Generation = 136 pht (76 In/60 Out)  
P.M. Peak Hour Traffic Generation = 81 pht (31 In/50 Out)

The total anticipated trip generation for the proposed 1800 student private school may be summarized as follows:

### **Total Driveway Trips**

A.M. Peak Hour Traffic Generation = 2256 pht (1253 In/1003 Out)  
P.M. Peak Hour Traffic Generation = 1335 pht (511 In/824 Out)

It should be noted that the trip generation and total traffic conditions analysis can be considered conservative since many of the trips will be pass-by trips or diverted trips already using the existing roadway network.

### **Trip Distribution**

The project trips were distributed throughout the roadway network based on the existing traffic counts, existing travel patterns, and existing roadway network. The projected trip distribution and driveway assignment are depicted in the "Project Trips" exhibit attached to the report.

The project trips were then added to the 2021 background traffic volumes to determine the total traffic volumes for the analysis. The intersection development worksheets are included in Appendix "E" and the 2021 total traffic condition volumes are attached to the report in the "Total (2021) Volumes exhibit.

## 6.0 TOTAL TRAFFIC CONDITIONS (CONTINUED)

### Link Level of Service Analysis

The roadway link LOS analysis was performed for the A.M. and P.M. peak hour for the total traffic (2021) conditions. The results are summarized in Table 8. All study roadway links continue to perform at an acceptable Level of Service standard.

**Table 8**  
**Total (2019) Link Level of Service Analysis**

Roadway	Segment	Dir.	# of Lanes	Speed Limit	Road Class	AM Peak	PM Peak	Adopted LOS "D" Threshold	Meets Standard?
<b>Griffin Road</b>	West of Flamingo Road	EB	6	45	I	1635	1246	3020	Yes
		WB	6	45	I	1626	1148	3020	Yes
	East of Flamingo Road	EB	6	45	I	1607	1294	3020	Yes
		WB	6	45	I	1618	1045	3020	Yes
<b>Flamingo Road</b>	N. of Griffin Road	NB	6	45	I	2099	1530	3020	Yes
		SB	6	45	I	1910	1552	3020	Yes
	Griffin Road to School Site	NB	6	45	I	1912	1834	3020	Yes
		SB	6	45	I	2097	1569	3020	Yes
	School Site to Stirling Road	NB	6	45	I	2167	1862	3020	Yes
		SB	6	45	I	2232	1874	3020	Yes

### Intersection Level of Service Analysis

An intersection LOS analysis was also performed for both the A.M and school P.M. peak hours for all study intersections for the total traffic (2021) conditions. The existing geometry and existing signal timing was utilized in the analysis. The Synchro printouts are included in Appendix "G" and the results are summarized in Tables 9 and 10 for the A.M. and P.M. peak hours, respectively.

## 6.0 TOTAL TRAFFIC CONDITIONS (CONTINUED)

**Table 9**  
**Total (2021) Intersection Operational Analysis – A.M. Peak Hour**

Intersection	Traffic Control	Overall		EB		WB		NB		SB	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Flamingo Rd at Griffin Rd	Signal	80.1	F	80.1	F	70.6	E	89.9	F	76.6	E
Flamingo Rd at North School Driveway	TWSC	N/A	N/A	175.4	F	N/A	N/A	N/A	N/A	N/A	N/A
Flamingo Rd at Main School Driveway	Police Controlled	N/A	N/A	N/A	N/A	N/A	N/A	65.4 (NBL)	F	N/A	N/A
Flamingo Rd at South School Driveway	TWSC	N/A	N/A	53.0	F	N/A	N/A	N/A	N/A	N/A	N/A
Flamingo Rd at SW 55 <sup>th</sup> St	Signal	56.6	E	83.0	F	56.5	E	35.1	D	75.6	E

**Table 10**  
**Total (2021) Intersection Operational Analysis – P.M. Peak Hour**

Intersection	Traffic Control	Overall		EB		WB		NB		SB	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Flamingo Rd at Griffin Rd	Signal	60.2	E	82.8	F	65.9	E	48.4	D	52.3	D
Flamingo Rd at North School Driveway	TWSC	N/A	N/A	14.7	B	N/A	N/A	N/A	N/A	N/A	N/A
Flamingo Rd at Main School Driveway	Police Controlled	N/A	N/A	N/A	N/A	N/A	N/A	79.2 (NBL)	E	N/A	N/A
Flamingo Rd at South School Driveway	TWSC	N/A	N/A	97.3	F	N/A	N/A	N/A	N/A	N/A	N/A
Flamingo Rd at SW 55 <sup>th</sup> St	Signal	27.3	C	74.5	E	68.1	E	20.5	C	21.9	C

As shown above, the intersection of Flamingo Road at Griffin Road will continue to operate below LOS D with the proposed school expansion. Additionally, the intersection of Flamingo Road at SW 55<sup>th</sup> Street will operate at LOS E during the A.M. peak hour.



## 6.0 TOTAL TRAFFIC CONDITIONS (CONTINUED)

The above total traffic conditions assume the existing signal timing for the intersections of Flamingo Road at Griffin Road and Flamingo Road at SW 55<sup>th</sup> Street. The two signalized intersections were then also evaluated utilizing optimized signal timing and the results are shown in Table 11 and 12 and included in Appendix "H".

**Table 11**  
**Total (2021) Intersection Operational Analysis With Optimized Signal**  
**Timing – A.M. Peak Hour**

Intersection	Traffic Control	Overall		EB		WB		NB		SB	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Flamingo Rd at Griffin Rd	Signal	74.5	E	73.8	E	73.6	E	75.9	E	74.1	E
Flamingo Rd at SW 55 <sup>th</sup> St	Signal	45.1	D	108.1	F	58.4	E	42.9	D	37.6	D

**Table 12**  
**Total (2021) Intersection Operational Analysis With Optimized Signal**  
**Timing – P.M. Peak Hour**

Intersection	Traffic Control	Overall		EB		WB		NB		SB	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Flamingo Rd at Griffin Rd	Signal	60.1	E	88.2	F	66.1	E	46.4	D	49.4	D
Flamingo Rd at SW 55 <sup>th</sup> St	Signal	27.0	C	75.7	E	68.2	E	21.1	C	20.6	C

The results above show that signal timing adjustments will provide some benefit and is able to improve the intersection of Flamingo Road at SW 55<sup>th</sup> Street to LOS D. However, the intersection of Flamingo Road at Griffin Road will remain at LOS E.

## 7.0 QUEUEING ANALYSIS

As previously stated, the school utilizes two designated drop off/pick up areas. The first drop off/pick up area is located utilizing the north school entrance and the second one is located utilizing the main (middle) school entrance. The north drop off/pick up area has approximately 1570 feet of queueing space from the drop off/pick up portico to the north driveway entrance on Flamingo Road. The main school drop off/pick up area has approximately 665 feet of queueing space from the drop off/pick up portico to the main driveway entrance on Flamingo Road. Utilizing a standard queue calculation of 1 vehicle every 22 feet, this results in a stacking capacity of 71 vehicles for the north drop off/pick up area and 30 vehicles for the drop off/pick up area not including Flamingo Road turn lane storage. An exhibit documenting the onsite vehicle storage is included in Appendix "A". Queue data was collected the week of September 23, 2019 for the school pick up/drop off areas and the driveway turn lanes and is included in Appendix "B". The queue data may be summarized as follows:

### **AM Peak Hour**

North School Pick Up/Drop Off Area = 16 vehicles  
(Queue capacity = 71 vehicles)  
Main School Pick Up/Drop Off Area = 28 vehicles  
(Queue capacity = 30 vehicles)  
Main School Entrance Southbound Right Turn Lane = 0 vehicles  
(Queue capacity = 8 vehicles)  
Main School Entrance Northbound Left Turn Lane = 20 vehicles\*  
(Queue capacity = 20 vehicles)

Total AM Queue = 64 vehicles

### **PM Peak Hour**

North School Pick Up/Drop Off Area = 31 vehicles  
(Queue capacity = 71 vehicles)  
Main School Pick Up/Drop Off Area = 30 vehicles  
(Queue capacity = 30 vehicles)  
Main School Entrance Southbound Right Turn Lane = 24 vehicles  
(Queue capacity = 8 vehicles)  
Main School Entrance Northbound Left Turn Lane = 11 vehicles  
(Queue capacity – 20 vehicles)

Total PM Queue = 96 vehicles

Based on the above queue data collection and the existing enrollment of 1691 high school students, the existing queue rates are .038 vehicles per student and .057 vehicles per student for the A.M. and P.M. peak hours, respectively. A graphic depicting the existing queue is also provided in Appendix "J".

Therefore, the projected total queue for the proposed 1800 student high school is 68 vehicles during the A.M. peak hour and 103 vehicles during the P.M. peak hour. The school can currently accommodate approximately 101 vehicles onsite not including the designated turn lanes. However, it should be noted that majority of parents utilize the main school driveway instead of the north school driveway, particularly during afternoon pick up. However, the north school driveway has significantly more onsite queuing spaces.

## 8.0 CONCLUSION

The proposed plan of development entails the expansion of the existing 1691 private student high school by 109 students for a total of an 1800 student private high school. The results of the analysis showed that all roadway segments currently and will continue to operate at an acceptable Level of Service with the exception of the intersection of Flamingo Road at Griffin Road. This intersection is currently and will continue to operate below Level of Service D standards. However, the proposed school expansion of 109 students will only has a minimal impact on the intersection of Flamingo Road at Griffin Road. The following improvements are recommended to help mitigate the traffic impact of the proposed school expansion:

1. Extend the southbound right turn lane on Flamingo Road at the main entrance to the longest distance feasible which is approximately 450 feet of storage plus 50 feet of taper.
2. Extend the southbound left turn lane on Flamingo Road at the main entrance/SW 53<sup>rd</sup> Street for a total of approximately 450 feet of storage plus 50 feet of taper.
3. Extend the southbound left turn lane on Flamingo Road at SW 55<sup>th</sup> Street to run "back to back" with the northbound left turn lane on Flamingo Road at the main school entrance. This improvement includes the modifying the existing taper from approximately 175 feet to 50 feet with the remaining 125 feet converting to vehicle storage for the southbound left turn lane.
4. Coordinate with Broward County to optimize signal timing at the intersections of Flamingo Road at Griffin Road and SW 55<sup>th</sup> Street.

Exhibits documenting the proposed improvement recommendations are included in Appendix "I". In addition to the physical roadway improvement recommendations, it is recommended that the school encourage more students and parents to utilize the north school driveway, particularly during school dismissal. The north school driveway has approximately 71 queueing spaces onsite compared to just 30 queueing spaces for the main driveway. This will help alleviate traffic backup onto Flamingo Road and improve overall efficiency of the roadway corridor. Additionally, staggering start and end times among the high school grades and/or staggering times with the adjacent St. Marks school will help improve operations on Flamingo Road.







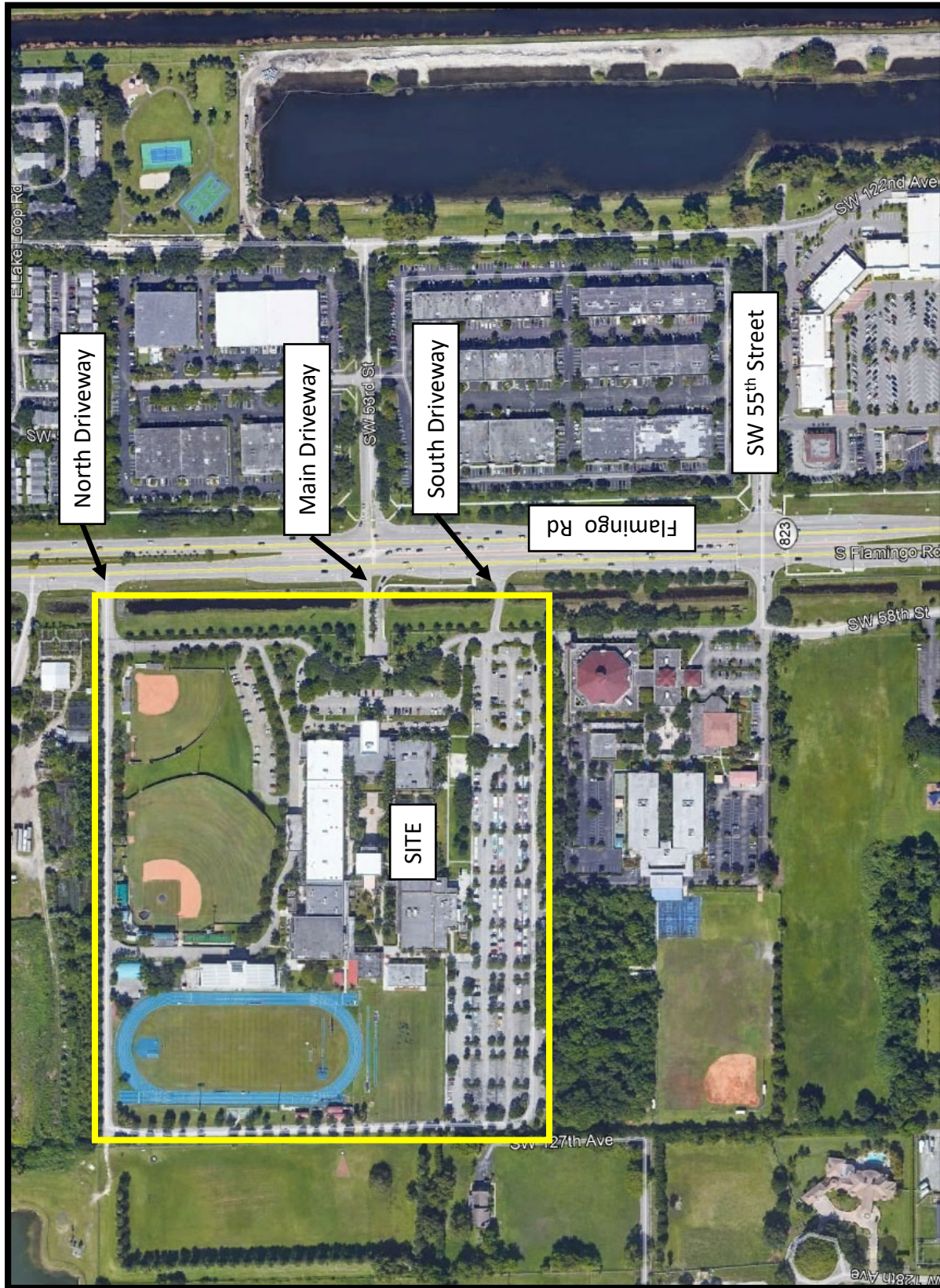
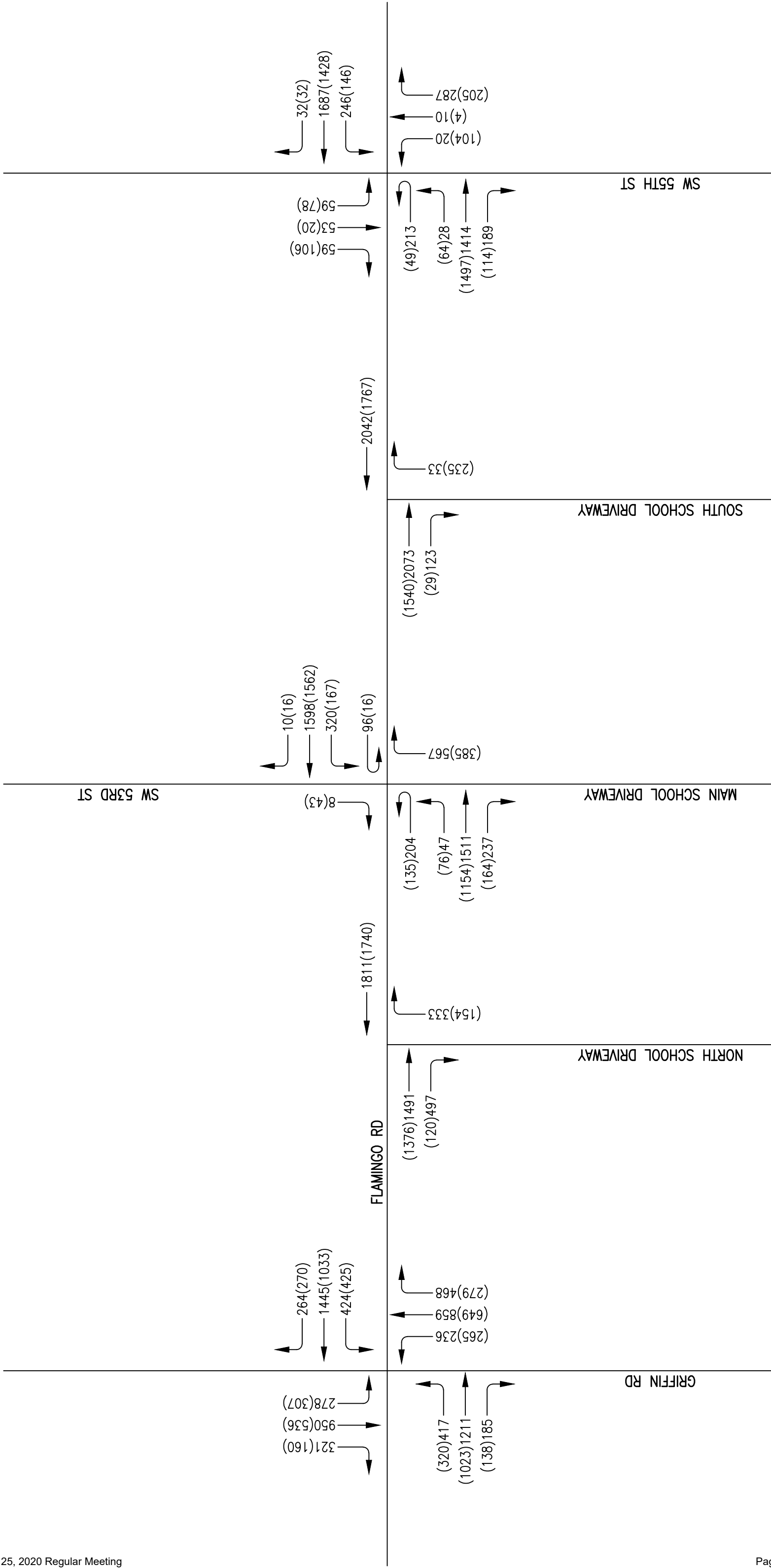


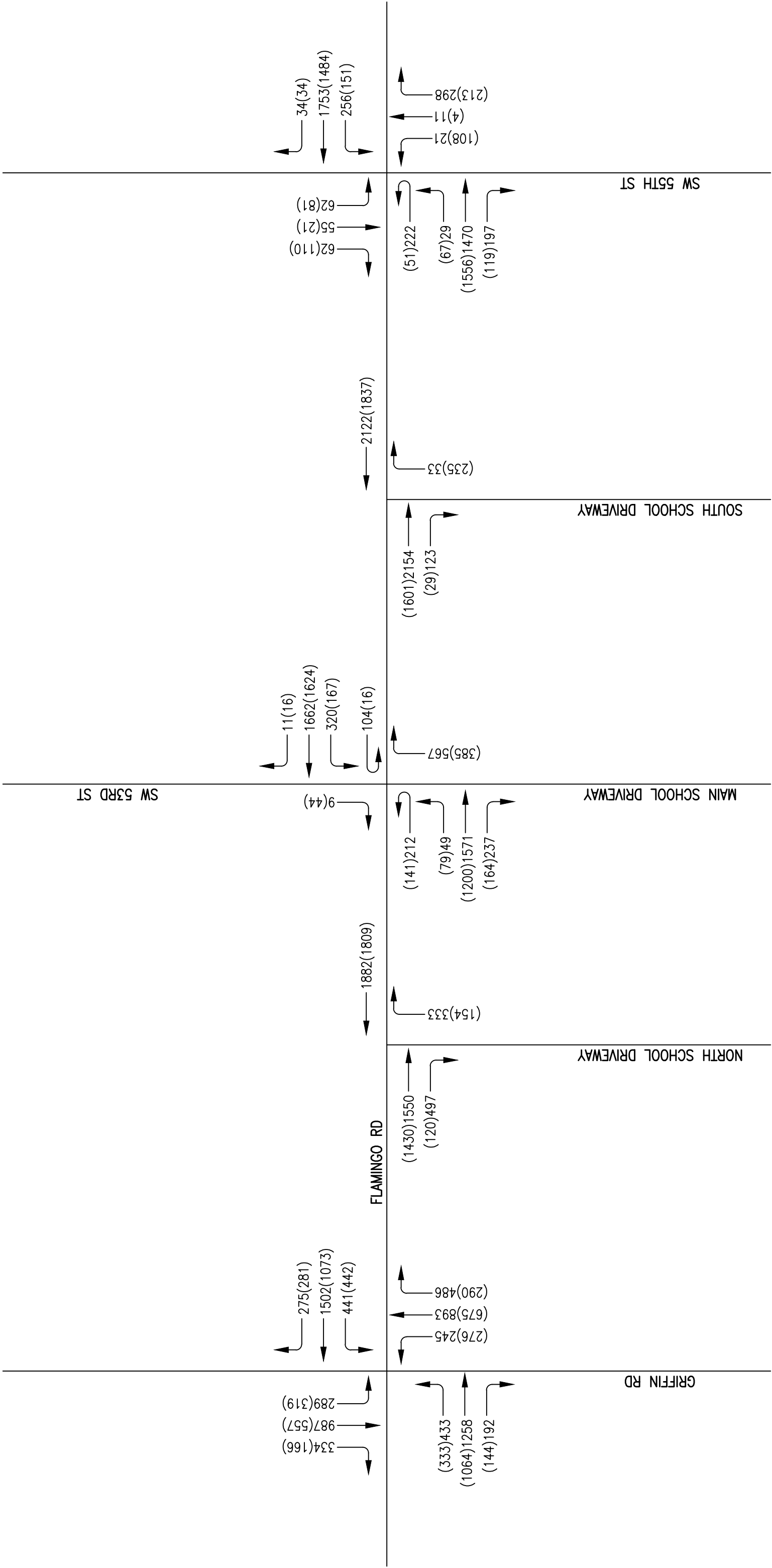
Figure 2 – Site Location Map  
Archbishop McCarthy High School  
Project # 19-105



EXISTING (2019) VOLUMES

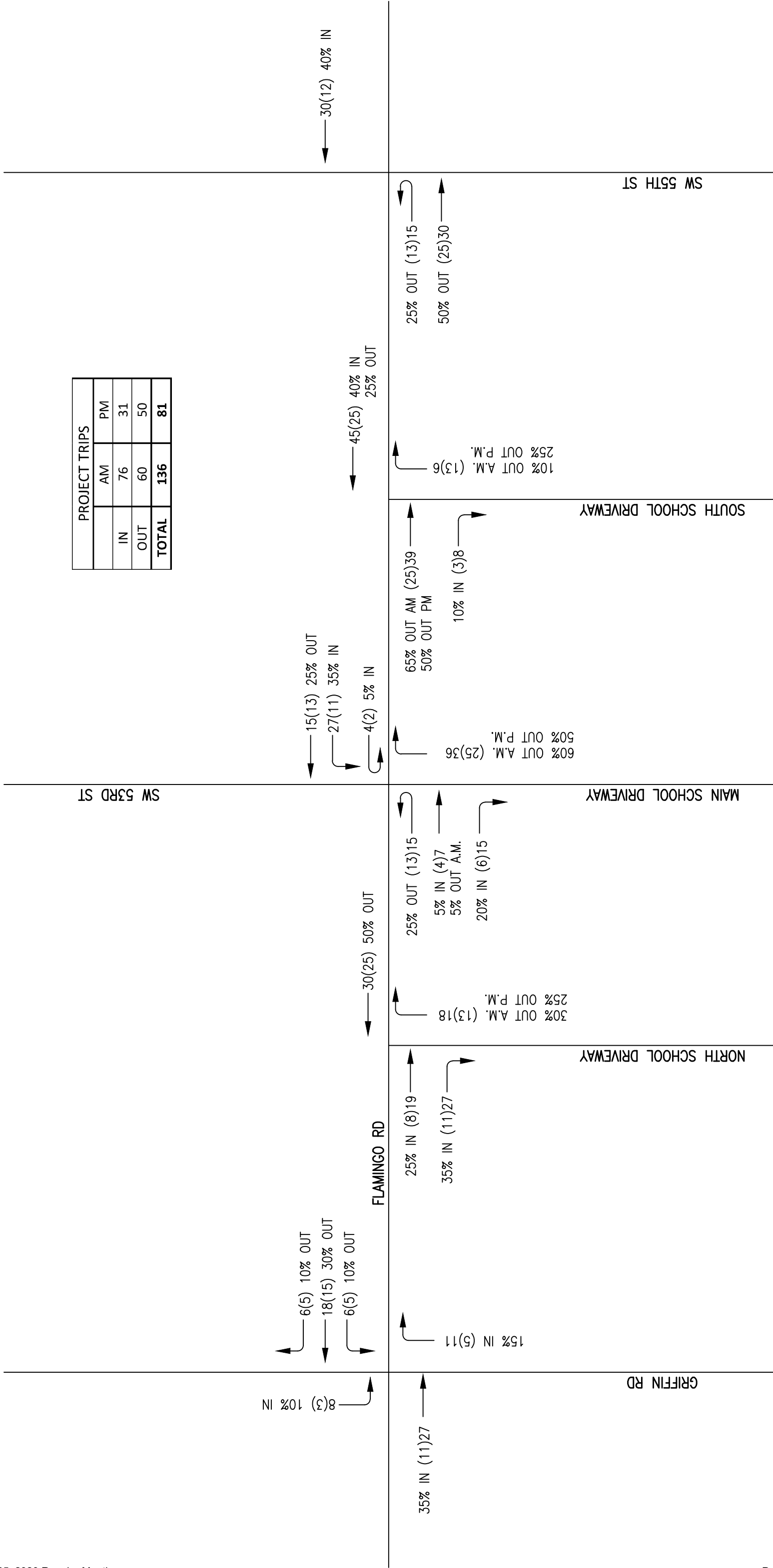
LEGEND

185 A.M. PEAK HOUR TURNING MOVEMENT  
(138) P.M. PEAK HOUR TURNING MOVEMENT



BACKGROUND (2021) VOLUMES

LEGEND  
192 A.M. PEAK HOUR TURNING MOVEMENT  
(144) P.M. PEAK HOUR TURNING MOVEMENT



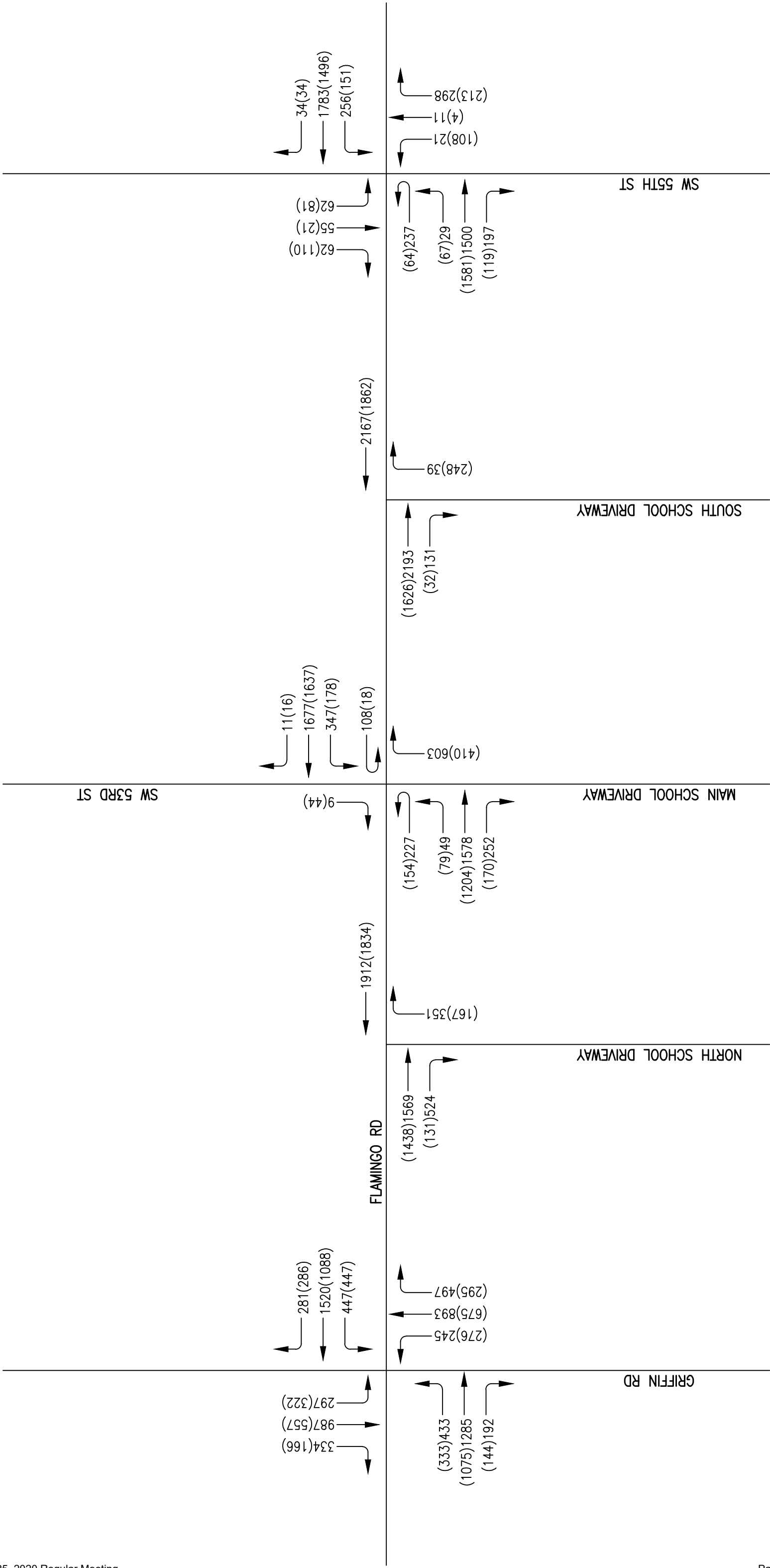
**LEGEND**  
160 A.M. PEAK HOUR TURNING MOVEMENT  
(65) P.M. PEAK HOUR TURNING MOVEMENT

**PROJECT TRIPS**

**ARCHBISHOP MCCARTHY  
HIGHSCHOOL**

19-105 BK 11-14-19  
REVISED 03-23-20





TOTAL (2021) VOLUMES

ARCHBISHOP MCCARTHY  
HIGHSCHOOL  
19-105 BK 11-14-19  
REVISED 03-23-20

LEGEND  
192 A.M. PEAK HOUR TURNING MOVEMENT  
(144) P.M. PEAK HOUR TURNING MOVEMENT

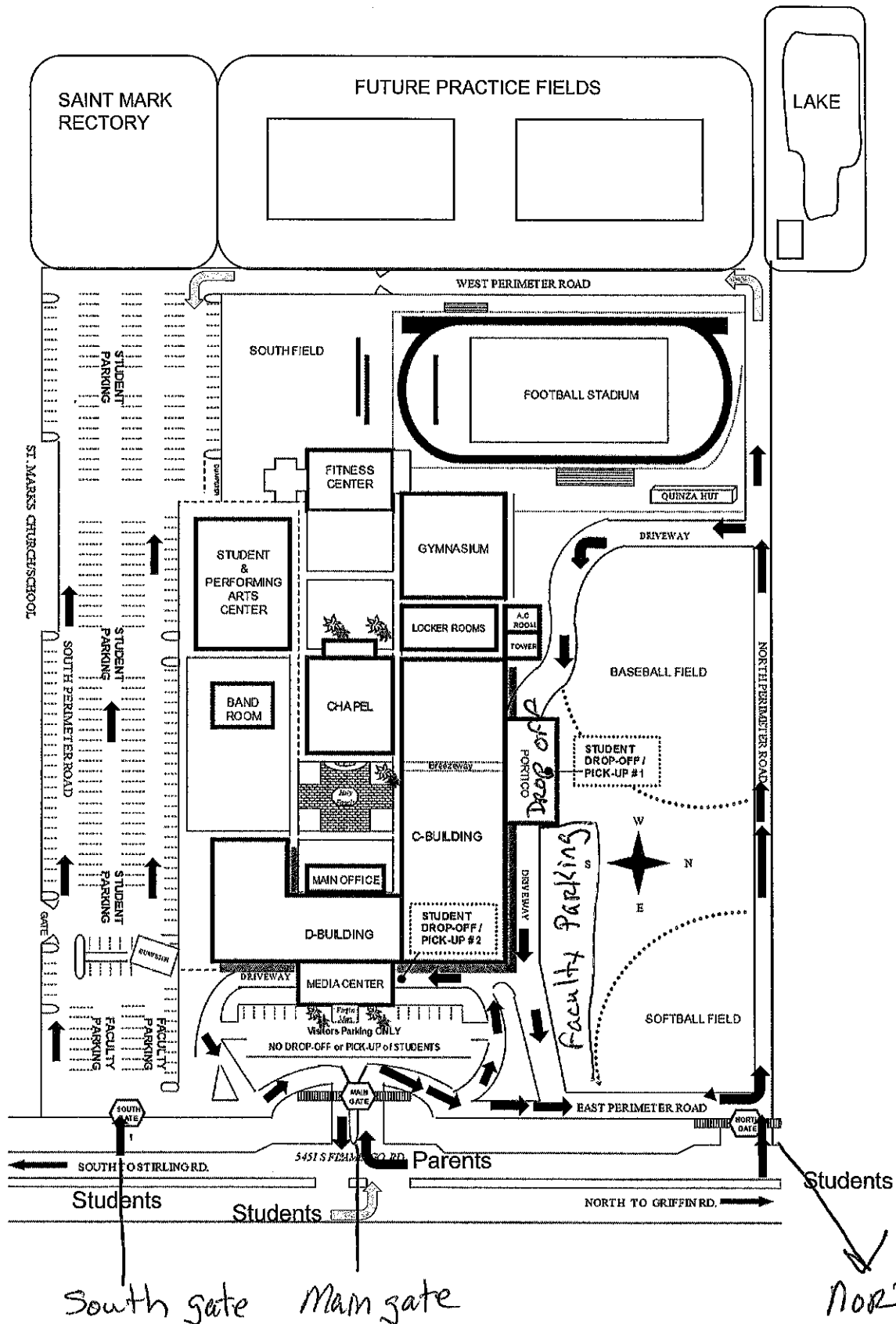
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# **APPENDIX “A”**

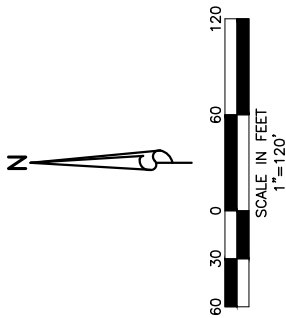
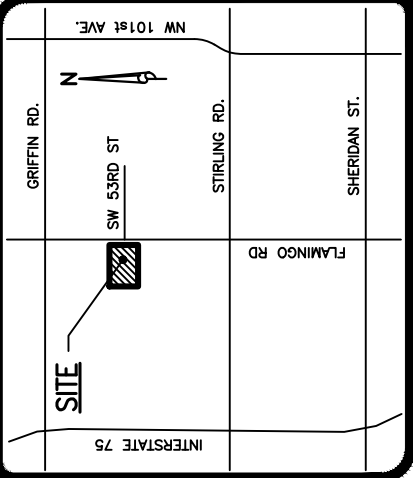
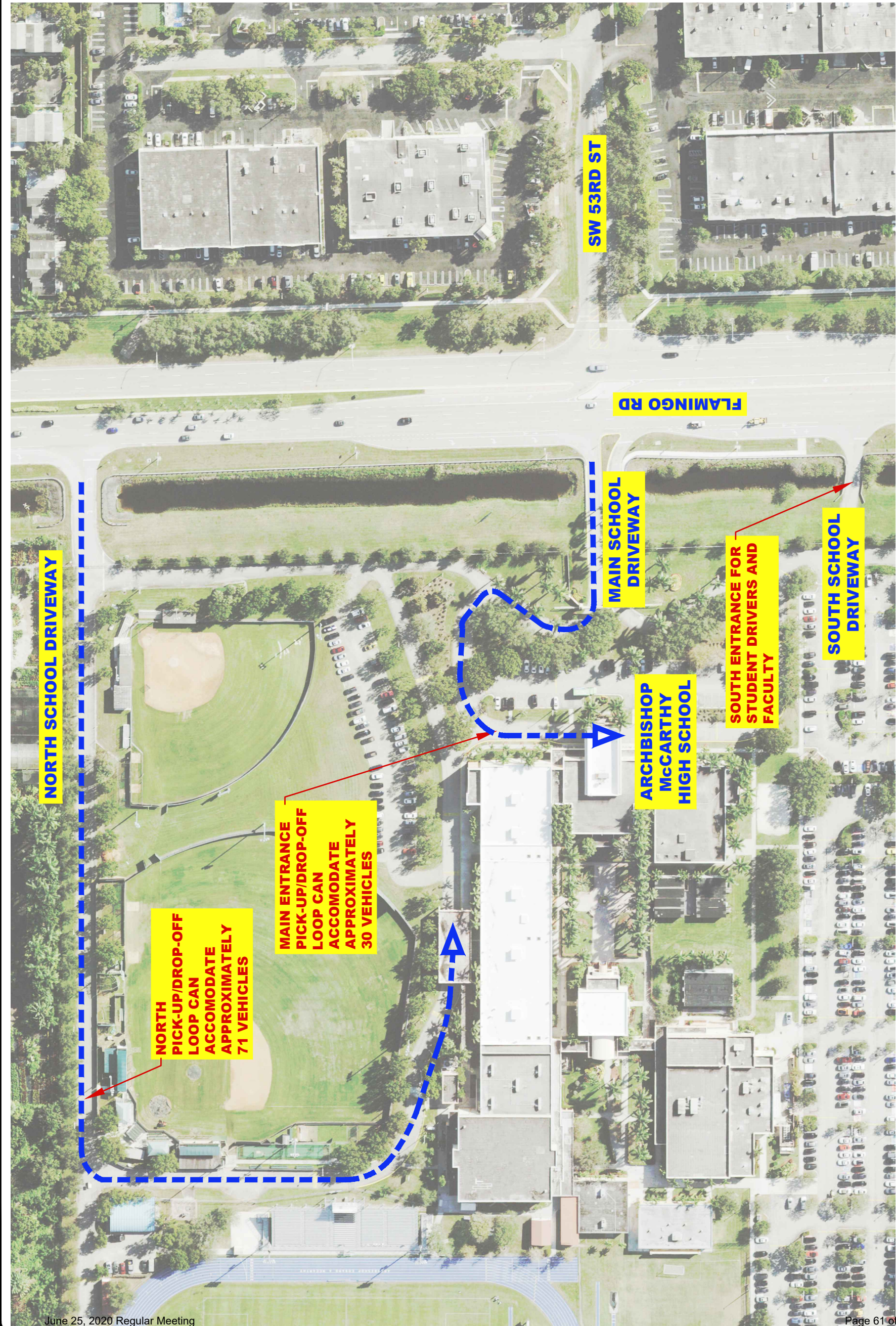
## **SCHOOL ACCESS MAP**


# **ARCHBISHOP EDWARD A. McCARTHY HIGH SCHOOL** **ACCESS TO STUDENT PARKING LOT**

Main Gate and North Gate, South Gate







				 <p><b>SIMMONS &amp; WHITE</b> PLANNING   LANDSCAPE ARCHITECTURE   CIVIL ENGINEERING 2501 Metcalf Ave., Suite 300 • Fort Worth, Texas 76107 • (817) 478-7948 Authorization No. 3452</p>									
DESIGN B.K.		DRAWN R.S.		CHECKED		APPROVED		DATE					



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## **APPENDIX “B”**

### **TRAFFIC COUNTS, QUEUE DATA, AND FDOT PSCF**

Manual Traffic Count - All Traffic  
Flamingo Rd and Griffin Rd  
Cooper City, FL

File Name : FLGRAMPM  
Site Code : SW1920  
Start Date : 9/19/2019  
Page No : 1

Groups Printed- All Traffic

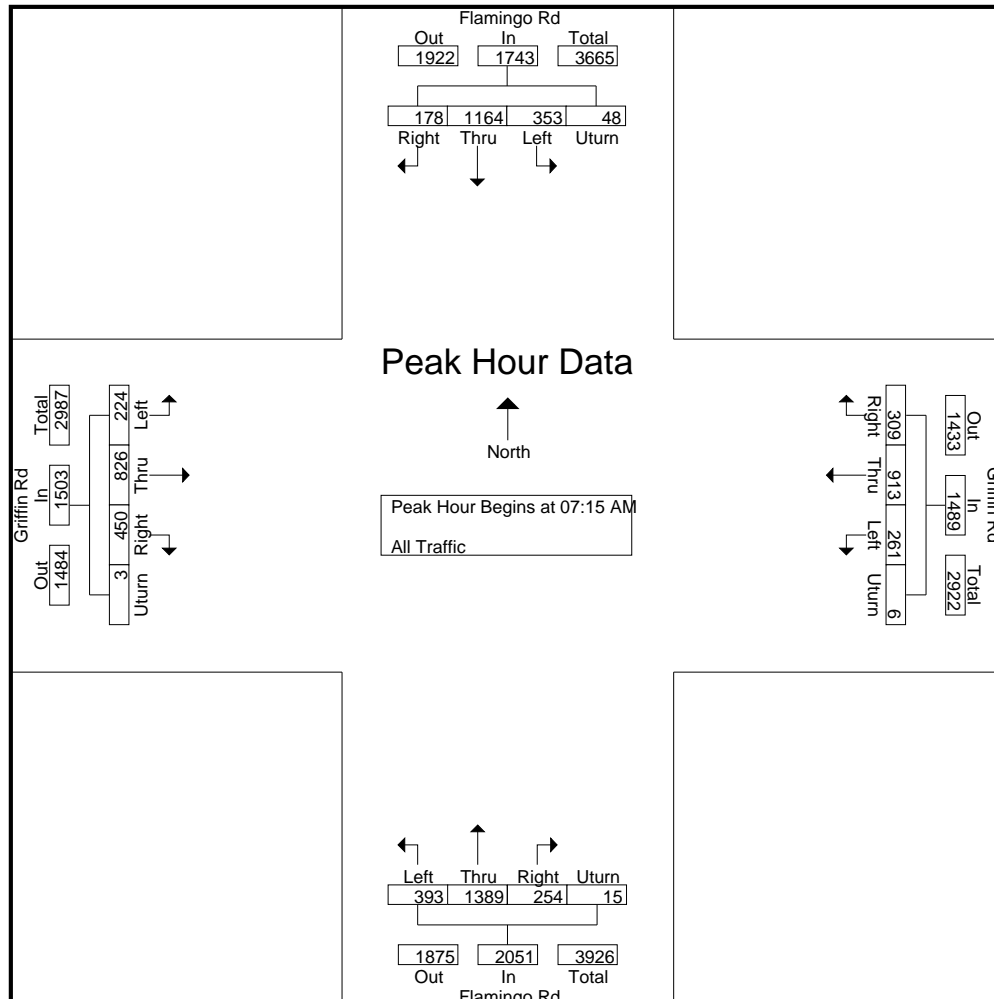
	Flamingo Rd NB					Flamingo Rd SB					Griffin Rd EB					Griffin Rd WB					
Start Time	Right	Thru	Left	Uturn	App. Total	Right	Thru	Left	Uturn	App. Total	Right	Thru	Left	Uturn	App. Total	Right	Thru	Left	Uturn	App. Total	Int. Total
06:30 AM	22	187	48	1	258	29	191	31	2	253	31	78	19	2	130	32	101	34	1	168	809
06:45 AM	27	205	53	0	285	36	209	39	3	287	38	88	23	0	149	42	116	41	0	199	920
Total	49	392	101	1	543	65	400	70	5	540	69	166	42	2	279	74	217	75	1	367	1729
07:00 AM	57	254	65	3	379	44	288	50	9	391	61	176	49	4	290	58	157	39	1	255	1315
07:15 AM	64	301	89	5	459	26	301	90	8	425	162	238	56	1	457	61	192	57	2	312	1653
07:30 AM	66	359	105	2	532	42	326	95	15	478	155	234	40	0	429	55	207	80	2	344	1783
07:45 AM	65	382	106	4	557	64	295	100	11	470	71	177	64	2	314	92	254	61	0	407	1748
Total	252	1296	365	14	1927	176	1210	335	43	1764	449	825	209	7	1490	266	810	237	5	1318	6499
08:00 AM	59	347	93	4	503	46	242	68	14	370	62	177	64	0	303	101	260	63	2	426	1602
08:15 AM	26	188	66	1	281	26	159	39	10	234	30	143	29	1	203	43	109	46	1	199	917
*** BREAK ***																					
Total	85	535	159	5	784	72	401	107	24	604	92	320	93	1	506	144	369	109	3	625	2519
*** BREAK ***																					
01:30 PM	35	196	92	1	324	26	166	45	25	262	49	142	20	21	232	36	143	55	0	234	1052
01:45 PM	42	197	69	2	310	24	212	43	11	290	59	123	40	12	234	42	136	50	1	229	1063
Total	77	393	161	3	634	50	378	88	36	552	108	265	60	33	466	78	279	105	1	463	2115
02:00 PM	52	190	82	2	326	27	184	53	14	278	65	131	26	23	245	45	181	46	2	274	1123
02:15 PM	57	190	81	2	330	25	231	67	19	342	86	150	42	24	302	42	121	72	2	237	1211
02:30 PM	54	225	99	3	381	28	268	62	26	384	55	137	57	15	264	33	114	52	0	199	1228
02:45 PM	55	275	114	1	445	39	206	62	10	317	63	156	35	14	268	51	149	84	1	285	1315
Total	218	880	376	8	1482	119	889	244	69	1321	269	574	160	76	1079	171	565	254	5	995	4877
03:00 PM	77	230	86	2	395	37	245	54	19	355	73	155	54	9	291	30	130	81	3	244	1285
03:15 PM	74	263	104	0	441	29	265	60	15	369	77	176	57	14	324	40	122	72	2	236	1370
Grand Total	832	3989	1352	33	6206	548	3788	958	211	5505	1137	2481	675	142	4435	803	2492	933	20	4248	20394
Apprch %	13.4	64.3	21.8	0.5		10	68.8	17.4	3.8		25.6	55.9	15.2	3.2		18.9	58.7	22	0.5		
Total %	4.1	19.6	6.6	0.2	30.4	2.7	18.6	4.7	1	27	5.6	12.2	3.3	0.7	21.7	3.9	12.2	4.6	0.1	20.8	



Manual Traffic Count - All Traffic  
Flamingo Rd and Griffin Rd  
Cooper City, FL

File Name : FLGRAMPM  
Site Code : SW1920  
Start Date : 9/19/2019  
Page No : 2

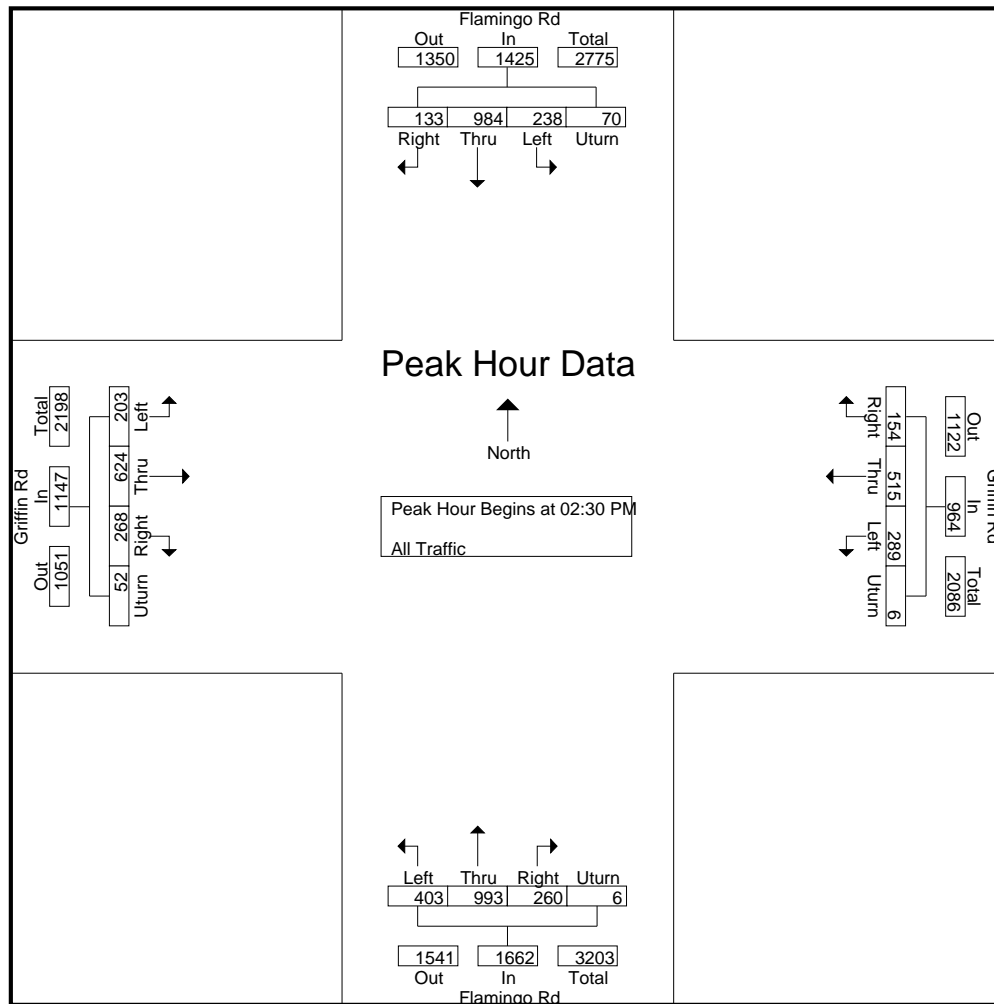
	Flamingo Rd NB					Flamingo Rd SB					Griffin Rd EB					Griffin Rd WB					
Start Time	Right	Thru	Left	Uturn	App. Total	Right	Thru	Left	Uturn	App. Total	Right	Thru	Left	Uturn	App. Total	Right	Thru	Left	Uturn	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	64	301	89	5	459	26	301	90	8	425	162	238	56	1	457	61	192	57	2	312	1653
07:30 AM	66	359	105	2	532	42	326	95	15	478	155	234	40	0	429	55	207	80	2	344	1783
07:45 AM	65	382	106	4	557	64	295	100	11	470	71	177	64	2	314	92	254	61	0	407	1748
08:00 AM	59	347	93	4	503	46	242	68	14	370	62	177	64	0	303	101	260	63	2	426	1602
Total Volume	254	1389	393	15	2051	178	1164	353	48	1743	450	826	224	3	1503	309	913	261	6	1489	6786
% App. Total	12.4	67.7	19.2	0.7		10.2	66.8	20.3	2.8		29.9	55	14.9	0.2		20.8	61.3	17.5	0.4		
PHF	.962	.909	.927	.750	.921	.695	.893	.883	.800	.912	.694	.868	.875	.375	.822	.765	.878	.816	.750	.874	.951



Manual Traffic Count - All Traffic  
Flamingo Rd and Griffin Rd  
Cooper City, FL

File Name : FLGRAMPM  
Site Code : SW1920  
Start Date : 9/19/2019  
Page No : 3

	Flamingo Rd NB					Flamingo Rd SB					Griffin Rd EB					Griffin Rd WB					
Start Time	Right	Thru	Left	Uturn	App. Total	Right	Thru	Left	Uturn	App. Total	Right	Thru	Left	Uturn	App. Total	Right	Thru	Left	Uturn	App. Total	Int. Total
Peak Hour Analysis From 01:30 PM to 03:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 02:30 PM																					
02:30 PM	54	225	99	3	381	28	268	62	26	384	55	137	57	15	264	33	114	52	0	199	1228
02:45 PM	55	275	114	1	445	39	206	62	10	317	63	156	35	14	268	51	149	84	1	285	1315
03:00 PM	77	230	86	2	395	37	245	54	19	355	73	155	54	9	291	30	130	81	3	244	1285
03:15 PM	74	263	104	0	441	29	265	60	15	369	77	176	57	14	324	40	122	72	2	236	1370
Total Volume	260	993	403	6	1662	133	984	238	70	1425	268	624	203	52	1147	154	515	289	6	964	5198
% App. Total	15.6	59.7	24.2	0.4		9.3	69.1	16.7	4.9		23.4	54.4	17.7	4.5		16	53.4	30	0.6		
PHF	.844	.903	.884	.500	.934	.853	.918	.960	.673	.928	.870	.886	.890	.867	.885	.755	.864	.860	.500	.846	.949



Manual Traffic Count - All Traffic  
Flamingo Rd & AE McCarthy HS north Gate  
Southwest Ranches, FL

File Name : FLNORTHGATE  
Site Code : SW1920  
Start Date : 9/19/2019  
Page No : 1

Groups Printed- All Traffic

Start Time	Flamingo Rd SB			North Access EB		Int. Total
	Right	Thru	App. Total	Right	App. Total	
06:30 AM	1	0	1	0	0	1
06:45 AM	13	0	13	9	9	22
Total	14	0	14	9	9	23
07:00 AM	39	0	39	22	22	61
07:15 AM	144	0	144	59	59	203
07:30 AM	234	0	234	100	100	334
07:45 AM	80	0	80	152	152	232
Total	497	0	497	333	333	830
08:00 AM	0	0	0	3	3	3
08:15 AM	0	0	0	1	1	1
*** BREAK ***						
Total	0	0	0	4	4	4
*** BREAK ***						
01:30 PM	0	0	0	1	1	1
01:45 PM	3	0	3	0	0	3
Total	3	0	3	1	1	4
02:00 PM	3	0	3	0	0	3
02:15 PM	17	0	17	2	2	19
02:30 PM	31	0	31	1	1	32
02:45 PM	41	0	41	46	46	87
Total	92	0	92	49	49	141
03:00 PM	21	0	21	61	61	82
03:15 PM	27	0	27	46	46	73
03:30 PM	8	0	8	23	23	31
Grand Total	662	0	662	526	526	1188
Apprch %	100	0		100		
Total %	55.7	0	55.7	44.3	44.3	

File Name : FLNORTHGATE  
Site Code : SW1920  
Start Date : 9/19/2019  
Page No : 2

	Flamingo Rd SB			North Access EB		
Start Time	Right	Thru	App. Total	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1						
Peak Hour for Entire Intersection Begins at 07:00 AM						
07:00 AM	39	0	39	22	22	61
07:15 AM	144	0	144	59	59	203
07:30 AM	234	0	234	100	100	334
07:45 AM	80	0	80	152	152	232
Total Volume	497	0	497	333	333	830
% App. Total	100	0		100		
PHF	.531	.000	.531	.548	.548	.621

File Name : FLNORTHGATE  
Site Code : SW1920  
Start Date : 9/19/2019  
Page No : 3

	Flamingo Rd SB			North Access EB		
Start Time	Right	Thru	App. Total	Right	App. Total	Int. Total
Peak Hour Analysis From 01:30 PM to 03:15 PM - Peak 1 of 1						
Peak Hour for Entire Intersection Begins at 02:30 PM						
02:30 PM	31	0	31	1	1	32
02:45 PM	41	0	41	46	46	87
03:00 PM	21	0	21	61	61	82
03:15 PM	27	0	27	46	46	73
Total Volume	120	0	120	154	154	274
% App. Total	100	0		100		
PHF	.732	.000	.732	.631	.631	.787

Manual Traffic Count - All Traffic  
Flamingo Rd and School Access/SW 53rd  
Southwest Ranches, FL

File Name : FLSCHMAIN  
Site Code : SW1920  
Start Date : 9/19/2019  
Page No : 1

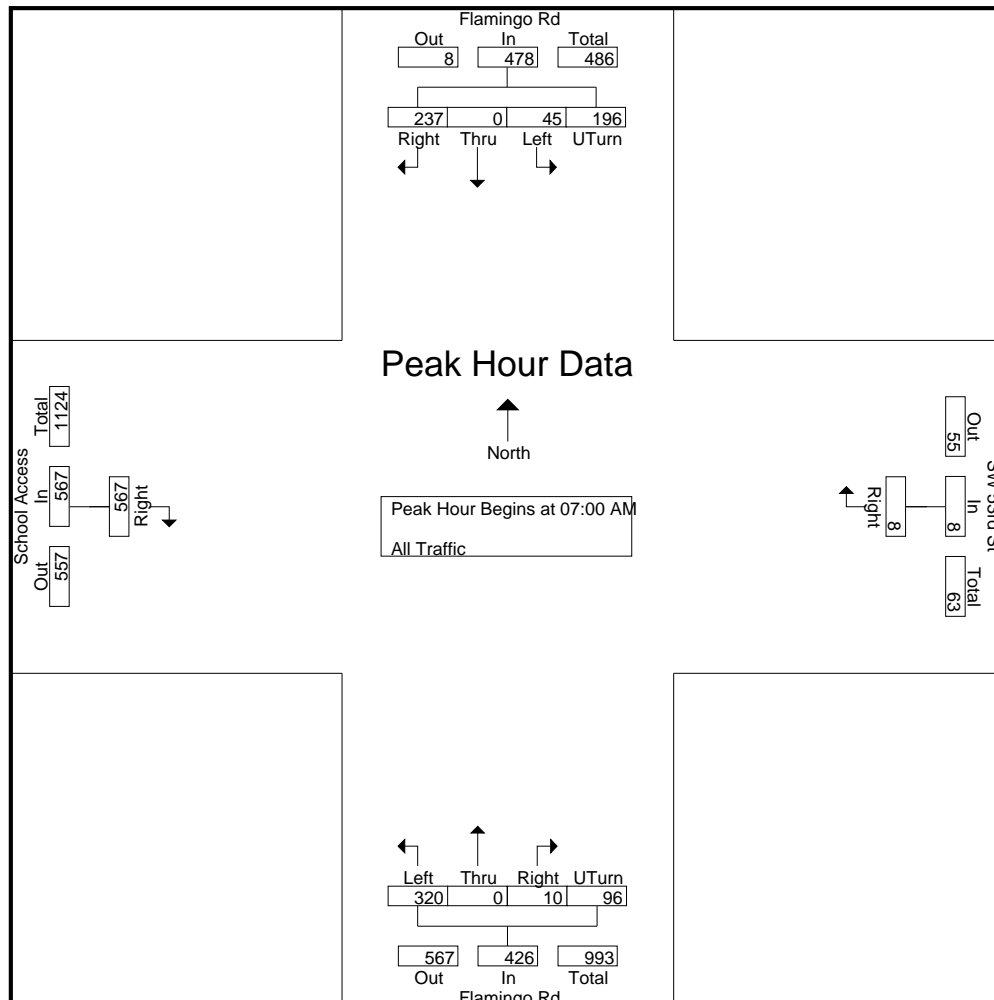
Groups Printed- All Traffic

	Flamingo Rd NB					Flamingo Rd SB					School Access EB		SW 53rd St WB		
Start Time	Right	Thru	Left	UTurn	App. Total	Right	Thru	Left	UTurn	App. Total	Right	App. Total	Right	App. Total	Int. Total
06:30 AM	6	0	2	4	12	4	0	11	0	15	3	3	0	0	30
06:45 AM	13	0	14	4	31	19	0	31	7	57	11	11	8	8	107
Total	19	0	16	8	43	23	0	42	7	72	14	14	8	8	137
07:00 AM	5	0	35	11	51	33	0	12	10	55	71	71	6	6	183
07:15 AM	0	0	97	25	122	74	0	15	44	133	127	127	1	1	383
07:30 AM	1	0	109	37	147	102	0	6	63	171	195	195	0	0	513
07:45 AM	4	0	79	23	106	28	0	12	79	119	174	174	1	1	400
Total	10	0	320	96	426	237	0	45	196	478	567	567	8	8	1479
08:00 AM	0	0	4	2	6	9	0	8	26	43	16	16	0	0	65
08:15 AM	0	0	2	2	4	0	0	0	8	8	8	8	0	0	20
*** BREAK ***															
Total	0	0	6	4	10	9	0	8	34	51	24	24	0	0	85
*** BREAK ***															
01:30 PM	2	0	7	0	9	11	0	15	1	27	2	2	12	12	50
01:45 PM	6	0	17	2	25	12	0	7	3	22	12	12	9	9	68
Total	8	0	24	2	34	23	0	22	4	49	14	14	21	21	118
02:00 PM	7	0	21	8	36	17	0	7	2	26	7	7	7	7	76
02:15 PM	7	0	22	4	33	4	0	13	3	20	3	3	6	6	62
02:30 PM	7	0	30	0	37	22	0	9	50	81	97	97	11	11	226
02:45 PM	1	0	30	2	33	52	0	20	37	109	98	98	7	7	247
Total	22	0	103	14	139	95	0	49	92	236	205	205	31	31	611
03:00 PM	6	0	52	6	64	42	0	21	29	92	102	102	13	13	271
03:15 PM	8	0	55	7	70	48	0	23	14	85	88	88	10	10	253
Grand Total	73	0	576	137	786	477	0	210	376	1063	1014	1014	91	91	2954
Apprch %	9.3	0	73.3	17.4		44.9	0	19.8	35.4		100		100		
Total %	2.5	0	19.5	4.6	26.6	16.1	0	7.1	12.7	36	34.3	34.3	3.1	3.1	

Manual Traffic Count - All Traffic  
Flamingo Rd and School Access/SW 53rd  
Southwest Ranches, FL

File Name : FLSCHMAIN  
Site Code : SW1920  
Start Date : 9/19/2019  
Page No : 2

	Flamingo Rd NB					Flamingo Rd SB					School Access EB		SW 53rd St WB		
Start Time	Right	Thru	Left	UTurn	App. Total	Right	Thru	Left	UTurn	App. Total	Right	App. Total	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1															
Peak Hour for Entire Intersection Begins at 07:00 AM															
07:00 AM	5	0	35	11	51	33	0	12	10	55	71	71	6	6	183
07:15 AM	0	0	97	25	122	74	0	15	44	133	127	127	1	1	383
07:30 AM	1	0	109	37	147	102	0	6	63	171	195	195	0	0	513
07:45 AM	4	0	79	23	106	28	0	12	79	119	174	174	1	1	400
Total Volume	10	0	320	96	426	237	0	45	196	478	567	567	8	8	1479
% App. Total	2.3	0	75.1	22.5		49.6	0	9.4	41		100		100		
PHF	.500	.000	.734	.649	.724	.581	.000	.750	.620	.699	.727	.727	.333	.333	.721

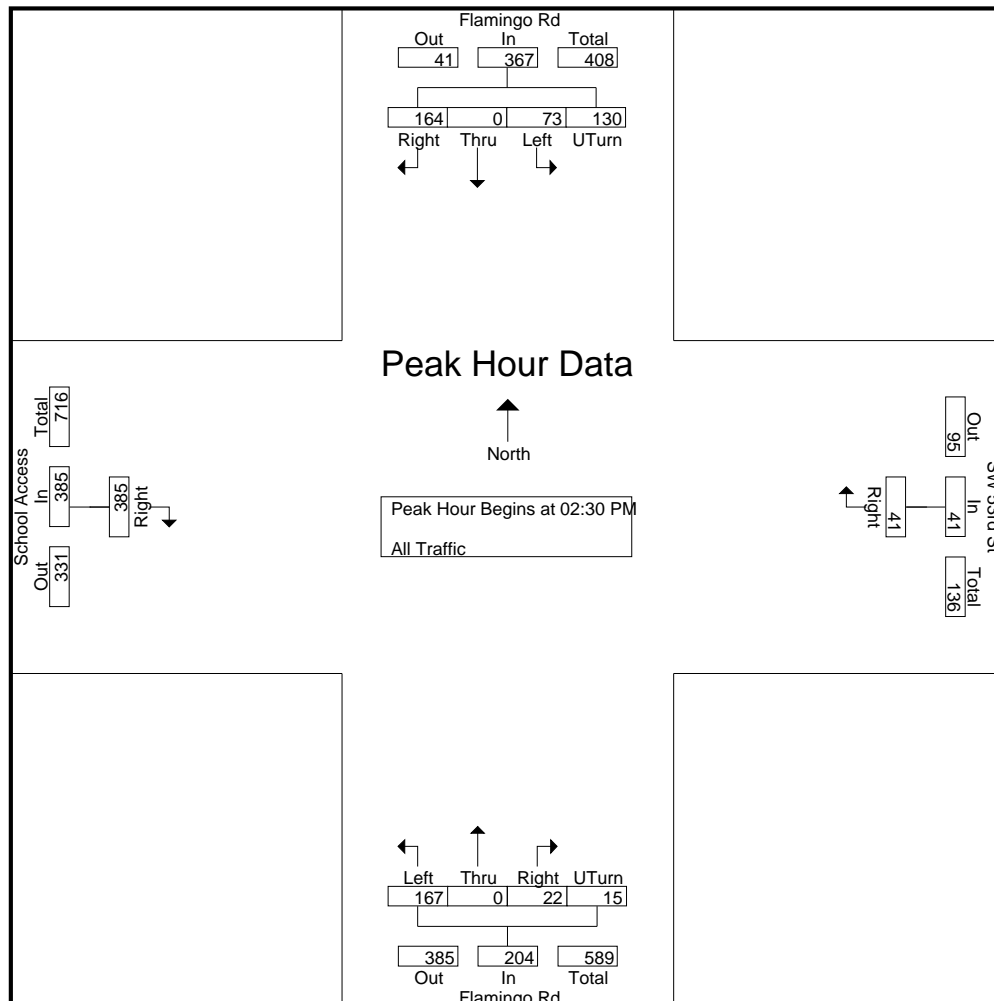




Manual Traffic Count - All Traffic  
Flamingo Rd and School Access/SW 53rd  
Southwest Ranches, FL

File Name : FLSCHMAIN  
Site Code : SW1920  
Start Date : 9/19/2019  
Page No : 3

	Flamingo Rd NB					Flamingo Rd SB					School Access EB		SW 53rd St WB		
Start Time	Right	Thru	Left	UTurn	App. Total	Right	Thru	Left	UTurn	App. Total	Right	App. Total	Right	App. Total	Int. Total
Peak Hour Analysis From 01:30 PM to 03:15 PM - Peak 1 of 1															
Peak Hour for Entire Intersection Begins at 02:30 PM															
02:30 PM	7	0	30	0	37	22	0	9	50	81	97	97	11	11	226
02:45 PM	1	0	30	2	33	52	0	20	37	109	98	98	7	7	247
03:00 PM	6	0	52	6	64	42	0	21	29	92	102	102	13	13	271
03:15 PM	8	0	55	7	70	48	0	23	14	85	88	88	10	10	253
Total Volume	22	0	167	15	204	164	0	73	130	367	385	385	41	41	997
% App. Total	10.8	0	81.9	7.4		44.7	0	19.9	35.4		100		100		
PHF	.688	.000	.759	.536	.729	.788	.000	.793	.650	.842	.944	.944	.788	.788	.920



Manual Traffic Count - All Traffic  
Flamingo Rd and South Gate

File Name : AM  
Site Code : SW1920  
Start Date : 9/19/2019  
Page No : 1

Groups Printed- ALL TRAFFIC

	Flamingo Rd NB					Flamingo Rd SB					South Gate EB					WB					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
06:30 AM	0	0	0	0	0	4	0	0	0	4	1	0	0	1	2	0	0	0	0	0	6
06:45 AM	0	0	0	0	0	19	0	0	0	19	0	0	0	0	0	0	0	0	0	0	19
Total	0	0	0	0	0	23	0	0	0	23	1	0	0	1	2	0	0	0	0	0	25
07:00 AM	0	0	0	0	0	18	0	0	0	18	0	0	0	0	0	0	0	0	0	0	18
07:15 AM	0	0	0	0	0	42	0	0	0	42	0	0	0	0	0	0	0	0	0	0	42
07:30 AM	0	0	0	0	0	47	0	0	0	47	0	0	0	0	0	0	0	0	0	0	47
07:45 AM	0	0	9	7	16	16	0	0	7	23	33	0	0	0	33	0	0	0	0	0	72
Total	0	0	9	7	16	123	0	0	7	130	33	0	0	0	33	0	0	0	0	0	179
08:00 AM	0	0	0	0	0	0	0	0	0	0	10	0	0	0	10	0	0	0	0	0	10
08:15 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Grand Total	0	0	9	7	16	147	0	0	7	154	44	0	0	1	45	0	0	0	0	0	215
Apprch %	0	0	56.2	43.8		95.5	0	0	4.5		97.8	0	0	2.2		0	0	0	0		
Total %	0	0	4.2	3.3	7.4	68.4	0	0	3.3	71.6	20.5	0	0	0.5	20.9	0	0	0	0	0	

Manual Traffic Count - All Traffic  
Flamingo Rd and South Gate

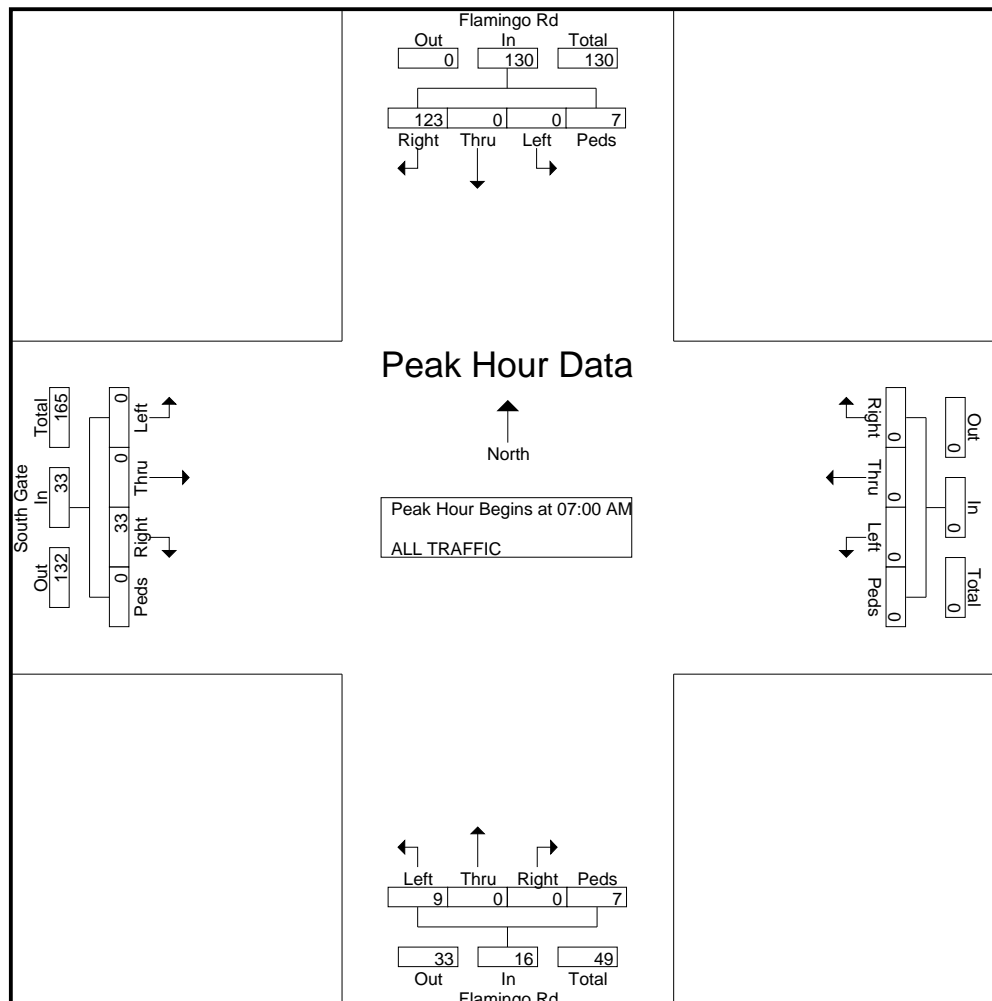
File Name : AM  
Site Code : SW1920  
Start Date : 9/19/2019  
Page No : 2

	Flamingo Rd NB					Flamingo Rd SB					South Gate EB					WB					
Start Time	Rig ht	Thr u	Lef t	Pe ds	App. Total	Right	Thr u	Lef t	Pe ds	App. Total	Right	Thr u	Lef t	Pe ds	App. Total	Right	Thr u	Lef t	Pe ds	App. Total	Int. Total

Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:00 AM

07:00 AM	0	0	0	0	0	18	0	0	0	18	0	0	0	0	0	0	0	0	0	0	18
07:15 AM	0	0	0	0	0	42	0	0	0	42	0	0	0	0	0	0	0	0	0	0	42
07:30 AM	0	0	0	0	0	47	0	0	0	47	0	0	0	0	0	0	0	0	0	0	47
07:45 AM	0	0	9	7	16	16	0	0	7	23	33	0	0	0	33	0	0	0	0	0	72
Total Volume	0	0	9	7	16	123	0	0	7	130	33	0	0	0	33	0	0	0	0	0	179
% App. Total	0	0	56.2	43.8		94.6	0	0	5.4		100	0	0	0		0	0	0	0		
PHF	.000	.000	.250	.250	.250	.654	.000	.000	.250	.691	.250	.000	.000	.000	.250	.000	.000	.000	.000	.000	.622



Manual Traffic Count - All Traffic  
Flamingo Rd and South Gate

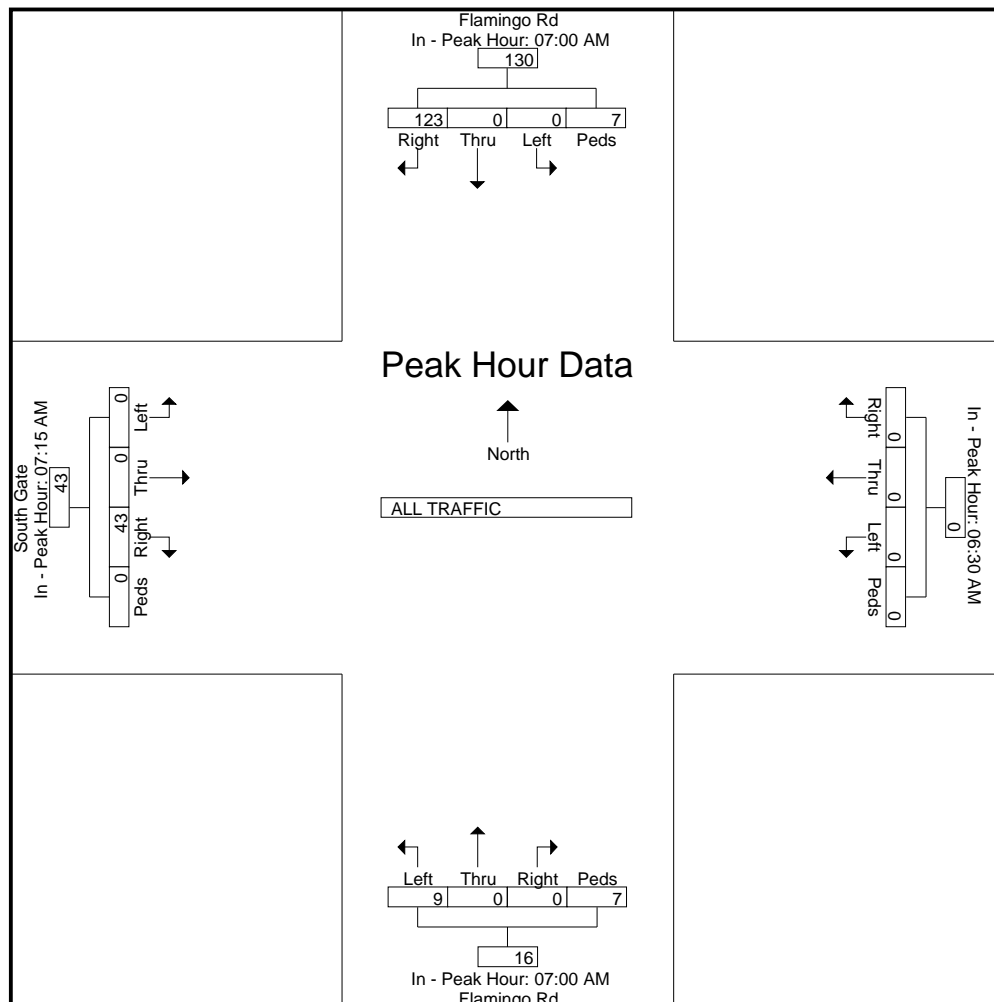
File Name : AM  
Site Code : SW1920  
Start Date : 9/19/2019  
Page No : 3

	Flamingo Rd NB					Flamingo Rd SB					South Gate EB					WB					
Start Time	Rig ht	Thr u	Lef t	Pe ds	App. Total	Right	Thr u	Lef t	Pe ds	App. Total	Right	Thr u	Lef t	Pe ds	App. Total	Right	Thr u	Lef t	Pe ds	App. Total	Int. Total

Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM					07:00 AM					07:15 AM					06:30 AM				
+0 mins.	0	0	0	0	0	18	0	0	0	18	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	42	0	0	0	42	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	47	0	0	0	47	33	0	0	0	33	0	0	0	0	0
+45 mins.	0	0	9	7	16	16	0	0	7	23	10	0	0	0	10	0	0	0	0	0
Total Volume	0	0	9	7	16	123	0	0	7	130	43	0	0	0	43	0	0	0	0	0
% App. Total	0	0	56.2	43.8		94.6	0	0	5.4		100	0	0	0		0	0	0	0	
PHF	.000	.000	.250	.250	.250	.654	.000	.000	.250	.691	.326	.000	.000	.000	.326	.000	.000	.000	.000	.000



Manual Traffic Count - All Traffic  
Flamingo SB and South Gate

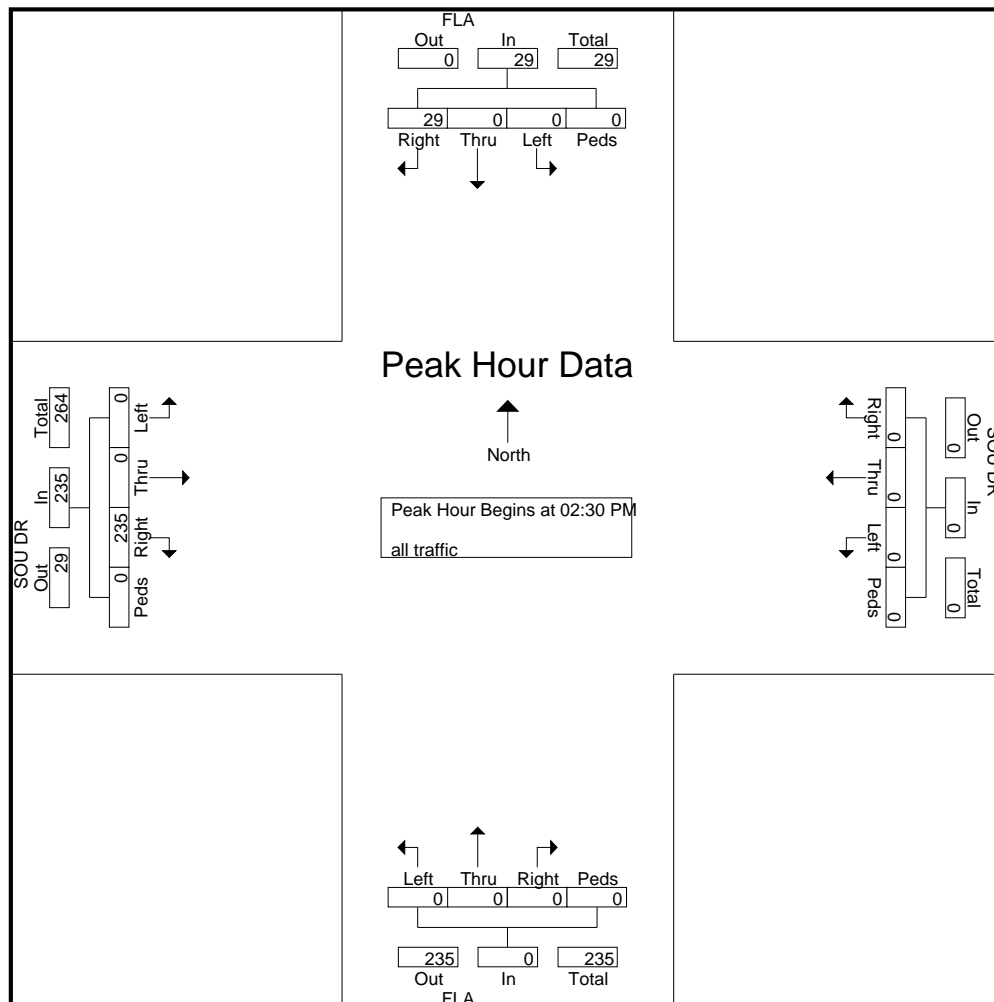
File Name : PM  
Site Code : SW1920  
Start Date : 9/17/2019  
Page No : 1

Groups Printed- all traffic

Start Time	FLA NB					FLA SB					SOU DR EB					SOU DR WB					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
01:30 PM	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
01:45 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
02:00 PM	0	0	0	0	0	8	0	0	0	8	0	0	0	0	0	0	0	0	0	0	8
02:15 PM	0	0	0	0	0	9	0	0	0	9	0	0	0	0	0	0	0	0	0	0	9
02:30 PM	0	0	0	0	0	3	0	0	0	3	61	0	0	0	61	0	0	0	0	0	64
02:45 PM	0	0	0	0	0	5	0	0	0	5	61	0	0	0	61	0	0	0	0	0	66
Total	0	0	0	0	0	25	0	0	0	25	122	0	0	0	122	0	0	0	0	0	147
03:00 PM	0	0	0	0	0	9	0	0	0	9	60	0	0	0	60	0	0	0	0	0	69
03:15 PM	0	0	0	0	0	12	0	0	0	12	53	0	0	0	53	0	0	0	0	0	65
Grand Total	0	0	0	0	0	49	0	0	0	49	235	0	0	0	235	0	0	0	0	0	284
Apprch %	0	0	0	0	0	100	0	0	0	100	100	0	0	0	100	0	0	0	0	0	
Total %	0	0	0	0	0	17.3	0	0	0	17.3	82.7	0	0	0	82.7	0	0	0	0	0	

File Name : PM  
Site Code : SW1920  
Start Date : 9/17/2019  
Page No : 2

	FLA NB					FLA SB					SOU DR EB					SOU DR WB					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 01:30 PM to 03:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 02:30 PM																					
02:30 PM	0	0	0	0	0	3	0	0	0	3	61	0	0	0	61	0	0	0	0	0	64
02:45 PM	0	0	0	0	0	5	0	0	0	5	61	0	0	0	61	0	0	0	0	0	66
03:00 PM	0	0	0	0	0	9	0	0	0	9	60	0	0	0	60	0	0	0	0	0	69
03:15 PM	0	0	0	0	0	12	0	0	0	12	53	0	0	0	53	0	0	0	0	0	65
Total Volume	0	0	0	0	0	29	0	0	0	29	235	0	0	0	235	0	0	0	0	0	264
% App. Total	0	0	0	0		100	0	0	0		100	0	0	0		0	0	0	0		
PHF	.000	.000	.000	.000	.000	.604	.000	.000	.000	.604	.963	.000	.000	.000	.963	.000	.000	.000	.000	.000	.957





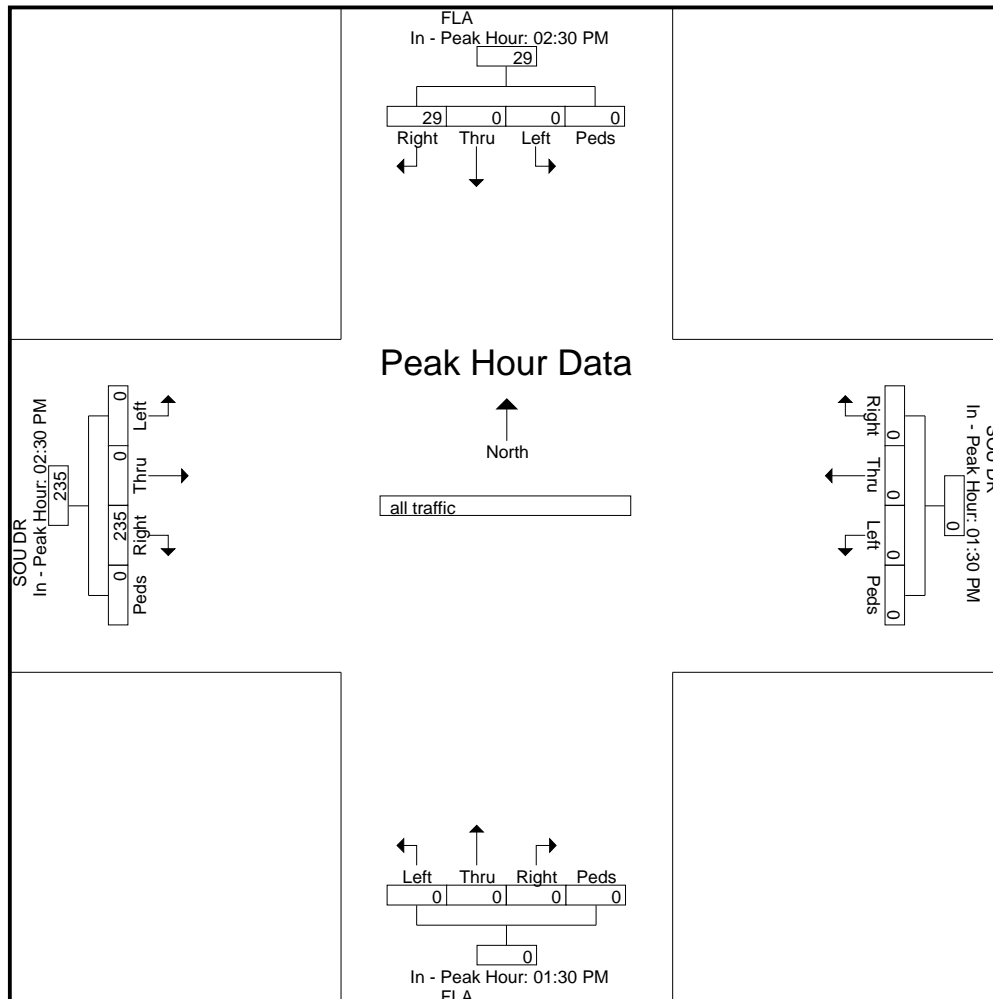
File Name : PM  
Site Code : SW1920  
Start Date : 9/17/2019  
Page No : 3

	FLA NB					FLA SB					SOU DR EB					SOU DR WB					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total

Peak Hour Analysis From 01:30 PM to 03:15 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	01:30 PM					02:30 PM					02:30 PM					01:30 PM				
+0 mins.	0	0	0	0	0	3	0	0	0	3	61	0	0	0	61	0	0	0	0	0
+15 mins.	0	0	0	0	0	5	0	0	0	5	61	0	0	0	61	0	0	0	0	0
+30 mins.	0	0	0	0	0	9	0	0	0	9	60	0	0	0	60	0	0	0	0	0
+45 mins.	0	0	0	0	0	12	0	0	0	12	53	0	0	0	53	0	0	0	0	0
Total Volume	0	0	0	0	0	29	0	0	0	29	235	0	0	0	235	0	0	0	0	0
% App. Total	0	0	0	0	0	100	0	0	0	0	100	0	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.604	.000	.000	.000	.604	.963	.000	.000	.000	.963	.000	.000	.000	.000	.000



Manual Traffic Count - All Traffic  
Flamingo Rd and SW55th St  
Southwest Ranches, FL

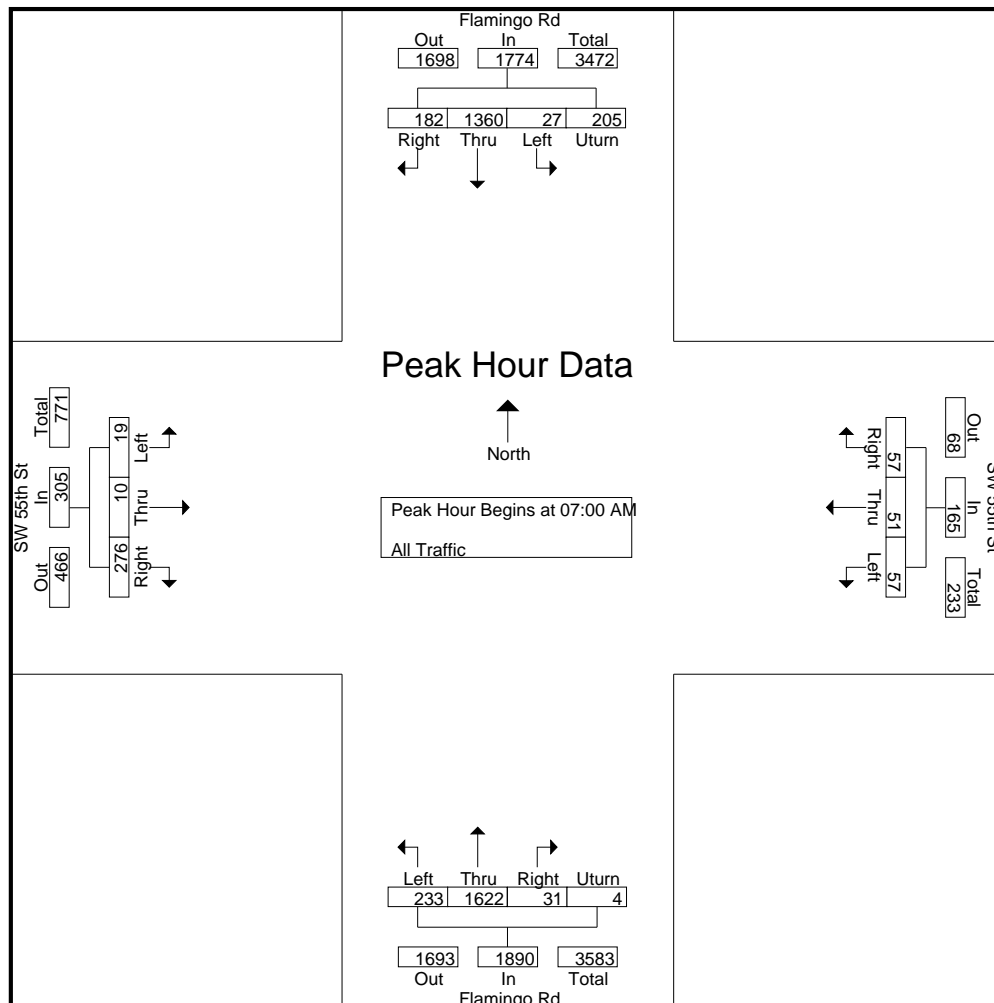
File Name : AMPMTMC  
Site Code : SW1920  
Start Date : 9/19/2019  
Page No : 1

Groups Printed- All Traffic

	Flamingo Rd NB					Flamingo Rd SB					SW 55th St EB				SW 55th St WB				
Start Time	Right	Thru	Left	Uturn	App. Total	Right	Thru	Left	Uturn	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
06:30 AM	0	205	9	3	217	6	191	1	0	198	0	0	0	0	0	0	1	1	416
06:45 AM	5	225	50	0	280	41	196	4	3	244	10	0	0	10	1	0	1	2	536
Total	5	430	59	3	497	47	387	5	3	442	10	0	0	10	1	0	2	3	952
07:00 AM	8	360	24	1	393	27	333	2	24	386	21	0	2	23	9	6	9	24	826
07:15 AM	9	429	114	0	552	99	302	7	45	453	91	0	0	91	12	17	25	54	1150
07:30 AM	8	434	60	0	502	47	447	4	61	559	105	9	4	118	17	25	11	53	1232
07:45 AM	6	399	35	3	443	9	278	14	75	376	59	1	13	73	19	3	12	34	926
Total	31	1622	233	4	1890	182	1360	27	205	1774	276	10	19	305	57	51	57	165	4134
08:00 AM	6	386	5	5	402	12	322	6	6	346	2	0	2	4	14	1	8	23	775
*** BREAK ***																			
Total	6	386	5	5	402	12	322	6	6	346	2	0	2	4	14	1	8	23	775
*** BREAK ***																			
01:30 PM	0	220	16	1	237	2	212	19	2	235	3	0	2	5	36	1	18	55	532
01:45 PM	5	279	24	2	310	4	232	16	0	252	5	0	2	7	24	5	30	59	628
Total	5	499	40	3	547	6	444	35	2	487	8	0	4	12	60	6	48	114	1160
02:00 PM	8	301	15	4	328	3	219	9	3	234	6	0	2	8	20	4	20	44	614
02:15 PM	2	318	24	3	347	12	265	21	8	306	6	1	2	9	38	2	19	59	721
02:30 PM	11	326	12	14	363	15	334	15	12	376	21	0	4	25	15	1	24	40	804
02:45 PM	10	297	51	10	368	21	384	11	10	426	56	1	18	75	28	6	12	46	915
Total	31	1242	102	31	1406	51	1202	56	33	1342	89	2	26	117	101	13	75	189	3054
03:00 PM	4	372	32	4	412	43	377	13	13	446	66	3	39	108	29	9	23	61	1027
03:15 PM	6	378	13	4	401	31	344	23	12	410	54	0	39	93	30	3	16	49	953
Grand Total	88	4929	484	54	5555	372	4436	165	274	5247	505	15	129	649	292	83	229	604	12055
Apprch %	1.6	88.7	8.7	1		7.1	84.5	3.1	5.2		77.8	2.3	19.9		48.3	13.7	37.9		
Total %	0.7	40.9	4	0.4	46.1	3.1	36.8	1.4	2.3	43.5	4.2	0.1	1.1	5.4	2.4	0.7	1.9	5	

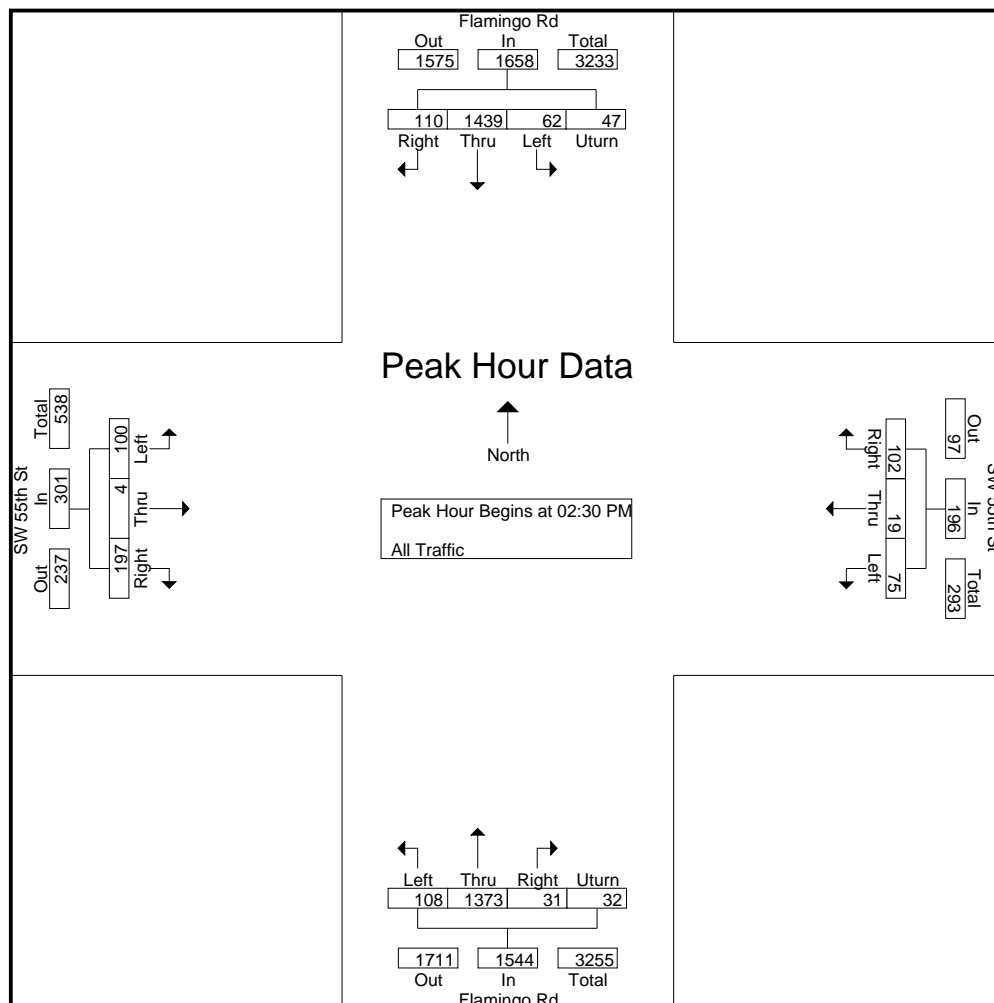
File Name : AMPMTMC  
Site Code : SW1920  
Start Date : 9/19/2019  
Page No : 2

	Flamingo Rd NB					Flamingo Rd SB					SW 55th St EB				SW 55th St WB				
Start Time	Right	Thru	Left	Uturn	App. Total	Right	Thru	Left	Uturn	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1																			
Peak Hour for Entire Intersection Begins at 07:00 AM																			
07:00 AM	8	360	24	1	393	27	333	2	24	386	21	0	2	23	9	6	9	24	826
07:15 AM	9	429	114	0	552	99	302	7	45	453	91	0	0	91	12	17	25	54	1150
07:30 AM	8	434	60	0	502	47	447	4	61	559	105	9	4	118	17	25	11	53	1232
07:45 AM	6	399	35	3	443	9	278	14	75	376	59	1	13	73	19	3	12	34	926
Total Volume	31	1622	233	4	1890	182	1360	27	205	1774	276	10	19	305	57	51	57	165	4134
% App. Total																			
PHF	.861	.934	.511	.333	.856	.460	.761	.482	.683	.793	.657	.278	.365	.646	.750	.510	.570	.764	.839



File Name : AMPMTMC  
Site Code : SW1920  
Start Date : 9/19/2019  
Page No : 3

	Flamingo Rd NB					Flamingo Rd SB					SW 55th St EB				SW 55th St WB				
Start Time	Right	Thru	Left	Uturn	App. Total	Right	Thru	Left	Uturn	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 01:30 PM to 03:15 PM - Peak 1 of 1																			
Peak Hour for Entire Intersection Begins at 02:30 PM																			
02:30 PM	11	326	12	14	363	15	334	15	12	376	21	0	4	25	15	1	24	40	804
02:45 PM	10	297	51	10	368	21	384	11	10	426	56	1	18	75	28	6	12	46	915
03:00 PM	4	372	32	4	412	43	377	13	13	446	66	3	39	108	29	9	23	61	1027
03:15 PM	6	378	13	4	401	31	344	23	12	410	54	0	39	93	30	3	16	49	953
Total Volume	31	1373	108	32	1544	110	1439	62	47	1658	197	4	100	301	102	19	75	196	3699
% App. Total																			
PHF	.705	.908	.529	.571	.937	.640	.937	.674	.904	.929	.746	.333	.641	.697	.850	.528	.781	.803	.900



Flamingo 700 feet north oh sw 53rd st

Date Start: 9/19/2019  
Date End: 9/19/2019  
Site Code: SW1920

Start Time	9/19/2019 Thu	NB Flamin								
12:00 AM		32								
12:15		41								
12:30		28								
12:45		24								
01:00		19								
01:15		22								
01:30		15								
01:45		14								
02:00		19								
02:15		14								
02:30		11								
02:45		17								
03:00		12								
03:15		7								
03:30		16								
03:45		19								
04:00		12								
04:15		16								
04:30		34								
04:45		36								
05:00		24								
05:15		42								
05:30		73								
05:45		79								
06:00		106								
06:15		145								
06:30		201								
06:45		225								
07:00		348								
07:15		<b>407</b>								
07:30		<b>484</b>								
07:45		<b>502</b>								
08:00		<b>413</b>								
08:15		387								
08:30		386								
08:45		342								
09:00		275								
09:15		255								
09:30		262								
09:45		262								
10:00		241								
10:15		258								
10:30		256								
10:45		232								
11:00		232								
11:15		243								
11:30		241								
11:45		252								
Total		7581								
Peak	-	07:15	-	-	-	-	-	-	-	-
Vol.	-	1806	-	-	-	-	-	-	-	-
P.H.F.		0.899								

Flamingo 700 feet north oh sw 53rd st

Date Start: 9/19/2019  
Date End: 9/19/2019  
Site Code: SW1920

Start Time	9/19/2019	NB Flamin								
12:00 PM		251								
12:15		255								
12:30		315								
12:45		271								
01:00		323								
01:15		268								
01:30		282								
01:45		248								
02:00		275								
02:15		262								
02:30		411								
02:45		437								
03:00		437								
03:15		388								
03:30		418								
03:45		427								
04:00		363								
04:15		372								
04:30		386								
04:45		413								
05:00		432								
05:15		403								
05:30		428								
05:45		410								
06:00		418								
06:15		412								
06:30		315								
06:45		303								
07:00		291								
07:15		285								
07:30		263								
07:45		270								
08:00		271								
08:15		259								
08:30		206								
08:45		192								
09:00		200								
09:15		214								
09:30		167								
09:45		140								
10:00		97								
10:15		136								
10:30		87								
10:45		73								
11:00		82								
11:15		59								
11:30		53								
11:45		46								
Total		13314								
Peak	-	14:45	-	-	-	-	-	-	-	-
Vol.	-	1680	-	-	-	-	-	-	-	-
P.H.F.		0.961								
Total		20895								
Percent										
ADT	ADT 20,864	AADT 20,864								



On Flamingo Rd approximately 270 feet north  
of Archbishop Edward A. McCarthy HS north Access

www.kmftraffic.net - Stuart, FL 34997  
(772) 221-7971

Date Start: 9/19/2019  
Date End: 9/19/2019  
Site Code: SW1920

Start Time	9/19/2019 Thu	SB Flamin								
12:00 AM		34								
12:15		36								
12:30		26								
12:45		29								
01:00		17								
01:15		13								
01:30		13								
01:45		12								
02:00		15								
02:15		6								
02:30		6								
02:45		17								
03:00		7								
03:15		8								
03:30		7								
03:45		10								
04:00		6								
04:15		14								
04:30		22								
04:45		26								
05:00		37								
05:15		44								
05:30		64								
05:45		87								
06:00		95								
06:15		125								
06:30		187								
06:45		301								
07:00		<b>376</b>								
07:15		<b>526</b>								
07:30		<b>587</b>								
07:45		<b>442</b>								
08:00		327								
08:15		347								
08:30		336								
08:45		319								
09:00		264								
09:15		312								
09:30		246								
09:45		273								
10:00		216								
10:15		202								
10:30		231								
10:45		186								
11:00		247								
11:15		213								
11:30		231								
11:45		249								
Total		7394								
Peak	-	07:00	-	-	-	-	-	-	-	-
Vol.	-	1931	-	-	-	-	-	-	-	-
P.H.F.		0.822								

On Flamingo Rd approximately 270 feet north  
of Archbishop Edward A. McCarthy HS north Access

Date Start: 9/19/2019  
Date End: 9/19/2019  
Site Code: SW1920

Start Time	9/19/2019	SB Flamin								
12:00 PM		251								
12:15		269								
12:30		252								
12:45		243								
01:00		261								
01:15		257								
01:30		253								
01:45		292								
02:00		288								
02:15		376								
02:30		396								
02:45		327								
03:00		365								
03:15		389								
03:30		382								
03:45		397								
04:00		318								
04:15		384								
04:30		402								
04:45		391								
05:00		431								
05:15		500								
05:30		501								
05:45		514								
06:00		471								
06:15		471								
06:30		390								
06:45		335								
07:00		304								
07:15		268								
07:30		267								
07:45		240								
08:00		228								
08:15		227								
08:30		224								
08:45		165								
09:00		137								
09:15		168								
09:30		143								
09:45		129								
10:00		114								
10:15		99								
10:30		81								
10:45		58								
11:00		70								
11:15		49								
11:30		62								
11:45		31								
Total		13170								
Peak	-	17:15	-	-	-	-	-	-	-	-
Vol.	-	1986	-	-	-	-	-	-	-	-
P.H.F.		0.966								
Total		20564								
Percent										
ADT	ADT 20,564	AADT 20,564								

## KMF Traffic Group, LLC

### AM Queue Study at Archbishop Edward A. McCarthy High School North Access



QUEUE	TIME OF DAY (h.m)
1	6:45
0	6:47
1	6:50
1	7:05
1	7:08
1	7:09
1	7:10
2	7:11
2	7:12
1	7:13
1	7:14
2	7:15
4	7:16
3	7:18
2	7:19
5	7:22
3	7:23
4	7:24
3	7:25
4	7:26
5	7:27
9	7:28
8	7:29
5	7:30
7	7:31

## KMF Traffic Group, LLC

### AM Queue Study at Archbishop Edward A. McCarthy High School North Access



QUEUE	TIME OF DAY (h.m)
10	7:33
5	7:34
6	7:35
10	7:36
10	7:37
10	7:38
10	7:39
12	7:40
10	7:42
6	7:44
11	7:45
13	7:46
16	7:47
10	7:48
7	7:49
6	7:50
5	7:55

## KMF Traffic Group, LLC

### PM Queue Study at Archbishop Edward A. McCarthy High School North Access



QUEUE	TIME OF DAY (h.m)
6	2:00
7	2:05
8	2:10
15	2:15
20	2:20
25	2:30
27	2:45
31	2:47
25	2:50
18	2:52
9	2:55
6	2:54
3	3:00

## KMF Traffic Group, LLC

### AM Queue Study at Archbishop Edward A. McCarthy High School Main Access



QUEUE	TIME OF DAY (h.m)
0	6:45
1	6:47
1	6:49
1	6:51
2	6:53
2	6:55
1	7:00
2	7:05
3	7:05
3	7:06
4	7:08
2	7:11
4	7:12
6	7:14
4	7:15
1	7:16
4	7:18
2	7:19
8	7:20
6	7:22
8	7:23
12	7:24
6	7:25
4	7:26
10	7:27



## KMF Traffic Group, LLC

### AM Queue Study at Archbishop Edward A. McCarthy High School Main Access



QUEUE	TIME OF DAY (h.m)
13	7:28
11	7:29
6	7:30
7	7:31
12	7:33
14	7:34
14	7:35
15	7:36
13	7:37
12	7:38
13	7:39
16	7:40
16	7:41
18	7:42
22	7:43
20	7:45
24	7:46
20	7:47
27	7:48
27	7:49
20	7:50
28	7:51
15	7:52
8	7:54
3	7:56

**KMF Traffic Group, LLC**

**AM Queue Study at Archbishop Edward A.  
McCarthy High School Main Access**



QUEUE	TIME OF DAY (h.m)
3	7:59
2	8:00

## KMF Traffic Group, LLC

### PM Queue Study at Archbishop Edward A. McCarthy High School Main Access



QUEUE	TIME OF DAY (h.m)
2	2:02
3	2:04
4	2:06
5	2:08
6	2:10
7	2:11
8	2:13
9	2:14
10	2:15
11	2:16
12	2:17
13	2:18
14	2:19
24	2:24
25	2:25
28	2:28
29	2:29
30	2:30
30	3:13
20	3:15
20	3:17
14	3:19

### **KMF Traffic Group, LLC**

PM Queue Study at Archbishop Edward A.  
McCarthy High School Main Access



<b>QUEUE</b>	<b>TIME OF DAY (h.m)</b>
10	3:20
6	3:22
4	3:25
4	3:27
Approximately between 2:30 PM and 3:13 PM the internal queue is replace from new traffic from Flamingo Road NBL and SBR:	

## KMF Traffic Group, LLC

AM Queue Study for Flamingo Rd NBL at  
Archbishop Edward A. McCarthy High  
School main access/SW 53rd St



QUEUE	TIME OF DAY (h.m.s)
0	06:30:11
1	06:32:40
0	06:32:43
1	06:34:47
0	06:34:50
1	06:35:50
0	06:35:52
1	06:38:30
0	06:38:38
1	06:40:38
0	06:40:43
1	06:41:45
0	06:41:53
1	06:42:44
0	06:42:47
1	06:42:52
0	06:42:58
1	06:53:35
0	06:53:37
1	06:54:44
0	06:55:06
1	06:55:47
2	06:55:48
1	06:56:00
2	06:56:02

## KMF Traffic Group, LLC

AM Queue Study for Flamingo Rd NBL at  
Archbishop Edward A. McCarthy High  
School main access/SW 53rd St



QUEUE	TIME OF DAY (h.m.s)
1	06:56:11
0	06:56:19
1	06:58:24
0	06:58:39
1	06:58:41
0	06:58:49
1	06:58:50
0	06:58:52
1	06:58:53
0	06:58:58
1	06:59:53
0	07:00:02
1	07:00:39
0	07:00:44
1	07:00:59
2	07:01:04
3	07:01:08
2	07:01:19
1	07:01:26
0	07:01:29
1	07:01:31
0	07:01:32
1	07:01:56
0	07:02:06
1	07:04:02

## KMF Traffic Group, LLC

AM Queue Study for Flamingo Rd NBL at  
Archbishop Edward A. McCarthy High  
School main access/SW 53rd St



QUEUE	TIME OF DAY (h.m.s)
0	07:04:09
1	07:04:10
0	07:04:15
1	07:04:22
2	07:04:28
1	07:04:30
2	07:04:39
1	07:04:43
0	07:04:48
1	07:04:58
2	07:05:06
1	07:05:34
0	07:05:46
1	07:05:58
0	07:06:02
1	07:06:42
2	07:06:45
1	07:06:51
0	07:07:06
1	07:09:28
0	07:09:41
1	07:10:24
2	07:10:33
3	07:10:43
4	07:10:47



## KMF Traffic Group, LLC

AM Queue Study for Flamingo Rd NBL at  
Archbishop Edward A. McCarthy High  
School main access/SW 53rd St



QUEUE	TIME OF DAY (h.m.s)
5	07:11:34
4	07:11:38
3	07:12:03
2	07:12:04
1	07:12:11
2	07:12:16
3	07:12:17
4	07:12:18
5	07:12:23
6	07:12:28
7	07:12:29
5	07:12:33
4	07:12:39
3	07:12:43
4	07:12:51
3	07:13:03
4	07:13:12
3	07:13:38
2	07:13:50
3	07:14:12
4	07:14:16
5	07:14:20
4	07:14:22
3	07:14:25
2	07:14:30

## KMF Traffic Group, LLC

AM Queue Study for Flamingo Rd NBL at  
Archbishop Edward A. McCarthy High  
School main access/SW 53rd St



QUEUE	TIME OF DAY (h.m.s)
1	07:14:39
0	07:14:45
1	07:14:58
2	07:15:08
1	07:15:12
0	07:15:15
1	07:15:27
2	07:15:48
3	07:16:44
4	07:16:46
3	07:17:02
2	07:17:17
1	07:17:25
0	07:17:29
1	07:17:32
0	07:17:40
1	07:17:46
0	07:17:56
1	07:18:00
2	07:18:04
3	07:18:05
4	07:18:09
5	07:18:10
6	07:18:17
5	07:18:20

## KMF Traffic Group, LLC

AM Queue Study for Flamingo Rd NBL at  
Archbishop Edward A. McCarthy High  
School main access/SW 53rd St



QUEUE	TIME OF DAY (h.m.s)
6	07:18:21
7	07:18:29
6	07:18:32
5	07:18:37
4	07:18:41
5	07:19:41
6	07:19:41
7	07:19:42
6	07:19:54
5	07:19:59
4	07:20:08
3	07:20:13
2	07:20:16
3	07:20:18
4	07:20:19
2	07:20:31
3	07:20:40
4	07:20:42
5	07:20:44
6	07:20:45
7	07:20:56
8	07:20:58
7	07:21:10
6	07:21:14
5	07:21:16

## KMF Traffic Group, LLC

AM Queue Study for Flamingo Rd NBL at  
Archbishop Edward A. McCarthy High  
School main access/SW 53rd St



QUEUE	TIME OF DAY (h.m.s)
4	07:21:17
3	07:21:26
2	07:21:28
0	07:21:34
1	07:21:45
2	07:22:16
3	07:22:18
4	07:22:19
5	07:22:20
6	07:22:26
7	07:22:29
8	07:22:29
9	07:22:31
10	07:22:38
11	07:22:41
12	07:22:43
11	07:22:48
10	07:22:50
9	07:22:53
8	07:22:56
7	07:22:58
6	07:23:00
5	07:23:01
6	07:23:04
7	07:23:05

## KMF Traffic Group, LLC

AM Queue Study for Flamingo Rd NBL at  
Archbishop Edward A. McCarthy High  
School main access/SW 53rd St



QUEUE	TIME OF DAY (h.m.s)
6	07:23:10
5	07:23:14
0	07:23:27
2	07:23:35
3	07:23:36
4	07:23:46
3	07:24:21
2	07:24:23
1	07:24:26
0	07:24:28
1	07:24:56
2	07:24:56
3	07:25:02
4	07:25:02
5	07:25:03
6	07:25:21
7	07:25:31
8	07:25:32
0	07:26:24
1	07:26:30
2	07:26:31
3	07:27:59
4	07:28:00
5	07:28:03
6	07:28:04

## KMF Traffic Group, LLC

AM Queue Study for Flamingo Rd NBL at  
Archbishop Edward A. McCarthy High  
School main access/SW 53rd St



QUEUE	TIME OF DAY (h.m.s)
7	07:28:05
8	07:28:06
9	07:28:08
0	07:28:10
11	07:28:13
12	07:28:15
13	07:28:17
14	07:28:19
15	07:28:24
16	07:28:30
17	07:28:36
0	07:30:10
1	07:30:23
2	07:30:24
3	07:30:25
4	07:30:27
5	07:30:29
6	07:30:30
7	07:30:32
8	07:30:33
9	07:30:34
10	07:30:37
11	07:30:38
12	07:30:39
13	07:30:41

## KMF Traffic Group, LLC

AM Queue Study for Flamingo Rd NBL at  
Archbishop Edward A. McCarthy High  
School main access/SW 53rd St



20 Vehicles represents the average number of vehicles queuing on the existing storage bay for the Flaming north bound left.

QUEUE	TIME OF DAY (h.m.s)
14	07:30:47
15	07:30:54
16	07:30:58
17	07:31:07
18	07:31:10
19	07:31:13
20	07:31:16
20	07:31:18
20	07:31:35
20	07:31:55
20	07:31:59
0	07:33:00
1	07:33:21
2	07:33:23
3	07:33:24
4	07:33:25
5	07:33:26
6	07:33:27
7	07:33:28
8	07:33:29
9	07:33:30
10	07:33:33
11	07:33:36
12	07:33:37
13	07:33:40



## KMF Traffic Group, LLC

AM Queue Study for Flamingo Rd NBL at  
Archbishop Edward A. McCarthy High  
School main access/SW 53rd St



QUEUE	TIME OF DAY (h.m.s)
14	07:33:42
15	07:33:43
16	07:33:45
17	07:33:48
18	07:33:50
19	07:33:52
20	07:33:54
20	07:33:56
20	07:33:57
20	07:33:59
20	07:34:01
0	07:35:46
12	07:35:56
13	07:36:00
14	07:36:04
15	07:36:08
16	07:36:09
17	07:36:11
18	07:36:14
19	07:36:16
20	07:36:18
20	07:36:20
20	07:36:21
20	07:36:22
20	07:36:24

## KMF Traffic Group, LLC

AM Queue Study for Flamingo Rd NBL at  
Archbishop Edward A. McCarthy High  
School main access/SW 53rd St



QUEUE	TIME OF DAY (h.m.s)
0	07:38:20
20	07:36:24
12	07:39:58
13	07:40:04
14	07:40:05
15	07:40:06
16	07:40:08
17	07:40:10
18	07:40:13
19	07:40:15
20	07:40:16
20	07:40:18
20	07:40:18
20	07:40:20
20	07:40:21
12	07:42:25
13	07:42:26
14	07:42:27
15	07:42:32
16	07:42:37
17	07:42:39
18	07:42:41
19	07:42:51
20	07:42:53
20	07:42:54

## KMF Traffic Group, LLC

AM Queue Study for Flamingo Rd NBL at  
Archbishop Edward A. McCarthy High  
School main access/SW 53rd St



QUEUE	TIME OF DAY (h.m.s)
20	07:42:55
20	07:42:56
20	07:42:57
12	07:44:20
13	07:44:31
14	07:44:33
15	07:44:34
16	07:44:35
17	07:44:37
18	07:44:38
19	07:44:40
20	07:44:42
20	07:44:43
20	07:44:44
20	07:44:45
20	07:44:46
0	07:46:45
1	07:46:48
2	07:46:49
3	07:46:49
4	07:46:50
5	07:46:50
6	07:46:50
7	07:46:51
8	07:46:51

## KMF Traffic Group, LLC

AM Queue Study for Flamingo Rd NBL at  
Archbishop Edward A. McCarthy High  
School main access/SW 53rd St



QUEUE	TIME OF DAY (h.m.s)
9	07:46:53
10	07:46:57
11	07:46:58
12	07:46:59
13	07:47:00
14	07:47:01
15	07:47:03
16	07:47:04
17	07:47:06
18	07:47:08
19	07:47:10
20	07:47:12
20	07:47:14
20	07:47:14
20	07:47:15
20	07:47:16
1	07:50:08
2	07:50:09
3	07:50:10
4	07:50:11
5	07:50:11
6	07:50:12
7	07:50:12
8	07:50:13
9	07:50:13



## KMF Traffic Group, LLC

AM Queue Study for Flamingo Rd NBL at  
Archbishop Edward A. McCarthy High  
School main access/SW 53rd St



QUEUE	TIME OF DAY (h.m.s)
10	07:50:18
11	07:50:19
12	07:50:20
13	07:50:22
14	07:50:23
15	07:50:25
16	07:50:27
17	07:50:28
18	07:50:30
19	07:50:32
20	07:50:34
20	07:50:35
20	07:50:36
20	07:50:37
20	07:50:38
0	07:51:58
1	07:52:00
2	07:52:02
3	07:52:03
4	07:52:04
5	07:52:05
6	07:52:06
7	07:52:08
8	07:52:08
9	07:52:09

## KMF Traffic Group, LLC

AM Queue Study for Flamingo Rd NBL at  
Archbishop Edward A. McCarthy High  
School main access/SW 53rd St



QUEUE	TIME OF DAY (h.m.s)
10	07:52:12
11	07:52:13
12	07:52:14
13	07:52:16
14	07:52:18
15	07:52:20
16	07:52:22
17	07:52:24
18	07:52:28
19	07:52:30
0	07:53:54
1	07:55:20
2	07:55:55
1	07:56:12
0	07:56:24
1	07:57:11
0	07:57:36
1	07:58:01
2	07:58:06
1	07:59:39
0	07:59:41
1	07:59:59
2	08:00:33
1	08:00:39
0	08:00:48

## KMF Traffic Group, LLC

AM Queue Study for Flamingo Rd NBL at  
Archbishop Edward A. McCarthy High  
School main access/SW 53rd St



QUEUE	TIME OF DAY (h.m.s)
1	08:05:09
0	08:05:27
1	08:06:50
0	08:06:54
1	08:07:05
0	08:08:14
1	08:09:49
0	08:10:20
1	08:10:37
0	08:10:52
1	08:11:31
0	08:11:43
1	08:15:08
0	08:15:10
1	08:15:13
0	08:15:15
1	08:15:26
0	08:15:27
1	08:19:15
0	08:19:16
1	08:19:25
0	08:19:26
1	08:19:48
0	08:20:46
1	08:21:41

**KMF Traffic Group, LLC**

AM Queue Study for Flamingo Rd NBL at  
Archbishop Edward A. McCarthy High  
School main access/SW 53rd St



<b>QUEUE</b>	<b>TIME OF DAY (h.m.s)</b>
0	08:21:57
1	08:29:19
0	08:29:26
0	08:30:01



## KMF Traffic Group, LLC

PM Queue Study for Flamingo Rd NBL at  
Archbishop Edward A. McCarthy High  
School main access/SW 53rd St



QUEUE	TIME OF DAY (h.m)
1	2:26
2	
3	
0	2:27
0	2:28
1	2:30
2	2:31
3	
4	
4	2:32
5	
6	
7	
8	
5	2:33
6	2:34
7	
8	
9	2:35
10	
11	2:36
5	
3	
7	2:37
8	

## KMF Traffic Group, LLC

### AM Queue Study for Flamingo Rd SBL at SW 53rd St



QUEUE	TIME OF DAY (h.m)
2	7:18
2	7:19
8	7:20
3	7:21
12	7:22
8	7:24
8	7:27
13	7:30
13	7:33
13	7:36
14	7:39
14	7:40
12	7:44
13	7:46
13	7:52
12	7:54
9	7:56
12	7:57
13	7:59
5	8:00
7	8:02
2	8:04

### **KMF Traffic Group, LLC**

PM Queue Study for Flamingo Rd NBL at  
Archbishop Edward A. McCarthy High  
School main access/SW 53rd St



<b>QUEUE</b>	<b>TIME OF DAY (h.m)</b>
4	
5	2:38
3	
5	2:39
6	
8	2:40
5	
6	2:41
4	2:42
2	
3	
2	
0	2:43
2	
1	
0	2:44

### **KMF Traffic Group, LLC**

PM Queue Study for Flamingo Rd SBR at  
Archbishop Edward A. McCarthy High  
School main access/SW 53rd St



<b>QUEUE</b>	<b>TIME OF DAY (h.m)</b>
2	2:10
1	2:12
2	2:14
7	2:16
10	2:18
10	2:20
11	2:22
14	2:24
15	2:26
22	2:28
24	2:30
22	2:32
23	2:34
22	2:36
20	2:40
17	2:42
14	2:44
10	2:46
5	2:48
0	2:50
Queue Clear	



2018 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL  
 CATEGORY: 8630 WEST-W OF US441

WEEK	DATES	SF	MOCF: 0.97 PSCF
1	01/01/2018 - 01/06/2018	1.02	1.05
2	01/07/2018 - 01/13/2018	1.02	1.05
3	01/14/2018 - 01/20/2018	1.01	1.04
4	01/21/2018 - 01/27/2018	1.00	1.03
* 5	01/28/2018 - 02/03/2018	0.98	1.01
* 6	02/04/2018 - 02/10/2018	0.97	1.00
* 7	02/11/2018 - 02/17/2018	0.95	0.98
* 8	02/18/2018 - 02/24/2018	0.95	0.98
* 9	02/25/2018 - 03/03/2018	0.96	0.99
*10	03/04/2018 - 03/10/2018	0.96	0.99
*11	03/11/2018 - 03/17/2018	0.96	0.99
*12	03/18/2018 - 03/24/2018	0.97	1.00
*13	03/25/2018 - 03/31/2018	0.97	1.00
*14	04/01/2018 - 04/07/2018	0.97	1.00
*15	04/08/2018 - 04/14/2018	0.97	1.00
*16	04/15/2018 - 04/21/2018	0.97	1.00
*17	04/22/2018 - 04/28/2018	0.99	1.02
18	04/29/2018 - 05/05/2018	1.00	1.03
19	05/06/2018 - 05/12/2018	1.02	1.05
20	05/13/2018 - 05/19/2018	1.03	1.06
21	05/20/2018 - 05/26/2018	1.03	1.06
22	05/27/2018 - 06/02/2018	1.04	1.07
23	06/03/2018 - 06/09/2018	1.04	1.07
24	06/10/2018 - 06/16/2018	1.04	1.07
25	06/17/2018 - 06/23/2018	1.04	1.07
26	06/24/2018 - 06/30/2018	1.05	1.08
27	07/01/2018 - 07/07/2018	1.05	1.08
28	07/08/2018 - 07/14/2018	1.05	1.08
29	07/15/2018 - 07/21/2018	1.06	1.09
30	07/22/2018 - 07/28/2018	1.04	1.07
31	07/29/2018 - 08/04/2018	1.03	1.06
32	08/05/2018 - 08/11/2018	1.02	1.05
33	08/12/2018 - 08/18/2018	1.01	1.04
34	08/19/2018 - 08/25/2018	1.01	1.04
35	08/26/2018 - 09/01/2018	1.01	1.04
36	09/02/2018 - 09/08/2018	1.01	1.04
37	09/09/2018 - 09/15/2018	1.01	1.04
38	09/16/2018 - 09/22/2018	1.01	1.04
39	09/23/2018 - 09/29/2018	1.00	1.03
40	09/30/2018 - 10/06/2018	1.00	1.03
41	10/07/2018 - 10/13/2018	0.99	1.02
42	10/14/2018 - 10/20/2018	0.99	1.02
43	10/21/2018 - 10/27/2018	0.99	1.02
44	10/28/2018 - 11/03/2018	1.00	1.03
45	11/04/2018 - 11/10/2018	1.00	1.03
46	11/11/2018 - 11/17/2018	1.00	1.03
47	11/18/2018 - 11/24/2018	1.01	1.04
48	11/25/2018 - 12/01/2018	1.01	1.04
49	12/02/2018 - 12/08/2018	1.02	1.05
50	12/09/2018 - 12/15/2018	1.02	1.05
51	12/16/2018 - 12/22/2018	1.02	1.05
52	12/23/2018 - 12/29/2018	1.01	1.04
53	12/30/2018 - 12/31/2018	1.01	1.04

\* PEAK SEASON

25-FEB-2019 16:26:26

830UPD

4\_8630\_PKSEASON.TXT

## **APPENDIX “C”**

### **FDOT LEVEL OF SERVICE TABLE**



# **APPENDIX “D”**

























## **SYNCHRO PRINTOUTS**

## **EXISTING CONDITIONS**

# Lanes, Volumes, Timings

## 3: Flamingo Dr & Griffin Rd

12/09/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	236	859	468	278	950	321	424	1445	264	417	1211	185
Future Volume (vph)	236	859	468	278	950	321	424	1445	264	417	1211	185
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	450		550	420		300	300		280	290		210
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	100			100			220			250		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	5085	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	5085	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			266			269			178			115
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1085			1206			2451			1027	
Travel Time (s)		24.7			27.4			55.7			23.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	248	904	493	293	1000	338	446	1521	278	439	1275	195
Shared Lane Traffic (%)												
Lane Group Flow (vph)	248	904	493	293	1000	338	446	1521	278	439	1275	195
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)		24			24			24			24	
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
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	12.0	13.0	13.0	12.0	13.0	13.0	12.0	17.0	17.0	12.0	17.0	17.0
Total Split (s)	25.0	63.0	63.0	23.0	61.0	61.0	30.0	64.0	64.0	30.0	64.0	64.0
Total Split (%)	13.9%	35.0%	35.0%	12.8%	33.9%	33.9%	16.7%	35.6%	35.6%	16.7%	35.6%	35.6%
Maximum Green (s)	18.0	56.0	56.0	16.0	54.0	54.0	23.0	57.0	57.0	23.0	57.0	57.0
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effect Green (s)	16.8	48.1	48.1	16.0	47.3	47.3	27.7	60.8	60.8	27.1	60.2	60.2

Existing Conditions  
Timing Plan: AM Peak













Synchro 10 Light Report  
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# Lanes, Volumes, Timings

## 3: Flamingo Dr & Griffin Rd

12/09/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.09	0.27	0.27	0.09	0.26	0.26	0.15	0.34	0.34	0.15	0.33	0.33
v/c Ratio	0.78	0.67	0.80	0.96	0.75	0.55	0.84	0.89	0.43	0.85	0.75	0.32
Control Delay	96.5	60.8	37.1	122.0	64.4	15.0	88.2	63.9	18.7	89.2	57.1	20.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	96.5	60.8	37.1	122.0	64.4	15.0	88.2	63.9	18.7	89.2	57.1	20.0
LOS	F	E	D	F	E	B	F	E	B	F	E	C
Approach Delay	59.1			64.5			63.2			60.7		
Approach LOS	E			E			E			E		

### Intersection Summary

Area Type: Other

Cycle Length: 180

Actuated Cycle Length: 180

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.96

Intersection Signal Delay: 61.9









Intersection LOS: E

Intersection Capacity Utilization 88.2%

ICU Level of Service E

Analysis Period (min) 15

























Splits and Phases: 3: Flamingo Dr & Griffin Rd

 Ø1	 Ø2 (R)	 Ø3	 Ø4
30 s	64 s	23 s	63 s
 Ø5	 Ø6 (R)	 Ø7	 Ø8
30 s	64 s	25 s	61 s

# HCM 6th Signalized Intersection Summary

## 3: Flamingo Dr & Griffin Rd

12/09/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	236	859	468	278	950	321	424	1445	264	417	1211	185
Future Volume (veh/h)	236	859	468	278	950	321	424	1445	264	417	1211	185
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	248	904	493	293	1000	338	446	1521	278	439	1275	195
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	288	1589	493	307	1616	502	442	1617	502	442	1617	502
Arrive On Green	0.08	0.31	0.31	0.09	0.32	0.32	0.13	0.32	0.32	0.13	0.32	0.32
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	248	904	493	293	1000	338	446	1521	278	439	1275	195
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	12.8	26.7	56.0	15.2	30.0	33.3	23.0	52.2	26.2	22.8	40.9	17.3
Cycle Q Clear(g_c), s	12.8	26.7	56.0	15.2	30.0	33.3	23.0	52.2	26.2	22.8	40.9	17.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	288	1589	493	307	1616	502	442	1617	502	442	1617	502
V/C Ratio(X)	0.86	0.57	1.00	0.95	0.62	0.67	1.01	0.94	0.55	0.99	0.79	0.39
Avail Cap(c_a), veh/h	346	1589	493	307	1616	502	442	1617	502	442	1617	502
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	81.5	51.9	62.0	81.6	52.3	53.4	78.5	59.9	51.0	78.4	56.0	47.9
Incr Delay (d2), s/veh	16.9	0.5	40.5	39.0	0.7	3.5	45.4	12.1	4.4	41.2	4.0	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	10.6	17.2	36.8	13.3	19.0	20.0	19.1	32.5	16.6	18.6	25.3	11.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	98.3	52.4	102.5	120.7	53.0	57.0	123.9	72.0	55.3	119.7	60.0	50.2
LnGrp LOS	F	D	F	F	D	E	F	E	E	F	E	D
Approach Vol, veh/h	1645			1631			2245			1909		
Approach Delay, s/veh	74.3			66.0			80.2			72.7		
Approach LOS	E			E			F			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	30.0	64.0	23.0	63.0	30.0	64.0	22.0	64.0				
Change Period (Y+Rc), s	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0				
Max Green Setting (Gmax), s	23.0	57.0	16.0	56.0	23.0	57.0	18.0	54.0				
Max Q Clear Time (g_c+I1), s	24.8	54.2	17.2	58.0	25.0	42.9	14.8	35.3				
Green Ext Time (p_c), s	0.0	2.4	0.0	0.0	0.0	8.1	0.3	8.2				
Intersection Summary												
HCM 6th Ctrl Delay	73.9											
HCM 6th LOS	E											

Existing Conditions  
Timing Plan: AM Peak

Synchro 10 Light Report  
Page 3

# Lanes, Volumes, Timings

## 6: Flamingo Dr & North School Driveway

12/09/2019



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑↑	↑↑↑	↗
Traffic Volume (vph)	0	333	0	1811	1491	497
Future Volume (vph)	0	333	0	1811	1491	497
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	0			400
Storage Lanes	0	1	0			1
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	1.00
Frt		0.865				0.850
Flt Protected						
Satd. Flow (prot)	0	1611	0	5085	5085	1583
Flt Permitted						
Satd. Flow (perm)	0	1611	0	5085	5085	1583
Link Speed (mph)	30			30	30	
Link Distance (ft)	502			664	2451	
Travel Time (s)	11.4			15.1	55.7	
Peak Hour Factor	0.62	0.62	0.86	0.86	0.86	0.62
Adj. Flow (vph)	0	537	0	2106	1734	802
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	537	0	2106	1734	802
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			24	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	56.1%			ICU Level of Service B		
Analysis Period (min)	15					

Existing Conditions  
Timing Plan: AM Peak

Synchro 10 Light Report  
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HCM 6th TWSC  
6: Flamingo Dr & North School Driveway

12/09/2019
























Intersection						
Int Delay, s/veh	5.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑↑	↑↑↑	↗
Traffic Vol, veh/h	0	333	0	1811	1491	497
Future Vol, veh/h	0	333	0	1811	1491	497
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	-	-	-	400
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	62	62	86	86	86	62
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	537	0	2106	1734	802
Major/Minor	Minor2		Major1	Major2		
Conflicting Flow All	-	867	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	-	-
Pot Cap-1 Maneuver	0	*560	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %		1		-	-	-
Mov Cap-1 Maneuver	-	*560	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB		NB	SB		
HCM Control Delay, s	55.7		0	0		
HCM LOS	F					
Minor Lane/Major Mvmt	NBT		EBLn1	SBT	SBR	
Capacity (veh/h)	-		560	-	-	
HCM Lane V/C Ratio	-		0.959	-	-	
HCM Control Delay (s)	-		55.7	-	-	
HCM Lane LOS	-		F	-	-	
HCM 95th %tile Q(veh)	-		12.8	-	-	
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

Existing Conditions  
Timing Plan: AM Peak

Synchro 10 Light Report  
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Lanes, Volumes, Timings  
10: Flamingo Dr & Main School Driveway

12/09/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								  			 	
Traffic Volume (vph)	0	0	0	0	0	8	416	1598	10	251	1511	237
Future Volume (vph)	0	0	0	0	0	8	416	1598	10	251	1511	237
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	480		180	180		200
Storage Lanes	0		0	0		0	1		1	1		1
Taper Length (ft)	25			25			50			150		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.95	1.00
Frt					0.865				0.850			0.850
Flt Protected							0.950			0.950		
Satd. Flow (prot)	0	1863	0	0	1611	0	1770	5085	1583	1770	3539	1583
Flt Permitted							0.038			0.110		
Satd. Flow (perm)	0	1863	0	0	1611	0	71	5085	1583	205	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					260				55			137
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		579			521			638			664	
Travel Time (s)		13.2			11.8			14.5			15.1	
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.86	0.72	0.72	0.86	0.72
Adj. Flow (vph)	0	0	0	0	0	11	578	1858	14	349	1757	329
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	11	0	578	1858	14	349	1757	329
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
Turn Type					NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases							2		2	6		6
Detector Phase		4			8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)		2.0			2.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)		7.0			7.0		12.0	22.5	22.5	12.0	22.5	22.5
Total Split (s)		7.0			7.0		70.0	133.0	133.0	40.0	103.0	103.0
Total Split (%)		3.9%			3.9%		38.9%	73.9%	73.9%	22.2%	57.2%	57.2%
Maximum Green (s)		2.0			2.0		63.0	126.0	126.0	33.0	96.0	96.0
Yellow Time (s)		3.0			3.0		5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)		2.0			2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0			5.0		7.0	7.0	7.0	7.0	7.0	7.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)		3.0			3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode		None			None		None	Max	Max	None	Max	Max
Act Effect Green (s)					2.0		159.2	126.5	126.5	124.0	98.2	98.2













Existing Conditions  
Timing Plan: AM Peak

Synchro 10 Light Report  
Page 6



Lanes, Volumes, Timings  
10: Flamingo Dr & Main School Driveway

12/09/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio					0.01		0.94	0.75	0.75	0.73	0.58	0.58
v/c Ratio					0.04		0.95	0.49	0.01	0.90	0.85	0.34
Control Delay					0.2		74.6	9.8	0.0	72.0	36.3	12.5
Queue Delay					0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay					0.2		74.6	9.8	0.0	72.0	36.3	12.5
LOS					A		E	A	A	E	D	B
Approach Delay					0.3			25.0			38.2	
Approach LOS					A			C			D	

Intersection Summary

Area Type: Other

Cycle Length: 180

Actuated Cycle Length: 168.9

Natural Cycle: 100

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.95

Intersection Signal Delay: 31.5

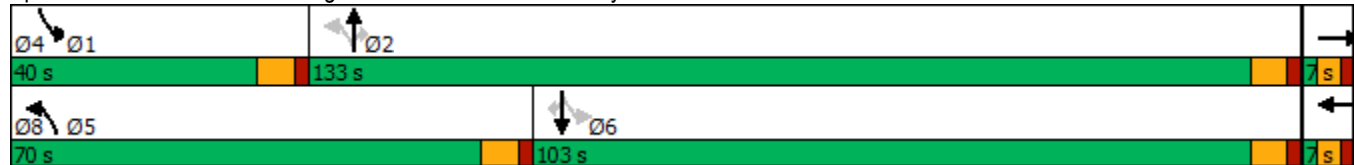
Intersection LOS: C

Intersection Capacity Utilization 84.0%

ICU Level of Service E

Analysis Period (min) 15













Splits and Phases: 10: Flamingo Dr & Main School Driveway



# HCM 6th Signalized Intersection Summary

## 10: Flamingo Dr & Main School Driveway

12/09/2019















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑		↑	↑↑↑	↑	↑	↑↑	↑
Traffic Volume (veh/h)	0	0	0	0	0	8	416	1598	10	251	1511	237
Future Volume (veh/h)	0	0	0	0	0	8	416	1598	10	251	1511	237
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	0	1870	0	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	0	0	0	0	11	578	1858	14	349	1757	329
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.86	0.72	0.72	0.86	0.72
Percent Heavy Veh, %	0	2	0	0	2	2	2	2	2	2	2	2
Cap, veh/h	0	14	0	0	0	12	606	3938	1222	375	2064	921
Arrive On Green	0.00	0.00	0.00	0.00	0.00	0.01	0.30	0.77	0.77	0.11	0.58	0.58
Sat Flow, veh/h	0	1870	0	0	0	1585	1781	5106	1585	1781	3554	1585
Grp Volume(v), veh/h	0	0	0	0	0	11	578	1858	14	349	1757	329
Grp Sat Flow(s),veh/h/ln	0	1870	0	0	0	1585	1781	1702	1585	1781	1777	1585
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	1.1	45.2	21.6	0.3	14.6	67.7	18.1
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	1.1	45.2	21.6	0.3	14.6	67.7	18.1
Prop In Lane	0.00		0.00	0.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	14	0	0	0	12	606	3938	1222	375	2064	921
V/C Ratio(X)	0.00	0.00	0.00	0.00	0.00	0.92	0.95	0.47	0.01	0.93	0.85	0.36
Avail Cap(c_a), veh/h	0	23	0	0	0	19	756	3938	1222	541	2064	921
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	82.0	50.5	6.8	4.4	21.7	28.7	18.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	126.6	19.9	0.4	0.0	18.2	4.7	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	0.0	0.0	0.0	1.6	34.2	12.1	0.2	12.4	38.7	11.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	0.0	0.0	208.6	70.4	7.2	4.4	39.9	33.4	19.4
LnGrp LOS	A	A	A	A	A	F	E	A	A	D	C	B
Approach Vol, veh/h	0				11				2450			
Approach Delay, s/veh	0.0				208.6				22.1			
Approach LOS					F				C			
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	24.6	134.4		6.2	56.0	103.0		6.2				
Change Period (Y+Rc), s	7.0	7.0		5.0	7.0	7.0		5.0				
Max Green Setting (Gmax), s	33.0	126.0		2.0	63.0	96.0		2.0				
Max Q Clear Time (g_c+I1), s	16.6	23.6		0.0	47.2	69.7		3.1				
Green Ext Time (p_c), s	1.0	29.7		0.0	1.8	18.0		0.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay	27.6											
HCM 6th LOS	C											

Existing Conditions  
Timing Plan: AM Peak

Synchro 10 Light Report  
Page 8

Lanes, Volumes, Timings  
13: Flamingo Dr & South School Driveway

12/09/2019

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations				  	  	
Traffic Volume (vph)	0	33	0	2042	2073	123
Future Volume (vph)	0	33	0	2042	2073	123
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	0			125
Storage Lanes	0	1	0			1
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	1.00
Frt		0.865				0.850
Flt Protected						
Satd. Flow (prot)	0	1611	0	5085	5085	1583
Flt Permitted						
Satd. Flow (perm)	0	1611	0	5085	5085	1583
Link Speed (mph)	30			30	30	
Link Distance (ft)	453			662	638	
Travel Time (s)	10.3			15.0	14.5	
Peak Hour Factor	0.62	0.62	0.62	0.86	0.86	0.62
Adj. Flow (vph)	0	53	0	2374	2410	198
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	53	0	2374	2410	198
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	50.1%			ICU Level of Service A		
Analysis Period (min)	15					

Existing Conditions  
Timing Plan: AM Peak

Synchro 10 Light Report  
Page 9

HCM 6th TWSC  
13: Flamingo Dr & South School Driveway

12/09/2019

Intersection

Int Delay, s/veh 0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑↑	↑↑↑	↗
Traffic Vol, veh/h	0	33	0	2042	2073	123
Future Vol, veh/h	0	33	0	2042	2073	123
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	-	-	-	125
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	62	62	62	86	86	62
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	53	0	2374	2410	198

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	- 1205	- 0	- 0
Stage 1	- -	- -	- -
Stage 2	- -	- -	- -
Critical Hdwy	- 7.14	- -	- -
Critical Hdwy Stg 1	- -	- -	- -
Critical Hdwy Stg 2	- -	- -	- -
Follow-up Hdwy	- 3.92	- -	- -
Pot Cap-1 Maneuver	0 151	0 -	- -
Stage 1	0 -	0 -	- -
Stage 2	0 -	0 -	- -
Platoon blocked, %		- -	- -
Mov Cap-1 Maneuver	- 151	- -	- -
Mov Cap-2 Maneuver	- -	- -	- -
Stage 1	- -	- -	- -
Stage 2	- -	- -	- -

Approach	EB	NB	SB
HCM Control Delay, s	41.3	0	0
HCM LOS	E		























Minor Lane/Major Mvmt	NBT EBLn1	SBT	SBR
Capacity (veh/h)	- 151	- -	- -
HCM Lane V/C Ratio	- 0.352	- -	- -
HCM Control Delay (s)	- 41.3	- -	- -
HCM Lane LOS	- E	- -	- -
HCM 95th %tile Q(veh)	- 1.5	- -	- -

Existing Conditions  
Timing Plan: AM Peak

Synchro 10 Light Report  
Page 10

Lanes, Volumes, Timings  
15: Flamingo Dr & SW 55th St

12/09/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	10	287	59	53	59	246	1687	32	241	1414	189
Future Volume (vph)	20	10	287	59	53	59	246	1687	32	241	1414	189
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	160		160	170		170
Storage Lanes	0		1	0		1	1		1	1		1
Taper Length (ft)	25			25			170			160		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected		0.968			0.974		0.950			0.950		
Satd. Flow (prot)	0	1803	1583	0	1814	1583	1770	5085	1583	1770	5085	1583
Flt Permitted		0.622			0.816		0.950			0.950		
Satd. Flow (perm)	0	1159	1583	0	1520	1583	1770	5085	1583	1770	5085	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			308			123			68			116
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		543			396			1986			662	
Travel Time (s)		12.3			9.0			45.1			15.0	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	24	12	342	70	63	70	293	2008	38	287	1683	225
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	36	342	0	133	70	293	2008	38	287	1683	225
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
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8			2			6
Detector Phase	4	4	4	8	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	5.0	20.0	20.0	5.0	20.0	20.0
Minimum Split (s)	12.0	12.0	12.0	12.0	12.0	12.0	12.0	27.0	27.0	12.0	27.0	27.0
Total Split (s)	46.0	46.0	46.0	46.0	46.0	46.0	40.0	89.0	89.0	25.0	74.0	74.0
Total Split (%)	28.8%	28.8%	28.8%	28.8%	28.8%	28.8%	25.0%	55.6%	55.6%	15.6%	46.3%	46.3%
Maximum Green (s)	40.0	40.0	40.0	40.0	40.0	40.0	33.0	82.0	82.0	18.0	67.0	67.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0	6.0		6.0	6.0	7.0	7.0	7.0	7.0	7.0	7.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effect Green (s)		19.3	19.3		19.3	19.3	31.9	82.0	82.0	38.7	88.7	88.7













Existing Conditions  
Timing Plan: AM Peak

Synchro 10 Light Report  
Page 11



Lanes, Volumes, Timings  
15: Flamingo Dr & SW 55th St

12/09/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.12	0.12		0.12	0.12	0.20	0.51	0.51	0.24	0.55	0.55
v/c Ratio		0.26	0.74		0.73	0.23	0.83	0.77	0.05	0.67	0.60	0.24
Control Delay		66.1	19.8		88.9	1.8	80.6	34.0	0.8	64.6	26.5	10.9
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		66.1	19.8		88.9	1.8	80.6	34.0	0.8	64.6	26.5	10.9
LOS		E	B		F	A	F	C	A	E	C	B
Approach Delay		24.2			58.9			39.3			29.9	
Approach LOS		C			E			D			C	

Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.83

Intersection Signal Delay: 34.9

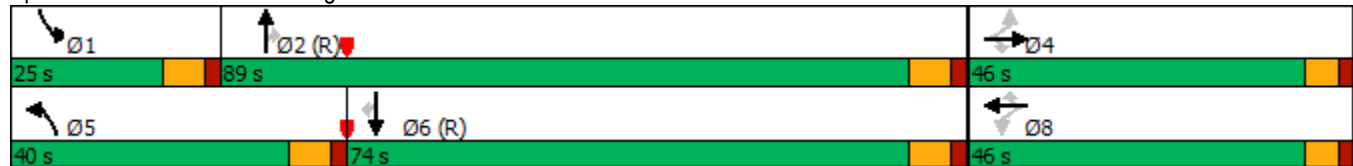
Intersection LOS: C

Intersection Capacity Utilization 75.3%

ICU Level of Service D



























Analysis Period (min) 15

Splits and Phases: 15: Flamingo Dr & SW 55th St



# HCM 6th Signalized Intersection Summary 15: Flamingo Dr & SW 55th St

12/09/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								  			  	
Traffic Volume (veh/h)	20	10	287	59	53	59	246	1687	32	241	1414	189
Future Volume (veh/h)	20	10	287	59	53	59	246	1687	32	241	1414	189
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	24	12	271	70	63	70	293	2008	38	287	1683	225
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	206	96	294	182	154	294	315	2945	914	200	2615	812
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.18	0.58	0.58	0.11	0.51	0.51
Sat Flow, veh/h	909	517	1585	793	827	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	36	0	271	133	0	70	293	2008	38	287	1683	225
Grp Sat Flow(s),veh/h/ln	1426	0	1585	1619	0	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	0.0	0.0	26.9	8.0	0.0	6.0	25.9	43.9	1.7	18.0	38.4	12.9
Cycle Q Clear(g_c), s	3.3	0.0	26.9	11.3	0.0	6.0	25.9	43.9	1.7	18.0	38.4	12.9
Prop In Lane	0.67		1.00	0.53		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	302	0	294	335	0	294	315	2945	914	200	2615	812
V/C Ratio(X)	0.12	0.00	0.92	0.40	0.00	0.24	0.93	0.68	0.04	1.43	0.64	0.28
Avail Cap(c_a), veh/h	397	0	396	437	0	396	367	2945	914	200	2615	812
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.3	0.0	64.0	57.5	0.0	55.5	64.8	23.6	14.7	71.0	28.4	22.2
Incr Delay (d2), s/veh	0.2	0.0	22.1	0.8	0.0	0.4	27.4	1.3	0.1	220.7	1.2	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.2	0.0	18.5	8.5	0.0	4.4	20.4	24.9	1.2	31.9	22.6	8.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.4	0.0	86.1	58.2	0.0	55.9	92.3	24.9	14.8	291.7	29.6	23.0
LnGrp LOS	D	A	F	E	A	E	F	C	B	F	C	C
Approach Vol, veh/h		307			203			2339			2195	
Approach Delay, s/veh		82.4			57.4			33.2			63.2	
Approach LOS		F			E			C			E	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	25.0	99.3		35.7	35.3	89.0		35.7				
Change Period (Y+Rc), s	7.0	7.0		6.0	7.0	7.0		6.0				
Max Green Setting (Gmax), s	18.0	82.0		40.0	33.0	67.0		40.0				
Max Q Clear Time (g_c+I1), s	20.0	45.9		28.9	27.9	40.4		13.3				
Green Ext Time (p_c), s	0.0	22.7		0.8	0.4	16.1		0.9				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			50.2									
HCM 6th LOS			D									

























Existing Conditions  
Timing Plan: AM Peak

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# Lanes, Volumes, Timings

## 3: Flamingo Dr & Griffin Rd

12/09/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	265	649	279	307	536	160	425	1033	270	320	1023	138
Future Volume (vph)	265	649	279	307	536	160	425	1033	270	320	1023	138
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	450		550	420		300	300		280	290		210
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	100			100			220			250		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	5085	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	5085	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			271			170			275			170
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1085			1206			2451			1027	
Travel Time (s)		24.7			27.4			55.7			23.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	279	683	294	323	564	168	447	1087	284	337	1077	145
Shared Lane Traffic (%)												
Lane Group Flow (vph)	279	683	294	323	564	168	447	1087	284	337	1077	145
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)		24			24			24			24	
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
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	12.0	13.0	13.0	12.0	13.0	13.0	12.0	17.0	17.0	12.0	17.0	17.0
Total Split (s)	23.0	38.0	38.0	28.0	43.0	43.0	35.0	68.0	68.0	26.0	59.0	59.0
Total Split (%)	14.4%	23.8%	23.8%	17.5%	26.9%	26.9%	21.9%	42.5%	42.5%	16.3%	36.9%	36.9%
Maximum Green (s)	16.0	31.0	31.0	21.0	36.0	36.0	28.0	61.0	61.0	19.0	52.0	52.0
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effect Green (s)	15.6	28.6	28.6	19.1	32.1	32.1	25.1	65.5	65.5	18.8	59.2	59.2













Existing Conditions  
Timing Plan: PM Peak

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# Lanes, Volumes, Timings

## 3: Flamingo Dr & Griffin Rd

12/09/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.10	0.18	0.18	0.12	0.20	0.20	0.16	0.41	0.41	0.12	0.37	0.37
v/c Ratio	0.84	0.75	0.58	0.79	0.55	0.37	0.83	0.52	0.35	0.83	0.57	0.21
Control Delay	91.7	67.9	13.1	82.5	59.2	8.7	79.1	37.4	5.1	86.9	43.0	3.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	91.7	67.9	13.1	82.5	59.2	8.7	79.1	37.4	5.1	86.9	43.0	3.4
LOS	F	E	B	F	E	A	E	D	A	F	D	A
Approach Delay	60.4			58.3			42.6			48.8		
Approach LOS	E			E			D			D		

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.84

Intersection Signal Delay: 51.1

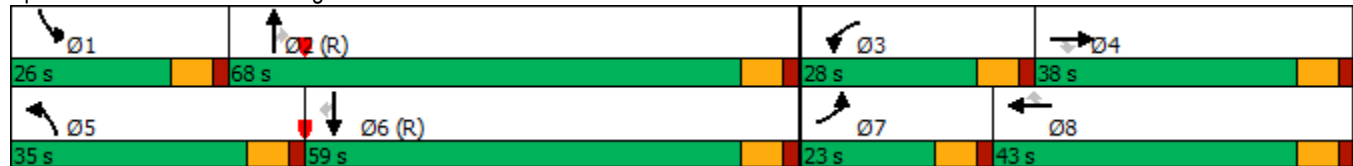
Intersection LOS: D

Intersection Capacity Utilization 76.5%

ICU Level of Service D

Analysis Period (min) 15

























Splits and Phases: 3: Flamingo Dr & Griffin Rd



# HCM 6th Signalized Intersection Summary

## 3: Flamingo Dr & Griffin Rd

12/09/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	265	649	279	307	536	160	425	1033	270	320	1023	138
Future Volume (veh/h)	265	649	279	307	536	160	425	1033	270	320	1023	138
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	279	683	294	323	564	168	447	1087	284	337	1077	145
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	321	989	307	371	1063	330	501	2113	656	380	1935	601
Arrive On Green	0.09	0.19	0.19	0.11	0.21	0.21	0.14	0.41	0.41	0.11	0.38	0.38
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	279	683	294	323	564	168	447	1087	284	337	1077	145
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	12.7	19.9	29.4	14.7	15.7	15.0	20.3	25.4	20.5	15.4	26.6	10.0
Cycle Q Clear(g_c), s	12.7	19.9	29.4	14.7	15.7	15.0	20.3	25.4	20.5	15.4	26.6	10.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	321	989	307	371	1063	330	501	2113	656	380	1935	601
V/C Ratio(X)	0.87	0.69	0.96	0.87	0.53	0.51	0.89	0.51	0.43	0.89	0.56	0.24
Avail Cap(c_a), veh/h	346	989	307	454	1149	357	605	2113	656	410	1935	601
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	71.6	60.0	63.8	70.3	56.4	56.1	67.2	34.9	33.5	70.2	39.1	34.0
Incr Delay (d2), s/veh	19.4	2.1	39.9	14.3	0.4	1.2	13.7	0.9	2.1	19.3	1.2	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	10.7	13.7	21.7	11.7	11.2	10.3	15.1	16.2	13.1	12.5	17.0	7.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	91.0	62.1	103.7	84.6	56.8	57.3	80.9	35.8	35.6	89.5	40.3	34.9
LnGrp LOS	F	E	F	F	E	E	F	D	D	F	D	C
Approach Vol, veh/h	1256			1055			1818			1559		
Approach Delay, s/veh	78.3			65.4			46.9			50.4		
Approach LOS	E			E			D			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	24.6	73.2	24.2	38.0	30.2	67.6	21.9	40.3				
Change Period (Y+Rc), s	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0				
Max Green Setting (Gmax), s	19.0	61.0	21.0	31.0	28.0	52.0	16.0	36.0				
Max Q Clear Time (g_c+I1), s	17.4	27.4	16.7	31.4	22.3	28.6	14.7	17.7				
Green Ext Time (p_c), s	0.2	11.1	0.5	0.0	0.9	9.0	0.1	4.3				
Intersection Summary												
HCM 6th Ctrl Delay	58.2											
HCM 6th LOS	E											















Existing Conditions  
Timing Plan: PM Peak

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Lanes, Volumes, Timings  
6: Flamingo Dr & North School Driveway

12/09/2019

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations				  	  	
Traffic Volume (vph)	0	154	0	1740	1376	120
Future Volume (vph)	0	154	0	1740	1376	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	0			400
Storage Lanes	0	1	0			1
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	1.00
Frt		0.865				0.850
Flt Protected						
Satd. Flow (prot)	0	1611	0	5085	5085	1583
Flt Permitted						
Satd. Flow (perm)	0	1611	0	5085	5085	1583
Link Speed (mph)	30			30	30	
Link Distance (ft)	502			664	2451	
Travel Time (s)	11.4			15.1	55.7	
Peak Hour Factor	0.79	0.79	0.95	0.95	0.95	0.79
Adj. Flow (vph)	0	195	0	1832	1448	152
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	195	0	1832	1448	152
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			24	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	42.8%			ICU Level of Service A		
Analysis Period (min)	15					

HCM 6th TWSC  
6: Flamingo Dr & North School Driveway

12/09/2019

Intersection

Int Delay, s/veh 0.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑↑	↑↑↑	↗
Traffic Vol, veh/h	0	154	0	1740	1376	120
Future Vol, veh/h	0	154	0	1740	1376	120
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	-	-	-	400
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	79	79	95	95	95	79
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	195	0	1832	1448	152

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	- 724	- 0	- 0
Stage 1	- -	- -	- -
Stage 2	- -	- -	- -
Critical Hdwy	- 7.14	- -	- -
Critical Hdwy Stg 1	- -	- -	- -
Critical Hdwy Stg 2	- -	- -	- -
Follow-up Hdwy	- 3.92	- -	- -
Pot Cap-1 Maneuver	0 *598	0 -	- -
Stage 1	0 -	0 -	- -
Stage 2	0 -	0 -	- -
Platoon blocked, %	1	- -	- -
Mov Cap-1 Maneuver	- *598	- -	- -
Mov Cap-2 Maneuver	- -	- -	- -
Stage 1	- -	- -	- -
Stage 2	- -	- -	- -

Approach	EB	NB	SB
HCM Control Delay, s	13.9	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT EBLn1	SBT	SBR
Capacity (veh/h)	- 598	- -	- -
HCM Lane V/C Ratio	- 0.326	- -	- -
HCM Control Delay (s)	- 13.9	- -	- -
HCM Lane LOS	- B	- -	- -
HCM 95th %tile Q(veh)	- 1.4	- -	- -

Notes


~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Existing Conditions  
Timing Plan: PM Peak

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Lanes, Volumes, Timings  
10: Flamingo Dr & Main School Driveway

12/09/2019













												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↶			↶		↶	↶↶↶	↶	↶	↶↶	↶
Traffic Volume (vph)	0	0	0	0	0	43	183	1562	16	211	1154	164
Future Volume (vph)	0	0	0	0	0	43	183	1562	16	211	1154	164
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	480		180	180		200
Storage Lanes	0		0	0		0	1		1	1		1
Taper Length (ft)	25			25			50			150		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.95	1.00
Frt					0.865				0.850			0.850
Flt Protected							0.950			0.950		
Satd. Flow (prot)	0	1863	0	0	1611	0	1770	5085	1583	1770	3539	1583
Flt Permitted							0.950			0.139		
Satd. Flow (perm)	0	1863	0	0	1611	0	1770	5085	1583	259	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					100				17			131
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		579			521			638			664	
Travel Time (s)		13.2			11.8			14.5			15.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.95	0.92	0.92	0.95	0.92
Adj. Flow (vph)	0	0	0	0	0	47	199	1644	17	229	1215	178
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	47	0	199	1644	17	229	1215	178
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
Turn Type					NA		Prot	NA	Perm	Perm	NA	Perm
Protected Phases		4			8		5	2			6	
Permitted Phases									2	6		6
Detector Phase		4			8		5	2	2	6	6	6
Switch Phase												
Minimum Initial (s)		2.0			2.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)		7.0			7.0		12.0	22.5	22.5	22.5	22.5	22.5
Total Split (s)		7.0			7.0		55.0	153.0	153.0	98.0	98.0	98.0
Total Split (%)		4.4%			4.4%		34.4%	95.6%	95.6%	61.3%	61.3%	61.3%
Maximum Green (s)		3.0			3.0		48.0	146.0	146.0	91.0	91.0	91.0
Yellow Time (s)		3.0			3.0		5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)		1.0			1.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.0			4.0		7.0	7.0	7.0	7.0	7.0	7.0
Lead/Lag							Lead			Lag	Lag	Lag
Lead-Lag Optimize?							Yes			Yes	Yes	Yes
Vehicle Extension (s)		3.0			3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode		None			None		None	Max	Max	Max	Max	Max
Act Effect Green (s)					3.0		23.3	147.5	147.5	115.7	115.7	115.7

Existing Conditions  
Timing Plan: PM Peak

Synchro 10 Light Report  
Page 6

Lanes, Volumes, Timings  
10: Flamingo Dr & Main School Driveway

12/09/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio					0.02		0.15	0.93	0.93	0.73	0.73	0.73
v/c Ratio					0.37		0.77	0.35	0.01	1.22	0.47	0.15
Control Delay					7.9		83.6	1.0	0.2	160.1	10.4	2.7
Queue Delay					0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay					7.9		83.6	1.0	0.2	160.1	10.4	2.7
LOS					A		F	A	A	F	B	A
Approach Delay					7.9			9.8			30.7	
Approach LOS					A			A			C	

Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 158.6

Natural Cycle: 150

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 1.22

Intersection Signal Delay: 19.4

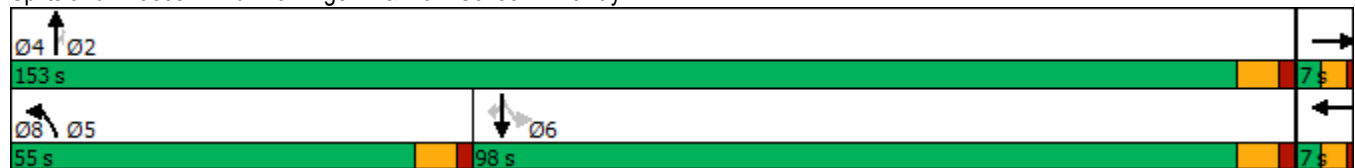
Intersection LOS: B

Intersection Capacity Utilization 60.4%

ICU Level of Service B

Analysis Period (min) 15
























Splits and Phases: 10: Flamingo Dr & Main School Driveway



# HCM 6th Signalized Intersection Summary

## 10: Flamingo Dr & Main School Driveway

12/09/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								  			 	
Traffic Volume (veh/h)	0	0	0	0	0	43	183	1562	16	211	1154	164
Future Volume (veh/h)	0	0	0	0	0	43	183	1562	16	211	1154	164
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	0	0	0	0	47	199	1644	17	229	1215	178
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.95	0.92	0.92	0.95	0.92
Percent Heavy Veh, %	0	2	2	0	2	2	2	2	2	2	2	2
Cap, veh/h	0	35	0	0	0	30	224	4659	1446	268	2640	1177
Arrive On Green	0.00	0.00	0.00	0.00	0.00	0.02	0.13	0.91	0.91	0.74	0.74	0.74
Sat Flow, veh/h	0	1870	0	0	0	1585	1781	5106	1585	300	3554	1585
Grp Volume(v), veh/h	0	0	0	0	0	47	199	1644	17	229	1215	178
Grp Sat Flow(s),veh/h/ln	0	1870	0	0	0	1585	1781	1702	1585	300	1777	1585
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	3.0	17.6	6.6	0.2	118.8	21.4	5.2
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	3.0	17.6	6.6	0.2	118.8	21.4	5.2
Prop In Lane	0.00		0.00	0.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	35	0	0	0	30	224	4659	1446	268	2640	1177
V/C Ratio(X)	0.00	0.00	0.00	0.00	0.00	1.58	0.89	0.35	0.01	0.86	0.46	0.15
Avail Cap(c_a), veh/h	0	35	0	0	0	30	534	4659	1446	268	2640	1177
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	78.5	68.8	0.9	0.6	22.3	8.0	6.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	376.2	11.2	0.2	0.0	27.9	0.6	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	0.0	0.0	0.0	7.8	13.6	1.6	0.0	15.7	12.8	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	0.0	0.0	454.7	80.0	1.1	0.6	50.2	8.6	6.2
LnGrp LOS	A	A	A	A	A	F	E	A	A	D	A	A
Approach Vol, veh/h		0			47			1860			1622	
Approach Delay, s/veh		0.0			454.7			9.5			14.2	
Approach LOS					F			A			B	
Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		153.0		7.0	27.2	125.8		7.0				
Change Period (Y+Rc), s		7.0		4.0	7.0	7.0		4.0				
Max Green Setting (Gmax), s		146.0		3.0	48.0	91.0		3.0				
Max Q Clear Time (g_c+I1), s		8.6		0.0	19.6	120.8		5.0				
Green Ext Time (p_c), s		23.1		0.0	0.6	0.0		0.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				17.6								
HCM 6th LOS				B								











Existing Conditions  
Timing Plan: PM Peak

Synchro 10 Light Report  
Page 8



Lanes, Volumes, Timings  
13: Flamingo Dr & South School Driveway

12/09/2019

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	235	0	1767	1540	29
Future Volume (vph)	0	235	0	1767	1540	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	0			125
Storage Lanes	0	1	0			1
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	1.00
Frt		0.865				0.850
Flt Protected						
Satd. Flow (prot)	0	1611	0	5085	5085	1583
Flt Permitted						
Satd. Flow (perm)	0	1611	0	5085	5085	1583
Link Speed (mph)	30			30	30	
Link Distance (ft)	453			662	638	
Travel Time (s)	10.3			15.0	14.5	
Peak Hour Factor	0.96	0.96	0.95	0.95	0.95	0.96
Adj. Flow (vph)	0	245	0	1860	1621	30
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	245	0	1860	1621	30
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	51.0%			ICU Level of Service A		
Analysis Period (min)	15					

Existing Conditions  
Timing Plan: PM Peak

Synchro 10 Light Report  
Page 9

HCM 6th TWSC  
13: Flamingo Dr & South School Driveway

12/09/2019

Intersection

Int Delay, s/veh 4.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑↑	↑↑↑	↗
Traffic Vol, veh/h	0	235	0	1767	1540	29
Future Vol, veh/h	0	235	0	1767	1540	29
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	-	-	-	125
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	95	95	95	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	245	0	1860	1621	30

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	- 811	- 0	- 0
Stage 1	- -	- -	- -
Stage 2	- -	- -	- -
Critical Hdwy	- 7.14	- -	- -
Critical Hdwy Stg 1	- -	- -	- -
Critical Hdwy Stg 2	- -	- -	- -
Follow-up Hdwy	- 3.92	- -	- -
Pot Cap-1 Maneuver	0 277	0 -	- -
Stage 1	0 -	0 -	- -
Stage 2	0 -	0 -	- -
Platoon blocked, %		- -	- -
Mov Cap-1 Maneuver	- 277	- -	- -
Mov Cap-2 Maneuver	- -	- -	- -
Stage 1	- -	- -	- -
Stage 2	- -	- -	- -

Approach	EB	NB	SB
HCM Control Delay, s	68.3	0	0
HCM LOS	F		























Minor Lane/Major Mvmt	NBT EBLn1	SBT	SBR
Capacity (veh/h)	- 277	- -	- -
HCM Lane V/C Ratio	- 0.884	- -	- -
HCM Control Delay (s)	- 68.3	- -	- -
HCM Lane LOS	- F	- -	- -
HCM 95th %tile Q(veh)	- 7.8	- -	- -

Existing Conditions  
Timing Plan: PM Peak

Synchro 10 Light Report  
Page 10

Lanes, Volumes, Timings  
15: Flamingo Dr & SW 55th St

12/09/2019













												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	104	4	205	78	20	106	146	1428	32	113	1497	114
Future Volume (vph)	104	4	205	78	20	106	146	1428	32	113	1497	114
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	160		160	170		170
Storage Lanes	0		1	0		1	1		1	1		1
Taper Length (ft)	25			25			170			160		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected		0.954			0.962		0.950			0.950		
Satd. Flow (prot)	0	1777	1583	0	1792	1583	1770	5085	1583	1770	5085	1583
Flt Permitted		0.568			0.568		0.950			0.950		
Satd. Flow (perm)	0	1058	1583	0	1058	1583	1770	5085	1583	1770	5085	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			228			123			68			116
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		543			396			1986			662	
Travel Time (s)		12.3			9.0			45.1			15.0	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	116	4	228	87	22	118	162	1587	36	126	1663	127
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	120	228	0	109	118	162	1587	36	126	1663	127
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
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8			2			6
Detector Phase	4	4	4	8	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	5.0	20.0	20.0	5.0	20.0	20.0
Minimum Split (s)	12.0	12.0	12.0	12.0	12.0	12.0	12.0	27.0	27.0	12.0	27.0	27.0
Total Split (s)	46.0	46.0	46.0	46.0	46.0	46.0	40.0	89.0	89.0	25.0	74.0	74.0
Total Split (%)	28.8%	28.8%	28.8%	28.8%	28.8%	28.8%	25.0%	55.6%	55.6%	15.6%	46.3%	46.3%
Maximum Green (s)	40.0	40.0	40.0	40.0	40.0	40.0	33.0	82.0	82.0	18.0	67.0	67.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0	6.0		6.0	6.0	7.0	7.0	7.0	7.0	7.0	7.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effect Green (s)		21.9	21.9		21.9	21.9	19.9	101.4	101.4	16.6	98.1	98.1

Existing Conditions  
Timing Plan: PM Peak

Synchro 10 Light Report  
Page 11

Lanes, Volumes, Timings  
15: Flamingo Dr & SW 55th St

12/09/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.14	0.14		0.14	0.14	0.12	0.63	0.63	0.10	0.61	0.61
v/c Ratio		0.83	0.55		0.75	0.37	0.74	0.49	0.04	0.68	0.53	0.13
Control Delay		105.9	11.6		95.1	10.9	86.2	17.6	0.4	87.3	20.1	3.9
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		105.9	11.6		95.1	10.9	86.2	17.6	0.4	87.3	20.1	3.9
LOS		F	B		F	B	F	B	A	F	C	A
Approach Delay		44.1			51.3			23.5			23.5	
Approach LOS		D			D			C			C	

Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.83

Intersection Signal Delay: 26.6

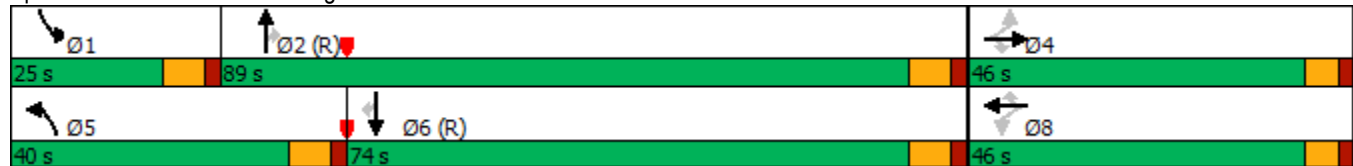
Intersection LOS: C

Intersection Capacity Utilization 66.3%

ICU Level of Service C























Analysis Period (min) 15

Splits and Phases: 15: Flamingo Dr & SW 55th St



# HCM 6th Signalized Intersection Summary 15: Flamingo Dr & SW 55th St

12/09/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	104	4	205	78	20	106	146	1428	32	113	1497	114
Future Volume (veh/h)	104	4	205	78	20	106	146	1428	32	113	1497	114
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	116	4	161	87	22	118	162	1587	36	126	1663	127
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	213	6	189	201	41	189	186	3436	1067	147	3326	1032
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.10	0.67	0.67	0.08	0.65	0.65
Sat Flow, veh/h	1414	49	1585	1347	341	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	120	0	161	109	0	118	162	1587	36	126	1663	127
Grp Sat Flow(s),veh/h/ln	1462	0	1585	1687	0	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	3.2	0.0	15.9	0.0	0.0	11.3	14.3	23.6	1.2	11.2	26.9	4.9
Cycle Q Clear(g_c), s	12.3	0.0	15.9	9.1	0.0	11.3	14.3	23.6	1.2	11.2	26.9	4.9
Prop In Lane	0.97		1.00	0.80		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	219	0	189	242	0	189	186	3436	1067	147	3326	1032
V/C Ratio(X)	0.55	0.00	0.85	0.45	0.00	0.62	0.87	0.46	0.03	0.85	0.50	0.12
Avail Cap(c_a), veh/h	402	0	396	436	0	396	367	3436	1067	200	3326	1032
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.4	0.0	69.1	66.1	0.0	67.0	70.6	12.4	8.8	72.4	14.4	10.6
Incr Delay (d2), s/veh	2.1	0.0	10.2	1.3	0.0	3.3	11.8	0.4	0.1	22.4	0.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.5	0.0	11.4	7.7	0.0	8.4	11.6	14.0	0.8	10.1	15.9	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.5	0.0	79.3	67.4	0.0	70.4	82.4	12.9	8.8	94.8	15.0	10.8
LnGrp LOS	E	A	E	E	A	E	F	B	A	F	B	B
Approach Vol, veh/h	281			227			1785			1916		
Approach Delay, s/veh	75.1			68.9			19.1			19.9		
Approach LOS	E			E			B			B		
Timer - Assigned Phs	1	2	4		5	6	8					
Phs Duration (G+Y+Rc), s	20.2	114.7	25.1		23.7	111.2	25.1					
Change Period (Y+Rc), s	7.0	7.0	6.0		7.0	7.0	6.0					
Max Green Setting (Gmax), s	18.0	82.0	40.0		33.0	67.0	40.0					
Max Q Clear Time (g_c+I1), s	13.2	25.6	17.9		16.3	28.9	13.3					
Green Ext Time (p_c), s	0.1	19.4	1.2		0.4	18.8	1.0					
Intersection Summary												
HCM 6th Ctrl Delay	25.9											
HCM 6th LOS	C											

Existing Conditions  
Timing Plan: PM Peak

Synchro 10 Light Report  
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4069 : 3063 - Flamingo Rd &amp; Griffin Rd ( Upload File )

Skdvh#4141

	1 (SL)	2 (NT)	3 (WL)	4 (ET)	5 (NL)	6 (ST)	7 (EL)	8 (WT)	9	10	11	12	13	14	15	16
Walk	0	7	0	7	0	7	0	7	0	0	0	0	0	0	0	0
Ped Clearance	0	36	0	46	0	39	0	45	0	0	0	0	0	0	0	0
Min Green	5	10	5	6	5	10	5	6	0	0	0	0	0	0	0	0
Gap Ext	1.5	3	1.5	2	1.5	3	1.5	2	0	0	0	0	0	0	0	0
Max1	20	50	20	40	20	50	20	40	0	0	0	0	0	0	0	0
Max2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yellow Clr	5	5	5	5	5	5	5	5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red Clr	2	2	2	2	2	2	2	2	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5

Skdvh#4145

	1 (SL)	2 (NT)	3 (WL)	4 (ET)	5 (NL)	6 (ST)	7 (EL)	8 (WT)	9	10	11	12	13	14	15	16
Enable	ON	ON	ON	ON	ON	ON	ON	ON								
Lock Call	ON		ON		ON		ON		ON	ON	ON	ON	ON	ON	ON	ON
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Dual Entry				ON				ON								
Sim Gap Enable									ON	ON	ON	ON	ON	ON	ON	ON
Rest In Walk		ON				ON										

Ghwhfwu#4145

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Call Phase	1	2	3	4	5	6	7	8	0	2	0	4	0	6	0	8
Switch Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ghwhfwu#4145

	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Call Phase	0	2	0	4	0	6	0	8	0	2	0	4	0	6	0	8
Switch Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ghwhfwu#4145

	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
Call Phase	0	2	0	4	0	6	0	8	0	0	0	0	0	0	0	0
Switch Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ghwhfwu#4145

	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
Call Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Switch Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Approved By: Carmen Li

Date: \_\_\_\_\_

Broward County

System Timing Sheet

9/23/2019

4069 : 3063 - Flamingo Rd &amp; Griffin Rd ( Upload File )

WE#Frru#Gd|#Bdq#7D`

Day Plan Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		6	9	15	20											
Minute																
Action	100	2	3	4	3											

Day Plan Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		7	21													
Minute		30														
Action	100	5	100													

Day Plan Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		8	20													
Minute		30														
Action	100	5	100													

Frrugldwrg/#Bdwug#049#514`Frrugldwrg/#Ddw#dev. 5D`

Pattern	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Cycle Time		180	160	180												
Offset Time		59	122	33												
Split Number		2	3	4												
Seq Number	1	5	3	5	1	1	1	1	1	1	1	1	1	1	1	1
Ph Opt Alt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ph Time Alt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Frrugldwrg/#scdw#51:14`

Split Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	30	64	23	63	30	64	25	61								
Mode	NON	MXP	NON	NON	NON	MXP	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase		ON														

Split Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	26	68	28	38	35	59	23	43								
Mode	NON	MXP	NON	NON	NON	MXP	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase		ON														

Split Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	29	78	35	38	45	62	35	38								
Mode	NON	MXP	NON	NON	NON	MXP	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase		ON														

Split Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Approved By: Carmen Li

Date: \_\_\_\_\_

4069 : 3063 - Flamingo Rd &amp; Griffin Rd ( Upload File )

Suhhp swirg#Wp hv'64 '2Skdvhv'6B '2R swirgv'6B'

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	2	4	1	3	2	4
Dwell Cyc Veh 2	6	8	6	8	5	7
Dwell Cyc Veh 3						
Dwell Cyc Veh 4						
Dwell Cyc Veh 5						
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	3	1	2	4	2	4
Exit 2	7	5	6	8	6	8
Exit 3						
Exit 4						

Suhhp swirg#Wp hv. '6I' '2R yhuusv. '6B '2R swirgv. '6B'

Preempt	1	2	3	4	5	6
Enable	ON	ON	ON	ON	ON	ON
Type	EMERG	EMERG	EMERG	EMERG	EMERG	EMERG
Skip Track						
Volt Mon Flash						
Coord in Preempt	ON	ON	ON	ON	ON	ON
Return Max/Min	MAX	MAX	MAX	MAX	MAX	MAX
Extend Dwell						
Pattern						
Output Mode	TS2	TS2	TS2	TS2	TS2	TS2
Track Over 1						
Track Over 2						
Track Over 3						
Track Over 4						
Track Over 5						
Track Over 6						
Track Over 7						
Track Over 8						
Track Over 9						
Track Over 10						
Track Over 11						
Track Over 12						
DwellCyc Over 1	9	9	9	9	9	9
DwellCyc Over 2						
DwellCyc Over 3						
DwellCyc Over 4						
DwellCyc Over 5						
DwellCyc Over 6						
DwellCyc Over 7						
DwellCyc Over 8						
DwellCyc Over 9						
DwellCyc Over 10						
DwellCyc Over 11						
DwellCyc Over 12						
Ped Clear						
Yellow						
Red						
Return Max						

R yhuus#Bur j uop #Bd up hwhw#4B54'

Overlap	Included Phases								Modifier Phases								Type	Green	Yellow	Red
Overlap 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NORMAL	0	3.5	1.5
Overlap 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NORMAL	0	3.5	1.5
Overlap 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NORMAL	0	3.5	1.5
Overlap 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NORMAL	0	3.5	1.5
Overlap 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NORMAL	0	3.5	1.5
Overlap 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NORMAL	0	3.5	1.5
Overlap 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NORMAL	0	3.5	1.5
Overlap 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NORMAL	0	3.5	1.5
Overlap 9	1	2	3	4	5	6	7	8	0	0	0	0	0	0	0	0	NORMAL	0	3.5	1.5
Overlap 10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NORMAL	0	3.5	1.5
Overlap 11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NORMAL	0	3.5	1.5
Overlap 12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NORMAL	0	3.5	1.5
Overlap 13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NORMAL	0	3.5	1.5
Overlap 14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NORMAL	0	3.5	1.5
Overlap 15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NORMAL	0	3.5	1.5
Overlap 16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NORMAL	0	3.5	1.5

Approved By: Carmen Li

Date: \_\_\_\_\_

4069 : 3063 - Flamingo Rd &amp; Griffin Rd ( Upload File )

Dohugdwh#Skdvh#Surj uop #4/#qwhuydc#Wlp hv#411914`

Skdvh	Z don	Shg# Fhdu	P lq# Juhg	Sdwdjh	P d{4	P d{5	hærz	Uhg# Fhdu	Dwljg Sk	#Elnh# Fhdu
4	3	3	3	3	3	3	3	3	3	
5	3	3	3	3	3	3	3	3	3	
6	3	3	3	3	3	3	3	3	3	
7	3	3	3	3	3	3	3	3	3	
8	3	3	3	3	3	3	3	3	3	
9	3	3	3	3	3	3	3	3	3	
:	3	3	3	3	3	3	3	3	3	
;	3	3	3	3	3	3	3	3	3	

Dohugdwh#Skdvh#Surj uop #5/#qwhuydc#Wlp hv#411914`

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1	0	0	0	0	0	0	0	0	0	
2	0	0	0	0	0	0	0	0	0	
3	0	0	0	0	0	0	0	0	0	
4	0	0	0	0	0	0	0	0	0	
5	0	0	0	0	0	0	0	0	0	
6	0	0	0	0	0	0	0	0	0	
7	0	0	0	0	0	0	0	0	0	
8	0	0	0	0	0	0	0	0	0	

Dohugdwh#Skdvh#Surj uop #6/#qwhuydc#Wlp hv#411914`

Skdvh	Z don	Shg# Fhdu	P lq# Juhg	Sdwdjh	P d{4	P d{5	hærz	Uhg# Fhdu	Dwljg Sk	#Elnh# Fhdu
4	3	3	3	3	3	3	3	3	3	
5	3	3	3	3	3	3	3	3	3	
6	3	3	3	3	3	3	3	3	3	
7	3	3	3	3	3	3	3	3	3	
8	3	3	3	3	3	3	3	3	3	
9	3	3	3	3	3	3	3	3	3	
:	3	3	3	3	3	3	3	3	3	
;	3	3	3	3	3	3	3	3	3	

Dohugdwh#Skdvh#Surj uop #7/#qwhuydc#Wlp hv#411914`

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
-------	------	--------------	--------------	---------	------	------	--------	--------------	--------------	---------------

Dohugdwh#Skdvh#Surj uop #8/#qwhuydc#Wlp hv#411914`

Skdvh	Z don	Shg# Fhdu	P lq# Juhg	Sdwdjh	P d{4	P d{5	hærz	Uhg# Fhdu	Dwljg Sk	#Elnh# Fhdu
-------	-------	--------------	---------------	--------	-------	-------	------	--------------	-------------	----------------

WE#Frru#Gd|#Bql#7I`

Day Plan Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Approved By: Carmen Li

Date: \_\_\_\_\_

4069 : 3063 - Flamingo Rd &amp; Griffin Rd ( Upload File )

Fruglind, #51: 14

Split Table 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 13	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 14	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 15	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 16	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Approved By: Carmen Li

Date: \_\_\_\_\_



3994 : 3355 - Flamingo Rd &amp; SW 55 St ( Upload File )

Skdvh#4141`

	1 (SL)	2 (NT)	3	4 (ET)	5 (NL)	6 (ST)	7	8 (WT)	9	10	11	12	13	14	15	16
Walk	0	7	0	7	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clearance	0	15	0	30	0	0	0	0	0	0	0	0	0	0	0	0
Min Green	5	20	0	6	5	20	0	6	0	0	0	0	0	0	0	0
Gap Ext	1.5	3	0	2	1.5	3	0	2	0	0	0	0	0	0	0	0
Max1	15	50	0	25	22	50	0	25	0	0	0	0	0	0	0	0
Max2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yellow Clr	5	5	0	4	5	5	0	4	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red Clr	2	2	0	2	2	2	0	2	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5

Skdvh#swrg#4145`

	1 (SL)	2 (NT)	3	4 (ET)	5 (NL)	6 (ST)	7	8 (WT)	9	10	11	12	13	14	15	16
Enable	ON	ON		ON	ON	ON		ON								
Lock Call	ON				ON				ON	ON	ON	ON	ON	ON	ON	ON
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Dual Entry				ON				ON								
Sim Gap Enable									ON	ON	ON	ON	ON	ON	ON	ON
Rest In Walk		ON				ON										

Ghwhfwru#zhkldh#Scdup hwhw#049#814`

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Call Phase	1	2	3	4	5	6	7	8	0	0	0	0	0	0	0	8
Switch Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ghwhfwru#zhkldh#Scdup hwhw#065#814`

	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Call Phase	0	0	0	0	0	6	0	8	0	2	0	4	0	6	0	8
Switch Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ghwhfwru#zhkldh#Scdup hwhw#607;#814`

	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
Call Phase	0	2	0	4	0	6	0	8	0	0	0	0	0	0	0	0
Switch Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ghwhfwru#zhkldh#Scdup hwhw#097#814`

	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
Call Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Switch Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Approved By: Carmen Li

Date: \_\_\_\_\_

Broward County

System Timing Sheet

9/23/2019

3994 : 3355 - Flamingo Rd &amp; SW 55 St ( Upload File )

WE#Frru#Gd|#Bdq#7D`

Day Plan Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		6	9	15	20											
Minute																
Action	100	2	3	4	3											

Day Plan Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		1	6													
Minute			30													
Action	3	100	3													

Day Plan Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		1	6	23												
Minute			30													
Action	3	100	3	100												

Frrugldwrg/#Bdwug#049#514`Frrugldwrg/#Dw#dev. 5D`

Pattern	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Cycle Time		160	160	160												
Offset Time		134	98	110												
Split Number		2	3	4												
Seq Number	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Ph Opt Alt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ph Time Alt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Frrugldwrg/#scw#51:14`

Split Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	25	89		46	40	74		46								
Mode	NON	MPX	NON	NON	NON	MPX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase		ON														

Split Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	25	89		46	40	74		46								
Mode	NON	MPX	NON	NON	NON	MPX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase		ON														

Split Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	25	89		46	40	74		46								
Mode	NON	MPX	NON	NON	NON	MPX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase		ON														

Split Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Approved By: Carmen Li

Date: \_\_\_\_\_

3994 : 3355 - Flamingo Rd &amp; SW 55 St ( Upload File )

Suhhp swirg#Wp hv'64 '2Skdvhv'6B '2R swirgv'6B'

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

Suhhp swirg#Wp hv. '6I' '2R yhuu'sv. '6B '2R swirgv. '6B'

Preempt	1	2	3	4	5	6
Enable	ON	ON	ON		ON	
Type	EMERG	EMERG	EMERG	EMERG	EMERG	EMERG
Skip Track						
Volt Mon Flash						
Coord in Preempt	ON	ON	ON		ON	
Return Max/Min	MAX	MAX	MAX	MAX	MAX	MAX
Extend Dwell						
Pattern						
Output Mode	TS2	TS2	TS2	TS2	TS2	TS2
Track Over 1						
Track Over 2						
Track Over 3						
Track Over 4						
Track Over 5						
Track Over 6						
Track Over 7						
Track Over 8						
Track Over 9						
Track Over 10						
Track Over 11						
Track Over 12						
DwellCyc Over 1						
DwellCyc Over 2						
DwellCyc Over 3						
DwellCyc Over 4						
DwellCyc Over 5						
DwellCyc Over 6						
DwellCyc Over 7						
DwellCyc Over 8						
DwellCyc Over 9						
DwellCyc Over 10						
DwellCyc Over 11						
DwellCyc Over 12						
Ped Clear						
Yellow						
Red						
Return Max						

R yhuu's#Bur juop #Bduop hwhw#4B54'

Overlap	Included Phases								Modifier Phases								Type	Green	Yellow	Red
Overlap 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NORMAL	0	3.5	1.5
Overlap 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NORMAL	0	3.5	1.5
Overlap 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NORMAL	0	3.5	1.5
Overlap 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NORMAL	0	3.5	1.5
Overlap 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NORMAL	0	3.5	1.5
Overlap 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NORMAL	0	3.5	1.5
Overlap 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NORMAL	0	3.5	1.5
Overlap 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NORMAL	0	3.5	1.5
Overlap 9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NORMAL	0	3.5	1.5
Overlap 10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NORMAL	0	3.5	1.5
Overlap 11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NORMAL	0	3.5	1.5
Overlap 12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NORMAL	0	3.5	1.5
Overlap 13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NORMAL	0	3.5	1.5
Overlap 14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NORMAL	0	3.5	1.5
Overlap 15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NORMAL	0	3.5	1.5
Overlap 16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NORMAL	0	3.5	1.5

Approved By: Carmen Li

Date: \_\_\_\_\_

3994 : 3355 - Flamingo Rd &amp; SW 55 St ( Upload File )

Dohugdwh#Skdvh#Surj uop #4/#qwhuydc#Wlp hv#411914`

Skdvh	Z don	Shg# Fhdu	P lq# Juhg	Sdwdjh	P d{4	P d{5	hørz	Uhg# Fhdu	Dwlj g Sk	#Elnh# Fhdu
4	3	3	3	3	3	3	3	3	3	
5	3	3	3	3	3	3	3	3	3	
6	3	3	3	3	3	3	3	3	3	
7	3	3	3	3	3	3	3	3	3	
8	3	3	3	3	3	3	3	3	3	
9	3	3	3	3	3	3	3	3	3	
:	3	3	3	3	3	3	3	3	3	
;	3	3	3	3	3	3	3	3	3	

Dohugdwh#Skdvh#Surj uop #5/#qwhuydc#Wlp hv#411914`

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1	0	0	0	0	0	0	0	0	0	
2	0	0	0	0	0	0	0	0	0	
3	0	0	0	0	0	0	0	0	0	
4	0	0	0	0	0	0	0	0	0	
5	0	0	0	0	0	0	0	0	0	
6	0	0	0	0	0	0	0	0	0	
7	0	0	0	0	0	0	0	0	0	
8	0	0	0	0	0	0	0	0	0	

Dohugdwh#Skdvh#Surj uop #6/#qwhuydc#Wlp hv#411914`

Skdvh	Z don	Shg# Fhdu	P lq# Juhg	Sdwdjh	P d{4	P d{5	hørz	Uhg# Fhdu	Dwlj g Sk	#Elnh# Fhdu
4	3	3	3	3	3	3	3	3	3	
5	3	3	3	3	3	3	3	3	3	
6	3	3	3	3	3	3	3	3	3	
7	3	3	3	3	3	3	3	3	3	
8	3	3	3	3	3	3	3	3	3	
9	3	3	3	3	3	3	3	3	3	
:	3	3	3	3	3	3	3	3	3	
;	3	3	3	3	3	3	3	3	3	

Dohugdwh#Skdvh#Surj uop #7/#qwhuydc#Wlp hv#411914`

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
-------	------	--------------	--------------	---------	------	------	--------	--------------	--------------	---------------

Dohugdwh#Skdvh#Surj uop #8/#qwhuydc#Wlp hv#411914`

Skdvh	Z don	Shg# Fhdu	P lq# Juhg	Sdwdjh	P d{4	P d{5	hørz	Uhg# Fhdu	Dwlj g Sk	#Elnh# Fhdu
-------	-------	--------------	---------------	--------	-------	-------	------	--------------	--------------	----------------

WE#Frru#Gd|#Bølg#7I`

Day Plan Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Approved By: Carmen Li

Date: \_\_\_\_\_

3994 : 3355 - Flamingo Rd &amp; SW 55 St ( Upload File )

Frugliolo/Aschw#51: 4`

Split Table 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 13	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 14	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 15	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 16	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Approved By: Carmen Li

Date: \_\_\_\_\_



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# **APPENDIX “E”**

## **INTERSECTION DEVELOPMENT SHEETS**

**INTERSECTION DEVELOPMENT SHEET**  
**ARCHBISHOP MCCARTHY HIGH SCHOOL**  
**FLAMINGO ROAD AND GRIFFIN ROAD**

**INPUT DATA**

**Comments:**

Growth Rate = 1.0%      Peak Season = 1.04      Current Year = 2019      Buildout Year = 2021

**AM Peak Hour**

**INTERSECTION VOLUME DEVELOPMENT**

	Northbound			Southbound			Eastbound			Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volume (2019)	408	1389	254	401	1164	178	227	826	450	267	913	309
Peak Adjusted Existing Volume	424	1445	264	417	1211	185	236	859	468	278	950	321
Background Traffic Growth	17	57	10	16	48	7	9	34	18	11	37	13
2021 Background Traffic	441	1502	275	433	1258	192	245	893	486	289	987	334
Project Traffic	6	18	6	0	27	0	0	0	11	8	0	0
<b>2021 Total Traffic</b>	<b>447</b>	<b>1520</b>	<b>281</b>	<b>433</b>	<b>1285</b>	<b>192</b>	<b>245</b>	<b>893</b>	<b>497</b>	<b>297</b>	<b>987</b>	<b>334</b>

**PM Peak Hour**

**INTERSECTION VOLUME DEVELOPMENT**

	Northbound			Southbound			Eastbound			Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volume (2019)	409	993	260	308	984	133	255	624	268	295	515	154
Peak Adjusted Existing Volume	425	1033	270	320	1023	138	265	649	279	307	536	160
Background Traffic Growth	17	41	11	13	40	5	10	26	11	12	21	6
2021 Background Traffic	442	1073	281	333	1064	144	276	675	290	319	557	166
Project Traffic	5	15	5	0	11	0	0	0	5	3	0	0
<b>2021 Total Traffic</b>	<b>447</b>	<b>1088</b>	<b>286</b>	<b>333</b>	<b>1075</b>	<b>144</b>	<b>276</b>	<b>675</b>	<b>295</b>	<b>322</b>	<b>557</b>	<b>166</b>

**INTERSECTION DEVELOPMENT SHEET**  
**ARCHBISHOP MCCARTHY HIGH SCHOOL**  
**FLAMINGO ROAD AND NORTH SCHOOL DRIVEWAY**

**INPUT DATA**

**Comments:**

Growth Rate = 1.0%      Peak Season = 1.04      Current Year = 2019      Buildout Year = 2021

**AM Peak Hour**

**INTERSECTION VOLUME DEVELOPMENT**

	Northbound			Southbound			Eastbound			Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volume (2019)	0	1741	0	0	1434	497	0	0	333	0	0	0
Peak Adjusted Existing Volume	0	1811	0	0	1491	497	0	0	333	0	0	0
Background Traffic Growth	0	71	0	0	59	0	0	0	0	0	0	0
2021 Background Traffic	0	1882	0	0	1550	497	0	0	333	0	0	0
Project Traffic	0	30	0	0	19	27	0	0	18	0	0	0
<b>2021 Total Traffic</b>	<b>0</b>	<b>1912</b>	<b>0</b>	<b>0</b>	<b>1569</b>	<b>524</b>	<b>0</b>	<b>0</b>	<b>351</b>	<b>0</b>	<b>0</b>	<b>0</b>

**PM Peak Hour**

**INTERSECTION VOLUME DEVELOPMENT**

	Northbound			Southbound			Eastbound			Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volume (2019)	0	1673	0	0	1323	120	0	0	154	0	0	0
Peak Adjusted Existing Volume	0	1740	0	0	1376	120	0	0	154	0	0	0
Background Traffic Growth	0	69	0	0	54	0	0	0	0	0	0	0
2021 Background Traffic	0	1809	0	0	1430	120	0	0	154	0	0	0
Project Traffic	0	25	0	0	8	11	0	0	13	0	0	0
<b>2021 Total Traffic</b>	<b>0</b>	<b>1834</b>	<b>0</b>	<b>0</b>	<b>1438</b>	<b>131</b>	<b>0</b>	<b>0</b>	<b>167</b>	<b>0</b>	<b>0</b>	<b>0</b>

Note:

The northbound and southbound through volumes determined by 24-hour directional tube counts.

SBT at north school driveway = SBT tube counts minus EBR turn at driveway

PSCF and background growth not applied for driveway volumes

**INTERSECTION DEVELOPMENT SHEET**  
**ARCHBISHOP MCCARTHY HIGH SCHOOL**  
**FLAMINGO ROAD AND MAIN SCHOOL DRIVEWAY**

**INPUT DATA**

**Comments:**

Growth Rate = 1.0%

Peak Season = 1.04

Current Year = 2019

Buildout Year = 2021

**AM Peak Hour**

**INTERSECTION VOLUME DEVELOPMENT**

	Northbound				Southbound				Eastbound			Westbound		
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volume (2019)	96	320	1537	10	196	45	1453	237	0	0	567	0	0	8
Peak Adjusted Existing Volume	100	320	1598	10	204	47	1511	237	0	0	567	0	0	8
Background Traffic Growth	4	0	63	0	8	2	60	0	0	0	0	0	0	0
2021 Background Traffic	104	320	1662	11	212	49	1571	237	0	0	567	0	0	9
Project Traffic	4	27	15	0	15	0	7	15	0	0	36	0	0	0
<b>2021 Total Traffic</b>	<b>108</b>	<b>347</b>	<b>1677</b>	<b>11</b>	<b>227</b>	<b>49</b>	<b>1578</b>	<b>252</b>	<b>0</b>	<b>0</b>	<b>603</b>	<b>0</b>	<b>0</b>	<b>9</b>

**PM Peak Hour**

**INTERSECTION VOLUME DEVELOPMENT**

	Northbound				Southbound				Eastbound			Westbound		
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volume (2019)	15	167	1502	15	130	73	1110	164	0	0	385	0	0	41
Peak Adjusted Existing Volume	16	167	1562	16	135	76	1154	164	0	0	385	0	0	43
Background Traffic Growth	1	0	62	1	5	3	46	0	0	0	0	0	0	2
2021 Background Traffic	16	167	1624	16	141	79	1200	164	0	0	385	0	0	44
Project Traffic	2	11	13	0	13	0	4	6	0	0	25	0	0	0
<b>2021 Total Traffic</b>	<b>18</b>	<b>178</b>	<b>1637</b>	<b>16</b>	<b>154</b>	<b>79</b>	<b>1204</b>	<b>170</b>	<b>0</b>	<b>0</b>	<b>410</b>	<b>0</b>	<b>0</b>	<b>44</b>

Note:

The northbound and southbound through volumes determined by 24-hour directional tube counts.

SBT = SBT tube counts - SBR - SBU - SBL at school driveway

NBT = NBT tube counts - WBR - SBU

PSCF and background growth not applied for driveway volumes



**INTERSECTION DEVELOPMENT SHEET**  
**ARCHBISHOP MCCARTHY HIGH SCHOOL**  
**FLAMINGO ROAD AND SOUTH SCHOOL DRIVEWAY**

**INPUT DATA**

**Comments:**

Growth Rate = 1.0%    Peak Season = 1.04    Current Year = 2019    Buildout Year = 2021

**AM Peak Hour**

**INTERSECTION VOLUME DEVELOPMENT**

	Northbound			Southbound			Eastbound			Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volume (2019)	0	1963	0	0	1993	123	0	0	33	0	0	0
Peak Adjusted Existing Volume	0	2042	0	0	2073	123	0	0	33	0	0	0
Background Traffic Growth	0	80	0	0	82	0	0	0	0	0	0	0
2021 Background Traffic	0	2122	0	0	2154	123	0	0	33	0	0	0
Project Traffic	0	45	0	0	39	8	0	0	6	0	0	0
<b>2021 Total Traffic</b>	<b>0</b>	<b>2167</b>	<b>0</b>	<b>0</b>	<b>2193</b>	<b>131</b>	<b>0</b>	<b>0</b>	<b>39</b>	<b>0</b>	<b>0</b>	<b>0</b>

**PM Peak Hour**

**INTERSECTION VOLUME DEVELOPMENT**

	Northbound			Southbound			Eastbound			Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volume (2019)	0	1699	0	0	1481	29	0	0	235	0	0	0
Peak Adjusted Existing Volume	0	1767	0	0	1540	29	0	0	235	0	0	0
Background Traffic Growth	0	70	0	0	61	0	0	0	0	0	0	0
2021 Background Traffic	0	1837	0	0	1601	29	0	0	235	0	0	0
Project Traffic	0	25	0	0	25	3	0	0	13	0	0	0
<b>2021 Total Traffic</b>	<b>0</b>	<b>1862</b>	<b>0</b>	<b>0</b>	<b>1626</b>	<b>32</b>	<b>0</b>	<b>0</b>	<b>248</b>	<b>0</b>	<b>0</b>	<b>0</b>

Note:

The northbound and southbound through volumes determined by directional volumes on Flamingo Road at the main school driveway  
PSCF and background growth not applied for driveway volumes

**INTERSECTION DEVELOPMENT SHEET**  
**ARCHBISHOP MCCARTHY HIGH SCHOOL**  
**FLAMINGO ROAD AND SW 55TH STREET**

**INPUT DATA**

**Comments:**

Growth Rate = 1.0%      Peak Season = 1.04      Current Year = 2019      Buildout Year = 2021

**AM Peak Hour**

**INTERSECTION VOLUME DEVELOPMENT**

	Northbound			Southbound			Eastbound			Westbound			
	Left	Thru	Right	U-Turn	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volume (2019)	237	1622	31	205	27	1360	182	19	10	276	57	51	57
Peak Adjusted Existing Volume	246	1687	32	213	28	1414	189	20	10	287	59	53	59
Background Traffic Growth	10	67	1	8	1	56	7	1	0	11	2	2	2
2021 Background Traffic	256	1753	34	222	29	1470	197	21	11	298	62	55	62
Project Traffic	0	30	0	15	0	30	0	0	0	0	0	0	0
2021 Total Traffic	256	1783	34	237	29	1500	197	21	11	298	62	55	62

**PM Peak Hour**

**INTERSECTION VOLUME DEVELOPMENT**

	Northbound			Southbound				Eastbound			Westbound		
	Left	Thru	Right	U-Turn	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volume (2019)	140	1373	31	47	62	1439	110	100	4	197	75	19	102
Peak Adjusted Existing Volume	146	1428	32	49	64	1497	114	104	4	205	78	20	106
Background Traffic Growth	6	56	1	2	3	59	5	4	0	8	3	1	4
2021 Background Traffic	151	1484	34	51	67	1556	119	108	4	213	81	21	110
Project Traffic	0	12	0	13	0	25	0	0	0	0	0	0	0
2021 Total Traffic	151	1496	34	64	67	1581	119	108	4	213	81	21	110

























# **APPENDIX “F”**

## **SYNCHRO PRINTOUTS**

## **BACKGROUND CONDITIONS**

Lanes, Volumes, Timings  
3: Flamingo Dr & Griffin Rd

12/09/2019













												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	245	893	486	289	987	334	441	1502	275	433	1258	192
Future Volume (vph)	245	893	486	289	987	334	441	1502	275	433	1258	192
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	450		550	420		300	300		280	290		210
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	100			100			220			250		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	5085	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	5085	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			265			267			178			115
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1085			1206			2451			1027	
Travel Time (s)		24.7			27.4			55.7			23.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	258	940	512	304	1039	352	464	1581	289	456	1324	202
Shared Lane Traffic (%)												
Lane Group Flow (vph)	258	940	512	304	1039	352	464	1581	289	456	1324	202
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)		24			24			24			24	
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
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	12.0	13.0	13.0	12.0	13.0	13.0	12.0	17.0	17.0	12.0	17.0	17.0
Total Split (s)	25.0	63.0	63.0	23.0	61.0	61.0	30.0	64.0	64.0	30.0	64.0	64.0
Total Split (%)	13.9%	35.0%	35.0%	12.8%	33.9%	33.9%	16.7%	35.6%	35.6%	16.7%	35.6%	35.6%
Maximum Green (s)	18.0	56.0	56.0	16.0	54.0	54.0	23.0	57.0	57.0	23.0	57.0	57.0
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effect Green (s)	17.0	49.9	49.9	16.0	48.9	48.9	28.0	58.5	58.5	27.6	58.1	58.1

2021 Background Conditions  
Timing Plan: AM Peak

Synchro 10 Light Report  
Page 1

Lanes, Volumes, Timings  
3: Flamingo Dr & Griffin Rd

12/09/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.09	0.28	0.28	0.09	0.27	0.27	0.16	0.32	0.32	0.15	0.32	0.32
v/c Ratio	0.80	0.67	0.81	1.00	0.75	0.56	0.87	0.96	0.46	0.87	0.81	0.34
Control Delay	97.9	59.7	38.8	130.1	63.5	16.5	89.6	73.0	20.4	90.0	60.7	21.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	97.9	59.7	38.8	130.1	63.5	16.5	89.6	73.0	20.4	90.0	60.7	21.3
LOS	F	E	D	F	E	B	F	E	C	F	E	C
Approach Delay	59.2			65.7			69.8			63.4		
Approach LOS	E			E			E			E		

Intersection Summary

Area Type: Other

Cycle Length: 180

Actuated Cycle Length: 180

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.00

Intersection Signal Delay: 64.9

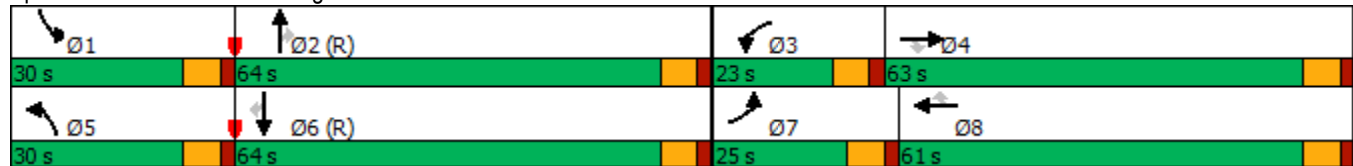
Intersection LOS: E

Intersection Capacity Utilization 90.8%

ICU Level of Service E

Analysis Period (min) 15

























Splits and Phases: 3: Flamingo Dr & Griffin Rd



# HCM 6th Signalized Intersection Summary

## 3: Flamingo Dr & Griffin Rd

12/09/2019











												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	245	893	486	289	987	334	441	1502	275	433	1258	192
Future Volume (veh/h)	245	893	486	289	987	334	441	1502	275	433	1258	192
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	258	940	512	304	1039	352	464	1581	289	456	1324	202
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	298	1589	493	307	1603	497	442	1617	502	442	1617	502
Arrive On Green	0.09	0.31	0.31	0.09	0.31	0.31	0.13	0.32	0.32	0.13	0.32	0.32
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	258	940	512	304	1039	352	464	1581	289	456	1324	202
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	13.3	28.0	56.0	15.8	31.6	35.3	23.0	55.2	27.4	23.0	43.1	18.0
Cycle Q Clear(g_c), s	13.3	28.0	56.0	15.8	31.6	35.3	23.0	55.2	27.4	23.0	43.1	18.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	298	1589	493	307	1603	497	442	1617	502	442	1617	502
V/C Ratio(X)	0.87	0.59	1.04	0.99	0.65	0.71	1.05	0.98	0.58	1.03	0.82	0.40
Avail Cap(c_a), veh/h	346	1589	493	307	1603	497	442	1617	502	442	1617	502
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	81.2	52.3	62.0	81.9	53.2	54.5	78.5	60.9	51.4	78.5	56.7	48.2
Incr Delay (d2), s/veh	18.2	0.6	50.8	48.4	0.9	4.6	56.8	17.7	4.7	51.5	4.8	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.0	17.9	39.5	14.1	19.9	21.2	20.3	35.0	17.3	19.8	26.6	12.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	99.4	52.9	112.8	130.3	54.1	59.1	135.3	78.6	56.1	130.0	61.5	50.6
LnGrp LOS	F	D	F	F	D	E	F	E	E	F	E	D
Approach Vol, veh/h	1710		1695				2334		1982			
Approach Delay, s/veh	77.9		68.8				87.1		76.1			
Approach LOS	E		E				F		E			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	30.0	64.0	23.0	63.0	30.0	64.0	22.5	63.5				
Change Period (Y+Rc), s	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0				
Max Green Setting (Gmax), s	23.0	57.0	16.0	56.0	23.0	57.0	18.0	54.0				
Max Q Clear Time (g_c+I1), s	25.0	57.2	17.8	58.0	25.0	45.1	15.3	37.3				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	7.5	0.2	8.1				
Intersection Summary												
HCM 6th Ctrl Delay	78.2											
HCM 6th LOS	E											



# Lanes, Volumes, Timings

## 6: Flamingo Dr & North School Driveway

12/09/2019

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	333	0	1882	1550	497
Future Volume (vph)	0	333	0	1882	1550	497
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	0			400
Storage Lanes	0	1	0			1
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	1.00
Frt		0.865				0.850
Flt Protected						
Satd. Flow (prot)	0	1611	0	5085	5085	1583
Flt Permitted						
Satd. Flow (perm)	0	1611	0	5085	5085	1583
Link Speed (mph)	30			30	30	
Link Distance (ft)	502			664	2451	
Travel Time (s)	11.4			15.1	55.7	
Peak Hour Factor	0.62	0.62	0.86	0.86	0.86	0.62
Adj. Flow (vph)	0	537	0	2188	1802	802
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	537	0	2188	1802	802
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			24	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	57.2%			ICU Level of Service B		
Analysis Period (min)	15					

HCM 6th TWSC  
6: Flamingo Dr & North School Driveway
























12/09/2019

Intersection						
Int Delay, s/veh	6.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑↑	↑↑↑	↗
Traffic Vol, veh/h	0	333	0	1882	1550	497
Future Vol, veh/h	0	333	0	1882	1550	497
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	-	-	-	400
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	62	62	86	86	86	62
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	537	0	2188	1802	802
Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	901	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	-	-
Pot Cap-1 Maneuver	0	*545	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %		1		-	-	-
Mov Cap-1 Maneuver	-	*545	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB		NB		SB	
HCM Control Delay, s	62.6		0		0	
HCM LOS	F					
Minor Lane/Major Mvmt	NBT		EBLn1		SBT	SBR
Capacity (veh/h)	-		545		-	-
HCM Lane V/C Ratio	-		0.985		-	-
HCM Control Delay (s)	-		62.6		-	-
HCM Lane LOS	-		F		-	-
HCM 95th %tile Q(veh)	-		13.7		-	-
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

# Lanes, Volumes, Timings

## 10: Flamingo Dr & Main School Driveway

12/09/2019













												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								  			 	
Traffic Volume (vph)	0	0	0	0	0	9	424	1662	11	261	1571	237
Future Volume (vph)	0	0	0	0	0	9	424	1662	11	261	1571	237
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	480		180	180		200
Storage Lanes	0		0	0		0	1		1	1		1
Taper Length (ft)	25			25			50			150		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.95	1.00
Frt					0.865				0.850			0.850
Flt Protected							0.950			0.950		
Satd. Flow (prot)	0	1863	0	0	1611	0	1770	5085	1583	1770	3539	1583
Flt Permitted							0.038			0.102		
Satd. Flow (perm)	0	1863	0	0	1611	0	71	5085	1583	190	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					271				33			132
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		579			521			638			664	
Travel Time (s)		13.2			11.8			14.5			15.1	
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.86	0.72	0.72	0.86	0.72
Adj. Flow (vph)	0	0	0	0	0	13	589	1933	15	363	1827	329
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	13	0	589	1933	15	363	1827	329
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
Turn Type					NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases							2		2	6		6
Detector Phase		4			8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)		2.0			2.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)		6.0			6.0		12.0	22.5	22.5	9.5	22.5	22.5
Total Split (s)		7.0			7.0		70.0	133.0	133.0	40.0	103.0	103.0
Total Split (%)		3.9%			3.9%		38.9%	73.9%	73.9%	22.2%	57.2%	57.2%
Maximum Green (s)		3.0			3.0		63.0	126.0	126.0	35.5	96.0	96.0
Yellow Time (s)		3.0			3.0		5.0	5.0	5.0	3.5	5.0	5.0
All-Red Time (s)		1.0			1.0		2.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)		0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.0			4.0		7.0	7.0	7.0	4.5	7.0	7.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)		3.0			3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode		None			None		None	Max	Max	None	Max	Max
Act Effect Green (s)					3.0		159.0	126.6	126.6	127.7	97.2	97.2

2021 Background Conditions  
Timing Plan: AM Peak

Synchro 10 Light Report  
Page 6

Lanes, Volumes, Timings  
10: Flamingo Dr & Main School Driveway

12/09/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio					0.02		0.94	0.75	0.75	0.76	0.58	0.58
v/c Ratio					0.04		0.95	0.51	0.01	0.90	0.90	0.34
Control Delay					0.3		75.0	10.0	0.5	72.2	39.6	13.0
Queue Delay					0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay					0.3		75.0	10.0	0.5	72.2	39.6	13.0
LOS					A		E	A	A	E	D	B
Approach Delay					0.3			25.0			40.9	
Approach LOS					A			C			D	

Intersection Summary

Area Type: Other

Cycle Length: 180

Actuated Cycle Length: 168.7

Natural Cycle: 110

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.95

Intersection Signal Delay: 32.8

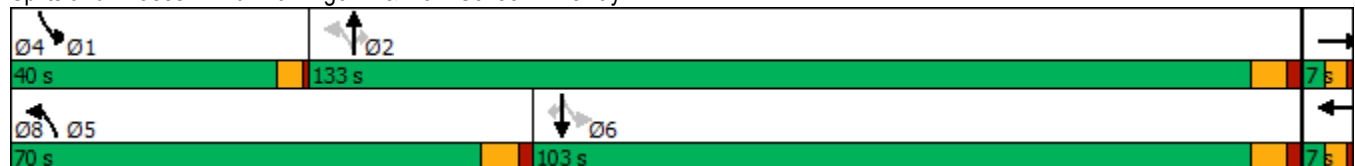
Intersection LOS: C

Intersection Capacity Utilization 85.3%

ICU Level of Service E

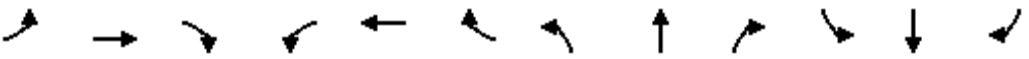
Analysis Period (min) 15

Splits and Phases: 10: Flamingo Dr & Main School Driveway



# HCM 6th Signalized Intersection Summary 10: Flamingo Dr & Main School Driveway

12/09/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰			↰		↰	↰↰↰	↰	↰	↰↰	↰
Traffic Volume (veh/h)	0	0	0	0	0	9	424	1662	11	261	1571	237
Future Volume (veh/h)	0	0	0	0	0	9	424	1662	11	261	1571	237
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	0	0	0	0	12	589	1933	15	362	1827	329
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.86	0.72	0.72	0.86	0.72
Percent Heavy Veh, %	0	2	2	0	2	2	2	2	2	2	2	2
Cap, veh/h	0	16	0	0	0	13	616	3975	1234	388	2045	912
Arrive On Green	0.00	0.00	0.00	0.00	0.00	0.01	0.31	0.78	0.78	0.12	0.58	0.58
Sat Flow, veh/h	0	1870	0	0	0	1585	1781	5106	1585	1781	3554	1585
Grp Volume(v), veh/h	0	0	0	0	0	12	589	1933	15	362	1827	329
Grp Sat Flow(s),veh/h/ln	0	1870	0	0	0	1585	1781	1702	1585	1781	1777	1585
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	1.3	47.7	22.5	0.4	17.0	75.0	18.6
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	1.3	47.7	22.5	0.4	17.0	75.0	18.6
Prop In Lane	0.00		0.00	0.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	16	0	0	0	13	616	3975	1234	388	2045	912
V/C Ratio(X)	0.00	0.00	0.00	0.00	0.00	0.91	0.96	0.49	0.01	0.93	0.89	0.36
Avail Cap(c_a), veh/h	0	34	0	0	0	28	739	3975	1234	552	2045	912
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	82.7	51.3	6.6	4.1	26.4	31.0	19.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	90.8	21.1	0.4	0.0	18.6	6.5	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	0.0	0.0	0.0	1.5	35.2	12.4	0.2	13.7	42.9	11.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	0.0	0.0	173.5	72.4	7.0	4.1	44.9	37.5	20.1
LnGrp LOS	A	A	A	A	A	F	E	A	A	D	D	C
Approach Vol, veh/h	0			12			2537			2518		
Approach Delay, s/veh	0.0			173.5			22.2			36.3		
Approach LOS				F			C			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	24.6	136.9		5.4	58.5	103.0		5.4				
Change Period (Y+Rc), s	4.5	7.0		4.0	7.0	7.0		4.0				
Max Green Setting (Gmax), s	35.5	126.0		3.0	63.0	96.0		3.0				
Max Q Clear Time (g_c+I1), s	19.0	24.5		0.0	49.7	77.0		3.3				
Green Ext Time (p_c), s	1.0	32.5		0.0	1.8	14.6		0.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay	29.5											
HCM 6th LOS	C											

# Lanes, Volumes, Timings

## 13: Flamingo Dr & South School Driveway

12/09/2019



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑↑	↑↑↑	↗
Traffic Volume (vph)	0	33	0	2122	2154	123
Future Volume (vph)	0	33	0	2122	2154	123
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	0			125
Storage Lanes	0	1	0			1
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	1.00
Frt		0.865				0.850
Flt Protected						
Satd. Flow (prot)	0	1611	0	5085	5085	1583
Flt Permitted						
Satd. Flow (perm)	0	1611	0	5085	5085	1583
Link Speed (mph)	30			30	30	
Link Distance (ft)	453			662	638	
Travel Time (s)	10.3			15.0	14.5	
Peak Hour Factor	0.62	0.62	0.62	0.86	0.86	0.62
Adj. Flow (vph)	0	53	0	2467	2505	198
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	53	0	2467	2505	198
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	51.6%			ICU Level of Service A		
Analysis Period (min)	15					



HCM 6th TWSC  
13: Flamingo Dr & South School Driveway

12/09/2019

Intersection

Int Delay, s/veh 0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑↑	↑↑↑	↗
Traffic Vol, veh/h	0	33	0	2122	2154	123
Future Vol, veh/h	0	33	0	2122	2154	123
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	-	-	-	125
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	62	62	62	86	86	62
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	53	0	2467	2505	198























Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	- 1253	- 0	- 0
Stage 1	- -	- -	- -
Stage 2	- -	- -	- -
Critical Hdwy	- 7.14	- -	- -
Critical Hdwy Stg 1	- -	- -	- -
Critical Hdwy Stg 2	- -	- -	- -
Follow-up Hdwy	- 3.92	- -	- -
Pot Cap-1 Maneuver	0 140	0 -	- -
Stage 1	0 -	0 -	- -
Stage 2	0 -	0 -	- -
Platoon blocked, %		- -	- -
Mov Cap-1 Maneuver	- 140	- -	- -
Mov Cap-2 Maneuver	- -	- -	- -
Stage 1	- -	- -	- -
Stage 2	- -	- -	- -

Approach	EB	NB	SB
HCM Control Delay, s	45.7	0	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBT EBLn1	SBT	SBR
Capacity (veh/h)	- 140	- -	- -
HCM Lane V/C Ratio	- 0.38	- -	- -
HCM Control Delay (s)	- 45.7	- -	- -
HCM Lane LOS	- E	- -	- -
HCM 95th %tile Q(veh)	- 1.6	- -	- -

Lanes, Volumes, Timings  
15: Flamingo Dr & SW 55th St

12/09/2019













												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	11	298	62	55	62	256	1753	34	251	1470	197
Future Volume (vph)	21	11	298	62	55	62	256	1753	34	251	1470	197
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	160		160	170		170
Storage Lanes	0		1	0		1	1		1	1		1
Taper Length (ft)	25			25			170			160		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected		0.968			0.974		0.950			0.950		
Satd. Flow (prot)	0	1803	1583	0	1814	1583	1770	5085	1583	1770	5085	1583
Flt Permitted		0.613			0.813		0.950			0.950		
Satd. Flow (perm)	0	1142	1583	0	1514	1583	1770	5085	1583	1770	5085	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			307			123			68			116
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		543			396			1986			662	
Travel Time (s)		12.3			9.0			45.1			15.0	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	25	13	355	74	65	74	305	2087	40	299	1750	235
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	38	355	0	139	74	305	2087	40	299	1750	235
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
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8			2			6
Detector Phase	4	4	4	8	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	5.0	20.0	20.0	5.0	20.0	20.0
Minimum Split (s)	12.0	12.0	12.0	12.0	12.0	12.0	12.0	27.0	27.0	12.0	27.0	27.0
Total Split (s)	46.0	46.0	46.0	46.0	46.0	46.0	40.0	89.0	89.0	25.0	74.0	74.0
Total Split (%)	28.8%	28.8%	28.8%	28.8%	28.8%	28.8%	25.0%	55.6%	55.6%	15.6%	46.3%	46.3%
Maximum Green (s)	40.0	40.0	40.0	40.0	40.0	40.0	33.0	82.0	82.0	18.0	67.0	67.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0	6.0		6.0	6.0	7.0	7.0	7.0	7.0	7.0	7.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effect Green (s)		20.0	20.0		20.0	20.0	33.2	82.0	82.0	38.0	86.8	86.8

2021 Background Conditions  
Timing Plan: AM Peak

Synchro 10 Light Report  
Page 11

Lanes, Volumes, Timings  
15: Flamingo Dr & SW 55th St

12/09/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.12	0.12		0.12	0.12	0.21	0.51	0.51	0.24	0.54	0.54
v/c Ratio		0.27	0.76		0.74	0.24	0.83	0.80	0.05	0.71	0.63	0.26
Control Delay		65.8	22.1		88.8	2.3	79.6	35.2	1.1	67.0	28.6	12.0
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		65.8	22.1		88.8	2.3	79.6	35.2	1.1	67.0	28.6	12.0
LOS		E	C		F	A	E	D	A	E	C	B
Approach Delay		26.3			58.7			40.2			31.9	
Approach LOS		C			E			D			C	

Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.83

Intersection Signal Delay: 36.4

Intersection LOS: D

Intersection Capacity Utilization 77.4%

ICU Level of Service D

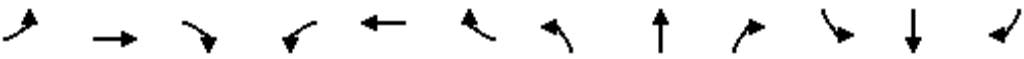
Analysis Period (min) 15

Splits and Phases: 15: Flamingo Dr & SW 55th St



# HCM 6th Signalized Intersection Summary 15: Flamingo Dr & SW 55th St

























12/09/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰	↱		↰	↱	↰	↰↰↰	↱	↰	↰↰↰	↱
Traffic Volume (veh/h)	21	11	298	62	55	62	256	1753	34	251	1470	197
Future Volume (veh/h)	21	11	298	62	55	62	256	1753	34	251	1470	197
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	25	13	284	74	65	74	305	2087	40	299	1750	235
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	211	103	307	190	157	307	327	2904	901	200	2542	789
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.18	0.57	0.57	0.11	0.50	0.50
Sat Flow, veh/h	898	530	1585	804	812	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	38	0	284	139	0	74	305	2087	40	299	1750	235
Grp Sat Flow(s),veh/h/ln	1428	0	1585	1616	0	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	0.0	0.0	28.2	8.3	0.0	6.3	27.0	47.7	1.8	18.0	41.9	14.0
Cycle Q Clear(g_c), s	3.4	0.0	28.2	11.8	0.0	6.3	27.0	47.7	1.8	18.0	41.9	14.0
Prop In Lane	0.66		1.00	0.53		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	314	0	307	348	0	307	327	2904	901	200	2542	789
V/C Ratio(X)	0.12	0.00	0.92	0.40	0.00	0.24	0.93	0.72	0.04	1.49	0.69	0.30
Avail Cap(c_a), veh/h	397	0	396	437	0	396	367	2904	901	200	2542	789
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.3	0.0	63.4	56.6	0.0	54.5	64.4	25.2	15.3	71.0	30.7	23.7
Incr Delay (d2), s/veh	0.2	0.0	23.6	0.7	0.0	0.4	28.8	1.6	0.1	245.9	1.5	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.3	0.0	19.4	8.8	0.0	4.7	21.2	26.8	1.2	34.1	24.5	9.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.4	0.0	86.9	57.3	0.0	54.9	93.2	26.7	15.4	316.9	32.2	24.7
LnGrp LOS	D	A	F	E	A	D	F	C	B	F	C	C
Approach Vol, veh/h	322			213			2432			2284		
Approach Delay, s/veh	83.0			56.5			34.9			68.7		
Approach LOS	F			E			C			E		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	25.0	98.0		37.0	36.4	86.6		37.0				
Change Period (Y+Rc), s	7.0	7.0		6.0	7.0	7.0		6.0				
Max Green Setting (Gmax), s	18.0	82.0		40.0	33.0	67.0		40.0				
Max Q Clear Time (g_c+I1), s	20.0	49.7		30.2	29.0	43.9		13.8				
Green Ext Time (p_c), s	0.0	22.1		0.8	0.4	15.3		1.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay	53.4											
HCM 6th LOS	D											

# Lanes, Volumes, Timings

## 3: Flamingo Dr & Griffin Rd

12/09/2019













												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	276	675	290	319	557	166	442	1073	281	333	1064	144
Future Volume (vph)	276	675	290	319	557	166	442	1073	281	333	1064	144
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	450		550	420		300	300		280	290		210
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	100			100			220			250		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	5085	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	5085	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			269			175			273			170
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1085			1206			2451			1027	
Travel Time (s)		24.7			27.4			55.7			23.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	291	711	305	336	586	175	465	1129	296	351	1120	152
Shared Lane Traffic (%)												
Lane Group Flow (vph)	291	711	305	336	586	175	465	1129	296	351	1120	152
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)		24			24			24			24	
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
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	12.0	13.0	13.0	12.0	13.0	13.0	12.0	17.0	17.0	12.0	17.0	17.0
Total Split (s)	23.0	38.0	38.0	28.0	43.0	43.0	35.0	68.0	68.0	26.0	59.0	59.0
Total Split (%)	14.4%	23.8%	23.8%	17.5%	26.9%	26.9%	21.9%	42.5%	42.5%	16.3%	36.9%	36.9%
Maximum Green (s)	16.0	31.0	31.0	21.0	36.0	36.0	28.0	61.0	61.0	19.0	52.0	52.0
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effect Green (s)	15.7	29.3	29.3	19.5	33.0	33.0	25.6	64.4	64.4	18.8	57.7	57.7

2021 Background Conditions  
Timing Plan: PM Peak

Synchro 10 Light Report  
Page 1

Lanes, Volumes, Timings  
3: Flamingo Dr & Griffin Rd

12/09/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.10	0.18	0.18	0.12	0.21	0.21	0.16	0.40	0.40	0.12	0.36	0.36
v/c Ratio	0.86	0.76	0.60	0.81	0.56	0.38	0.85	0.55	0.37	0.87	0.61	0.22
Control Delay	94.7	67.9	14.7	83.6	58.8	8.8	80.2	38.6	6.2	90.7	44.7	4.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	94.7	67.9	14.7	83.6	58.8	8.8	80.2	38.6	6.2	90.7	44.7	4.2
LOS	F	E	B	F	E	A	F	D	A	F	D	A
Approach Delay	61.5			58.4			43.8			50.9		
Approach LOS	E			E			D			D		

Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.87

Intersection Signal Delay: 52.3

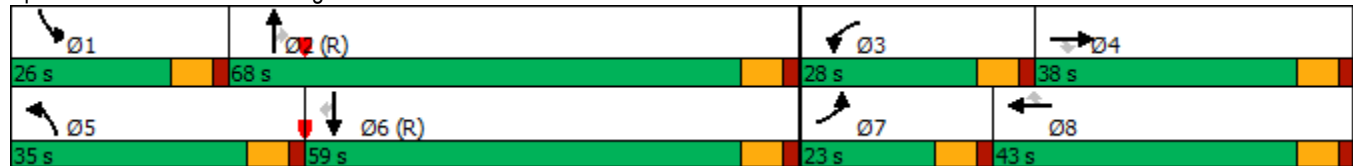
Intersection LOS: D

Intersection Capacity Utilization 78.6%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 3: Flamingo Dr & Griffin Rd





























# HCM 6th Signalized Intersection Summary











## 3: Flamingo Dr & Griffin Rd

12/09/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	276	675	290	319	557	166	442	1073	281	333	1064	144
Future Volume (veh/h)	276	675	290	319	557	166	442	1073	281	333	1064	144
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	291	711	305	336	586	175	465	1129	296	351	1120	152
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	332	989	307	383	1065	331	518	2077	645	393	1892	587
Arrive On Green	0.10	0.19	0.19	0.11	0.21	0.21	0.15	0.41	0.41	0.11	0.37	0.37
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	291	711	305	336	586	175	465	1129	296	351	1120	152
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	13.3	20.9	30.7	15.3	16.4	15.7	21.2	26.9	21.8	16.0	28.3	10.7
Cycle Q Clear(g_c), s	13.3	20.9	30.7	15.3	16.4	15.7	21.2	26.9	21.8	16.0	28.3	10.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	332	989	307	383	1065	331	518	2077	645	393	1892	587
V/C Ratio(X)	0.88	0.72	0.99	0.88	0.55	0.53	0.90	0.54	0.46	0.89	0.59	0.26
Avail Cap(c_a), veh/h	346	989	307	454	1149	357	605	2077	645	410	1892	587
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	71.4	60.4	64.4	70.0	56.6	56.3	66.8	36.2	34.6	70.0	40.6	35.1
Incr Delay (d2), s/veh	21.0	2.5	49.4	15.4	0.5	1.3	14.8	1.0	2.3	20.8	1.4	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.2	14.3	23.3	12.2	11.6	10.6	15.7	17.1	13.9	13.0	18.0	7.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	92.3	63.0	113.8	85.5	57.1	57.6	81.6	37.2	37.0	90.8	42.0	36.1
LnGrp LOS	F	E	F	F	E	E	F	D	D	F	D	D
Approach Vol, veh/h	1307			1097			1890			1623		
Approach Delay, s/veh	81.4			65.9			48.1			52.0		
Approach LOS	F			E			D			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	25.2	72.1	24.8	38.0	31.0	66.3	22.4	40.4				
Change Period (Y+Rc), s	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0				
Max Green Setting (Gmax), s	19.0	61.0	21.0	31.0	28.0	52.0	16.0	36.0				
Max Q Clear Time (g_c+I1), s	18.0	28.9	17.3	32.7	23.2	30.3	15.3	18.4				
Green Ext Time (p_c), s	0.1	11.5	0.4	0.0	0.8	9.1	0.1	4.4				
Intersection Summary												
HCM 6th Ctrl Delay	59.8											
HCM 6th LOS	E											

Lanes, Volumes, Timings  
6: Flamingo Dr & North School Driveway

12/09/2019

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	154	0	1809	1430	120
Future Volume (vph)	0	154	0	1809	1430	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	0			400
Storage Lanes	0	1	0			1
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	1.00
Frt		0.865				0.850
Flt Protected						
Satd. Flow (prot)	0	1611	0	5085	5085	1583
Flt Permitted						
Satd. Flow (perm)	0	1611	0	5085	5085	1583
Link Speed (mph)	30			30	30	
Link Distance (ft)	502			664	2451	
Travel Time (s)	11.4			15.1	55.7	
Peak Hour Factor	0.79	0.79	0.95	0.95	0.95	0.79
Adj. Flow (vph)	0	195	0	1904	1505	152
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	195	0	1904	1505	152
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			24	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	43.8%			ICU Level of Service A		
Analysis Period (min)	15					
























HCM 6th TWSC  
6: Flamingo Dr & North School Driveway

12/09/2019

Intersection						
Int Delay, s/veh	0.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑↑	↑↑↑	↗
Traffic Vol, veh/h	0	154	0	1809	1430	120
Future Vol, veh/h	0	154	0	1809	1430	120
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	-	-	-	400
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	79	79	95	95	95	79
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	195	0	1904	1505	152
Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	753	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	-	-
Pot Cap-1 Maneuver	0	*581	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %		1		-	-	-
Mov Cap-1 Maneuver	-	*581	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB		NB		SB	
HCM Control Delay, s	14.3		0		0	
HCM LOS	B					
Minor Lane/Major Mvmt	NBT		EBLn1	SBT	SBR	
Capacity (veh/h)	-		581	-	-	
HCM Lane V/C Ratio	-		0.336	-	-	
HCM Control Delay (s)	-		14.3	-	-	
HCM Lane LOS	-		B	-	-	
HCM 95th %tile Q(veh)	-		1.5	-	-	
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

Lanes, Volumes, Timings  
10: Flamingo Dr & Main School Driveway

12/09/2019













												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								  			 	
Traffic Volume (vph)	0	0	0	0	0	44	183	1624	16	220	1200	164
Future Volume (vph)	0	0	0	0	0	44	183	1624	16	220	1200	164
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	480		180	180		200
Storage Lanes	0		0	0		0	1		1	1		1
Taper Length (ft)	25			25			50			150		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.95	1.00
Frt					0.865				0.850			0.850
Flt Protected							0.950			0.950		
Satd. Flow (prot)	0	1863	0	0	1611	0	1770	5085	1583	1770	3539	1583
Flt Permitted							0.950			0.130		
Satd. Flow (perm)	0	1863	0	0	1611	0	1770	5085	1583	242	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					91				17			126
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		579			521			638			664	
Travel Time (s)		13.2			11.8			14.5			15.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.95	0.92	0.92	0.95	0.92
Adj. Flow (vph)	0	0	0	0	0	48	199	1709	17	239	1263	178
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	48	0	199	1709	17	239	1263	178
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
Turn Type					NA		Prot	NA	Perm	Perm	NA	Perm
Protected Phases		4			8		5	2			6	
Permitted Phases									2	6		6
Detector Phase		4			8		5	2	2	6	6	6
Switch Phase												
Minimum Initial (s)		3.0			3.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)		7.0			7.0		12.0	22.5	22.5	22.5	22.5	22.5
Total Split (s)		7.0			7.0		55.0	153.0	153.0	98.0	98.0	98.0
Total Split (%)		4.4%			4.4%		34.4%	95.6%	95.6%	61.3%	61.3%	61.3%
Maximum Green (s)		3.0			3.0		48.0	146.0	146.0	91.0	91.0	91.0
Yellow Time (s)		3.0			3.0		5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)		1.0			1.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.0			4.0		7.0	7.0	7.0	7.0	7.0	7.0
Lead/Lag							Lead			Lag	Lag	Lag
Lead-Lag Optimize?							Yes			Yes	Yes	Yes
Vehicle Extension (s)		3.0			3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode		None			None		None	Max	Max	Max	Max	Max
Act Effect Green (s)					3.0		23.3	147.5	147.5	115.7	115.7	115.7

2021 Background Conditions  
Timing Plan: PM Peak

Synchro 10 Light Report  
Page 6

Lanes, Volumes, Timings  
10: Flamingo Dr & Main School Driveway

12/09/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio					0.02		0.15	0.93	0.93	0.73	0.73	0.73
v/c Ratio					0.40		0.77	0.36	0.01	1.36	0.49	0.15
Control Delay					9.8		83.6	1.0	0.2	217.9	10.6	2.9
Queue Delay					0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay					9.8		83.6	1.0	0.2	217.9	10.6	2.9
LOS					A		F	A	A	F	B	A
Approach Delay					9.8			9.5			39.3	
Approach LOS					A			A			D	

Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 158.6

Natural Cycle: 150

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 1.36

Intersection Signal Delay: 23.2

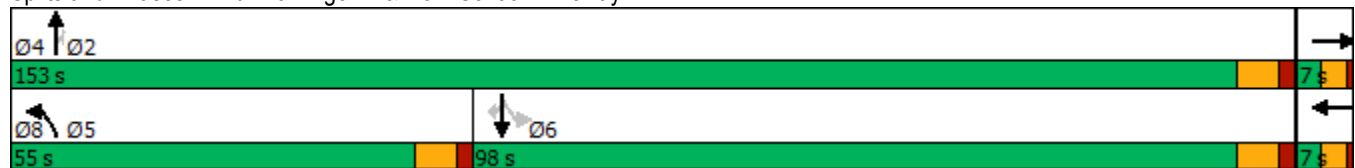
Intersection LOS: C

Intersection Capacity Utilization 61.9%

ICU Level of Service B

Analysis Period (min) 15
























Splits and Phases: 10: Flamingo Dr & Main School Driveway



# HCM 6th Signalized Intersection Summary

## 10: Flamingo Dr & Main School Driveway

12/09/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								  			 	
Traffic Volume (veh/h)	0	0	0	0	0	44	183	1624	16	220	1200	164
Future Volume (veh/h)	0	0	0	0	0	44	183	1624	16	220	1200	164
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	0	0	0	0	48	199	1709	17	239	1263	178
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.95	0.92	0.92	0.95	0.92
Percent Heavy Veh, %	0	2	2	0	2	2	2	2	2	2	2	2
Cap, veh/h	0	35	0	0	0	30	224	4659	1446	254	2640	1177
Arrive On Green	0.00	0.00	0.00	0.00	0.00	0.02	0.13	0.91	0.91	0.74	0.74	0.74
Sat Flow, veh/h	0	1870	0	0	0	1585	1781	5106	1585	281	3554	1585
Grp Volume(v), veh/h	0	0	0	0	0	48	199	1709	17	239	1263	178
Grp Sat Flow(s),veh/h/ln	0	1870	0	0	0	1585	1781	1702	1585	281	1777	1585
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	3.0	17.6	7.0	0.2	118.8	22.7	5.2
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	3.0	17.6	7.0	0.2	118.8	22.7	5.2
Prop In Lane	0.00		0.00	0.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	35	0	0	0	30	224	4659	1446	254	2640	1177
V/C Ratio(X)	0.00	0.00	0.00	0.00	0.00	1.62	0.89	0.37	0.01	0.94	0.48	0.15
Avail Cap(c_a), veh/h	0	35	0	0	0	30	534	4659	1446	254	2640	1177
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	78.5	68.8	0.9	0.6	28.1	8.2	6.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	389.7	11.2	0.2	0.0	43.1	0.6	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	0.0	0.0	0.0	8.0	13.6	1.7	0.0	18.9	13.4	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	0.0	0.0	468.2	80.0	1.1	0.6	71.2	8.8	6.2
LnGrp LOS	A	A	A	A	A	F	E	A	A	E	A	A
Approach Vol, veh/h		0			48			1925			1680	
Approach Delay, s/veh		0.0			468.2			9.3			17.4	
Approach LOS					F			A			B	
Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		153.0		7.0	27.2	125.8		7.0				
Change Period (Y+Rc), s		7.0		4.0	7.0	7.0		4.0				
Max Green Setting (Gmax), s		146.0		3.0	48.0	91.0		3.0				
Max Q Clear Time (g_c+I1), s		9.0		0.0	19.6	120.8		5.0				
Green Ext Time (p_c), s		25.2		0.0	0.6	0.0		0.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				19.1								
HCM 6th LOS				B								



# Lanes, Volumes, Timings

## 13: Flamingo Dr & South School Driveway

12/09/2019



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑↑	↑↑↑	↗
Traffic Volume (vph)	0	235	0	1837	1601	29
Future Volume (vph)	0	235	0	1837	1601	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	0			125
Storage Lanes	0	1	0			1
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	1.00
Frt		0.865				0.850
Flt Protected						
Satd. Flow (prot)	0	1611	0	5085	5085	1583
Flt Permitted						
Satd. Flow (perm)	0	1611	0	5085	5085	1583
Link Speed (mph)	30			30	30	
Link Distance (ft)	453			662	638	
Travel Time (s)	10.3			15.0	14.5	
Peak Hour Factor	0.96	0.96	0.95	0.95	0.95	0.96
Adj. Flow (vph)	0	245	0	1934	1685	30
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	245	0	1934	1685	30
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	52.2%			ICU Level of Service A		
Analysis Period (min)	15					

HCM 6th TWSC  
13: Flamingo Dr & South School Driveway

12/09/2019

Intersection

Int Delay, s/veh 5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑↑	↑↑↑	↗
Traffic Vol, veh/h	0	235	0	1837	1601	29
Future Vol, veh/h	0	235	0	1837	1601	29
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	-	-	-	125
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	95	95	95	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	245	0	1934	1685	30



























Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	- 843	- 0	- 0
Stage 1	- -	- -	- -
Stage 2	- -	- -	- -
Critical Hdwy	- 7.14	- -	- -
Critical Hdwy Stg 1	- -	- -	- -
Critical Hdwy Stg 2	- -	- -	- -
Follow-up Hdwy	- 3.92	- -	- -
Pot Cap-1 Maneuver	0 264	0 -	- -
Stage 1	0 -	0 -	- -
Stage 2	0 -	0 -	- -
Platoon blocked, %		- -	- -
Mov Cap-1 Maneuver	- 264	- -	- -
Mov Cap-2 Maneuver	- -	- -	- -
Stage 1	- -	- -	- -
Stage 2	- -	- -	- -

Approach	EB	NB	SB
HCM Control Delay, s	79.5	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT EBLn1	SBT	SBR
Capacity (veh/h)	- 264	- -	- -
HCM Lane V/C Ratio	- 0.927	- -	- -
HCM Control Delay (s)	- 79.5	- -	- -
HCM Lane LOS	- F	- -	- -
HCM 95th %tile Q(veh)	- 8.5	- -	- -

Lanes, Volumes, Timings  
15: Flamingo Dr & SW 55th St

12/09/2019













												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								  			  	
Traffic Volume (vph)	108	4	213	81	21	110	151	1484	34	118	1556	119
Future Volume (vph)	108	4	213	81	21	110	151	1484	34	118	1556	119
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	160		160	170		170
Storage Lanes	0		1	0		1	1		1	1		1
Taper Length (ft)	25			25			170			160		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected		0.954			0.962		0.950			0.950		
Satd. Flow (prot)	0	1777	1583	0	1792	1583	1770	5085	1583	1770	5085	1583
Flt Permitted		0.560			0.562		0.950			0.950		
Satd. Flow (perm)	0	1043	1583	0	1047	1583	1770	5085	1583	1770	5085	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			237			123			68			116
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		543			396			1986			662	
Travel Time (s)		12.3			9.0			45.1			15.0	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	120	4	237	90	23	122	168	1649	38	131	1729	132
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	124	237	0	113	122	168	1649	38	131	1729	132
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
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8			2			6
Detector Phase	4	4	4	8	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	5.0	20.0	20.0	5.0	20.0	20.0
Minimum Split (s)	12.0	12.0	12.0	12.0	12.0	12.0	12.0	27.0	27.0	12.0	27.0	27.0
Total Split (s)	46.0	46.0	46.0	46.0	46.0	46.0	40.0	89.0	89.0	25.0	74.0	74.0
Total Split (%)	28.8%	28.8%	28.8%	28.8%	28.8%	28.8%	25.0%	55.6%	55.6%	15.6%	46.3%	46.3%
Maximum Green (s)	40.0	40.0	40.0	40.0	40.0	40.0	33.0	82.0	82.0	18.0	67.0	67.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0	6.0		6.0	6.0	7.0	7.0	7.0	7.0	7.0	7.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effect Green (s)		22.7	22.7		22.7	22.7	20.5	100.2	100.2	17.1	96.8	96.8

2021 Background Conditions  
Timing Plan: PM Peak

Synchro 10 Light Report  
Page 11

Lanes, Volumes, Timings  
15: Flamingo Dr & SW 55th St

12/09/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.14	0.14		0.14	0.14	0.13	0.63	0.63	0.11	0.60	0.60
v/c Ratio		0.84	0.55		0.76	0.37	0.74	0.52	0.04	0.69	0.56	0.13
Control Delay		106.5	11.3		95.2	11.4	86.1	18.7	0.7	87.2	21.5	4.4
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		106.5	11.3		95.2	11.4	86.1	18.7	0.7	87.2	21.5	4.4
LOS		F	B		F	B	F	B	A	F	C	A
Approach Delay		44.0			51.7			24.5			24.7	
Approach LOS		D			D			C			C	

Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.84

Intersection Signal Delay: 27.6

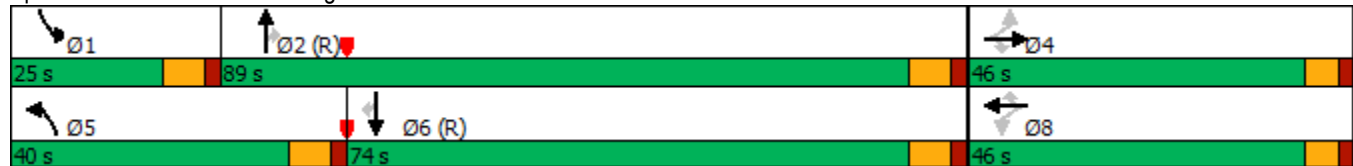
Intersection LOS: C

Intersection Capacity Utilization 68.0%

ICU Level of Service C



























Analysis Period (min) 15

Splits and Phases: 15: Flamingo Dr & SW 55th St



# HCM 6th Signalized Intersection Summary 15: Flamingo Dr & SW 55th St

12/09/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								  			  	
Traffic Volume (veh/h)	108	4	213	81	21	110	151	1484	34	118	1556	119
Future Volume (veh/h)	108	4	213	81	21	110	151	1484	34	118	1556	119
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	120	4	170	90	23	122	168	1649	38	131	1729	132
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	221	6	198	208	43	198	192	3392	1053	152	3279	1018
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.11	0.66	0.66	0.09	0.64	0.64
Sat Flow, veh/h	1411	47	1585	1342	343	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	124	0	170	113	0	122	168	1649	38	131	1729	132
Grp Sat Flow(s),veh/h/ln	1458	0	1585	1685	0	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	3.3	0.0	16.8	0.0	0.0	11.7	14.9	25.6	1.3	11.6	29.3	5.2
Cycle Q Clear(g_c), s	12.7	0.0	16.8	9.4	0.0	11.7	14.9	25.6	1.3	11.6	29.3	5.2
Prop In Lane	0.97		1.00	0.80		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	227	0	198	251	0	198	192	3392	1053	152	3279	1018
V/C Ratio(X)	0.55	0.00	0.86	0.45	0.00	0.62	0.88	0.49	0.04	0.86	0.53	0.13
Avail Cap(c_a), veh/h	401	0	396	437	0	396	367	3392	1053	200	3279	1018
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	66.7	0.0	68.6	65.3	0.0	66.3	70.3	13.3	9.2	72.2	15.5	11.2
Incr Delay (d2), s/veh	2.1	0.0	10.2	1.3	0.0	3.1	11.7	0.5	0.1	24.0	0.6	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.7	0.0	11.9	7.9	0.0	8.6	11.9	15.1	0.9	10.5	17.1	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.7	0.0	78.7	66.6	0.0	69.4	82.1	13.8	9.3	96.2	16.1	11.4
LnGrp LOS	E	A	E	E	A	E	F	B	A	F	B	B
Approach Vol, veh/h	294			235			1855			1992		
Approach Delay, s/veh	74.5			68.1			19.9			21.1		
Approach LOS	E			E			B			C		
Timer - Assigned Phs	1	2	4		5	6	8					
Phs Duration (G+Y+Rc), s	20.7	113.3	26.0		24.2	109.7	26.0					
Change Period (Y+Rc), s	7.0	7.0	6.0		7.0	7.0	6.0					
Max Green Setting (Gmax), s	18.0	82.0	40.0		33.0	67.0	40.0					
Max Q Clear Time (g_c+I1), s	13.6	27.6	18.8		16.9	31.3	13.7					
Green Ext Time (p_c), s	0.1	20.6	1.2		0.4	19.2	1.0					
Intersection Summary												
HCM 6th Ctrl Delay	26.7											
HCM 6th LOS	C											

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# **APPENDIX “G”**

























## **SYNCHRO PRINTOUTS**

### **TOTAL CONDITIONS** **(NO SIGNAL TIMING OPTIMIZATION)**

# Lanes, Volumes, Timings

## 3: Flamingo Dr & Griffin Rd

03/23/2020













												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	245	893	497	297	987	334	447	1520	281	433	1285	192
Future Volume (vph)	245	893	497	297	987	334	447	1520	281	433	1285	192
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	450		550	420		300	300		280	290		210
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	100			100			220			250		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	5085	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	5085	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			264			267			180			112
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1085			1206			2451			1027	
Travel Time (s)		24.7			27.4			55.7			23.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	258	940	523	313	1039	352	471	1600	296	456	1353	202
Shared Lane Traffic (%)												
Lane Group Flow (vph)	258	940	523	313	1039	352	471	1600	296	456	1353	202
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)		24			24			24			24	
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
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	12.0	13.0	13.0	12.0	13.0	13.0	12.0	17.0	17.0	12.0	17.0	17.0
Total Split (s)	25.0	63.0	63.0	23.0	61.0	61.0	30.0	64.0	64.0	30.0	64.0	64.0
Total Split (%)	13.9%	35.0%	35.0%	12.8%	33.9%	33.9%	16.7%	35.6%	35.6%	16.7%	35.6%	35.6%
Maximum Green (s)	18.0	56.0	56.0	16.0	54.0	54.0	23.0	57.0	57.0	23.0	57.0	57.0
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effect Green (s)	17.0	49.9	49.9	16.0	48.9	48.9	28.4	58.5	58.5	27.6	57.7	57.7

2021 Total Traffic Conditions  
Timing Plan: AM Peak

Synchro 10 Light Report  
Page 1

Lanes, Volumes, Timings  
3: Flamingo Dr & Griffin Rd

03/23/2020

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.09	0.28	0.28	0.09	0.27	0.27	0.16	0.32	0.32	0.15	0.32	0.32
v/c Ratio	0.80	0.67	0.83	1.03	0.75	0.56	0.87	0.97	0.47	0.87	0.83	0.35
Control Delay	97.9	59.7	41.1	135.6	63.5	16.5	89.4	74.9	20.9	90.0	62.1	22.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	97.9	59.7	41.1	135.6	63.5	16.5	89.4	74.9	20.9	90.0	62.1	22.1
LOS	F	E	D	F	E	B	F	E	C	F	E	C
Approach Delay	59.8			67.0			71.0			64.4		
Approach LOS	E			E			E			E		

Intersection Summary

Area Type: Other

Cycle Length: 180

Actuated Cycle Length: 180

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.03

Intersection Signal Delay: 66.0

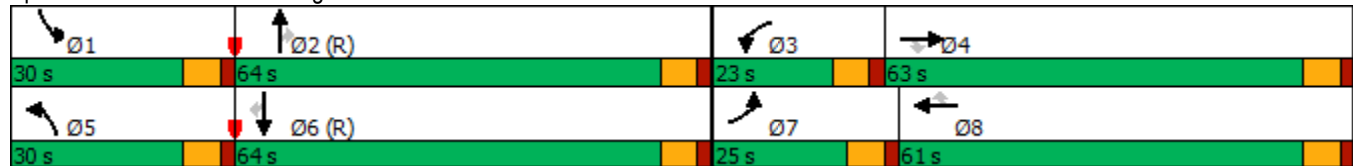
Intersection LOS: E

Intersection Capacity Utilization 91.1%

ICU Level of Service F

Analysis Period (min) 15

























Splits and Phases: 3: Flamingo Dr & Griffin Rd



# HCM 6th Signalized Intersection Summary

## 3: Flamingo Dr & Griffin Rd

03/23/2020















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	245	893	497	297	987	334	447	1520	281	433	1285	192
Future Volume (veh/h)	245	893	497	297	987	334	447	1520	281	433	1285	192
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	258	940	523	313	1039	352	471	1600	296	456	1353	202
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	298	1589	493	307	1603	497	442	1617	502	442	1617	502
Arrive On Green	0.09	0.31	0.31	0.09	0.31	0.31	0.13	0.32	0.32	0.13	0.32	0.32
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	258	940	523	313	1039	352	471	1600	296	456	1353	202
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	13.3	28.0	56.0	16.0	31.6	35.3	23.0	56.1	28.2	23.0	44.3	18.0
Cycle Q Clear(g_c), s	13.3	28.0	56.0	16.0	31.6	35.3	23.0	56.1	28.2	23.0	44.3	18.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	298	1589	493	307	1603	497	442	1617	502	442	1617	502
V/C Ratio(X)	0.87	0.59	1.06	1.02	0.65	0.71	1.07	0.99	0.59	1.03	0.84	0.40
Avail Cap(c_a), veh/h	346	1589	493	307	1603	497	442	1617	502	442	1617	502
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	81.2	52.3	62.0	82.0	53.2	54.5	78.5	61.2	51.7	78.5	57.2	48.2
Incr Delay (d2), s/veh	18.2	0.6	57.5	56.3	0.9	4.6	61.7	20.0	5.0	51.5	5.3	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.0	17.9	41.1	14.8	19.9	21.2	20.8	35.8	17.8	19.8	27.3	12.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	99.4	52.9	119.5	138.3	54.1	59.1	140.2	81.2	56.7	130.0	62.5	50.6
LnGrp LOS	F	D	F	F	D	E	F	F	E	F	E	D
Approach Vol, veh/h	1721		1704				2367		2011			
Approach Delay, s/veh	80.1		70.6				89.9		76.6			
Approach LOS	F		E				F		E			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	30.0	64.0	23.0	63.0	30.0	64.0	22.5	63.5				
Change Period (Y+Rc), s	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0				
Max Green Setting (Gmax), s	23.0	57.0	16.0	56.0	23.0	57.0	18.0	54.0				
Max Q Clear Time (g_c+I1), s	25.0	58.1	18.0	58.0	25.0	46.3	15.3	37.3				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	7.0	0.2	8.1				
Intersection Summary												
HCM 6th Ctrl Delay	80.1											
HCM 6th LOS	F											

2021 Total Traffic Conditions  
Timing Plan: AM Peak

Synchro 10 Light Report  
Page 3

Lanes, Volumes, Timings  
6: Flamingo Dr & North School Driveway

03/23/2020

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations				  	  	
Traffic Volume (vph)	0	443	0	1912	1569	524
Future Volume (vph)	0	443	0	1912	1569	524
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	0			400
Storage Lanes	0	1	0			1
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	1.00
Frt		0.865				0.850
Flt Protected						
Satd. Flow (prot)	0	1611	0	5085	5085	1583
Flt Permitted						
Satd. Flow (perm)	0	1611	0	5085	5085	1583
Link Speed (mph)	30			30	30	
Link Distance (ft)	502			664	2451	
Travel Time (s)	11.4			15.1	55.7	
Peak Hour Factor	0.62	0.62	0.86	0.86	0.86	0.62
Adj. Flow (vph)	0	715	0	2223	1824	845
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	715	0	2223	1824	845
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			24	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	64.4%			ICU Level of Service C		
Analysis Period (min)	15					

HCM 6th TWSC  
6: Flamingo Dr & North School Driveway

03/23/2020
























Intersection						
Int Delay, s/veh	22.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑↑	↑↑↑	↗
Traffic Vol, veh/h	0	443	0	1912	1569	524
Future Vol, veh/h	0	443	0	1912	1569	524
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	-	-	-	400
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	62	62	86	86	86	62
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	715	0	2223	1824	845
Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	912	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	-	-
Pot Cap-1 Maneuver	0 *~	545	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %		1		-	-	-
Mov Cap-1 Maneuver	- *~	545	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB		NB		SB	
HCM Control Delay, s	175.4		0		0	
HCM LOS	F					
Minor Lane/Major Mvmt	NBT		EBLn1		SBT	SBR
Capacity (veh/h)	-		545		-	-
HCM Lane V/C Ratio	-		1.311		-	-
HCM Control Delay (s)	-		175.4		-	-
HCM Lane LOS	-		F		-	-
HCM 95th %tile Q(veh)	-		30.1		-	-
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon



# Lanes, Volumes, Timings

## 10: Flamingo Dr & Main School Driveway

03/23/2020













												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								  			 	
Traffic Volume (vph)	0	0	0	0	0	9	455	1677	11	276	1578	252
Future Volume (vph)	0	0	0	0	0	9	455	1677	11	276	1578	252
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	480		180	180		200
Storage Lanes	0		0	0		0	1		1	1		1
Taper Length (ft)	25			25			50			150		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.95	1.00
Frt					0.865				0.850			0.850
Flt Protected							0.950			0.950		
Satd. Flow (prot)	0	1863	0	0	1611	0	1770	5085	1583	1770	3539	1583
Flt Permitted							0.042			0.100		
Satd. Flow (perm)	0	1863	0	0	1611	0	78	5085	1583	186	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					334				33			125
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		579			521			638			664	
Travel Time (s)		13.2			11.8			14.5			15.1	
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.86	0.72	0.72	0.86	0.72
Adj. Flow (vph)	0	0	0	0	0	13	632	1950	15	383	1835	350
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	13	0	632	1950	15	383	1835	350
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
Turn Type					NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases							2		2	6		6
Detector Phase		4			8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)		2.0			2.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)		7.0			7.0		12.0	22.5	22.5	9.5	22.5	22.5
Total Split (s)		7.0			7.0		80.0	123.0	123.0	50.0	93.0	93.0
Total Split (%)		3.9%			3.9%		44.4%	68.3%	68.3%	27.8%	51.7%	51.7%
Maximum Green (s)		3.0			3.0		73.0	116.0	116.0	45.5	86.0	86.0
Yellow Time (s)		3.0			3.0		5.0	5.0	5.0	3.5	5.0	5.0
All-Red Time (s)		1.0			1.0		2.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)		0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.0			4.0		7.0	7.0	7.0	4.5	7.0	7.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)		3.0			3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode		None			None		None	Max	Max	None	Max	Max
Act Effect Green (s)					3.0		152.8	117.3	117.3	121.9	88.4	88.4

2021 Total Traffic Conditions  
Timing Plan: AM Peak

Synchro 10 Light Report  
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Lanes, Volumes, Timings  
10: Flamingo Dr & Main School Driveway

03/23/2020

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio					0.02		0.94	0.72	0.72	0.75	0.54	0.54
v/c Ratio					0.04		0.94	0.53	0.01	0.87	0.95	0.38
Control Delay					0.2		67.6	12.3	0.5	65.6	47.9	16.3
Queue Delay					0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay					0.2		67.6	12.3	0.5	65.6	47.9	16.3
LOS					A		E	B	A	E	D	B
Approach Delay					0.2			25.7			46.2	
Approach LOS					A			C			D	

Intersection Summary

Area Type: Other

Cycle Length: 180

Actuated Cycle Length: 162.4

Natural Cycle: 130

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.95

Intersection Signal Delay: 35.8

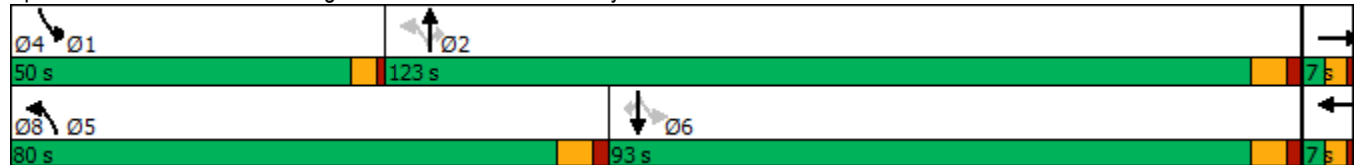
Intersection LOS: D

Intersection Capacity Utilization 87.2%

ICU Level of Service E


Analysis Period (min) 15

Splits and Phases: 10: Flamingo Dr & Main School Driveway



# HCM 6th Signalized Intersection Summary 10: Flamingo Dr & Main School Driveway

03/23/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰			↰		↰	↰↰↰	↰	↰	↰↰	↰
Traffic Volume (veh/h)	0	0	0	0	0	9	455	1677	11	276	1578	252
Future Volume (veh/h)	0	0	0	0	0	9	455	1677	11	276	1578	252
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	0	0	0	0	12	632	1950	15	383	1835	350
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.86	0.72	0.72	0.86	0.72
Percent Heavy Veh, %	0	2	2	0	2	2	2	2	2	2	2	2
Cap, veh/h	0	16	0	0	0	13	662	3864	1199	411	1909	852
Arrive On Green	0.00	0.00	0.00	0.00	0.00	0.01	0.34	0.76	0.76	0.14	0.54	0.54
Sat Flow, veh/h	0	1870	0	0	0	1585	1781	5106	1585	1781	3554	1585
Grp Volume(v), veh/h	0	0	0	0	0	12	632	1950	15	383	1835	350
Grp Sat Flow(s),veh/h/ln	0	1870	0	0	0	1585	1781	1702	1585	1781	1777	1585
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	1.2	50.6	24.1	0.4	18.9	79.1	21.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	1.2	50.6	24.1	0.4	18.9	79.1	21.0
Prop In Lane	0.00		0.00	0.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	16	0	0	0	13	662	3864	1199	411	1909	852
V/C Ratio(X)	0.00	0.00	0.00	0.00	0.00	0.91	0.95	0.50	0.01	0.93	0.96	0.41
Avail Cap(c_a), veh/h	0	35	0	0	0	30	865	3864	1199	671	1909	852
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	79.3	47.7	7.7	4.8	27.8	35.4	22.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	92.3	17.7	0.5	0.0	13.6	13.3	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	0.0	0.0	0.0	1.5	35.2	13.3	0.2	12.7	47.1	13.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	0.0	0.0	171.6	65.4	8.1	4.8	41.4	48.7	23.5
LnGrp LOS	A	A	A	A	A	F	E	A	A	D	D	C
Approach Vol, veh/h	0				12				2597			
Approach Delay, s/veh	0.0				171.6				22.1			
Approach LOS					F				C			
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	26.6	128.1		5.3	61.7	93.0		5.3				
Change Period (Y+Rc), s	4.5	7.0		4.0	7.0	7.0		4.0				
Max Green Setting (Gmax), s	45.5	116.0		3.0	73.0	86.0		3.0				
Max Q Clear Time (g_c+I1), s	20.9	26.1		0.0	52.6	81.1		3.2				
Green Ext Time (p_c), s	1.2	32.3		0.0	2.2	4.4		0.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay	33.4											
HCM 6th LOS	C											

# Lanes, Volumes, Timings

## 13: Flamingo Dr & South School Driveway

03/23/2020



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑↑	↑↑↑	↗
Traffic Volume (vph)	0	39	0	2167	2193	131
Future Volume (vph)	0	39	0	2167	2193	131
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	0			125
Storage Lanes	0	1	0			1
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	1.00
Frt		0.865				0.850
Flt Protected						
Satd. Flow (prot)	0	1611	0	5085	5085	1583
Flt Permitted						
Satd. Flow (perm)	0	1611	0	5085	5085	1583
Link Speed (mph)	30			30	30	
Link Distance (ft)	453			662	638	
Travel Time (s)	10.3			15.0	14.5	
Peak Hour Factor	0.62	0.62	0.62	0.86	0.86	0.62
Adj. Flow (vph)	0	63	0	2520	2550	211
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	63	0	2520	2550	211
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	52.4%			ICU Level of Service A		
Analysis Period (min)	15					

HCM 6th TWSC  
13: Flamingo Dr & South School Driveway

03/23/2020

Intersection

Int Delay, s/veh 0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑↑	↑↑↑	↗
Traffic Vol, veh/h	0	39	0	2167	2193	131
Future Vol, veh/h	0	39	0	2167	2193	131
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	-	-	-	125
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	62	62	62	86	86	62
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	63	0	2520	2550	211























Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	- 1275	- 0	- 0
Stage 1	- -	- -	- -
Stage 2	- -	- -	- -
Critical Hdwy	- 7.14	- -	- -
Critical Hdwy Stg 1	- -	- -	- -
Critical Hdwy Stg 2	- -	- -	- -
Follow-up Hdwy	- 3.92	- -	- -
Pot Cap-1 Maneuver	0 135	0 -	- -
Stage 1	0 -	0 -	- -
Stage 2	0 -	0 -	- -
Platoon blocked, %		- -	- -
Mov Cap-1 Maneuver	- 135	- -	- -
Mov Cap-2 Maneuver	- -	- -	- -
Stage 1	- -	- -	- -
Stage 2	- -	- -	- -

Approach	EB	NB	SB
HCM Control Delay, s	53	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT EBLn1	SBT	SBR
Capacity (veh/h)	- 135	- -	- -
HCM Lane V/C Ratio	- 0.466	- -	- -
HCM Control Delay (s)	- 53	- -	- -
HCM Lane LOS	- F	- -	- -
HCM 95th %tile Q(veh)	- 2.1	- -	- -

Lanes, Volumes, Timings  
15: Flamingo Dr & SW 55th St

03/23/2020

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	11	298	62	55	62	256	1783	34	266	1500	197
Future Volume (vph)	21	11	298	62	55	62	256	1783	34	266	1500	197
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	160		160	170		170
Storage Lanes	0		1	0		1	1		1	1		1
Taper Length (ft)	25			25			170			160		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected		0.968			0.974		0.950			0.950		
Satd. Flow (prot)	0	1803	1583	0	1814	1583	1770	5085	1583	1770	5085	1583
Flt Permitted		0.613			0.813		0.950			0.950		
Satd. Flow (perm)	0	1142	1583	0	1514	1583	1770	5085	1583	1770	5085	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			307			123			68			116
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		543			396			1986			662	
Travel Time (s)		12.3			9.0			45.1			15.0	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	25	13	355	74	65	74	305	2123	40	317	1786	235
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	38	355	0	139	74	305	2123	40	317	1786	235
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
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8			2			6
Detector Phase	4	4	4	8	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	5.0	20.0	20.0	5.0	20.0	20.0
Minimum Split (s)	12.0	12.0	12.0	12.0	12.0	12.0	12.0	27.0	27.0	12.0	27.0	27.0
Total Split (s)	46.0	46.0	46.0	46.0	46.0	46.0	40.0	89.0	89.0	25.0	74.0	74.0
Total Split (%)	28.8%	28.8%	28.8%	28.8%	28.8%	28.8%	25.0%	55.6%	55.6%	15.6%	46.3%	46.3%
Maximum Green (s)	40.0	40.0	40.0	40.0	40.0	40.0	33.0	82.0	82.0	18.0	67.0	67.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0	6.0		6.0	6.0	7.0	7.0	7.0	7.0	7.0	7.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effect Green (s)		20.0	20.0		20.0	20.0	33.2	82.0	82.0	38.0	86.8	86.8













2021 Total Traffic Conditions  
Timing Plan: AM Peak

Synchro 10 Light Report  
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Lanes, Volumes, Timings  
15: Flamingo Dr & SW 55th St

03/23/2020

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.12	0.12		0.12	0.12	0.21	0.51	0.51	0.24	0.54	0.54
v/c Ratio		0.27	0.76		0.74	0.24	0.83	0.81	0.05	0.75	0.65	0.26
Control Delay		65.8	22.1		88.8	2.3	79.6	35.9	1.1	69.5	28.9	12.0
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		65.8	22.1		88.8	2.3	79.6	35.9	1.1	69.5	28.9	12.0
LOS		E	C		F	A	E	D	A	E	C	B
Approach Delay		26.3			58.7			40.7			32.7	
Approach LOS		C			E			D			C	

Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.83

Intersection Signal Delay: 36.9

Intersection LOS: D

Intersection Capacity Utilization 78.8%

ICU Level of Service D

Analysis Period (min) 15



























Splits and Phases: 15: Flamingo Dr & SW 55th St



# HCM 6th Signalized Intersection Summary

## 15: Flamingo Dr & SW 55th St

03/23/2020

























												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								  			  	
Traffic Volume (veh/h)	21	11	298	62	55	62	256	1783	34	266	1500	197
Future Volume (veh/h)	21	11	298	62	55	62	256	1783	34	266	1500	197
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	25	13	284	74	65	74	305	2123	40	317	1786	235
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	211	103	307	190	157	307	327	2904	901	200	2542	789
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.18	0.57	0.57	0.11	0.50	0.50
Sat Flow, veh/h	898	530	1585	804	812	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	38	0	284	139	0	74	305	2123	40	317	1786	235
Grp Sat Flow(s),veh/h/ln	1428	0	1585	1616	0	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	0.0	0.0	28.2	8.3	0.0	6.3	27.0	49.1	1.8	18.0	43.2	14.0
Cycle Q Clear(g_c), s	3.4	0.0	28.2	11.8	0.0	6.3	27.0	49.1	1.8	18.0	43.2	14.0
Prop In Lane	0.66		1.00	0.53		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	314	0	307	348	0	307	327	2904	901	200	2542	789
V/C Ratio(X)	0.12	0.00	0.92	0.40	0.00	0.24	0.93	0.73	0.04	1.58	0.70	0.30
Avail Cap(c_a), veh/h	397	0	396	437	0	396	367	2904	901	200	2542	789
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.3	0.0	63.4	56.6	0.0	54.5	64.4	25.5	15.3	71.0	31.0	23.7
Incr Delay (d2), s/veh	0.2	0.0	23.6	0.7	0.0	0.4	28.8	1.7	0.1	284.3	1.7	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.3	0.0	19.4	8.8	0.0	4.7	21.2	27.6	1.2	37.6	25.2	9.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.4	0.0	86.9	57.3	0.0	54.9	93.2	27.1	15.4	355.3	32.7	24.7
LnGrp LOS	D	A	F	E	A	D	F	C	B	F	C	C
Approach Vol, veh/h	322		213				2468				2338	
Approach Delay, s/veh	83.0		56.5				35.1				75.6	
Approach LOS	F		E				D				E	
Timer - Assigned Phs	1	2	4		5	6	8					
Phs Duration (G+Y+Rc), s	25.0	98.0	37.0		36.4	86.6	37.0					
Change Period (Y+Rc), s	7.0	7.0	6.0		7.0	7.0	6.0					
Max Green Setting (Gmax), s	18.0	82.0	40.0		33.0	67.0	40.0					
Max Q Clear Time (g_c+I1), s	20.0	51.1	30.2		29.0	45.2	13.8					
Green Ext Time (p_c), s	0.0	21.8	0.8		0.4	15.0	1.0					
Intersection Summary												
HCM 6th Ctrl Delay			56.6									
HCM 6th LOS			E									

2021 Total Traffic Conditions  
Timing Plan: AM Peak

Synchro 10 Light Report  
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Lanes, Volumes, Timings  
3: Flamingo Dr & Griffin Rd

03/23/2020













												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	276	675	295	322	557	166	447	1088	286	333	1075	144
Future Volume (vph)	276	675	295	322	557	166	447	1088	286	333	1075	144
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	450		550	420		300	300		280	290		210
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	100			100			220			250		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	5085	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	5085	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			269			175			273			170
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1085			1206			2451			1027	
Travel Time (s)		24.7			27.4			55.7			23.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	291	711	311	339	586	175	471	1145	301	351	1132	152
Shared Lane Traffic (%)												
Lane Group Flow (vph)	291	711	311	339	586	175	471	1145	301	351	1132	152
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)		24			24			24			24	
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
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	12.0	13.0	13.0	12.0	13.0	13.0	12.0	17.0	17.0	12.0	17.0	17.0
Total Split (s)	23.0	38.0	38.0	28.0	43.0	43.0	35.0	68.0	68.0	26.0	59.0	59.0
Total Split (%)	14.4%	23.8%	23.8%	17.5%	26.9%	26.9%	21.9%	42.5%	42.5%	16.3%	36.9%	36.9%
Maximum Green (s)	16.0	31.0	31.0	21.0	36.0	36.0	28.0	61.0	61.0	19.0	52.0	52.0
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effect Green (s)	15.7	29.2	29.2	19.6	33.1	33.1	25.8	64.4	64.4	18.8	57.4	57.4

2021 Total Traffic Conditions  
Timing Plan: PM Peak

Synchro 10 Light Report  
Page 1

Lanes, Volumes, Timings  
3: Flamingo Dr & Griffin Rd

03/23/2020

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.10	0.18	0.18	0.12	0.21	0.21	0.16	0.40	0.40	0.12	0.36	0.36
v/c Ratio	0.86	0.77	0.61	0.81	0.56	0.38	0.85	0.56	0.38	0.87	0.62	0.22
Control Delay	94.7	68.0	15.5	83.8	58.7	8.8	80.6	38.8	6.5	90.7	45.1	4.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	94.7	68.0	15.5	83.8	58.7	8.8	80.6	38.8	6.5	90.7	45.1	4.2
LOS	F	E	B	F	E	A	F	D	A	F	D	A
Approach Delay	61.5			58.5			44.0			51.1		
Approach LOS	E			E			D			D		

Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.87

Intersection Signal Delay: 52.5

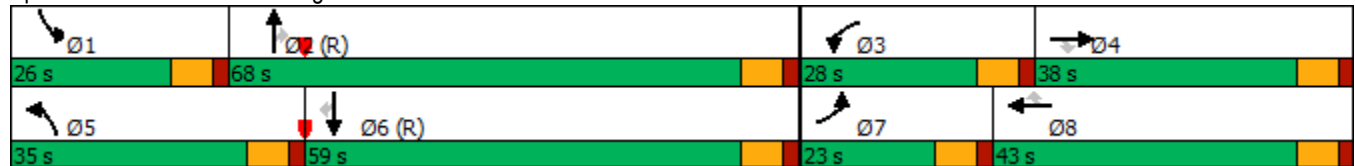
Intersection LOS: D

Intersection Capacity Utilization 79.1%

ICU Level of Service D

Analysis Period (min) 15

























Splits and Phases: 3: Flamingo Dr & Griffin Rd



# HCM 6th Signalized Intersection Summary

## 3: Flamingo Dr & Griffin Rd

03/23/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	276	675	295	322	557	166	447	1088	286	333	1075	144
Future Volume (veh/h)	276	675	295	322	557	166	447	1088	286	333	1075	144
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	291	711	311	339	586	175	471	1145	301	351	1132	152
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	332	989	307	386	1069	332	523	2072	643	393	1880	583
Arrive On Green	0.10	0.19	0.19	0.11	0.21	0.21	0.15	0.41	0.41	0.11	0.37	0.37
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	291	711	311	339	586	175	471	1145	301	351	1132	152
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	13.3	20.9	31.0	15.5	16.4	15.7	21.4	27.5	22.3	16.0	28.8	10.7
Cycle Q Clear(g_c), s	13.3	20.9	31.0	15.5	16.4	15.7	21.4	27.5	22.3	16.0	28.8	10.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	332	989	307	386	1069	332	523	2072	643	393	1880	583
V/C Ratio(X)	0.88	0.72	1.01	0.88	0.55	0.53	0.90	0.55	0.47	0.89	0.60	0.26
Avail Cap(c_a), veh/h	346	989	307	454	1149	357	605	2072	643	410	1880	583
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	71.4	60.4	64.5	70.0	56.5	56.2	66.7	36.4	34.9	70.0	41.0	35.3
Incr Delay (d2), s/veh	21.0	2.5	54.6	15.7	0.5	1.3	15.2	1.1	2.4	20.8	1.4	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.2	14.3	24.2	12.3	11.5	10.6	15.9	17.4	14.1	13.0	18.3	7.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	92.3	63.0	119.1	85.7	57.0	57.5	81.9	37.5	37.3	90.8	42.5	36.4
LnGrp LOS	F	E	F	F	E	E	F	D	D	F	D	D
Approach Vol, veh/h	1313			1100			1917			1635		
Approach Delay, s/veh	82.8			65.9			48.4			52.3		
Approach LOS	F			E			D			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	25.2	71.9	24.9	38.0	31.2	65.9	22.4	40.5				
Change Period (Y+Rc), s	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0				
Max Green Setting (Gmax), s	19.0	61.0	21.0	31.0	28.0	52.0	16.0	36.0				
Max Q Clear Time (g_c+I1), s	18.0	29.5	17.5	33.0	23.4	30.8	15.3	18.4				
Green Ext Time (p_c), s	0.1	11.7	0.4	0.0	0.8	9.1	0.1	4.4				
Intersection Summary												
HCM 6th Ctrl Delay	60.2											
HCM 6th LOS	E											

# Lanes, Volumes, Timings

## 6: Flamingo Dr & North School Driveway

03/23/2020



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑↑	↑↑↑	↗
Traffic Volume (vph)	0	167	0	1834	1438	131
Future Volume (vph)	0	167	0	1834	1438	131
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	0			400
Storage Lanes	0	1	0			1
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	1.00
Frt		0.865				0.850
Flt Protected						
Satd. Flow (prot)	0	1611	0	5085	5085	1583
Flt Permitted						
Satd. Flow (perm)	0	1611	0	5085	5085	1583
Link Speed (mph)	30			30	30	
Link Distance (ft)	502			664	2451	
Travel Time (s)	11.4			15.1	55.7	
Peak Hour Factor	0.79	0.79	0.95	0.95	0.95	0.79
Adj. Flow (vph)	0	211	0	1931	1514	166
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	211	0	1931	1514	166
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			24	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	44.8%			ICU Level of Service A		
Analysis Period (min)	15					





























HCM 6th TWSC  
6: Flamingo Dr & North School Driveway

03/23/2020

Intersection						
Int Delay, s/veh	0.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑↑	↑↑↑	↗
Traffic Vol, veh/h	0	167	0	1834	1438	131
Future Vol, veh/h	0	167	0	1834	1438	131
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	-	-	-	400
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	79	79	95	95	95	79
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	211	0	1931	1514	166
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	-	757	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	-	-
Pot Cap-1 Maneuver	0	*581	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %		1		-	-	-
Mov Cap-1 Maneuver	-	*581	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	14.7	0		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT EBLn1		SBT	SBR		
Capacity (veh/h)	- 581		-	-		
HCM Lane V/C Ratio	- 0.364		-	-		
HCM Control Delay (s)	- 14.7		-	-		
HCM Lane LOS	- B		-	-		
HCM 95th %tile Q(veh)	- 1.7		-	-		
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

Lanes, Volumes, Timings  
10: Flamingo Dr & Main School Driveway

03/23/2020













												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								   			   	
Traffic Volume (vph)	0	0	0	0	0	44	196	1637	16	233	1204	170
Future Volume (vph)	0	0	0	0	0	44	196	1637	16	233	1204	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	480		180	180		200
Storage Lanes	0		0	0		0	1		1	1		1
Taper Length (ft)	25			25			50			150		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.95	1.00
Frt					0.865				0.850			0.850
Flt Protected							0.950			0.950		
Satd. Flow (prot)	0	1863	0	0	1611	0	1770	5085	1583	1770	3539	1583
Flt Permitted							0.950			0.128		
Satd. Flow (perm)	0	1863	0	0	1611	0	1770	5085	1583	238	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					118				34			121
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		579			521			638			664	
Travel Time (s)		13.2			11.8			14.5			15.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.95	0.92	0.92	0.95	0.92
Adj. Flow (vph)	0	0	0	0	0	48	213	1723	17	253	1267	185
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	48	0	213	1723	17	253	1267	185
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
Turn Type					NA		Prot	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases									2	6		6
Detector Phase		4			8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)		3.0			3.0		5.0	5.0	5.0	3.0	5.0	5.0
Minimum Split (s)		22.5			22.5		12.0	22.5	22.5	7.0	22.5	22.5
Total Split (s)		7.0			7.0		60.0	143.0	143.0	10.0	93.0	93.0
Total Split (%)		4.4%			4.4%		37.5%	89.4%	89.4%	6.3%	58.1%	58.1%
Maximum Green (s)		3.0			3.0		53.0	136.0	136.0	6.0	86.0	86.0
Yellow Time (s)		3.0			3.0		5.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)		1.0			1.0		2.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)		0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.0			4.0		7.0	7.0	7.0	4.0	7.0	7.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)		3.0			3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode		None			None		None	Max	Max	None	Max	Max
Act Effect Green (s)					3.0		24.7	136.0	136.0	123.3	114.3	114.3

2021 Total Traffic Conditions  
Timing Plan: PM Peak

Synchro 10 Light Report  
Page 6

Lanes, Volumes, Timings  
10: Flamingo Dr & Main School Driveway

03/23/2020

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio					0.02		0.16	0.86	0.86	0.78	0.72	0.72
v/c Ratio					0.33		0.77	0.40	0.01	1.04	0.50	0.16
Control Delay					6.0		82.5	2.8	0.2	94.8	11.3	3.4
Queue Delay					0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay					6.0		82.5	2.8	0.2	94.8	11.3	3.4
LOS					A		F	A	A	F	B	A
Approach Delay					6.0			11.5			22.9	
Approach LOS					A			B			C	

Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 158.6

Natural Cycle: 80

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 1.04

Intersection Signal Delay: 16.6

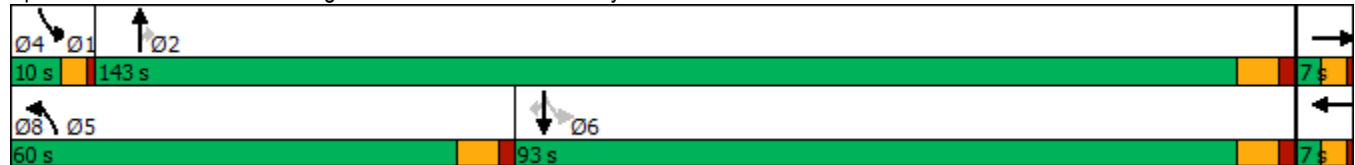
Intersection LOS: B

Intersection Capacity Utilization 62.5%

ICU Level of Service B

Analysis Period (min) 15
























Splits and Phases: 10: Flamingo Dr & Main School Driveway



# HCM 6th Signalized Intersection Summary

## 10: Flamingo Dr & Main School Driveway

03/23/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								  			 	
Traffic Volume (veh/h)	0	0	0	0	0	44	196	1637	16	233	1204	170
Future Volume (veh/h)	0	0	0	0	0	44	196	1637	16	233	1204	170
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	0	0	0	0	48	213	1723	17	253	1267	185
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.95	0.92	0.92	0.95	0.92
Percent Heavy Veh, %	0	2	2	0	2	2	2	2	2	2	2	2
Cap, veh/h	0	35	0	0	0	30	239	4340	1347	316	2611	1165
Arrive On Green	0.00	0.00	0.00	0.00	0.00	0.02	0.13	0.85	0.85	0.04	0.73	0.73
Sat Flow, veh/h	0	1870	0	0	0	1585	1781	5106	1585	1781	3554	1585
Grp Volume(v), veh/h	0	0	0	0	0	48	213	1723	17	253	1267	185
Grp Sat Flow(s),veh/h/ln	0	1870	0	0	0	1585	1781	1702	1585	1781	1777	1585
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	3.0	18.8	12.2	0.3	6.0	23.5	5.6
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	3.0	18.8	12.2	0.3	6.0	23.5	5.6
Prop In Lane	0.00		0.00	0.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	35	0	0	0	30	239	4340	1347	316	2611	1165
V/C Ratio(X)	0.00	0.00	0.00	0.00	0.00	1.62	0.89	0.40	0.01	0.80	0.49	0.16
Avail Cap(c_a), veh/h	0	35	0	0	0	30	590	4340	1347	316	2611	1165
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	78.5	68.1	2.7	1.8	4.8	8.7	6.4
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	389.7	11.0	0.3	0.0	13.7	0.6	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	0.0	0.0	0.0	8.0	14.4	6.1	0.1	6.0	13.9	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	0.0	0.0	468.2	79.2	3.0	1.8	18.6	9.4	6.7
LnGrp LOS	A	A	A	A	A	F	E	A	A	B	A	A
Approach Vol, veh/h		0			48			1953			1705	
Approach Delay, s/veh		0.0			468.2			11.3			10.5	
Approach LOS					F			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.0	143.0		7.0	28.4	124.6		7.0				
Change Period (Y+Rc), s	4.0	7.0		4.0	7.0	7.0		4.0				
Max Green Setting (Gmax), s	6.0	136.0		3.0	53.0	86.0		3.0				
Max Q Clear Time (g_c+I1), s	8.0	14.2		0.0	20.8	25.5		5.0				
Green Ext Time (p_c), s	0.0	25.5		0.0	0.6	15.4		0.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			16.8									
HCM 6th LOS			B									

# Lanes, Volumes, Timings

## 13: Flamingo Dr & South School Driveway

03/23/2020



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑↑	↑↑↑	↗
Traffic Volume (vph)	0	248	0	1862	1626	32
Future Volume (vph)	0	248	0	1862	1626	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	0			125
Storage Lanes	0	1	0			1
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	1.00
Frt		0.865				0.850
Flt Protected						
Satd. Flow (prot)	0	1611	0	5085	5085	1583
Flt Permitted						
Satd. Flow (perm)	0	1611	0	5085	5085	1583
Link Speed (mph)	30			30	30	
Link Distance (ft)	453			662	638	
Travel Time (s)	10.3			15.0	14.5	
Peak Hour Factor	0.96	0.96	0.95	0.95	0.95	0.96
Adj. Flow (vph)	0	258	0	1960	1712	33
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	258	0	1960	1712	33
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	53.4%			ICU Level of Service A		
Analysis Period (min)	15					

HCM 6th TWSC  
13: Flamingo Dr & South School Driveway

03/23/2020

Intersection

Int Delay, s/veh 6.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑↑	↑↑↑	↗
Traffic Vol, veh/h	0	248	0	1862	1626	32
Future Vol, veh/h	0	248	0	1862	1626	32
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	-	-	-	125
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	95	95	95	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	258	0	1960	1712	33

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	- 856	- 0	- 0
Stage 1	- -	- -	- -
Stage 2	- -	- -	- -
Critical Hdwy	- 7.14	- -	- -
Critical Hdwy Stg 1	- -	- -	- -
Critical Hdwy Stg 2	- -	- -	- -
Follow-up Hdwy	- 3.92	- -	- -
Pot Cap-1 Maneuver	0 259	0 -	- -
Stage 1	0 -	0 -	- -
Stage 2	0 -	0 -	- -
Platoon blocked, %		- -	- -
Mov Cap-1 Maneuver	- 259	- -	- -
Mov Cap-2 Maneuver	- -	- -	- -
Stage 1	- -	- -	- -
Stage 2	- -	- -	- -























Approach	EB	NB	SB
HCM Control Delay, s	97.3	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT EBLn1	SBT	SBR
Capacity (veh/h)	- 259	- -	- -
HCM Lane V/C Ratio	- 0.997	- -	- -
HCM Control Delay (s)	- 97.3	- -	- -
HCM Lane LOS	- F	- -	- -
HCM 95th %tile Q(veh)	- 9.8	- -	- -



Lanes, Volumes, Timings  
15: Flamingo Dr & SW 55th St

03/23/2020













												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	108	4	213	81	21	110	151	1496	34	131	1581	119
Future Volume (vph)	108	4	213	81	21	110	151	1496	34	131	1581	119
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	160		160	170		170
Storage Lanes	0		1	0		1	1		1	1		1
Taper Length (ft)	25			25			170			160		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected		0.954			0.962		0.950			0.950		
Satd. Flow (prot)	0	1777	1583	0	1792	1583	1770	5085	1583	1770	5085	1583
Flt Permitted		0.560			0.562		0.950			0.950		
Satd. Flow (perm)	0	1043	1583	0	1047	1583	1770	5085	1583	1770	5085	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			237			123			68			116
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		543			396			1986			662	
Travel Time (s)		12.3			9.0			45.1			15.0	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	120	4	237	90	23	122	168	1662	38	146	1757	132
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	124	237	0	113	122	168	1662	38	146	1757	132
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
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8			2			6
Detector Phase	4	4	4	8	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	5.0	20.0	20.0	5.0	20.0	20.0
Minimum Split (s)	12.0	12.0	12.0	12.0	12.0	12.0	12.0	27.0	27.0	12.0	27.0	27.0
Total Split (s)	46.0	46.0	46.0	46.0	46.0	46.0	40.0	89.0	89.0	25.0	74.0	74.0
Total Split (%)	28.8%	28.8%	28.8%	28.8%	28.8%	28.8%	25.0%	55.6%	55.6%	15.6%	46.3%	46.3%
Maximum Green (s)	40.0	40.0	40.0	40.0	40.0	40.0	33.0	82.0	82.0	18.0	67.0	67.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0	6.0		6.0	6.0	7.0	7.0	7.0	7.0	7.0	7.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effect Green (s)		22.7	22.7		22.7	22.7	20.5	98.5	98.5	18.7	96.8	96.8

2021 Total Traffic Conditions  
Timing Plan: PM Peak

Synchro 10 Light Report  
Page 11

Lanes, Volumes, Timings  
15: Flamingo Dr & SW 55th St

03/23/2020

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.14	0.14		0.14	0.14	0.13	0.62	0.62	0.12	0.60	0.60
v/c Ratio		0.84	0.55		0.76	0.37	0.74	0.53	0.04	0.71	0.57	0.13
Control Delay		106.5	11.3		95.2	11.4	86.1	19.8	0.8	85.5	21.7	4.4
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		106.5	11.3		95.2	11.4	86.1	19.8	0.8	85.5	21.7	4.4
LOS		F	B		F	B	F	B	A	F	C	A
Approach Delay		44.0			51.7			25.4			25.2	
Approach LOS		D			D			C			C	

Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.84

Intersection Signal Delay: 28.1

Intersection LOS: C

Intersection Capacity Utilization 68.4%

ICU Level of Service C

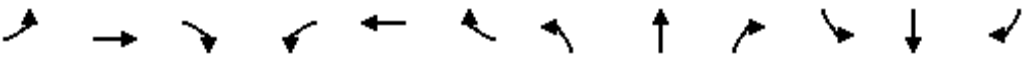
Analysis Period (min) 15

Splits and Phases: 15: Flamingo Dr & SW 55th St



# HCM 6th Signalized Intersection Summary 15: Flamingo Dr & SW 55th St

03/23/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↗	↘		↗	↘	↘	↑↑↑	↘	↘	↑↑↑	↘
Traffic Volume (veh/h)	108	4	213	81	21	110	151	1496	34	131	1581	119
Future Volume (veh/h)	108	4	213	81	21	110	151	1496	34	131	1581	119
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	120	4	170	90	23	122	168	1662	38	146	1757	132
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	221	6	198	208	43	198	192	3350	1040	167	3279	1018
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.11	0.66	0.66	0.09	0.64	0.64
Sat Flow, veh/h	1411	47	1585	1342	343	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	124	0	170	113	0	122	168	1662	38	146	1757	132
Grp Sat Flow(s),veh/h/ln	1458	0	1585	1685	0	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	3.3	0.0	16.8	0.0	0.0	11.7	14.9	26.6	1.4	12.9	30.0	5.2
Cycle Q Clear(g_c), s	12.7	0.0	16.8	9.4	0.0	11.7	14.9	26.6	1.4	12.9	30.0	5.2
Prop In Lane	0.97		1.00	0.80		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	227	0	198	251	0	198	192	3350	1040	167	3279	1018
V/C Ratio(X)	0.55	0.00	0.86	0.45	0.00	0.62	0.88	0.50	0.04	0.87	0.54	0.13
Avail Cap(c_a), veh/h	401	0	396	437	0	396	367	3350	1040	200	3279	1018
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	66.7	0.0	68.6	65.3	0.0	66.3	70.3	14.0	9.7	71.5	15.6	11.2
Incr Delay (d2), s/veh	2.1	0.0	10.2	1.3	0.0	3.1	11.7	0.5	0.1	28.4	0.6	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.7	0.0	11.9	7.9	0.0	8.6	11.9	15.6	0.9	11.7	17.5	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.7	0.0	78.7	66.6	0.0	69.4	82.1	14.6	9.8	100.0	16.3	11.4
LnGrp LOS	E	A	E	E	A	E	F	B	A	F	B	B
Approach Vol, veh/h	294				235				1868			
Approach Delay, s/veh	74.5				68.1				20.5			
Approach LOS	E				E				C			
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	22.0	112.0		26.0	24.2	109.7		26.0				
Change Period (Y+Rc), s	7.0	7.0		6.0	7.0	7.0		6.0				
Max Green Setting (Gmax), s	18.0	82.0		40.0	33.0	67.0		40.0				
Max Q Clear Time (g_c+I1), s	14.9	28.6		18.8	16.9	32.0		13.7				
Green Ext Time (p_c), s	0.1	20.7		1.2	0.4	19.4		1.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay	27.3											
HCM 6th LOS	C											

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# **APPENDIX “H”**

























## **SYNCHRO PRINTOUTS**

### **TOTAL CONDITIONS** **(WITH SIGNAL TIMING OPTIMIZATION)**

# Lanes, Volumes, Timings

## 3: Flamingo Dr & Griffin Rd

03/23/2020

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	245	893	497	297	987	334	447	1520	281	433	1285	192
Future Volume (vph)	245	893	497	297	987	334	447	1520	281	433	1285	192
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	450		550	420		300	300		280	290		210
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	100			100			220			250		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	5085	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	5085	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			276			286			183			111
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1085			1206			2451			1027	
Travel Time (s)		24.7			27.4			55.7			23.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	258	940	523	313	1039	352	471	1600	296	456	1353	202
Shared Lane Traffic (%)												
Lane Group Flow (vph)	258	940	523	313	1039	352	471	1600	296	456	1353	202
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)		24			24			24			24	
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
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	12.0	13.0	13.0	12.0	13.0	13.0	12.0	17.0	17.0	12.0	17.0	17.0
Total Split (s)	30.0	60.0	60.0	23.0	53.0	53.0	34.0	66.0	66.0	31.0	63.0	63.0
Total Split (%)	16.7%	33.3%	33.3%	12.8%	29.4%	29.4%	18.9%	36.7%	36.7%	17.2%	35.0%	35.0%
Maximum Green (s)	23.0	53.0	53.0	16.0	46.0	46.0	27.0	59.0	59.0	24.0	56.0	56.0
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effect Green (s)	18.7	48.6	48.6	16.0	45.9	45.9	27.1	61.0	61.0	26.5	60.4	60.4













2021 Total Traffic Conditions With Signal Timing Optimization  
Timing Plan: AM Peak

Synchro 10 Light Report  
Page 1



Lanes, Volumes, Timings  
3: Flamingo Dr & Griffin Rd

03/23/2020

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.10	0.27	0.27	0.09	0.26	0.26	0.15	0.34	0.34	0.15	0.34	0.34
v/c Ratio	0.73	0.69	0.83	1.03	0.80	0.57	0.91	0.93	0.45	0.90	0.79	0.33
Control Delay	90.0	61.3	40.4	135.6	68.1	15.3	97.5	67.8	19.6	96.1	59.2	22.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	90.0	61.3	40.4	135.6	68.1	15.3	97.5	67.8	19.6	96.1	59.2	22.2
LOS	F	E	D	F	E	B	F	E	B	F	E	C
Approach Delay	59.3			69.6			67.7			63.9		
Approach LOS	E			E			E			E		

Intersection Summary

Area Type: Other

Cycle Length: 180

Actuated Cycle Length: 180

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.03

Intersection Signal Delay: 65.3









Intersection LOS: E

Intersection Capacity Utilization 91.1%

ICU Level of Service F

Analysis Period (min) 15

























Splits and Phases: 3: Flamingo Dr & Griffin Rd

 Ø1	 Ø2 (R)	 Ø3	 Ø4
31 s	66 s	23 s	60 s
 Ø5	 Ø6 (R)	 Ø7	 Ø8
34 s	63 s	30 s	53 s

# HCM 6th Signalized Intersection Summary























## 3: Flamingo Dr & Griffin Rd

03/23/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	245	893	497	297	987	334	447	1520	281	433	1285	192
Future Volume (veh/h)	245	893	497	297	987	334	447	1520	281	433	1285	192
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	258	940	460	313	1039	352	471	1600	296	456	1353	202
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	303	1503	467	307	1510	469	507	1674	520	461	1605	498
Arrive On Green	0.09	0.29	0.29	0.09	0.30	0.30	0.15	0.33	0.33	0.13	0.31	0.31
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	258	940	460	313	1039	352	471	1600	296	456	1353	202
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	13.2	28.7	51.9	16.0	32.4	36.2	24.2	55.2	27.8	23.7	44.5	18.0
Cycle Q Clear(g_c), s	13.2	28.7	51.9	16.0	32.4	36.2	24.2	55.2	27.8	23.7	44.5	18.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	303	1503	467	307	1510	469	507	1674	520	461	1605	498
V/C Ratio(X)	0.85	0.63	0.99	1.02	0.69	0.75	0.93	0.96	0.57	0.99	0.84	0.41
Avail Cap(c_a), veh/h	442	1503	467	307	1510	469	518	1674	520	461	1605	498
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	81.0	54.9	63.1	82.0	56.1	57.4	75.9	59.2	50.0	77.9	57.6	48.5
Incr Delay (d2), s/veh	10.3	0.8	37.8	56.3	1.3	6.7	23.1	13.8	4.5	39.1	5.6	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	10.5	18.4	34.2	14.8	20.4	21.9	18.3	34.3	17.5	19.1	27.4	12.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	91.3	55.7	100.9	138.3	57.4	64.1	99.0	73.0	54.5	117.0	63.1	50.9
LnGrp LOS	F	E	F	F	E	E	F	E	D	F	E	D
Approach Vol, veh/h		1658			1704			2367			2011	
Approach Delay, s/veh		73.8			73.6			75.9			74.1	
Approach LOS		E			E			E			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	31.0	66.0	23.0	60.0	33.4	63.6	22.8	60.2				
Change Period (Y+Rc), s	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0				
Max Green Setting (Gmax), s	24.0	59.0	16.0	53.0	27.0	56.0	23.0	46.0				
Max Q Clear Time (g_c+I1), s	25.7	57.2	18.0	53.9	26.2	46.5	15.2	38.2				
Green Ext Time (p_c), s	0.0	1.6	0.0	0.0	0.2	6.4	0.5	4.8				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			74.5									
HCM 6th LOS			E									

Lanes, Volumes, Timings  
15: Flamingo Dr & SW 55th St

03/23/2020













												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	11	298	62	55	62	256	1783	34	266	1500	197
Future Volume (vph)	21	11	298	62	55	62	256	1783	34	266	1500	197
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	160		160	170		170
Storage Lanes	0		1	0		1	1		1	1		1
Taper Length (ft)	25			25			170			160		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected		0.968			0.974		0.950			0.950		
Satd. Flow (prot)	0	1803	1583	0	1814	1583	1770	5085	1583	1770	5085	1583
Flt Permitted		0.610			0.813		0.950			0.950		
Satd. Flow (perm)	0	1136	1583	0	1514	1583	1770	5085	1583	1770	5085	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			355			75			68			113
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		543			396			1986			662	
Travel Time (s)		12.3			9.0			45.1			15.0	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	25	13	355	74	65	74	305	2123	40	317	1786	235
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	38	355	0	139	74	305	2123	40	317	1786	235
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
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8			2			6
Detector Phase	4	4	4	8	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	5.0	20.0	20.0	5.0	20.0	20.0
Minimum Split (s)	12.0	12.0	12.0	12.0	12.0	12.0	12.0	27.0	27.0	12.0	27.0	27.0
Total Split (s)	35.0	35.0	35.0	35.0	35.0	35.0	47.0	76.0	76.0	49.0	78.0	78.0
Total Split (%)	21.9%	21.9%	21.9%	21.9%	21.9%	21.9%	29.4%	47.5%	47.5%	30.6%	48.8%	48.8%
Maximum Green (s)	29.0	29.0	29.0	29.0	29.0	29.0	40.0	69.0	69.0	42.0	71.0	71.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0	6.0		6.0	6.0	7.0	7.0	7.0	7.0	7.0	7.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effect Green (s)		19.9	19.9		19.9	19.9	32.7	86.2	86.2	33.9	87.4	87.4

2021 Total Traffic Conditions With Signal Timing Optimization  
Timing Plan: AM Peak

Synchro 10 Light Report  
Page 4

Lanes, Volumes, Timings  
15: Flamingo Dr & SW 55th St

03/23/2020

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.12	0.12		0.12	0.12	0.20	0.54	0.54	0.21	0.55	0.55
v/c Ratio		0.27	0.70		0.74	0.28	0.84	0.78	0.05	0.85	0.64	0.26
Control Delay		65.9	13.3		89.2	13.7	81.4	33.4	1.4	80.4	28.6	12.2
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		65.9	13.3		89.2	13.7	81.4	33.4	1.4	80.4	28.6	12.2
LOS		E	B		F	B	F	C	A	F	C	B
Approach Delay		18.4			63.0			38.8			34.0	
Approach LOS		B			E			D			C	

Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 36.2

Intersection LOS: D

Intersection Capacity Utilization 78.8%

ICU Level of Service D

Analysis Period (min) 15



























Splits and Phases: 15: Flamingo Dr & SW 55th St



# HCM 6th Signalized Intersection Summary

## 15: Flamingo Dr & SW 55th St

























03/23/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								  			  	
Traffic Volume (veh/h)	21	11	298	62	55	62	256	1783	34	266	1500	197
Future Volume (veh/h)	21	11	298	62	55	62	256	1783	34	266	1500	197
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	25	13	284	74	65	74	305	2123	40	317	1786	235
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	199	96	287	180	147	287	330	2561	795	342	2597	806
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.19	0.50	0.50	0.19	0.51	0.51
Sat Flow, veh/h	891	531	1585	805	814	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	38	0	284	139	0	74	305	2123	40	317	1786	235
Grp Sat Flow(s),veh/h/ln	1422	0	1585	1618	0	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	0.0	0.0	28.6	8.4	0.0	6.4	26.9	56.8	2.1	28.0	42.3	13.7
Cycle Q Clear(g_c), s	3.5	0.0	28.6	12.0	0.0	6.4	26.9	56.8	2.1	28.0	42.3	13.7
Prop In Lane	0.66		1.00	0.53		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	295	0	287	328	0	287	330	2561	795	342	2597	806
V/C Ratio(X)	0.13	0.00	0.99	0.42	0.00	0.26	0.92	0.83	0.05	0.93	0.69	0.29
Avail Cap(c_a), veh/h	295	0	287	328	0	287	445	2561	795	468	2597	806
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.9	0.0	65.3	58.3	0.0	56.3	64.1	34.0	20.4	63.5	29.7	22.7
Incr Delay (d2), s/veh	0.2	0.0	49.8	0.9	0.0	0.5	20.9	3.3	0.1	20.3	1.5	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.4	0.0	22.0	8.9	0.0	4.7	20.4	32.2	1.5	20.9	24.6	9.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.1	0.0	115.1	59.2	0.0	56.7	85.0	37.3	20.5	83.8	31.2	23.6
LnGrp LOS	E	A	F	E	A	E	F	D	C	F	C	C
Approach Vol, veh/h	322			213			2468			2338		
Approach Delay, s/veh	108.1			58.4			42.9			37.6		
Approach LOS	F			E			D			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	37.7	87.3		35.0	36.6	88.4		35.0				
Change Period (Y+Rc), s	7.0	7.0		6.0	7.0	7.0		6.0				
Max Green Setting (Gmax), s	42.0	69.0		29.0	40.0	71.0		29.0				
Max Q Clear Time (g_c+I1), s	30.0	58.8		30.6	28.9	44.3		14.0				
Green Ext Time (p_c), s	0.8	8.8		0.0	0.7	17.3		0.8				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay	45.1											
HCM 6th LOS	D											

# Lanes, Volumes, Timings

## 3: Flamingo Dr & Griffin Rd

03/23/2020

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	276	675	295	322	557	166	447	1088	286	333	1075	144
Future Volume (vph)	276	675	295	322	557	166	447	1088	286	333	1075	144
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	450		550	420		300	300		280	290		210
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	100			100			220			250		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	5085	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	5085	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			310			175			300			170
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1085			1206			2451			1027	
Travel Time (s)		24.7			27.4			55.7			23.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	291	711	311	339	586	175	471	1145	301	351	1132	152
Shared Lane Traffic (%)												
Lane Group Flow (vph)	291	711	311	339	586	175	471	1145	301	351	1132	152
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)		24			24			24			24	
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
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	12.0	13.0	13.0	12.0	13.0	13.0	12.0	17.0	17.0	12.0	17.0	17.0
Total Split (s)	27.0	36.0	36.0	31.0	40.0	40.0	39.0	62.0	62.0	31.0	54.0	54.0
Total Split (%)	16.9%	22.5%	22.5%	19.4%	25.0%	25.0%	24.4%	38.8%	38.8%	19.4%	33.8%	33.8%
Maximum Green (s)	20.0	29.0	29.0	24.0	33.0	33.0	32.0	55.0	55.0	24.0	47.0	47.0
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effect Green (s)	17.9	28.7	28.7	20.6	31.4	31.4	26.9	61.7	61.7	21.0	55.8	55.8













2021 Total Traffic Conditions with Signal Timing Optimization  
Timing Plan: PM Peak

Synchro 10 Light Report  
Page 1



Lanes, Volumes, Timings  
3: Flamingo Dr & Griffin Rd

03/23/2020

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.11	0.18	0.18	0.13	0.20	0.20	0.17	0.39	0.39	0.13	0.35	0.35
v/c Ratio	0.76	0.78	0.58	0.77	0.59	0.39	0.82	0.58	0.38	0.78	0.64	0.23
Control Delay	81.8	69.1	10.2	79.3	60.8	9.3	76.0	41.6	5.1	79.7	47.0	4.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	81.8	69.1	10.2	79.3	60.8	9.3	76.0	41.6	5.1	79.7	47.0	4.6
LOS	F	E	B	E	E	A	E	D	A	E	D	A
Approach Delay	58.0			58.3			44.3			50.1		
Approach LOS	E			E			D			D		

Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.82

Intersection Signal Delay: 51.5

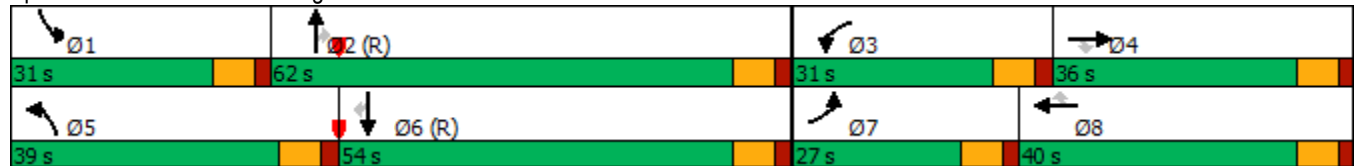
Intersection LOS: D

Intersection Capacity Utilization 79.1%

ICU Level of Service D

Analysis Period (min) 15

























Splits and Phases: 3: Flamingo Dr & Griffin Rd



# HCM 6th Signalized Intersection Summary























## 3: Flamingo Dr & Griffin Rd

03/23/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	276	675	295	322	557	166	447	1088	286	333	1075	144
Future Volume (veh/h)	276	675	295	322	557	166	447	1088	286	333	1075	144
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	291	711	311	339	586	175	471	1145	301	351	1132	152
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	339	925	287	391	1002	311	531	2114	656	403	1925	598
Arrive On Green	0.10	0.18	0.18	0.11	0.20	0.20	0.15	0.41	0.41	0.12	0.38	0.38
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	291	711	311	339	586	175	471	1145	301	351	1132	152
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	13.3	21.2	29.0	15.4	16.7	16.0	21.4	27.1	22.0	16.0	28.4	10.6
Cycle Q Clear(g_c), s	13.3	21.2	29.0	15.4	16.7	16.0	21.4	27.1	22.0	16.0	28.4	10.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	339	925	287	391	1002	311	531	2114	656	403	1925	598
V/C Ratio(X)	0.86	0.77	1.08	0.87	0.58	0.56	0.89	0.54	0.46	0.87	0.59	0.25
Avail Cap(c_a), veh/h	432	925	287	518	1053	327	691	2114	656	518	1925	598
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	71.0	62.3	65.5	69.8	58.4	58.1	66.4	35.4	33.9	69.5	39.9	34.3
Incr Delay (d2), s/veh	13.0	4.0	76.9	11.5	0.8	2.0	11.0	1.0	2.3	12.3	1.3	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	10.7	14.6	25.9	12.0	11.8	10.9	15.5	17.2	13.9	12.4	18.0	7.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	84.0	66.3	142.4	81.3	59.1	60.1	77.4	36.4	36.2	81.8	41.2	35.4
LnGrp LOS	F	E	F	F	E	E	E	D	D	F	D	D
Approach Vol, veh/h	1313			1100			1917			1635		
Approach Delay, s/veh	88.2			66.1			46.4			49.4		
Approach LOS	F			E			D			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	25.6	73.2	25.1	36.0	31.6	67.3	22.7	38.4				
Change Period (Y+Rc), s	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0				
Max Green Setting (Gmax), s	24.0	55.0	24.0	29.0	32.0	47.0	20.0	33.0				
Max Q Clear Time (g_c+I1), s	18.0	29.1	17.4	31.0	23.4	30.4	15.3	18.7				
Green Ext Time (p_c), s	0.7	10.8	0.7	0.0	1.2	8.0	0.4	4.0				
Intersection Summary												
HCM 6th Ctrl Delay	60.1											
HCM 6th LOS	E											

Lanes, Volumes, Timings  
15: Flamingo Dr & SW 55th St

03/23/2020













												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	108	4	213	81	21	110	151	1496	34	131	1581	119
Future Volume (vph)	108	4	213	81	21	110	151	1496	34	131	1581	119
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	160		160	170		170
Storage Lanes	0		1	0		1	1		1	1		1
Taper Length (ft)	25			25			170			160		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected		0.954			0.962		0.950			0.950		
Satd. Flow (prot)	0	1777	1583	0	1792	1583	1770	5085	1583	1770	5085	1583
Flt Permitted		0.562			0.564		0.950			0.950		
Satd. Flow (perm)	0	1047	1583	0	1051	1583	1770	5085	1583	1770	5085	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			237			122			68			73
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		543			396			1986			662	
Travel Time (s)		12.3			9.0			45.1			15.0	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	120	4	237	90	23	122	168	1662	38	146	1757	132
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	124	237	0	113	122	168	1662	38	146	1757	132
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
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8			2			6
Detector Phase	4	4	4	8	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	5.0	20.0	20.0	5.0	20.0	20.0
Minimum Split (s)	12.0	12.0	12.0	12.0	12.0	12.0	12.0	27.0	27.0	12.0	27.0	27.0
Total Split (s)	39.0	39.0	39.0	39.0	39.0	39.0	33.0	81.0	81.0	40.0	88.0	88.0
Total Split (%)	24.4%	24.4%	24.4%	24.4%	24.4%	24.4%	20.6%	50.6%	50.6%	25.0%	55.0%	55.0%
Maximum Green (s)	33.0	33.0	33.0	33.0	33.0	33.0	26.0	74.0	74.0	33.0	81.0	81.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0	6.0		6.0	6.0	7.0	7.0	7.0	7.0	7.0	7.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effect Green (s)		23.0	23.0		23.0	23.0	20.1	98.5	98.5	18.5	96.8	96.8

2021 Total Traffic Conditions with Signal Timing Optimization  
Timing Plan: PM Peak

Synchro 10 Light Report  
Page 4

Lanes, Volumes, Timings  
15: Flamingo Dr & SW 55th St

03/23/2020

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.14	0.14		0.14	0.14	0.13	0.62	0.62	0.12	0.60	0.60
v/c Ratio		0.83	0.55		0.75	0.37	0.76	0.53	0.04	0.72	0.57	0.13
Control Delay		103.3	11.1		92.8	11.5	88.1	19.9	0.8	86.7	21.6	8.3
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		103.3	11.1		92.8	11.5	88.1	19.9	0.8	86.7	21.6	8.3
LOS		F	B		F	B	F	B	A	F	C	A
Approach Delay		42.8			50.6			25.7			25.4	
Approach LOS		D			D			C			C	

Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.83

Intersection Signal Delay: 28.2

Intersection LOS: C

Intersection Capacity Utilization 68.4%

ICU Level of Service C

Analysis Period (min) 15

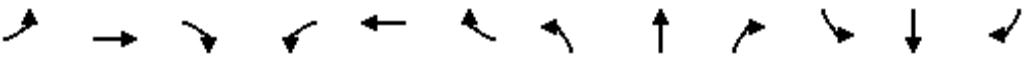
Splits and Phases: 15: Flamingo Dr & SW 55th St



# HCM 6th Signalized Intersection Summary

## 15: Flamingo Dr & SW 55th St

03/23/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↗	↘		↗	↘	↘	↑↑↑	↘	↘	↑↑↑	↘
Traffic Volume (veh/h)	108	4	213	81	21	110	151	1496	34	131	1581	119
Future Volume (veh/h)	108	4	213	81	21	110	151	1496	34	131	1581	119
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	120	4	170	90	23	122	168	1662	38	146	1757	132
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	220	6	197	207	43	197	191	3347	1039	170	3286	1020
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.11	0.66	0.66	0.10	0.64	0.64
Sat Flow, veh/h	1411	47	1585	1343	343	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	124	0	170	113	0	122	168	1662	38	146	1757	132
Grp Sat Flow(s),veh/h/ln	1458	0	1585	1686	0	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	3.3	0.0	16.8	0.0	0.0	11.7	14.9	26.6	1.4	12.9	29.9	5.2
Cycle Q Clear(g_c), s	12.7	0.0	16.8	9.4	0.0	11.7	14.9	26.6	1.4	12.9	29.9	5.2
Prop In Lane	0.97		1.00	0.80		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	225	0	197	250	0	197	191	3347	1039	170	3286	1020
V/C Ratio(X)	0.55	0.00	0.86	0.45	0.00	0.62	0.88	0.50	0.04	0.86	0.53	0.13
Avail Cap(c_a), veh/h	340	0	327	372	0	327	289	3347	1039	367	3286	1020
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	66.8	0.0	68.7	65.5	0.0	66.5	70.4	14.1	9.7	71.3	15.5	11.1
Incr Delay (d2), s/veh	2.1	0.0	12.0	1.3	0.0	3.2	17.8	0.5	0.1	11.9	0.6	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.7	0.0	12.0	7.9	0.0	8.6	12.3	15.7	0.9	10.7	17.4	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.9	0.0	80.7	66.7	0.0	69.6	88.2	14.6	9.8	83.2	16.1	11.3
LnGrp LOS	E	A	F	E	A	E	F	B	A	F	B	B
Approach Vol, veh/h	294				235				1868			
Approach Delay, s/veh	75.7				68.2				21.1			
Approach LOS	E				E				C			
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	22.2	111.9		25.9	24.1	110.0		25.9				
Change Period (Y+Rc), s	7.0	7.0		6.0	7.0	7.0		6.0				
Max Green Setting (Gmax), s	33.0	74.0		33.0	26.0	81.0		33.0				
Max Q Clear Time (g_c+I1), s	14.9	28.6		18.8	16.9	31.9		13.7				
Green Ext Time (p_c), s	0.3	19.6		1.0	0.3	22.8		0.9				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay	27.0											
HCM 6th LOS	C											

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# **APPENDIX “I”**

## **SYNCHRO PRINTOUTS**

## **IMPROVEMENT RECOMMENDATION EXHIBITS**



**NORTH SCHOOL DRIVEWAY**

**MAIN SCHOOL DRIVEWAY**

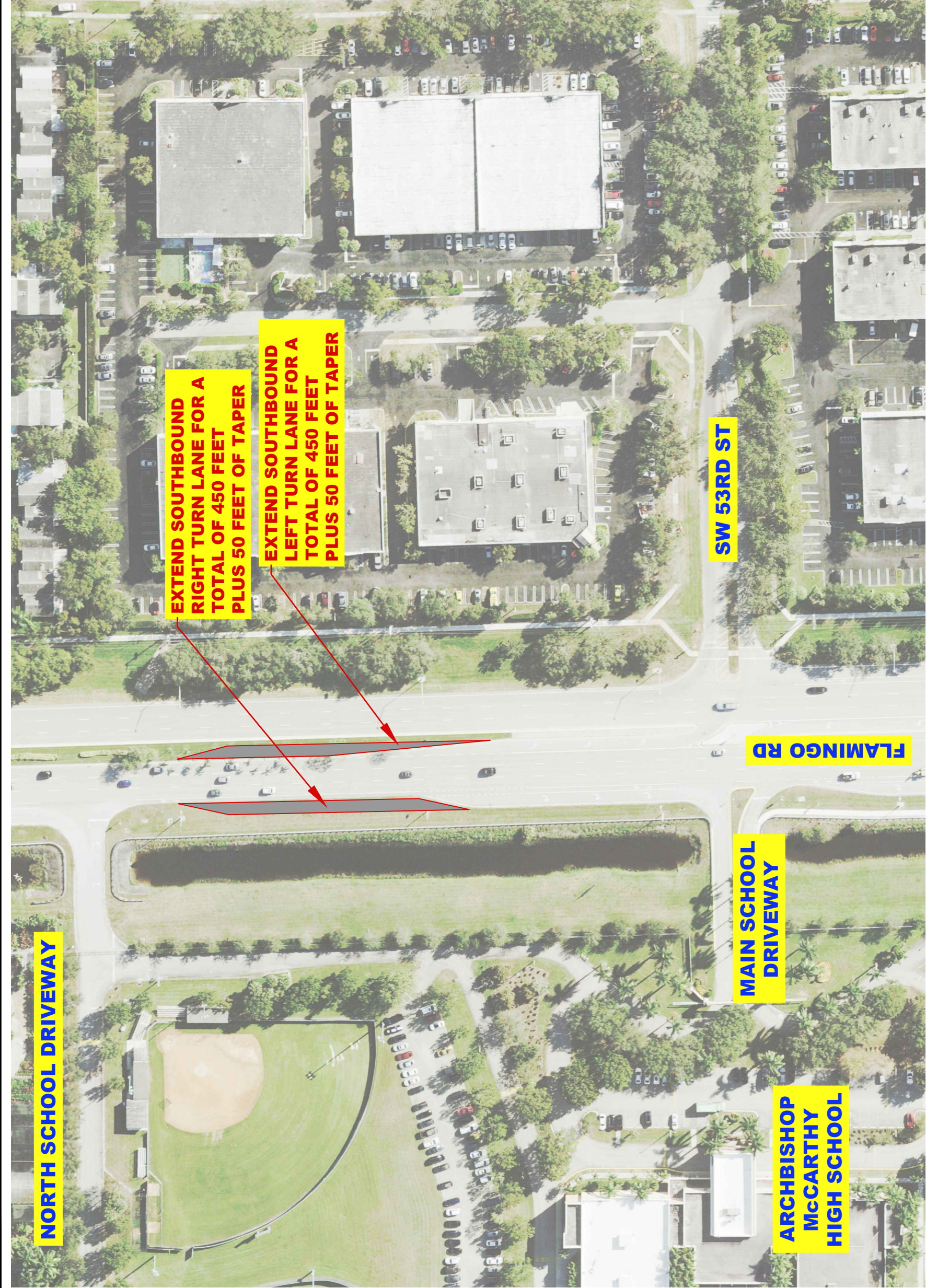
**ARCHBISHOP MCCARTHY HIGH SCHOOL**

**SW 53RD ST**

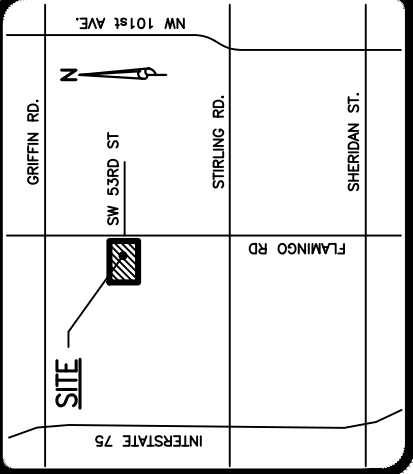
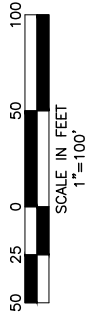
**FLAMINGO RD**


**EXTEND SOUTHBOUND  
RIGHT TURN LANE FOR A  
TOTAL OF 450 FEET  
PLUS 50 FEET OF TAPER**

**EXTEND SOUTHBOUND  
LEFT TURN LANE FOR A  
TOTAL OF 450 FEET  
PLUS 50 FEET OF TAPER**



**LOCATION MAP**  
NOT TO SCALE



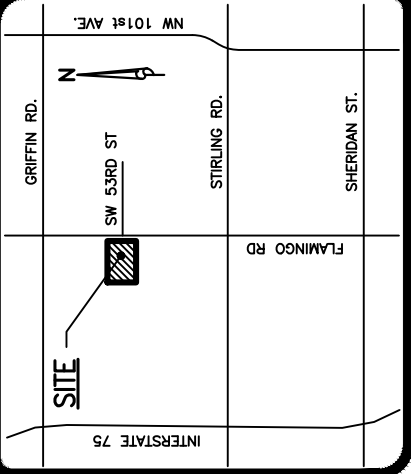


**SIMMONS & WHITE**  
TRANSPORTATION | PLANNING | ENGINEERING | ENVIRONMENTAL  
2501 Metcalf Avenue, Suite 300, West Palm Beach, Florida 33411-4700  
Phone: 561.831.1234 | Fax: 561.831.1235  
www.simmonsandwhite.com

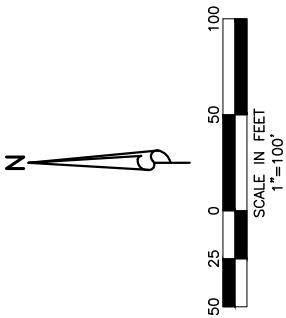
ARCHBISHOP MCCARTHY HIGH SCHOOL  
SECTION 35, TOWNSHIP 50S., RANGE 40E.  
BROWARD COUNTY, FLORIDA  
IMPROVEMENT RECOMMENDATIONS No. 1 & 2

DESIGN	DRAWN	CHECKED	APPROVED	DATE
B.K.	R.S.			
JOB NO.	DRAWING NO.	SHEET	OF	
19-105	19105EXH02	2	4	





LOCATION MAP  
NOT TO SCALE



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2501 Metropole Blvd. Suite 300 West Palm Beach, Florida 33411-4700  
Phone: 561.833.1100 Fax: 561.833.1101  
www.simmonsandwhite.com

DESIGN  
B.K.

DRAWN  
R.S.

CHECKED

APPROVED

DATE

REVISIONS

ARCHBISHOP MCCARTHY HIGH SCHOOL  
SECTION 35, TOWNSHIP 50S., RANGE 40E.  
BROWARD COUNTY, FLORIDA  
IMPROVEMENT RECOMMENDATIONS No. 3

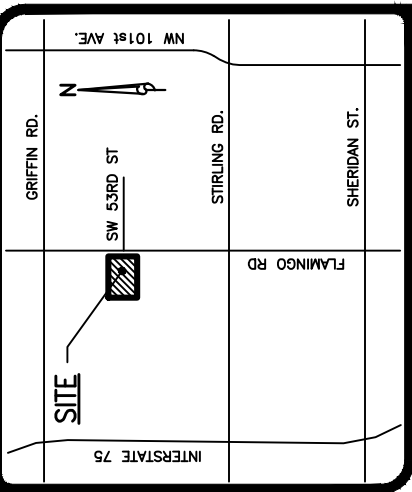
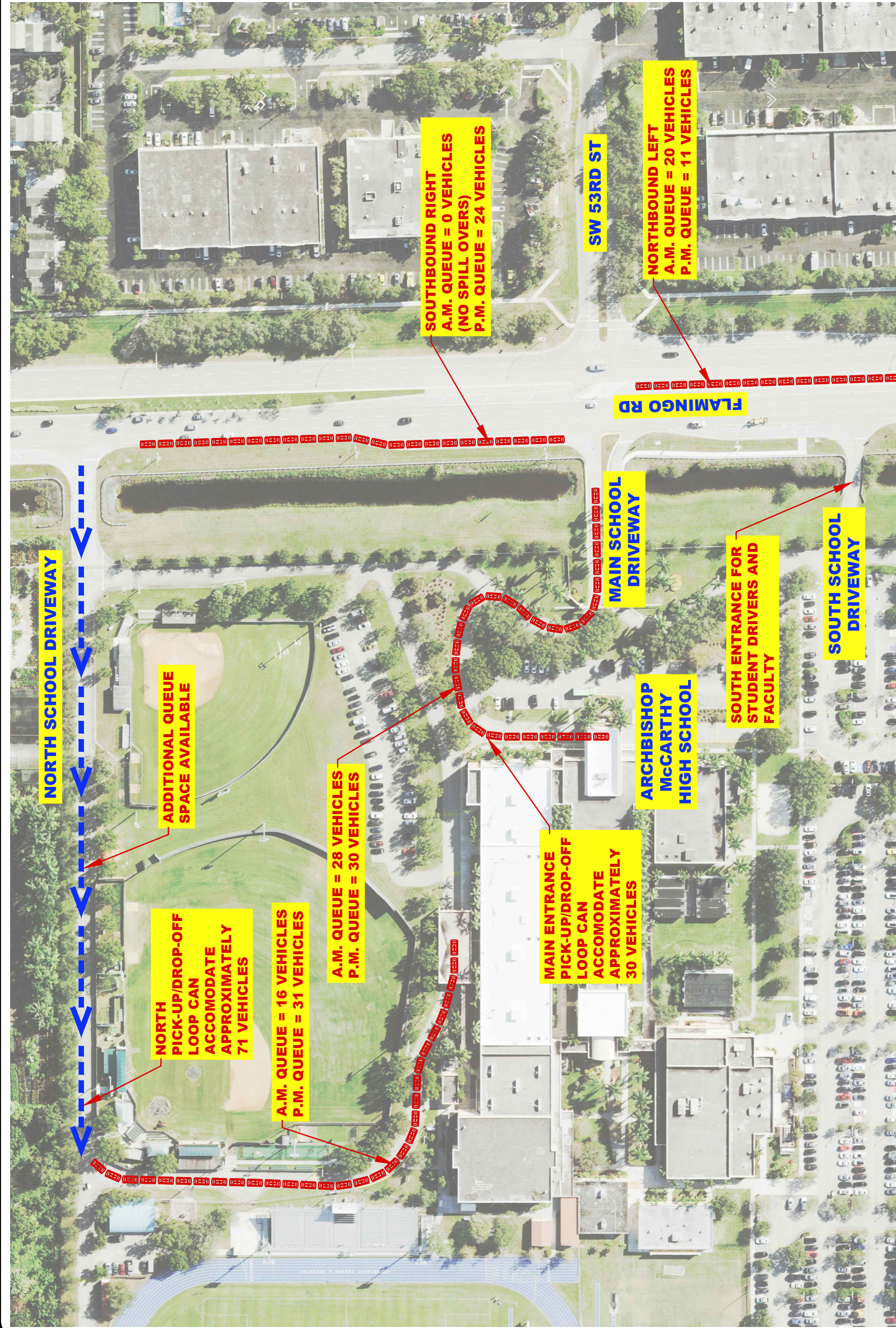
JOB NO.	DRAWING NO.	SHEET	OF
19-105	19105EXH01	3	4

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# **APPENDIX “J”**

## **EXISTING QUEUE DATA EXHIBIT**





LOCATION MAP  
NOT TO SCALE



TOTAL OBSERVED QUEUE

A.M.= 64 VEHICLES  
P.M.= 96 VEHICLES

NOTE:  
QUEUE DATA IS BASED  
ON OBSERVATIONS  
DURING A TYPICAL  
WEEKDAY BUT ACTUAL  
QUEUES WILL VARY  
BASED ON WEATHER AND  
ROADWAY CONDITIONS,

EXISTING QUEUE DATA

ARCHBISHOP MCCARTHY HIGH SCHOOL  
SECTION 35, TOWNSHIP 50S., RANGE 40E.  
BROWARD COUNTY, FLORIDA  
EXISTING ON-SITE QUEING CAPACITY



**SIMMONS & WHITE**  
TRAFFIC ENGINEERS & PLANNERS  
2581 Metcalf Ave., Suite 300, Fort Lauderdale, FL 33307 • (954) 478-7848

DESIGN	DRAWN	CHECKED	APPROVED	DATE
B.K.	R.S.			

JOB NO.	DRAWING NO.	SHEET	OF
19-105	19105EXH01	1	4

REVISIONS
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**Town of Southwest Ranches**  
**13400 Griffin Road**  
**Southwest Ranches, FL 33330-2628**

**(954) 434-0008 Town Hall**  
**(954) 434-1490 Fax**

**Town Council**  
**Doug McKay, Mayor**  
**Denise Schroeder, Vice Mayor**  
**Delsa Amundson, Council Member**  
**Bob Hartmann, Council Member**  
**Gary Jablonski, Council Member**

**Andrew D. Berns, Town Administrator**  
**Keith M. Poliakoff, JD, Town Attorney**  
**Russell Muniz, Assistant Town Administrator/Town Clerk**  
**Martin D. Sherwood, CPA, CGMA, CGFO, Town Financial Administrator**

### **COUNCIL MEMORANDUM**

**TO:** Honorable Mayor McKay and Town Council  
**VIA:** Andy Berns, Town Administrator  
**FROM:** Sandra Luongo  
**DATE:** 6/25/2020  
**SUBJECT:** Town of Southwest Ranches Comprehensive Emergency Management Plan (CEMP) & Continuity of Operations Plan (COOP)

---

#### **Recommendation**

Town Council consideration for a motion to approve the ordinance.

#### **Unanimous Vote of the Town Council Required?**

No

#### **Strategic Priorities**

- A. Sound Governance
- C. Reliable Public Safety

#### **Background**

In accordance with Florida Statute 252.36(b)(2), (3)(c), *Emergency Management Powers of the Governor*, an executive order or proclamation of a state of emergency shall identify whether the state of emergency is due to a minor, major, or catastrophic disaster. These categories are required to identify various emergency management proclamation authorities of the Governor. For example, under a catastrophic disaster, the proclamation constitutes a formal request for mobilization of the military, which shall be communicated to the President of the United States. The levels of emergency are:

Minor Emergency: Any emergency that is likely to be within the response capabilities of local government and results in only minimal need for state or federal assistance. Operationally, this definition translates into a Level III or Level II activation of the CEOC. (See Concept of Operations section; Levels of EOC Activation).

Major Emergency: Any emergency that will likely exceed local capabilities and require a broad range of County, State and Federal assistance. Operationally, this definition translates into a Level II or Level I activation. The State will be notified, and State and potentially Federal assistance will be required.

Catastrophic Emergency: Any emergency that will require massive State and Federal assistance, including immediate military involvement. Operationally, this definition translates into a Level I activation. The State will be notified and pre-deployed to the CEOC; potential Federal assistance will involve response as well as recovery needs.

Pursuant to F.S. Chapter 252.38, legally constituted municipalities may establish emergency management programs and develop emergency management plans in conformance with Federal, State, and County plans.

The Town's Comprehensive Emergency Management Plan (CEMP) is to serve as a guide to be followed by the Town when a disaster is declared on a Federal, State and Local governmental level.

The Town's Continuity of Operations Plan is designed to establish policy and guidance to essential roles to ensure the continued execution of Town functions continue to be performed in the event of a disaster.

### **Fiscal Impact/Analysis**

There is no fiscal impact to approving the Town's emergency plans.

### **Staff Contact:**

Sandy Luongo  
General Services Manager

### **ATTACHMENTS:**

Description	Upload Date	Type
Ord_CEMP_and_COOP_2020-TA Approved	6/5/2020	Ordinance
SWR Comprehensive Emergency Management Plan (CEMP)	6/17/2020	Resolution
SWR Continuity of Operations Plan (COOP)	4/25/2020	Exhibit
SWR Staff COOP Roles	4/25/2020	Exhibit

**ORDINANCE NO. 2020- XXX**

**AN ORDINANCE OF THE TOWN OF SOUTHWEST RANCHES, FLORIDA, AMENDING ORDINANCE 2002-005 AND THE TOWN'S COMPREHENSIVE EMERGENCY MANAGEMENT PLAN (CEMP) AND ADOPTING A NEW CONTINUITY OF OPERATIONS PLAN (COOP) IN ORDER TO MINIMIZE HUMAN AND PROPERTY LOSSES AND TO PRESERVE THE CONTINUANCE OF THE TOWN'S MUNICIPAL ESSENTIAL OPERATIONS IN THE EVENT OF A NATURAL OR MAN-MADE DISASTER; AUTHORIZING THE MAYOR, TOWN ADMINISTRATOR, AND TOWN ATTORNEY TO APPROVE THE PLANS; AND PROVIDING AN EFFECTIVE DATE.**

**WHEREAS**, Section 252.36(b)(2), (3)(c), Florida Statutes, Emergency Powers of the Governor, states an executive order or proclamation of a state of emergency shall identify whether the state of emergency is due to a disaster, and

**WHEREAS**, Chapter 252.38 of the Florida Statutes states that municipalities may establish emergency management plans in conformance with Federal, State, and County plans; and

**WHEREAS**, the Town's Comprehensive Emergency Management Plan (CEMP) is to serve as a guide to be followed by the Town when a disaster is declared on a federal, state, or local governmental level, and

**WHEREAS**, on June 13, 2002, the Town's first CEMP was approved and adopted by the Town Council via Ordinance 2002-005; and

**WHEREAS**, the Town's COOP is designed to establish policy and guidance of essential roles to ensure the continued execution of Town functions are performed in the event of a disaster; and

**WHEREAS**, this Ordinance amends the CEMP and adopts the new COOP plan in an effort to minimize the loss of human lives and property; and

**WHEREAS**, all future modifications to the CEMP and the COOP shall be made by Resolution.

**NOW, THEREFORE, BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF SOUTHWEST RANCHES, FLORIDA:**

**Section 1: Ratification.** That the foregoing "WHEREAS" clauses are hereby ratified and confirmed as being true and correct and are hereby made a specific part of this Ordinance.

**Section 2: Designation of Emergency Director.** The Town Administrator is hereby designated as the Town's Emergency Director and is hereby granted the authority to create and implement disaster plans for the Town and to declare a "State of Local Emergency" in the event of an emergency affecting the limits of the Town of Southwest Ranches, when the Administrator, in his or her sole judgement determines that the magnitude and extent of damages will necessitate outside assistance.

**Section 3: Grant of Authority.** The Town Administrator is granted such authority as may be necessary to direct and coordinate the development of the emergency management mitigation, preparedness and response operations, as well as performance of public work and to take such actions as may be deemed necessary and appropriate to protect the safety, health and welfare of the residents.

**Section 4: Authorization.** The Town Council hereby authorizes the Mayor, Town Administrator, and Town Attorney to approve the CEMP and COOP plans in the same form as that attached hereto as Exhibit A and B in order to effectuate the intent of this Ordinance.

**Section 5: Effective Date.** This Ordinance shall take effect immediately upon its adoption.

**PASSED ON FIRST READING** this 11<sup>th</sup> day of June 2020 on a motion made by \_\_\_\_\_ and seconded by \_\_\_\_\_.

**PASSED AND ADOPTED ON SECOND READING** this \_\_\_\_ day of \_\_\_\_\_, 2020, on a motion made by \_\_\_\_\_ and seconded by \_\_\_\_\_.

**[Signatures on Next Page]**

McKay \_\_\_\_\_  
Schroeder \_\_\_\_\_  
Amundson \_\_\_\_\_  
Hartmann \_\_\_\_\_  
Jablonski \_\_\_\_\_

Ayes \_\_\_\_\_  
Nays \_\_\_\_\_  
Absent \_\_\_\_\_

---

Doug McKay, Mayor

ATTEST:

---

Russell Muñiz, Assistant Town Administrator/Town Clerk

Approved as to Form and Correctness:

---

Keith Poliakoff, J.D., Town Attorney  
37048941.1

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# **Town of Southwest Ranches COMPREHENSIVE EMERGENCY MANAGEMENT PLAN (CEMP)**



**May 2020**

## **INTRODUCTION**

The Southwest Ranches Comprehensive Emergency Management Plan (CEMP) establishes a framework for the Town and contracted partners to plan the actions needed to protect the welfare of the community from the effects of emergencies and disasters. The procedures establish a framework for emergency planning, response to and rapid recovery from any emergency or disaster which could affects the Town.

## **PURPOSE**

The purpose of this CEMP is to serve as a guide to be followed by the Town when a disaster is declared on a Federal, State, or Local governmental level. The procedure is expanded in the Town of Southwest Ranches Comprehensive Emergency Operations plan (CEOP) which describes how the Town will manage and coordinate resources and personnel during periods of major emergency. This plan focuses on the roles of personnel and actions that must be implemented prior to, during and after an emergency occurs.

Continuity of government issues will be addressed in compliance with the Town of Southwest Ranches Continuity of Operations (COOP) Plan.

Examples of emergencies that will cause activation of this procedure are; natural or environmental disasters; acts of war or terrorism; nuclear; biological; or radiological incidents, pandemics or any other event of a catastrophic or cataclysmic nature that may constitute a disaster and require appropriate community response.

## **POLICY**

This procedure provides a breakdown of responsibilities which will include the duties of Mayor and Council, the Town Administrator, Town Staff, and contracted partners during emergency situations. The plan provides an overview of the Town of Southwest Ranches Emergency Management protocols and Emergency Operations.

The Town of Southwest Ranches has a total staff of 15 employees and have outsourced services including Code Enforcement (J.A. Medina LLC), Building Department (CAP Government Inc.), Police and Fire (Town of Davie) and the Southwest Ranches Volunteer Fire Department. All Town Staff are considered “essential” in the event of a disaster and the details of their respective duties are outlined in the CEOP.

This procedure attempts to define clearly who does what, when, where, and how, along with the legal authority to act, in order to mitigate, prepare for, respond to, and recover from the effects of natural disaster, technological accidents, and other major incidents.

This procedure shall be a guide for the Mayor, Town Council and the Town Administration and Staff in the event of a declaration of emergency by Federal, State and/or Local governments, resulting from any of the following causes such as natural or environmental disasters, acts of war or terrorism, nuclear, biological or radiological events, or any other event of a catastrophic or cataclysmic nature.

The level of response will be determined for each incident based on the severity of the incident. This decision will be based on information from Broward County EOC, Town of Southwest Ranches Administration, and staff reports.

## **PERSONNEL POLICY**

The Town Administrator or designee will appoint or assign Town staff members and/or contractors to manage any and all circumstances involving intra-governmental or inter-governmental matters or relations, relating to an emergency and non-emergency nature as may be necessary. The Town Administrator, or designee, shall determine the need for additional governmental resources and personnel as required by the magnitude of the event or emergency.

The following is a summary of the staff functions for the Town of Southwest Ranches. Details of operations for mitigation, activations and recovery are outlined in detail in the Towns CEOP.

## **SUMMARY OF RISKS**

The Town of Southwest Ranches is exposed to many hazards, all of which have the potential for disrupting the community, causing damage, and creating casualties. Possible natural hazards include hurricanes, floods, tornadoes, and forest and brush fires. There are also threats of incidents from such sources as nuclear, biochemical, or conventional attacks. The Town of Southwest Ranches is close to the flight path of the Fort Lauderdale/Hollywood International airport. Other disaster situations could develop from a hazardous materials accident, brushfire, nuclear power plant accident, major transportation accident, terrorism, active shooter or other types of civil disorder.

## **LOCAL GOVERNMENT RESPONSIBILITIES**

1. In order to protect life and property from the effects of emergencies, local government is responsible for all emergency management activities. When operating under such conditions, the Town of Southwest Ranches will utilize all available resources from within the Town, including voluntary and private assets.
2. If the emergency exceeds Town of Southwest Ranches capabilities to respond, assistance will be requested from other jurisdictions and the Florida Division of Emergency Management (FDEM). Upon a Presidential declaration, assistance as requested by the State, Broward County will make requests to the State on behalf of the municipalities.
3. Consistent with the commitment to comprehensive emergency management, this plan addresses major emergency situations that may develop in the Town other than those for which the military is primarily responsible. It outlines activities that address mitigation, preparedness, response and recovery. The plan emphasizes the capabilities of the Town of Southwest Ranches to respond and accomplish short-term recovery.
4. The Town of Southwest Ranches, in coordination with the county and other municipal governments, will cooperate to the fullest extent with all applicable agencies in coordination for emergency operations and the NIMS emergency response system.
5. The Town of Southwest Ranches will commit services and resources in order to save lives and protect property. Therefore, all persons assigned to the MEOC will have the authority to commit all of the Town's resources.
6. In addition to Town staff, response agencies consist of Davie Police and Fire Departments who have contracted with the Town of Southwest Ranches to provide such services and the Southwest Ranches Volunteer Fire Department.
7. The Town communicates with Broward County through WebEOC and will have a presence at the Broward EOC in Plantation in the event of a disaster.
8. Additional needs may be met by other local governments, agencies and/or organizations through mutual aid or MOUs. After these sources have been exhausted, additional resources will be

requested from FDEM and other agencies via Broward County.

9. The Public Information Officer (PIO) in concert with the Emergency Manager, Town Administrator, or designee, will coordinate the release of all emergency information.
10. If a department requests functional support from another agency or organization, assigned personnel and resources will be coordinated by the agency through WebEOC.

## **DIRECTION AND COORDINATION**

1. The person responsible for emergency management within the Town of Southwest Ranches will be the Town of Southwest Ranches Town Administrator, to be known as Incident Command. Incident Command provides direction to the Emergency Manager and may assign duties to the Emergency Manager as he/she deems appropriate.
2. The Emergency Manager or designee will coordinate the efforts of Section Chiefs responsible for plan development of Standard Operating Procedures (SOP's) and major revisions. The plan will be reviewed annually before June 1 and revisions completed, as necessary.
3. All Town of Southwest Ranches staff are considered essential. The Emergency Manager provides direction and coordination for the MEOC. If required, emergency operations will be conducted within the MEOC. Either full or partial activation may be required based on the severity of the emergency situation. However, if the situation warrants, the Town of Southwest Ranches Emergency Manager may request that the agency or organization with ESF responsibility report to the site of the emergency.
4. As required, the combined communications systems of the Town of Southwest Ranches, and (as available) other town/county emergency response agencies will be utilized to ensure communication with appropriate agencies and organizations.
5. Upon Declaration of a State of Emergency by the Governor, State resources may be obtained under the auspices of the Florida Division of Emergency Management (FDEM) as transmitted through the Broward County warning point.

## **PHASES OF EMERGENCY MANAGEMENT**

**MITIGATION**: Activities that may prevent the occurrence of an emergency or reduce the community's vulnerability and/or minimize the adverse impact of disasters or emergencies. A preventable measure, for instance, is the enforcement of local building codes to minimize such situations.

**PREPAREDNESS**: Activities that exist prior to an emergency to support and enhance disaster response. Planning, training, exercises, community awareness and education are among such activities.

**RESPONSE**: Activities that address the immediate and short-term effects of an emergency or disaster. Response activities help to reduce both casualties and damage, and speed recovery. Response activities include use of the Nationwide Incident Management System (NIMS) for direction and coordination, Resident warnings, evacuation and other similar operations.

**RECOVERY**: Activities involve restoring the community to a normal state.

- **Short Term Recovery** includes damage assessment and the return of vital functions, such as utilities and emergency services, to minimum operating standards.
- **Long Term Recovery** includes the return of all government and governmental services to normal operations at their pre-disaster levels. When rebuilding and re-location is necessary due to damaged property, long-term recovery activities may continue for years.

## **ORGANIZATION AND ASSIGNMENT OF RESPONSIBILITIES**

The Emergency Manager, and/or other personnel as assigned to their ESF position is responsible for the following:

1. Assist in development and coordination of staff's emergency roles to ensure necessary planning;
2. Brief and train staff and volunteers as well as conduct periodic exercises to evaluate support function responsibilities;
3. Manage the Municipal EOC for operational readiness;
4. Coordinate issues with other municipal emergency management agencies, Broward County Office of Emergency Management (BEMA), FDEM, Davie PD and Fire Rescue, SWR Volunteer Fire Department and other emergency response organizations;
5. Maintain a list of all agency contacts including cellular, home telephone, fax, and pager numbers;
6. Provide requested assistance in creation of Policies and Procedures for all ESFs;
7. Update, maintain and distribute this plan and all major revisions to agencies and organizations contained on the distribution list;
8. Advise Town of Southwest Ranches officials, and agencies with ESF responsibilities on the nature, magnitude, and possible effects of an emergency
9. Develop and maintain the ESF and appropriate Policies and Procedures in conjunction & cooperation with the Emergency Manager and other supporting agencies;
10. Assign agency and organization personnel with emergency authority to work on planning, mitigation, preparedness and response issues and commit resources;
11. If needed, negotiate and prepare MOU's impacting the specific ESF, in cooperation with the Emergency Manager or designee; and
12. Detailed records of expenditures are required by all agencies and organizations responding to a disaster for possible reimbursement, such as through an authorized federal declaration.

## **NATIONWIDE INCIDENT MANAGEMENT SYSTEM (NIMS)**

It is the policy of the Town of Southwest Ranches to adopt and utilize the NIMS system. All Departments will adopt, provided training for and utilize the NIMS system during emergency operations. This includes implementation of a modular command structure and sectoring of responsibilities as necessary.

## **INTRODUCTION**

NIMS is designed to coordinate the use of resources from different agencies (both public and private) and allow them to meld into a single seamless organization.

Benefits of this concept include:

- Consistency in team and agency functions
- Efficiency of communications in emergency operations
- Common terminology
- Unified command structure
- Consolidated action plans
- Manageable span of control

## RESPONSIBILITIES

It is the responsibility of the Emergency Manager to insure Compliance with NIMS. New employees will have six months to complete the applicable NIMS courses to become NIMS compliant.

## SUMMARY OF THE CONCEPT OF OPERATIONS

The Town of Southwest Ranches will utilize the National Incident Management System (NIMS), the Incident Command System (ICS), and structured to the Broward Emergency Management Division (BEMD) plan criteria as the basic operational framework to respond to emergency situations. At the time of a disaster, the Town Administrator, Emergency Manager and other key staff will coordinate operations from the Town Municipal Emergency Operations Center at Town of Southwest Ranches Town Hall at 13400 Griffin Road. From this location the Town will coordinate and prioritize field operations by its Operations, Logistic, Finance and Planning Sections, as well as coordinate requests for County, State and Federal assistance to the Town with the Broward County Emergency Operations Center.

## ACTIVATION

**LEVEL 1 - Full Scale Activation** - In this activation, all primary and support agencies are notified. The Town of Southwest Ranches will be staffed by Emergency Management personnel and all Emergency Support Functions.

**LEVEL 2 - Partial Activation** - This is limited Department activation. All primary, or lead, Emergency Support Functions are notified. The Town of Southwest Ranches Field Operations Center will be staffed by Emergency Management personnel and necessary Emergency Support Functions

**LEVEL 3 - Monitoring Activation** - Level 3 is typically a "monitoring" phase.

## ROLES AND RESPONSIBILITIES

The Mayor or designee shall be the Town of Southwest Ranches official representative to the Federal, State and Local government elected officials in all matters related to the Town's Comprehensive Emergency Operating Plan. The Town Council may be assigned to pre-establish areas of responsibility within the Town of Southwest Ranches. The Town Administrator shall have overlapping responsibilities and shall assist Council members in communicating relevant information to all residents and businesses located within the geographical area of the Town as required by the magnitude of the event or emergency.

## AUTHORITY TO DECLARE EMERGENCY

Pursuant to F.S. Chapter 252, whenever there shall occur within the Town a natural or manmade disaster or emergency, or the occurrence or threat of one that is imminent and requires immediate and expeditious action, a state of emergency is declared by the Town Administrator or the Town Council.

## CONTENTS OF DECLARATION

- A. The state of emergency shall be declared by a resolution of the Town Administrator or the Town Council, and the state of emergency shall continue until the Town Administrator or the Town Council finds that the threat or danger no longer exists.
- B. The state of emergency resolution shall provide the following:



1. Specify the nature of the emergency.
2. Designate by appropriate boundaries the area or areas affected.
3. The conditions which have brought the emergency about or which make possible its termination.
4. Recite additional matter as is deemed necessary to effectuate the emergency powers prescribed herein.
5. The Governor may request Federal assistance if a disaster occurs and the situation exceeds the capability of the state to respond. Upon a Presidential Declaration, federal disaster assistance is available.

## **EMERGENCY POWERS**

Upon the declaration of a state of emergency, pursuant to this chapter, the Town Administrator shall have the power to impose by authority and powers granted the Town under F.S. Chapter 252 as it now is or as it may be amended, necessary to protect the health, safety and welfare of the Town.

## **UNLAWFUL ACTS DURING EMERGENCY**

It shall be unlawful to violate any order which is issued during an emergency when the order is included in any proclamation of emergency and is issued for the purpose of protecting life and property.

## **ACTIVATION AND RESPONSE**

### **LEVEL 3 - Monitoring Activation - Low- Guarded Condition**

Mayor and Town Council members, Town Administrator and Emergency Manager shall monitor all events of a potentially threatening nature prior to the establishment of a declared emergency or other situation as may be necessary. The Town Administrator or designee may advise the Mayor and Town Council of all situations that pose a potential danger to the community or the governmental organization. No other individual actions or activation of the Town of Southwest Ranches is required at this time.

### **LEVEL 2 - Partial Activation - Elevated to High Condition**

Mayor and Town Council members shall monitor and prepare for events of a potentially threatening nature prior to the establishment of a declared emergency or any other situation as may be necessary. The Town Administrator or designee shall advise the Mayor and Town Council of all incidents that pose a potential or imminent danger to the community or the government. The Mayor and Council shall communicate with the Town Administrator or designee regarding the status of the Town of Southwest Ranches emergency preparedness activities. Limited activation of the Town of Southwest Ranches may be necessary at this time.

### **LEVEL 1 - Full Scale Activation - Severe Condition**

The Town Administrator or designee shall advise the Mayor and Town Council of all activities underway within the Town of Southwest Ranches during the incident posing potential or imminent danger to the residents and businesses within the community. The Mayor and Council shall communicate with the Town Administrator or designee regarding the status of the Town of Southwest Ranches emergency preparedness activities within their respective districts and other related issues. Full activation of the Town of Southwest Ranches MEOC and public safety response shall continue as necessary.

## **RECOVERY – Post Incident**

The Town Administrator or designee shall advise the Mayor and Town Council of all post-incident activities underway within the Town of Southwest Ranches posing potential or imminent danger to the residents and businesses within the community. The Mayor and Council shall communicate with the Town Administrator or designee regarding the status of the Town of Southwest Ranches emergency preparedness activities in their respective districts and other related issues. Full activation of the Town of Southwest Ranches Field Operations Center and public safety response shall continue as necessary. When appropriate the Town Administrator or designee shall provide a “snapshot” of the Town of Southwest Ranches post-incident status. The Town PIO or designee shall coordinate all public announcements or messages provided to the community.

## **TOWN ADMINISTRATOR OR DESIGNEE AND/OR EMERGENCY MANAGER**

### **POLICY**

This procedure shall be a guide for the Town Administrator or designee and/or Emergency Manager in the event of a declaration of emergency by Federal, State and/or Local governments, resulting from any of the following causes: natural or environmental disasters; acts of war or terrorism; nuclear, biological or radiological events; or any other event of a catastrophic or cataclysmic nature.

### **PERSONNEL POLICY**

All Town staff shall have access to and have knowledge of contents and materials within this emergency management procedure. As a component of this procedure and the CEOP, the Town Administrator will direct the Emergency Manager to maintain a current hurricane policy which shall serve as a guide within the Emergency Support Functions that they are responsible for during hurricane season. The hurricane policy will contain an overview of storm categories, including all appropriate definitions of storm watches and warnings. It will also include specific duties and responsibilities related to the levels of activation and the response alert system. The response alert process will include certain responsibilities which are required to be performed during these specific phases to insure Department/function readiness.

Staff may be assigned to emergency duty by the Town Administrator, or designee, and/or Emergency Manager in the event of a critical incident, disaster or other such emergency situation. It is the staff member’s responsibility to be prepared to respond in emergency situations. Staff is responsible for providing all current personal contact information to the office of the Town Administrator for the purpose of contact during emergency situations. The Town Administrator or designee or Emergency Manager will communicate to Town Staff what their responsibilities are during critical incident, disaster or other such emergency situation. These responsibilities will follow a channel of communication based on assignment of Emergency Support Functions.

### **EMERGENCY CONTACT LIST**

It is the responsibility of the Emergency Manager to have available for Town Staff an emergency contact list of all key Town personnel who are to be notified in emergency situations, including emergency contact numbers of the Mayor and Town Council.

It shall be the responsibility of the Town Administrator, or PIO, to serve as a point of communication between Mayor and Town Council and Emergency Manager if necessary, during the response planning

stage, actual deployment of personnel during field operations, and post incident communications.

## **ACTIVATION AND RESPONSE**

### **LEVEL 3 - Monitoring Activation - Low to Guarded Condition**

The Town Administrator, or designee and/or Emergency Manager shall monitor all events of a potentially threatening nature prior to the establishment of a declared emergency or other situation as may be necessary. The Town Administrator or designee may advise the Mayor and Town Council of all situations that pose a potential danger to the community or the governmental organization. No other individual actions or activation of the MEOC is required at this time.

### **LEVEL 2 - Partial Activation - Elevated to High Condition**

The Town Administrator, or designee and/or Emergency Manager shall monitor events and prepare for response by the Town Section Chiefs as defined by the declared emergency or other situation as may be necessary. The Town Administrator shall have the authority in conjunction with the Federal, State and Local government to declare an emergency when required for full activation of response. The Town Administrator, or designee, shall advise the Mayor and Town Council of the status of all activities undertaken by the Town of Southwest Ranches in preparation or response to a potential or imminent danger to the community or the government. The Town Administrator shall communicate with the Mayor and Council regarding the status of the Town of Southwest Ranches emergency preparedness activities and or related issues. Full activation of the Town of Southwest Ranches MEOC may be necessary at this time.

### **LEVEL 1 - Full Scale Activation - Severe Condition**

The Town Administrator, or designee and/or Emergency Manager shall oversee all activities during the active incident as may be necessary. The Town Administrator or designee shall advise the Mayor and Town Council of all activities underway within the Town of Southwest Ranches during the incident posing potential or imminent danger to the residents and businesses within the community. The Town Administrator, or designee, shall communicate with the Mayor and Council regarding the status of the Town of Southwest Ranches emergency preparedness activities within their respective districts and other related issues. Full activation of the Town of Southwest Ranches MEOC and public safety response shall continue as necessary.

### **RECOVERY – Post Incident**

The Town Administrator, or designee and/or Emergency Manager shall oversee the post-incident phase. The Town Administrator or designee and/or Emergency Manager shall advise the Mayor and Town Council of all post-incident activities underway within the Town of Southwest Ranches posing potential or imminent danger to the residents and businesses within the community. The Town Administrator shall communicate with the Mayor and Council regarding the status of the Town of Southwest Ranches emergency preparedness activities. Full activation of the Town of Southwest Ranches MEOC and public safety response shall continue as necessary. When appropriate, the Town Administrator or designee and/or Emergency Manager shall be prepared to provide an overview of the Town of Southwest Ranches post-incident status. The Town PIO shall coordinate and dissemination of all public announcements or messages provided to the community.

## **SECTION RESPONSIBILITIES**

### **ROLES AND RESPONSIBILITIES**

The Section and Branch Chiefs of the Emergency Service Functions (ESF) or designees which are outlined in this procedure are responsible for coordinating and directing resources and staff required responding to a critical incident. Initially, the Chiefs will be the responsible authority to deal with and handle the critical incident as necessary. Expanded information is located in the Town of Southwest Ranches CEOP.

### **UNIFIED COMMAND**

During an incident that requires activation of the Town of Southwest Ranches MEOC, the Town Administrator will establish a Unified Command. This Unified Command consist of the Town Administrator, Assistant Town Administrator/ PIO, and the Emergency Manager and will work collectively to provide direction and guidance to all personnel and responding departments/agencies involved in the incident. Through the process lead roles in handling phases of the situation may change.

The Unified Command will also provide direction and guidance to other responding Emergency Service providers, Governmental agencies, and other responding emergency workers to establish appropriate channels of communication based on situational requirements in field level operations.

### **EMERGENCY SERVICES**

The Chief of the Fire Rescue Department or designee, who oversees the Fire Rescue response, will maintain an emergency operations plan. This plan, either defined by policy or in place as procedure, will guide the Fire Rescue response to issues within the Town. As a component of this emergency operating plan, a current hurricane policy will be prepared which shall serve as a guide within this Section during hurricane season. The hurricane policy will contain an overview of storm categories, including all appropriate definitions of storm watches and warnings.

It will also include specific duties and responsibilities related to the levels of activation and the response alert system. The response alert process will include certain responsibilities which are required to be performed during these specific phases to insure Department/function readiness.

The Chief of the Fire Rescue Department, or designee, within the means provided by the Town, will ensure that personnel assigned to this Section will be prepared and in a state of readiness to respond to incidents that may arise, including natural or environmental disaster; acts of war or terrorism; nuclear; biological or radiological incidents; or any other event of a catastrophic or cataclysmic nature that may constitute a disaster and require appropriate response.

The Chief of the Fire Rescue Department, or designee, will maintain a channel of communication with the Emergency Manager as necessary, to communicate and advise information concerning planning, risk assessment and incident response. This information is crucial to communicating need for required support, resources and any other significant needs that may arise during a critical incident.

For additional details or information, authorized individuals are to refer to the specific operational plan or practice of this ESF function. Expanded information of ESF functions is located in the Town of

## **LAW ENFORCEMENT GROUP**

The Chief of the Police Department or designee, who oversees the Law Enforcement Branch, will maintain an emergency operations plan. This plan, either defined by policy or in place as procedure, will guide the Law Enforcement response to issues within the Town. As a component of this plan, a current hurricane policy will be prepared which shall serve as a guide within this Branch during hurricane season. The hurricane policy will contain an overview of storm categories, including all appropriate definitions of storm watches and warnings. It will also include specific duties and responsibilities related to the levels of activation and the response alert system. The response alert process will include certain responsibilities which are required to be performed during these specific phases to insure Department/function readiness.

The Chief of the Police Department, or designee, within the means provided by the Town, will ensure that personnel assigned to this Branch will be prepared and in a state of readiness to respond to incidents that may arise, including natural or environmental disasters; acts of war or terrorism; nuclear, biological or radiological incidents; or any other event of a catastrophic or cataclysmic nature that may constitute a disaster and require appropriate response.

The Chief of the Police Department, or designee, will maintain a channel of communication with the Operation Section, as necessary, to communicate and advise information concerning planning, risk assessment and incident response. This information is crucial to communicating need for required support, resources and any other significant needs that may arise during a critical incident. The Chief of the Police Department, or designee, will communicate all necessary information to the Emergency Manager in order to assist them in the process of their duties and responsibilities of ESF activities that overlap in function during response phase of this plan.

For additional details or information, authorized individuals are to refer to the specific operational plan or practice of this ESF function. Expanded information of ESF functions is located in the Town of Southwest Ranches CEOP.

## **FINANCE SECTION**

The Finance Director or designee, who oversees the Finance Section, will maintain an emergency operations plan. This plan, either defined by policy or in place as procedure, will guide the Finance Section response to issues within the Town. As a component of this emergency operations plan, a current hurricane policy will be prepared which shall serve as a guide within this Section during hurricane season. The hurricane policy will contain an overview of storm categories, including all appropriate definitions of storm watches and warnings. It will also include specific duties and responsibilities related to the levels of activation and the response alert system. The response alert process will include certain responsibilities which are required to be performed during these specific phases to insure Department/function readiness.

The Finance Section Chief, within the means provided by the Town, will ensure that personnel assigned to this Section will be prepared and in a state of readiness to respond to incidents that may arise, including a natural or environmental disasters; acts of war or terrorism; nuclear; biological or radiological incidents; or any other event of a catastrophic or cataclysmic nature that may constitute

a disaster and require appropriate response. This function will be responsible and will employ measures to identify, acquire, and deploy the use of resources needed to respond to the pre and post incident in order to provide support assistance, and/or resolve matters created by either man made or natural disasters.

The Finance Section Chief, will maintain a channel of communication with the Emergency Manager as necessary, to communicate and advise of information concerning planning, risk assessment and incident response. This information is crucial to communicating need for required support, resources and any other significant needs that may arise during a critical incident.

The Finance Section Chief, will communicate all necessary information to the Emergency Manager in order to assist them in the process of their duties and responsibilities of ESF information that overlap in function.

The Finance Section will include assistance and support from the Town of Southwest Ranches Finance, and Legal Departments.

For additional details or information, authorized individuals are to refer to the specific operational plan or practice of this ESF function. Expanded information of ESF functions is located in the Town of Southwest Ranches CEOP.

## **PLANNING AND OPERATIONS SECTIONS**

The Planning and Operations Section includes the support functions that includes measures to identify, plan, and acquire the use of resources needed to anticipate, prevent, and/or resolve a threat, either man made or by natural disaster. These responsibilities include all Town facilities, roads and right of ways, Risk Management, Asset Management and Debris Management.

The Planning and Operations Managers or designee, will maintain an emergency operations plan. This plan, either defined by policy or in place as procedure, will guide the Planning Section response to issues within the Town. As a component of this emergency operations plan, a current hurricane policy will be prepared which shall serve as a guide within this Section during hurricane season. The hurricane policy will contain an overview of storm categories, including all appropriate definitions of storm watches and warnings. It will also include specific duties and responsibilities related to the levels of activation and the response alert system. The response alert process will include certain responsibilities which are required to be performed during these specific phases to insure

The Planning Section and Operations Section Chiefs, within the means provided by the Town, will ensure that personnel assigned to these Sections will be prepared and in a state of readiness to respond to incidents that may arise, including a natural or environmental disasters; acts of war or terrorism; nuclear; biological or radiological incidents; or any other event of a catastrophic or cataclysmic nature that may constitute a disaster and require appropriate response. This function will be responsible and will employ measures to identify, acquire, and deploy the use of resources needed to respond to the pre and post incident in order to provide support assistance, and/or resolve matters created by either man made or natural disasters.

The Planning Section and Operations Section Chiefs will maintain a channel of communication with



the Emergency Manager as necessary, to communicate and advise information concerning planning, risk assessment and incident response. This information is crucial to communicating need for required support, resources and any other significant needs that may arise during a critical incident.

The Planning Section and Operations Section Chiefs will communicate all necessary information to the Emergency Manager in order to assist them in the process of their duties and responsibilities of ESF information that overlap in function.

For additional details or information, authorized individuals are to refer to the specific operational plan or practice of this ESF function. Expanded information of ESF functions is in the Town of Southwest Ranches CEOP.

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# Town of Southwest Ranches CONTINUITY OF OPERATIONS PLAN (COOP)



May 2020

Pursuant to Florida Statutes, Chapter 252.365: *Emergency Coordination Officers; disaster-preparedness plans*, this Continuity of Operations Plan (COOP) establishes policy and guidance to ensure the continued execution of the mission-essential functions for the Town of Southwest Ranches in the event that an emergency threatens or incapacitates operations, and requiring the relocation of selected personnel and functions of Town Hall located at 13400 Griffin Road, Southwest Ranches Florida 33330 to:

1. Ensure the Town of Southwest Ranches is prepared to respond to emergencies, recover from them, and mitigate their impact.
2. Ensure that the Town of Southwest Ranches is prepared to provide critical services in an environment that is threatened, diminished, or incapacitated.

### **Scope**

The COOP is intended as a flexible framework to guide the Town of Southwest Ranches in managing all safety-security threats, emergencies and disasters. The COOP defines the role and responsibilities of the Town's staff in the event of adverse safety conditions and/or natural or man-made emergencies.

The Town of Southwest Ranches must ensure its operations are performed efficiently with minimal disruption, especially during an emergency. This document provides planning and program guidance for implementing the Town's Continuity of Operations Plan and programs to ensure the organization is capable of conducting its essential missions and functions under all threats and conditions.

Continuity personnel must establish an operational capability and perform Essential Functions within 12 hours from the time of the activation of the Continuity Plan, for up to a 30-day period or until normal operations can be resumed.

This document provides planning and program guidance for implementing the Town's Continuity of Operations Plan and programs to ensure the organization is capable of conducting its essential missions and functions under all threats and conditions. While the severity and consequences of an emergency cannot be predicted, effective contingency planning can minimize the impact on the Towns' missions, personnel, and facilities.

The overall purpose of Continuity of Operations planning is to ensure the Continuity of the National Essential Functions (NEFs) under all conditions. The current changing threat environment and recent emergencies, including acts of nature, accidents, technological emergencies, and military or terrorist attack-related incidents have increased the need for viable Continuity of Operations capabilities and plans that enable organizations to continue their Essential Functions across a spectrum of emergencies. These conditions, coupled with the potential for terrorist use of weapons of mass destruction, have increased the importance of having Continuity programs that ensure Continuity of essential government functions across the Federal Executive Branch.

This Continuity Plan ensures the Town of Southwest Ranches is capable of conducting its essential missions and functions under all threats and conditions, with or without warning.

## **SITUATION OVERVIEW**

According to NSPD 51/HSPD 20, it is the policy of the United States to maintain a comprehensive and effective Continuity capability composed of Continuity of Operations and Continuity of Government programs in order to ensure the preservation of our form of government under the Constitution and the continuing performance of National Essential Functions under all conditions. Continuity requirements shall be incorporated into daily operations of all Federal Executive Branch organizations.

Further, Continuity planning must be based on the assumption that organizations will not receive warning of an impending emergency.

## **PLANNING ASSUMPTIONS**

This Continuity Plan is based on the following assumptions:

- An emergency condition may require the relocation of staff members to work at a remote location such as their homes or other temporary facility such as a trailer that has been secured for this purpose.
- The Town will support staff members and the continuation of Essential Functions by available communications and information systems within 12 hours or less from the time the Continuity Plan is activated, for potentially up to a 30-day period or until normal operations can be resumed

## **OBJECTIVES**

The Town's Continuity objectives are listed below:

- 1) Ensure that the Town can perform its Essential Functions, under all conditions.
- 2) Reduce the loss of life and minimize property damage and loss.
- 3) Execute a successful Order of Succession with accompanying authorities in the event a disruption renders the Town's leadership unable, unavailable, or incapable of assuming and performing their authorities and responsibilities of the office.
- 4) Reduce or mitigate disruptions to operations.
- 5) Ensure that the Town has facilities where it can continue to operate during a Continuity event.

- 6) Protect essential facilities, equipment, records, and other assets, in the event of a disruption.
- 7) Achieve the Town's timely and orderly recovery and reconstitution from an emergency.
- 8) Ensure and validate Continuity readiness through a dynamic and integrated Continuity Test, Training, and Exercise program and operational capability.

## SECURITY AND PRIVACY STATEMENT

***This Continuity Plan is for Official Use Only. Portions of this Continuity Plan contain information that raises personal privacy or other concerns, and those portions may be exempt from mandatory disclosure under the Freedom of Information Act (see 5 U.S.C §552, 41 CFR Part 105-60). It is to be controlled, stored, handled, transmitted, distributed, and disposed of in accordance with and is not to be released to the public or other personnel who do not have a valid "need to know" without prior approval of the Town Administrator.***

***Some of the information in this Plan, if made public, could endanger the lives and privacy of employees. In addition, the disclosure of information in this Plan could compromise the security of essential equipment, services, and systems of the Town or otherwise impair its ability to carry out Essential Functions. Distribution of the Continuity Plan in whole or in part is limited to those personnel who need to know the information in order to successfully implement the Plan.***

The Town Administrator will distribute copies of the Continuity Plan on a need to know basis. In addition, copies of the Plan will be distributed to other organizations as necessary to promote information sharing and facilitate a coordinated interagency Continuity effort. Further distribution of the Plan, in hardcopy or electronic form, is not allowed without approval from the Town Administrator. The Town Administrator will distribute updated versions of the Continuity Plan annually or as critical changes occur.

## PHASE I: READINESS AND PREPAREDNESS

The Town participates in Readiness and Preparedness activities to ensure its personnel can continue Essential Functions in an all-hazard risk environment. The Town's readiness activities are divided into two key areas:

- Organization readiness and preparedness
- Staff readiness and preparedness



## Organization Readiness and Preparedness

The Town has identified the following activities to undertake for each threat level.

Threat Alert	Threat Condition Criteria	Organization Potential Response
<b>Imminent Threat Alert</b>	Warns of credible, specific, and impending terrorist threat against the United States.	Activate the Town's Continuity of Operations Plan.  Alert Town's Emergency Response Group.
<b>Elevated Threat Alert</b>	Warns of credible non-specific terrorist threat against the United States.	The Town reviews the Continuity of Operations Plan and Procedures.  The Town places the Continuity of Operations Team on alert.

## Staff Readiness and Preparedness

The personnel must also prepare for a Continuity event. Town personnel should plan in advance what to do in an emergency and should develop a Family Support Plan to increase personal and family preparedness. To develop your Family Support Plan, use the templates available at [www.ready.gov](http://www.ready.gov). This site includes a "Get Ready Now" pamphlet, which explains the importance of planning and provides a template that you and your family can use to develop your specific plan.

Town Continuity personnel have the responsibility to create and maintain go-kits. Continuity personnel are responsible for carrying the kits to the Continuity Facility or pre-storing the kits at the Continuity site. A sample of what items should be included in the go-kits, but not limited to in are in the following table. The contents of each individual go-kit should be reviewed by each staff member on an annual basis.

The roles of essential staff is located in **Attachment A** of the Continuity Plan.

Sample Go Kit	
<ul style="list-style-type: none"> <li>• Laptop or Tablet, charger, jump drives</li> <li>• Government ID card</li> <li>• Driver's license</li> <li>• Health insurance card</li> <li>• Vehicle Insurance</li> <li>• Personal charge card</li> <li>• Communication equipment</li> <li>• Town issued cell phone</li> <li>• Personal cell phone</li> <li>• Hand-carried essential records</li> <li>• Maps of surrounding area</li> </ul>	<ul style="list-style-type: none"> <li>• Town Continuity Plan</li> <li>• Town Emergency Management Plan</li> <li>• Town Emergency Operations Manual (SOP's)</li> <li>• Toiletries</li> <li>• Bottled water and non-perishable food (i.e., granola, dried fruit, etc.)</li> <li>• Insurance information</li> <li>• Prescription drugs (30-day supply) &amp; Over-the-counter medications, dietary supplements</li> <li>• Other supplies needed for your job function such as boots, cones, rain gear, etc.</li> </ul>

## PHASE II: ACTIVATION

To ensure the ability to attain operational capability at Continuity sites and with minimal disruption to operations, the Town has developed activation plans, which are captured in the following sections.

### Decision Process Matrix

Based on the type and severity of the emergency situation, the Town's Continuity Plan may be activated by one of the following methods:

1. The President may initiate Federal Executive Branch Continuity activation.
2. The Governor of the State of Florida declares a State of Emergency or Continuity activation.
3. The Town Administrator, or designee, may initiate the Continuity Plan activation for the entire Town based on an emergency or threat directed at the organization.

Continuity Plan activation is a scenario-driven process that allows flexible and scalable responses to the full spectrum of emergencies and other events that could disrupt operations with or without warning during duty and non-duty hours. Continuity Plan activation is not required for all emergencies and disruptive situations since other actions may be deemed appropriate. The decision to activate the Town's Continuity Plan and corresponding actions to be taken are tailored for the situation, based upon projected or actual impact and severity that may occur with or without warning. Decision-makers may use the below decision matrix to assist in the decision to activate the Continuity Plan.

### Decision Matrix for Continuity Plan Implementation

Event With Warning	<ul style="list-style-type: none"> <li>• Is the threat aimed at Town facilities or surrounding area?</li> <li>• Is the threat aimed at Town dignitaries or personnel?</li> <li>• Are employees unsafe remaining in facilities and/or area?</li> </ul>
Event Without Warning	<ul style="list-style-type: none"> <li>• Are the facilities affected?</li> <li>• Are personnel affected? Have personnel safely evacuated or are they sheltering-in-place?</li> <li>• What are instructions from first responders?</li> <li>• How soon must the organization be operational?</li> </ul>

As the decision authority, the Town Administrator will be kept informed of the threat environment using all available means including national/local reporting channels, and news media. The Town will evaluate all available information relating to:

- Direction and guidance from higher authorities;
- The health and safety of personnel;
- The ability to execute Essential Functions;
- Changes in readiness or advisory levels;
- Intelligence reports;
- The potential or actual effects on communication systems, information systems, office facilities, and other vital equipment; and,
- The expected duration of the emergency situation.

### Alert and Notification Procedures

The Town Administrator is responsible for communicating and coordinating activities with Town Council, Town Attorney and Town personnel before, during, and after a Continuity event.

In the event normal operations are interrupted or if an incident appears imminent, The Town will take the following steps to communicate the organization's operating status with all staff:

- The Town Administrator will notify Town Council, Town Attorney, Staff and affective and interdependent entities of the Continuity Activation. Information to be relayed will include Continuity activation status,

operational and communication status, and the anticipated duration of relocation.

- The Emergency Manager will notify Broward County Emergency Management of the Continuity activation. Information to be relayed will include Continuity activation status, operational and communication status, and the anticipated duration of relocation.
- Town personnel will notify family members, next of kin, and/or emergency vendors and other contacts of the Continuity Plan activation.

### **Relocation Process**

Upon activation, the Town Continuity personnel deploy to the assigned Continuity facility to perform the Towns Essential Functions and other Continuity tasks.

Emergency procedures during duty hours with or without a warning are as follows:

- Continuity personnel will depart to the Continuity Facility from the Town Hall or their current location.
- Individuals who are not Continuity personnel present at the Town Hall at the time of an emergency notification will receive instructions from the Town Administrator. In most scenarios, staff members will be directed to proceed to their homes or to other Town facilities to wait for further guidance.

Emergency procedures during non-duty hours with or without a warning are as follows:

- Each Continuity staff member will depart to the Continuity Facility from his/her current location.
- Individuals who are not Continuity personnel will remain at their residence to wait for further instructions.

In the event of an activation of the Continuity Plan, the Town may need to procure necessary personnel, equipment, and supplies not already in place for Continuity operations on an emergency basis.

### **PHASE III: CONTINUITY OPERATIONS**

Upon activation of the Continuity of Operations Plan, the Town will continue to operate at Town Hall until ordered to cease operations by the Town Administrator. At that time, Essential Functions will transfer to the Continuity facility. The Town must ensure that the Continuity Plan can become operational within the minimal acceptable period within 12 hours of plan activation.

Town Continuity personnel must first prepare the site for activation. Upon arrival at the Continuity facility, the advance team will:

- Ensure infrastructure systems, such as power and HVAC are functional;

#### **PHASE IV: RECONSTITUTION OPERATIONS**

During Continuity operations, Town staff must assess the status of the personnel, assets, facilities, and infrastructure affected by the event.

Reconstitution procedures will commence when the Town Administrator or other authorized person ascertains that the emergency situation has ended and is unlikely to reoccur. These Reconstitution plans are viable regardless of the level of disruption that originally prompted implementation of the Continuity of Operations Plan. Once the Town Administrator has made this determination in coordination with other Federal and/or other applicable authorities, one or a combination of the following options may be implemented, depending on the situation:

- Continue to operate from the Continuity facility;
- Reconstitute Town Hall and begin an orderly return to the facility;

Prior to relocating to Town Hall or another facility, Town staff will conduct appropriate security, safety, and health assessments to determine building suitability. In addition, Town Staff will verify that all systems, communications, and other required capabilities are available and operational and that the Town is fully capable of accomplishing all Essential Functions and operations at the new or restored facility.

Upon verification that the required capabilities are available and operational and that the Town is fully capable of accomplishing all Essential Functions and operations at the new or restored facility, Town staff will begin supervising a return of personnel, equipment, and documents to the normal operating facility or a move to another temporary or permanent primary operating facility.

The Town will identify lessons learned, best practices, and improvement needs. This includes developing an After-Action Report/Improvement Plan for the purposes of summarizing the Reconstitution event; identifying opportunities to improve and enhance the organization's Continuity program, plans, and capabilities; and, developing an approach to implementing improvements. The Town Emergency Manager has the responsibility for initiating and completing the After-Action Report (AAR).

## **Direction, Control, and Coordination**

During an activation of the Continuity Plan, the Town Administrator maintains responsibility for direction and control of the Town. Should the Town Administrator become unavailable or incapacitated; the organization will follow the directions of the Assistant Town Administrator.

## **Communications**

The Town has identified available and redundant critical communication systems located at Town Hall and Continuity facility utilizing emergency cell phones and WebEOC, Code Red and other social media when applicable.

All necessary and required communications and IT capabilities must be operational as soon as possible following Continuity activation and, in all cases, within 12 hours of Continuity activation.

## **Plan Development and Maintenance**

The Emergency Manager is responsible for maintaining the Town's Continuity of Operations Plan.

This Continuity Plan, Essential Functions, and supporting activities will be reviewed by The Town Administrator, Assistant Town Administrator and Emergency Manager and updated by April 1st of each year as part of the annual maintenance of Continuity plans and procedures. Comments or suggestions for improving this Plan may be provided to the Emergency Manager at any time.

## **Authorities and References**

the Continuity Plan should include operational checklists which is a simple tool that ensures all required tasks are accomplished so that the organization can continue operations at an alternate location. Checklists may be designed to list the responsibilities of a specific position or the steps required to complete a specific task.

Sample operational checklists may include:

- Emergency Calling Directory
- Emergency Relocation Group Checklist
- Essential Functions Checklist
- Emergency Operating Records
- IT Checklist
- Emergency Equipment Checklist



## ESSENTIAL RECORDS MANAGEMENT

“Essential records” refers to information systems and applications, electronic and hardcopy documents, references, and records, to include classified or sensitive data, needed to support Town staff during a Continuity event. The Town has incorporated its essential records program into the overall Continuity program, plans, and procedures.

The Town’s essential records program incorporates into the overall Continuity Plan with a clear authority to include:

- Policies
- Authorities
- Procedures

The Town’s official essential records program:

- Identifies and protects those records that specify how an organization will operate in an emergency or disaster.
- Identifies those records necessary to the organization’s continuing operations.

Identifies those records needed to protect the legal and financial rights of the Government and citizens.

As soon as possible after activation of the Continuity Plan, but in all cases within 12 hours of activation, Continuity personnel at the Continuity facility for **the Town** must have access to the appropriate media for accessing essential records, including:

- A local area network;
- Electronic versions of essential records;
- Supporting information systems and data;
- Internal and external e-mail and e-mail archives;

## IDENTIFYING ESSENTIAL RECORDS

The Town’s IT Department developed and maintains an essential records through the cloud. The Town’s essential records includes:

- A hard copy or electronic list of the Town’s key organization and Continuity personnel with up-to-date telephone numbers;
- Necessary access codes;
- Listing of the access requirements and sources of equipment necessary to access the records;

- Lists of vendors provided by the Finance Department;
- A copy of the Town Continuity Plan.

## **TRAINING AND MAINTENANCE**

The Town essential records program includes a training program for all staff, to include periodic briefings to managers about the essential records program and its relationship to their essential records and business needs. Town staff training focuses on identifying, inventorying, protecting, storing, accessing, and updating the essential records. Training records for essential records are maintained by the Town Clerk's office.

The Town's essential records program includes an annual review of the program to address new security issues, identify problem areas, update information, and incorporate any additional essential records generated by new agency programs or functions or by organizational changes to existing programs or functions. The review is conducted by the Town's IT Department. The review provides an opportunity to familiarize staff with all aspects of the essential records program. It is appropriate to conduct a review of the essential records program in conjunction with the Town's Continuity exercises. At a minimum, the Town's essential records are annually reviewed, rotated, or cycled so that the latest version will be available.

The Town's IT Department conducts annual testing, of the capabilities for protecting classified and unclassified essential records and for providing access to them from the alternate facility.

## **ALTERNATE SITE INFORMATION**

The Town's primary Continuity facility is Town Hall at 13400 Griffin Road. Alternate sites include Rolling Oaks Barn at 17630 SW 56 Street or temporary mobile unit to be deployed where applicable.

## **CONTINUITY COMMUNICATIONS**

The Town has identified available and redundant critical communication systems available to Town Council, Town Attorney and Town staff. Further, the Town maintains fully capable Continuity communications that could support organization needs during all hazards.

## **LEADERSHIP AND ORDERS OF SUCCESSION**

Pre-identifying Orders of Succession is critical to ensuring effective leadership during an emergency. In the event an incumbent is incapable or unavailable to fulfill essential duties, successors have been identified to ensure there is no lapse in essential decision-making authority.

The Town's Orders of Succession are:

- At least three positions deep, where possible, ensuring sufficient depth to ensure the Town's ability to manage and direct its Essential Functions and operations;
- Described by positions or titles, rather than by names of individuals holding those offices;
- Reviewed by the organization's General or Chief Counsel for legal sufficiency, as changes occur; and,
- Included as essential files.

### **Order of Succession and Delegation of Authority**

In the event of a change in leadership status, the Town Administrator must notify Town Council, Town Attorney and Town staff and the successors, as well as internal and external stakeholders. In the event the Town Administrator becomes unreachable or incapable of performing their authorized legal duties, roles and responsibilities, the Town will initiate a notification of the next successor in line. The line of Succession is as follows:

- Town Administrator
- Assistant Town Administrator
- General Services Manager/Emergency Manager

### **ALL STAFF EMERGENCY PREPAREDNESS**

Town staff, including contractors, are encouraged to take active measures to plan and prepare for emergencies, including developing Family Emergency Plans, and to stay informed during an emergency.

It is important that the Town keep all staff, especially individuals not identified as Continuity personnel, informed and accounted for during a Continuity event. The Town has established procedures for contacting and accounting for employees in the event of an emergency, including operating status.

- In the event of an emergency, the Town will contact and account for all staff, including contractors, and communicate the operating status as determined in the Town's Emergency Operation Plan.
- Town employees are expected to remain in contact with their supervisor during any closure or relocation situation and are responsible for reporting their accountability status.
- The Town ensures staff are aware of and familiar with Human Resources guidance in order to continue Essential Functions during an emergency.

Accounting for all personnel during a Continuity event is of utmost importance. In order to account for all staff, the Town will initiate the call trees in accordance with the Emergency Operation Plan to attempt to contact unaccounted for individuals.

## **HUMAN RESOURCES CONSIDERATIONS**

The Town Continuity program, plans, and procedures incorporate existing organization-specific guidance and direction for Human Resources management, including guidance on pay, leave, work scheduling, benefits, telework, hiring, authorities, and flexibilities.

Town of Southwest Ranches Staff COOP Roles 2020		
Town Title	COOP Role	Activation Level
Town Administrator	Incident Command	1
Assistant Town Administrator/Town Clerk	PIO/ Incident Command	1
General Services Manager/ Emergency Manager	Emergency Manager	1
Town Financial Administrator	Finance/ Human Resource/ Procurement	1
Parks, Open Space and Recreation Manager	Parks Facilities and Services	1
Town Engineer	Public Works/Planning and Operations	1
Fire Chief SWR Volunteer fire Department	Volunteer Fire Department Chief	1
Community Services Manager	Public Works/ EOC	1
Community Development Manager	Operations	1
Senior Procurement and Budget Officer	Procurement	1
Controller	Finance/Procurement	1
CAP	Building Department Issues	1
Davie Police Department	First Responder	1
Davie Fire Department	RIA and First Responder	1
VFD	RIA and First Responder	1
Executive Assistant to the Town Administrator	Administration	2
Deputy Town Clerk	Administration	2
Accountant	Procurement/ Time or MEOC/Bravo	2
Administrative Specialist	Administration	2
Administrative Coordinator	Administration	2
Code Enforcement Officer	Operations	2
Administrative Assistant	Administration	2
Engineer 1	Public Works/Planning and Operations	2
Bergeron Emergency Management	Debris hauling and disposal	2
Witt O'Brien's Emergency Monitoring	Debris monitoring	2

Level 1 - Within 12 hours of declaration
Level 2 - As needed

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**Town of Southwest Ranches**  
**13400 Griffin Road**  
**Southwest Ranches, FL 33330-2628**

**(954) 434-0008 Town Hall**  
**(954) 434-1490 Fax**

**Town Council**  
**Doug McKay, Mayor**  
**Gary Jablonski, Vice Mayor**  
**Freddy Fisikelli, Council Member**  
**Bob Hartmann, Council Member**  
**Denise Schroeder, Council Member**

**Andrew D. Berns, Town Administrator**  
**Keith M. Poliakoff, JD, Town Attorney**  
**Russell Muniz, Assistant Town Administrator/Town Clerk**  
**Martin D. Sherwood, CPA, CGMA, CGFO, Town Financial Administrator**

## **COUNCIL MEMORANDUM**

**TO:** Honorable Mayor McKay and Town Council  
**VIA:** Andrew D. Berns, Town Administrator  
**FROM:** Russell Muniz, Assistant Town Administrator/Town Clerk  
**DATE:** 6/25/2020  
**SUBJECT:** Noise Ordinance

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### **Recommendation**

Town Council consideration for a motion to approve the ordinance.

### **Unanimous Vote of the Town Council Required?**

No

### **Strategic Priorities**

- A. Sound Governance
- E. Cultivate a Vibrant Community

### **Background**

The Town has fielded numerous complaints from residents about excessive noise in their neighborhoods. Without an effective standard and ordinance in place excessive noise complaints cannot effectively be resolved. This ordinance establishes a standard for excessive noise and provides enforcement provisions to protect the residents' quiet enjoyment of their property.

### **Fiscal Impact/Analysis**

None.

### **Staff Contact:**

Russell Muñiz, Assistant Town Administrator/Town Clerk

Julio Medina, Community Development Director  
Keith Poliakoff, Town Attorney

**ATTACHMENTS:**

Description

Upload Date

Type

Noise Ordinance - TA Approved

6/19/2020

Resolution

**ORDINANCE NO. 2020-XXX**

**AN ORDINANCE OF THE TOWN OF SOUTHWEST RANCHES, FLORIDA, AMENDING THE TOWN OF SOUTHWEST RANCHES CODE OF ORDINANCES, BY CREATING CHAPTER 9 ENTITLED "NOISE" TO ESTABLISH STANDARDS FOR THE ACCEPTABLE LEVELS OF NOISE AND TO PREVENT NUISANCES THAT MAY ADVERSELY AFFECT THE QUIET ENJOYMENT AND QUALITY OF LIFE EXPECTED BY TOWN RESIDENTS; PROVIDING FOR SEVERABILITY AND PROVIDING AN EFFECTIVE DATE.**

**WHEREAS**, pursuant to Article VIII, Section 2 of the Florida Constitution and Chapter 166 of the Florida Statutes, the Town of Southwest Ranches is authorized to protect the public health, safety, and welfare of its residents and has the power and authority to enact regulations for valid governmental purposes that are not inconsistent with general or special law; and

**WHEREAS**, the Town Council of the Town of Southwest Ranches finds it in the best interest of the Town to create Chapter 9, entitled "Noise" in order to establish standards for the acceptable levels of noise to protect the quiet enjoyment of the Town; and

**WHEREAS**, the Town Council finds that the additions to the Code contained herein are in the best interest of and will reasonably protect the health, safety, and welfare of the Town's residents.

**NOW, THEREFORE, BE IT ENACTED BY THE TOWN COUNCIL OF THE TOWN OF SOUTHWEST RANCHES, FLORIDA:**

**SECTION 1.** Recitals. The above recitals are true, correct and incorporated herein by reference.

**SECTION 2.** Creation. Chapter 9, entitled "Noise" of the Code of Ordinances of the Town is hereby created to state as follows:

**Sec. 9-1 *Intent***

The Town of Southwest Ranches finds and declares that excessive sound is a serious hazard to the public health, welfare, safety, and quality of life; that a substantial body of science and technology exists by which excessive sound may be substantially abated; and that people have a right to and should be ensured an environment free from excessive sound that may jeopardize their health, welfare or safety or degrade the quality of life. Therefore, it is the policy of Southwest Ranches to prevent excessive sound which may jeopardize the health, welfare or

safety of the citizens of the town or degrade the quality of life.

## Sec. 9-2 ***Definitions***

All terminology used in this chapter, not defined below, shall be in conformance with applicable publications of the American National Standards Institute (ANSI) or its successor body.

- (1) Construction means any site preparation, assembly, erection, substantial repair, alteration, demolition or similar action on public or private property, utilities or similar property.
- (2) Emergency means any occurrence or set of circumstances involving actual or imminent physical trauma or property damage which demands immediate action; economic loss shall not be a factor in the determination of an emergency. It shall be the burden of an alleged violator to prove an "emergency. "
- (3) Emergency work means any work performed for the purpose of preventing or alleviating the physical trauma or property damage, but not economic loss, threatened or caused by an emergency.
- (4) Noise means any sound which annoys or disturbs humans or animals, or which causes or tends to cause any adverse psychological or physiological effect on humans or animals.
- (5) Noise disturbance means any noise or sound, including subharmonic frequencies that can be heard or felt beyond a real property boundary that would be determined to be objectionable by a reasonable person.
- (6) Person means any natural person, individual, public corporation, firm, association, joint venture, partnership, municipality, governmental agency, political subdivision, public officer, or any other entity whatsoever or any combination of such, jointly or severally.
- (7) Public right-of-way means any street, avenue, sidewalk, or similar place normally accessible to the public which is owned or controlled by a governmental entity.
- (8) Public space means any property or structures thereon normally accessible to the public.

- (9) Real property line means any imaginary line along the surface, and its vertical plane extension, which separates the real property owned, rented or leased by one person from that owned, rented or leased by another person.
- (10) Receiving land means the land located within the Town which is receiving the noise or sound.
- (11) Sound means an oscillation in pressure, particle displacement, particle velocity or other physical parameter in a medium with internal forces that cause compression and rarefaction of that medium. The description of sound may include any characteristic of such sound, including duration, intensity and frequency.
- (12) Vibration means an oscillatory motion of solid bodies of deterministic or random nature described by displacement, velocity or acceleration with respect to a given reference point.

Sec. 9-3. ***Noise Disturbance Prohibited.***

No person shall make, continue, or cause to be made or continued, any noise disturbance as defined herein.

Sec. 9-4. - ***Maximum Permissible Sound Levels By Receiving Land.***

No person shall operate or cause to be operated any sound in such manner as to create a noise disturbance that is audible in a receiving land.

Sec. 9-5. - ***Exemptions.***

The provisions of section 9-3 shall not apply at any time to:

- (1) Motor vehicles legally operating on a public right-of-way;
- (2) The unamplified human voice;
- (3) Any noise generated by new products or interstate motor and rail carrier vehicles to the extent that local regulation of noise levels of such new products and interstate motor and rail carrier vehicles has been preempted by the Noise Control Act of 1972 (49 U. S. C. Section 4901 et seq.) or other applicable federal laws or regulations;
- (4) Farming equipment;
- (5) Any noise generated by the movement of aircraft in accordance with or

- pursuant to applicable federal laws or regulations;
- (6) Maintenance and installation of public service utilities;
  - (7) Noise generated for the purpose of alerting persons to the existence of an emergency or noise generated in the performance of emergency work;
  - (8) Any noise generated by any noncommercial public speaking and public assembly activities conducted on any public space or public right-of-way pursuant to lawful authority; and
  - (9) Any noise generated by the operation or testing of engines, landscaping equipment, generators, pumps, mechanical equipment, construction tools, emergency equipment or similar noises that are common to residential properties;
  - (10) Refuse collection;
  - (11) Construction in accordance with the construction hours set forth in the Town Code;
  - (12) Any noise generated on a Town owned property, which is authorized by the Town;
  - (13) Any noise generated by the Town or by a Town event;
  - (14) Farm animals;
  - (15) Non-farm animals provided that they do not constitute a nuisance, as defined by the Town's Code; and
  - (16) Home workshops in accordance with the construction hours set forth in the Town Code; and
  - (17) Any special event that has been approved by the Town.

Sec. 9-6. - **Noise measurement.**

For the purpose of determining and classifying any noise disturbance, the test measurement shall consist of an inspection by an authorized Town representative who shall determine if the noise can be heard within a receiving land and whether a reasonable person would find the noise, sound or vibration to be objectionable



during the time of day the noise is observed.

**Sec. 9-7. - *Display of permit.***

A person who has been granted a permit for a special event shall firmly affix such permit so that it is visible from the adjacent street to enable neighbors to know of the terms, conditions, and duration of the special event.

**Sec. 9-8. – *Enforcement & Penalty.***

This regulation shall be enforced by all appropriate administrative and judicial proceedings in accordance with the Town's Code and the Florida Statutes.

**SECTION 3.** Severability. Should any section or provision of this Ordinance or any portion thereof, any paragraph, sentence or word hereof be declared unconstitutional or invalid, the invalidity thereof shall not affect the validity of any of the remaining portions of this Ordinance.

**SECTION 4.** Effective Date. This Ordinance shall take effect immediately upon its Passage and adoption.

**PASSED ON FIRST READING** this \_\_\_\_ day of \_\_\_\_\_, 2020 on a motion made by \_\_\_\_\_ and seconded by \_\_\_\_\_.

**PASSED ON SECOND READING** this \_\_\_\_ day of \_\_\_\_\_ 2020 on a motion made by \_\_\_\_\_ and seconded by \_\_\_\_\_.

McKay \_\_\_\_\_  
Schroeder \_\_\_\_\_  
Amundson \_\_\_\_\_  
Hartmann \_\_\_\_\_  
Jablonski \_\_\_\_\_

Ayes \_\_\_\_\_  
Nays \_\_\_\_\_  
Absent \_\_\_\_\_  
Abstaining \_\_\_\_\_

**[Signatures on Next Page]**

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Doug McKay, Mayor

Attest:

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Russell Muñiz, Assistant Town Administrator/Town Clerk

Approved as to Form and Correctness:

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Keith Poliakoff, Town Attorney  
37095455.1



**Town of Southwest Ranches**  
**13400 Griffin Road**  
**Southwest Ranches, FL 33330-2628**

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**Town Council**  
**Doug McKay, Mayor**  
**Denise Schroeder, Vice Mayor**  
**Delsa Amundson, Council Member**  
**Bob Hartmann, Council Member**  
**Gary Jablonski, Council Member**

**Andrew D. Berns, Town Administrator**  
**Keith M. Poliakoff, JD, Town Attorney**  
**Russell Muniz, Assistant Town Administrator/Town Clerk**  
**Martin D. Sherwood, CPA, CGMA, CGFO, Town Financial Administrator**

### **COUNCIL MEMORANDUM**

**TO:** Honorable Mayor McKay and Town Council  
**VIA:** Andrew Berns, Town Administrator  
**FROM:** Rod Ley, Public Works Director  
**DATE:** 6/9/2020  
**SUBJECT:** R&R Water Agreement

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#### **Recommendation**

To place this item on the agenda for Council consideration and approval.

#### **Strategic Priorities**

D. Improved Infrastructure

#### **Background**

R&R Developer Corp. ("Owner") is the owner of a property lying within the Town of Southwest Ranches located at 5150 SW 124<sup>th</sup> Avenue. The Owner is desirous of obtaining water service for the property, however, water service is not available from the Town of Southwest Ranches. The City of Cooper City, a neighboring municipality, has water service and is willing to provide said service to the Owner.

The proposed Resolution states no objection to the City of Cooper City providing water service to the Owner, or to any other property owner within the Town of Southwest Ranches whose property is within the vicinity of the proposed utility services and is desirous of obtaining water service from the City of Cooper City.

As a condition, and in consideration, of this Resolution being adopted, the Owner and others seeking water service from the City of Cooper City agree that he/she/it/they shall solely be responsible for all costs of connecting to the water facilities from the City of Cooper City, including all ongoing costs of water and maintenance of the utility connections.

**Fiscal Impact/Analysis**

None.

**Staff Contact:**

Rod Ley, PE

**ATTACHMENTS:**

Description	Upload Date	Type
Water Service Agreement Reso - TA Approved	6/18/2020	Resolution
Water Agreement	6/9/2020	Agreement

**RESOLUTION NO. 2020 - XXX**

**A RESOLUTION OF THE TOWN COUNCIL OF THE TOWN OF SOUTHWEST RANCHES, FLORIDA, CONSENTING TO THE CITY OF COOPER CITY PROVIDING WATER SERVICE TO THE FARMER'S MARKET LOCATED AT 5150 SW 124 AVENUE, LYING WITHIN THE TOWN OF SOUTHWEST RANCHES, FLORIDA; PROVIDING THAT NO FURTHER EXPANSION OF SERVICE SHALL BE PERMITTED WITHOUT THE EXPLICIT WRITTEN CONSENT OF THE TOWN; PROVIDING FOR A CERTIFIED COPY OF THIS RESOLUTION TO BE FURNISHED TO THE CITY OF COOPER CITY; AND PROVIDING AN EFFECTIVE DATE.**

**WHEREAS,** R&R Developer Corp. ("Owner"), has a farmer's market in the Town of Southwest Ranches, as described in Exhibit "A", attached hereto and incorporated herein by reference; and

**WHEREAS,** Owner is desirous of obtaining water service for their farmer's market however, water service is not available from the Town of Southwest Ranches; and

**WHEREAS,** the City of Cooper City, a neighboring municipality, has capacity to provide this property with water service, and is willing to provide such services to the Owner; and

**WHEREAS,** the Owner is desirous of obtaining water service from the City of Cooper City, and has requested the Town's consent for the connection; and

**WHEREAS,** the Town of Southwest Ranches consents to the connection provided that no further expansion of service occurs without the specific written consent of the Town; and

**WHEREAS,** Owner agrees that he shall solely be responsible for all costs of connecting to the water service from the City of Cooper City and the Town, including all ongoing costs of water and maintenance of the utility connections.

**NOW THEREFORE, BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF SOUTHWEST RANCHES, FLORIDA, AS FOLLOWS:**

**Section 1:** Recitals. The above recitals are true and correct and are incorporated herein by this reference.

**Section 2:** The Town of Southwest Ranches, Florida hereby consents to the City of Cooper City providing water service to 5150 SW 124<sup>th</sup> Avenue, provided that no further expansion of service shall be permitted without the explicit written consent of the Town.

**Section 3.** A certified copy of this Resolution shall be provided to the City of Cooper City.

**Section 4.** Effective Date. This Resolution shall become effective immediately upon its adoption.

**PASSED AND ADOPTED** by the Town Council of the Town of Southwest

Ranches, Florida, this 25th day of June, 2020 on a motion by

\_\_\_\_\_ and seconded by \_\_\_\_\_.

McKay \_\_\_\_\_  
Schroeder \_\_\_\_\_  
Amundson \_\_\_\_\_  
Hartmann \_\_\_\_\_  
Jablonski \_\_\_\_\_

Ayes \_\_\_\_\_  
Nays \_\_\_\_\_  
Absent \_\_\_\_\_  
Abstaining \_\_\_\_\_

\_\_\_\_\_  
Doug McKay, Mayor

Attest:

\_\_\_\_\_  
Russell Muñiz, Assistant Town Administrator/Town Clerk

Approved as to Form and Correctness:

\_\_\_\_\_  
Keith Poliakoff, Town Attorney  
37106497.1



**WATER AGREEMENT**

**FOR SINGLE-FAMILY HOMEOWNER**

**FOR:** \_\_\_\_\_ R&R Developer Corp.  
(NAME OF OWNER)

**LOCATION:** \_\_\_\_\_ 5150 SW 124<sup>th</sup> Avenue, Southwest Ranches, FL 33330

**THIS AGREEMENT** effective this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, made and entered into by and between:

**THE CITY OF COOPER CITY**, a municipal corporation of the State of Florida, hereinafter referred to as the “CITY,” the Town of Southwest Ranches, a municipal corporation of the State of Florida, hereinafter referred to as the “TOWN,” and R&R Developer Corp., an individual with a property address of 5150 SW 124<sup>th</sup> Avenue, Southwest Ranches, FL 33330, hereinafter referred to as the “OWNER.” CITY, TOWN, and OWNER may hereinafter be collectively referred to as the “Parties.”

**WITNESSETH:**

**WHEREAS**, CITY is the owner and operator of a water treatment and sewage treatment plant, together with water distribution and sewage collection facilities known as COOPER CITY WATER AND SEWER SYSTEM; and

**WHEREAS**, OWNER controls certain real property in Broward County, Florida, as shown and described in Exhibit “A” attached hereto and made a part of hereof; and all references made in this Agreement to PROPERTY shall refer specifically to OWNER’S PROPERTY described in Exhibit “A” attached; and

**WHEREAS**, the PROPERTY is located in the TOWN; and

**WHEREAS**, OWNER desires to procure water service from CITY for the PROPERTY;  
and

**WHEREAS**, Section 19-142 of the CITY’s Code of Ordinances authorizes the CITY to provide water service outside of the CITY’s municipal boundaries, subject to Ch. 180, F.S., and the terms and conditions set forth in the CITY Code; and

**WHEREAS**, Section 180.19, F.S., authorizes a municipality to provide water service outside of its corporate limits and in another municipality, subject to the terms and conditions as may be agreed upon between such municipalities and the owner of the property receiving such service; and

**WHEREAS**, the Parties desire to enter into an agreement setting forth the mutual understandings and undertaking regarding the furnishing of said water service for the PROPERTY; and

**WHEREAS**, the Cooper City City Commission has approved this Agreement and has authorized the proper CITY officials to execute this Agreement by motion passed at a regular City Commission meeting on \_\_\_\_\_, 20\_\_\_\_; and

**WHEREAS**, the Town Council has approved this Agreement and has authorized the proper Town officials to execute this Agreement by motion passed at a regular Council meeting on \_\_\_\_\_, 20\_\_\_\_.

**NOW, THEREFORE**, in consideration of the mutual covenants and undertakings of CITY and OWNER and other good and valuable considerations, these parties covenant and agree with each other as follows:

## **PART I - DEFINITIONS**

- A. The term OWNER shall refer to the Contracting Party in this Agreement who has an ownership interest in the PROPERTY.
- B. The term EQUIVALENT RESIDENTIAL CONNECTION, referred to in this Agreement as ERC, is the assumed average daily flow of a detached single-family residential unit.
- C. The term PROPERTY refers to the real property described in Exhibit "A" attached to and incorporated into this Agreement.
- D. The term CITY COMMISSION shall refer to the City of Cooper City City Commission.

## **PART II - OWNER'S OBLIGATIONS**

### **A. CONTRIBUTION PAYMENTS FROM OWNER**

The contribution charges (water) shall be calculated according to rates set by Resolution of the City Commission. In addition to all rates, fees and charges otherwise imposed on consumers within the City, in accordance with Section 180.191, F.S., and Section 19-142 of the City Code, the OWNER shall pay to the CITY a surcharge equal to twenty-five percent (25%) of all charges for services provided under this Agreement. This surcharge payment shall be due and payable along with payment for all services provided by this Agreement.

Payment of the contribution charges is a condition precedent to the execution of this Agreement. The contribution charges applicable for this Agreement are summarized as follows:

#### **CONTRIBUTION (WATER)**

Residential .....# 1 Units X 1 ERC's Per Unit @ \$\_\_\_\_\_ Per ERC  
Total ERC's 1 (WATER)

OWNER has paid to CITY the sum of \_\_\_\_\_

\$\_\_\_\_\_ for THE CONTRIBUTION CHARGES DUE AT THE TIME THIS AGREEMENT IS APPROVED BY THE CITY COMMISSION.

### **PART III. - MUTUAL COVENANTS**

#### **A. EXCLUSIVE RIGHTS OF CITY**

CITY shall have the exclusive right to furnish water service to consumers within the PROPERTY covered by this Agreement. Notwithstanding anything to the contrary, the CITY's duties and obligations, as set forth herein, shall be subject to the CITY having adequate water capacity to serve the PROPERTY. The City shall have the sole authority and discretion to determine its water capacity and its ability to serve the PROPERTY pursuant to this Agreement.

#### **B. WELLS PROHIBITED EXCEPT FOR IRRIGATION**

OWNER, his successors and assigns, and the owners and occupants of buildings on OWNER'S PROPERTY shall not install or maintain any water wells except for irrigation purposes. These wells shall not be connected to any potable water system.

#### **C. PROMULGATION OF REASONABLE RULES OF SERVICES**

CITY shall have the right to promulgate, from time to time, reasonable rules and regulations relating to the furnishing of water service to consumers within the PROPERTY encompassed by this Agreement. Such rules and regulations may relate to, but are not limited to, rates, deposits, and connection charges and the right to discontinue services under certain conditions. OWNER hereby acknowledges and agrees that rates are subject to change at any time by CITY. The OWNER shall be subject to all local, state and federal ordinances, rules and regulations applicable to the services provided by the CITY, including, but not limited to, Chapter 19 and Chapter 25 of the CITY's Code of Ordinances, as may be amended from time to time.

#### **D. CITY NOT LIABLE FOR OWNER'S OR CONSUMER'S PROPERTY**

CITY shall not be liable or responsible for maintenance or operation of any pipes, pipelines, valves, fixtures or equipment on any of the properties of the customers, consumers or users on OWNER'S PROPERTY other than the water service lines within granted easements to CITY pursuant to this Agreement. In the event that CITY cannot provide sufficient water service as a result of the actions of any regulatory agency, then CITY'S sole obligation shall be to refund OWNER'S contribution charges as described in this Agreement.

#### **E. OWNER'S RESPONSIBILITY**

CITY shall provide water line to property and install meter. Immediately upon installation of the meter, billing of base charges as well as applicable commodity charges will commence. OWNER is responsible to connect house lines to meter.

#### **F. EFFECTIVE DATE**

Unless otherwise specified in this Agreement, this Agreement shall not be binding until fully executed, but once executed, it shall have a retroactive effect commencing from the date of the City Commission Meeting at which it was approved.

G. SYSTEM ON CONSUMER'S PROPERTY TO BE KEPT IN GOOD WORKING CONDITION

Each consumer of water service on OWNER'S PROPERTY shall keep all water pipes, service lines, connections and necessary fixtures and equipment on the premises occupied by said consumer, and within the interior lines of the lot occupied by the consumer in good order and condition. The sale of water by CITY to the consumer shall occur at the consumer's side of the entire meter installation, but the obligation for the maintenance of the lines shall be as set forth above and applicable to CITY regulations.

H. DISCLAIMER

Any temporary cessations or interruptions of the furnishings of water service to the PROPERTY described herein, irrespective of duration, at any time caused by an Act of God, fires, strikes, casualties, accidents, power failures, necessary maintenance work, breakdowns, damage to equipment or mains, civil or military authority, riots or other cause beyond the control of CITY shall not constitute a breach of the provisions contained herein nor impose any liability upon CITY by OWNER, his successors and assigns.

I. SEVERABILITY

If and section, subsection, sentence, clause, phrase or portion of this Agreement is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate, distinct and independent provision and such holding shall not affect the validity of the remaining hereof.

J. RECORDING OF AGREEMENT

The provisions of this Agreement shall run with the land and be binding upon and inure to the benefits of successors to title to the property. This Agreement shall be recorded by CITY among the Public Records of Broward County, Florida, for the particular purpose of placing all owners or occupants of properties in OWNER'S PROPERTY connected to or to be connected to said water system of CITY upon notice of each and every one of the provisions herein contained to the same extent and with the same force and effect as if said owners and occupants had joined with the parties to this Agreement in the execution thereof; and the acquisition or occupancy of real PROPERTY in OWNER'S PROPERTY connected to or to be connected to said water system of CITY shall be deemed conclusive evidence of the fact that the said owners or occupants have consented to and accepted the Agreement herein contained and have become bound thereby.

K. HOLD HARMLESS PROVISION

It is mutually agreed that CITY shall be indemnified and held harmless by the OWNER from any and all liability for damages if CITY'S obligations under this Agreement cannot be fulfilled as a result of any ruling or order by any other governmental or regulatory agency having jurisdiction over the subject matter hereof; and in such event, this Agreement shall be null and void and unenforceable by either party regarding that portion of the OWNER'S PROPERTY for which CITY cannot perform its obligation.

L. ATTORNEY'S FEES FOR LITIGATION

The parties agree that in the event that it becomes necessary for any party to this Agreement to litigate in order to enforce its rights under the terms of this Agreement, then, and in that event, the prevailing party shall be entitled to receive from the non-prevailing party reasonable Attorney's fees and the costs of such litigation, including appellate proceedings.

#### **PART IV - NOTICE**

Whenever either party desires to give notice to the other, it shall be given by written notice, sent by prepaid certified United States mail, with return receipt requested, addressed to the party for whom it is intended, at the place specified as the place for giving of notice, which shall remain such until it shall have been changed by written notice in compliance with the provisions of this paragraph. For the request, the parties designate the following as the respective places for the giving of notice:

FOR THE CITY OF COOPER CITY

City Manager  
9090 S.W. 50<sup>th</sup> Place  
Cooper City, Florida 33328

FOR THE OWNER

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

FOR THE TOWN OF \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Notice so addressed and sent by prepaid certified mail, with return receipt requested, shall be deemed given when it shall have been so deposited in the United States mail.

#### **PART V - ADDITIONAL PROVISIONS**

##### **A. EXHIBITS**

The following exhibits are attached, as part of this Agreement and are incorporated into this Agreement:

EXHIBIT "A" – Legal Description of PROPERTY

EXHIBIT "B" – A copy of the site plan of the PROPERTY reduced to 8 ½ by 14" page size.

**IN WITNESS WHEREOF**, the parties hereto have caused these presents to be executed on the day and year indicated below:

Signed, sealed and delivered  
in the presence of:

**THE CITY OF COOPER CITY**

ATTEST:

BY: \_\_\_\_\_

MAYOR GREG ROSS

DATE: \_\_\_\_\_

\_\_\_\_\_  
CITY CLERK

Approved as to legal form:

\_\_\_\_\_  
CITY ATTORNEY

STATE OF FLORIDA            )  
COUNTY OF BROWARD        ) SS

BEFORE ME personally appeared \_\_\_\_\_ to me well known and known to me to be the person (s) described in and who executed the foregoing instrument, and acknowledged to and before me that \_\_\_\_\_ executed said instrument for the purposes therein expressed.

WITNESS my hand and official seal, this \_\_\_\_\_ day of \_\_\_\_\_,  
20\_\_\_\_.

My commission expires:

\_\_\_\_\_  
NOTARY PUBLIC STATE OF FLORIDA

**OWNER**

BY: \_\_\_\_\_

DATE: \_\_\_\_\_

STATE OF FLORIDA            )  
COUNTY OF BROWARD        )

BEFORE ME personally appeared \_\_\_\_\_ to me well known and known to me to be the person(s) described in and who executed the foregoing instrument, and acknowledged to and before me that \_\_\_\_\_ executed said instrument for the purposes therein expressed.

WITNESS my hand and official seal, this \_\_\_\_\_ day of \_\_\_\_\_,  
20\_\_\_\_.

My commission expires:

\_\_\_\_\_  
NOTARY PUBLIC STATE OF FLORIDA

Signed, sealed and delivered  
in the presence of:

THE TOWN OF \_\_\_\_\_

ATTEST:

BY: \_\_\_\_\_

MAYOR \_\_\_\_\_

DATE: \_\_\_\_\_

\_\_\_\_\_  
CITY CLERK

Approved as to legal form:

\_\_\_\_\_  
CITY ATTORNEY

STATE OF FLORIDA            )  
COUNTY OF BROWARD        ) SS

BEFORE ME personally appeared \_\_\_\_\_ to me well known and known to me to be the person (s) described in and who executed the foregoing instrument, and acknowledged to and before me that \_\_\_\_\_ executed said instrument for the purposes therein expressed.

WITNESS my hand and official seal, this \_\_\_\_\_ day of \_\_\_\_\_,  
20\_\_\_\_.

\_\_\_\_\_  
FLORIDA                      My commission expires:                      NOTARY PUBLIC STATE OF