



776 N.E. 125 Street, North Miami, Florida 33161

Planning Commission Report

To: The City of North Miami Planning Commission

From: Debbie Love, AICP, City Planner 

Date: September 1, 2020

RE: **A RESOLUTION OF THE MAYOR AND CITY COUNCIL OF THE CITY OF NORTH MIAMI, FLORIDA, APPROVING AN APPLICATION FOR A CONDITIONAL USE PERMIT, IN SUBSTANTIALLY THE ATTACHED FORM, FOR A PROPOSED MIXED USE DEVELOPMENT, INCLUDING A 3-STORY PUBLIC CHARTER SCHOOL, COMMUNITY MEDICAL CLINIC AND 24- UNIT MULTI-FAMILY RESIDENTIAL APARTMENT BUILDING ON THE 7.6-ACRE REAL PROPERTY, LOCATED AT 13855 NW 17TH AVENUE, AND SPECIFICALLY IDENTIFIED WITH MIAMI-DADE COUNTY FOLIO NUMBER: 06-2123-000-0060, IN ACCORDANCE WITH ARTICLE 3, DIVISION 4, SECTIONS 3-402 THROUGH 3-407 AND ARTICLE 4, DIVISION 3, SECTION 4-302 OF THE CITY OF NORTH MIAMI CODE OF ORDINANCES, CHAPTER 29, ENTITLED "LAND DEVELOPMENT REGULATIONS"; PROVIDING FOR AN EFFECTIVE DATE AND FOR ALL OTHER PURPOSES.**

District: 4 – Alix Desulme, Ph. Ed.

RECOMMENDATION

Staff is requesting that pursuant to Article 3, Division 4, Section 4-305 of the City's Land Development Regulations (LDRs), the Planning Commission review the Conditional Use Permit (CUP) request, consider City staff's recommendation, any testimony at the public hearing, and recommend that the Mayor and City Council approve the CUP by passage of the attached resolution.

BACKGROUND

Property Information: The property is 7.6 acres (or 330,620 square feet) in size, and is located at 13855 NW 17th Avenue (as depicted in **Figure 1**, below). It is currently occupied by an abandoned church, and is specifically identified with Miami-Dade County ("County") folio number 06-2123-000-0060 (the "Subject Property").

The Subject Property is designated Mixed Use High on the City of North Miami (the "City") 2036 Future Land Use Map, and is zoned PD-3, Planned Development (PD) on the

Official Zoning Map, which allows up to 45 dwelling units per acre (du/acre), limits the maximum height to one hundred, ten feet (110'), and requires mixed-use with three (3) or more complimentary permitted uses, one (1) of which must be residential. Article 4, Division 2, Section 3-401(B) of the City's LDRs requires a CUP for all development within the PD districts.

Figure 1 - Aerial Photo of the Subject Site



Applicant Request. The property owner, Lively Stone, LLC, through its designee, KIPP New Jersey (the "Applicant") is requesting a CUP for the development of a mixed use project including a three-story, 149,295 square foot K-12 public charter school with amenities; a 1,400 square foot community clinic; and a three-story, 33,300 square foot, 24-unit residential apartment building with amenities.

Project attributes include:

- **Creation of 404 short term direct and indirect construction jobs per annum** (24 - 36 month construction period), and \$121.5 million in short term construction wages and expenditures;
- Payment of **\$900,100 in permit and impact fees**;
- Creation of **138 direct and indirect full time jobs annually; more than \$6.3 million in direct and indirect wages and benefits annually** related to building employment and operating expenditures;
- Payment of approximately **\$300,000 in annual retail and food and beverage expenditures** for the 24 residential households;
- KIPP K-12 Public Charter School, housed in a 3-story, 149,295 square foot building serving approximately 1,432 students;
- 3-story residential apartment building with twenty-four (24) rental units affordable for moderate income (80% - 120% of median income) households: six (6) one-bedroom, 800 square foot units renting for \$1,350 per month; twelve (12), two-bedroom, 1,200 square foot units renting for \$1,600 per month; and six (6), three-bedroom, 1,600 square foot units renting for \$1,900 per month;
- A 1,400 square foot community clinic “offering general medical services” for use by the both the general public and the students;
- A basketball court, and a 3,800 square foot children’s playground available for use by the residential households;
- A soccer field and tot lot area;
- School garden area;
- Ingress and egress limited to NW 17th Avenue;
- Student drop-off and pick-up areas designed to assure safe pedestrian movement, adequate on-site circulation of cars and buses, and no queuing onto NW 17th Avenue;
- Certified Green Build construction;
- Approximately triple the amount of landscaping and open space areas as required by the LDRs, including large landscape buffers on all sides to mitigate visual impacts and heat island effect;
- Underground utilities and stormwater management system, and a private wastewater lift station;
- Hardscape areas constructed with pervious materials.

Analysis: In reviewing the Applicant’s CUP request for the subject property, staff took into consideration the extent to which the request conforms with the purpose and intent of Article 3, Division 4, Sections 3-402 through 3-407 of the City’s LDRs that establish

procedures and the criteria for the granting of a CUP, and of Article 4, Division 3, Section 4-302 that governs development within the PD districts.

Compliance with the LDR general standards for a CUP

After an analysis of the project, staff finds that this CUP application complies with the intent of the City's LDRs governing the conditional use permit process, as demonstrated below:

1. The application is consistent with the comprehensive land use plan;

The Applicant's request advances many of the goals, objectives and policies (GOPs) contained in the City Comprehensive Plan, including:

Future Land Use Element (FLUE) GOPs: *The development proposed through this CUP application is consistent with Objective 1.1 in that it expands housing choice and promotes conservation of water and energy and Objective 1.14 requiring the city to support, "...high-quality elementary, secondary and college level education facilities..."*

Economic Element GOPs: *This application will further the Economic Element of the City Comprehensive Plan, which aims to improve the economic viability of the City through provision of balanced employment and housing opportunities, attraction and retention of businesses, and promotion of fiscal strength and stability in the community. The proposed development will support Policy 9.6.6, as it will provide for more modern housing options for existing and future residents in a City where the majority of housing stock is over fifty (50) years.*

Housing Element GOPs: *This CUP application will help provide new housing units meeting the standards of modern living, in furtherance of Objective 3B.A of the Housing Element. This Objective requires that the City facilitate a range of housing options by providing the appropriate densities, intensities, height, type, and size that encourage the creation of new housing units.*

Climate Change Element GOPs: *This project provides for green development, thereby creating a more sustainable development pattern in furtherance of Policy 12.2.2. Additionally, it activates Objective 12.3 that seeks to improve the climate resiliency, energy-efficiency and storm hardening of buildings in the City. The project's use of native plants meets the requirements of Policy 12.4.11 which seeks to create a more climate-resilient landscape within the City.*

Concurrency:

The City's Public Works Department conducted a concurrency review of the proposed development using the Utility Impact Study prepared by Kimley-Horn, approval letters from the City of Opa Locka and North Miami Beach, and the Traffic Impact Analysis created by Kimley-Horn provided by the applicant. Public Works determined that there is available capacity and the proposed project will meet all applicable Level of Service standards for an initial development order for potable water supply, wastewater disposal, drainage, and roads.

Water Supply: *The Subject Property is within the City of North Miami Beach (NMB) water supply area. The City's Public Works Department requires that any development on the site be connected to the City of North Miami Beach public water system. The Applicant shall be responsible for all off-site improvement necessary to connect to the nearest water main, as may be required to meet fire flow demands.*

Wastewater Disposal: *The Subject Property is within the City of Opa Locka sewer service area. The Applicant will install a private lift station and shall be responsible for all off-site improvements necessary to connect to the City of Opa Locka's sanitary sewer system.*

Stormwater Management: *All stormwater shall be retained on-site utilizing properly designed seepage or infiltration drainage structures. Drainage shall be provided for the 5-year storm event with full on-site retention of the 25-year/3-day storm. Pollution Control devices shall be required at all drainage inlet structures. Additionally, a Standard General Environmental Resource Permit from Miami-Dade County Department of Regulatory and Economic Resources (RER) shall be required for the construction and operation of the required surface water management system. Site grading and development shall comply with the County and Federal flood criteria requirements.*

Roads: *The Subject Property fronts on two streets: NW 17th Avenue and NW 15th Avenue; however, ingress and egress is limited to NW 17th Avenue, which will maintain a minimum Level of Service "C".*

- 2. The application is in compliance with the district regulations applicable to the proposed development, including the bonus provisions in section 4-205, if applicable;**

The subject property is zoned PD-3, which provides for a density of 45 du/acre,

allowing the property owner to construct up to three hundred, forty-two (342) dwelling units as-of-right; however, the proposed project includes only twenty-four (24) dwelling units. The PD-3 District also allows buildings up to 110' (approximately 10 stories) high; as shown on the proposed project plans, the height of both the school and the residential apartment building is three (3) stories. The charter school, community clinic and the residential apartment are allowable uses within the district. The Applicant is not requesting any bonus dwelling units.

3. The application is consistent with the applicable development standards in these LDRs;

The conceptual plans submitted with this application show that the proposed development will meet or exceed all applicable development standards set forth in the LDRs.

While the PD District does not establish minimum setback requirements, the project's proposed buildings' setbacks, and landscaped perimeter transitioning provides protection for the surrounding uses. The school building is setback 73.5 feet from NW 17th Avenue, 238 feet from NW 15th Avenue, 263 feet from the northern property line, and 57 feet from the southern property line. The landscaping, buffering, and open space proposed for the site are almost triple that required by the LDRs.

*Section 5-1402 provides the schedule of required parking based upon use. For this project, without any parking adjustments as provided for in Sections 5-1401 and 5-1402, **the proposed development requires 178 parking spaces; the Applicant proposes 179 parking spaces.***

Furthermore, as per the requirements of Article 3, Division 4, Section 3-408 of the LDRs, within one (1) year of the CUP approval, a precise plan, in substantial compliance with the initial development order approved by the City Council, shall be submitted and meet with the approval of the Development Review Committee (DRC) before being transmitted to the City Council, which may issue additional comments before final approval, pursuant to the provisions of Article 2, Division 7, Section 2-701 of the LDRs. Through the DRC approval process, all concurrency determinations will be finalized to ensure strict compliance with the requirements of the LDRs as they pertain to bulk, massing placement, landscaping, design, sustainability and lighting, as well as the requirements of the City's Public Works Department, the City's Police Department, and the

County and/or State agencies.

- 4. The site for the proposed use relates to streets and highways adequate in width and pavement type to carry the quantity and kind of traffic generated by the proposed use or adequate mitigation is provided;**

According to a trip generation analysis conducted by Kimley-Horn, a consulting firm contracted by the Applicant, the proposed development is anticipated to generate approximately 638 net new weekday A.M. peak hour trips and 389 net new weekday P.M. peak hour trips. The results of the intersection capacity analysis, confirmed by the City's Transportation Manager, indicate that the study intersections are expected to operate at LOS C or better during the A.M. and P.M. peak hours under all analysis conditions.

The proposed use is compatible with the nature, condition and development of adjacent uses, buildings and structures and will not adversely affect the adjacent uses, buildings or structures.

Staff believes the proposed development will enhance the surrounding area, when taking into account the scale and massing of the proposed buildings, the excellence in design or architectural elements, as well as the related amenities.



- 5. The parcel proposed for development is adequate in size and shape to accommodate all development features;**

With a size of 7.6 acres and having frontage on both NW 17th Avenue and NW 15th Avenue, the subject property is suitable in size and shape to accommodate the proposed mixed-use development.

- 7. The proposed use will not have an adverse impact on use, livability, value and development of adjacent properties;**

The proposed development will activate an otherwise underutilized site. As proposed, this mixed-use development is anticipated to greatly improve the site and have an overall positive impact on neighboring properties. Through the DRC site plan approval, staff will ensure that the final plans show an architecturally and aesthetically pleasing project.

- 6. The nature of the proposed development is not detrimental to the public health, safety and general welfare of the community;**

The proposed project will not adversely impact the public health, safety and general welfare of the residents. Rather, the proposed development will be an asset to the community by providing a public charter school to accommodate the City's and surrounding area's student population, and a community medical clinic to serve the needs of the general public.

- 9. The design of the use creates a form and function which enhances the community character of the immediate vicinity of the parcel proposed for development; and**

Per Section 5-803 of the City LDRs, all new construction is required to incorporate LEED standards or the City's alternative green standards in order to support the City's environmental initiatives. While the conceptual plans submitted with the CUP request depicts an aesthetically pleasing building, through the DRC site plan approval, staff will ensure that the final/precise plans show a development that demonstrates design excellence and incorporates the required Green Building standards, and all other requirements or features as may be found in the CUP approved by the City Council for the subject property.

- 10. Flexibility in regards to development standards is justified by the benefits to community character and the immediate vicinity of the parcel proposed for development.**

*The Applicant has committed to strictly adhere to or exceed the standards set forth in the applicable sections of the LDRs. **No flexibility in regard to any of these development standards is being sought.***

- 11. No open code violations or unpaid code enforcement fines exist.**

A search of the City Code Compliance Division record for the subject property shows no open code violations or unpaid code fines.

Based on the foregoing, staff believes that the requested CUP for the described mixed-use development, is consistent with the goals, objectives and policies of the City Comprehensive Plan, and is in keeping with the purpose and intent of the LDRs.

Staff therefore requests that the Planning Commission reviews this CUP request, the recommendations of City staff, and the testimony at the public hearing, if any, and recommends approval to the Mayor and City Council of the attached resolution and CUP, along with the following findings and conditions:

- 1. Development Review Committee Approval:** After approval of the CUP, the Applicant shall submit a site plan application to the Development Review Committee (DRC) for City Council approval. Failure to file said precise plan within one (1) year of the City Council approval shall result in the revocation of the CUP. Site Plan approval must be granted by City Council before the Applicant can apply for a building permit.
- 2. Site Plan Compliance:** That the Applicant must develop the property in accordance with the final site plan approved by the City Council.
- 3. Operation and Maintenance:** That the owners or successors or assigns in title is bound by the CUP and shall continue operation and maintenance of all areas, functions and facilities as depicted on the approved precise site plan, unless otherwise released by the Mayor and City Council.
- 4. Easements:** That the Applicant shall provide suitable areas for easements for dedication and/or improved for the installation of public utilities and purposes which include, but shall not be limited to water, gas, telephone, electric power, sewer, drainage, public access, ingress, egress and other public purposes.

5. **Installation of Utilities:** That all utilities within the Subject Property including, but not limited to, telephone, electrical systems, and television cables, shall be installed underground.
6. **Sidewalk:** That the Applicant shall, in coordination with the Miami-Dade County Transportation and Public Works Department, construct a sidewalk on NW 17th Avenue within the street frontage of the Subject Property.
7. **Building Permits:** That the Applicant apply for a building permit within eighteen (18) months of approval of the precise site plan by the City Council. Failure to do so will result in the expiration of the precise site plan;
8. **Miscellaneous:** That the CUP comply with all applicable requirements of the City's Public Works Department, Police Department, and all other County and State agencies;
9. **Certificate of Occupancy:** That a Certificate of Occupancy (CO) from the Building Department be only issued to the applicant upon complying with all the terms and conditions of this CUP approval; the same subject to cancellation upon violation of any of the conditions herein listed;
10. **Certificate of Use:** That a Certificate of Use (CU) from the Community Planning & Development Department and Business Tax Receipt (BTR) be only issued to the Applicant upon compliance with all terms and conditions of this CUP approval; the same subject to cancellation upon violation of any of the conditions herein listed; and
11. **Leadership in Energy and Environmental Design (LEED) Certification:** Proof of LEED or equivalent National Green Building Certification is required prior to obtaining final Certificate of Occupancy.

ATTACHMENTS

1. Proposed Resolution
2. Conditional Use Permit (Exhibit 1)
3. Letter of Intent
4. Conceptual Development Plans
5. Traffic Generation Study by Kimley-Horn
6. City Transportation Manager Statement of Satisfaction

RESOLUTION NO. _____

A RESOLUTION OF THE MAYOR AND CITY COUNCIL OF THE CITY OF NORTH MIAMI, FLORIDA, APPROVING AN APPLICATION FOR A CONDITIONAL USE PERMIT, IN SUBSTANTIALLY THE ATTACHED FORM, FOR A PROPOSED MIXED USE DEVELOPMENT, INCLUDING A 3-STORY PUBLIC CHARTER SCHOOL, COMMUNITY MEDICAL CLINIC AND 24- UNIT MULTI-FAMILY RESIDENTIAL APARTMENT BUILDING ON THE 7.6-ACRE REAL PROPERTY, LOCATED AT 13855 NW 17TH AVENUE, AND SPECIFICALLY IDENTIFIED WITH MIAMI-DADE COUNTY FOLIO NUMBER: 06-2123-000-0060, IN ACCORDANCE WITH ARTICLE 3, DIVISION 4, SECTIONS 3-402 THROUGH 3-407 AND ARTICLE 4, DIVISION 3, SECTION 4-302 OF THE CITY OF NORTH MIAMI CODE OF ORDINANCES, CHAPTER 29, ENTITLED “LAND DEVELOPMENT REGULATIONS”; PROVIDING FOR AN EFFECTIVE DATE AND FOR ALL OTHER PURPOSES.

WHEREAS, the real property located at 13855 NW 17th Avenue (“Subject Property”) is designated Mixed Use High on the City’s 2036 Future Land Use Map, and

WHEREAS, Policy 1.21.6 of the Comprehensive Plan establishes the allowable uses within the Mixed Use Land Use districts, e.g., residential, schools, and community facilities; and

WHEREAS, the Subject Property has a PD-3, Planned Development (PD) zoning designation, with a maximum permitted density of forty-five (45) dwelling units per acre and height of one hundred, ten feet (110’) for development on the Subject Property; and

WHEREAS, Article 4, Division 3, section 4-302 of the Land Development Regulations (LDRs) provides development standards for properties within the PD districts, including requiring a Conditional Use Permit (“CUP”) for all development activities; and

WHEREAS, Article 3, Division 4, section 3-405 of the LDRs establishes criteria for the approval of a CUP; and

WHEREAS, Lively Stone, LLC is the owner of the Subject Property and has granted limited power of attorney to KIPP New Jersey, a New Jersey Non-Profit Corporation, to serve as

Applicant and file the application for the CUP; and

WHEREAS, the Applicant filed a CUP application with the Community Planning and Development Department to construct a three-story, 149,295 square foot public charter school and associated amenities, with approximately 1,432 students, a 1,400 square foot community medical clinic, and a three-story, 33,300 square foot, 24-unit residential apartment building with amenities on the Subject Property; and

WHEREAS, the City has reviewed the proposed request and found that it is consistent with Policy 1.12.6 of the Comprehensive Plan and satisfies the requirements of Sections 3-405 and 4-302 of the LDRs; and

WHEREAS, the Planning Commission, after a duly noticed public hearing held on September 1, 2020, reviewed the proposed request and found it to be consistent with the Comprehensive Plan and in keeping the intent of the LDRs, and, thereby, recommended approval of the CUP to the Mayor and City Council; and

WHEREAS, the Mayor and City Council have determined that the proposed request is in the best interest of the City, does not adversely affect the health, safety and welfare of residents, and thereby, approve the CUP.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND CITY COUNCIL OF THE CITY OF NORTH MIAMI, FLORIDA:

Section 1. Approval of Conditional Use Permit. The Mayor and City Council of the City of North Miami, Florida, hereby, approve the CUP, in substantially the attached form, for a proposed three-story, 149,295 square foot public charter school and associated amenities, with approximately 1,432 students, a 1,400 square foot community medical clinic, and a three-story, 33,300 square foot, 24-unit residential apartment building with amenities located at 13855 NW 17th Avenue in accordance with Article 3, Division 4, section 3-405 of Chapter 29 of the City of North Miami Code of Ordinances, Land Development Regulations.

Section 2. **Effective Date.** This Resolution shall be effective upon adoption.

NOW, THEREFORE, the Mayor and City Council approves this CUP along with the following findings and conditions:

1. **Development Review Committee Approval:** After approval of the CUP, the Applicant shall submit a site plan application to the Development Review Committee (DRC) for City Council. Failure to file said precise plan within one (1) year of the City Council approval shall result in the revocation of the CUP. Site Plan approval must be granted by City Council before applicant can apply for a building permit.
2. **Site Plan Compliance:** That the Applicant must develop the property in accordance with the final site plan approved by the City Council.
3. **Operation and Maintenance:** That the owners or successors or assigns in title is bound by the CUP and shall continue operation and maintenance of all areas, functions and facilities as depicted on the approved precise site plan, unless otherwise released by the Mayor and City Council.
4. **Easements:** That the Applicant shall provide suitable areas for easements for dedication and/or improved for the installation of public utilities and purposes which include, but shall not be limited to water, gas, telephone, electric power, sewer, drainage, public access, ingress, egress and other public purposes.
5. **Installation of Utilities:** That all utilities within the Subject Property including, but not limited to, telephone, electrical systems, and television cables, shall be installed underground.
6. **Sidewalk:** That the Applicant shall, in coordination with the Miami-Dade County Transportation and Public Works Department, construct a sidewalk on NW 17th Avenue within the street frontage of the Subject Property.
7. **Building Permits:** That the Applicant apply for a building permit within eighteen (18) months of approval of the precise site plan by the City Council. Failure to do so will result in the expiration of the precise site plan;
8. **Miscellaneous:** That the CUP comply with all applicable requirements of the City's Public Works Department, Police Department, and all other County and State agencies;
9. **Certificate of Occupancy:** That a Certificate of Occupancy (CO) from the Building Department be only issued to the applicant upon complying with all the terms and conditions of this CUP approval; the same subject to cancellation upon violation of any of the conditions herein listed;

10. Certificate of Use: That a Certificate of Use (CU) from the Community Planning & Development Department and Business Tax Receipt (BTR) be only issued to the Applicant upon compliance with all terms and conditions of this CUP approval; the same subject to cancellation upon violation of any of the conditions herein listed; and

11. Leadership in Energy and Environmental Design (LEED) Certification: Proof of LEED or equivalent National Green Building Certification is required prior to obtaining final Certificate of Occupancy.

PASSED AND ADOPTED by a _____ vote of the Mayor and City Council of the City of North Miami, Florida, this ____ day of _____, 2020.

PHILIPPE BIEN-AIME
MAYOR

ATTEST:

VANESSA JOSEPH, Esq.
CITY CLERK

APPROVED AS TO FORM
AND LEGAL SUFFICIENCY:

Jeff P. H. Cazeau, Esq.
CITY ATTORNEY

SPONSORED BY: City Administration

Moved by: _____
Seconded by: _____

Vote:

Mayor Philippe Bien-Aime
Vice Mayor Alix Desulme, Ph.Ed.
Councilwoman Carol Keys, Esq.
Councilman Scott Galvin

_____ (Yes) _____ (No)
_____ (Yes) _____ (No)
_____ (Yes) _____ (No)
_____ (Yes) _____ (No)

Councilwoman Mary Estimé-Irvin

_____ (Yes) _____ (No)

EXHIBIT I

CONDITIONAL USE PERMIT FOR

LIVELY STONE, LLC

WHEREAS, the real property located at 13855 NW 17th Avenue (“Subject Property”) is designated Mixed Use High on the City’s 2036 Future Land Use Map, and

WHEREAS, Policy 1.21.6 of the Comprehensive Plan establishes the allowable uses within the Mixed Use Land Use districts, e.g., residential, schools, and community facilities; and

WHEREAS, the Subject Property has a PD-3, Planned Development (PD) zoning designation, with a maximum permitted density of forty-five (45) dwelling units per acre and height of one hundred, ten feet (110’) for development on the Subject Property; and

WHEREAS, Article 4, Division 3, section 4-302 of the Land Development Regulations (LDRs) provides development standards for properties within the PD districts, including requiring a Conditional Use Permit (“CUP”) for all development activities; and

WHEREAS, Article 3, Division 4, section 3-405 of the LDRs establishes criteria for the approval of a CUP; and

WHEREAS, Lively Stone, LLC is the owner of the Subject Property and has granted limited power of attorney to KIPP New Jersey, a New Jersey Non-Profit Corporation, to serve as Applicant and file the application for the CUP; and

WHEREAS, the Applicant filed a CUP application with the Community Planning and Development Department to construct a three-story, 149,295 square foot public charter school and associated amenities, with approximately 1,432 students, a 1,400 square foot community medical clinic, and a three-story, 33,300 square foot, 24-unit residential apartment building with amenities on the Subject Property; and

WHEREAS, the City has reviewed the proposed request and found that it is consistent with Policy 1.12.6 of the Comprehensive Plan and satisfies the requirements of Sections 3-405 and 4-302 of the LDRs; and

WHEREAS, the Planning Commission, after a duly noticed public hearing held on September 1, 2020, reviewed the proposed request and found it to be consistent with the Comprehensive Plan and in keeping the intent of the LDRs, and, thereby, recommended approval of the CUP to the Mayor and City Council; and

WHEREAS, the Mayor and City Council have determined that the proposed request is in the best interest of the City, does not adversely affect the health, safety and welfare of residents, and thereby, approve the CUP.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND CITY COUNCIL OF THE CITY OF NORTH MIAMI, FLORIDA:

Section 1. Approval of Conditional Use Permit. The Mayor and City Council of the City of North Miami, Florida, hereby, approve the CUP, in substantially the attached form, for a proposed three-story, 149,295 square foot public charter school and associated amenities, with approximately 1,432 students, a 1,400 square foot community medical clinic, and a three-story, 33,300 square foot, 24-unit residential apartment building with amenities located at 13855 NW 17th Avenue in accordance with Article 3, Division 4, section 3-405 of Chapter 29 of the City of North Miami Code of Ordinances, Land Development Regulations.

Section 2. Effective Date. This Resolution shall be effective upon adoption.

NOW, THEREFORE, the Mayor and City Council approves this CUP along with the following findings and conditions:

- 1. Development Review Committee Approval:** After approval of the CUP, the Applicant shall submit a site plan application to the Development Review Committee (DRC) for City Council approval. Failure to file said precise plan within one (1) year of the City Council

approval shall result in the revocation of the CUP. Site Plan approval must be granted by City Council before the Applicant can apply for a building permit.

2. **Site Plan Compliance:** That the Applicant must develop the property in accordance with the final site plan approved by the City Council.
3. **Operation and Maintenance:** That the owners or successors or assigns in title is bound by the CUP and shall continue operation and maintenance of all areas, functions and facilities as depicted on the approved precise site plan, unless otherwise released by the Mayor and City Council.
4. **Easements:** That the Applicant shall provide suitable areas for easements for dedication and/or improved for the installation of public utilities and purposes which include, but shall not be limited to water, gas, telephone, electric power, sewer, drainage, public access, ingress, egress and other public purposes.
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6. **Sidewalk:** That the Applicant shall, in coordination with the Miami-Dade County Transportation and Public Works Department, construct a sidewalk on NW 17th Avenue within the street frontage of the Subject Property.
7. **Building Permits:** That the Applicant apply for a building permit within eighteen (18) months of approval of the precise site plan by the City Council. Failure to do so will result in the expiration of the precise site plan;
8. **Miscellaneous:** That the CUP comply with all applicable requirements of the City's Public Works Department, Police Department, and all other County and State agencies;
9. **Certificate of Occupancy:** That a Certificate of Occupancy (CO) from the Building Department be only issued to the applicant upon complying with all the terms and conditions of this CUP approval; the same subject to cancellation upon violation of any of the conditions herein listed;
10. **Certificate of Use:** That a Certificate of Use (CU) from the Community Planning & Development Department and Business Tax Receipt (BTR) be only issued to the Applicant upon compliance with all terms and conditions of this CUP approval; the same subject to cancellation upon violation of any of the conditions herein listed; and
11. **Leadership in Energy and Environmental Design (LEED) Certification:** Proof of LEED or Equivalent National Green Building Certification is required prior to obtaining final Certificate of Occupancy.



July 15, 2020

Ms. Debbie Love, AICP, Planner
Community Planning & Development Department
City of North Miami
12440 NE 8th Avenue
North Miami, Florida 33161

*Re: Application for Conditional Use Permit
KIPP Charter School North Miami Campus
13855 NW 17th Avenue*

Dear Ms. Love:

On behalf of Lively Stone, LLC, the property owner, and KIPP New Jersey, the applicant, Summit Construction Management Group is pleased to submit this conditional use application to the City of North Miami Community Planning & Development Department. In addition to this Letter of Intent, please find enclosed the following for your review and consideration:

1. Application for Conditional Use Permit
2. Owner's Limited Power of Attorney Permitting Applicant to File for the Request
3. Warranty Deed
4. Site Plan Package – includes Overall Master Plan, Phasing Plan and Landscape Plan, prepared by Kimley-Horn, dated July 14, 2020
5. Cost Benefit/Economic Impact Analysis, prepared by Miami Economic Associates, Inc., dated June 30, 2020
6. Traffic Impact Analysis, prepared by Kimley-Horn, dated July 2020
7. Miami-Dade County School Impact Report, dated July 14, 2020
8. Utility Impact Report, prepared by Kimley-Horn, dated July 2020
9. View Impact Study/Color Renderings
10. Review Fees – Calculated as follows:
 - a. Processing Fee: \$1,081.00
 - b. Development Fee: \$ 717.00 (\$541.00 + (\$22/acre x 8 acres = \$176.00))
 - c. Publishing Fee: \$1,250.00
 - d. Sign Fee: \$ 268.00 (\$134.00 x 2 street frontages)
 - e. Traffic Impact Cost Recovery: \$2,500.00 (payable to Kittleson & Associates)

The proposed KIPP Charter School North Miami Campus project is located on the east side of NW 17th Avenue, between NW 143rd Street and Opa-Locka Boulevard. Although the subject property is located within the limits of the City of North Miami, all of the surrounding properties are located within unincorporated Miami-Dade County. The subject rectangular-shaped property includes approximately 7.6 acres and is identified by the Miami-Dade County Property Appraiser with Folio Number: 06-2123-000-0060.

421 South Summerlin Avenue
Orlando, Florida, 32801
Phone 267-331-4882 / Fax 267-331-4889

www.SummitCMGroup.com

The site is currently occupied by a small, abandoned house of worship building. The surrounding properties abutting the subject site are developed with a mix of uses. A house of worship/church is located on the property to the immediate south of the subject site, while general commercial and light industrial businesses are located to the southwest of the subject property, across NW 17th Avenue. Single family residences are located to the east of the subject property, yet are separated from the subject site by the NW 15th Avenue right-of-way. A large retention pond and single family residences are located to the north of the project site, while residential condominiums and townhomes are located to the west of the site, across NW 17th Avenue.

The subject property is designated Mixed Use High (110' and 45 DU/AC) on the City of North Miami's 2036 Future Land Use Map. According to the City of North Miami 2036 Comprehensive Plan, land uses permissible within areas designated Mixed Use include residential dwelling units, commercial and office uses, home occupations, hotels and lodging, community facilities designed to serve the residential areas (e.g. schools, museums, places of worship, adult and child day care centers, nursing homes, hospitals, libraries and governmental facilities), non-profit neighborhood social and recreational facilities, as well as active and passive parks and open space. The maximum residential density permitted in the Mixed Use High future land use district is 45 dwelling units per acre, while a maximum height of 110 feet is permitted. Development within this land use district is restricted to a maximum lot coverage of 85%.

The site is zoned Planned Development – 3 (PD-3) on the City of North Miami's Official Zoning Map. According to the City of North Miami's Land Development Regulations (Chapter 29 North Miami Zoning Code), planned development zoning promotes greater innovation and creativity in the development of land, ensure the mixed-use development of land is compatible with the surrounding land uses and consistent with the City's comprehensive plan, and promotes a more desirable community environment through the rezoning or conditional use permit process. A variety of land uses are permitted in the PD-3 zoning district, including, but not limited to adult living facilities, community educational facilities, medical facilities, hotels, office, public uses, religious institutions, residential, restaurants, retail sales and service, and mixed-use (any combination of three (3) or more permitted uses, one of which may be residential).

The proposed application for conditional use application is for the development of a mixed-use project on the 7.6+/- acre subject property. The proposed project is anchored by a KIPP Public Charter School (K-12) with accessory recreational uses and a community garden. The project will also have a community medical clinic offering general medical services, as well as a 24-unit multi-family residential apartment building.

KIPP, the Knowledge is Power Program, is a non-profit network of over two-hundred and forty (240+) college-preparatory, public charter schools educating early childhood, elementary, middle and high school students. KIPP schools are tuition-free, public charter schools open to all students. They are united by a common mission, a commitment to excellence and a belief that if they help children develop the academic and character strengths they need for college and choice filled lives, they will be able to build a better tomorrow for themselves and for their communities. To serve the students within the North Miami area, KIPP has been approved as a School of Hope operator by the State of Florida.

The attached phasing plan outlines the proposed development phases. Phase I includes development of a temporary school campus for KIPP, located on the northwest portion of the property. The temporary campus includes approximately twenty (20) portable classrooms, two (2) administration buildings, an outdoor play area, associated parking areas and vehicular circulation to allow for student drop off and pick up. A single driveway near the northern boundary of the property will provide access to/from NW 17th Avenue.

Phase II includes the development of the primary school facility, including a three-story school building, a soccer field, a tot lot play area, an outdoor basketball court, two (2) additional play fields, a community garden and associated parking and vehicular circulation areas. A community medical clinic is also proposed within Phase II of the development and is located within the front of the school building. Two (2) driveways along the property's NW 17th Avenue frontage provide safe and efficient access to the site. An extensive vehicular circulation drive aisle system around the perimeter of the site provides for adequate queuing and stacking for student drop off and pick up.

Phase III includes removal of the portable classrooms and temporary school facility and redevelopment of the site with a three-story multi-family residential apartment building. The proposed apartment building will include a maximum of 24 residential apartments (1, 2 and 3 bedroom). The proposed apartment building is set back from the northern property line by approximately 25 feet. A 68.9-foot setback is provided from the western property line, while a 397-foot setback from the eastern property line is provided. It is anticipated these apartments will be made available to the teachers and staff from the abutting KIPP Charter School, providing a convenient and effective live-work community.

The proposed KIPP school building includes three stories and approximately 100,000 square feet of building area. At capacity, the school will service a maximum of 1,432 students (K-12) and employ approximately 100 faculty and staff. The school building will include approximately 54 academic classrooms, several specialty classrooms (e.g. art, music, band, general science, computer tech, etc.), a media center, a multi-purpose room with warming kitchen to serve student meals, a gymnasium, teacher work rooms and conference rooms, a student clinic and administrative offices. An outdoor community garden, soccer field, basketball court, tot lot and play fields compliment the student experience on the KIPP campus.

The primary school building is situated on the site with a minimum 73.5-foot setback from NW 17th Avenue (western property line), 238-foot setback from the eastern property line, 263-foot setback from the northern property line and a 57-foot setback from the southern property line. The building is surrounded by several parking areas providing adequate parking for the faculty, staff and visitors, as well as a vehicular driveway circulation and queuing system providing safe and efficient student drop off and pick up. Over 50% of the student population are transported to and from the school by bus.

The project will be serviced by public water and sanitary sewer system, provided by the City of North Miami Beach and the City of Opa-Locka, respectively. An underground stormwater management system will ensure more than adequate site drainage. Extensive perimeter landscaping and the previously detailed building setbacks provide buffering and screening from abutting properties. Interior landscaping coupled with the perimeter landscaping improve the aesthetic quality of the project and the surrounding community, as well as ensure mitigation of the heat island effect, while maintaining compliance with the Florida State Statute for Safe Schools, which provides landscaping guidelines to promote student and staff safety by allowing for clear line of sight and eliminating areas of refuge or hiding. A vinyl-coated chain link fence surrounding the site and extensive camera monitoring system provide additional security.

As previously stated, the subject property is zoned PD-3 and the proposed mixed-use project is permissible through the conditional use process. The Applicant provides the following responses to Section 3-405, City of North Miami Zoning Code, Standards for Approval of Conditional Uses:

1. The application is consistent with the comprehensive land use plan.

Response: The subject property is located within the Mixed Use High future land use category in the City's comprehensive plan. According to the City of North Miami 2036 Comprehensive Plan, Policy 1.21.6, all of the proposed uses are permissible within the Mixed Use High land use category. The project's proposed height, density and lot coverage are all consistent with the intensity standards outlined in the Mixed Use High future land use category (Policy 1.2.1). The proposed KIPP North Miami campus project is consistent with and furthers the intent of Goal 1 and Objective 1.1 of the Future Land Use Element, by providing a development that encourages infill development, incorporates urban form, enhances the economic base of the City, improves aesthetic quality of the community and provides a range of housing and employment opportunities.

While the proposed school and clinic will serve the area's population, the surrounding established residential neighborhoods are protected through appropriate building setbacks, landscape buffering and screening. Furthermore, the proposed project will have no adverse impacts on natural resources and ecosystems, but rather provides extensive open space and serves recreational needs. The project is consistent with Policy 1.2.6, as adequate public facilities and services are available to support the proposed development.

As the key component to the mixed-use project is the KIPP North Miami campus, the conditional use application is consistent with and furthers the City's Comprehensive Plan and Future Land Use Element's Objective 1.14, Policy 1.14.1, Policy 1.14.2, Policy 1.14.5 and Policy 1.14.9. These objectives and policies promote the development of high quality elementary and secondary public charter schools necessary to meet the future needs of North Miami's youth population, ensure that the charter schools are permissible in all future land use categories and zoning districts, provide expedited development review process for all proposed schools in North Miami, and encourage the creation of educational campus development plans that are consistent with urban design guidelines and uses in the Future Land Use Map.

2. The application is in compliance with the district regulations applicable to the proposed development, including the bonus provisions in Section 4-404, if applicable.

Response: The subject KIPP North Miami project is located within the PD-3 zoning district. The proposed school, medical clinic, recreational and multi-family residential uses are permitted within and in compliance with the PD-3 zoning district (Section 4-302.B.1., North Miami Zoning Code). Bonus provisions are not applicable to the subject project.

3. The application is consistent with the applicable development standards in these LDRs.

Response: The proposed project meets or exceeds the applicable development standards in the LDRs, including but not limited to the minimum development standards outlined in Section 4-302.B.2.: minimum site area, configuration of land, maximum density, maximum height, provision of mix of land uses, minimum open space (49.8% provided, while 20% required) and design requirements (e.g. architectural relief, setbacks, perimeter transitioning and screening and placement of refuse areas). The proposed project is consistent with the minimum landscaping and buffering requirements (Sections 5-1205, 5-1206 and 5-1208) and required parking regulations (Section 5-1402), while providing extensive landscaping, buffering, parking areas and queuing lanes for safe and efficient vehicular circulation throughout the site.

4. The site for the proposed use relates to streets and highways adequate in width and pavement type to carry the quantity and kind of traffic generated by the proposed use or adequate mitigation is provided.

Response: A Traffic Impact Study was prepared by Kimley-Horn (attached) and there were no deficiencies identified.

5. The proposed use is compatible with the nature, condition and development of adjacent uses, buildings and structures and will not adversely affect the adjacent uses, building or structures.

Response: The proposed school, recreational, clinic and multi-family residential uses are complimentary in nature and typically found within communities similar to the subject area, while providing much needed services and facilities to the surrounding population. Architectural detail, landscaping, buffering, screening, setbacks and physical placement of the proposed uses ensure compatibility with the adjacent uses and neighboring community.

6. The parcel proposed for development is adequate in size and shape to accommodate all development features.

Response: The proposed mixed use project is situated on a 7.6+/- acre property. The size and rectangular shape accommodate the primary and accessory uses, while providing sufficient parking, landscaping, buffers and setbacks to support the proposed development. The extensive frontage (520+ linear feet) along NW 17th Avenue provides for adequate and safe access driveway to serve the proposed development.

7. The proposed use will not have an adverse impact on use, livability, value and development of adjacent properties.

Response: The proposed KIPP North Miami campus will provide to be an asset to the adjacent properties and surrounding community. The project will provide a highly regarded public charter school to serve the student population of North Miami and neighboring communities, while ensuring pedestrian connectivity, aesthetically pleasing landscaping and architectural design, open space, recreational facilities and building placement that enhance the livability and value of surrounding properties.

8. The nature of the proposed development is not detrimental to the public, health, safety and general welfare of the community.

Response: The nature of the proposed development provides public facilities and services, as well as housing opportunities to further benefit the public, health, safety and general welfare of the community.

9. The design of the use creates form and function which enhances the community character and the immediate vicinity of the parcel proposed for development.

Response: The uses are complementary to the surrounding development pattern within the immediate vicinity and are designed as a compatible mixed-use project with aesthetically pleasing design characteristics.

10. Flexibility in regard to development standards is justified by the benefits to community character and the immediate vicinity of the parcel proposed for development.

Response: The characteristics of the proposed project meet or exceed the required development regulations; therefore, no flexibility in the same is requested.

11. No open code violations or unpaid code enforcement fines exist.

Response: There are no known open code violations or unpaid code enforcement fines related to the subject property.

The attached master site plan, landscape plan, phasing plan, color renderings, economic impact analysis, traffic impact analysis, utility impact report and school impact report further support this conditional use request and the standards for approval. We believe the KIPP North Miami Campus mixed-use project is consistent with the City of North Miami 2036 Comprehensive Plan and the City of North Miami Zoning Code, is compatible with the existing land uses and development pattern within the surrounding area and will be a revered and valuable asset to the City of North Miami and its residents. We respectfully request your favorable review and consideration of this application for conditional use and look forward to being a part of the North Miami community.

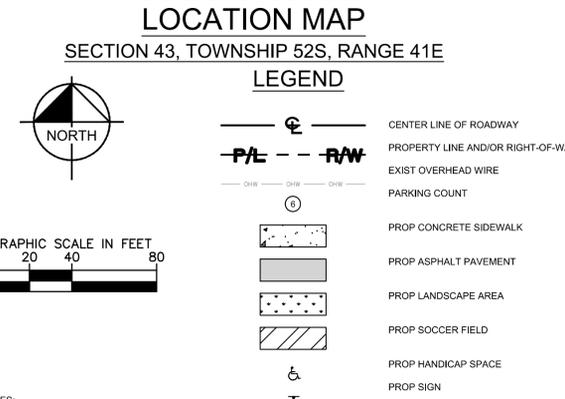
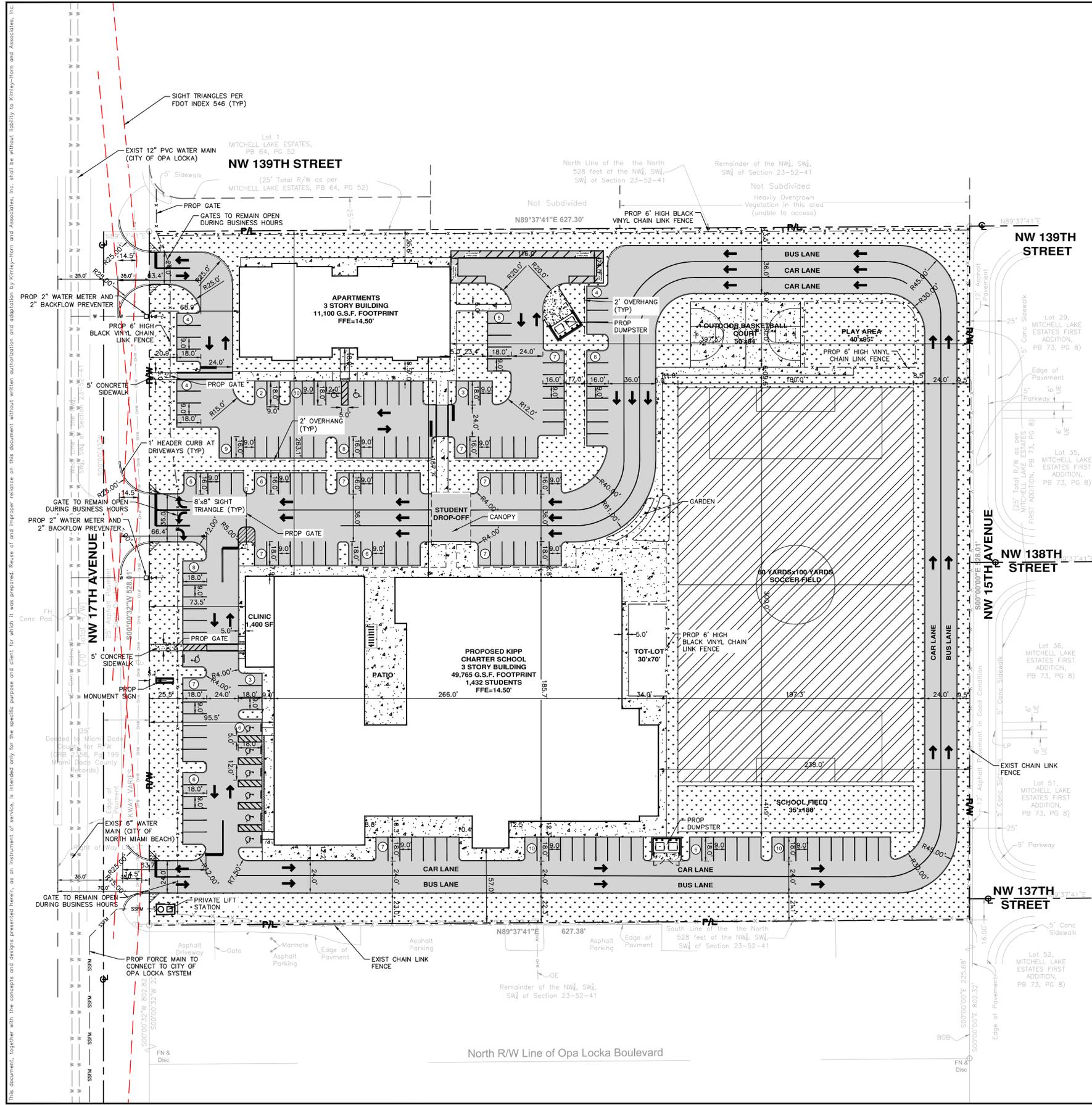
Respectfully submitted,



Ty Maxey, AICP

Enclosures

Cc: Jose Pacheco, Director of Real Estate, KIPP New Jersey
Todd Lucas, Director of Development, Summit Construction Management Group
George Balaban, P.E., Kimley-Horn
Carter McDowell, Esquire, Bilzin Sumberg Baena Price & Axelrod LLP



- SITE PLAN NOTES:**
- ALL DIMENSIONS SHOWN ARE TO THE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
 - ALL CURBS ARE TYPE 'D' UNLESS OTHERWISE NOTED.
 - REFER TO LANDSCAPE PLANS FOR PLANTING AND DETAILS.
 - ALL PAVEMENT MARKINGS ARE PAINT UNLESS OTHERWISE NOTED.
 - ALL RADII ARE 3' UNLESS OTHERWISE NOTED.
 - WITHIN FDOT RW ALL CURB RAMPS ARE WITH DETECTABLE WARNINGS AND CROSSWALKS SHALL BE COMPLIANT WITH FDOT DESIGN STANDARD INDEX 522-202 AND 711-001 (LATEST EDITION).
 - ALL PAVEMENT MARKINGS AND SIGNS WITHIN THE RW SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS AND THE FDOT 2020 STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION.
 - FREE-STANDING SIGNAGE SHOWN FOR REPRESENTATION PURPOSES ONLY AND SHALL BE PERMITTED SEPARATELY.

SITE DATA

PROPERTY ADDRESS	13855 NW 17TH AVE, NORTH MIAMI, FL 33167
FOLIO NUMBER	06-2123-000-0060
PROPOSED USE(S)	(K-12) PUBLIC CHARTER SCHOOL, CLINIC, APARTMENT UNITS
ZONING DISTRICT	PD-3 (PLANNED DEVELOPMENT DISTRICT)
FUTURE LAND USE	MIXED USE HIGH (110 FT., 45 DU/AC)
SECTION, TOWNSHIP, RANGE	SECTION 43, TOWNSHIP 52S, RANGE 41E
OPEN SPACE (20% REQUIRED)	165,024 SF (49.8%)
TOTAL SITE AREA	331,235 SF (7.60 AC)
TOTAL GROSS FLOOR AREA	183,995 SF
CHARTER SCHOOL (K-12)	149,295 SF (49,765 SF BUILDING FOOTPRINT)
CLINIC	1,400 SF
APARTMENTS*	33,300 SF (11,100 SF BUILDING FOOTPRINT)
NUMBER OF STORIES	
CHARTER SCHOOL (K-12)	3 STORY
CLINIC	1 STORY
APARTMENTS	3 STORY
PARKING REQUIRED PER FLORIDA STATUTES	
1 SPACE/STAFF MEMBER	100 SPACES
1 SPACE/100 STUDENTS	15 SPACES
1 SPACE/10 STUDENTS ABOVE GRADE 10 (STUDENTS)	20 SPACES
24 APARTMENT UNITS (1.5 SPACES/DWELLING UNIT)+5% GUEST	38 SPACES
1,400 SF CLINIC (1 SPACE/300SF)	5 SPACES
REQUIRED PARKING	178 SPACES
PROPOSED PARKING	179 SPACES
HANDICAP SPACES REQUIRED	7 SPACES
HANDICAP SPACES PROVIDED	9 SPACES

* SIX-1 BEDROOM APARTMENTS, TWELVE-2 BEDROOM APARTMENTS, AND SIX-3 BEDROOM APARTMENTS
 ** SREF STANDS FOR STATE REQUIREMENTS FOR EDUCATIONAL FACILITIES. THE STATE STATUE THE PUBLIC SCHOOL IS IN COMPLIANCE WITH THE FLORIDA STATUE (F.S.) 1002.23(C)

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NO.	REVISIONS	DATE	BY

Kimley»Horn

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PROFESSIONAL SEAL

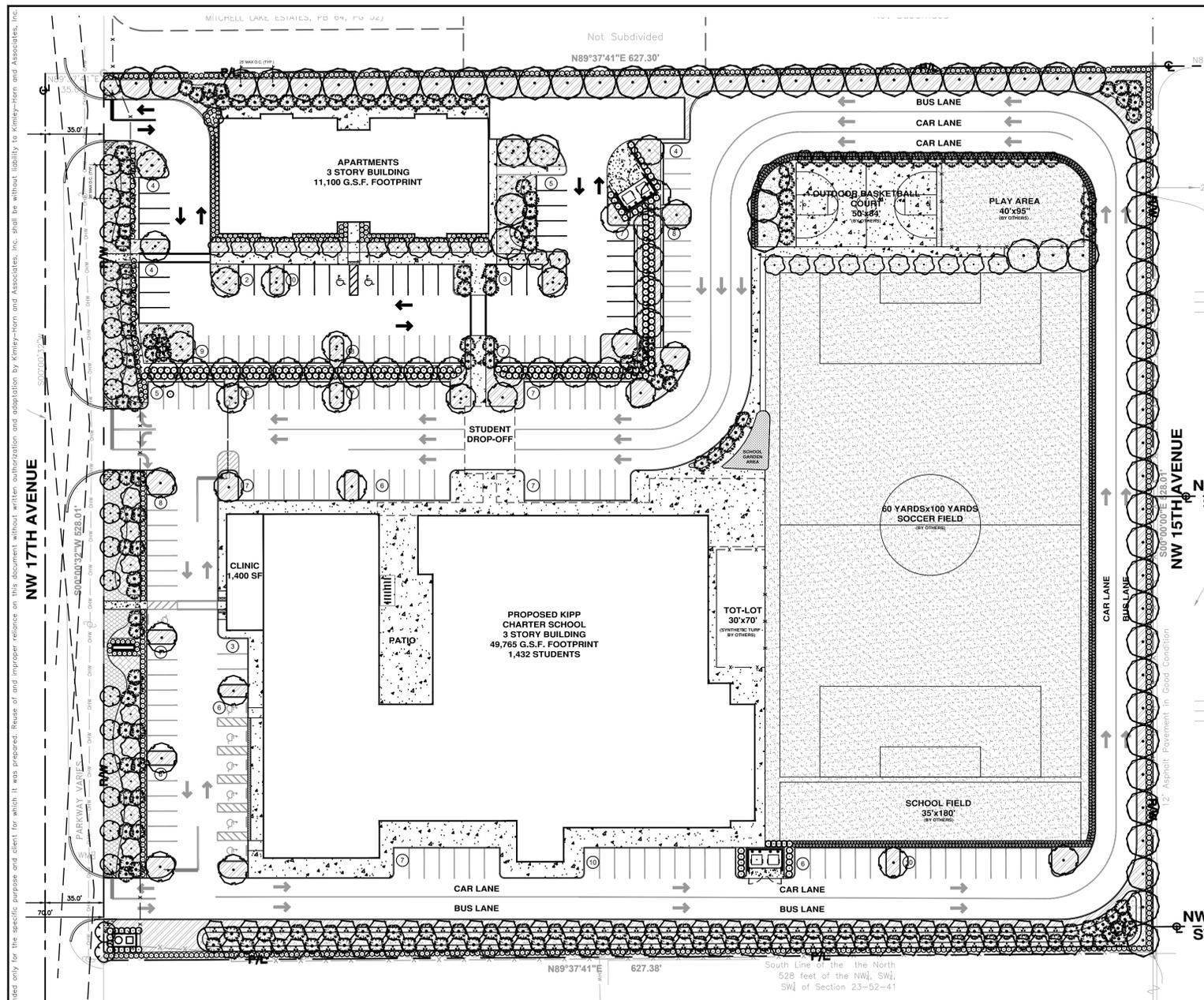
STATE OF FLORIDA
 PROFESSIONAL ENGINEER
 No. 74543

MASTER SITE PLAN

KIP PROJECT
 140596005
 DATE: 07/14/2020
 SCALE: AS SHOWN
 DESIGNED BY: GB
 DRAWN BY: MB
 CHECKED BY: GB

KIPP SCHOOL
 PREPARED FOR
SUMMIT CONSTRUCTION
MANAGEMENT GROUP, LLC
 CITY OF NORTH MIAMI, FLORIDA

SHEET NUMBER
MSP-1



CITY OF NORTH MIAMI LANDSCAPE LEGEND

Zoning District Planned Development (PD-3) Net Lot Area: 7.6 acres, 331,235 square feet
 minus play areas Net Lot Area: 3.9 acres, 200,434 square feet

OPEN SPACE	REQUIRED	PROVIDED
Square feet of open space required by Chapter 20, as indicated on site plan:		
A. Net lot area = 331,235 sq ft x 20% = 66,247 square feet	66,247	163,234
B. Square feet of parking lot open space required by Chapter 20, as indicated on site plan:		
The number of parking spaces = 178 x 10 sq ft per parking space = 1,780	1,780	1,780
Total square feet of landscaped open space required by Chapter 20 = A+B = 68,027	68,027	165,014
Total square feet area of open space (Play Fields included): 165,024 sq ft		
Total square feet area of open space of play area only: 70,083 sq ft		
Total square feet area of open space w/o play areas: 94,941 sq ft		

LAWN AREA CALCULATION

	REQUIRED	PROVIDED
Total square feet of landscaped open space required by Chp. 20	13,807	10,416
A. Maximum lawn area (not permitted) = 30% x 68,024 sq ft = 20,407 square feet		
Very drought tolerant grasses and low growing native plants, including grasses and forbs, as referenced in the Landscape Manual, may be used as groundcover beyond the maximum permitted grass area specified		

TREES

	REQUIRED	PROVIDED
A. The number of trees required per net lot acre (excluding play areas), less the existing number of trees that meet minimum requirements = 20 trees x net lot acreage = 152 trees required - 166 total number of existing trees = -14 trees for every 80 sq ft of required parking lot open space 22"	158	253
B. 30% palm trees allowed (three palms = one tree) Palms provided =	49	49
C. Percentage of native trees required = Total number of trees provided, 158 x 30% = 49	49	253
D. Street trees (max. average spacing of 35' O.C.) 20% linear feet along street divided by 25 =	N/A	N/A
E. Street trees located directly beneath power lines (max. avg. spacing of 25' O.C.): 25% linear feet along street divided by 25 =	21	21
F. Total number of trees provided (A+D+E) =	202	274

SHRUBS

	REQUIRED	PROVIDED
A. The total number of trees required x 10 = the number of shrubs required	2,090	3,185
B. The number of shrubs required x 30% = the number of native shrubs required	627	2,288

IRRIGATION PLAN
 Required by Chapter 20. Auto irrigation or hose bibbs provided.

Minimum Landscape and Buffering Standards Generalized Table

Zoning district/ landscape requirement	PD-3	Required	Proposed
Shade trees	28 per net acre	188	253
Shade trees—off street parking areas	1 per req. landscape island	22	22
Street trees (Overhead Utility)	1 per 25' lot frontage	21	21
Shrubs/Hedging	10 per req. tree	2090	3185
Knee wall, off-street parking areas	N/A	N/A	N/A
Sod, lawn area, ground	Req.	X	X
Landscaped open space	20%	20%	49.80%
Landscape buffers—front yard/ROW	Min. 5'	X	X
Landscape buffers—side yard	Min. 5'	X	X
Landscape buffers—rear yard	Min. 5'	X	X
Landscape buffers—off-street parking areas	Min. 5'	X	X
Landscape islands—off-street parking areas	1 per every 10 req. parking spaces	22	22
Fence, wall, hedge heights—maximum	Max. 8'; hedges 8'	X	X

PLANT SCHEDULE

TREES	CODE	QTY	BOTANICAL / COMMON NAME	CONT	CAL	HT	SPRD	NATIVE
	BS	64	BURSERA SIMARUBA / GUMBO LIMBO 4' CT MIN.	FG	2' CAL MIN	12 HT MIN	8' SPRD MIN.	YES
	CE	54	CONOCARPUS ERECTUS 'SERICEUS' / SILVER BUTTWOOD 5 STEMS MIN. @ 2' CAL. MIN. EA. W/ 4' CT.	FG	MULTI-TRUNK	12 HT MIN	6' SPRD MIN.	YES
	CO	46	CHRYSOPHYLLUM OLIVIFORME / SATINLEAF 4' CLEAR TRUNK	FG	2' CAL MIN	12 HT MIN	6' SPRD MIN.	YES
	MF	40	MYRCIANTHES FRAGRANS / SIMPSON'S STOPPER SINGLE TRUNK, 4' CLEAR TRUNK	FG	2' CAL MIN	12 HT MIN	6' SPRD MIN.	YES
	SS	185	SABAL PALMETTO / CURVED TRUNK SABAL PALM CHARACTER, CURVED SLICK TRUNK	FG	12" DBH	14'-20' CT, STAGGERED		YES
STREET TREES	CODE	QTY	BOTANICAL / COMMON NAME	CONT	CAL	HT	SPRD	NATIVE
	LI-S	21	LAGERSTROEMIA INDICA / CRAPE MYRTLE SINGLE LEADER, 4' CLEAR TRUNK	FG	2' CAL MIN	12 HT MIN	8' SPRD MIN.	NO
SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	CONT	SPACING	SIZE	NATIVE	
	CR	724	CHRYSOBALANUS ICACO 'RED TIP' / RED TIP COCOPLUM	CONT.	30" OC	36" X 36"	YES	
	FM	887	FICUS MICROCARPA 'GREEN ISLAND' / GREEN ISLAND FICUS	CONT.	24" OC	20" X 20"	NO	
	HC	168	HAMELIA PATENS 'COMPACTA' / DWARF FIREBUSH	CONT.	30" OC	36" X 36"	YES	
	MC	244	MYRCIANTHES FRAGRANS 'COMPACTA' / COMPACT SIMPSON'S STOPPER	CONT.	36" O.C.	48"X48"	YES	
SHRUB AREAS	CODE	QTY	BOTANICAL / COMMON NAME	CONT	SPACING	SIZE	NATIVE	
	TF	1,162	TRIPSACUM FLORIDANUM / DWARF FAKAHATCHEE	CONT.	30" OC	24" X 24"	YES	
GROUND COVERS	CODE	QTY	BOTANICAL / COMMON NAME	CONT	SIZE	SPACING	NATIVE	
	AG2	4,223 SF	ARACHIS GLABRATA / PERENNIAL PEANUT	SOD		SOD	NO	
	EL	5,488	ERNOEUA LITTORALIS / GOLDEN BEACH CREEPER	CONT.	12" HT.	24" O.C.	YES	
	SOD	81,217 SF	STENOTAPHRUM SECUNDATUM 'FLORATAM' / FLORATAM ST. AUGUSTINE SOD	SOD		SOD	NO	

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MATTHEW VINCENT WISNEWSKI LA6667406 ON THE DATE ADJACENT TO THE SEAL.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

No.	REVISIONS	DATE	BY

Kimley»Horn

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 WWW.KIMLEY-HORN.COM CA 0000696

KHA PROJECT: 140596003
 DATE: 06/30/2020
 SCALE: AS SHOWN
 DESIGNED BY: BJ
 DRAWN BY: CF
 CHECKED BY: NW

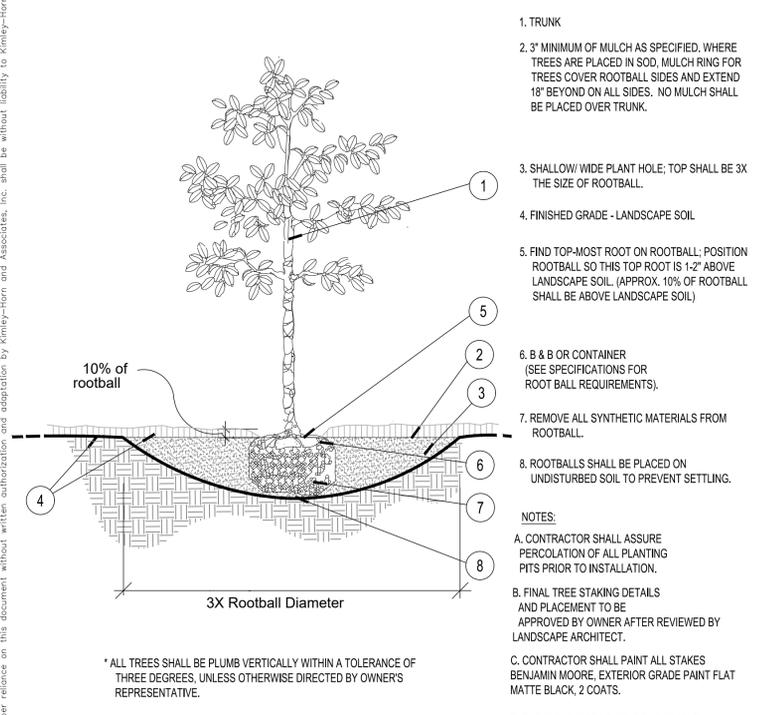
REGISTERED PROFESSIONAL LANDSCAPE ARCHITECT
 No. LA6667406
 STATE OF FLORIDA

KIPP SCHOOL
 PREPARED FOR
SUMMIT CONSTRUCTION
MANAGEMENT GROUP, LLC
 CITY OF NORTH MIAMI, FLORIDA

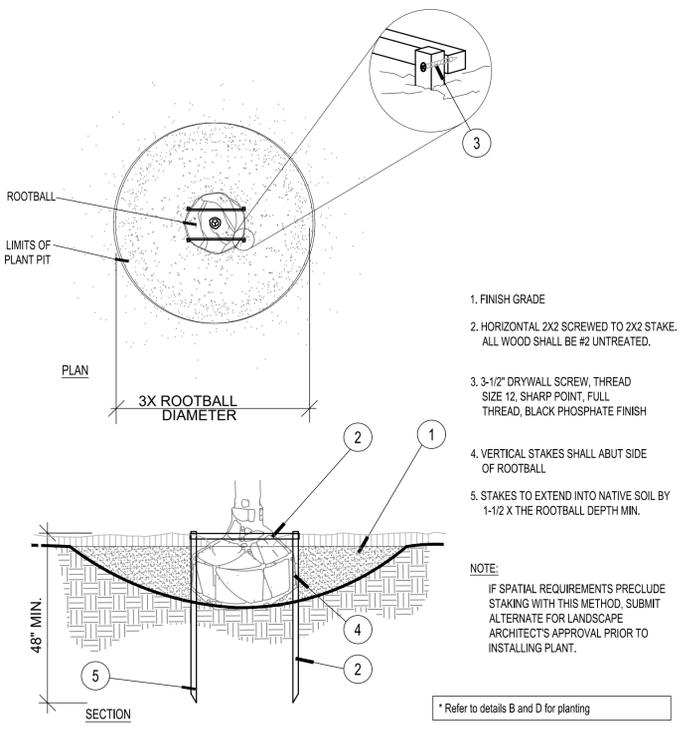
LANDSCAPE PLAN

SHEET NUMBER
L-300

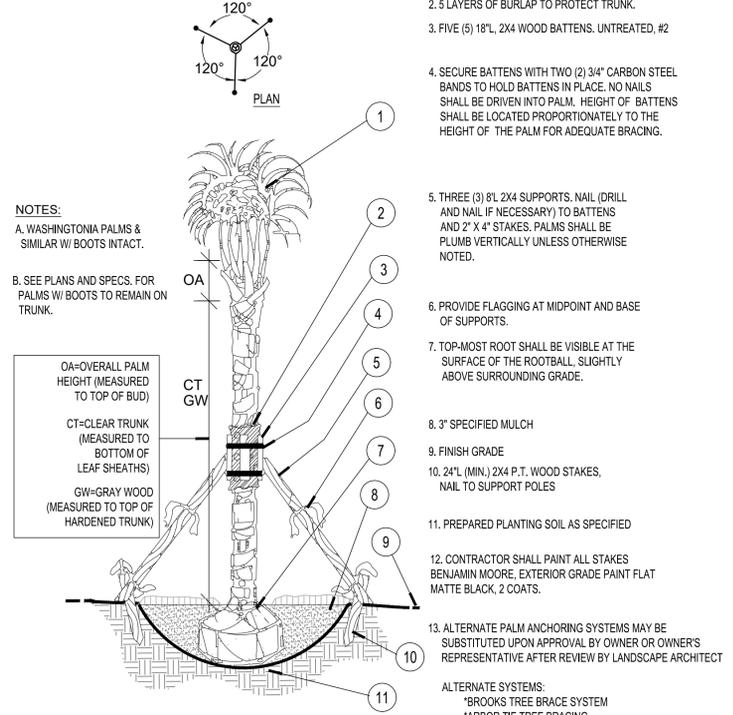
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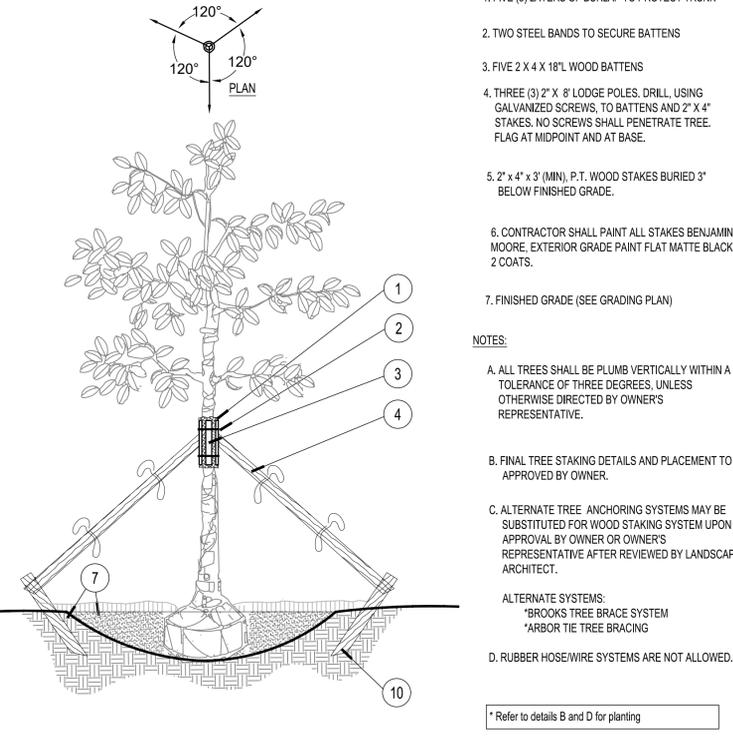
A Tree Planting
SECTION NTS



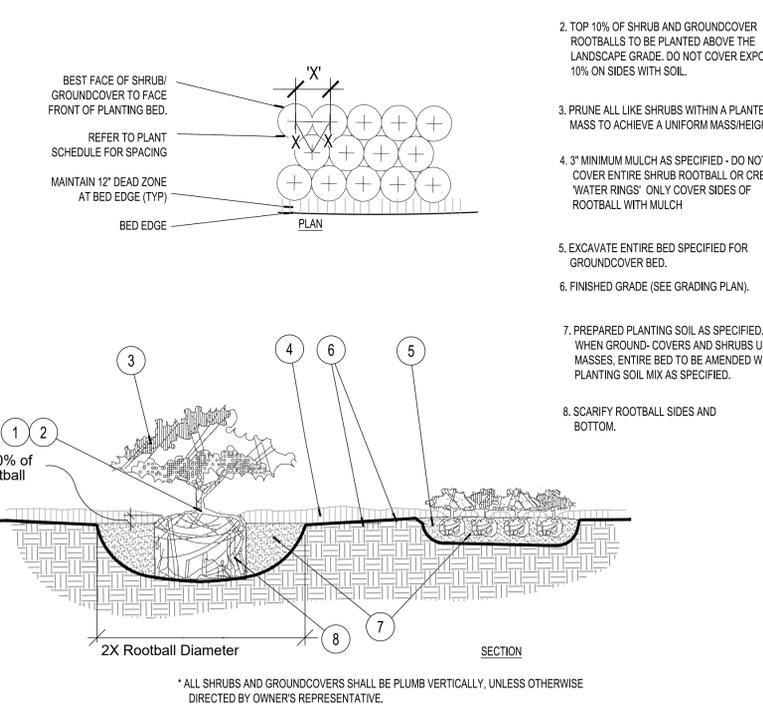
D Staking - up to 65 gal. or B&B to 3-1/2" Cal.
PLAN/SECTION NTS



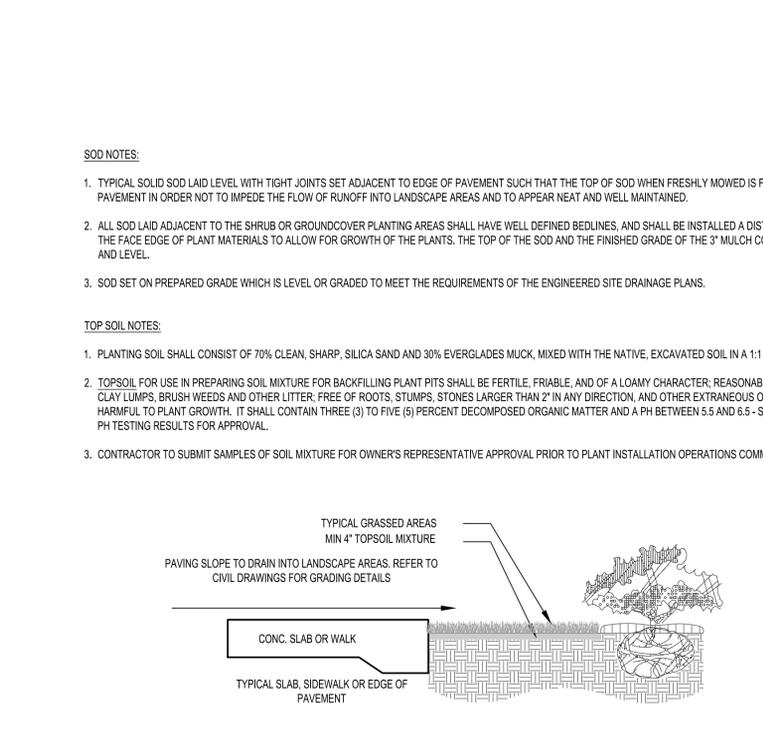
B Palm Planting and Staking
SECTION NTS



E Large Tree Staking - 100 Gal + or B&B 4" +
SECTION NTS



C Shrub / Groundcover Planting
PLAN/SECTION NTS



F SOD
SECTION NTS

- MINIMUM OF NINE (9) GOOD PALM FRONDS; PRUNE AND TIE FRONDS WITH HEMP TWINE. SABAL PALMS TO BE SELECTIVELY "HURRICANE CUT", LEAVING ONLY NEWLY-EMERGING GROWTH.
 - 5 LAYERS OF BURLAP TO PROTECT TRUNK.
 - FIVE (5) 18"L, 2X4 WOOD BATTENS, UNTREATED, #2
 - SECURE BATTENS WITH TWO (2) 3/4" CARBON STEEL BANDS TO HOLD BATTENS IN PLACE, NO NAILS SHALL BE DRIVEN INTO PALM. HEIGHT OF BATTENS SHALL BE LOCATED PROPORTIONATELY TO THE HEIGHT OF THE PALM FOR ADEQUATE BRACING.
 - THREE (3) 8'L 2X4 SUPPORTS, NAIL, DRILL AND NAIL IF NECESSARY TO BATTENS AND 2" X 4" STAKES. PALMS SHALL BE PLUMB VERTICALLY UNLESS OTHERWISE NOTED.
 - PROVIDE FLAGGING AT MIDPOINT AND BASE OF SUPPORTS.
 - TOP-MOST ROOT SHALL BE VISIBLE AT THE SURFACE OF THE ROOTBALL, SLIGHTLY ABOVE SURROUNDING GRADE.
 - 3" SPECIFIED MULCH
 - FINISH GRADE
 - 24" (MIN.) 2X4 P.T. WOOD STAKES, NAIL TO SUPPORT POLES
 - PREPARED PLANTING SOIL AS SPECIFIED
 - CONTRACTOR SHALL PAINT ALL STAKES BENJAMIN MOORE, EXTERIOR GRADE PAINT FLAT MATTE BLACK, 2 COATS.
 - ALTERNATE PALM ANCHORING SYSTEMS MAY BE SUBSTITUTED UPON APPROVAL BY OWNER OR OWNER'S REPRESENTATIVE AFTER REVIEW BY LANDSCAPE ARCHITECT
- ALTERNATE SYSTEMS:
*BROOKS TREE BRACE SYSTEM
*ARBOR TIE TREE BRACING

- NOTES:
- FIND POINT WHERE TOPMOST ROOT EMERGES FROM TRUNK WITHIN 2" OF SURFACE. CLEAR EXCESS SOIL IF NECESSARY.
 - TOP 10% OF SHRUB AND GROUNDCOVER ROOTBALLS TO BE PLANTED ABOVE THE LANDSCAPE GRADE. DO NOT COVER EXPOSED 10% ON SIDES WITH SOIL.
 - PRUNE ALL LIKE SHRUBS WITHIN A PLANTED MASS TO ACHIEVE A UNIFORM MASS HEIGHT.
 - 3" MINIMUM MULCH AS SPECIFIED - DO NOT COVER ENTIRE SHRUB ROOTBALL OR CREATE "WATER RINGS" ONLY COVER SIDES OF ROOTBALL WITH MULCH
 - EXCAVATE ENTIRE BED SPECIFIED FOR GROUNDCOVER BED.
 - FINISHED GRADE (SEE GRADING PLAN).
 - PREPARED PLANTING SOIL AS SPECIFIED. NOTE: WHEN GROUND-COVERS AND SHRUBS USED IN MASSES, ENTIRE BED TO BE AMENDED WITH PLANTING SOIL MIX AS SPECIFIED.
 - SCARIFY ROOTBALL SIDES AND BOTTOM.

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MATTHEW VINCENT WSNEWSKI LAG667406 ON DATE ADJACENT TO SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

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KIPPA PROJECT 140596005		DATE: 06/30/2020	CHECKED BY: NW
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LANDSCAPE DETAILS		DRAWN BY: CF	CITY OF NORTH MIAMI
KIPP SCHOOL PREPARED FOR SUMMIT CONSTRUCTION MANAGEMENT GROUP, LLC		FLORIDA	
SHEET NUMBER L-350		REVISIONS	
		No.	DATE

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GENERAL LANDSCAPE SPECIFICATIONS AND NOTES

A. SCOPE OF WORK

1. THE WORK CONSISTS OF: FURNISHING ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, TRANSPORTATION, AND ANY OTHER APPURTENANCES NECESSARY FOR THE COMPLETION OF THIS PROJECT AS SHOWN ON THE DRAWINGS, AS INCLUDED IN THE PLANT LIST, AND AS HEREIN SPECIFIED.

2. WORK SHALL INCLUDE MAINTENANCE AND WATERING OF ALL CONTRACT PLANTING AREAS UNTIL CERTIFICATION OF ACCEPTABILITY BY THE OWNER.

B. PROTECTION OF EXISTING STRUCTURES

ALL EXISTING BUILDINGS, WALKS, WALLS, PAVING, PIPING, OTHER SITE CONSTRUCTION ITEMS, AND PLANTING ALREADY COMPLETED OR ESTABLISHED SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR UNLESS OTHERWISE SPECIFIED. ALL DAMAGE RESULTING FROM NEGLIGENCE SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER, AT NO COST TO THE OWNER.

C. PROTECTION OF EXISTING PLANT MATERIALS OUTSIDE LIMIT OF WORK

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UNAUTHORIZED CUTTING OR DAMAGE TO TREES AND SHRUBS EXISTING OR OTHERWISE CAUSED BY CARELESS EQUIPMENT OPERATION, MATERIAL STOCKPILING, ETC. THIS SHALL INCLUDE COMPACTION BY DRIVING OR PARKING INSIDE THE DRIP-LINE AND SPILLING OIL, GASOLINE, OR OTHER DELETERIOUS MATERIALS WITHIN THE DRIP-LINE. NO MATERIALS SHALL BE BURNED WHERE HEAT WILL DAMAGE ANY PLANT. EXISTING TREES KILLED OR DAMAGED SO THAT THEY ARE MISSHAPEN AND/OR UNSIGHTLY SHALL BE REPLACED AT THE COST TO THE CONTRACTOR OF ONE HUNDRED DOLLARS (\$100) PER CALIPER INCH ON AN ESCALATING SCALE WHICH ADDS AN ADDITIONAL TWENTY (20) PERCENT PER INCH OVER FOUR (4) INCHES CALIPER AS FIRED AND AGREED LIQUIDATED DAMAGES. CALIPER SHALL BE MEASURED SIX (6) INCHES ABOVE GROUND LEVEL FOR TREES UP TO AND INCLUDING FOUR (4) INCHES IN CALIPER AND TWELVE (12) INCHES ABOVE GROUND LEVEL FOR TREES OVER FOUR (4) INCHES IN CALIPER.

D. MATERIALS

1. GENERAL

MATERIALS LISTED BELOW SHALL BE SUBMITTED FOR APPROVAL. UPON SUBMITTALS APPROVAL, DELIVERY OF MATERIALS MAY COMMENCE.

Table with columns: MATERIAL, SUBMITTAL, PRODUCT DATA, TEST RESULTS. Rows include MULCH, TOPSOIL MIX, PLANTS, FERTILIZER, INNOCULANT, HERBICIDE.

2. PLANT MATERIALS

A. PLANT SPECIES AND SIZE SHALL CONFORM TO THOSE INDICATED ON THE DRAWINGS. NOMENCLATURE SHALL CONFORM TO STANDARDIZED PLANT NAMES, 1942 EDITION. ALL NURSERY STOCK SHALL BE IN ACCORDANCE WITH GRADES AND STANDARDS FOR NURSERY PLANTS, LATEST EDITION, PUBLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES. ALL PLANTS SHALL BE FLORIDA GRADE NO. 1 OR BETTER AS DETERMINED BY THE FLORIDA DIVISION OF PLANT INDUSTRY. ALL PLANTS SHALL BE HEALTHY, VIGOROUS, SOUND, WELL-BRANCHED, AND FREE OF DISEASE AND INSECTS, INSECT EGGS AND LARVAE AND SHALL HAVE ADEQUATE ROOT SYSTEMS. TREES FOR PLANTING IN ROWS SHALL BE UNIFORM IN SIZE AND SHAPE. ALL MATERIALS SHALL BE SUBJECT TO APPROVAL BY THE OWNER. WHERE ANY REQUIREMENTS ARE OMITTED FROM THE PLANT LIST, THE PLANTS FURNISHED SHALL BE NORMAL FOR THE VARIETY. PLANTS SHALL BE PRUNED PRIOR TO DELIVERY ONLY WITH APPROVAL FROM OWNER OR OWNER'S REPRESENTATIVE. NO SUBSTITUTIONS SHALL BE MADE WITHOUT WRITTEN PERMISSION FROM THE OWNER'S REPRESENTATIVE.

B. MEASUREMENTS: THE HEIGHT AND/OR WIDTH OF TREES SHALL BE MEASURED FROM THE GROUND OR ACROSS THE NORMAL SPREAD OF BRANCHES WITH THE PLANTS IN THEIR NORMAL POSITION. THIS MEASUREMENT SHALL NOT INCLUDE THE IMMEDIATE TERMINAL GROWTH. PLANTS LARGER IN SIZE THAN THOSE SPECIFIED IN THE PLANT LIST MAY BE USED IF APPROVED BY THE OWNER. IF THE USE OF LARGER PLANTS IS APPROVED, THE BALL OF EARTH OR SPREAD OF ROOTS SHALL BE INCREASED IN PROPORTION TO THE SIZE OF THE PLANT.

C. INSPECTION: PLANTS SHALL BE SUBJECT TO INSPECTION AND APPROVAL AT THE PLACE OF GROWTH, OR UPON DELIVERY TO THE SITE, AS DETERMINED BY THE OWNER, FOR QUALITY, SIZE, AND VARIETY; SUCH APPROVAL SHALL NOT IMPAIR THE RIGHT OF INSPECTION AND REJECTION AT THE SITE DURING PROGRESS OF THE WORK OR AFTER COMPLETION FOR SIZE AND CONDITION OF ROOT BALLS OR ROOTS, LATENT DEFECTS OR INJURIES. REJECTED PLANTS SHALL BE REMOVED IMMEDIATELY FROM THE SITE. NOTICE REQUESTING INSPECTION SHALL BE SUBMITTED IN WRITING BY THE CONTRACTOR AT LEAST ONE (1) WEEK PRIOR TO ANTICIPATED DATE.

E. SOIL MIXTURE (PLANTING MEDIUM, PLANTING MIX, TOPSOIL MIX)

- 1. SOIL MIXTURE (PLANTING MEDIUM FOR PLANT PITS) SHALL CONSIST OF 70% COARSE SAND AND 30% FLORIDA PEAT, AS DESCRIBED BELOW.
2. TOPSOIL FOR USE IN PREPARING SOIL MIXTURE FOR BACKFILLING PLANT PITS SHALL BE FERTILE, FRIABLE, AND OF A LOAMY CHARACTER...
3. SAND SHALL BE COARSE, CLEAN, WELL-DRAINING, NATIVE SAND...
4. CONTRACTOR TO SUBMIT SAMPLES OF SOIL MIXTURE FOR OWNER'S REPRESENTATIVE APPROVAL...
5. CONTRACTOR SHALL PROVIDE PH TEST RESULT FOR ALL MIX COMPONENTS.
6. CONTRACTOR SHALL PROVIDE PENETROMETER ON-SITE AT ALL TIMES FOR COMPACTION INSPECTION...
7. PENETROMETER CRITERIA / SPECIFICATION SHALL RANGE FROM APPROX. 75 PSI TO LESS THAN 300 PSI OR AS DETERMINE BY LANDSCAPE ARCHITECT.
8. SOIL SHALL BE SUPPLIED BY ATLAS PEAT & SOIL INC. 9621 STATE RD, BOYNTON BEACH, FLORIDA 33472. PHONE: 561-734-7300.
9. FINAL MIX SHALL BE TESTED TO HAVE A SATURATED WEIGHT OF NO MORE THAN 110 POUNDER PER CUBIC FOOT WHEN COMPACTED TO 85% STANDARDS PROCTOR.

F. WATER

WATER NECESSARY FOR PLANTING AND MAINTENANCE SHALL BE OF SATISFACTORY QUALITY TO SUSTAIN AN ADEQUATE PLANT GROWTH AND SHALL NOT CONTAIN HARMFUL, NATURAL OR MAN-MADE ELEMENTS DETRIMENTAL TO PLANTS. WATER MEETING THE ABOVE STANDARD SHALL BE OBTAINED ON THE SITE FROM THE OWNER, IF AVAILABLE, AND THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE ARRANGEMENTS FOR ITS USE BY HIS TANKS, HOSES, SPRINKLERS, ETC. IF SUCH WATER IS NOT AVAILABLE AT THE SITE, THE CONTRACTOR SHALL PROVIDE SATISFACTORY WATER FROM SOURCES OFF THE SITE AT NO ADDITIONAL COST TO THE OWNER.

*WATERING/IRRIGATION RESTRICTIONS MAY APPLY - REFER TO PROPERTY'S JURISDICTIONAL AUTHORITY.

G. FERTILIZER

CONTRACTOR SHALL PROVIDE FERTILIZER APPLICATION SCHEDULE TO OWNER, AS APPLICABLE TO SOIL TYPE, PLANT INSTALLATION TYPE, AND SITE'S PROPOSED USE. SUGGESTED FERTILIZER TYPES SHALL BE ORGANIC OR OTHERWISE NATURALLY-DERIVED.

*FERTILIZER RESTRICTIONS MAY APPLY - REFER TO PROPERTY'S JURISDICTIONAL AUTHORITY.

H. MULCH

MULCH MATERIAL SHALL BE MOISTENED AT THE TIME OF APPLICATION TO PREVENT WIND DISPLACEMENT, AND APPLIED AT A MINIMUM DEPTH OF 3 INCHES. CLEAR MULCH FROM EACH PLANT'S CROWN (BASE), TYPE OF MATERIAL: *FLORIMULCH® OR SHREDDED, STERILE EUCALYPTUS MULCH.

I. DIGGING AND HANDLING

1. PROTECT ROOTS OR ROOT BALLS OF PLANTS AT ALL TIMES FROM SUN, DRYING WINDS, WATER AND FREEZING, AS NECESSARY UNTIL PLANTING. PLANT MATERIALS SHALL BE ADEQUATELY PACKED TO PREVENT DAMAGE DURING TRANSIT. TREES TRANSPORTED MORE THAN TEN (10) MILES OR WHICH ARE NOT PLANTED WITHIN THREE (3) DAYS OF DELIVERY TO SITE SHALL BE SPRAYED WITH AN ANTITRANSPIRANT PRODUCT (*WILT-PRUF® OR EQUAL) TO MINIMIZE TRANSPIRATIONAL WATER LOSS.

2. BALLED AND BURLAPPED PLANTS (B&B) SHALL BE DUG WITH FIRM, NATURAL BALLS OF SOIL OF SUFFICIENT SIZE TO ENCOMPASS THE FIBROUS AND FEEDING ROOTS OF THE PLANTS. NO PLANTS MOVED WITH A ROOT BALL SHALL BE PLANTED IF THE BALL IS CRACKED OR BROKEN. PLANTS BALLED AND BURLAPPED OR CONTAINER GROWN SHALL NOT BE HANDLED BY STEMS.

3. PLANTS MARKED 'BR' IN THE PLANT LIST SHALL BE DUG WITH BARE ROOTS, COMPLYING WITH FLORIDA GRADES AND STANDARDS FOR NURSERY PLANTS, CURRENT EDITION. CARE SHALL BE EXERCISED THAT THE ROOTS DO NOT DRY OUT DURING TRANSPORTATION AND PRIOR TO PLANTING.

4. PROTECTION OF PALMS (IF APPLICABLE): ONLY A MINIMUM OF FRONDS SHALL BE REMOVED FROM THE CROWN OF THE PALM TREES TO FACILITATE MOVING AND HANDLING. CLEAR TRUNK (CT) SHALL BE AS SPECIFIED AFTER THE MINIMUM OF FRONDS HAVE BEEN REMOVED. ALL PALMS SHALL BE BRACED PER PALM PLANTING DETAIL.

5. EXCAVATION OF TREE PITS SHALL BE PERFORMED USING EXTREME CARE TO AVOID DAMAGE TO SURFACE AND SUBSURFACE ELEMENTS SUCH AS UTILITIES OR HARDSCAPE ELEMENTS, FOOTERS AND PREPARED SUB-BASES.

J. CONTAINER GROWN STOCK

1. ALL CONTAINER GROWN MATERIAL SHALL BE HEALTHY, VIGOROUS, WELL-ROOTED PLANTS ESTABLISHED IN THE CONTAINER IN WHICH THEY ARE SOLD. THE PLANTS SHALL HAVE TOPS WHICH ARE OF GOOD QUALITY AND ARE IN A HEALTHY GROWING CONDITION, FLORIDA #1 OR BETTER.

2. AN ESTABLISHED CONTAINER GROWN PLANT SHALL BE TRANSPLANTED INTO A CONTAINER AND GROWN IN THAT CONTAINER SUFFICIENTLY LONG FOR THE NEW FIBROUS ROOTS TO HAVE DEVELOPED SO THAT THE ROOT MASS WILL RETAIN ITS SHAPE AND HOLD TOGETHER WHEN REMOVED FROM THE CONTAINER. CONTAINER GROWN STOCK SHALL NOT BE HANDLED BY THEIR STEMS.

3. PLANT ROOTS BOUND IN CONTAINERS ARE NOT ACCEPTABLE.

4. SUBSTITUTION OF NON-CONTAINER GROWN MATERIAL FOR MATERIAL EXPLICITLY SPECIFIED TO BE CONTAINER GROWN WILL NOT BE PERMITTED WITHOUT WRITTEN APPROVAL IS OBTAINED FROM THE OWNER OR OWNER'S REPRESENTATIVE.

K. COLLECTED STOCK

WHEN THE USE OF COLLECTED STOCK IS PERMITTED AS INDICATED BY THE OWNER OR OWNER'S REPRESENTATIVE, THE MINIMUM SIZES OF ROOTBALLS SHALL BE EQUAL TO THAT SPECIFIED FOR THE NEXT LARGER SIZE OF NURSERY GROWN STOCK OF THE SAME VARIETY.

L. NATIVE STOCK

PLANTS COLLECTED FROM WILD OR NATIVE STANDS SHALL BE CONSIDERED NURSERY GROWN WHEN THEY HAVE BEEN SUCCESSFULLY RE-ESTABLISHED IN A NURSERY ROW AND GROWN UNDER REGULAR NURSERY CULTURAL PRACTICES FOR A MINIMUM OF TWO (2) GROWING SEASONS AND HAVE ATTAINED ADEQUATE ROOT AND TOP GROWTH TO INDICATE FULL RECOVERY FROM TRANSPANTING INTO THE NURSERY ROW.

M. MATERIALS LIST

QUANTITIES NECESSARY TO COMPLETE THE WORK ON THE DRAWINGS SHALL BE FURNISHED BY THE CONTRACTOR. QUANTITY ESTIMATES HAVE BEEN MADE CAREFULLY, BUT THE LANDSCAPE ARCHITECT OR OWNER ASSUMES NO LIABILITY FOR OMISSIONS OR ERRORS. SHOULD A DISCREPANCY OCCUR BETWEEN THE PLANS AND THE PLANT LIST QUANTITY, THE LANDSCAPE ARCHITECT SHALL BE NOTIFIED FOR CLARIFICATION PRIOR TO BIDDING OR INSTALLATION. ALL DIMENSIONS AND/OR SIZES SPECIFIED SHALL BE THE MINIMUM ACCEPTABLE SIZE.

N. FINE GRADING

- 1. FINE GRADING UNDER THIS CONTRACT SHALL CONSIST OF FINAL FINISHED GRADING OF LAWN AND PLANTING AREAS THAT HAVE BEEN ROUGH GRADED BY OTHERS, BERMING AS SHOWN ON THE DRAWINGS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, UNLESS OTHERWISE NOTED.
2. THE CONTRACTOR SHALL FINE GRADE THE LAWN AND PLANTING AREAS TO BRING THE ROUGH GRADE UP TO FINAL FINISHED GRADE ALLOWING FOR THICKNESS OF SOD AND/OR MULCH DEPTH. THIS CONTRACTOR SHALL FINE GRADE BY HAND AND/OR WITH ALL EQUIPMENT NECESSARY INCLUDING A GRADING TRACTOR WITH FRONT-END LOADER FOR TRANSPORTING SOIL WITHIN THE SITE.
3. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED FOR POSITIVE DRAINAGE TO SURFACE/SUBSURFACE STORM DRAIN SYSTEMS. AREAS ADJACENT TO BUILDINGS SHALL SLOPE AWAY FROM THE BUILDINGS. REFER TO CIVIL ENGINEER'S PLANS FOR FINAL GRADES.

O. PLANTING PROCEDURES

- 1. CLEANING UP BEFORE COMMENCING WORK: THE CONTRACTOR SHALL CLEAN WORK AND SURROUNDING AREAS OF ALL RUBBISH OR OBJECTIONABLE MATTER. ALL MORTAR, CEMENT, AND TOXIC MATERIAL SHALL BE REMOVED FROM THE SURFACE OF ALL PLANT BEDS. THESE MATERIALS SHALL NOT BE MIXED WITH THE SOIL. SHOULD THE CONTRACTOR FIND SUCH SOIL CONDITIONS BENEATH THE SOIL WHICH WILL IN ANY WAY ADVERSELY AFFECT THE PLANT GROWTH, HE SHALL IMMEDIATELY CALL IT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE. FAILURE TO DO SO BEFORE PLANTING SHALL MAKE THE CORRECTIVE MEASURES THE RESPONSIBILITY OF THE CONTRACTOR.
2. VERIFY LOCATIONS OF ALL UTILITIES, CONDUITS, SUPPLY LINES AND CABLES, INCLUDING BUT NOT LIMITED TO: ELECTRIC, GAS (LINES AND TANKS), WATER, SANITARY SEWER, STORMWATER SYSTEMS, CABLE, AND TELEPHONE. PROPERLY MAINTAIN AND PROTECT EXISTING UTILITIES. CALL NATIONAL ONE CALL - 811 - TO LOCATE UTILITIES.

3. SUBGRADE EXCAVATION: CONTRACTOR IS RESPONSIBLE TO REMOVE ALL EXISTING AND IMPORTED LIMESTONE AND LIMESTONE SUB-BASE FROM ALL LANDSCAPE PLANTING AREAS TO A MINIMUM DEPTH OF 3". CONTRACTOR IS RESPONSIBLE TO BACKFILL THESE PLANTING AREAS TO ROUGH FINISHED GRADE WITH CLEAN TOPSOIL FROM AN ON-SITE SOURCE OR AN IMPORTED SOURCE. IF LIMESTONE OR OTHER ADVERSE CONDITIONS OCCUR IN PLANTED AREAS AFTER 3" DEEP EXCAVATION BY THE CONTRACTOR, AND ADEQUATE PERCOLATION CAN NOT BE ACHIEVED, CONTRACTOR SHALL UTILIZE PLANTING DETAIL THAT ADDRESSES POOR DRAINAGE.

4. FURNISH NURSERY'S CERTIFICATE OF COMPLIANCE WITH ALL REQUIREMENTS AS HEREIN SPECIFIED AND REQUIRED. INSPECT AND SELECT PLANT MATERIALS BEFORE PLANTS ARE DUG AT NURSERY OR GROWING SITE.

5. GENERAL: COMPLY WITH APPLICABLE FEDERAL, STATE, COUNTY, AND LOCAL REGULATIONS GOVERNING LANDSCAPE MATERIALS AND WORK. CONFORM TO ACCEPTED HORTICULTURAL PRACTICES AS USED IN THE TRADE. UPON ARRIVAL AT THE SITE, PLANTS SHALL BE THOROUGHLY WATERED AND PROPERLY MAINTAINED UNTIL PLANTED. PLANTS STORED ON-SITE SHALL NOT REMAIN UNPLANTED FOR A PERIOD EXCEEDING TWENTY-FOUR (24) HOURS. AT ALL TIMES, METHODS CUSTOMARY IN GOOD HORTICULTURAL PRACTICES SHALL BE EXERCISED.

6. THE WORK SHALL BE COORDINATED WITH OTHER TRADES TO PREVENT CONFLICTS. COORDINATE PLANTING WITH IRRIGATION WORK TO ASSURE AVAILABILITY OF WATER AND PROPER LOCATION OF IRRIGATION APPURTENANCES AND PLANTS.

7. ALL PLANTING PITS SHALL BE EXCAVATED TO SIZE AND DEPTH IN ACCORDANCE WITH THE USA STANDARD FOR NURSERY STOCK 260.1, UNLESS SHOWN OTHERWISE ON THE DRAWINGS, AND BACKFILLED WITH THE PREPARED PLANTING SOIL MIXTURE AS SPECIFIED IN SECTION E. TEST ALL TREE PITS WITH WATER BEFORE PLANTING TO ASSURE PROPER DRAINAGE PERCOLATION IS AVAILABLE. NO ALLOWANCE WILL BE MADE FOR LOST PLANTS DUE TO IMPROPER PERCOLATION. IF POOR PERCOLATION EXISTS, UTILIZE "POOR DRAINAGE CONDITION" PLANTING DETAIL. TREES SHALL BE SET PLUMB AND HELD IN POSITION UNTIL THE PLANTING MIXTURE HAS BEEN FLUSHED INTO PLACE WITH A SLOW, FULL HOSE STREAM. ALL PLANTING SHALL BE PERFORMED BY PERSONNEL FAMILIAR WITH PLANTING PROCEDURES AND UNDER THE SUPERVISION OF A QUALIFIED LANDSCAPE FOREMAN. PROPER "JETTING IN" SHALL BE ASSURED TO ELIMINATE AIR POCKETS AROUND THE ROOTS. "JET STOCK" OR EQUAL IS RECOMMENDED.

8. TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO BUILDINGS AND BUILDING STRUCTURES WHILE INSTALLING TREES.

9. SOIL MIXTURE SHALL BE AS SPECIFIED IN SECTION E OF THESE SPECIFICATIONS.

10. TREES AND SHRUBS SHALL BE SET STRAIGHT AT AN ELEVATION THAT, AFTER SETTLEMENT, THE PLANT CROWN WILL STAND ONE (1) TO TWO (2) INCHES ABOVE GRADE. EACH PLANT SHALL BE SET IN THE CENTER OF THE PIT. PLANTING SOIL MIXTURE SHALL BE BACKFILLED, THOROUGHLY TAMPED AROUND THE BALL, AND SETTLED BY WATER (AFER TAMPING).

11. AMEND PINE AND OAK PLANT PITS WITH ECTOMYCORRHIZAL SOIL APPLICATION PER MANUFACTURER'S RECOMMENDATION. ALL OTHER PLANT PITS SHALL BE AMENDED WITH ENDOMYCORRHIZAL SOIL APPLICATION PER MANUFACTURER'S RECOMMENDATION. PROVIDE PRODUCT INFORMATION SUBMITTAL PRIOR TO INOCULATION.

12. FILL HOLE WITH SOIL MIXTURE, MAKING CERTAIN ALL SOIL IS SATURATED. TO DO THIS, FILL HOLE WITH WATER AND ALLOW TO SOAK MINIMUM TWENTY (20) MINUTES, STIRRING IF NECESSARY TO GET SOIL THOROUGHLY WET. PACK LIGHTLY WITH FEET. ADD MORE WET SOIL MIXTURE. DO NOT COVER TOP OF BALL WITH SOIL MIXTURE. ONLY WITH MULCH. ALL BURLAP, ROPE, WIRES, BASKETS, ETC., SHALL BE REMOVED FROM THE SIDES AND TOPS OF BALLS, BUT NO BURLAP SHALL BE PULLED FROM UNDERNEATH.

13. PRUNING: TREES SHALL BE PRUNED, AT THE DIRECTION OF THE OWNER OR OWNER'S REPRESENTATIVE, TO PRESERVE THE NATURAL CHARACTER OF THE PLANT. ALL SOFT WOOD OR SUCKER GROWTH AND ALL BROKEN OR BADLY DAMAGED BRANCHES SHALL BE REMOVED WITH A CLEAN CUT. ALL PRUNING TO BE PERFORMED BY LICENSED ARBORIST, IN ACCORDANCE WITH ANSI A-300.

14. SHRUBS AND GROUND COVER PLANTS SHALL BE EVENLY SPACED IN ACCORDANCE WITH THE DRAWINGS AND AS INDICATED ON THE PLANT LIST. CULTIVATE ALL PLANTING AREAS TO A MINIMUM DEPTH OF 6"; REMOVE AND DISPOSE ALL DEBRIS. MIX TOP 4" TO ACHIEVE SOIL MIXTURE AS SPECIFIED IN SECTION E. THOROUGHLY WATER ALL PLANTS AFTER INSTALLATION.

15. TREE GUYING AND BRACING SHALL BE INSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH THE PLANS TO INSURE STABILITY AND MAINTAIN TREES IN AN UPRIGHT POSITION. IF THE CONTRACTOR AND OWNER DECIDE TO WAIVE THE TREE GUYING AND BRACING, THE OWNER SHALL NOTIFY THE LANDSCAPE ARCHITECT IN WRITING AND AGREE TO INDEMNIFY AND HOLD HARMLESS THE LANDSCAPE ARCHITECT IN THE EVENT UNSUPPORTED TREES PLANTED UNDER THIS CONTRACT FALL AND DAMAGE PERSON OR PROPERTY.

16. MULCHING: PROVIDE A THREE INCH (MINIMUM) LAYER OF SPECIFIED MULCH OVER THE ENTIRE AREA OF EACH SHRUB BED, GROUND COVER, VINE BED, AND TREE PIT PLANTED UNDER THIS CONTRACT.

17. HERBICIDE WEED CONTROL: ALL PLANT BEDS SHALL BE KEPT FREE OF NOXIOUS WEEDS UNTIL FINAL ACCEPTANCE OF WORK. IF DIRECTED BY THE OWNER, "ROUND-UP" SHALL BE APPLIED FOR WEED CONTROL BY QUALIFIED PERSONNEL TO ALL PLANTING AREAS IN SPOT APPLICATIONS PER MANUFACTURER'S PRECAUTIONS AND SPECIFICATIONS. PRIOR TO FINAL INSPECTION, TREAT ALL PLANTING BEDS WITH AN APPROVED, PRE-EMERGENT HERBICIDE AT AN APPLICATION RATE RECOMMENDED BY THE MANUFACTURER, (AS ALLOWED BY JURISDICTIONAL AUTHORITY).

P. LAWN SODDING

- 1. THE WORK CONSISTS OF LAWN BED PREPARATION, SOIL PREPARATION, AND SODDING COMPLETE, IN STRICT ACCORDANCE WITH THE SPECIFICATIONS AND THE APPLICABLE DRAWINGS TO PRODUCE A TURF GRASS LAWN ACCEPTABLE TO THE OWNER.
2. LAWN BED PREPARATION: ALL AREAS THAT ARE TO BE SODDED SHALL BE CLEARED OF ANY ROUGH GRASS, WEEDS, AND DEBRIS, AND THE GROUND BROUGHT TO AN EVEN GRADE. THE ENTIRE SURFACE SHALL BE ROLLED WITH A ROLLER WEIGHING NOT MORE THAN ONE-HUNDRED (100) POUNDS PER FOOT OF WIDTH. DURING THE ROLLING, ALL DEPRESSIONS CAUSED BY SETTLEMENT SHALL BE FILLED WITH ADDITIONAL SOIL, AND THE SURFACE SHALL BE REGRADED AND ROLLED UNTIL PRESENTING A SMOOTH AND EVEN FINISH TO THE REQUIRED GRADE.
3. SOIL PREPARATION: PREPARE LOOSE BED FOUR (4) INCHES DEEP. HAND RAKE UNTIL ALL BUMPS AND DEPRESSIONS ARE REMOVED. WET PREPARED AREA THOROUGHLY.
4. SODDING
A. THE CONTRACTOR SHALL SOD ALL AREAS THAT ARE NOT PAVED OR PLANTED AS DESIGNATED ON THE DRAWINGS WITHIN THE CONTRACT LIMITS, UNLESS SPECIFICALLY NOTED OTHERWISE.
B. THE SOD SHALL BE CERTIFIED TO MEET FLORIDA STATE PLANT BOARD SPECIFICATIONS, ABSOLUTELY TRUE TO VARIETAL TYPE, AND FREE FROM WEEDS, FUNGUS, INSECTS AND DISEASE OF ANY KIND.
C. SOD PANELS SHALL BE LAID TIGHTLY TOGETHER SO AS TO MAKE A SOLID SODDED LAWN AREA. SOD SHALL BE LAID UNIFORMLY AGAINST THE EDGES OF ALL CURBS AND OTHER HARDSCAPE ELEMENTS. PAVED AND PLANTED AREAS ADJACENT TO BUILDINGS, A 24 INCH STONE MULCH STRIP SHALL BE PROVIDED - REFER TO DETAILS. IMMEDIATELY FOLLOWING SOD LAYING, THE LAWN AREAS SHALL BE ROLLED WITH A LAWN ROLLER CUSTOMARILY USED FOR SUCH PURPOSES, AND THEN THOROUGHLY IRRIGATED. IF, IN THE OPINION OF THE OWNER, TOP-DRESSING IS NECESSARY AFTER ROLLING TO FILL THE VOIDS BETWEEN THE SOD PANELS AND TO EVEN OUT INCONSISTENCIES IN THE SOD, CLEAN SAND, AS APPROVED BY THE OWNER'S REPRESENTATIVE, SHALL BE UNIFORMLY SPREAD OVER THE ENTIRE SURFACE OF THE SOD AND THOROUGHLY WATERED IN. FERTILIZE INSTALLED SOD AS ALLOWED BY PROPERTY'S JURISDICTIONAL AUTHORITY.
5. DURING DELIVERY, PRIOR TO, AND DURING THE PLANTING OF THE LAWN AREAS, THE SOD PANELS SHALL AT ALL TIMES BE PROTECTED FROM EXCESSIVE DRYING AND UNNECESSARY EXPOSURE OF THE ROOTS TO THE SUN. ALL SOD SHALL BE STACKED SO AS NOT TO BE DAMAGED BY SWEATING OR EXCESSIVE HEAT AND MOISTURE.

6. LAWN MAINTENANCE:

A. WITHIN THE CONTRACT LIMITS, THE CONTRACTOR SHALL PRODUCE A DENSE, WELL ESTABLISHED LAWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR AND RE-SODDING OF ALL ERODED, SUNKEN OR BARE SPOTS (LARGER THAN 12"X12") UNTIL CERTIFICATION OF ACCEPTABILITY BY THE OWNER'S REPRESENTATIVE. REPAIRED SODDING SHALL BE ACCOMPLISHED AS IN THE ORIGINAL WORK (INCLUDING REGRADING IF NECESSARY).

B. CONTRACTOR RESPONSIBLE FOR ESTABLISHING AND MAINTAINING SOD LAWN UNTIL ACCEPTANCE BY THE OWNER'S REPRESENTATIVE. PRIOR TO AND UPON ACCEPTANCE, CONTRACTOR TO PROVIDE WATERING/IRRIGATION SCHEDULE TO OWNER. OBSERVE ALL APPLICABLE WATERING RESTRICTIONS AS SET FORTH BY THE PROPERTY'S JURISDICTIONAL AUTHORITY.

Q. CLEANUP

UPON COMPLETION OF ALL PLANTING WORK AND BEFORE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL MATERIAL, EQUIPMENT, AND DEBRIS RESULTING FROM HIS WORK. ALL PAVED AREAS SHALL BE BROOM-CLEANED AND THE SITE LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER'S AUTHORIZED REPRESENTATIVE.

R. PLANT MATERIAL MAINTENANCE

ALL PLANTS AND PLANTING INCLUDED UNDER THIS CONTRACT SHALL BE MAINTAINED BY WATERING, CULTIVATING, SPRAYING, AND ALL OTHER OPERATIONS (SUCH AS RE-STAKING OR REPAIRING GUY SUPPORTS) NECESSARY TO INSURE A HEALTHY PLANT CONDITION BY THE CONTRACTOR UNTIL CERTIFICATION OF ACCEPTABILITY BY THE OWNER'S REPRESENTATIVE. MAINTENANCE AFTER THE CERTIFICATION OF ACCEPTABILITY SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS IN THIS SECTION. CONTRACTORS ARE REQUESTED TO PROVIDE A BID ESTIMATE TO COVER LANDSCAPE AND IRRIGATION MAINTENANCE FOR A PERIOD OF 90 CALENDAR DAYS COMMENCING AFTER ACCEPTANCE.

S. MAINTENANCE (ALTERNATE BID ITEM)

CONTRACTORS ARE REQUESTED TO PROVIDE A BID ESTIMATE FOR MAINTENANCE FOLLOWING THE INITIAL 90-DAY MAINTENANCE PERIOD ON A COST-PER-MONTH BASIS.

T. FINAL INSPECTION AND ACCEPTANCE OF WORK

FINAL INSPECTION AT THE END OF THE WARRANTY PERIOD SHALL BE ON PLANTING, CONSTRUCTION AND ALL OTHER INCIDENTAL WORK PERTAINING TO THIS CONTRACT. ANY REPLACEMENT AT THIS TIME SHALL BE SUBJECT TO THE SAME ONE (1) YEAR WARRANTY OR AS SPECIFIED BY THE LANDSCAPE ARCHITECT OR OWNER (IN WRITING) BEGINNING WITH THE TIME OF REPLACEMENT AND ENDING WITH THE SAME INSPECTION AND ACCEPTANCE HEREIN DESCRIBED.

U. WARRANTY

- 1. THE LIFE AND SATISFACTORY CONDITION OF ALL PLANT MATERIAL INSTALLED BY THE LANDSCAPE CONTRACTOR SHALL BE WARRANTED BY THE CONTRACTOR FOR A MINIMUM OF ONE (1) CALENDAR YEAR COMMENCING AT THE TIME OF CERTIFICATION OF ACCEPTABILITY BY THE OWNER'S REPRESENTATIVE.
2. REPLACEMENT: ANY PLANT NOT FOUND IN A HEALTHY GROWING CONDITION AT THE END OF THE WARRANTY PERIOD SHALL BE REMOVED FROM THE SITE AND REPLACED AS SOON AS WEATHER CONDITIONS PERMIT. ALL REPLACEMENTS SHALL BE PLANTS OF THE SAME KIND AND SIZE AS SPECIFIED IN THE PLANT LIST. THEY SHALL BE FURNISHED PLANTED AND MULCHED AS SPECIFIED UNDER "PLANTING", AT NO ADDITIONAL COST TO THE OWNER.
3. IN THE EVENT THE OWNER DOES NOT CONTRACT WITH THE CONTRACTOR FOR LANDSCAPE (AND IRRIGATION) MAINTENANCE, THE CONTRACTOR IS ENCOURAGED TO VISIT THE PROJECT SITE PERIODICALLY DURING THE ONE YEAR WARRANTY PERIOD TO EVALUATE MAINTENANCE PROCEDURES BEING PERFORMED BY THE OWNER, AND SHALL NOTIFY THE OWNER IN WRITING OF MAINTENANCE PROCEDURES OR CONDITIONS WHICH THREATEN VIGOROUS AND HEALTHY PLANT GROWTH. IT IS SUGGESTED SUCH SITE VISITS SHALL BE CONDUCTED A MINIMUM OF ONCE PER MONTH FOR A PERIOD OF TWELVE (12) MONTHS FROM THE DATE OF ACCEPTANCE.

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MATTHEW VINCENT WISNEWSKI, AUTHORIZED BY MATTHEW VINCENT WISNEWSKI, LA6667406 ON THE DATE ADJACENT TO THE SEAL.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

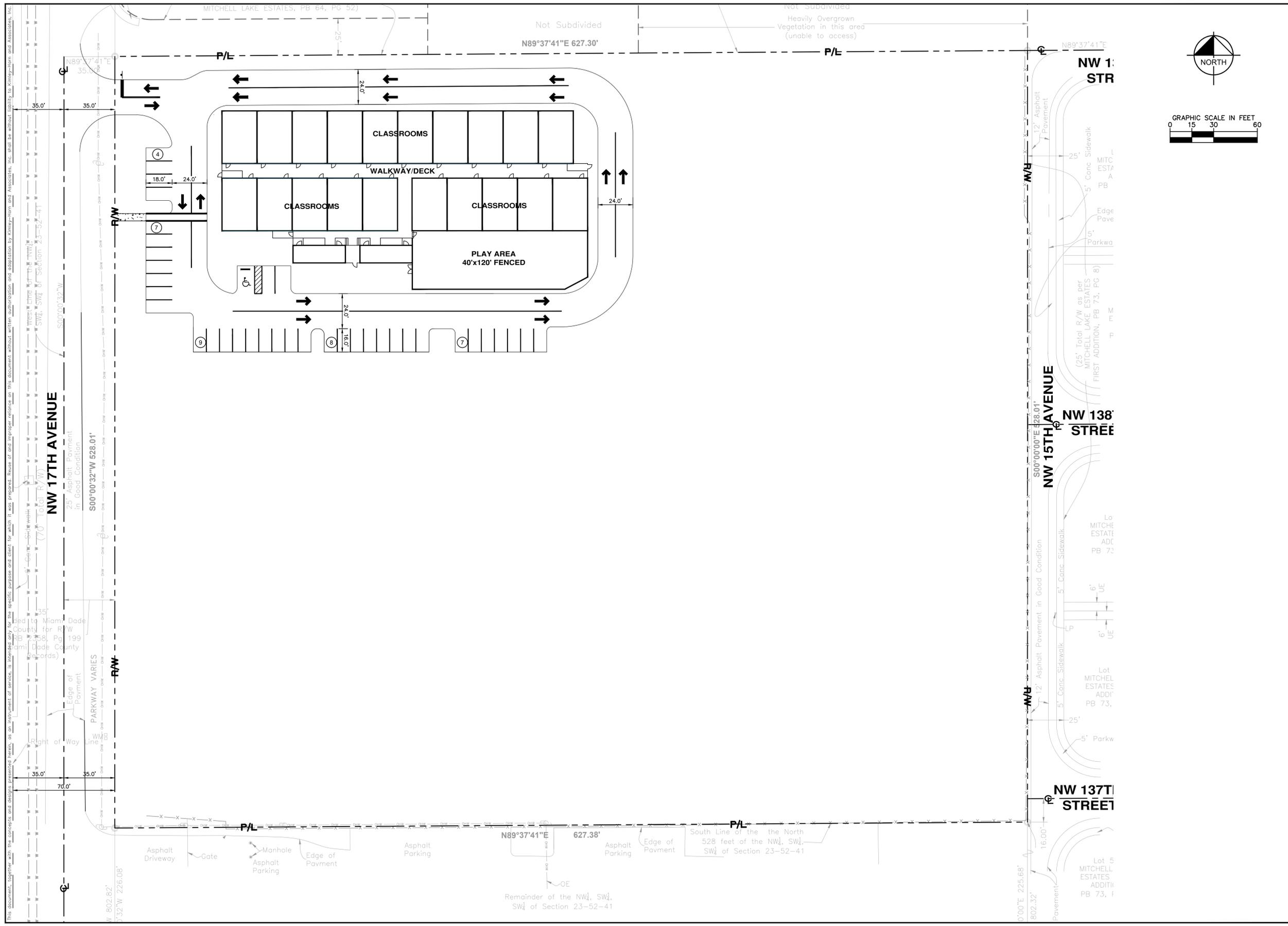
Professional seal for Matthew Vincent Wisnewski, Landscape Architect, No. LA6667406, State of Florida, dated 7/14/2020.

Table with columns: KHA PROJECT, DATE, SCALE, DESIGNED BY, DRAWN BY, CHECKED BY. Values: 140596005, 06/30/2020, AS SHOWN, BJ, CF, NW.

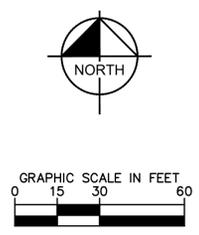
LANDSCAPE SPECIFICATIONS

KIPP SCHOOL PREPARED FOR SUMMIT CONSTRUCTION MANAGEMENT GROUP, LLC CITY OF NORTH MIAMI FLORIDA

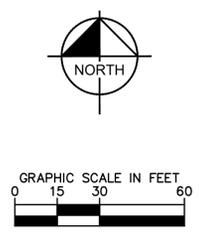
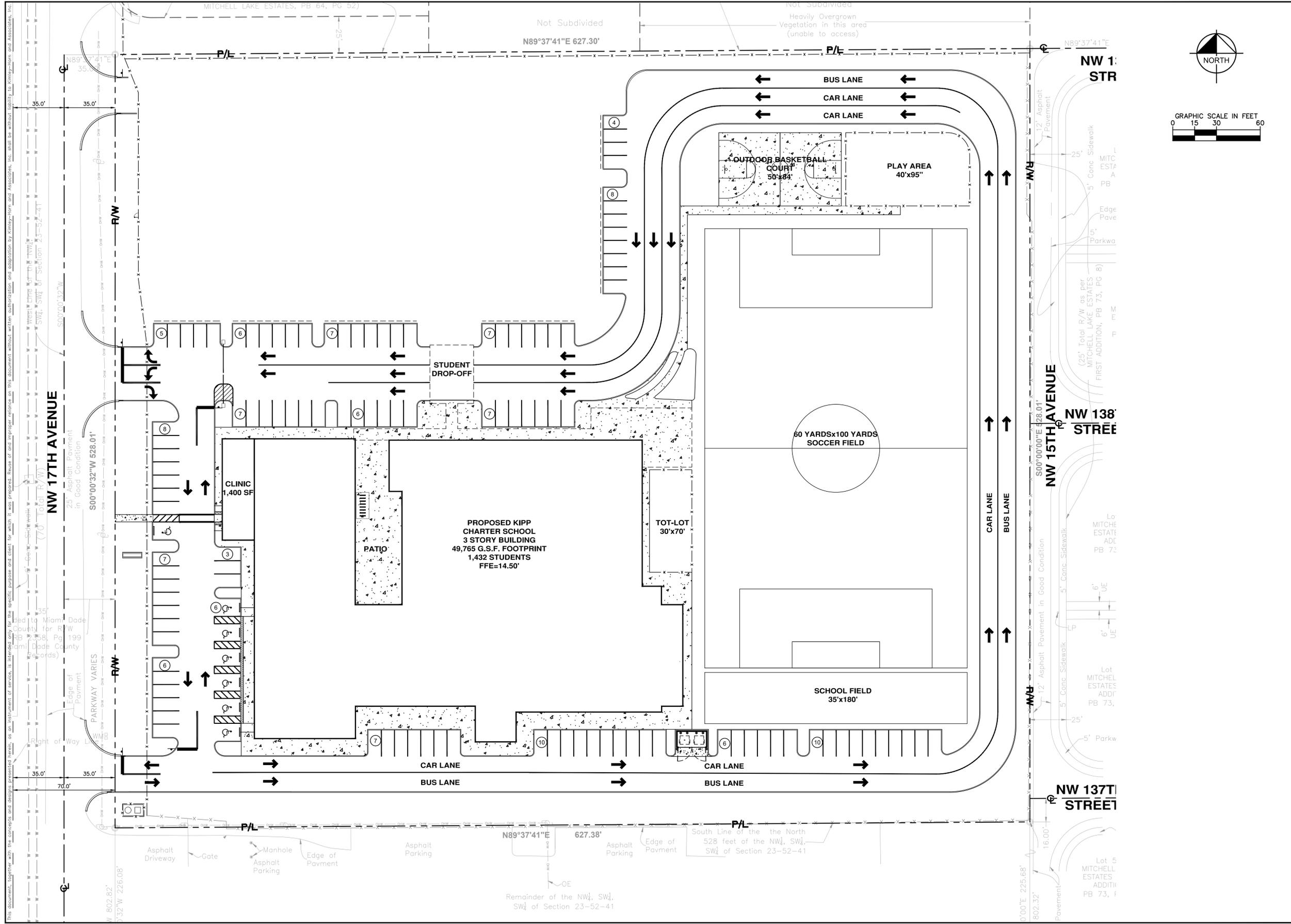
Table with columns: No., REVISIONS, DATE, BY. Contains revision history.



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KIMLEY-HORN 600 NORTH FINE ISLAND ROAD, SUITE 450, PLANTATION, FL 33324 PHONE: 954-535-5100 FAX: 954-739-2247 WWW.KIMLEY-HORN.COM CA 0000696	PROJECT: 140596005 DATE: 06/18/2020 SCALE: AS SHOWN DESIGNED BY: GB DRAWN BY: MB CHECKED BY: GB	PROFESSIONAL SEAL STATE OF FLORIDA No. 74543 LICENSE	REVISIONS	DATE	BY
PHASING PLAN PHASE 1		KIPP SCHOOL PREPARED FOR SUMMIT CONSTRUCTION MANAGEMENT GROUP, LLC CITY OF NORTH MIAMI FLORIDA			
SHEET NUMBER PH-1					



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PHASING PLAN PHASE 2	KIPP SCHOOL PREPARED FOR SUMMIT CONSTRUCTION MANAGEMENT GROUP, LLC <small>CITY OF NORTH MIAMI FLORIDA</small>	
KHA PROJECT: 140596005 DATE: 06/18/2020 SCALE: AS SHOWN DESIGNED BY: GB DRAWN BY: MB CHECKED BY: GB	Kimley»Horn 600 NORTH FINE ISLAND ROAD, SUITE 450, PLANTATION, FL 33324 PHONE: 954-535-5100 FAX: 954-739-2247 WWW.KIMLEY-HORN.COM CA 0000696	No. _____ REVISIONS _____ DATE _____ BY _____
SHEET NUMBER PH-2		

Northward View of Subject Project



Eastward View From NW 17th Avenue



**Northwestward View
From NW 15th Avenue**



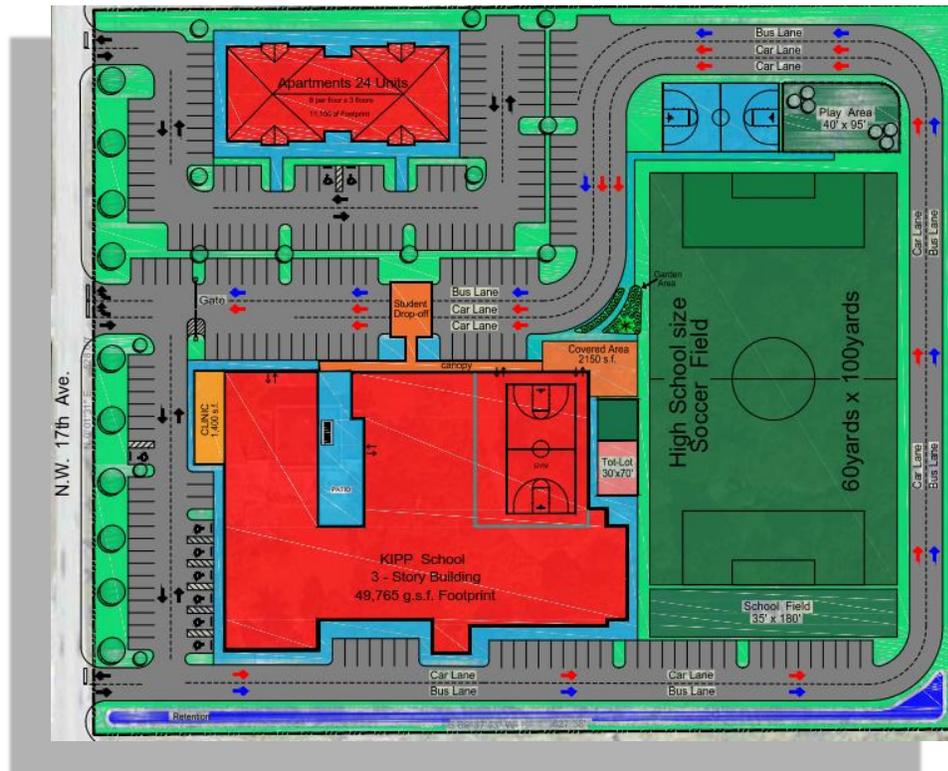
**Southwestward View
From NW 15th Avenue**





Traffic Impact Analysis for Submittal to the City of North Miami

13855 NW 17th Avenue North Miami, Florida



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Updated August 2020
July 2020
140598003

*Traffic Impact Analysis
for Submittal to the
City of North Miami*

13855 NW 17th Avenue
North Miami, Florida

Prepared for:

Summit Construction Management Group, LLC
Orlando, Florida

Prepared by:

Kimley-Horn and Associates, Inc.

Kimley»Horn

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Updated August 2020
July 2020
140598003

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Plantation, Florida 33324
Registry # 00000696

EXECUTIVE SUMMARY

Summit Construction Management Group, LLC is proposing to develop the property located at 13855 NW 17th Avenue in North Miami, Florida. Currently, the site proposed for development is vacant. The proposed development consists of a 1,432-student K-12 school, a 1,400 square foot clinic, and 24 multifamily residential units. The project is expected to be completed and opened by year 2021.

Access to the proposed development will be provided by three (3) driveways along NW 17th Avenue. Two (2) full access driveways will serve the K-12 school and clinic and one (1) full access driveway will serve the multifamily residential units.

A traffic impact analysis was conducted for the project. Trip generation calculations for the proposed redevelopment were performed using rates and/or equations contained in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 10th Edition and student drop-off/pick-up data collected at the Scheck Hillel Community Day School located in Aventura, Florida. The project is expected to result in 638 net new weekday A.M. peak hour trips and 389 net new weekday P.M. peak hour trips.

The results of the intersection capacity analysis indicate that the study intersections are expected to operate at LOS C or better during the A.M. and P.M. peak hours under all analysis conditions.

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APPENDIX C:	Growth Rate Calculations and Committed Developments
APPENDIX D:	Trip Generation and Transit Service Information
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APPENDIX G:	Intersection Capacity Analysis Worksheets

INTRODUCTION

Summit Construction Management Group, LLC is proposing to develop the property located at 13855 NW 17th Avenue in North Miami, Florida. Currently, the site proposed for development is vacant. The proposed development consists of a 1,432-student K-12 school, 1,400 square foot clinic, and 24 multifamily residential units. A project location map is provided as Figure 1. A conceptual site plan is provided in Appendix A. The project is expected to be completed and opened by year 2021.

Access to the proposed development will be provided by a total of three (3) driveways along NW 17th Avenue. Two (2) full access driveways will serve the K-12 school and clinic and one (1) full access driveway will serve the multifamily residential units.

Kimley-Horn and Associates, Inc. has completed this traffic impact analysis for submittal to the City of North Miami. The purpose of the study is to assess the project's impact on the surrounding roadway network. This report summarizes the data collection, project trip generation and distribution, and capacity analysis for the proposed development.

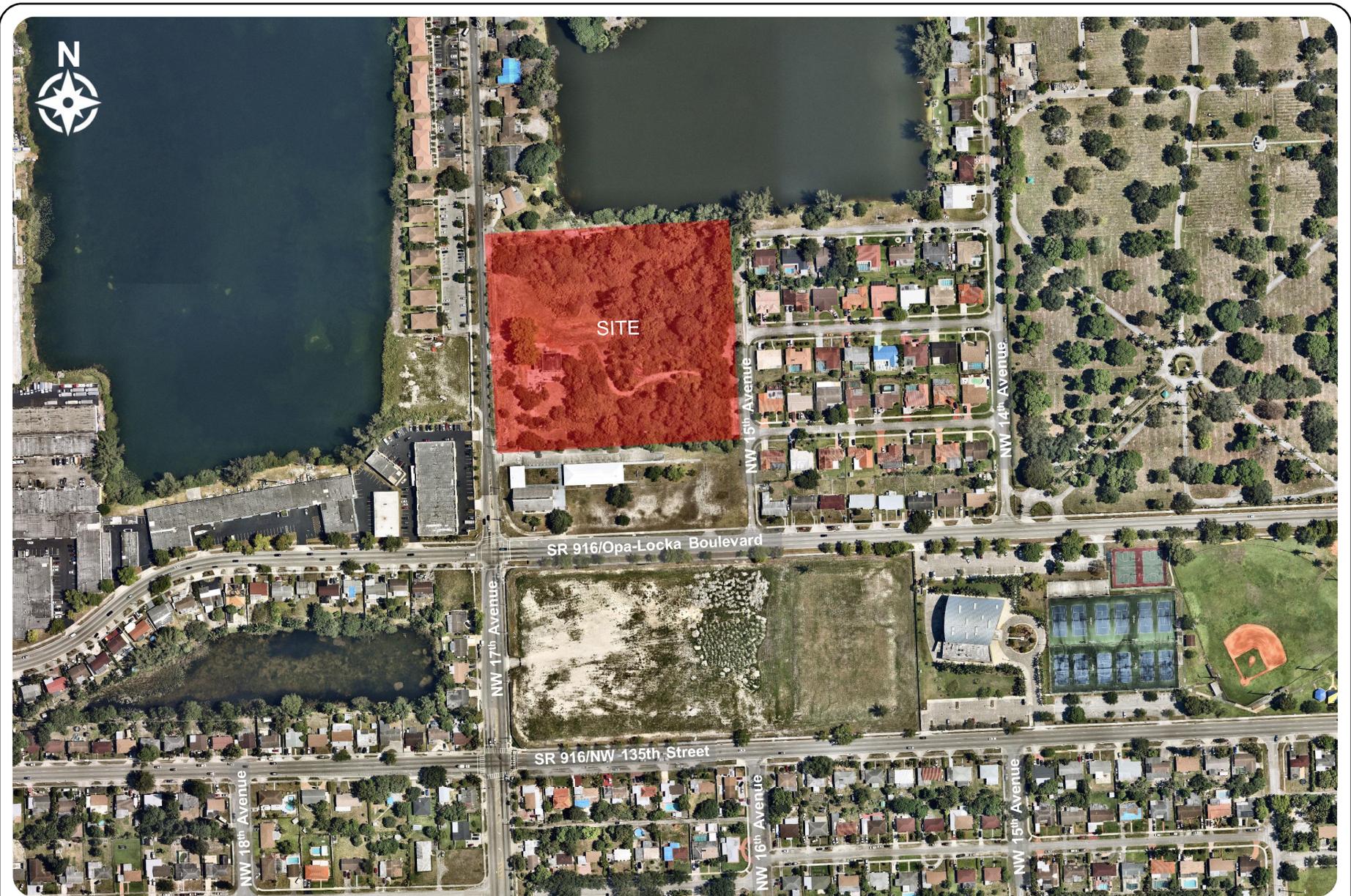


Figure 1
Location Map
13588 NW 17th Avenue
North Miami, Florida

EXISTING TRAFFIC

As a result of atypical traffic conditions due to the COVID-19 virus, A.M. peak period (7:00 A.M. to 9:00 A.M.) and P.M. peak period (4:00 P.M. to 6:00 P.M.) turning movement counts and 72-hour continuous roadway segment counts near the area were collected on Tuesday June 16, 2020. The collected 72-hour traffic counts were compared to historical AADT counts collected by the Florida Department of Transportation (FDOT) and Miami-Dade County to determine an adjustment factor applicable to the collected turning movement counts to reflect typical traffic conditions.

Turning movement counts were collected at the following intersections:

- SR 916/Opa-Locka Boulevard and NW 17th Avenue
- SR 916/NW 135th Street and NW 17th Avenue
- SR 916/NW 135th Street and NW 10th Avenue
- SR 916/NW 135th Street and US 441/NW 7th Avenue

72-hour continuous roadway segment counts were collected at the following locations:

- SR 916/Opa-Locka Boulevard west of NW 7th Avenue
- SR 916/NW 135th Street west of NW 7th Avenue

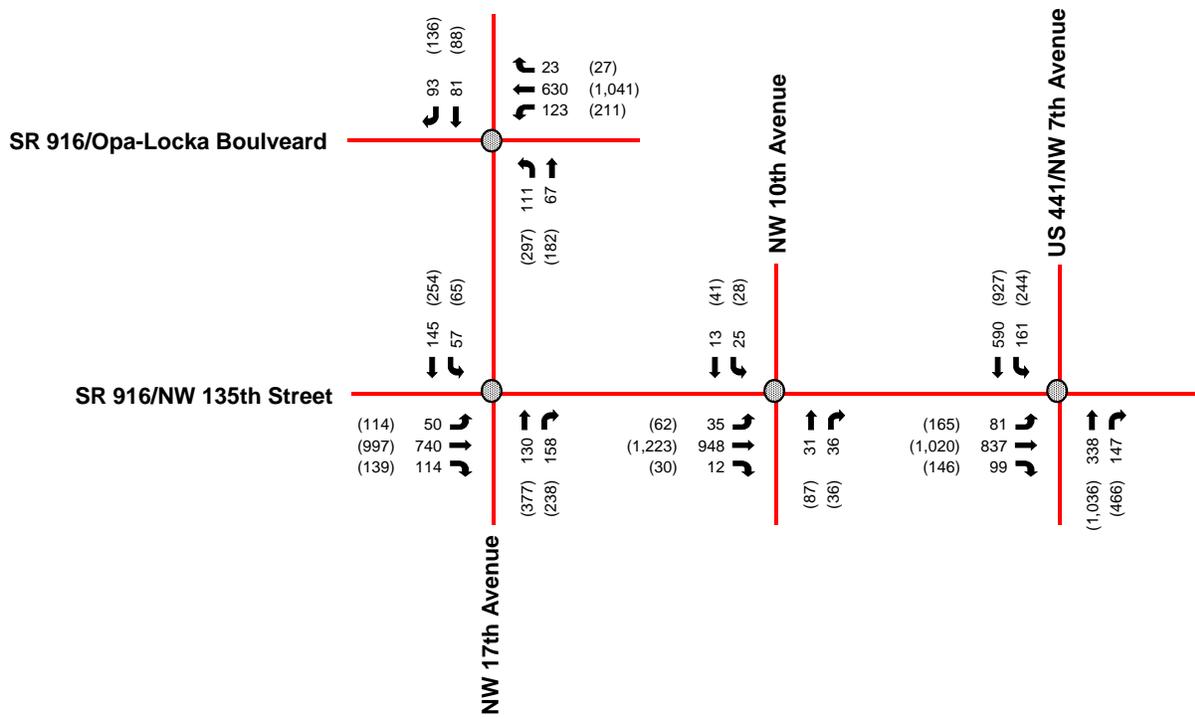
All volumes were collected in 15-minute intervals. All traffic counts were adjusted to typical traffic conditions and were adjusted to peak season conditions. Please note that the appropriate FDOT peak season factor for all study area intersections is 1.05. Further note that all turning movement counts were adjusted by a factor of 1.23 based on the comparison of 72-hour traffic counts to historical FDOT AADT counts within the vicinity of the project. Signal timing information was obtained from Miami-Dade County Department of Transportation and Public Works – Traffic Signals and Signs Division for all signalized study area intersections. The turning movement counts, FDOT peak season factor category report, and signal timing data are included in Appendix B. Figure 2 presents the existing turning movement volumes at the study intersections during the A.M. and P.M. peak periods.



NOT TO SCALE

Legend

- Study Roadway
- Study Intersection
- XX A.M. Peak Hour Traffic
- (XX) P.M. Peak Hour Traffic



FUTURE BACKGROUND TRAFFIC

Future background traffic conditions are defined as expected traffic conditions on the roadway network in the year 2021 without the construction of the proposed development. Future background traffic volumes used in the analysis are the sum of the existing traffic, committed development traffic, and an additional amount of traffic generated by growth in the study area. Refer to Figure 3 for the 2021 peak hour background traffic volumes.

Background Area Growth

Future traffic growth on the transportation network was determined based upon (a) historic growth trends at nearby FDOT traffic count stations and (b) traffic volume comparisons from the year 2015 and 2045 Florida Standard Urban Transportation Model Structure (FSUTMS) – Southeast Florida Regional Planning Model (SERPM).

FDOT count stations referenced in this analysis include:

- Count Station #0140: SR 916/NW 135th Street/One-way pair EB – 200' West of NW 7th Avenue
- Count Station #0141: SR 916/NW 138th Street/One-way pair WB – 200' West of NW 7th Avenue
- Count Station #1223: SR 916/Opa-Locka Boulevard – 200' West of SR 9/NW 27th Avenue
- Count Station #8621: NW 22nd Avenue – 200' North of NW 132nd Street

The historic growth rate analysis, based on FDOT count stations, examined linear, exponential, and decaying exponential growth rates for the most recent five (5) year and ten (10) year periods. The linear growth trend yielded a growth rate of 2.04 percent (2.04%) over the most recent five (5) year period and a growth rate of 1.18 percent (1.18%) over the most recent ten (10) year period. The exponential growth trend yielded a growth rate of 2.01 percent (2.01%) over the most recent five (5) year period and a growth rate of 1.04 percent (1.04%) over the most recent ten (10) year period. The decaying exponential growth trend yielded a growth rate of 2.12 percent (2.12%) over the most recent five (5) year period and a growth rate of 0.35 percent (0.35%) over the most recent ten (10) year period.

Based on the forecasted volumes obtained from the 2015 and 2045 FSUTMS SERPM, an annual growth rate of 0.48 percent (0.48%) was calculated in the vicinity of the development.

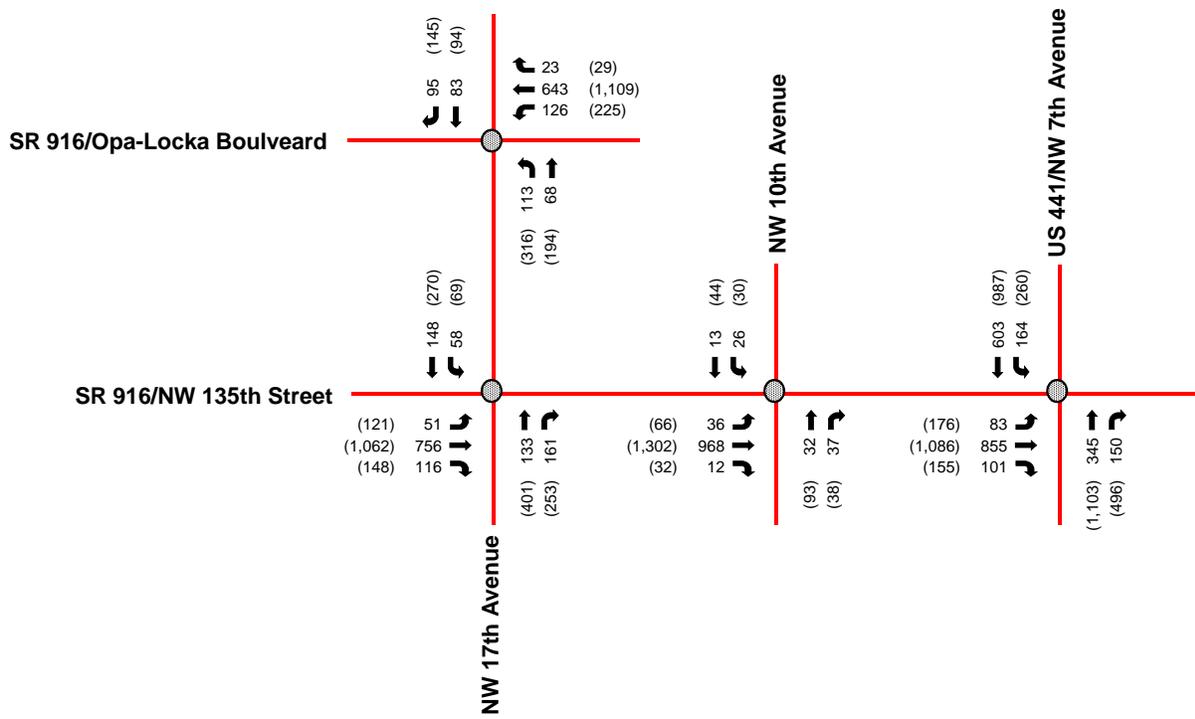
To provide a conservative analysis, the highest growth rate of 2.12 percent (2.12%) was applied annually on a compounding basis to the existing traffic volumes for future (2021) background conditions. The worksheets used to analyze the historic growth trends along with the FSUTMS transportation model outputs are included in Appendix C.



NOT TO SCALE

Legend

-  Study Roadway
-  Study Intersection
- XX A.M. Peak Hour Traffic
- (XX) P.M. Peak Hour Traffic



PROJECT TRAFFIC

Project traffic used in this analysis is defined as the vehicle trips expected to be generated by the project and the distribution and assignment of that traffic over the study roadway network.

Existing and Proposed Land Uses

The property proposed for development is currently vacant. The proposed development consists of a 1,432-student K-12 school, a 1,400 square foot clinic, and 24 multifamily residential units.

Project Access

Access to the proposed development will be provided by a total of three (3) driveways along NW 17th Avenue. Two (2) full access driveways will serve the K-12 school and clinic and one (1) full access driveway will serve the multifamily residential units.

Trip Generation

Trip generation calculations for the proposed redevelopment were performed using rates and/or equations contained in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 10th Edition and data collected at the Scheck Hillel Community Day School located in Aventura, Florida. Trip generation rates were developed utilizing the collected drop-off/pick-up data number of students at the surrogate school. Trip generation for the proposed land uses was based on Land Use Code (LUC) 221 (Multifamily Housing [Mid-Rise]) and LUC 630 (Clinic). Project trips were estimated for the weekday A.M. peak hour and P.M. peak hour. Note that the school is committed to providing bus transportation for 50 percent (50%) of the school's enrollment (716 students). Therefore, an additional 30 trips (15 entering and 15 exiting) were added to the trip generation calculations to account for bus traffic.

Net New Project Trips

The net new project trips represent the additional vehicles on the roadway network. As shown in Table 1, the project is expected to result in 638 net new weekday A.M. peak hour trips and 389 net new weekday P.M. peak hour trips. Detailed trip generation information is included in Appendix D.

Table 1: Proposed Net New Trip Generation				
A.M. (P.M.) Peak Hour				
Future Land Use (ITE Code)	Scale	Net New External Trips	Entering Trips	Exiting Trips
<i>Proposed Redevelopment</i>				
Private School K-12	1,432 students	626 ⁽¹⁾ (371) ⁽¹⁾	426 ⁽¹⁾ (100) ⁽¹⁾	200 ⁽¹⁾ (271) ⁽¹⁾
Multifamily Housing (Mid-Rise) (820)	24 dwelling units	7 (10)	2 (6)	5 (4)
Clinic (630)	1,400 square feet	5 (8)	4 (3)	1 (5)
Proposed Vehicle Trips		638 (389)	432 (109)	206 (280)

Notes: ⁽¹⁾ School trip generation includes 30 bus trips to account for school's commitment of providing bus transportation to 50% of enrollment.

Trip Distribution and Assignment

The trip distribution was based on an interpolated cardinal trip distribution for the project site's traffic analysis zone (TAZ) obtained from the Miami-Dade Transportation Planning Organization's (TPO's) *2045 Long Range Transportation Plan Directional Trip Distribution Report*. The project is located within TAZ 249. The cardinal distribution is shown in Table 2.

Table 2: Cardinal Trip Distribution	
Cardinal Direction	Percentage of Trips
North-Northeast	17%
East-Northeast	11%
East-Southeast	6%
South-Southeast	15%
South-Southwest	19%
West-Southwest	14%
West-Northwest	7%
North-Northwest	11%
Total	100%

Figure 4 presents the A.M. peak hour net new trip distribution, Figure 5 presents the P.M. peak hour net new trip distribution, and Figure 6 presents the A.M. and P.M. peak hour net new trip assignment. Detailed cardinal distribution calculations are contained in Appendix E.

Multimodal Amenities

Miami-Dade County Transit (MDT) provides bus service to and from the project area via one (1) route:

- Route 135 (westbound) operates along Opa-locka Boulevard within the vicinity of the project with the nearest stop located at the northwest corner of NW 17th Avenue and Opa-locka Boulevard. This route provides service to/from the FIU Biscayne Bay Campus, Opa-locka Tri-rail Station, and the Hialeah Metrorail Station. This route operates with approximately 20-30 minute headways during the A.M. and P.M. peak hours.
- Route 135 (eastbound) operates along Opa-locka Boulevard within the vicinity of the project with the nearest stop located at the southeast corner of NW 17th Avenue and NW 135th Street. This route provides service to/from the FIU Biscayne Bay Campus, Opa-locka Tri-rail Station, and the Hialeah Metrorail Station. This route operates with approximately 20-30 minute headways during the A.M. and P.M. peak hours.

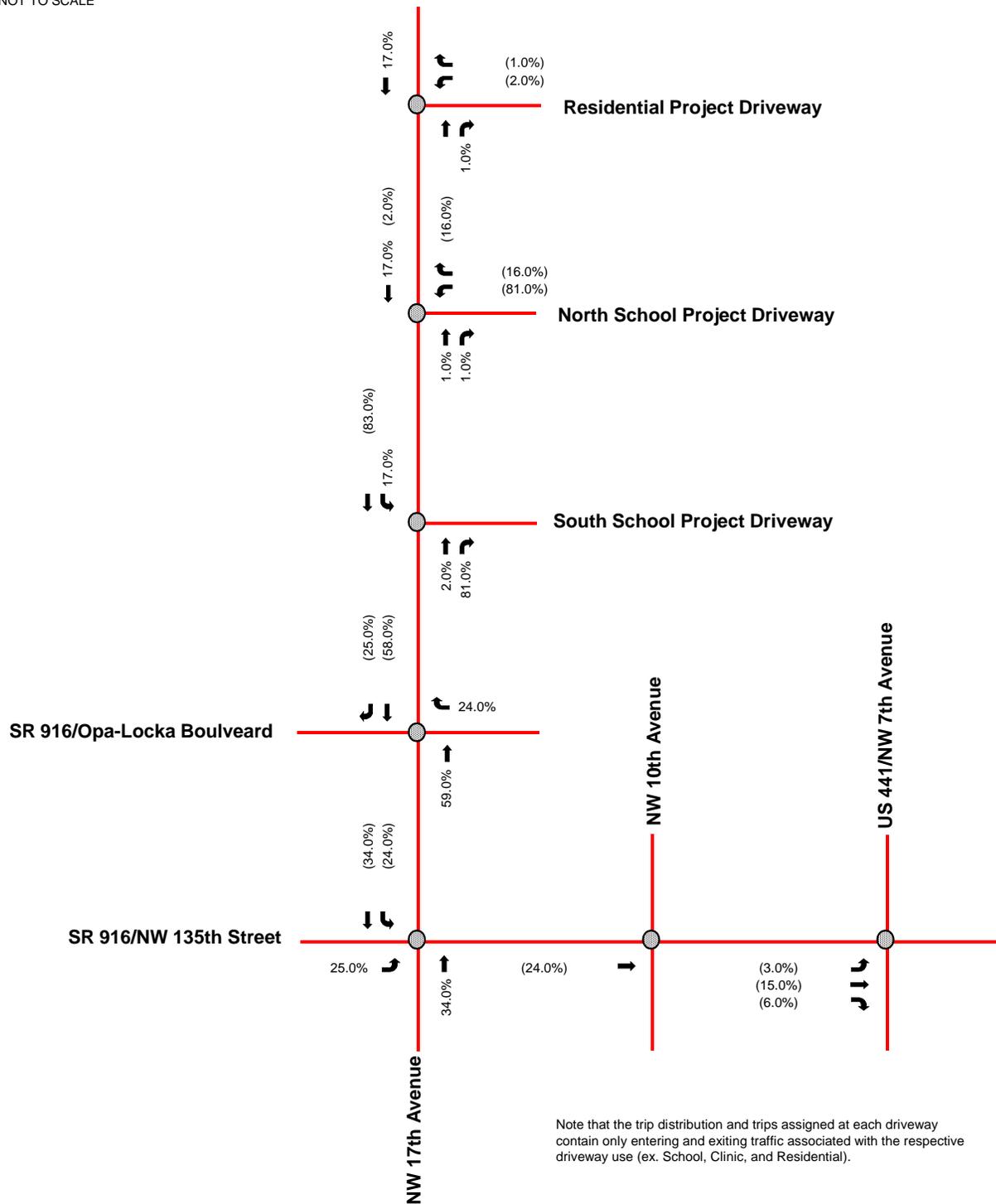
Detailed route information and headway data is provided in Appendix E.



NOT TO SCALE

Legend

-  Study Roadway
-  Study Intersection
- XX A.M. Entering Trip Distribution
- (XX) A.M. Exiting Trip Distribution



Note that the trip distribution and trips assigned at each driveway contain only entering and exiting traffic associated with the respective driveway use (ex. School, Clinic, and Residential).

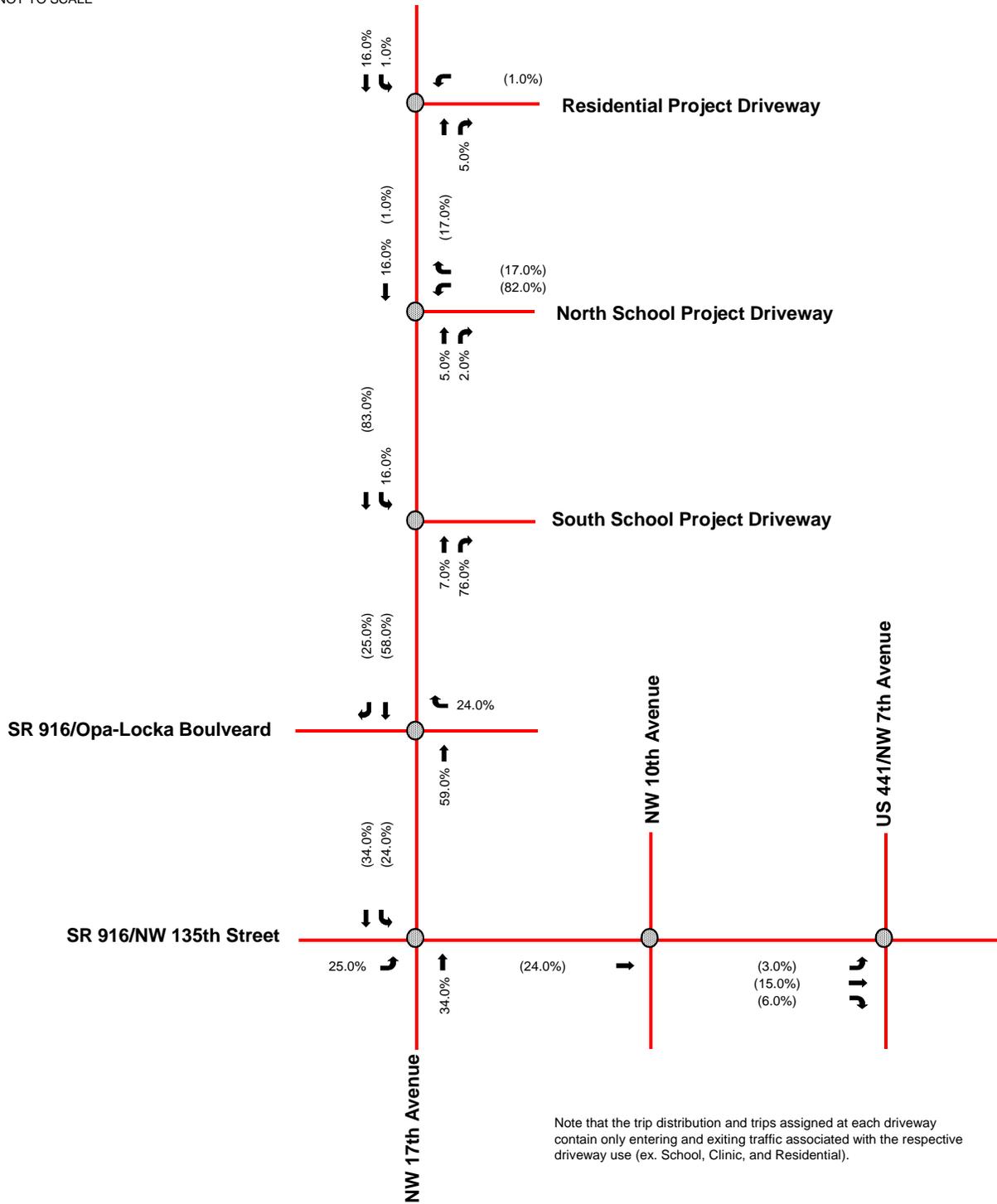
Figure 4
A.M. Peak Hour Trip Distribution
13855 NW 17th Avenue
North Miami, Florida



NOT TO SCALE

Legend

-  Study Roadway
-  Study Intersection
- XX** P.M. Entering Trip Distribution
- (XX)** P.M. Exiting Trip Distribution



Note that the trip distribution and trips assigned at each driveway contain only entering and exiting traffic associated with the respective driveway use (ex. School, Clinic, and Residential).



NOT TO SCALE

Legend

-  Study Roadway
-  Study Intersection
- XX A.M. Peak Hour Trip Assignment
- (XX) P.M. Peak Hour Trip Assignment

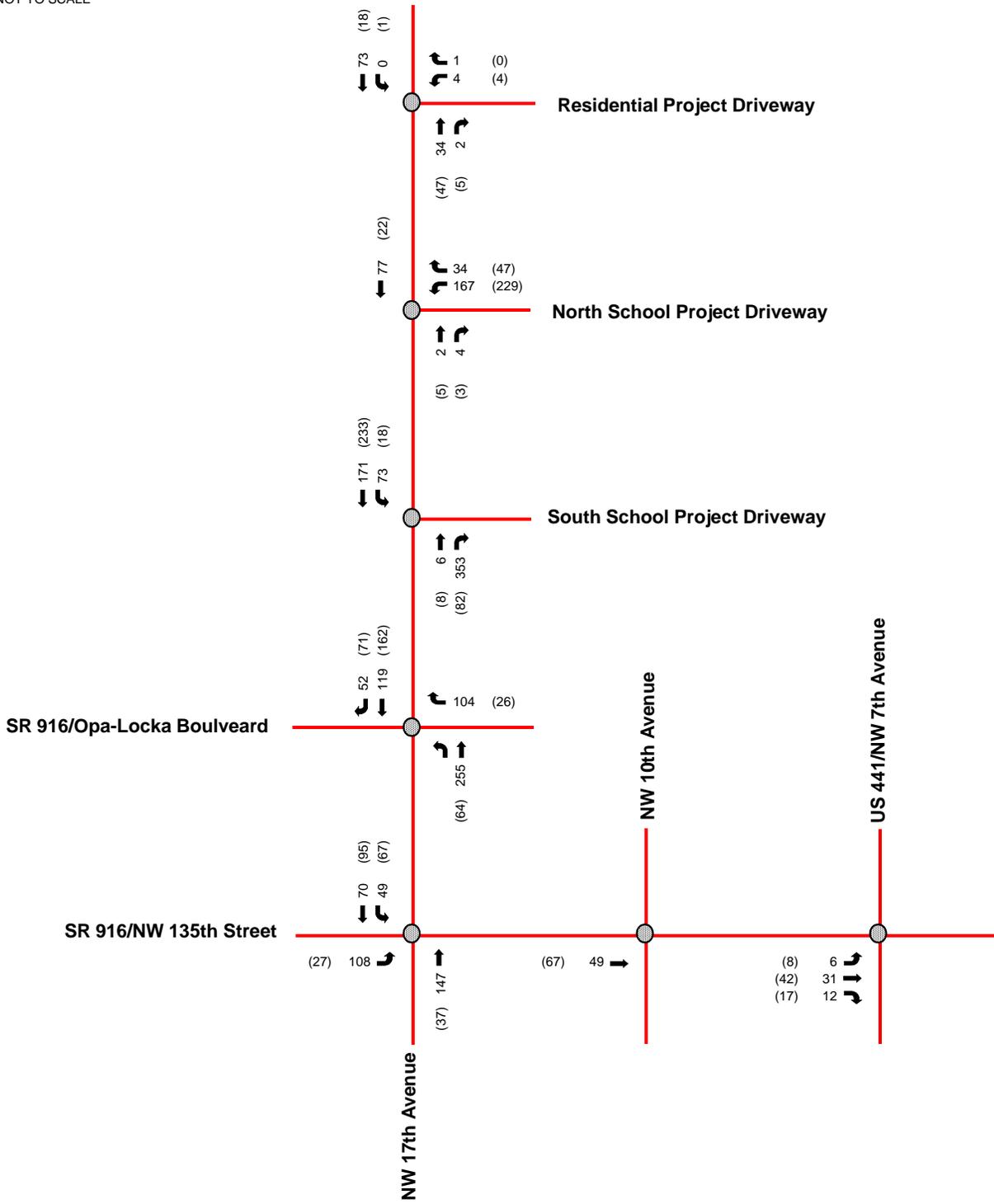


Figure 6
Peak Hour Trip Assignment
13855 NW 17th Avenue
North Miami, Florida

FUTURE TOTAL TRAFFIC

Future total traffic conditions are defined as the expected traffic conditions in the year 2021 with project traffic. Total traffic volumes considered in the analysis for this project are the sum of the year 2021 background traffic volumes and expected project traffic volumes. The A.M. and P.M. peak hour future traffic volumes are shown in Figure 7.



NOT TO SCALE

Legend

-  Study Roadway
-  Study Intersection
- XX A.M. Peak Hour Traffic
- (XX) P.M. Peak Hour Traffic

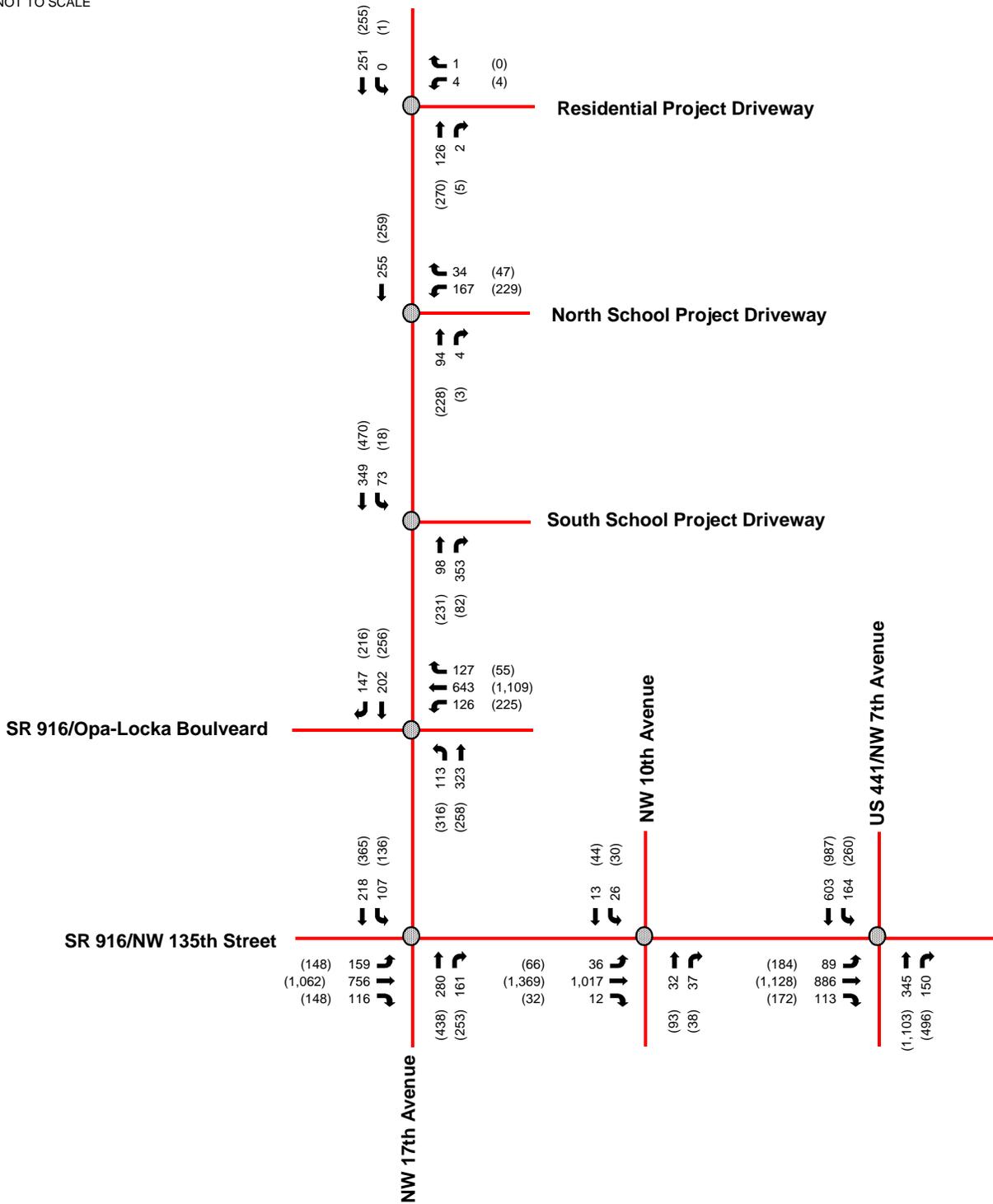


Figure 7
 Future Total Peak Hour Traffic
 13855 NW 17th Avenue
 North Miami, Florida

INTERSECTION CAPACITY ANALYSIS

The study area intersection operating conditions were analyzed for three (3) scenarios (existing conditions, future background conditions, and future total conditions) using Trafficware's *SYNCHRO 10* software, which applies methodologies outlined in the Transportation Research Board's (TRB's) *Highway Capacity Manual* (HCM), 6th Edition. Synchro worksheets for the study intersections are included in Appendix G.

A summary of the intersection analyses for the A.M. and P.M. peak hours is presented in Tables 3 and 4. As indicated in Tables 3 and 4, all study intersections are expected to operate at LOS C or better during the A.M. peak hour and P.M. peak hour under all analysis conditions.

Table 3: A.M. Peak Hour Intersection Capacity Analysis						
Intersection	Traffic Control	Overall LOS/Delay	Approach LOS			
			EB	WB	NB	SB
<i>Existing Conditions (Future Background Conditions) [Future Total Conditions]</i>						
SR 916/Opa-Locka and NW 17 th Avenue	Signalized	B/10.4 sec (B/10.4 sec) [B/12.2 sec]	(3)	A (A) [A]	C (C) [B]	C (C) [C]
SR 916/NW 135 th Street and NW 17 th Avenue	Signalized	B/17.1 sec (B/17.1 sec) [B/17.1 sec]	B (B) [B]	(3)	C (C) [C]	C (C) [C]
SR 916/NW 135 th Street and NW 10 th Avenue	Signalized	B/13.8 sec (B/13.9 sec) [B/13.8 sec]	A (A) [B]	(3)	D (D) [D]	D (D) [D]
SR 916/NW 135 th Street and US 441/NW 7 th Avenue	Signalized	C/21.4 sec (C/21.4 sec) [C/21.8 sec]	D (D) [D]	(3)	A (A) [A]	A (A) [A]
NW 17 th Avenue and Residential Project Driveway	One-Way Stop Control	(1)	(3)	(4) (4) [A]	(2)	(2)
NW 17 th Avenue and North School Project Driveway	One-Way Stop Control	(1)	(3)	(4) (4) [B]	(2)	(2)
NW 17 th Avenue and South School Project Driveway	One-Way Stop Control	(1)	(3)	(4) (4) [A]	(2)	(2)

Notes: (1) Overall intersection LOS is not defined, as intersection operates under stop-control conditions.
 (2) Approach operates under free-flow conditions. LOS is not defined.
 (3) Approach does not exist.
 (4) Approach does not exist under existing and future background conditions.

Table 4: P.M. Peak Hour Intersection Capacity Analysis						
Intersection	Traffic Control	Overall LOS/Delay	Approach LOS			
			EB	WB	NB	SB
<i>Existing Conditions (Future Background Conditions) [Future Total Conditions]</i>						
SR 916/Opa-Locka and NW 17 th Avenue	Signalized	B/12.5 sec (B/13.3 sec) [B/18.3 sec]	(3)	A (B) [B]	B (B) [C]	B (B) [B]
SR 916/NW 135 th Street and NW 17 th Avenue	Signalized	B/18.1 sec (B/18.0 sec) [B/16.6 sec]	B (B) [B]	(3)	C (C) [C]	C (C) [C]
SR 916/NW 135 th Street and NW 10 th Avenue	Signalized	B/16.0 sec (B/16.3 sec) [B/16.3 sec]	B (B) [B]	(3)	D (D) [D]	D (D) [D]
SR 916/NW 135 th Street and US 441/NW 7 th Avenue	Signalized	C/22.1 sec (C/24.3 sec) [C/25.0 sec]	D (D) [D]	(3)	B (B) [C]	A (B) [B]
NW 17 th Avenue and Residential Project Driveway	One-Way Stop Control	(1)	(3)	(4) (4) [B]	(2)	(2)
NW 17 th Avenue and North School Project Driveway	One-Way Stop Control	(1)	(3)	(4) (4) [B]	(2)	(2)
NW 17 th Avenue and South School Project Driveway	One-Way Stop Control	(1)	(3)	(4) (4) [A]	(2)	(2)

- Notes: (1) Overall intersection LOS is not defined, as intersection operates under stop-control conditions.
 (2) Approach operates under free-flow conditions. LOS is not defined.
 (3) Approach does not exist.
 (4) Approach does not exist under existing and future background conditions.

CONCLUSION

Summit Construction Management Group, LLC is proposing to develop the property located at 13855 NW 17th Avenue in North Miami, Florida. Currently, the site proposed for development is vacant. The proposed development consists of a 1,432-student K-12 school, a 1,400 square foot clinic, and 24 multifamily residential units. The project is expected to be completed and opened by year 2021.

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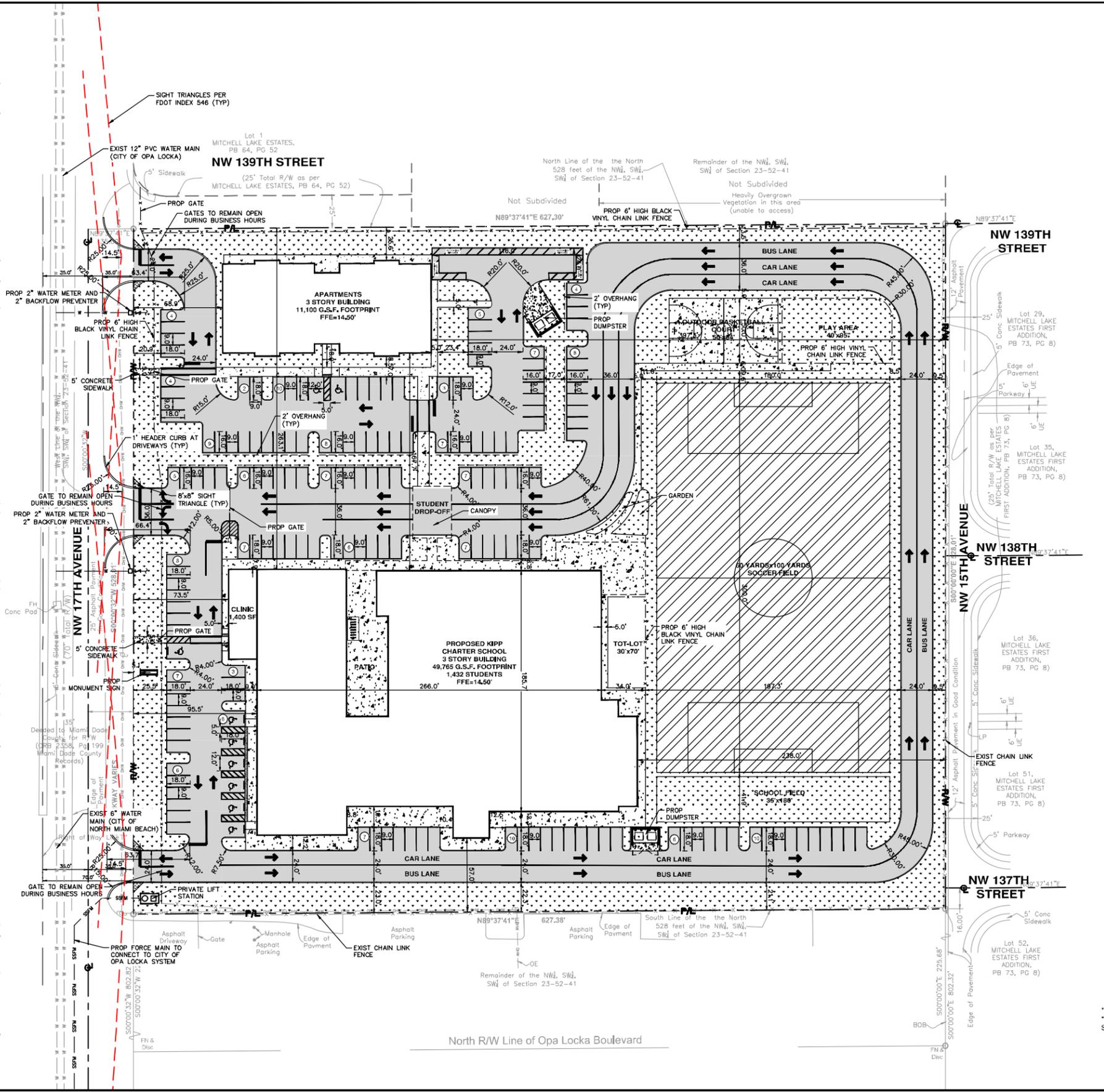
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The results of the intersection capacity analysis indicate that the study intersections are expected to operate at LOS C or better during the A.M. and P.M. peak hours under all analysis conditions.

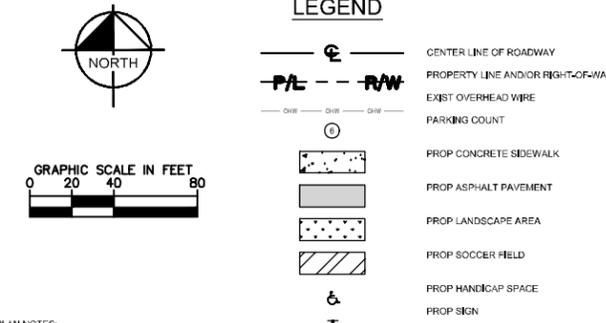
Appendix A

Site Plan

This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Reason of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



LOCATION MAP
SECTION 43, TOWNSHIP 52S, RANGE 41E



- SITE PLAN NOTES**
1. ALL DIMENSIONS SHOWN ARE TO THE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
 2. ALL CURBS ARE TYPE 'D' UNLESS OTHERWISE NOTED.
 3. REFER TO LANDSCAPE PLANS FOR PLANTING AND DETAILS.
 4. ALL PAVEMENT MARKINGS ARE PAINT UNLESS OTHERWISE NOTED.
 5. ALL RADII ARE 3' UNLESS OTHERWISE NOTED.
 6. WITHIN FOOT ROW ALL CURB RAMP ARE WITH DETECTABLE WARNINGS AND CROSSWALKS SHALL BE COMPLIANT WITH FOOT DESIGN STANDARD INDEX 52-202 AND 711-501 (LATEST EDITION).
 7. ALL PAVEMENT MARKINGS AND SIGNS WITHIN THE R/W SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS AND THE FOOT 5220 STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION.
 8. FREE-STANDING SIGNAGE SHOWN FOR REPRESENTATION PURPOSES ONLY AND SHALL BE PERMITTED SEPARATELY.

SITE DATA

PROPERTY ADDRESS	13855 NW 17TH AVE, NORTH MIAMI, FL 33167
FOLIO NUMBER	06-2123-000-0080
PROPOSED USE(S)	(K-12) PUBLIC CHARTER SCHOOL, CLINIC, APARTMENT UNITS
ZONING DISTRICT	PD-3 (PLANNED DEVELOPMENT DISTRICT)
FUTURE LAND USE	MIXED USE HIGH (110 FT. 45 DU/AC)
SECTION, TOWNSHIP, RANGE	SECTION 43, TOWNSHIP 52S, RANGE 41E
OPEN SPACE (20% REQUIRED)	165,024 SF (49.8%)
TOTAL SITE AREA	331,235 SF (7.60 AC)
TOTAL GROSS FLOOR AREA	183,995 SF
CHARTER SCHOOL (K-12)	149,285 SF (49,765 SF BUILDING FOOTPRINT)
CLINIC	1,400 SF
APARTMENTS	33,300 SF (11,100 SF BUILDING FOOTPRINT)
NUMBER OF STORIES	
CHARTER SCHOOL (K-12)	3 STORY
CLINIC	1 STORY
APARTMENTS	3 STORY
PARKING REQUIRED PER FLORIDA STATUTES	
1 SPACE/STAFF MEMBER	100 SPACES
1 SPACE/100 STUDENTS	15 SPACES
1 SPACE/10 STUDENTS ABOVE GRADE 10 (STUDENTS)	20 SPACES
24 APARTMENT UNITS (1.5 SPACES/DWELLING UNIT)+5% GUEST	38 SPACES
1,400 SF CLINIC (1 SPACE/300SF)	5 SPACES
REQUIRED PARKING	178 SPACES
PROPOSED PARKING	179 SPACES
HANDICAP SPACES REQUIRED	7 SPACES
HANDICAP SPACES PROVIDED	9 SPACES

* SIX-1 BEDROOM APARTMENTS, TWELVE-2 BEDROOM APARTMENTS, AND SIX-3 BEDROOM APARTMENTS
 ** SREF STANDS FOR STATE REQUIREMENTS FOR EDUCATIONAL FACILITIES. THE STATE STATUE THE PUBLIC SCHOOL IS IN COMPLIANCE WITH THE FLORIDA STATUE (F.S.) 1002.23(C)

NO.	REVISIONS	BY	DATE

Kimley-Horn
 600 NORTH PINE ISLAND ROAD, SUITE 450, PLANTATION, FL 33324
 PHONE: 954-535-5100 FAX: 954-739-2247
 WWW.KIMLEY-HORN.COM CA 0000696

PROFESSIONAL SEAL
 STATE OF FLORIDA
 PROFESSIONAL ENGINEER
 No. 74543
 DATE: 07/14/2020
 SCALE: AS SHOWN
 DESIGNED BY: CB
 DRAWN BY: MB
 CHECKED BY: GB

MASTER SITE PLAN

KIPP SCHOOL
 PREPARED FOR
SUMMIT CONSTRUCTION MANAGEMENT GROUP, LLC
 FLORIDA
 CITY OF NORTH MIAMI
 SHEET NUMBER
MSP-1

Appendix B

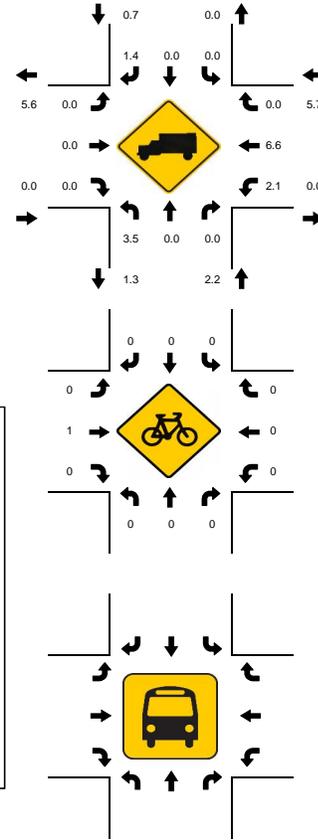
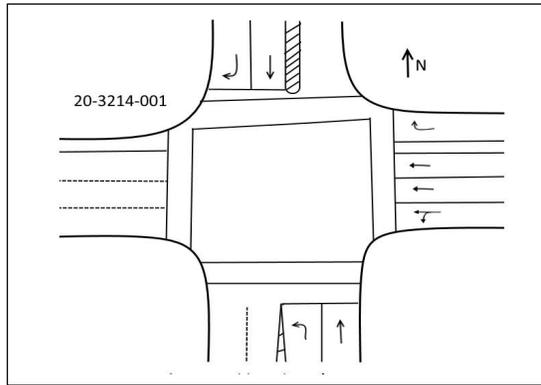
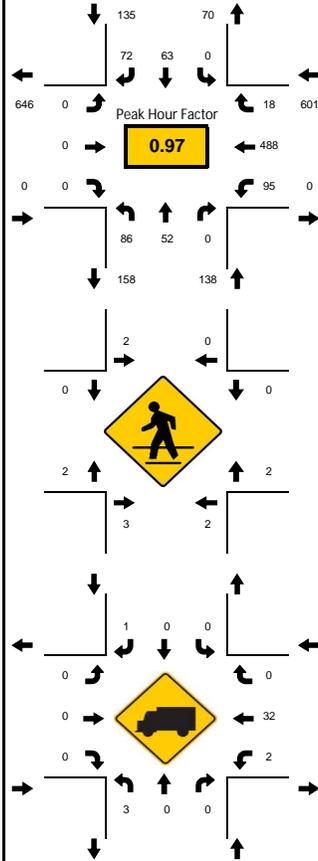
Traffic Data

Turning Movement Counts

LOCATION: NW 17th Ave & Opa-Locka Blvd
 CITY/STATE: Opa Locka, FL

PROJECT ID: 20-03214-001
 DATE: 06/16/2020

Peak-Hour: 07:30 AM - 08:30 AM
 Peak 15-Minute: 08:15 AM - 08:30 AM

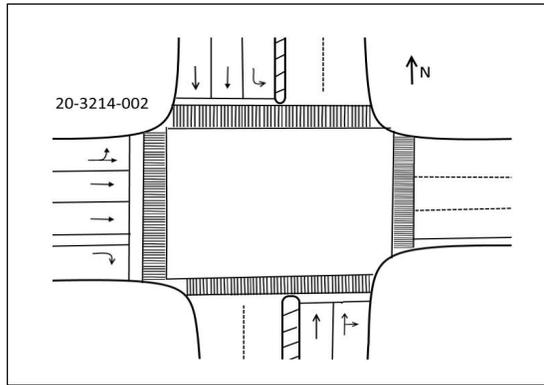
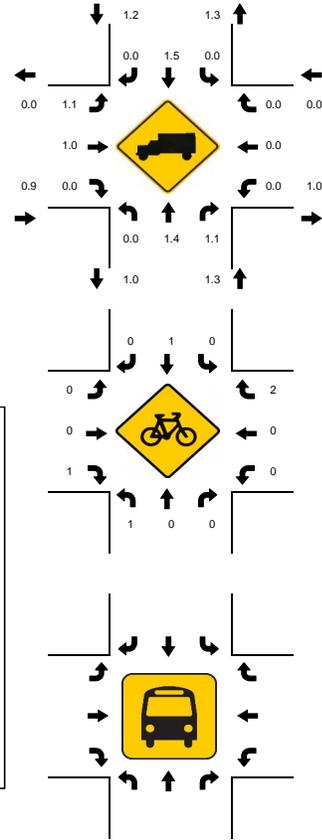
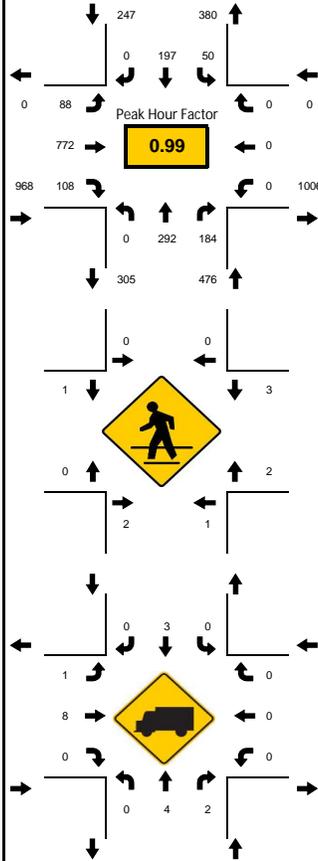


15-Min Count Period Beginning At	NW 17th Ave Northbound					NW 17th Ave Southbound					Opa-Locka Blvd Eastbound					Opa-Locka Blvd Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
07:00 AM	10	8	0	0		0	16	12	0		0	0	0	0		23	106	3	0		178	839
07:15 AM	18	12	0	0		0	10	22	0		0	0	0	0		14	141	4	0		221	869
07:30 AM	20	10	0	0		0	20	18	0		0	0	0	0		21	123	3	0		215	874
07:45 AM	23	13	0	0		0	12	19	0		0	0	0	0		22	128	8	0		225	867
08:00 AM	24	11	0	0		0	17	16	0		0	0	0	0		22	115	3	0		208	836
08:15 AM	19	18	0	0		0	14	19	0		0	0	0	0		30	122	4	0		226	628
08:30 AM	16	16	0	0		0	13	20	0		0	0	0	0		25	116	2	0		208	402
08:45 AM	23	10	0	0		0	4	13	0		0	0	0	0		29	109	6	0		194	194
Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total	
All Vehicles	96	72	0	0		0	80	76	0		0	0	0	0		120	512	32	0		988	
Heavy Trucks	4	0	0	0		0	0	4	0		0	0	0	0		4	36	0	0		48	
Pedestrians	8	0	0	0		4	0	0	0		8	0	0	0		8	0	0	0		28	
Bicycles	0	0	0	0		0	0	0	0		4	0	0	0		0	0	0	0		4	
Railroad	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0	
Stopped Buses	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0	

LOCATION: NW 17th Ave & NW 135th St
 CITY/STATE: Opa Locka, FL

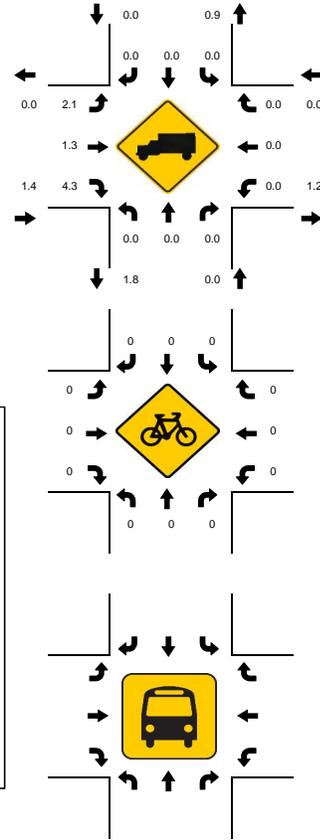
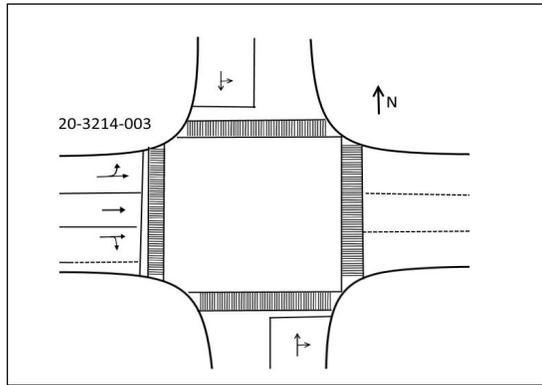
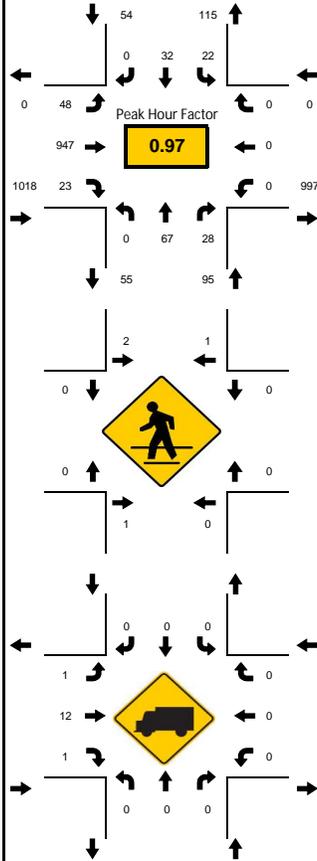
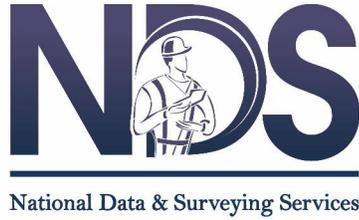
PROJECT ID: 20-03214-002
 DATE: 06/16/2020

Peak-Hour: 04:30 PM - 05:30 PM
 Peak 15-Minute: 05:00 PM - 05:15 PM



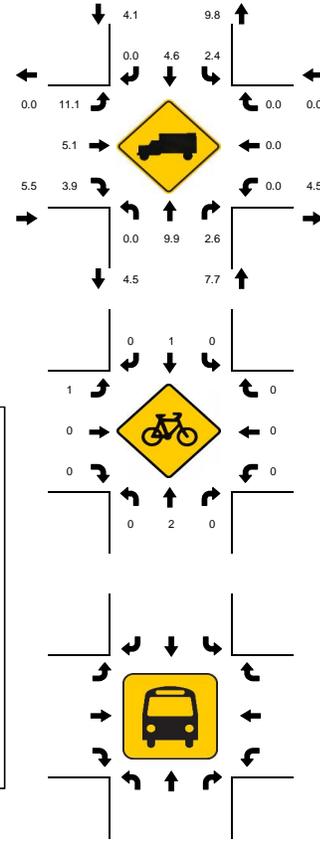
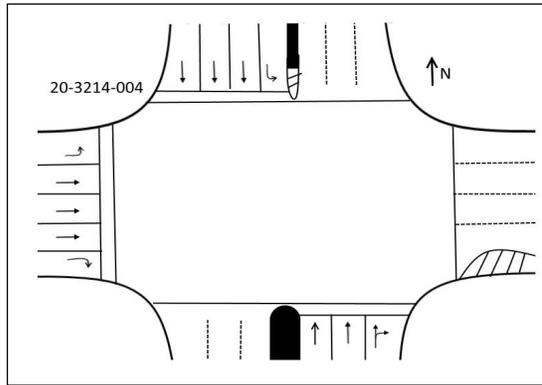
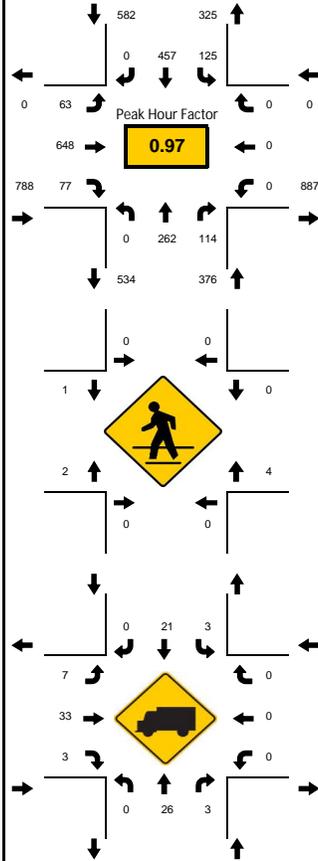
15-Min Count Period Beginning At	NW 17th Ave Northbound					NW 17th Ave Southbound					NW 135th St Eastbound					NW 135th St Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
04:00 PM	0	60	57	0		7	40	0	0		22	200	27	0		0	0	0	0		413	1643
04:15 PM	0	64	33	0		8	47	0	0		31	188	22	0		0	0	0	0		393	1658
04:30 PM	0	78	47	0		14	57	0	0		23	176	25	0		0	0	0	0		420	1691
04:45 PM	0	62	50	0		13	58	0	0		15	195	24	0		0	0	0	0		417	1654
05:00 PM	0	72	45	0		16	36	0	0		22	206	31	0		0	0	0	0		428	1628
05:15 PM	0	80	42	0		7	46	0	0		28	195	28	0		0	0	0	0		426	1200
05:30 PM	0	67	43	0		8	49	0	0		13	175	28	0		0	0	0	0		383	774
05:45 PM	0	73	43	0		8	45	0	0		17	181	24	0		0	0	0	0		391	391
Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	0	320	200	0		64	232	0	0		112	824	124	0		0	0	0	0		1876	
Heavy Trucks	0	8	4			0	8	0			4	16	0			0	0	0			40	
Pedestrians		4					0					4					8				16	
Bicycles	4	0	0			0	4	0			0	0	4			0	0	8			20	
Railroad																						
Stopped Buses																						

Peak-Hour: 04:30 PM - 05:30 PM
 Peak 15-Minute: 04:45 PM - 05:00 PM



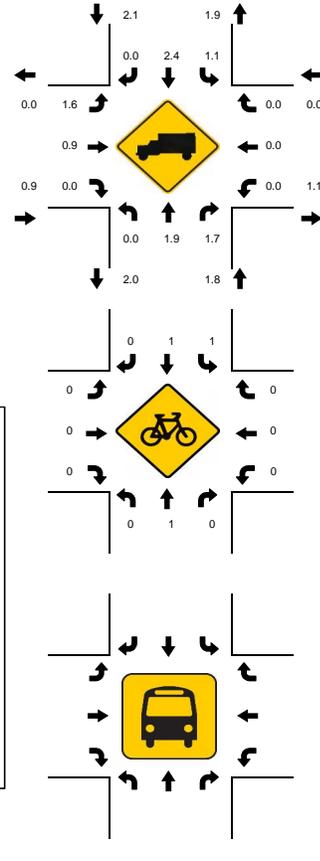
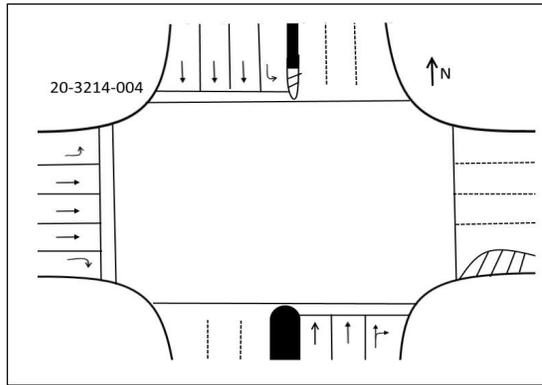
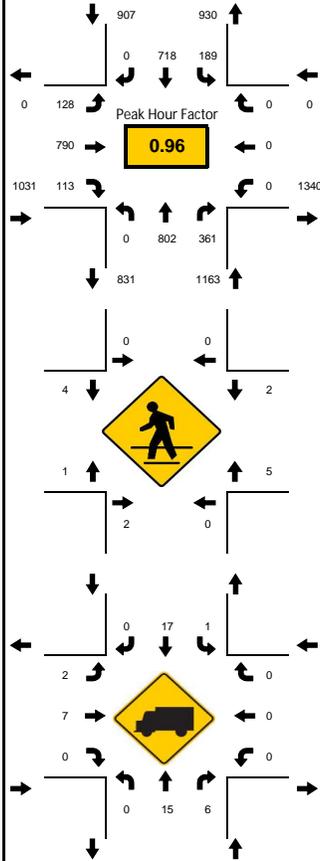
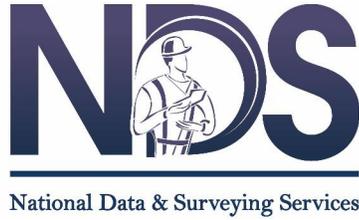
15-Min Count Period Beginning At	NW 10th Ave Northbound					NW 10th Ave Southbound					NW 135th St Eastbound					NW 135th St Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
04:00 PM	0	23	6	0		8	11	0	0		11	254	2	0		0	0	0	0		315	1161
04:15 PM	0	9	11	0		7	11	0	0		19	208	6	0		0	0	0	0		271	1143
04:30 PM	0	14	10	0		3	17	0	0		15	209	6	0		0	0	0	0		274	1167
04:45 PM	0	24	11	0		2	2	0	0		10	246	6	0		0	0	0	0		301	1154
05:00 PM	0	14	4	0		8	6	0	0		12	245	8	0		0	0	0	0		297	1154
05:15 PM	0	15	3	0		9	7	0	0		11	247	3	0		0	0	0	0		295	857
05:30 PM	0	19	5	0		3	4	0	0		9	220	1	0		0	0	0	0		261	562
05:45 PM	0	9	7	0		6	11	0	0		12	250	6	0		0	0	0	0		301	301
Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	0	96	44	0		36	68	0	0		60	988	32	0		0	0	0	0		1324	
Heavy Trucks	0	0	0			0	0	0			4	20	4			0	0	0			28	
Pedestrians		4					8					0					0				12	
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0	
Railroad																						
Stopped Buses																						

Peak-Hour: 08:00 AM - 09:00 AM
 Peak 15-Minute: 08:45 AM - 09:00 AM



15-Min Count Period Beginning At	NW 7th Ave/US 441/SR-7 Northbound					NW 7th Ave/US 441/SR-7 Southbound					NW 135th St Eastbound					NW 135th St Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
07:00 AM	0	36	21	0		19	81	0	1		7	144	20	0		0	0	0	0		329	1571
07:15 AM	0	59	20	0		16	124	0	2		18	162	18	0		0	0	0	0		419	1677
07:30 AM	0	57	27	0		15	104	0	0		11	190	23	0		0	0	0	0		427	1707
07:45 AM	0	60	28	1		31	107	0	5		8	142	14	0		0	0	0	0		396	1691
08:00 AM	0	67	32	0		32	109	0	5		11	158	21	0		0	0	0	0		435	1746
08:15 AM	0	65	23	0		25	113	0	2		21	180	20	0		0	0	0	0		449	1311
08:30 AM	0	65	25	0		18	111	0	2		13	167	10	0		0	0	0	0		411	862
08:45 AM	0	65	34	0		39	124	0	2		18	143	26	0		0	0	0	0		451	451
Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total	
All Vehicles	0	268	136	0		156	496	0	20		84	720	104	0		0	0	0	0		1984	
Heavy Trucks	0	40	8			4	32	0		12	44	8		0	0	0		16		148		
Pedestrians	0					0				8										24		
Bicycles	0	4	0			0	4	0		4	0	0		0	0	0				12		
Railroad																						
Stopped Buses																						

Peak-Hour: 04:45 PM - 05:45 PM
 Peak 15-Minute: 04:45 PM - 05:00 PM



15-Min Count Period Beginning At	NW 7th Ave/US 441/SR-7 Northbound					NW 7th Ave/US 441/SR-7 Southbound					NW 135th St Eastbound					NW 135th St Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
04:00 PM	0	195	76	1		31	165	0	7		34	196	28	0		0	0	0	0		733	2921
04:15 PM	0	150	70	0		30	172	0	4		34	163	36	0		0	0	0	0		659	2985
04:30 PM	0	173	83	1		39	169	0	3		44	183	26	0		0	0	0	0		721	3082
04:45 PM	0	210	90	0		47	173	0	8		38	205	37	0		0	0	0	0		808	3101
05:00 PM	0	200	96	0		44	197	0	3		26	205	26	0		0	0	0	0		797	2988
05:15 PM	0	202	97	0		38	163	0	4		30	190	32	0		0	0	0	0		756	2191
05:30 PM	0	190	78	0		41	185	0	4		34	190	18	0		0	0	0	0		740	1435
05:45 PM	0	157	73	1		36	176	0	10		31	187	24	0		0	0	0	0		695	695
Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	0	840	388	0		188	788	0	32		152	820	148	0		0	0	0	0		3356	
Heavy Trucks	0	20	12			4	24	0			4	8	0			0	0	0			72	
Pedestrians		4					0					12					12				28	
Bicycles	0	4	0			4	4	0			0	0	0			0	0	0			12	
Railroad																						
Stopped Buses																						

Signal Timings

TOD Schedule Report
for 3101: NW 7 Av&NW 135 St

Print Date:
9/24/2019

Print Time:
5:50 PM

<u>Asset</u>	<u>Intersection</u>	<u>TOD Schedule</u>	<u>Op Mode</u>	<u>Plan #</u>	<u>Cycle</u>	<u>Offset</u>	<u>TOD Setting</u>	<u>Active PhaseBank</u>	<u>Active Maximum</u>
3101	NW 7 Av&NW 135 St	DOW-3		[17] LATE NIGHT	110	18	N/A	1	Max 2

Splits

<u>PH 1</u>	<u>PH 2</u>	<u>PH 3</u>	<u>PH 4</u>	<u>PH 5</u>	<u>PH 6</u>	<u>PH 7</u>	<u>PH 8</u>
SBL	NBT	-	EBT	-	SBT	-	-
13	47	0	32	0	66	0	0



Active Phase Bank: Phase Bank 1

<u>Phase</u>	<u>Walk</u>			<u>Don't Walk</u>			<u>Min Initial</u>			<u>Veh Ext</u>			<u>Max Limit</u>			<u>Max 2</u>			<u>Yellow</u>	<u>Red</u>
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3		
1 SBL	0	0	0	0	0	0	5	5	5	2	2	2	7	7	7	14	14	14	4.4	2
2 NBT	7	7	7	18	18	18	7	7	7	1	1	1	35	35	35	0	40	40	4.4	2
3 -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4 EBT	7	7	7	22	22	22	7	7	7	2.5	2.5	2.5	15	15	15	36	36	36	4.4	2
5 -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 SBT	7	7	7	18	18	18	7	7	7	1	1	1	35	35	35	0	40	40	4.4	2
7 -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8 -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Last In Service Date: unknown

Permitted Phases	
	12345678
Default	12-4-6--
External Permit 0	-2-4-6--
External Permit 1	-2-4-6--
External Permit 2	-2-4-6--

TOD Schedule Report
for 3101: NW 7 Av&NW 135 St

Print Date:
9/24/2019

Print Time:
5:50 PM

Current TOD Schedule	Plan	Cycle	Green Time								Ring Offset	Offset
			1 SBL	2 NBT	3 -	4 EBT	5 -	6 SBT	7 -	8 -		
1		95	9	51	0	17	0	66	0	0	0	80
2		105	6	59	0	22	0	71	0	0	0	74
3		100	12	50	0	20	0	68	0	0	0	26
4		95	10	46	0	21	0	62	0	0	0	64
5		95	13	38	0	26	0	57	0	0	0	68
6		100	12	50	0	20	0	68	0	0	0	26
7		85	10	41	0	16	0	57	0	0	0	58
8		110	18	51	0	23	0	75	0	0	0	86
9		110	13	56	0	23	0	75	0	0	0	58
10		170	17	115	0	20	0	138	0	0	0	12
11		100	12	50	0	20	0	68	0	0	0	26
12		110	13	47	0	32	0	66	0	0	0	18
13		150	12	95	0	25	0	113	0	0	0	7
14		80	4	33	0	25	0	43	0	0	0	22
15		100	12	50	0	20	0	68	0	0	0	26
16		100	12	50	0	20	0	68	0	0	0	26
17		110	13	47	0	32	0	66	0	0	0	18
20		105	4	55	0	28	0	65	0	0	0	24
21		90	7	41	0	24	0	54	0	0	0	60
22		70	4	30	0	18	0	40	0	0	0	50

Local TOD Schedule		
Time	Plan	DOW
0000	Free	Su M T W Th F S
0500	4	M T W Th F
0600	5	Su M T W Th F S
0645	17	M T W Th F
1000	3	M T W Th F
1000	3	Su S
1330	6	M T W Th F
1545	17	M T W Th F
2000	4	M T W Th F
2015	4	S
2030	4	Su

Current Time of Day Function			
Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	-----	SuM T W ThF S

Local Time of Day Function			
Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	-----	SuM T W ThF S

* Settings
Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

TOD Schedule Report
for 3101: NW 7 Av&NW 135 St

Print Date:
9/24/2019

Print Time:
5:50 PM

No Calendar Defined/Enabled

TOD Schedule Report
for 3329: NW 17 Av&NW 135 St

Print Date:
3/27/2020

Print Time:
2:03 AM

<u>Asset</u>	<u>Intersection</u>	<u>TOD Schedule</u>	<u>Op Mode</u>	<u>Plan #</u>	<u>Cycle</u>	<u>Offset</u>	<u>TOD Setting</u>	<u>Active PhaseBank</u>	<u>Active Maximum</u>
3329	NW 17 Av&NW 135 St	DOW-6	TOD	N/A	0	0	N/A	0	Max 0

Splits

<u>PH 1</u>	<u>PH 2</u>	<u>PH 3</u>	<u>PH 4</u>	<u>PH 5</u>	<u>PH 6</u>	<u>PH 7</u>	<u>PH 8</u>
-	-	-	NBT	-	EBT	-	SBT
0	0	0	0	0	0	0	0

Active Phase Bank: Phase Bank 1

<u>Phase</u>	<u>Walk</u>			<u>Don't Walk</u>			<u>Min Initial</u>			<u>Veh Ext</u>			<u>Max Limit</u>			<u>Max 2</u>			<u>Yellow</u>	<u>Red</u>
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3		
1 -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2 -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3 -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4 NBT	7	7	7	16	16	16	7	7	7	2.5	-2.5	-2.5	22	22	22	42	42	42	4.4	2
5 -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 EBT	7	7	7	14	14	14	7	7	7	1	-1	-1	40	40	40	0	0	0	4.4	2
7 -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8 SBT	7	7	7	16	16	16	7	7	7	2.5	-2.5	-2.5	22	22	22	42	42	42	4.4	2

Last In Service Date: unknown

Permitted Phases	
	12345678
Default	---4-6-8
External Permit 0	-----
External Permit 1	-----
External Permit 2	-----

TOD Schedule Report
for 3329: NW 17 Av&NW 135 St

Print Date:
3/27/2020

Print Time:
2:03 AM

Current TOD Schedule	Plan	Cycle	Green Time								Ring Offset	Offset
			1	2	3	4	5	6	7	8		
			-	-	-	NBT	-	EBT	-	SBT		
4		85	0	0	0	35	0	38	0	35	0	64
5		70	0	0	0	20	0	38	0	20	0	22
7		80	0	0	0	32	0	36	0	32	0	16
9		65	0	0	0	15	0	38	0	15	0	18
10		75	0	0	0	31	0	32	0	31	0	22
13		130	0	0	0	40	0	78	0	40	0	98
14		130	0	0	0	40	0	78	0	40	0	60
16		85	0	0	0	35	0	38	0	35	0	64
18		65	0	0	0	15	0	38	0	15	0	18
19		65	0	0	0	15	0	38	0	15	0	18
20		65	0	0	0	15	0	38	0	15	0	18
21		65	0	0	0	15	0	38	0	15	0	18

Local TOD Schedule		
Time	Plan	DOW
0000	Free	Su
0000	Free	M T W Th F
0100	Free	Su M T W Th F S
0530	Free	Su
0530	5	M T W Th F
0615	16	M T W Th F
0630	4	M T W Th F
0700	9	Su
0700	10	M T W Th F
0800	5	Su
0930	5	M T W Th F
1600	7	M T W Th F
1900	5	M T W Th F
2200	Free	Su M T W Th F S

Current Time of Day Function			
Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	-----	SuM T W ThF S

Local Time of Day Function			
Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	-----	SuM T W ThF S

* Settings
Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

No Calendar Defined/Enabled

TOD Schedule Report

for 3330: Opa-Locka Blvd&NW 17 Av

Print Date:
3/27/2020

Print Time:
2:03 AM

<u>Asset</u>	<u>Intersection</u>	<u>TOD Schedule</u>	<u>Op Mode</u>	<u>Plan #</u>	<u>Cycle</u>	<u>Offset</u>	<u>TOD Setting</u>	<u>Active PhaseBank</u>	<u>Active Maximum</u>
3330	Opa-Locka Blvd&NW 17 Av	DOW-6	TOD	Free	0	0	N/A	1	Max 1

Splits

<u>PH 1</u>	<u>PH 2</u>	<u>PH 3</u>	<u>PH 4</u>	<u>PH 5</u>	<u>PH 6</u>	<u>PH 7</u>	<u>PH 8</u>
-	WBT	-	NBT	-	-	-	SBT
0	0	0	0	0	0	0	0

←

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Active Phase Bank: Phase Bank 1

<u>Phase</u>	<u>Walk</u>			<u>Don't Walk</u>			<u>Min Initial</u>			<u>Veh Ext</u>			<u>Max Limit</u>			<u>Max 2</u>			<u>Yellow</u>	<u>Red</u>
	<u>Phase Bank</u>																			
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3		
1 -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2 WBT	7	7	7	12	12	12	7	7	7	1	1	1	40	40	40	0	0	0	4.4	2
3 -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4 NBT	7	7	7	16	16	16	7	7	7	2.5	2.5	2.5	22	22	22	46	46	46	4.4	2
5 -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7 -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8 SBT	7	7	7	16	16	16	7	7	7	2.5	2.5	2.5	22	22	22	46	46	46	4.4	2

Last In Service Date: unknown

Permitted Phases	
	<u>12345678</u>
Default	-2-4---8
External Permit 0	-----
External Permit 1	-----
External Permit 2	-----

TOD Schedule Report
for 3330: Opa-Locka Blvd&NW 17 Av

Print Date:
3/27/2020

Print Time:
2:03 AM

Current TOD Schedule	Plan	Cycle	Green Time								Ring Offset	Offset
			1 -	2 WBT	3 -	4 NBT	5 -	6 -	7 -	8 SBT		
4		85	0	44	0	29	0	0	0	29	0	64
5		70	0	38	0	20	0	0	0	20	0	20
7		80	0	36	0	32	0	0	0	32	0	16
9		65	0	38	0	15	0	0	0	15	0	18
10		75	0	32	0	31	0	0	0	31	0	22
13		130	0	84	0	34	0	0	0	34	0	106
14		130	0	84	0	34	0	0	0	34	0	58
16		85	0	44	0	29	0	0	0	29	0	64
18		65	0	38	0	15	0	0	0	15	0	18
19		65	0	38	0	15	0	0	0	15	0	18
20		65	0	38	0	15	0	0	0	15	0	18
21		65	0	38	0	15	0	0	0	15	0	18

Local TOD Schedule		
Time	Plan	DOW
0000	Free	Su
0000	Free	M T W Th F
0100	Free	Su M T W Th F S
0530	Free	Su
0530	5	M T W Th F
0615	16	M T W Th F
0630	4	M T W Th F
0700	9	Su
0700	10	M T W Th F
0800	5	Su
0930	5	M T W Th F
1600	7	M T W Th F
1900	5	M T W Th F
2200	Free	Su M T W Th F S

Current Time of Day Function			
Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	-----	SuM T W ThF S

Local Time of Day Function			
Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	-----	SuM T W ThF S

* Settings
Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

No Calendar Defined/Enabled

TOD Schedule Report
for 4345: NW 10 Av&NW 135 St

Print Date:
9/24/2019

Print Time:
8:28 PM

<u>Asset</u>	<u>Intersection</u>	<u>TOD Schedule</u>	<u>Op Mode</u>	<u>Plan #</u>	<u>Cycle</u>	<u>Offset</u>	<u>TOD Setting</u>	<u>Active PhaseBank</u>	<u>Active Maximum</u>
4345	NW 10 Av&NW 135 St	DOW-3		[04] HEAVY AM PEAK	85	26	N/A	1	Max 2

Splits

<u>PH 1</u>	<u>PH 2</u>	<u>PH 3</u>	<u>PH 4</u>	<u>PH 5</u>	<u>PH 6</u>	<u>PH 7</u>	<u>PH 8</u>
-	-	SBT	NBT	-	EBT	-	-
0	0	15	15	0	37	0	0



Active Phase Bank: Phase Bank 1

<u>Phase</u>	<u>Walk</u>			<u>Don't Walk</u>			<u>Min Initial</u>			<u>Veh Ext</u>			<u>Max Limit</u>			<u>Max 2</u>			<u>Yellow</u>	<u>Red</u>
	<u>Phase Bank</u>																			
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3		
1 -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2 -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3 SBT	7	7	7	9	9	9	7	7	7	2.5	-2.5	-2.5	25	25	25	30	30	30	4	2
4 NBT	7	7	7	9	9	9	7	7	7	2.5	-2.5	-2.5	25	25	25	39	39	39	4	2
5 -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 EBT	0	0	0	0	0	0	15	15	15	1	-1	-1	40	40	40	0	0	0	4	2
7 -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8 -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Last In Service Date: unknown

Permitted Phases	
	12345678
Default	--34-6--
External Permit 0	-----
External Permit 1	-----
External Permit 2	-----

TOD Schedule Report
for 4345: NW 10 Av&NW 135 St

Print Date:
9/24/2019

Print Time:
8:28 PM

Current TOD Schedule	Plan	Cycle	Green Time								Ring Offset	Offset
			1	2	3	4	5	6	7	8		
			-	-	SBT	NBT	-	EBT	-	-		
	3	100	0	0	15	15	0	52	0	0	0	84
	4	85	0	0	15	15	0	37	0	0	0	26
	5	85	0	0	15	15	0	37	0	0	0	28
	6	100	0	0	15	15	0	52	0	0	0	84
	10	100	0	0	15	15	0	52	0	0	0	78
	11	100	0	0	15	15	0	52	0	0	0	78
	12	100	0	0	15	15	0	52	0	0	0	78
	13	100	0	0	15	15	0	52	0	0	0	78
	17	100	0	0	15	15	0	52	0	0	0	78

Local TOD Schedule		
Time	Plan	DOW
0000	Flash	Su M T W Th F S
0500	4	M T W Th F
0600	5	Su M T W Th F S
0630	10	M T W Th F
0700	17	M T W Th F
0800	12	M T W Th F
0930	3	M T W Th F
1000	3	Su S
1330	6	M T W Th F
1545	11	M T W Th F
1615	13	M T W Th F
1930	4	M T W Th F
2015	4	S
2030	4	Su

Current Time of Day Function			
Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	-----	SuM T W ThF S

Local Time of Day Function			
Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	-----	SuM T W ThF S

* Settings
Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

No Calendar Defined/Enabled

Peak Season Conversion Factor

2019 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
 CATEGORY: 8700 MIAMI-DADE NORTH

WEEK	DATES	SF	MOCF: 0.97 PSCF
1	01/01/2019 - 01/05/2019	1.03	1.06
2	01/06/2019 - 01/12/2019	1.02	1.05
3	01/13/2019 - 01/19/2019	1.01	1.04
4	01/20/2019 - 01/26/2019	1.00	1.03
* 5	01/27/2019 - 02/02/2019	0.98	1.01
* 6	02/03/2019 - 02/09/2019	0.97	1.00
* 7	02/10/2019 - 02/16/2019	0.96	0.99
* 8	02/17/2019 - 02/23/2019	0.96	0.99
* 9	02/24/2019 - 03/02/2019	0.96	0.99
*10	03/03/2019 - 03/09/2019	0.96	0.99
*11	03/10/2019 - 03/16/2019	0.97	1.00
*12	03/17/2019 - 03/23/2019	0.97	1.00
*13	03/24/2019 - 03/30/2019	0.97	1.00
*14	03/31/2019 - 04/06/2019	0.97	1.00
*15	04/07/2019 - 04/13/2019	0.98	1.01
*16	04/14/2019 - 04/20/2019	0.98	1.01
*17	04/21/2019 - 04/27/2019	0.98	1.01
18	04/28/2019 - 05/04/2019	0.99	1.02
19	05/05/2019 - 05/11/2019	0.99	1.02
20	05/12/2019 - 05/18/2019	1.00	1.03
21	05/19/2019 - 05/25/2019	1.00	1.03
22	05/26/2019 - 06/01/2019	1.01	1.04
23	06/02/2019 - 06/08/2019	1.01	1.04
24	06/09/2019 - 06/15/2019	1.02	1.05
25	06/16/2019 - 06/22/2019	1.02	1.05
26	06/23/2019 - 06/29/2019	1.02	1.05
27	06/30/2019 - 07/06/2019	1.02	1.05
28	07/07/2019 - 07/13/2019	1.03	1.06
29	07/14/2019 - 07/20/2019	1.03	1.06
30	07/21/2019 - 07/27/2019	1.03	1.06
31	07/28/2019 - 08/03/2019	1.02	1.05
32	08/04/2019 - 08/10/2019	1.02	1.05
33	08/11/2019 - 08/17/2019	1.02	1.05
34	08/18/2019 - 08/24/2019	1.02	1.05
35	08/25/2019 - 08/31/2019	1.02	1.05
36	09/01/2019 - 09/07/2019	1.03	1.06
37	09/08/2019 - 09/14/2019	1.03	1.06
38	09/15/2019 - 09/21/2019	1.03	1.06
39	09/22/2019 - 09/28/2019	1.02	1.05
40	09/29/2019 - 10/05/2019	1.01	1.04
41	10/06/2019 - 10/12/2019	1.00	1.03
42	10/13/2019 - 10/19/2019	0.99	1.02
43	10/20/2019 - 10/26/2019	1.00	1.03
44	10/27/2019 - 11/02/2019	1.00	1.03
45	11/03/2019 - 11/09/2019	1.01	1.04
46	11/10/2019 - 11/16/2019	1.01	1.04
47	11/17/2019 - 11/23/2019	1.02	1.05
48	11/24/2019 - 11/30/2019	1.02	1.05
49	12/01/2019 - 12/07/2019	1.02	1.05
50	12/08/2019 - 12/14/2019	1.03	1.06
51	12/15/2019 - 12/21/2019	1.03	1.06
52	12/22/2019 - 12/28/2019	1.02	1.05
53	12/29/2019 - 12/31/2019	1.01	1.04

* PEAK SEASON

14-FEB-2020 15:39:30

830UPD

6_8700_PKSEASON.TXT

72-Hour Tube Count vs. FDOT AADT Correction Factor

	<i>Opa-Locka Blvd W/O NW 7th Ave</i>	<i>NW 135th St W/O NW 7th Ave</i>
Day 1	12,141	14,109
Day 2	13,098	13,804
Day 3	12,665	13,868
Average	12,635	13,927
2019 FDOT AADT	15,500	16,000
Factor-up	1.23	1.15

Appendix C

Growth Rate Calculations

FDOT Historic Growth Trends

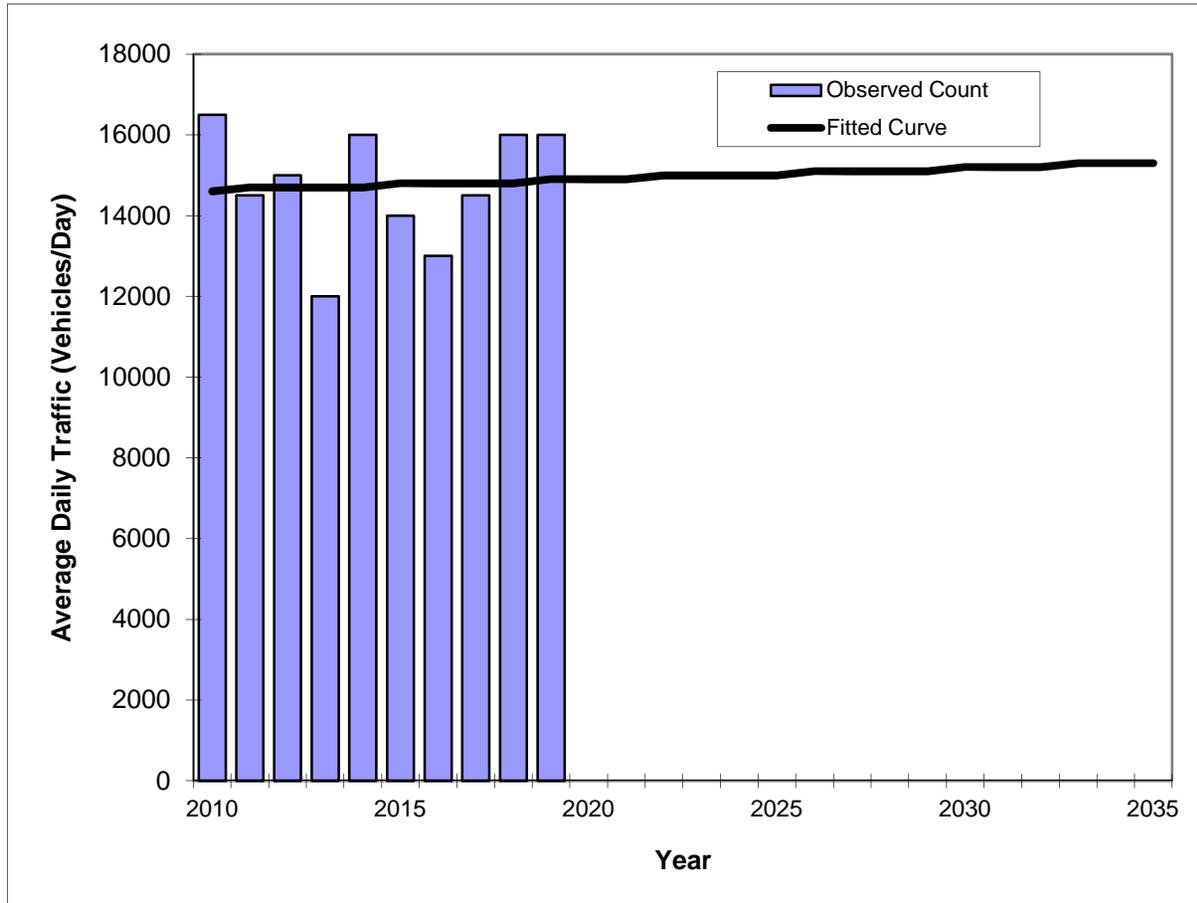
FDOT Growth Rate Summary

Station Number	Location	Historic Growth- Linear				Historic Growth- Exponential				Historic Growth- Decaying Exponential			
		5-year	R-squared	10-year	R-squared	5-year	R-squared	10-year	R-squared	5-year	R-squared	10-year	R-squared
0140	SR 916/NW 135th Street/One-way Pair EB -- 200' West of NW 7th Avenue	5.26%	72.06%	0.23%	0.32%	4.89%	70.46%	0.23%	39.00%	4.43%	56.73%	-0.52%	1.95%
0141	SR 916/NW 138th Street/One-way Pair WB -- 200' West of NW 7th Avenue	-0.32%	0.32%	3.64%	45.61%	-0.33%	0.29%	3.03%	44.99%	-0.81%	2.30%	2.90%	32.79%
1223	SR 916/Opa-Locka Boulevard -- 200' West of SR 9/NW 27th Avenue	2.36%	62.87%	-0.34%	0.71%	2.40%	63.33%	-0.15%	0.11%	2.65%	78.49%	-1.33%	10.19%
8621	NW 22nd Avenue -- 200' North of NW 132nd Street	0.85%	1.54%	N/A	N/A	1.09%	2.57%	N/A	N/A	2.20%	11.08%	N/A	N/A
Total		2.04%	34.20%	1.18%	15.55%	2.01%	34.16%	1.04%	28.03%	2.12%	37.15%	0.35%	14.98%

Traffic Trends

SR 916/NW 135th Street/One-way Pair EB -- 200' West of NW 7 Avenue

County:	Miami-Dade (87)
Station #:	0140
Highway:	SR 916/NW 135th Street/One-way Pair EB



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2010	16500	14600
2011	14500	14700
2012	15000	14700
2013	12000	14700
2014	16000	14700
2015	14000	14800
2016	13000	14800
2017	14500	14800
2018	16000	14800
2019	16000	14900

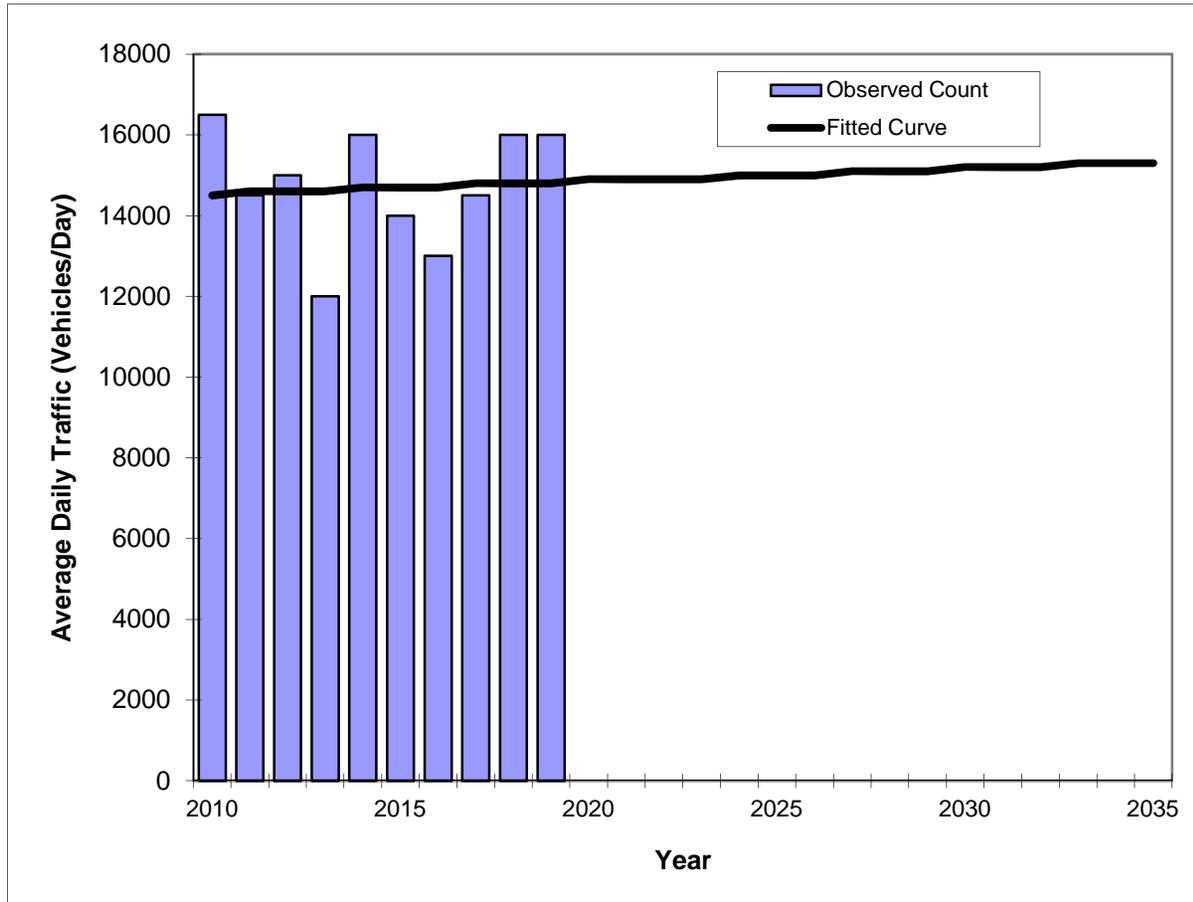
Trend R-squared:	0.32%
Trend Annual Historic Growth Rate:	0.23%
Printed:	18-Jun-20
Straight Line Growth Option	

*Axle-Adjusted

Traffic Trends

SR 916/NW 135th Street/One-way Pair EB -- 200' West of NW 7 Avenue

County:	Miami-Dade (87)
Station #:	0140
Highway:	SR 916/NW 135th Street/One-way Pair EB



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2010	16500	14500
2011	14500	14600
2012	15000	14600
2013	12000	14600
2014	16000	14700
2015	14000	14700
2016	13000	14700
2017	14500	14800
2018	16000	14800
2019	16000	14800

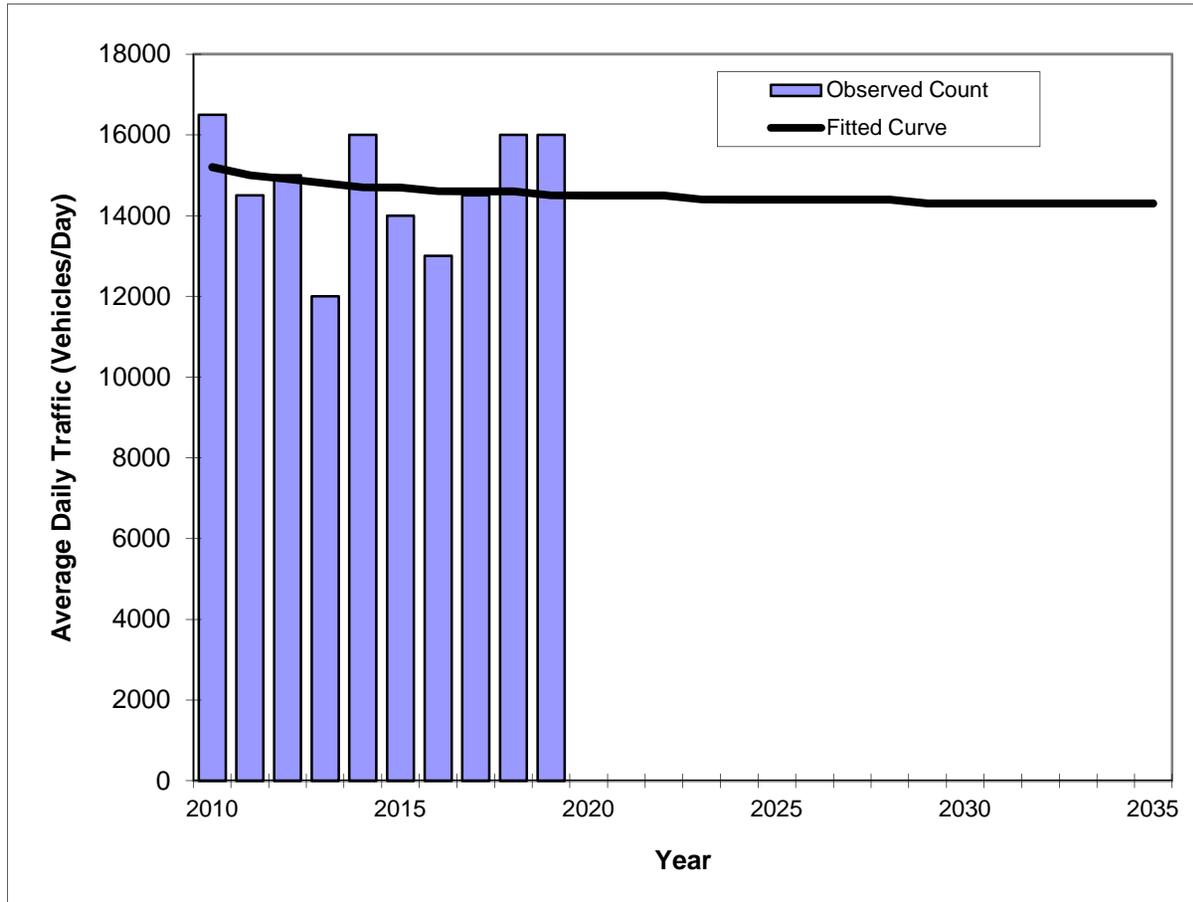
Trend R-squared:	0.39%
Compounded Annual Historic Growth Rate:	0.23%
Printed:	18-Jun-20
Exponential Growth Option	

*Axle-Adjusted

Traffic Trends

SR 916/NW 135th Street/One-way Pair EB -- 200' West of NW 7 Avenue

County:	Miami-Dade (87)
Station #:	0140
Highway:	SR 916/NW 135th Street/One-way Pair EB



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2010	16500	15200
2011	14500	15000
2012	15000	14900
2013	12000	14800
2014	16000	14700
2015	14000	14700
2016	13000	14600
2017	14500	14600
2018	16000	14600
2019	16000	14500

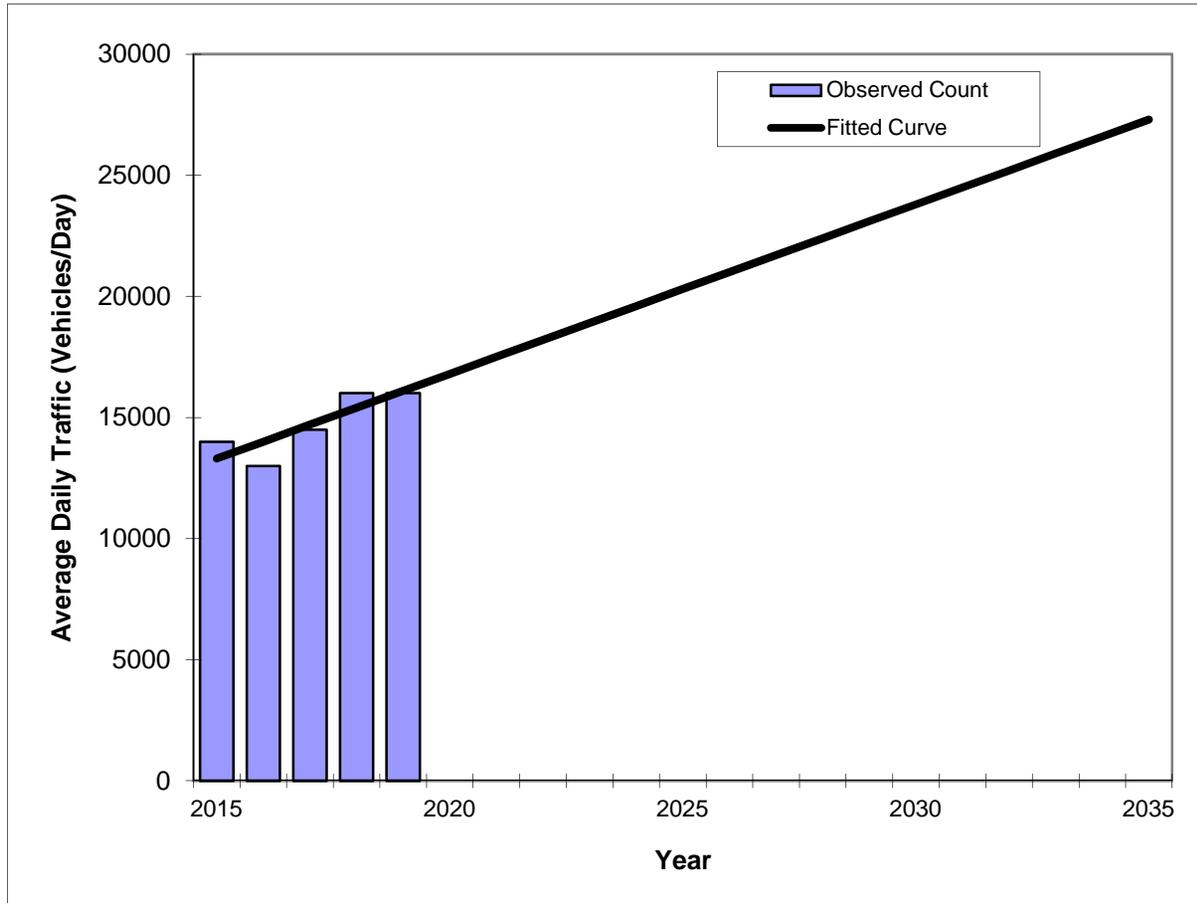
Trend R-squared:	1.95%
Compounded Annual Historic Growth Rate:	-0.52%
Printed:	18-Jun-20
Decaying Exponential Growth Option	

*Axle-Adjusted

Traffic Trends

SR 916/NW 135th Street/One-way Pair EB -- 200' West of NW 7 Avenue

County:	Miami-Dade (87)
Station #:	0140
Highway:	SR 916/NW 135th Street/One-way Pair EB



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2015	14000	13300
2016	13000	14000
2017	14500	14700
2018	16000	15400
2019	16000	16100

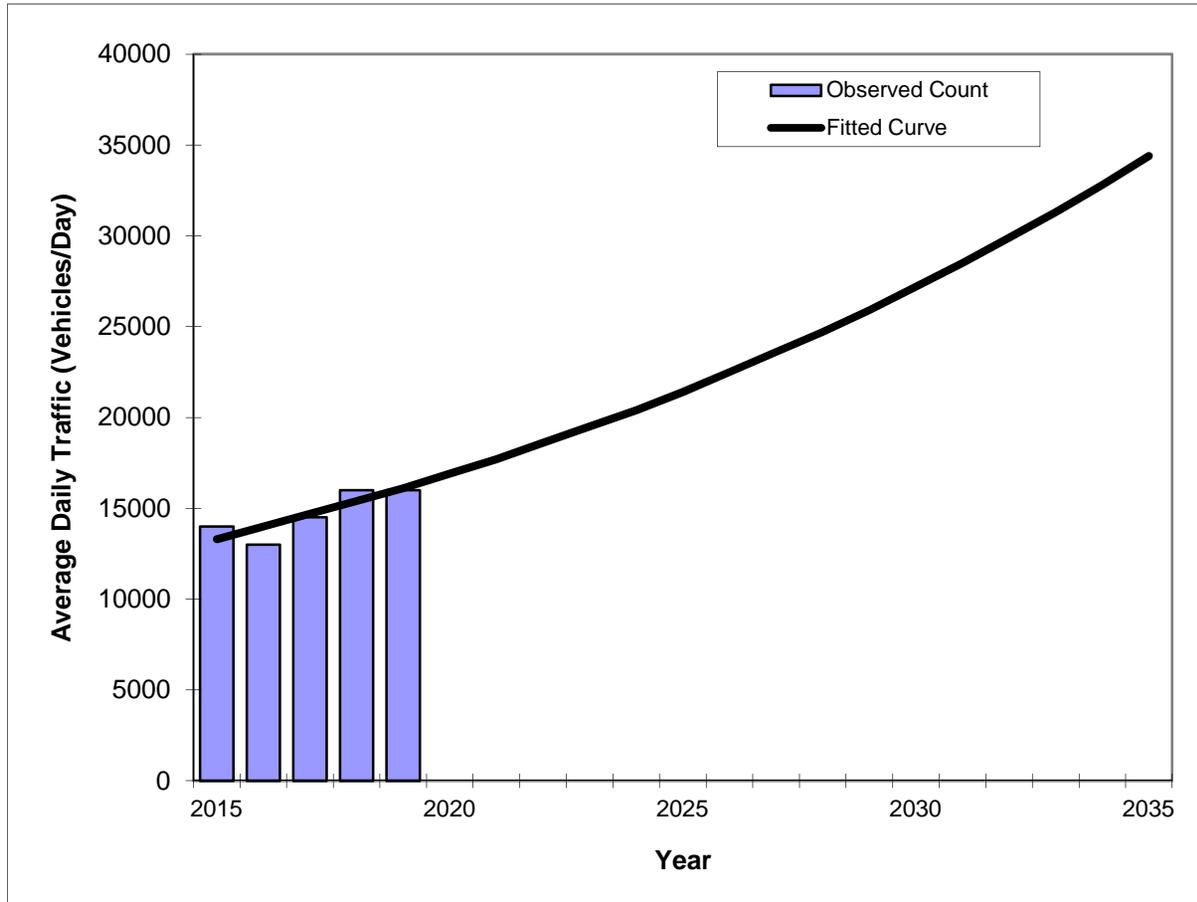
Trend R-squared:	72.06%
Trend Annual Historic Growth Rate:	5.26%
Printed:	18-Jun-20
Straight Line Growth Option	

*Axle-Adjusted

Traffic Trends

SR 916/NW 135th Street/One-way Pair EB -- 200' West of NW 7 Avenue

County:	Miami-Dade (87)
Station #:	0140
Highway:	SR 916/NW 135th Street/One-way Pair EB



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2015	14000	13300
2016	13000	14000
2017	14500	14700
2018	16000	15400
2019	16000	16100

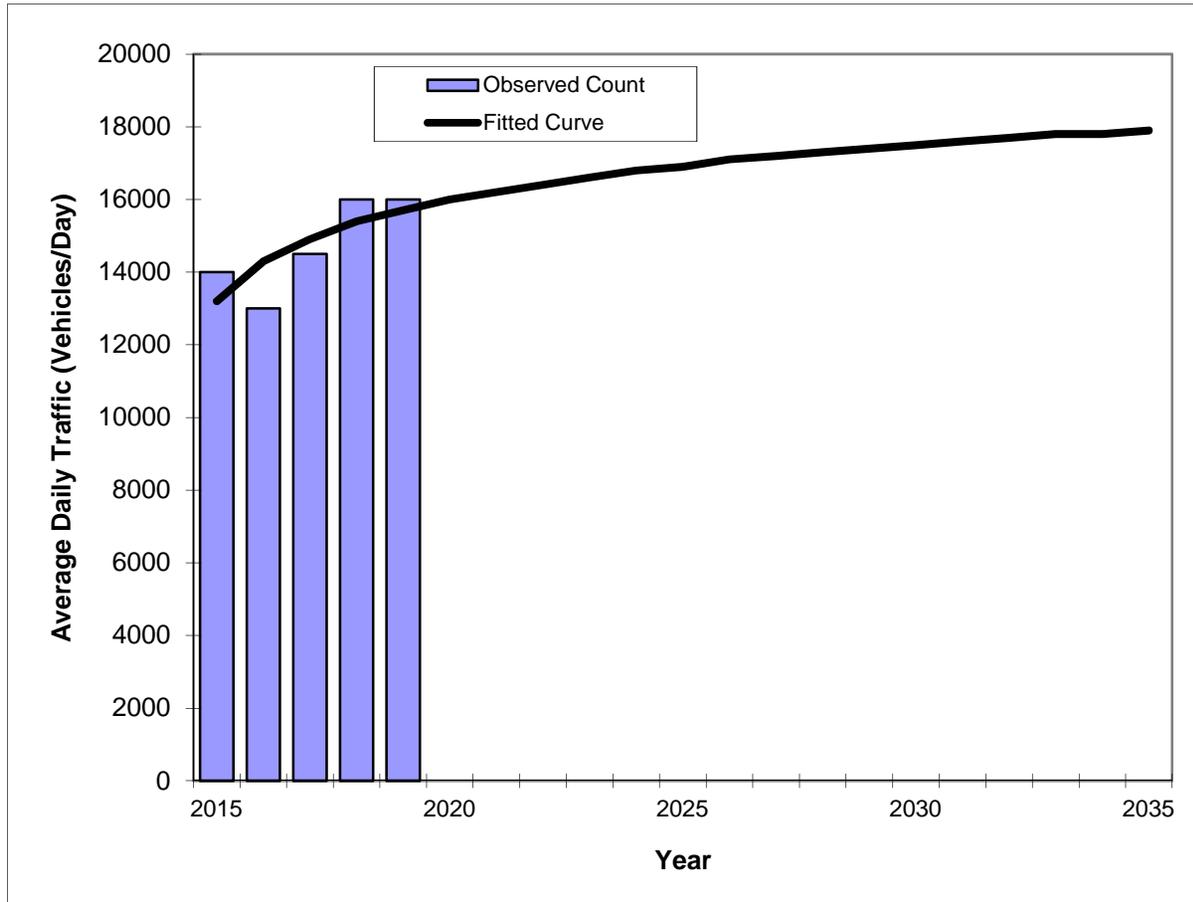
Trend R-squared:	70.46%
Compounded Annual Historic Growth Rate:	4.89%
Printed:	18-Jun-20
Exponential Growth Option	

*Axle-Adjusted

Traffic Trends

SR 916/NW 135th Street/One-way Pair EB -- 200' West of NW 7 Avenue

County:	Miami-Dade (87)
Station #:	0140
Highway:	SR 916/NW 135th Street/One-way Pair EB



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2015	14000	13200
2016	13000	14300
2017	14500	14900
2018	16000	15400
2019	16000	15700

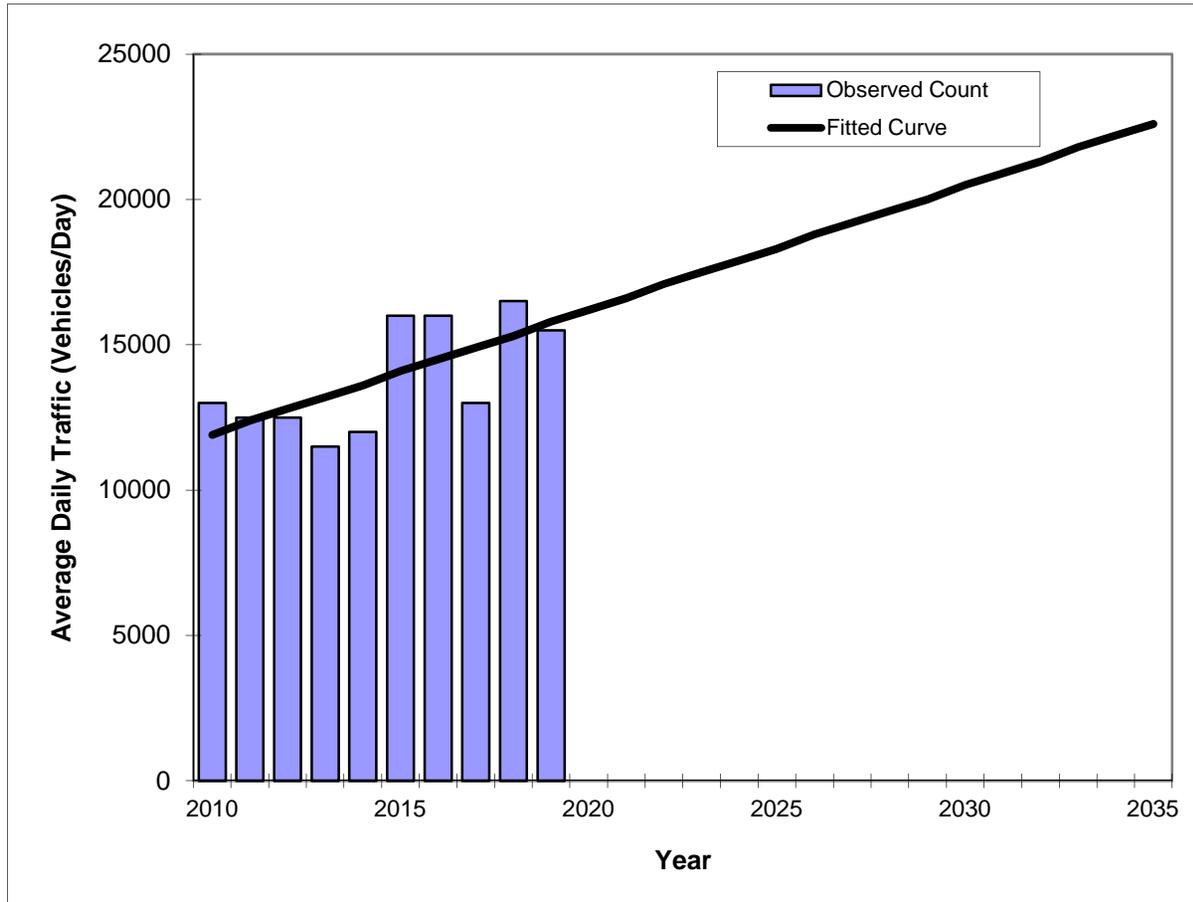
Trend R-squared:	56.73%
Compounded Annual Historic Growth Rate:	4.43%
Printed:	18-Jun-20
Decaying Exponential Growth Option	

*Axle-Adjusted

Traffic Trends

SR 916/NW 138th Street/One-way Pair WB -- 200' West of NW 7 Avenue

County:	Miami-Dade (87)
Station #:	0141
Highway:	SR 916/NW 138th Street/One-way Pair WB



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2010	13000	11900
2011	12500	12400
2012	12500	12800
2013	11500	13200
2014	12000	13600
2015	16000	14100
2016	16000	14500
2017	13000	14900
2018	16500	15300
2019	15500	15800

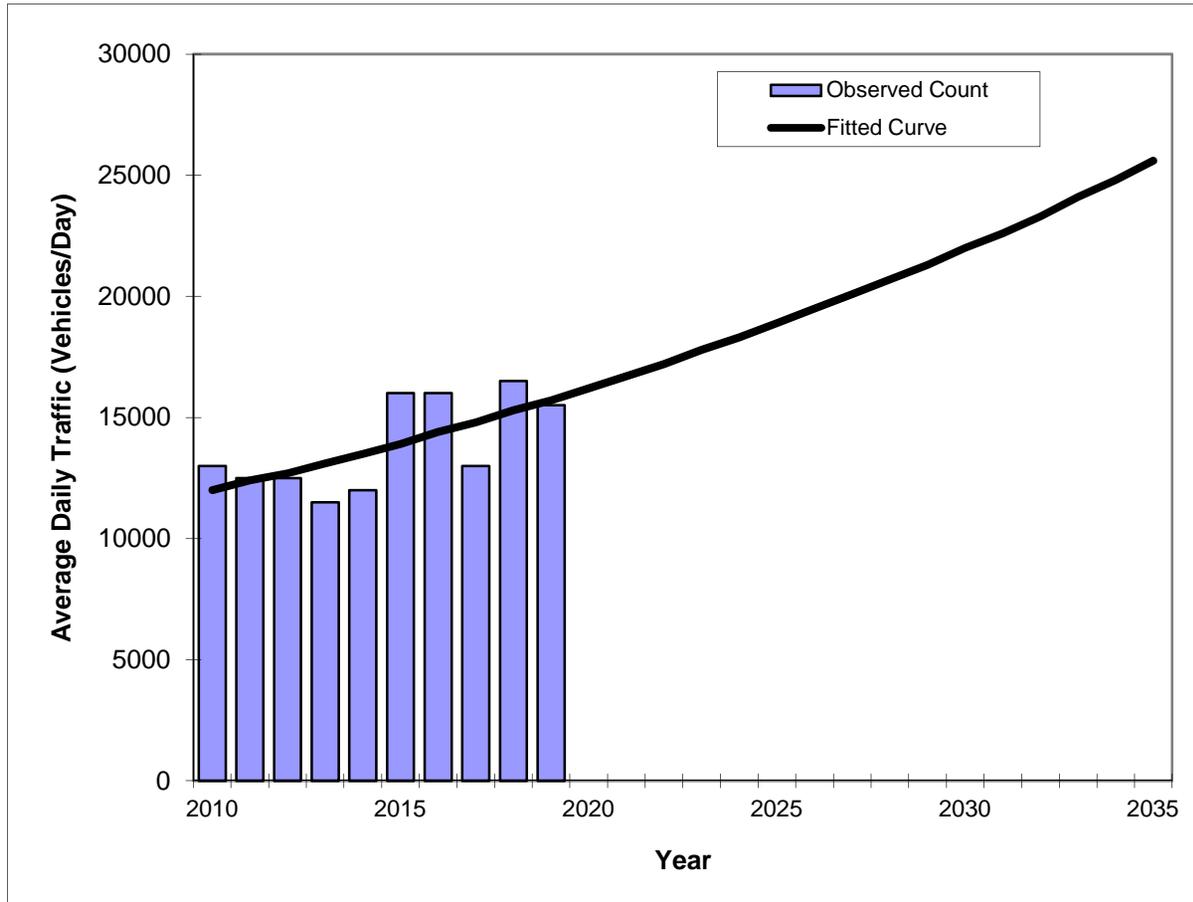
Trend R-squared:	45.61%
Trend Annual Historic Growth Rate:	3.64%
Printed:	18-Jun-20
Straight Line Growth Option	

*Axle-Adjusted

Traffic Trends

SR 916/NW 138th Street/One-way Pair WB -- 200' West of NW 7 Avenue

County:	Miami-Dade (87)
Station #:	0141
Highway:	SR 916/NW 138th Street/One-way Pair WB



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2010	13000	12000
2011	12500	12400
2012	12500	12700
2013	11500	13100
2014	12000	13500
2015	16000	13900
2016	16000	14400
2017	13000	14800
2018	16500	15300
2019	15500	15700

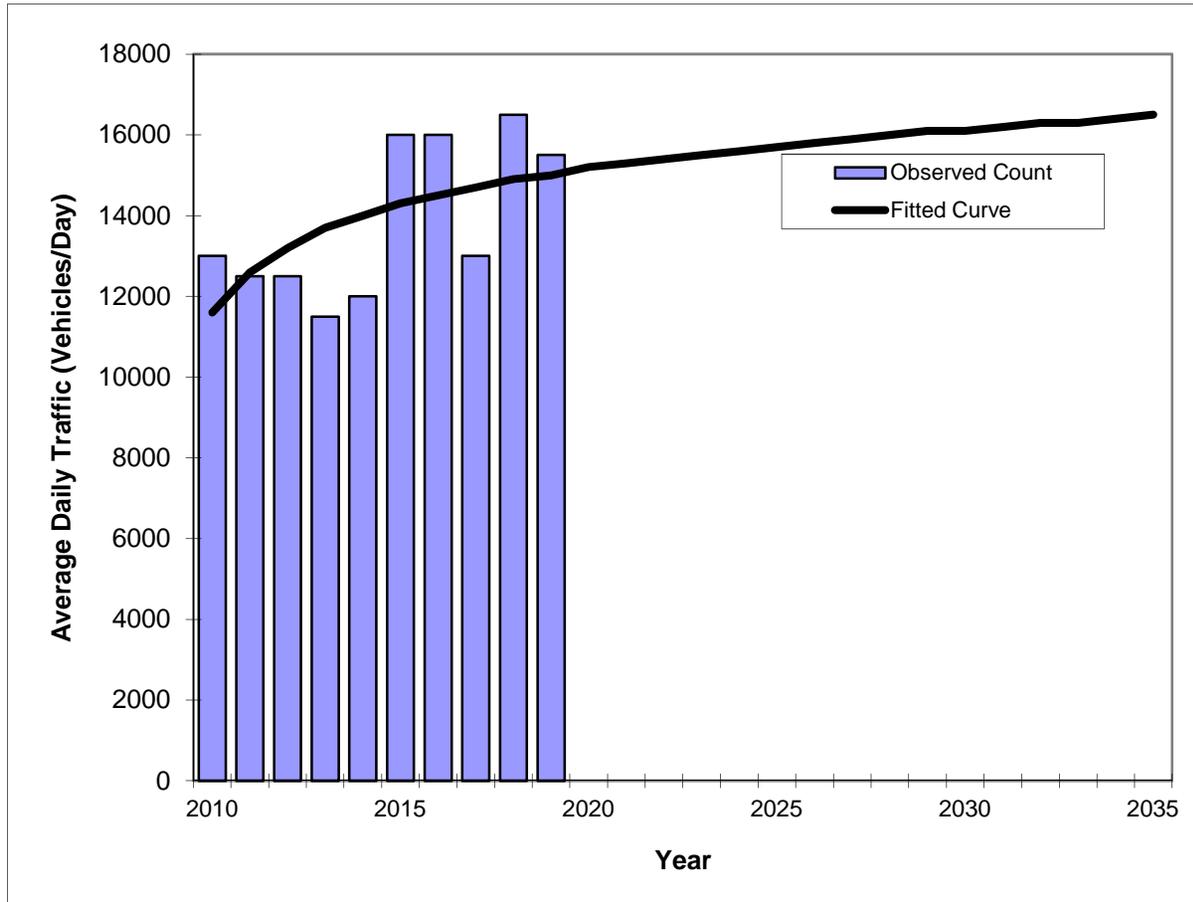
Trend R-squared:	44.99%
Compounded Annual Historic Growth Rate:	3.03%
Printed:	18-Jun-20
Exponential Growth Option	

*Axle-Adjusted

Traffic Trends

SR 916/NW 138th Street/One-way Pair WB -- 200' West of NW 7 Avenue

County:	Miami-Dade (87)
Station #:	0141
Highway:	SR 916/NW 138th Street/One-way Pair WB



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2010	13000	11600
2011	12500	12600
2012	12500	13200
2013	11500	13700
2014	12000	14000
2015	16000	14300
2016	16000	14500
2017	13000	14700
2018	16500	14900
2019	15500	15000

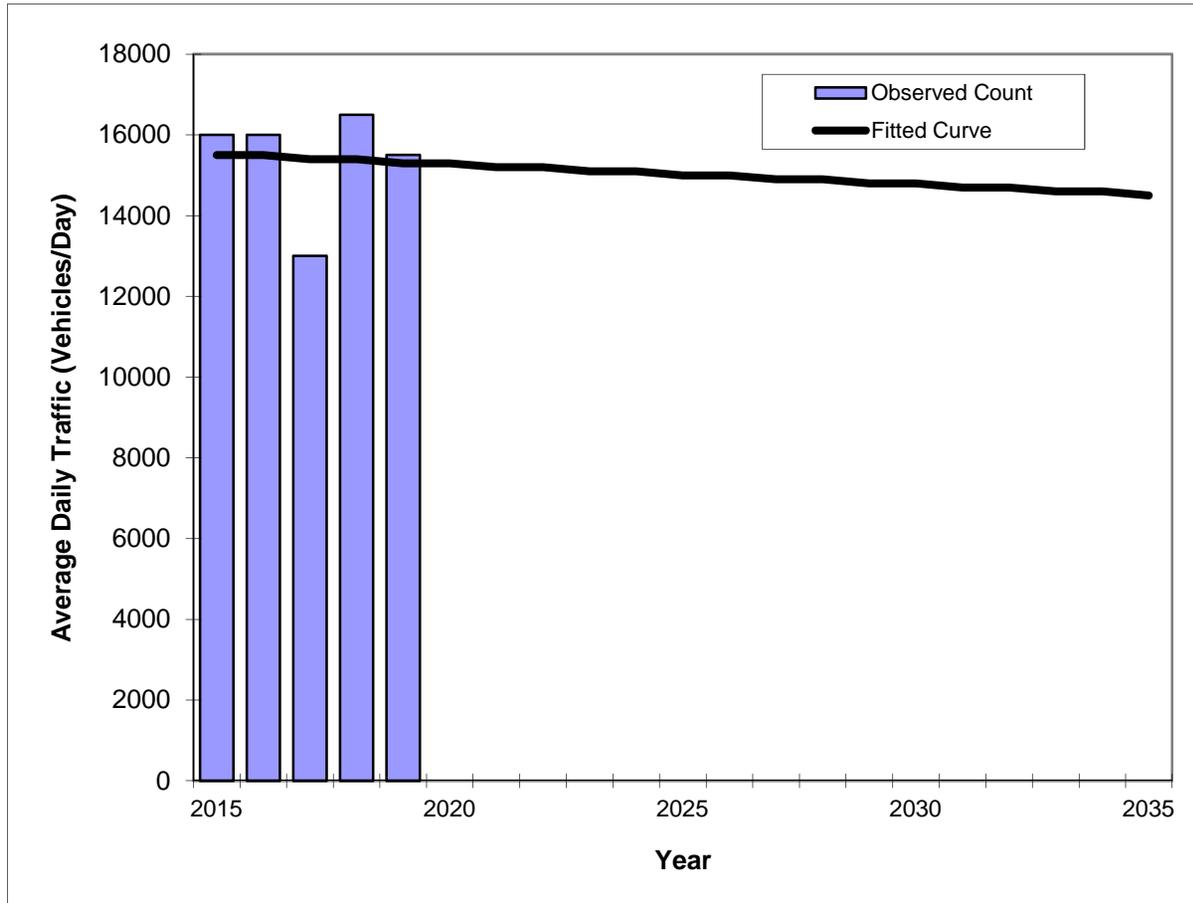
Trend R-squared:	32.79%
Compounded Annual Historic Growth Rate:	2.90%
Printed:	18-Jun-20
Decaying Exponential Growth Option	

*Axle-Adjusted

Traffic Trends

SR 916/NW 138th Street/One-way Pair WB -- 200' West of NW 7 Avenue

County:	Miami-Dade (87)
Station #:	0141
Highway:	SR 916/NW 138th Street/One-way Pair WB



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2015	16000	15500
2016	16000	15500
2017	13000	15400
2018	16500	15400
2019	15500	15300

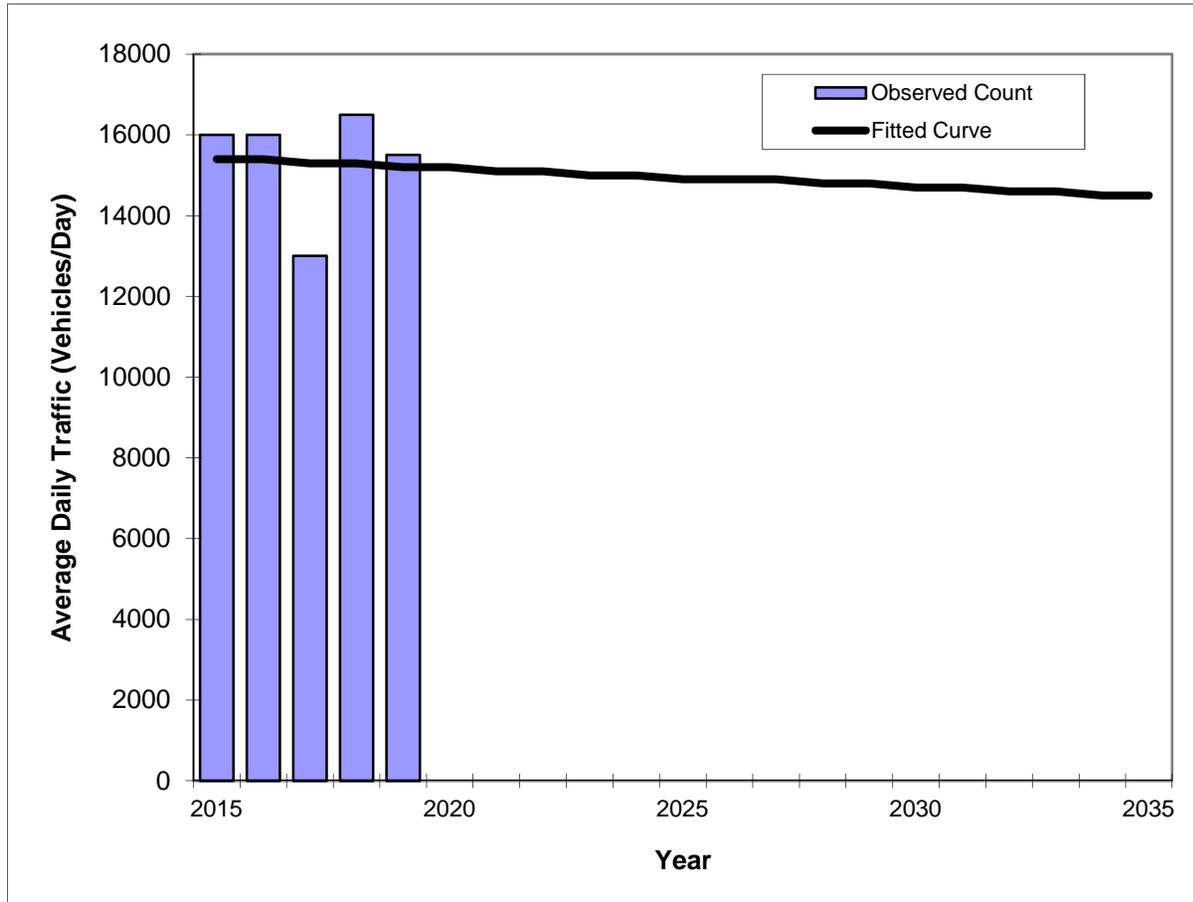
Trend R-squared:	0.32%
Trend Annual Historic Growth Rate:	-0.32%
Printed:	18-Jun-20
Straight Line Growth Option	

*Axle-Adjusted

Traffic Trends

SR 916/NW 138th Street/One-way Pair WB -- 200' West of NW 7 Avenue

County:	Miami-Dade (87)
Station #:	0141
Highway:	SR 916/NW 138th Street/One-way Pair WB



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2015	16000	15400
2016	16000	15400
2017	13000	15300
2018	16500	15300
2019	15500	15200

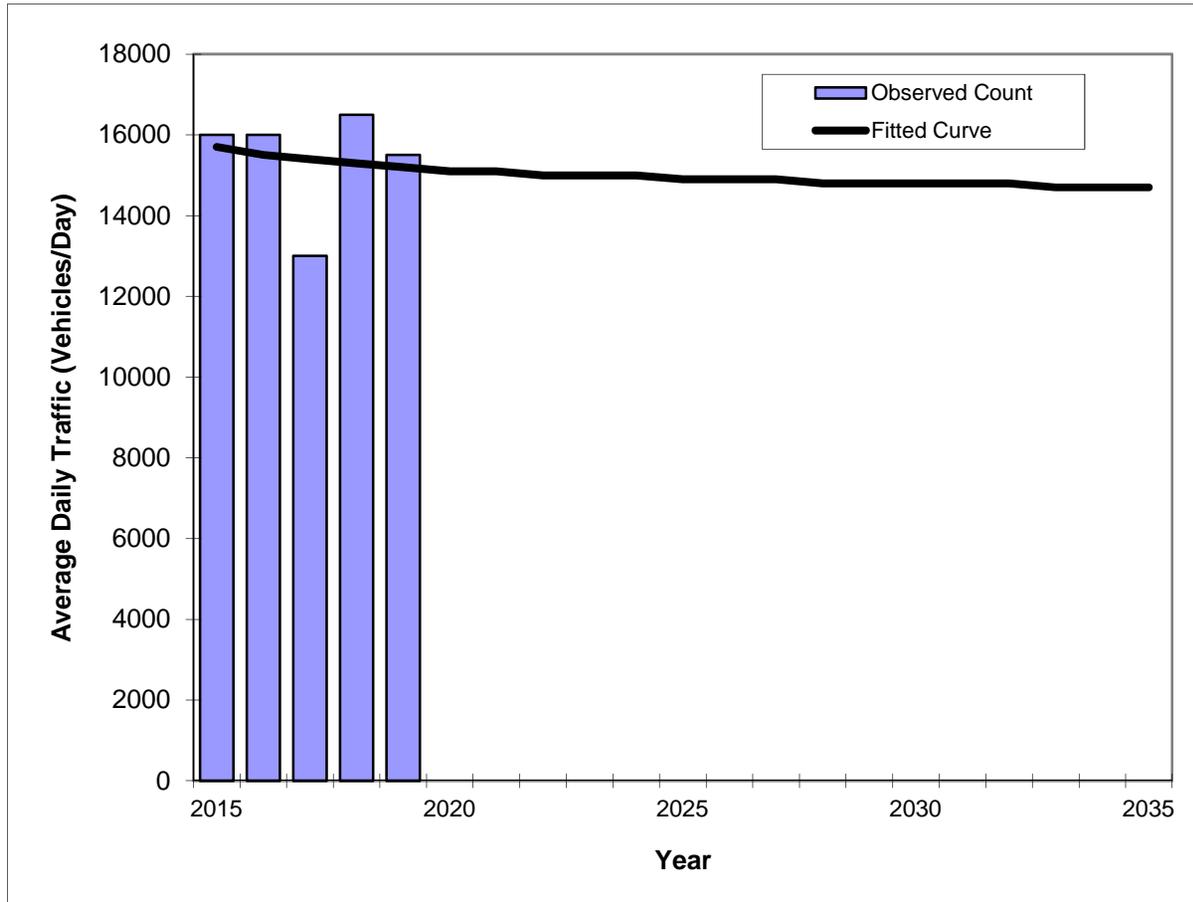
Trend R-squared:	0.29%
Compounded Annual Historic Growth Rate:	-0.33%
Printed:	18-Jun-20
Exponential Growth Option	

*Axle-Adjusted

Traffic Trends

SR 916/NW 138th Street/One-way Pair WB -- 200' West of NW 7 Avenue

County:	Miami-Dade (87)
Station #:	0141
Highway:	SR 916/NW 138th Street/One-way Pair WB



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2015	16000	15700
2016	16000	15500
2017	13000	15400
2018	16500	15300
2019	15500	15200

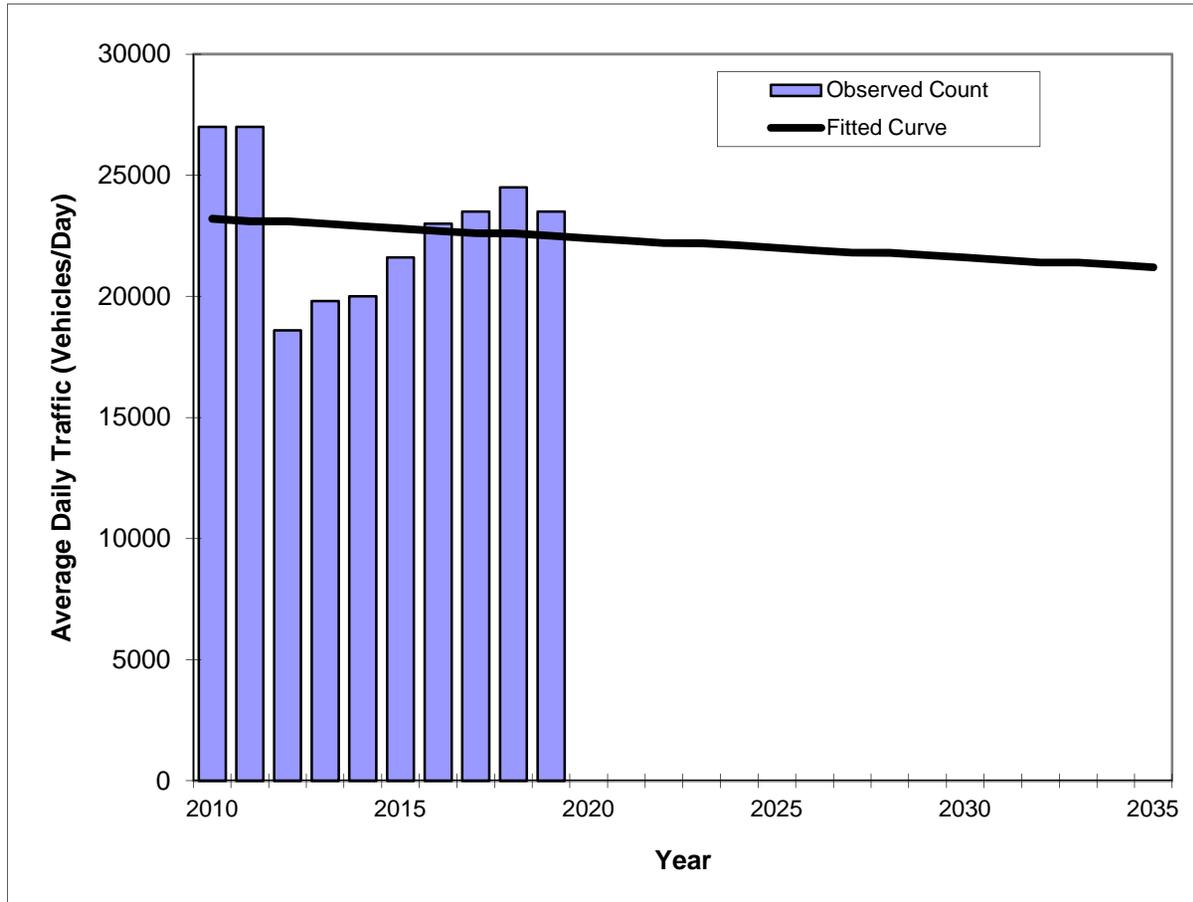
Trend R-squared:	2.30%
Compounded Annual Historic Growth Rate:	-0.81%
Printed:	18-Jun-20
Decaying Exponential Growth Option	

*Axle-Adjusted

Traffic Trends

SR 916/Opa-Locka Boulevard -- 200' West of SR 9/NW 27th Avenue

County:	Miami-Dade (87)
Station #:	1223
Highway:	SR 916/Opa-Locka Boulevard



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2010	27000	23200
2011	27000	23100
2012	18600	23100
2013	19800	23000
2014	20000	22900
2015	21600	22800
2016	23000	22700
2017	23500	22600
2018	24500	22600
2019	23500	22500

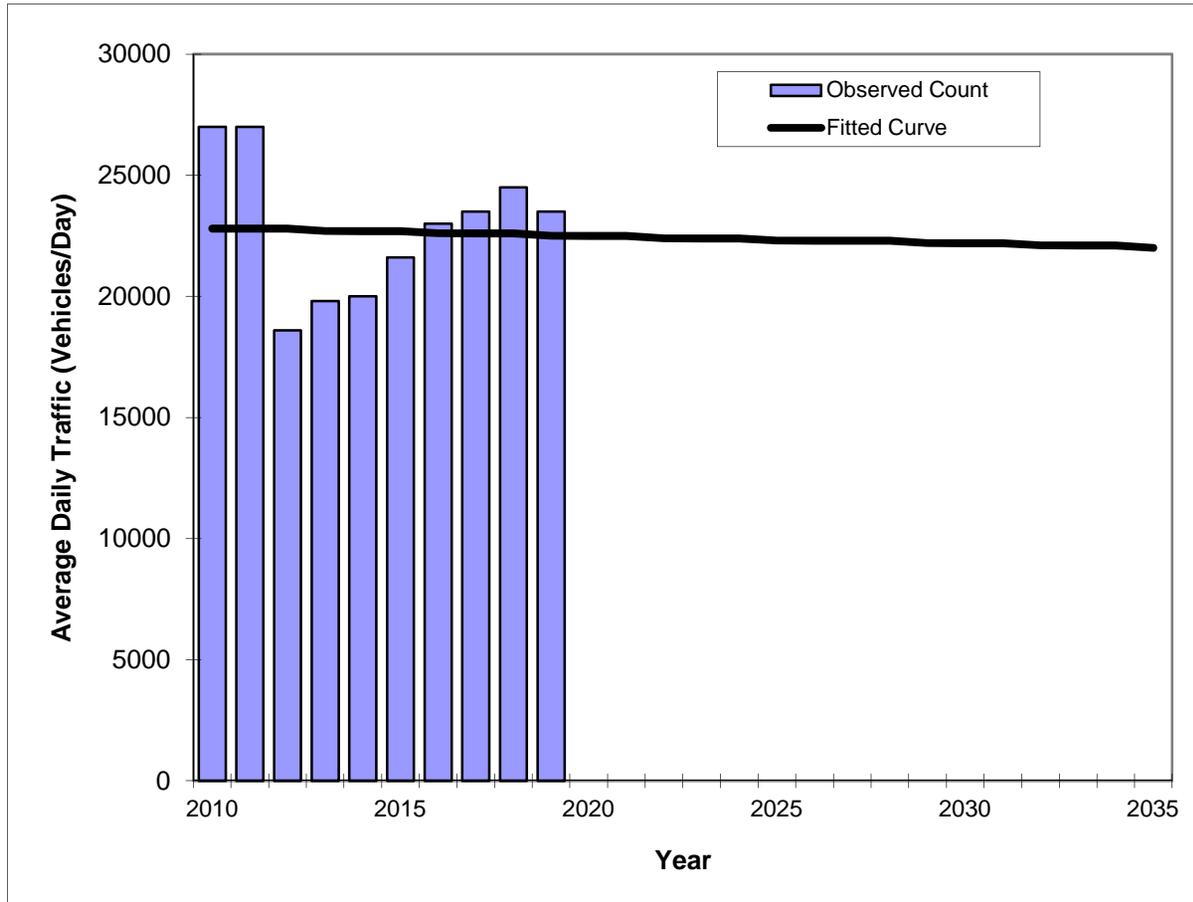
Trend R-squared:	0.71%
Trend Annual Historic Growth Rate:	-0.34%
Printed:	18-Jun-20
Straight Line Growth Option	

*Axle-Adjusted

Traffic Trends

SR 916/Opa-Locka Boulevard -- 200' West of SR 9/NW 27th Avenue

County:	Miami-Dade (87)
Station #:	1223
Highway:	SR 916/Opa-Locka Boulevard



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2010	27000	22800
2011	27000	22800
2012	18600	22800
2013	19800	22700
2014	20000	22700
2015	21600	22700
2016	23000	22600
2017	23500	22600
2018	24500	22600
2019	23500	22500

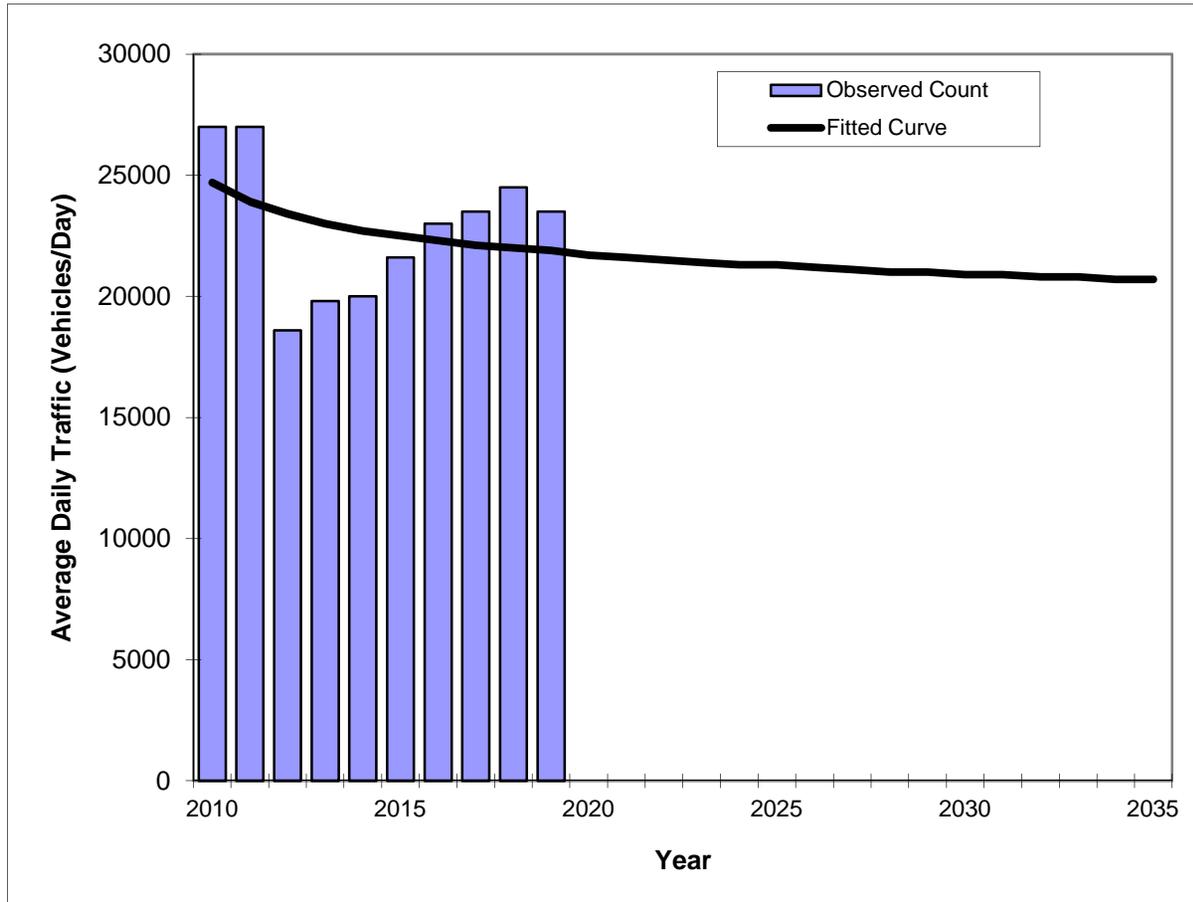
Trend R-squared:	0.11%
Compounded Annual Historic Growth Rate:	-0.15%
Printed:	18-Jun-20
Exponential Growth Option	

*Axle-Adjusted

Traffic Trends

SR 916/Opa-Locka Boulevard -- 200' West of SR 9/NW 27th Avenue

County:	Miami-Dade (87)
Station #:	1223
Highway:	SR 916/Opa-Locka Boulevard



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2010	27000	24700
2011	27000	23900
2012	18600	23400
2013	19800	23000
2014	20000	22700
2015	21600	22500
2016	23000	22300
2017	23500	22100
2018	24500	22000
2019	23500	21900

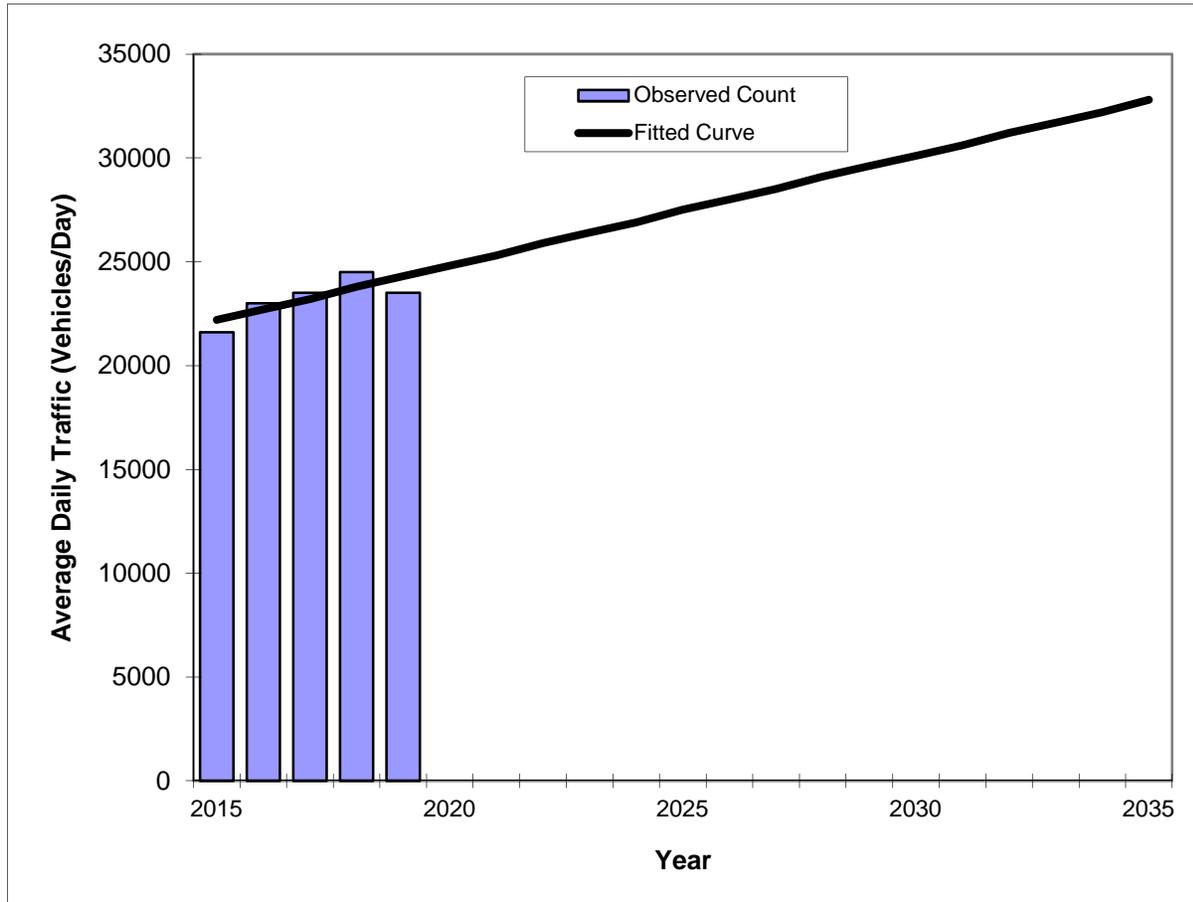
Trend R-squared:	10.19%
Compounded Annual Historic Growth Rate:	-1.33%
Printed:	18-Jun-20
Decaying Exponential Growth Option	

*Axle-Adjusted

Traffic Trends

SR 916/Opa-Locka Boulevard -- 200' West of SR 9/NW 27th Avenue

County:	Miami-Dade (87)
Station #:	1223
Highway:	SR 916/Opa-Locka Boulevard



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2015	21600	22200
2016	23000	22700
2017	23500	23200
2018	24500	23800
2019	23500	24300

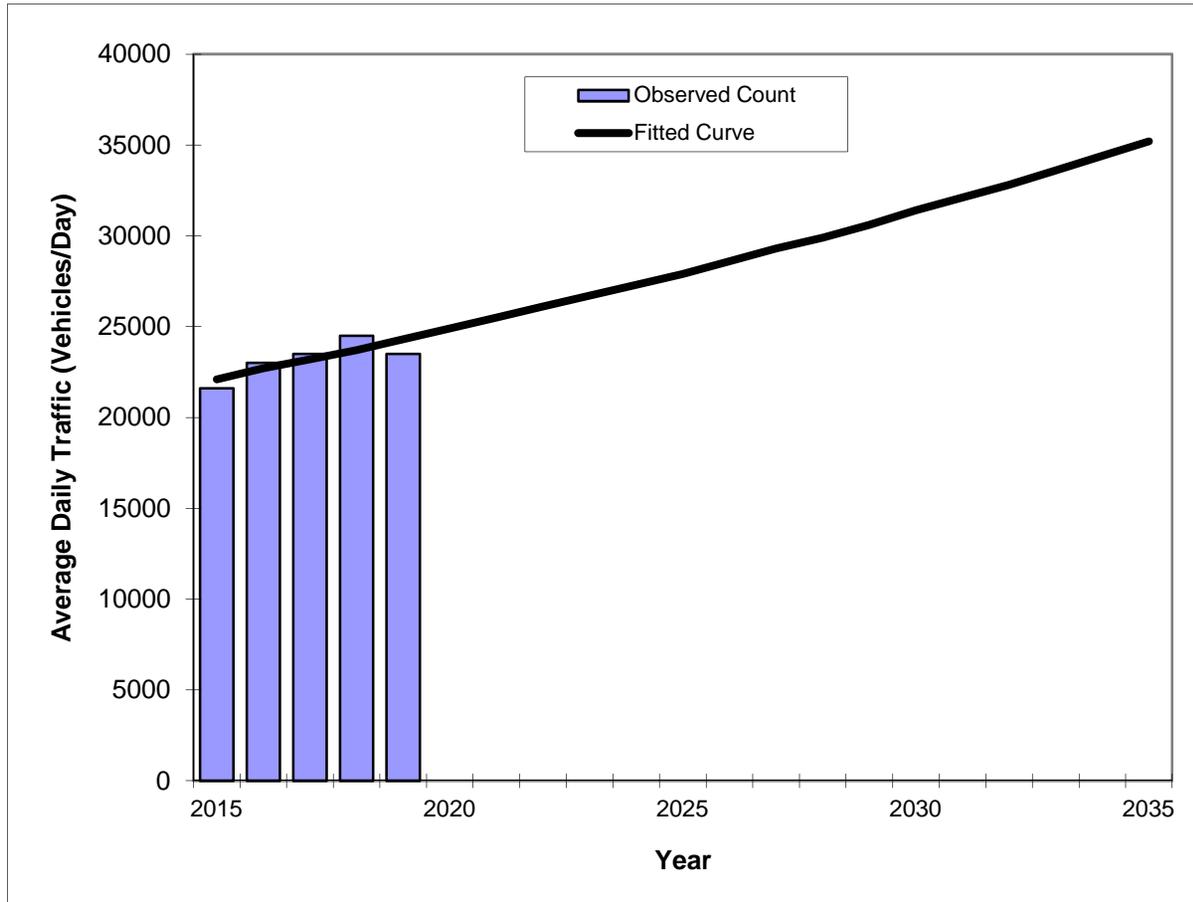
Trend R-squared:	62.87%
Trend Annual Historic Growth Rate:	2.36%
Printed:	18-Jun-20
Straight Line Growth Option	

*Axle-Adjusted

Traffic Trends

SR 916/Opa-Locka Boulevard -- 200' West of SR 9/NW 27th Avenue

County:	Miami-Dade (87)
Station #:	1223
Highway:	SR 916/Opa-Locka Boulevard



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2015	21600	22100
2016	23000	22700
2017	23500	23200
2018	24500	23700
2019	23500	24300

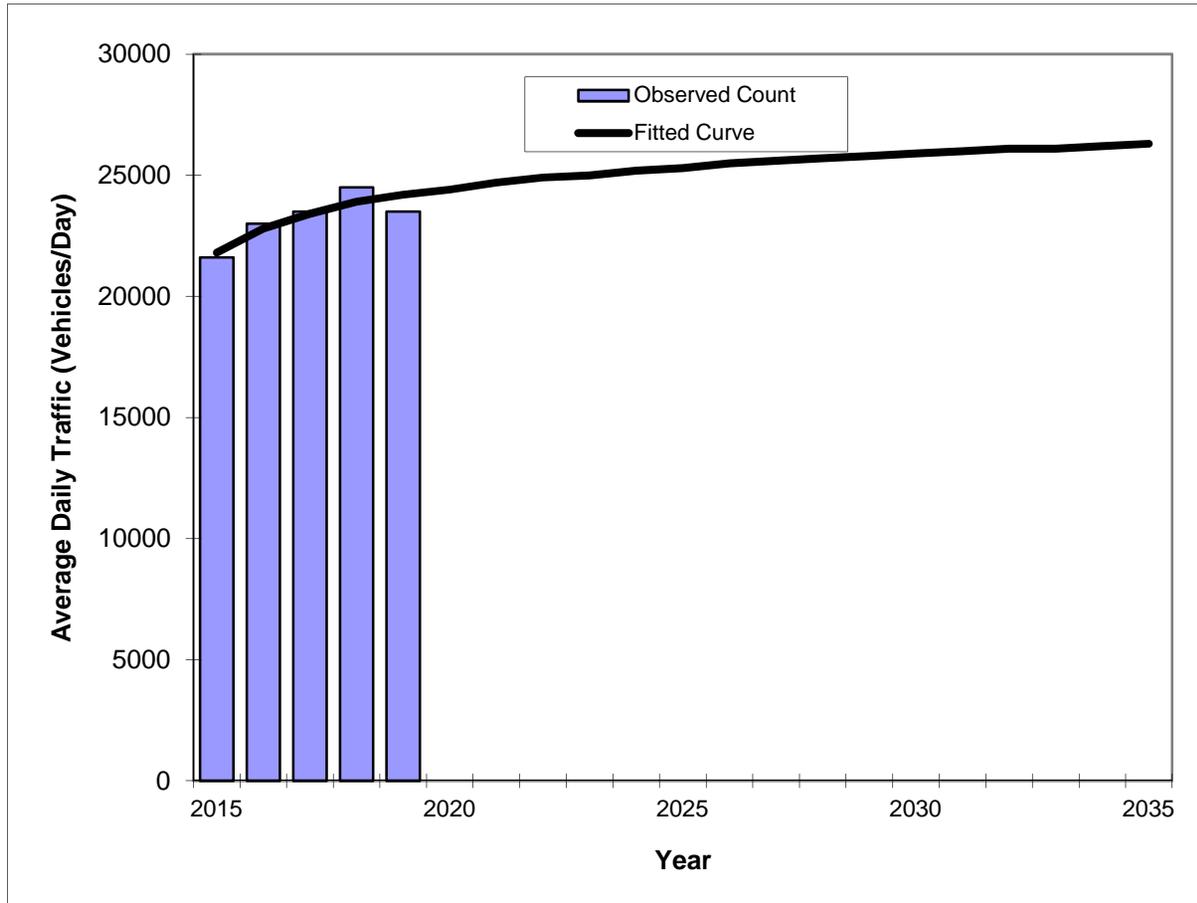
Trend R-squared:	63.33%
Compounded Annual Historic Growth Rate:	2.40%
Printed:	18-Jun-20
Exponential Growth Option	

*Axle-Adjusted

Traffic Trends

SR 916/Opa-Locka Boulevard -- 200' West of SR 9/NW 27th Avenue

County:	Miami-Dade (87)
Station #:	1223
Highway:	SR 916/Opa-Locka Boulevard



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2015	21600	21800
2016	23000	22800
2017	23500	23400
2018	24500	23900
2019	23500	24200

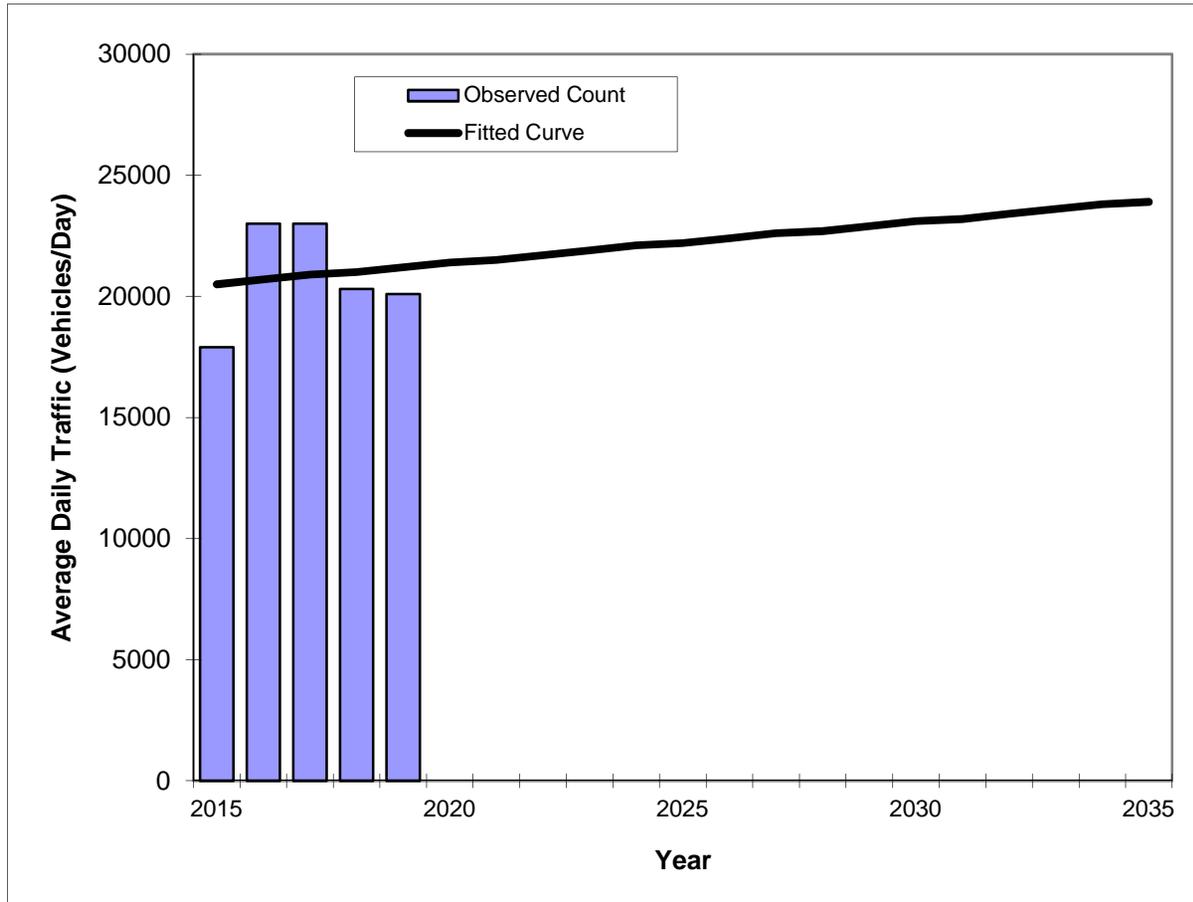
Trend R-squared:	78.49%
Compounded Annual Historic Growth Rate:	2.65%
Printed:	18-Jun-20
Decaying Exponential Growth Option	

*Axle-Adjusted

Traffic Trends

NW 22nd Avenue -- 200' North of NW 132 Street

County:	Miami-Dade (87)
Station #:	8621
Highway:	NW 22nd Avenue



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2015	17900	20500
2016	23000	20700
2017	23000	20900
2018	20300	21000
2019	20100	21200

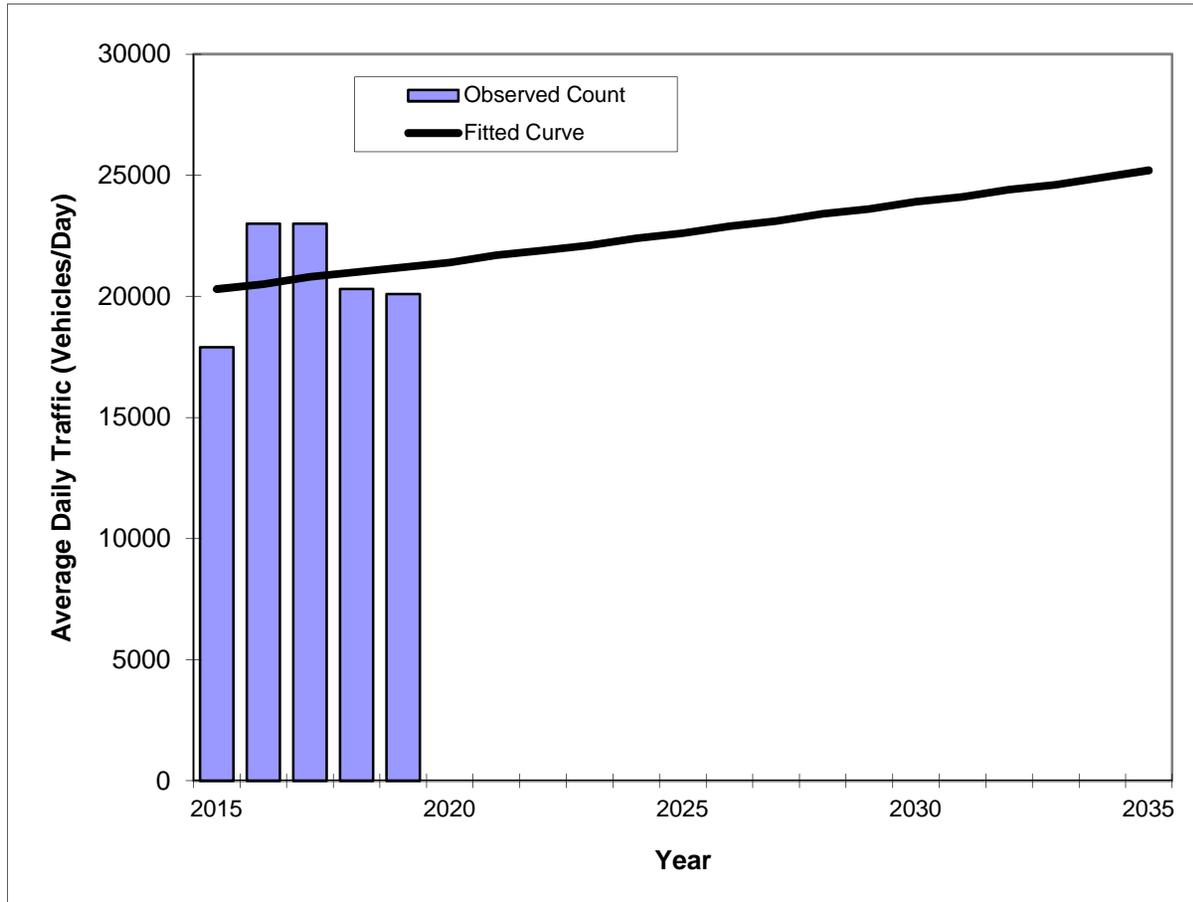
Trend R-squared:	1.54%
Trend Annual Historic Growth Rate:	0.85%
Printed:	18-Jun-20
Straight Line Growth Option	

*Axle-Adjusted

Traffic Trends

NW 22nd Avenue -- 200' North of NW 132 Street

County:	Miami-Dade (87)
Station #:	8621
Highway:	NW 22nd Avenue



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2015	17900	20300
2016	23000	20500
2017	23000	20800
2018	20300	21000
2019	20100	21200

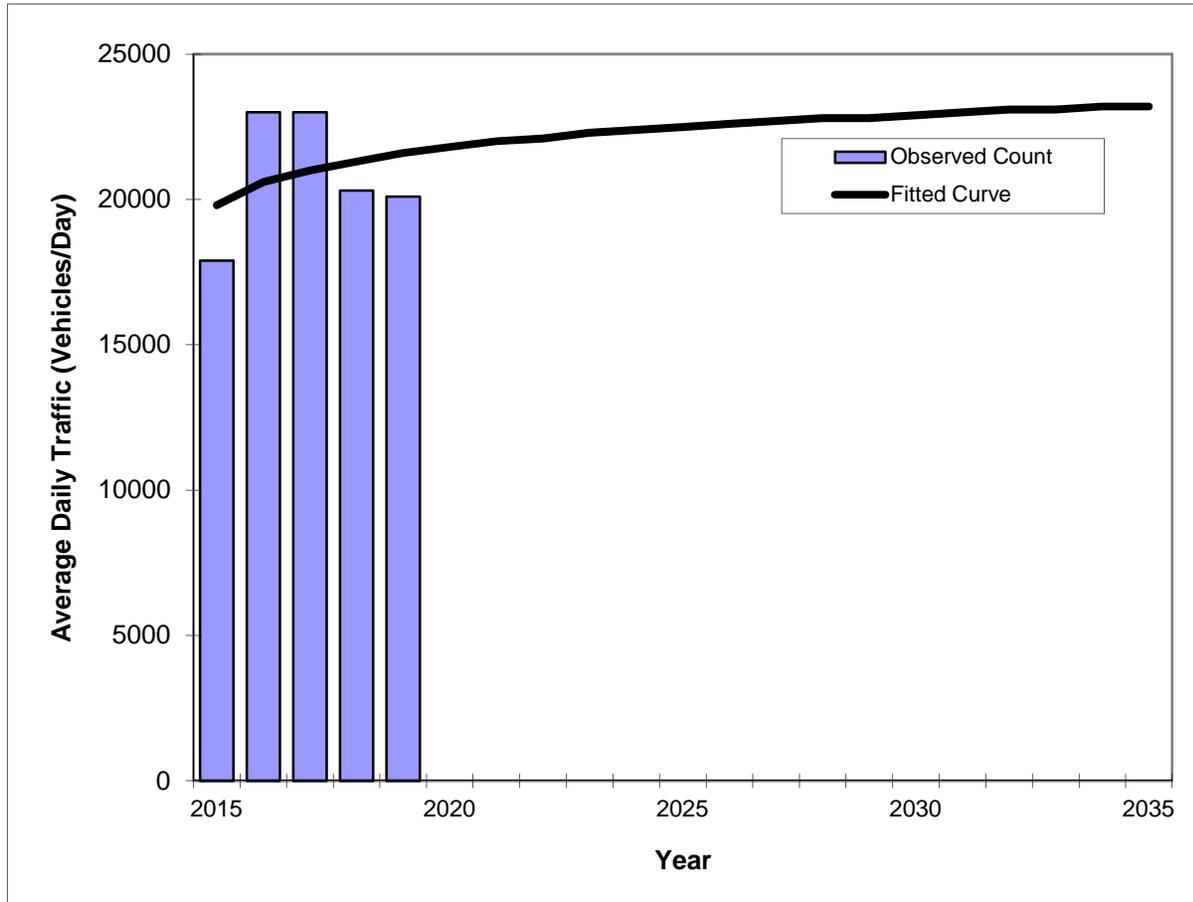
Trend R-squared: 2.57%
 Compounded Annual Historic Growth Rate: 1.09%
 Printed: 18-Jun-20
Exponential Growth Option

*Axle-Adjusted

Traffic Trends

NW 22nd Avenue -- 200' North of NW 132 Street

County:	Miami-Dade (87)
Station #:	8621
Highway:	NW 22nd Avenue



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2015	17900	19800
2016	23000	20600
2017	23000	21000
2018	20300	21300
2019	20100	21600

Trend R-squared:	11.08%
Compounded Annual Historic Growth Rate:	2.20%
Printed:	18-Jun-20
Decaying Exponential Growth Option	

*Axle-Adjusted

SERPM Analysis

SERPM Growth Rate Summary					
Street Name	2015	2045	Difference	Growth Rate	Annual Growth Rate
NW 17th Avenue	4,863	6,656	1,793	36.87%	1.23%
	4,863	6,656	1,793	36.87%	1.23%
	3,963	9,205	5,242	132.27%	4.41%
	5,745	13,201	7,456	129.78%	4.33%
	7,301	14,699	7,398	101.33%	3.38%
SR 916/Opa-Locka Boulevard	20,666	24,448	3,782	18.30%	0.61%
	19,694	23,378	3,684	18.71%	0.62%
	15,588	19,662	4,074	26.14%	0.87%
	15,672	19,343	3,671	23.42%	0.78%
SR 916/NW 135th Street	19,738	19,697	-41	-0.21%	-0.01%
	19,754	19,786	32	0.16%	0.01%
	19,058	17,089	-1,969	-10.33%	-0.34%
	19,361	17,339	-2,022	-10.44%	-0.35%
	19,972	18,049	-1,923	-9.63%	-0.32%
	20,755	18,953	-1,802	-8.68%	-0.29%
Total	216,993	248,161	31,168	14.36%	0.48%

Appendix D

Trip Generation

PROPOSED WEEKDAY AM PEAK HOUR TRIP GENERATION

GROUP	ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			MULTIMODAL REDUCTION		GROSS TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS				
	Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent		In	Out	Total	Percent	MR Trips	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total		
						In	Out																				
GROUP 1	1 Private School (K-12)	(1)	(1)	716	stu	69%	31%	448	201	649	8.1%	53	411	185	596	0.0%	0	411	185	596	0.0%	0	411	185	596		
	2 Multifamily Housing (Mid-Rise)	10	221	24	du	26%	74%	2	6	8	8.1%	1	2	5	7	0.0%	0	2	5	7	0.0%	0	2	5	7		
	3 Clinic	10	630	1.4	ksf	78%	22%	4	1	5	8.1%	0	4	1	5	0.0%	0	4	1	5	0.0%	0	4	1	5		
	4																										
	5																										
	6																										
	7																										
	8																										
	9																										
	10																										
	11																										
	12																										
	13																										
	14																										
	15																										
ITE Land Use Code					Rate or Equation		Total:			454	208	662	8.1%	54	417	191	608	0.0%	0	417	191	608	0.0%	0	417	191	608
(1)					Y=0.9063(X) ⁽¹⁾																						
221					LN(Y) = 0.98*LN(X)+0.98																						
630					Y=3.69(X)																						
																				716 students traveling by bus with 50 students per bus			15	15	30		
																				Total Trips			432	206	638		

⁽¹⁾ Trip Generation rate and direction distribution based on Scheck Hillel Community Day School driveway volumes.

PROPOSED WEEKDAY PM PEAK HOUR TRIP GENERATION

GROUP	ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			MULTIMODAL REDUCTION		GROSS TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS				
	Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent		In	Out	Total	Percent	MR Trips	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total		
						In	Out																				
GROUP 2	1 Private School (K-12)	(1)	(1)	716	stu	25%	75%	93	278	371	8.1%	30	85	256	341	0.0%	0	85	256	341	0.0%	0	85	256	341		
	2 Multifamily Housing (Mid-Rise)	10	221	24	du	61%	39%	7	4	11	8.1%	1	6	4	10	0.0%	0	6	4	10	0.0%	0	6	4	10		
	3 Clinic	10	630	1.4	ksf	29%	71%	3	6	9	8.1%	1	3	5	8	0.0%	0	3	5	8	0.0%	0	3	5	8		
	4																										
	5																										
	6																										
	7																										
	8																										
	9																										
	10																										
	11																										
	12																										
	13																										
	14																										
	15																										
ITE Land Use Code					Rate or Equation		Total:			103	288	391	8.1%	32	94	265	359	0.0%	0	94	265	359	0.0%	0	94	265	359
(1)					Y=0.5183(X) ⁽¹⁾																						
221					LN(Y) = 0.96*LN(X)+0.63																						
630					LN(Y) = 0.72*LN(X)+1.97																						
																				716 students traveling by bus with 50 students per bus			15	15	30		
																				Total Trips			109	280	389		

⁽¹⁾ Trip Generation rate and direction distribution based on Scheck Hillel Community Day School driveway volumes.

Internal Capture Reduction Calculations

Methodology for A.M. Peak Hour and P.M. Peak Hour
on the *Trip Generation Handbook*, 3rd Edition, published by the Institute of Transportation Engi

Methodology for Daily
based on the average of the Unconstrained Rates for the A.M. Peak Hour and P.M. Peak Hour

SUMMARY (PROPOSED)

GROSS TRIP GENERATION					
INPUT	Land Use	A.M. Peak Hour		P.M. Peak Hour	
		Enter	Exit	Enter	Exit
	Office	415	186	88	261
	Retail	0	0	0	0
	Restaurant	0	0	0	0
	Cinema/Entertainment	0	0	0	0
	Residential	2	5	6	4
	Hotel	0	0	0	0
		417	191	94	265
INTERNAL TRIPS					
OUTPUT	Land Use	A.M. Peak Hour		P.M. Peak Hour	
		Enter	Exit	Enter	Exit
	Office	0	0	0	0
	Retail	0	0	0	0
	Restaurant	0	0	0	0
	Cinema/Entertainment	0	0	0	0
	Residential	0	0	0	0
	Hotel	0	0	0	0
		0	0	0	0
OUTPUT	<i>Total % Reduction</i>	0.0%		0.0%	
	Office	0.0%		0.0%	
	Retail				
	Restaurant				
	Cinema/Entertainment				
	Residential	0.0%		0.0%	
	Hotel				
EXTERNAL TRIPS					
OUTPUT	Land Use	A.M. Peak Hour		P.M. Peak Hour	
		Enter	Exit	Enter	Exit
	Office	415	186	88	261
	Retail	0	0	0	0
	Restaurant	0	0	0	0
	Cinema/Entertainment	0	0	0	0
	Residential	2	5	6	4
	Hotel	0	0	0	0
		417	191	94	265

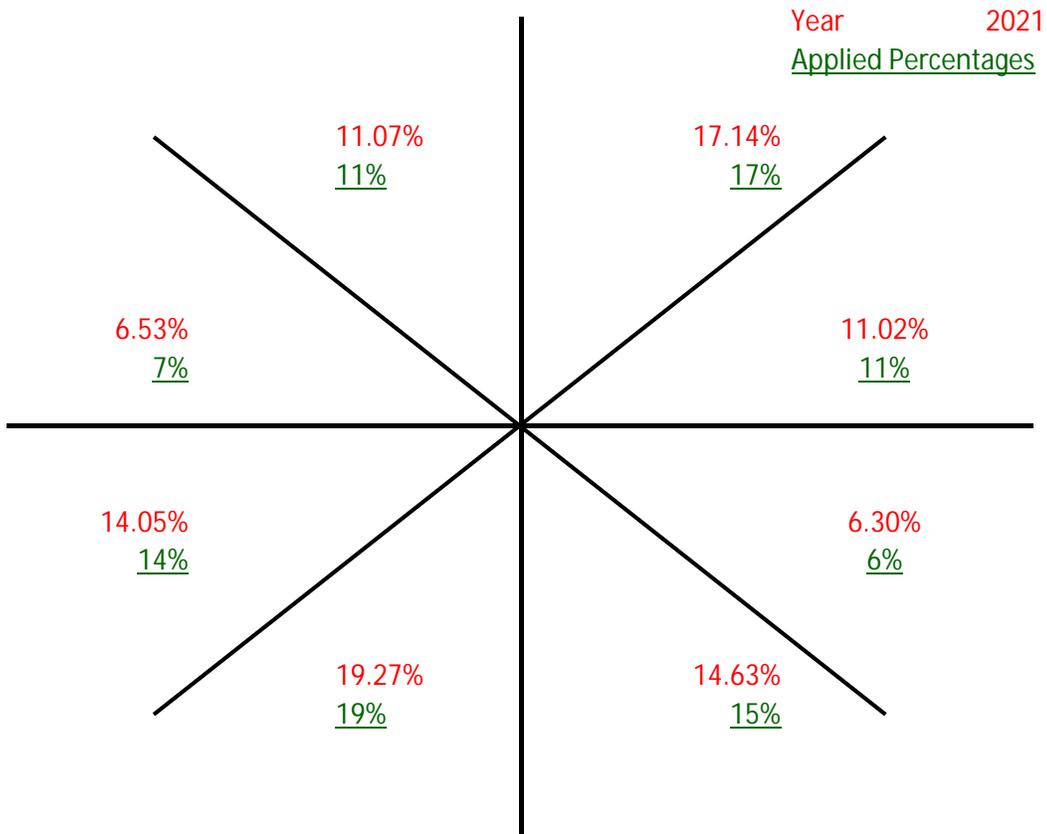
Scheck Hillel Community Day School Data
 Collected on December 11, 2019
 Number of Students enrolled: 1,100

<i>A.M. Peak Hour</i>					Surrogate Site		
<i>Land Use</i>	<i>In</i>	<i>Out</i>	<i>Total</i>		%In	%Out	Trip Generation Rate
School	706	310	1016		69%	31%	0.9063
<i>P.M. Peak Hour</i>					Surrogate Site		
<i>Land Use</i>	<i>In</i>	<i>Out</i>	<i>Total</i>		%In	%Out	Trip Generation Rate
School	146	435	581		25%	75%	0.5183

Appendix E

Cardinal Trip Distribution

Cardinal Distribution for TAZ 249



Cardinal Trip Distribution

Cardinal Direction	Percentage of Trips		2021 Interpolated	2021 Rounded
	2015	2045		
North-Northeast	18.9%	14.10%	17.14%	17.00%
East-Northeast	12.3%	8.80%	11.02%	11.00%
East-Southeast	7.0%	5.10%	6.30%	6.00%
South-Southeast	13.6%	16.40%	14.63%	15.00%
South-Southwest	16.7%	23.70%	19.27%	19.00%
West-Southwest	13.9%	14.30%	14.05%	14.00%
West-Northwest	5.5%	8.30%	6.53%	7.00%
North-Northwest	12.1%	9.30%	11.07%	11.00%
Total	100.0%	100.0%	100.00%	100.00%

Appendix F

Volume Development Worksheets

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: SR 916/NW 17th Avenue and Opa-Locka Boulevard
 COUNT DATE: June 16, 2020
 AM PEAK HOUR FACTOR: 0.97
 PM PEAK HOUR FACTOR: 0.95

"AM EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM Raw Turning Movements		0	0	0			95	488	18		86	52	0		63	72
Peak Season Correction Factor	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050
Counts vs. FDOT AADT Correction Factor	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23
AM EXISTING CONDITIONS		0	0	0			123	630	23		111	67	0		81	93

"PM EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Raw Turning Movements		0	0	0			163	806	21		230	141	0		68	105
Peak Season Correction Factor	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050
Counts vs. FDOT AADT Correction Factor	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23
PM EXISTING CONDITIONS		0	0	0			211	1,041	27		297	182	0		88	136

"AM BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
TOTAL "VESTED" TRAFFIC		0	0	0			0	0	0		0	0	0		0	0

Years To Buildout	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Yearly Growth Rate	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%
AM BACKGROUND TRAFFIC GROWTH		0	0	0			3	13	0		2	1	0		2	2

AM NON-PROJECT TRAFFIC		0	0	0			126	643	23		113	68	0		83	95
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"PM BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
TOTAL "VESTED" TRAFFIC		0	0	0			0	0	0		0	0	0		0	0

Years To Buildout	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%
PM BACKGROUND TRAFFIC GROWTH		0	0	0			14	68	2		19	12	0		6	9

PM NON-PROJECT TRAFFIC		0	0	0			225	1,109	29		316	194	0		94	145
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"AM PROJECT DISTRIBUTION"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Valet Distribution	Entering																
	Exiting																
Net New Distribution	Entering								24.0%			59.0%					
	Exiting														58.0%	25.0%	

"PM PROJECT DISTRIBUTION"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Valet Distribution	Entering																
	Exiting																
Net New Distribution	Entering								24.0%			59.0%					
	Exiting														58.0%	25.0%	

"AM PROJECT TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM TRAFFIC DIVERSIONS																	
Project Trips	Pass - By																
	Valet																
	Net New								104			255				119	52
AM TOTAL PROJECT TRAFFIC			0	0	0				104			255	0			119	52
AM TOTAL TRAFFIC			0	0	0				127		113	323	0			202	147

"PM PROJECT TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM TRAFFIC DIVERSIONS																	
Project Trips	Pass - By																
	Valet																
	Net New								26			64				162	71
PM TOTAL PROJECT TRAFFIC			0	0	0				26			64	0			162	71
PM TOTAL TRAFFIC			0	0	0				55		316	258	0			256	216

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: NW 17th Avenue and Residential Project Driveway
 COUNT DATE: June 16, 2020
 AM PEAK HOUR FACTOR: 0.92
 PM PEAK HOUR FACTOR: 0.92

"AM EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM Raw Turning Movements		0	0	0		0	0	0		0	70	0		0	135	0
Peak Season Correction Factor	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050
Counts vs. FDOT AADT Correction Factor	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23
AM EXISTING CONDITIONS		0	0	0		0	0	0		0	90	0		0	174	0

"PM EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Raw Turning Movements		0	0	0		0	0	0		0	162	0		0	173	0
Peak Season Correction Factor	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050
Counts vs. FDOT AADT Correction Factor	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23
PM EXISTING CONDITIONS		0	0	0		0	0	0		0	209	0		0	223	0

"AM BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
TOTAL "VESTED" TRAFFIC		0	0	0		0	0	0		0	0	0		0	0	0

Years To Buildout	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Yearly Growth Rate	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%
AM BACKGROUND TRAFFIC GROWTH		0	0	0		0	0	0		0	2	0		0	4	0

AM NON-PROJECT TRAFFIC		0	0	0		0	0	0		0	92	0		0	178	0
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"PM BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
TOTAL "VESTED" TRAFFIC		0	0	0		0	0	0		0	0	0		0	0	0

Years To Buildout	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%
PM BACKGROUND TRAFFIC GROWTH		0	0	0		0	0	0		0	14	0		0	14	0

PM NON-PROJECT TRAFFIC		0	0	0		0	0	0		0	223	0		0	237	0
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"AM PROJECT DISTRIBUTION"		LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																		
	Exiting																		
Valet Distribution	Entering																		
	Exiting																		
Net New Distribution	Entering														16.0%			17.0%	
	Exiting							2.0%			1.0%								

"PM PROJECT DISTRIBUTION"		LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																		
	Exiting																		
Valet Distribution	Entering																		
	Exiting														5.0%		1.0%	16.0%	
Net New Distribution	Entering																		
	Exiting							1.0%						17.0%					

"AM PROJECT TRAFFIC"		LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM TRAFFIC DIVERSIONS																			
Project Trips	Pass - By																		
	Valet																		
	Net New							4		1				34	2			73	
AM TOTAL PROJECT TRAFFIC					0	0	0		4	0	1		0	34	2		0	73	0
AM TOTAL TRAFFIC					0	0	0		4	0	1		0	126	2		0	251	0

"PM PROJECT TRAFFIC"		LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM TRAFFIC DIVERSIONS																			
Project Trips	Pass - By																		
	Valet																		
	Net New							4		0	0			47	5		1	18	
PM TOTAL PROJECT TRAFFIC					0	0	0		4	0	0		0	47	5		1	18	0
PM TOTAL TRAFFIC					0	0	0		4	0	0		0	270	5		1	255	0

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: NW 17th Avenue and North School Project Driveway
COUNT DATE: June 16, 2020
AM PEAK HOUR FACTOR: 0.92
PM PEAK HOUR FACTOR: 0.92

"AM EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM Raw Turning Movements		0	0	0		0	0	0		0	70	0		0	135	0
Peak Season Correction Factor	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050
Counts vs. FDOT AADT Correction Factor	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23
AM EXISTING CONDITIONS		0	0	0		0	0	0		0	90	0		0	174	0

"PM EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Raw Turning Movements		0	0	0		0	0	0		0	162	0		0	173	0
Peak Season Correction Factor	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050
Counts vs. FDOT AADT Correction Factor	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23
PM EXISTING CONDITIONS		0	0	0		0	0	0		0	209	0		0	223	0

"AM BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
TOTAL "VESTED" TRAFFIC		0	0	0		0	0	0		0	0	0		0	0	0

Years To Buildout	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Yearly Growth Rate	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%
AM BACKGROUND TRAFFIC GROWTH		0	0	0		0	0	0		0	2	0		0	4	0

AM NON-PROJECT TRAFFIC		0	0	0		0	0	0		0	92	0		0	178	0
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"PM BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
TOTAL "VESTED" TRAFFIC		0	0	0		0	0	0		0	0	0		0	0	0

Years To Buildout	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%
PM BACKGROUND TRAFFIC GROWTH		0	0	0		0	0	0		0	14	0		0	14	0

PM NON-PROJECT TRAFFIC		0	0	0		0	0	0		0	223	0		0	237	0
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"AM PROJECT DISTRIBUTION"		LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																		
	Exiting																		
Valet Distribution	Entering																		
	Exiting																		
Net New Distribution	Entering													1.0%	1.0%			17.0%	
	Exiting								81.0%		16.0%								2.0%

"PM PROJECT DISTRIBUTION"		LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																		
	Exiting																		
Valet Distribution	Entering																		
	Exiting																		
Net New Distribution	Entering													5.0%	2.0%			16.0%	
	Exiting								82.0%		17.0%								1.0%

"AM PROJECT TRAFFIC"		LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM TRAFFIC DIVERSIONS																			
Project Trips	Pass - By																		
	Valet																		
	Net New								167		34			2	4				77
AM TOTAL PROJECT TRAFFIC					0	0	0		167	0	34		0	2	4		0	77	0

AM TOTAL TRAFFIC					0	0	0		167	0	34		0	94	4		0	255	0
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"PM PROJECT TRAFFIC"		LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM TRAFFIC DIVERSIONS																			
Project Trips	Pass - By																		
	Valet																		
	Net New								229		47			5	3				22
PM TOTAL PROJECT TRAFFIC					0	0	0		229	0	47		0	5	3		0	22	0

PM TOTAL TRAFFIC					0	0	0		229	0	47		0	228	3		0	259	0
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TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: NW 17th Avenue and South School Project Driveway
COUNT DATE: June 16, 2020
AM PEAK HOUR FACTOR: 0.92
PM PEAK HOUR FACTOR: 0.92

"AM EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM Raw Turning Movements		0	0	0		0	0	0		0	70	0		0	135	0
Peak Season Correction Factor	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050
Counts vs. FDOT AADT Correction Factor	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23
AM EXISTING CONDITIONS		0	0	0		0	0	0		0	90	0		0	174	0

"PM EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Raw Turning Movements		0	0	0		0	0	0		0	162	0		0	173	0
Peak Season Correction Factor	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050
Counts vs. FDOT AADT Correction Factor	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23
PM EXISTING CONDITIONS		0	0	0		0	0	0		0	209	0		0	223	0

"AM BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
TOTAL "VESTED" TRAFFIC		0	0	0		0	0	0		0	0	0		0	0	0

Years To Buildout	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Yearly Growth Rate	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%
AM BACKGROUND TRAFFIC GROWTH		0	0	0		0	0	0		0	2	0		0	4	0

AM NON-PROJECT TRAFFIC		0	0	0		0	0	0		0	92	0		0	178	0
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"PM BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
TOTAL "VESTED" TRAFFIC		0	0	0		0	0	0		0	0	0		0	0	0

Years To Buildout	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%
PM BACKGROUND TRAFFIC GROWTH		0	0	0		0	0	0		0	14	0		0	14	0

PM NON-PROJECT TRAFFIC		0	0	0		0	0	0		0	223	0		0	237	0
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"AM PROJECT DISTRIBUTION"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
LAND USE	TYPE																
Pass-By Distribution	Entering																
	Exiting																
Valet Distribution	Entering																
	Exiting																
Net New Distribution	Entering										2.0%	81.0%			17.0%		
	Exiting														83.0%		

"PM PROJECT DISTRIBUTION"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
LAND USE	TYPE																
Pass-By Distribution	Entering																
	Exiting																
Valet Distribution	Entering																
	Exiting																
Net New Distribution	Entering										7.0%	76.0%			16.0%		
	Exiting														83.0%		

"AM PROJECT TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
LAND USE	TYPE																
AM TRAFFIC DIVERSIONS																	
Project Trips	Pass - By																
	Valet																
	Net New										6	353			73	171	
AM TOTAL PROJECT TRAFFIC			0	0	0		0	0	0		0	6	353		73	171	0

AM TOTAL TRAFFIC		0	0	0		0	0	0		0	98	353		73	349	0
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"PM PROJECT TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
LAND USE	TYPE																
PM TRAFFIC DIVERSIONS																	
Project Trips	Pass - By																
	Valet																
	Net New										8	82			18	233	
PM TOTAL PROJECT TRAFFIC			0	0	0		0	0	0		0	8	82		18	233	0

PM TOTAL TRAFFIC		0	0	0		0	0	0		0	231	82		18	470	0
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Appendix G

Intersection Capacity Analysis Worksheets

Existing A.M.

Timings
1: NW 17th Avenue & SR 916/Opa-Locka Boulevard

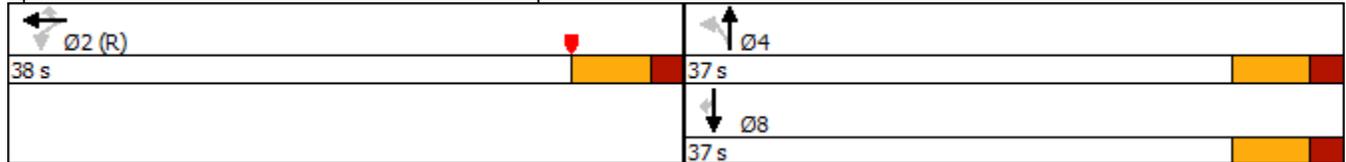
Existing Conditions
AM Peak Hour

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	630	23	111	67	81	93
Future Volume (vph)	630	23	111	67	81	93
Turn Type	NA	Perm	Perm	NA	NA	Perm
Protected Phases	2			4	8	
Permitted Phases		2	4			8
Detector Phase	2	2	4	4	8	8
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	25.4	25.4	29.4	29.4	29.4	29.4
Total Split (s)	38.0	38.0	37.0	37.0	37.0	37.0
Total Split (%)	50.7%	50.7%	49.3%	49.3%	49.3%	49.3%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4
All-Red Time (s)	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
Total Lost Time (s)	6.4	6.4	6.4	6.4	6.4	6.4
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max	None	None	None	None

Intersection Summary

Cycle Length: 75
 Actuated Cycle Length: 75
 Offset: 22 (29%), Referenced to phase 2:WBTL, Start of Yellow
 Natural Cycle: 55
 Control Type: Actuated-Coordinated

Splits and Phases: 1: NW 17th Avenue & SR 916/Opa-Locka Boulevard



HCM 6th Signalized Intersection Summary
 1: NW 17th Avenue & SR 916/Opa-Locka Boulevard

Existing Conditions
 AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	123	630	23	111	67	0	0	81	93
Future Volume (veh/h)	0	0	0	123	630	23	111	67	0	0	81	93
Initial Q (Qb), veh				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
Parking Bus, Adj				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	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				127	649	24	114	69	0	0	84	96
Peak Hour Factor				0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				530	2922	1042	253	317	0	0	317	268
Arrive On Green				0.88	0.88	0.88	0.17	0.17	0.00	0.00	0.17	0.17
Sat Flow, veh/h				804	4430	1579	1201	1870	0	0	1870	1579
Grp Volume(v), veh/h				289	487	24	114	69	0	0	84	96
Grp Sat Flow(s),veh/h/ln				1830	1702	1579	1201	1870	0	0	1870	1579
Q Serve(g_s), s				1.8	1.6	0.1	6.8	2.4	0.0	0.0	2.9	4.0
Cycle Q Clear(g_c), s				1.8	1.6	0.1	9.8	2.4	0.0	0.0	2.9	4.0
Prop In Lane				0.44		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				1207	2245	1042	253	317	0	0	317	268
V/C Ratio(X)				0.24	0.22	0.02	0.45	0.22	0.00	0.00	0.26	0.36
Avail Cap(c_a), veh/h				1207	2245	1042	539	763	0	0	763	644
HCM Platoon Ratio				1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.77	0.77	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				1.7	1.7	1.6	31.3	26.8	0.0	0.0	27.1	27.5
Incr Delay (d2), s/veh				0.5	0.2	0.0	0.7	0.2	0.0	0.0	0.3	0.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.6	0.5	0.0	2.0	1.0	0.0	0.0	1.3	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				2.1	1.9	1.6	32.0	27.0	0.0	0.0	27.4	28.1
LnGrp LOS				A	A	A	C	C	A	A	C	C
Approach Vol, veh/h					800			183			180	
Approach Delay, s/veh					2.0			30.1			27.8	
Approach LOS					A			C			C	
Timer - Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		55.9		19.1				19.1				
Change Period (Y+Rc), s		6.4		6.4				6.4				
Max Green Setting (Gmax), s		31.6		30.6				30.6				
Max Q Clear Time (g_c+I1), s		3.8		11.8				6.0				
Green Ext Time (p_c), s		2.0		0.5				0.6				

Intersection Summary

HCM 6th Ctrl Delay	10.4
HCM 6th LOS	B

Notes

User approved changes to right turn type.

Timings
2: NW 17th Avenue & SR 916/NW 135th Street

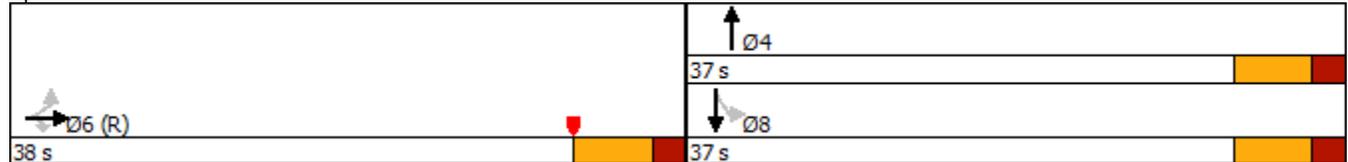
Existing Conditions
AM Peak Hour

	→	↘	↑	↙	↓
Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Configurations	↔↔↔	↗	↕↔	↖	↕↕
Traffic Volume (vph)	740	114	130	57	145
Future Volume (vph)	740	114	130	57	145
Turn Type	NA	Perm	NA	Perm	NA
Protected Phases	6		4		8
Permitted Phases		6		8	
Detector Phase	6	6	4	8	8
Switch Phase					
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	31.4	31.4	35.4	31.4	31.4
Total Split (s)	38.0	38.0	37.0	37.0	37.0
Total Split (%)	50.7%	50.7%	49.3%	49.3%	49.3%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.4	6.4	6.4	6.4	6.4
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	C-Max	C-Max	None	None	None

Intersection Summary

Cycle Length: 75
 Actuated Cycle Length: 75
 Offset: 22 (29%), Referenced to phase 6:EBTL, Start of Yellow
 Natural Cycle: 70
 Control Type: Actuated-Coordinated

Splits and Phases: 2: NW 17th Avenue & SR 916/NW 135th Street



HCM 6th Signalized Intersection Summary

2: NW 17th Avenue & SR 916/NW 135th Street

Existing Conditions
AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	740	114	0	0	0	0	130	158	57	145	0
Future Volume (veh/h)	50	740	114	0	0	0	0	130	158	57	145	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99				1.00		0.98	0.99		1.00
Parking Bus, Adj	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	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	54	796	123				0	140	170	61	156	0
Peak Hour Factor	0.93	0.93	0.93				0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	132	2083	659				0	370	322	214	740	0
Arrive On Green	0.56	0.56	0.56				0.00	0.21	0.21	0.21	0.21	0.00
Sat Flow, veh/h	314	4944	1565				0	1870	1546	1063	3647	0
Grp Volume(v), veh/h	319	531	123				0	140	170	61	156	0
Grp Sat Flow(s),veh/h/ln	1855	1702	1565				0	1777	1546	1063	1777	0
Q Serve(g_s), s	7.3	6.5	2.9				0.0	5.1	7.3	4.1	2.7	0.0
Cycle Q Clear(g_c), s	7.3	6.5	2.9				0.0	5.1	7.3	11.4	2.7	0.0
Prop In Lane	0.17		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	781	1434	659				0	370	322	214	740	0
V/C Ratio(X)	0.41	0.37	0.19				0.00	0.38	0.53	0.29	0.21	0.00
Avail Cap(c_a), veh/h	781	1434	659				0	725	631	426	1450	0
HCM Platoon Ratio	1.33	1.33	1.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.97	0.97	0.00
Uniform Delay (d), s/veh	11.2	11.0	10.2				0.0	25.5	26.4	31.5	24.6	0.0
Incr Delay (d2), s/veh	1.6	0.7	0.6				0.0	0.5	1.0	0.5	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	2.2	1.0				0.0	2.1	2.7	1.0	1.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.7	11.7	10.8				0.0	26.0	27.4	32.0	24.7	0.0
LnGrp LOS	B	B	B				A	C	C	C	C	A
Approach Vol, veh/h		973						310			217	
Approach Delay, s/veh		11.9						26.8			26.7	
Approach LOS		B						C			C	
Timer - Assigned Phs				4		6		8				
Phs Duration (G+Y+Rc), s				22.0		38.0		22.0				
Change Period (Y+Rc), s				6.4		6.4		6.4				
Max Green Setting (Gmax), s				30.6		31.6		30.6				
Max Q Clear Time (g_c+I1), s				9.3		9.3		13.4				
Green Ext Time (p_c), s				1.5		2.2		0.9				

Intersection Summary

HCM 6th Ctrl Delay	17.1
HCM 6th LOS	B

Notes

User approved changes to right turn type.

Timings
 3: NW 10th Avenue & SR 916/NW 135th Street

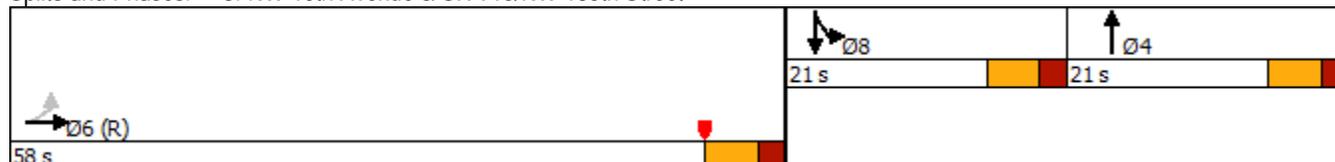
Existing Conditions
 AM Peak Hour

	→	↑	↓
Lane Group	EBT	NBT	SBT
Lane Configurations	↔↑↑↔	↑↔	↔↓
Traffic Volume (vph)	948	31	13
Future Volume (vph)	948	31	13
Turn Type	NA	NA	NA
Protected Phases	6	4	8
Permitted Phases			
Detector Phase	6	4	8
Switch Phase			
Minimum Initial (s)	15.0	7.0	7.0
Minimum Split (s)	21.0	22.0	22.0
Total Split (s)	58.0	21.0	21.0
Total Split (%)	58.0%	21.0%	21.0%
Yellow Time (s)	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0
Lead/Lag			
Lead-Lag Optimize?			
Recall Mode	C-Max	None	None

Intersection Summary

Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 78 (78%), Referenced to phase 6:EBTL, Start of Yellow
 Natural Cycle: 65
 Control Type: Actuated-Coordinated

Splits and Phases: 3: NW 10th Avenue & SR 916/NW 135th Street



HCM 6th Signalized Intersection Summary
 3: NW 10th Avenue & SR 916/NW 135th Street

Existing Conditions
 AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	948	12	0	0	0	0	31	36	25	13	0
Future Volume (veh/h)	35	948	12	0	0	0	0	31	36	25	13	0
Initial Q (Qb), veh	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
Parking Bus, Adj	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	
Adj Sat Flow, veh/h/ln	1900	1870	1900				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	38	1019	13				0	33	39	27	14	0
Peak Hour Factor	0.93	0.93	0.93				0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	2	0				0	2	2	2	2	0
Cap, veh/h	94	2689	35				0	47	56	57	29	0
Arrive On Green	0.69	0.69	0.69				0.00	0.06	0.06	0.05	0.05	0.00
Sat Flow, veh/h	181	5172	68				0	781	923	1192	618	0
Grp Volume(v), veh/h	390	325	355				0	0	72	41	0	0
Grp Sat Flow(s),veh/h/ln	1861	1702	1858				0	0	1704	1811	0	0
Q Serve(g_s), s	9.0	7.9	7.9				0.0	0.0	4.1	2.2	0.0	0.0
Cycle Q Clear(g_c), s	9.0	7.9	7.9				0.0	0.0	4.1	2.2	0.0	0.0
Prop In Lane	0.10		0.04				0.00		0.54	0.66		0.00
Lane Grp Cap(c), veh/h	968	885	966				0	0	103	86	0	0
V/C Ratio(X)	0.40	0.37	0.37				0.00	0.00	0.70	0.48	0.00	0.00
Avail Cap(c_a), veh/h	968	885	966				0	0	256	272	0	0
HCM Platoon Ratio	1.33	1.33	1.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.98	0.98	0.98				0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	8.8	8.6	8.6				0.0	0.0	46.1	46.4	0.0	0.0
Incr Delay (d2), s/veh	1.2	1.2	1.1				0.0	0.0	6.2	3.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	2.8	3.0				0.0	0.0	1.9	1.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	10.0	9.8	9.7				0.0	0.0	52.3	49.4	0.0	0.0
LnGrp LOS	B	A	A				A	A	D	D	A	A
Approach Vol, veh/h		1070						72			41	
Approach Delay, s/veh		9.8						52.3			49.4	
Approach LOS		A						D			D	
Timer - Assigned Phs				4		6		8				
Phs Duration (G+Y+Rc), s				12.1		58.0		10.8				
Change Period (Y+Rc), s				6.0		6.0		6.0				
Max Green Setting (Gmax), s				15.0		52.0		15.0				
Max Q Clear Time (g_c+I1), s				6.1		11.0		4.2				
Green Ext Time (p_c), s				0.1		2.4		0.1				

Intersection Summary

HCM 6th Ctrl Delay	13.8
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Timings
4: US 441/NW 7th Avenue & SR 916/NW 135th Street

Existing Conditions
AM Peak Hour

						
Lane Group	EBL	EBT	EBR	NBT	SBL	SBT
Lane Configurations		  		  		  
Traffic Volume (vph)	81	837	99	338	161	590
Future Volume (vph)	81	837	99	338	161	590
Turn Type	Perm	NA	Prot	NA	pm+pt	NA
Protected Phases		4	4	2	1	6
Permitted Phases	4				6	
Detector Phase	4	4	4	2	1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	7.0	5.0	7.0
Minimum Split (s)	35.4	35.4	35.4	31.4	11.5	31.4
Total Split (s)	38.0	38.0	38.0	53.0	19.0	72.0
Total Split (%)	34.5%	34.5%	34.5%	48.2%	17.3%	65.5%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4
All-Red Time (s)	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
Total Lost Time (s)	6.4	6.4	6.4	6.4	6.4	6.4
Lead/Lag				Lag	Lead	
Lead-Lag Optimize?				Yes	Yes	
Recall Mode	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 110
 Actuated Cycle Length: 110
 Offset: 18 (16%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow
 Natural Cycle: 80
 Control Type: Actuated-Coordinated

Splits and Phases: 4: US 441/NW 7th Avenue & SR 916/NW 135th Street



HCM 6th Signalized Intersection Summary
 4: US 441/NW 7th Avenue & SR 916/NW 135th Street

Existing Conditions
 AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  						  			  	
Traffic Volume (veh/h)	81	837	99	0	0	0	0	338	147	161	590	0
Future Volume (veh/h)	81	837	99	0	0	0	0	338	147	161	590	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.99	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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	84	863	102				0	348	152	166	608	0
Peak Hour Factor	0.97	0.97	0.97				0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	388	1112	345				0	1946	796	632	3400	0
Arrive On Green	0.22	0.22	0.22				0.00	0.73	0.73	0.08	0.89	0.00
Sat Flow, veh/h	1781	5106	1585				0	3708	1448	1781	5274	0
Grp Volume(v), veh/h	84	863	102				0	334	166	166	608	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1585				0	1702	1584	1781	1702	0
Q Serve(g_s), s	4.3	17.5	5.9				0.0	3.3	3.6	4.3	1.8	0.0
Cycle Q Clear(g_c), s	4.3	17.5	5.9				0.0	3.3	3.6	4.3	1.8	0.0
Prop In Lane	1.00		1.00				0.00		0.91	1.00		0.00
Lane Grp Cap(c), veh/h	388	1112	345				0	1871	871	632	3400	0
V/C Ratio(X)	0.22	0.78	0.30				0.00	0.18	0.19	0.26	0.18	0.00
Avail Cap(c_a), veh/h	512	1467	455				0	1871	871	733	3400	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.33	1.33	1.33	1.33	1.00
Upstream Filter(l)	0.97	0.97	0.97				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.3	40.5	36.0				0.0	7.1	7.1	8.5	2.2	0.0
Incr Delay (d2), s/veh	0.2	1.7	0.3				0.0	0.2	0.5	0.1	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	7.4	2.3				0.0	1.2	1.3	1.5	0.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.5	42.1	36.3				0.0	7.3	7.6	8.6	2.3	0.0
LnGrp LOS	D	D	D				A	A	A	A	A	A
Approach Vol, veh/h		1049						500			774	
Approach Delay, s/veh		41.0						7.4			3.7	
Approach LOS		D						A			A	
Timer - Assigned Phs	1	2		4				6				
Phs Duration (G+Y+Rc), s	12.8	66.9		30.4				79.6				
Change Period (Y+Rc), s	6.4	6.4		6.4				6.4				
Max Green Setting (Gmax), s	12.6	46.6		31.6				65.6				
Max Q Clear Time (g_c+I1), s	6.3	5.6		19.5				3.8				
Green Ext Time (p_c), s	0.1	1.3		4.5				1.8				

Intersection Summary

HCM 6th Ctrl Delay	21.4
HCM 6th LOS	C

Future Background A.M.

Timings
1: NW 17th Avenue & SR 916/Opa-Locka Boulevard

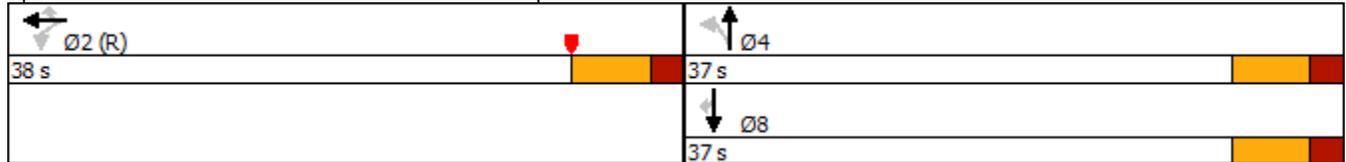
Future Background Conditions
AM Peak Hour

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	643	23	113	68	83	95
Future Volume (vph)	643	23	113	68	83	95
Turn Type	NA	Perm	Perm	NA	NA	Perm
Protected Phases	2			4	8	
Permitted Phases		2	4			8
Detector Phase	2	2	4	4	8	8
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	25.4	25.4	29.4	29.4	29.4	29.4
Total Split (s)	38.0	38.0	37.0	37.0	37.0	37.0
Total Split (%)	50.7%	50.7%	49.3%	49.3%	49.3%	49.3%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4
All-Red Time (s)	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
Total Lost Time (s)	6.4	6.4	6.4	6.4	6.4	6.4
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max	None	None	None	None

Intersection Summary

Cycle Length: 75
 Actuated Cycle Length: 75
 Offset: 22 (29%), Referenced to phase 2:WBTL, Start of Yellow
 Natural Cycle: 55
 Control Type: Actuated-Coordinated

Splits and Phases: 1: NW 17th Avenue & SR 916/Opa-Locka Boulevard



HCM 6th Signalized Intersection Summary
 1: NW 17th Avenue & SR 916/Opa-Locka Boulevard

Future Background Conditions
 AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					  							
Traffic Volume (veh/h)	0	0	0	126	643	23	113	68	0	0	83	95
Future Volume (veh/h)	0	0	0	126	643	23	113	68	0	0	83	95
Initial Q (Qb), veh				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
Parking Bus, Adj				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	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				130	663	24	116	70	0	0	86	98
Peak Hour Factor				0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				529	2909	1037	255	323	0	0	323	273
Arrive On Green				0.87	0.87	0.87	0.17	0.17	0.00	0.00	0.17	0.17
Sat Flow, veh/h				806	4428	1579	1197	1870	0	0	1870	1580
Grp Volume(v), veh/h				295	498	24	116	70	0	0	86	98
Grp Sat Flow(s),veh/h/ln				1830	1702	1579	1197	1870	0	0	1870	1580
Q Serve(g_s), s				1.9	1.7	0.1	7.0	2.4	0.0	0.0	3.0	4.1
Cycle Q Clear(g_c), s				1.9	1.7	0.1	10.0	2.4	0.0	0.0	3.0	4.1
Prop In Lane				0.44		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				1202	2236	1037	255	323	0	0	323	273
V/C Ratio(X)				0.25	0.22	0.02	0.46	0.22	0.00	0.00	0.27	0.36
Avail Cap(c_a), veh/h				1202	2236	1037	537	763	0	0	763	644
HCM Platoon Ratio				1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.77	0.77	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				1.8	1.7	1.6	31.2	26.7	0.0	0.0	26.9	27.4
Incr Delay (d2), s/veh				0.5	0.2	0.0	0.7	0.2	0.0	0.0	0.3	0.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.7	0.5	0.0	2.0	1.1	0.0	0.0	1.3	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				2.2	2.0	1.7	32.0	26.9	0.0	0.0	27.2	28.0
LnGrp LOS				A	A	A	C	C	A	A	C	C
Approach Vol, veh/h					817			186			184	
Approach Delay, s/veh					2.1			30.0			27.6	
Approach LOS					A			C			C	
Timer - Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		55.7		19.3				19.3				
Change Period (Y+Rc), s		6.4		6.4				6.4				
Max Green Setting (Gmax), s		31.6		30.6				30.6				
Max Q Clear Time (g_c+I1), s		3.9		12.0				6.1				
Green Ext Time (p_c), s		2.0		0.5				0.6				

Intersection Summary

HCM 6th Ctrl Delay	10.4
HCM 6th LOS	B

Notes

User approved changes to right turn type.

Timings
2: NW 17th Avenue & SR 916/NW 135th Street

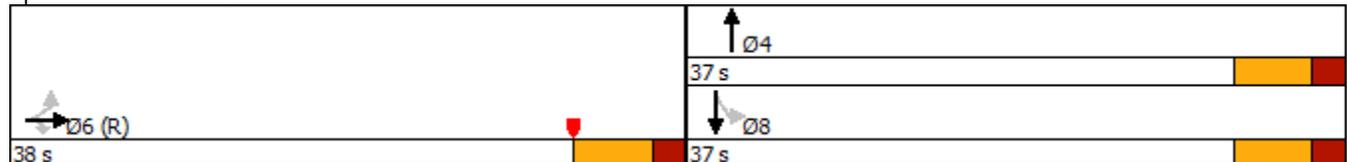
Future Background Conditions
AM Peak Hour

	→	↘	↑	↙	↓
Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Configurations	↔↔↔	↗	↕↔	↘	↕↕
Traffic Volume (vph)	756	116	133	58	148
Future Volume (vph)	756	116	133	58	148
Turn Type	NA	Perm	NA	Perm	NA
Protected Phases	6		4		8
Permitted Phases		6		8	
Detector Phase	6	6	4	8	8
Switch Phase					
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	31.4	31.4	35.4	31.4	31.4
Total Split (s)	38.0	38.0	37.0	37.0	37.0
Total Split (%)	50.7%	50.7%	49.3%	49.3%	49.3%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.4	6.4	6.4	6.4	6.4
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	C-Max	C-Max	None	None	None

Intersection Summary

Cycle Length: 75
 Actuated Cycle Length: 75
 Offset: 22 (29%), Referenced to phase 6:EBTL, Start of Yellow
 Natural Cycle: 70
 Control Type: Actuated-Coordinated

Splits and Phases: 2: NW 17th Avenue & SR 916/NW 135th Street



HCM 6th Signalized Intersection Summary
2: NW 17th Avenue & SR 916/NW 135th Street

Future Background Conditions
AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	756	116	0	0	0	0	133	161	58	148	0
Future Volume (veh/h)	51	756	116	0	0	0	0	133	161	58	148	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99				1.00		0.98	0.99		1.00
Parking Bus, Adj	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	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	55	813	125				0	143	173	62	159	0
Peak Hour Factor	0.93	0.93	0.93				0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	132	2084	659				0	375	326	214	749	0
Arrive On Green	0.56	0.56	0.56				0.00	0.21	0.21	0.21	0.21	0.00
Sat Flow, veh/h	314	4945	1565				0	1870	1547	1058	3647	0
Grp Volume(v), veh/h	325	543	125				0	143	173	62	159	0
Grp Sat Flow(s),veh/h/ln	1855	1702	1565				0	1777	1547	1058	1777	0
Q Serve(g_s), s	7.5	6.7	2.9				0.0	5.2	7.5	4.1	2.8	0.0
Cycle Q Clear(g_c), s	7.5	6.7	2.9				0.0	5.2	7.5	11.6	2.8	0.0
Prop In Lane	0.17		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	781	1434	659				0	375	326	214	749	0
V/C Ratio(X)	0.42	0.38	0.19				0.00	0.38	0.53	0.29	0.21	0.00
Avail Cap(c_a), veh/h	781	1434	659				0	725	631	422	1450	0
HCM Platoon Ratio	1.33	1.33	1.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.97	0.97	0.00
Uniform Delay (d), s/veh	11.2	11.0	10.2				0.0	25.4	26.3	31.4	24.4	0.0
Incr Delay (d2), s/veh	1.6	0.8	0.6				0.0	0.5	1.0	0.5	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	2.3	1.0				0.0	2.2	2.7	1.1	1.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.8	11.8	10.8				0.0	25.9	27.3	32.0	24.5	0.0
LnGrp LOS	B	B	B				A	C	C	C	C	A
Approach Vol, veh/h		993						316			221	
Approach Delay, s/veh		12.0						26.6			26.6	
Approach LOS		B						C			C	
Timer - Assigned Phs				4		6		8				
Phs Duration (G+Y+Rc), s				22.2		38.0		22.2				
Change Period (Y+Rc), s				6.4		6.4		6.4				
Max Green Setting (Gmax), s				30.6		31.6		30.6				
Max Q Clear Time (g_c+I1), s				9.5		9.5		13.6				
Green Ext Time (p_c), s				1.5		2.2		0.9				

Intersection Summary

HCM 6th Ctrl Delay	17.1
HCM 6th LOS	B

Notes

User approved changes to right turn type.

Timings
3: NW 10th Avenue & SR 916/NW 135th Street

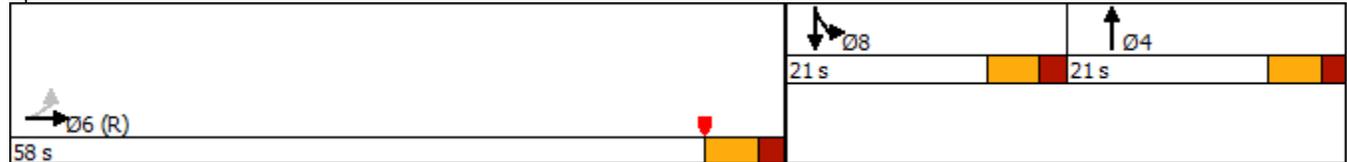
Future Background Conditions
AM Peak Hour

	→	↑	↓
Lane Group	EBT	NBT	SBT
Lane Configurations	↔↑↑↔	↑↔	↔↓
Traffic Volume (vph)	968	32	13
Future Volume (vph)	968	32	13
Turn Type	NA	NA	NA
Protected Phases	6	4	8
Permitted Phases			
Detector Phase	6	4	8
Switch Phase			
Minimum Initial (s)	15.0	7.0	7.0
Minimum Split (s)	21.0	22.0	22.0
Total Split (s)	58.0	21.0	21.0
Total Split (%)	58.0%	21.0%	21.0%
Yellow Time (s)	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0
Lead/Lag			
Lead-Lag Optimize?			
Recall Mode	C-Max	None	None

Intersection Summary

Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 78 (78%), Referenced to phase 6:EBTL, Start of Yellow
 Natural Cycle: 65
 Control Type: Actuated-Coordinated

Splits and Phases: 3: NW 10th Avenue & SR 916/NW 135th Street



HCM 6th Signalized Intersection Summary
 3: NW 10th Avenue & SR 916/NW 135th Street

Future Background Conditions
 AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  						 				
Traffic Volume (veh/h)	36	968	12	0	0	0	0	32	37	26	13	0
Future Volume (veh/h)	36	968	12	0	0	0	0	32	37	26	13	0
Initial Q (Qb), veh	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
Parking Bus, Adj	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	
Adj Sat Flow, veh/h/ln	1900	1870	1900				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	39	1041	13				0	34	40	28	14	0
Peak Hour Factor	0.93	0.93	0.93				0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	2	0				0	2	2	2	2	0
Cap, veh/h	95	2690	35				0	48	56	58	29	0
Arrive On Green	0.69	0.69	0.69				0.00	0.06	0.06	0.05	0.05	0.00
Sat Flow, veh/h	182	5173	67				0	783	921	1207	603	0
Grp Volume(v), veh/h	399	332	362				0	0	74	42	0	0
Grp Sat Flow(s),veh/h/ln	1861	1702	1858				0	0	1705	1810	0	0
Q Serve(g_s), s	9.2	8.1	8.1				0.0	0.0	4.3	2.3	0.0	0.0
Cycle Q Clear(g_c), s	9.2	8.1	8.1				0.0	0.0	4.3	2.3	0.0	0.0
Prop In Lane	0.10		0.04				0.00		0.54	0.67		0.00
Lane Grp Cap(c), veh/h	968	885	966				0	0	104	87	0	0
V/C Ratio(X)	0.41	0.37	0.38				0.00	0.00	0.71	0.48	0.00	0.00
Avail Cap(c_a), veh/h	968	885	966				0	0	256	272	0	0
HCM Platoon Ratio	1.33	1.33	1.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.98	0.98	0.98				0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	8.8	8.7	8.7				0.0	0.0	46.1	46.4	0.0	0.0
Incr Delay (d2), s/veh	1.3	1.2	1.1				0.0	0.0	6.5	3.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	2.8	3.1				0.0	0.0	2.0	1.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	10.1	9.8	9.7				0.0	0.0	52.6	49.4	0.0	0.0
LnGrp LOS	B	A	A				A	A	D	D	A	A
Approach Vol, veh/h		1093						74			42	
Approach Delay, s/veh		9.9						52.6			49.4	
Approach LOS		A						D			D	
Timer - Assigned Phs				4		6		8				
Phs Duration (G+Y+Rc), s				12.1		58.0		10.8				
Change Period (Y+Rc), s				6.0		6.0		6.0				
Max Green Setting (Gmax), s				15.0		52.0		15.0				
Max Q Clear Time (g_c+I1), s				6.3		11.2		4.3				
Green Ext Time (p_c), s				0.1		2.5		0.1				

Intersection Summary

HCM 6th Ctrl Delay	13.9
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Timings
4: US 441/NW 7th Avenue & SR 916/NW 135th Street

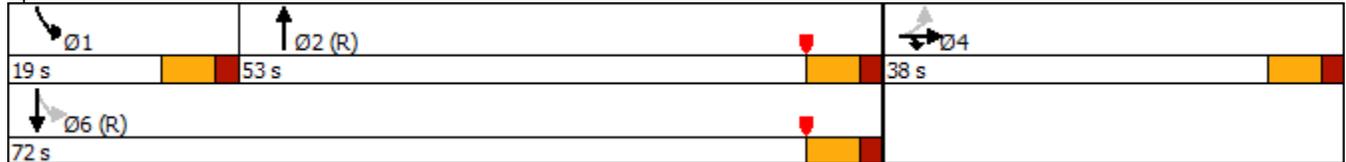
Future Background Conditions
AM Peak Hour

Lane Group	EBL	EBT	EBR	NBT	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	83	855	101	345	164	603
Future Volume (vph)	83	855	101	345	164	603
Turn Type	Perm	NA	Prot	NA	pm+pt	NA
Protected Phases		4	4	2	1	6
Permitted Phases	4				6	
Detector Phase	4	4	4	2	1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	7.0	5.0	7.0
Minimum Split (s)	35.4	35.4	35.4	31.4	11.5	31.4
Total Split (s)	38.0	38.0	38.0	53.0	19.0	72.0
Total Split (%)	34.5%	34.5%	34.5%	48.2%	17.3%	65.5%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4
All-Red Time (s)	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
Total Lost Time (s)	6.4	6.4	6.4	6.4	6.4	6.4
Lead/Lag				Lag	Lead	
Lead-Lag Optimize?				Yes	Yes	
Recall Mode	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 110
 Actuated Cycle Length: 110
 Offset: 18 (16%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow
 Natural Cycle: 80
 Control Type: Actuated-Coordinated

Splits and Phases: 4: US 441/NW 7th Avenue & SR 916/NW 135th Street



HCM 6th Signalized Intersection Summary
 4: US 441/NW 7th Avenue & SR 916/NW 135th Street

Future Background Conditions
 AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  						  			  	
Traffic Volume (veh/h)	83	855	101	0	0	0	0	345	150	164	603	0
Future Volume (veh/h)	83	855	101	0	0	0	0	345	150	164	603	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.99	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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	86	881	104				0	356	155	169	622	0
Peak Hour Factor	0.97	0.97	0.97				0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	394	1130	351				0	1931	788	624	3382	0
Arrive On Green	0.22	0.22	0.22				0.00	0.72	0.72	0.08	0.88	0.00
Sat Flow, veh/h	1781	5106	1585				0	3710	1446	1781	5274	0
Grp Volume(v), veh/h	86	881	104				0	341	170	169	622	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1585				0	1702	1584	1781	1702	0
Q Serve(g_s), s	4.3	17.9	6.0				0.0	3.5	3.8	4.4	1.9	0.0
Cycle Q Clear(g_c), s	4.3	17.9	6.0				0.0	3.5	3.8	4.4	1.9	0.0
Prop In Lane	1.00		1.00				0.00		0.91	1.00		0.00
Lane Grp Cap(c), veh/h	394	1130	351				0	1856	863	624	3382	0
V/C Ratio(X)	0.22	0.78	0.30				0.00	0.18	0.20	0.27	0.18	0.00
Avail Cap(c_a), veh/h	512	1467	455				0	1856	863	723	3382	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.33	1.33	1.33	1.33	1.00
Upstream Filter(I)	0.97	0.97	0.97				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.0	40.3	35.7				0.0	7.4	7.4	8.7	2.3	0.0
Incr Delay (d2), s/veh	0.2	1.8	0.3				0.0	0.2	0.5	0.1	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	7.6	2.4				0.0	1.3	1.3	1.6	0.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.2	42.1	36.0				0.0	7.6	7.9	8.8	2.4	0.0
LnGrp LOS	D	D	D				A	A	A	A	A	A
Approach Vol, veh/h		1071						511			791	
Approach Delay, s/veh		40.9						7.7			3.8	
Approach LOS		D						A			A	
Timer - Assigned Phs	1	2		4				6				
Phs Duration (G+Y+Rc), s	12.9	66.4		30.7				79.3				
Change Period (Y+Rc), s	6.4	6.4		6.4				6.4				
Max Green Setting (Gmax), s	12.6	46.6		31.6				65.6				
Max Q Clear Time (g_c+I1), s	6.4	5.8		19.9				3.9				
Green Ext Time (p_c), s	0.1	1.3		4.5				1.8				

Intersection Summary

HCM 6th Ctrl Delay	21.4
HCM 6th LOS	C

Future Total A.M.

Timings
1: NW 17th Avenue & SR 916/Opa-Locka Boulevard

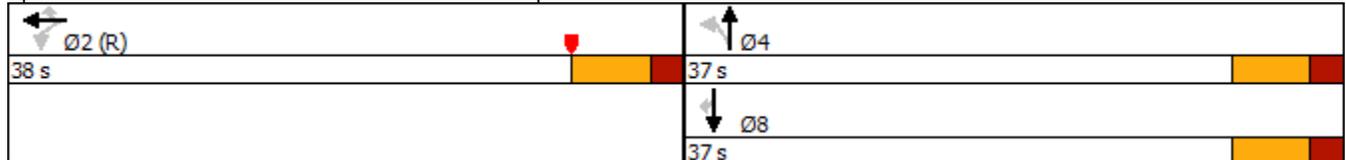
Future Total Conditions
AM Peak Hour

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	643	127	113	323	202	147
Future Volume (vph)	643	127	113	323	202	147
Turn Type	NA	Perm	Perm	NA	NA	Perm
Protected Phases	2			4	8	
Permitted Phases		2	4			8
Detector Phase	2	2	4	4	8	8
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	25.4	25.4	29.4	29.4	29.4	29.4
Total Split (s)	38.0	38.0	37.0	37.0	37.0	37.0
Total Split (%)	50.7%	50.7%	49.3%	49.3%	49.3%	49.3%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4
All-Red Time (s)	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
Total Lost Time (s)	6.4	6.4	6.4	6.4	6.4	6.4
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max	None	None	None	None

Intersection Summary

Cycle Length: 75
 Actuated Cycle Length: 75
 Offset: 22 (29%), Referenced to phase 2:WBTL, Start of Yellow
 Natural Cycle: 55
 Control Type: Actuated-Coordinated

Splits and Phases: 1: NW 17th Avenue & SR 916/Opa-Locka Boulevard



HCM 6th Signalized Intersection Summary
 1: NW 17th Avenue & SR 916/Opa-Locka Boulevard

Future Total Conditions
 AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					  							
Traffic Volume (veh/h)	0	0	0	126	643	127	113	323	0	0	202	147
Future Volume (veh/h)	0	0	0	126	643	127	113	323	0	0	202	147
Initial Q (Qb), veh				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
Parking Bus, Adj				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	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				130	663	131	116	333	0	0	208	152
Peak Hour Factor				0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				468	2572	917	254	465	0	0	465	393
Arrive On Green				0.77	0.77	0.77	0.50	0.50	0.00	0.00	0.25	0.25
Sat Flow, veh/h				806	4428	1578	1020	1870	0	0	1870	1581
Grp Volume(v), veh/h				295	498	131	116	333	0	0	208	152
Grp Sat Flow(s),veh/h/ln				1830	1702	1578	1020	1870	0	0	1870	1581
Q Serve(g_s), s				3.5	3.1	1.6	7.6	10.4	0.0	0.0	7.1	6.0
Cycle Q Clear(g_c), s				3.5	3.1	1.6	14.7	10.4	0.0	0.0	7.1	6.0
Prop In Lane				0.44		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				1063	1977	917	254	465	0	0	465	393
V/C Ratio(X)				0.28	0.25	0.14	0.46	0.72	0.00	0.00	0.45	0.39
Avail Cap(c_a), veh/h				1063	1977	917	416	763	0	0	763	645
HCM Platoon Ratio				1.33	1.33	1.33	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.75	0.75	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				4.0	3.9	3.8	21.0	16.8	0.0	0.0	23.8	23.4
Incr Delay (d2), s/veh				0.6	0.3	0.3	0.7	1.2	0.0	0.0	0.5	0.5
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.2	0.9	0.5	1.3	3.4	0.0	0.0	3.1	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				4.6	4.2	4.1	21.7	18.0	0.0	0.0	24.3	23.9
LnGrp LOS				A	A	A	C	B	A	A	C	C
Approach Vol, veh/h					924			449			360	
Approach Delay, s/veh					4.3			18.9			24.1	
Approach LOS					A			B			C	
Timer - Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		50.0		25.0				25.0				
Change Period (Y+Rc), s		6.4		6.4				6.4				
Max Green Setting (Gmax), s		31.6		30.6				30.6				
Max Q Clear Time (g_c+I1), s		5.5		16.7				9.1				
Green Ext Time (p_c), s		2.0		1.8				1.3				

Intersection Summary

HCM 6th Ctrl Delay	12.2
HCM 6th LOS	B

Notes

User approved changes to right turn type.

Timings
2: NW 17th Avenue & SR 916/NW 135th Street

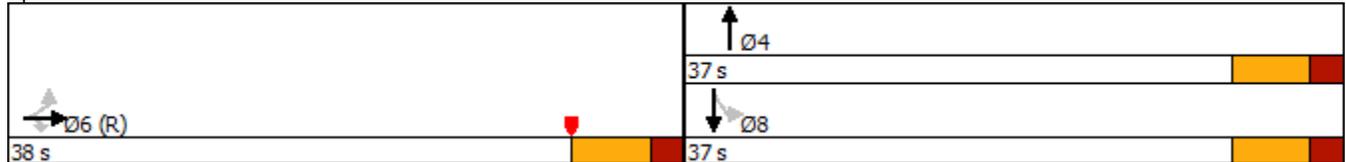
Future Total Conditions
AM Peak Hour

	→	↘	↑	↙	↓
Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Configurations	↔↔↔	↗	↕↔	↖	↕↕
Traffic Volume (vph)	756	116	280	107	218
Future Volume (vph)	756	116	280	107	218
Turn Type	NA	Perm	NA	Perm	NA
Protected Phases	6		4		8
Permitted Phases		6		8	
Detector Phase	6	6	4	8	8
Switch Phase					
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	31.4	31.4	35.4	31.4	31.4
Total Split (s)	38.0	38.0	37.0	37.0	37.0
Total Split (%)	50.7%	50.7%	49.3%	49.3%	49.3%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.4	6.4	6.4	6.4	6.4
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	C-Max	C-Max	None	None	None

Intersection Summary

Cycle Length: 75
 Actuated Cycle Length: 75
 Offset: 22 (29%), Referenced to phase 6:EBTL, Start of Yellow
 Natural Cycle: 70
 Control Type: Actuated-Coordinated

Splits and Phases: 2: NW 17th Avenue & SR 916/NW 135th Street



HCM 6th Signalized Intersection Summary

2: NW 17th Avenue & SR 916/NW 135th Street

Future Total Conditions
AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	159	756	116	0	0	0	0	280	161	107	218	0
Future Volume (veh/h)	159	756	116	0	0	0	0	280	161	107	218	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99				1.00		0.98	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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	171	813	125				0	301	173	115	234	0
Peak Hour Factor	0.93	0.93	0.93				0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	360	1844	659				0	622	347	249	1015	0
Arrive On Green	0.56	0.56	0.56				0.00	0.29	0.29	0.29	0.29	0.00
Sat Flow, veh/h	855	4376	1565				0	2274	1217	917	3647	0
Grp Volume(v), veh/h	365	619	125				0	244	230	115	234	0
Grp Sat Flow(s),veh/h/ln	1828	1702	1565				0	1777	1620	917	1777	0
Q Serve(g_s), s	9.0	7.9	2.9				0.0	8.5	8.9	9.0	3.8	0.0
Cycle Q Clear(g_c), s	9.0	7.9	2.9				0.0	8.5	8.9	17.8	3.8	0.0
Prop In Lane	0.47		1.00				0.00		0.75	1.00		0.00
Lane Grp Cap(c), veh/h	770	1434	659				0	507	463	249	1015	0
V/C Ratio(X)	0.47	0.43	0.19				0.00	0.48	0.50	0.46	0.23	0.00
Avail Cap(c_a), veh/h	770	1434	659				0	725	661	361	1450	0
HCM Platoon Ratio	1.33	1.33	1.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00				0.00	1.00	1.00	0.90	0.90	0.00
Uniform Delay (d), s/veh	11.5	11.3	10.2				0.0	22.2	22.3	29.7	20.5	0.0
Incr Delay (d2), s/veh	2.1	0.9	0.6				0.0	0.5	0.6	0.9	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	2.7	1.0				0.0	3.5	3.3	2.0	1.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.6	12.2	10.8				0.0	22.7	22.9	30.6	20.6	0.0
LnGrp LOS	B	B	B				A	C	C	C	C	A
Approach Vol, veh/h		1109						474			349	
Approach Delay, s/veh		12.5						22.8			23.9	
Approach LOS		B						C			C	
Timer - Assigned Phs				4		6		8				
Phs Duration (G+Y+Rc), s				27.8		38.0		27.8				
Change Period (Y+Rc), s				6.4		6.4		6.4				
Max Green Setting (Gmax), s				30.6		31.6		30.6				
Max Q Clear Time (g_c+I1), s				10.9		11.0		19.8				
Green Ext Time (p_c), s				2.3		2.6		1.3				

Intersection Summary

HCM 6th Ctrl Delay	17.1
HCM 6th LOS	B

Notes

User approved changes to right turn type.

Timings
 3: NW 10th Avenue & SR 916/NW 135th Street

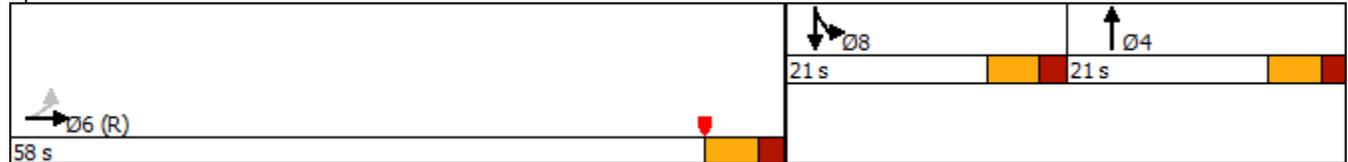
Future Total Conditions
 AM Peak Hour

	→	↑	↓
Lane Group	EBT	NBT	SBT
Lane Configurations	↔↑↑↔	↑↔	↔↓
Traffic Volume (vph)	1017	32	13
Future Volume (vph)	1017	32	13
Turn Type	NA	NA	NA
Protected Phases	6	4	8
Permitted Phases			
Detector Phase	6	4	8
Switch Phase			
Minimum Initial (s)	15.0	7.0	7.0
Minimum Split (s)	21.0	22.0	22.0
Total Split (s)	58.0	21.0	21.0
Total Split (%)	58.0%	21.0%	21.0%
Yellow Time (s)	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0
Lead/Lag			
Lead-Lag Optimize?			
Recall Mode	C-Max	None	None

Intersection Summary

Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 78 (78%), Referenced to phase 6:EBTL, Start of Yellow
 Natural Cycle: 65
 Control Type: Actuated-Coordinated

Splits and Phases: 3: NW 10th Avenue & SR 916/NW 135th Street



HCM 6th Signalized Intersection Summary
 3: NW 10th Avenue & SR 916/NW 135th Street

Future Total Conditions
 AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	1017	12	0	0	0	0	32	37	26	13	0
Future Volume (veh/h)	36	1017	12	0	0	0	0	32	37	26	13	0
Initial Q (Qb), veh	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
Parking Bus, Adj	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	
Adj Sat Flow, veh/h/ln	1900	1870	1900				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	39	1094	13				0	34	40	28	14	0
Peak Hour Factor	0.93	0.93	0.93				0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	2	0				0	2	2	2	2	0
Cap, veh/h	90	2696	33				0	48	56	58	29	0
Arrive On Green	0.69	0.69	0.69				0.00	0.06	0.06	0.05	0.05	0.00
Sat Flow, veh/h	174	5185	64				0	783	921	1207	603	0
Grp Volume(v), veh/h	418	348	380				0	0	74	42	0	0
Grp Sat Flow(s),veh/h/ln	1862	1702	1859				0	0	1705	1810	0	0
Q Serve(g_s), s	9.9	8.7	8.7				0.0	0.0	4.3	2.3	0.0	0.0
Cycle Q Clear(g_c), s	9.9	8.7	8.7				0.0	0.0	4.3	2.3	0.0	0.0
Prop In Lane	0.09		0.03				0.00		0.54	0.67		0.00
Lane Grp Cap(c), veh/h	968	885	967				0	0	104	87	0	0
V/C Ratio(X)	0.43	0.39	0.39				0.00	0.00	0.71	0.48	0.00	0.00
Avail Cap(c_a), veh/h	968	885	967				0	0	256	272	0	0
HCM Platoon Ratio	1.33	1.33	1.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.94	0.94	0.94				0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	8.9	8.7	8.7				0.0	0.0	46.1	46.4	0.0	0.0
Incr Delay (d2), s/veh	1.3	1.2	1.1				0.0	0.0	6.5	3.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	3.0	3.2				0.0	0.0	2.0	1.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	10.2	10.0	9.9				0.0	0.0	52.6	49.4	0.0	0.0
LnGrp LOS	B	A	A				A	A	D	D	A	A
Approach Vol, veh/h		1146						74			42	
Approach Delay, s/veh		10.0						52.6			49.4	
Approach LOS		B						D			D	
Timer - Assigned Phs				4		6		8				
Phs Duration (G+Y+Rc), s				12.1		58.0		10.8				
Change Period (Y+Rc), s				6.0		6.0		6.0				
Max Green Setting (Gmax), s				15.0		52.0		15.0				
Max Q Clear Time (g_c+l1), s				6.3		11.9		4.3				
Green Ext Time (p_c), s				0.1		2.6		0.1				

Intersection Summary

HCM 6th Ctrl Delay	13.8
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Timings
4: US 441/NW 7th Avenue & SR 916/NW 135th Street

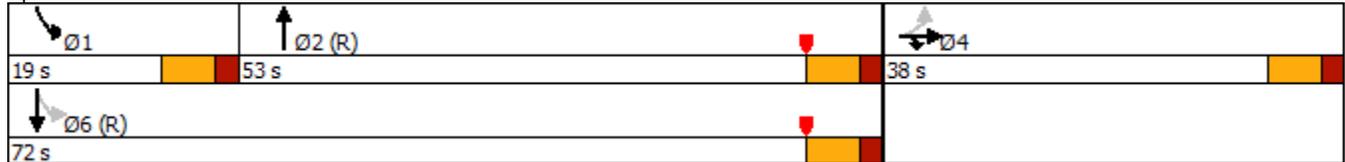
Future Total Conditions
AM Peak Hour

						
Lane Group	EBL	EBT	EBR	NBT	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	89	886	113	345	164	603
Future Volume (vph)	89	886	113	345	164	603
Turn Type	Perm	NA	Prot	NA	pm+pt	NA
Protected Phases		4	4	2	1	6
Permitted Phases	4				6	
Detector Phase	4	4	4	2	1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	7.0	5.0	7.0
Minimum Split (s)	35.4	35.4	35.4	31.4	11.5	31.4
Total Split (s)	38.0	38.0	38.0	53.0	19.0	72.0
Total Split (%)	34.5%	34.5%	34.5%	48.2%	17.3%	65.5%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4
All-Red Time (s)	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
Total Lost Time (s)	6.4	6.4	6.4	6.4	6.4	6.4
Lead/Lag				Lag	Lead	
Lead-Lag Optimize?				Yes	Yes	
Recall Mode	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 110
 Actuated Cycle Length: 110
 Offset: 18 (16%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow
 Natural Cycle: 80
 Control Type: Actuated-Coordinated

Splits and Phases: 4: US 441/NW 7th Avenue & SR 916/NW 135th Street



HCM 6th Signalized Intersection Summary
 4: US 441/NW 7th Avenue & SR 916/NW 135th Street

Future Total Conditions
 AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	886	113	0	0	0	0	345	150	164	603	0
Future Volume (veh/h)	89	886	113	0	0	0	0	345	150	164	603	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	92	913	116				0	356	155	169	622	0
Peak Hour Factor	0.97	0.97	0.97				0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	405	1162	361				0	1906	778	618	3350	0
Arrive On Green	0.23	0.23	0.23				0.00	0.72	0.72	0.08	0.87	0.00
Sat Flow, veh/h	1781	5106	1585				0	3710	1446	1781	5274	0
Grp Volume(v), veh/h	92	913	116				0	341	170	169	622	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1585				0	1702	1584	1781	1702	0
Q Serve(g_s), s	4.6	18.5	6.7				0.0	3.6	3.9	4.5	2.0	0.0
Cycle Q Clear(g_c), s	4.6	18.5	6.7				0.0	3.6	3.9	4.5	2.0	0.0
Prop In Lane	1.00		1.00				0.00		0.91	1.00		0.00
Lane Grp Cap(c), veh/h	405	1162	361				0	1832	853	618	3350	0
V/C Ratio(X)	0.23	0.79	0.32				0.00	0.19	0.20	0.27	0.19	0.00
Avail Cap(c_a), veh/h	512	1467	455				0	1832	853	716	3350	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.33	1.33	1.33	1.33	1.00
Upstream Filter(I)	0.96	0.96	0.96				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	34.6	40.0	35.4				0.0	7.7	7.8	9.0	2.5	0.0
Incr Delay (d2), s/veh	0.2	2.0	0.4				0.0	0.2	0.5	0.1	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	7.9	2.6				0.0	1.3	1.4	1.6	0.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.8	41.9	35.8				0.0	8.0	8.3	9.1	2.7	0.0
LnGrp LOS	C	D	D				A	A	A	A	A	A
Approach Vol, veh/h		1121						511			791	
Approach Delay, s/veh		40.7						8.1			4.0	
Approach LOS		D						A			A	
Timer - Assigned Phs	1	2		4				6				
Phs Duration (G+Y+Rc), s	13.0	65.6		31.4				78.6				
Change Period (Y+Rc), s	6.4	6.4		6.4				6.4				
Max Green Setting (Gmax), s	12.6	46.6		31.6				65.6				
Max Q Clear Time (g_c+I1), s	6.5	5.9		20.5				4.0				
Green Ext Time (p_c), s	0.1	1.3		4.5				1.8				

Intersection Summary

HCM 6th Ctrl Delay	21.8
HCM 6th LOS	C

HCM 6th TWSC
5: NW 17th Avenue & Residential Project Driveway

Future Total Conditions
AM Peak Hour

Intersection

Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	TT		TT			TT
Traffic Vol, veh/h	4	1	126	2	0	251
Future Vol, veh/h	4	1	126	2	0	251
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	1	137	2	0	273

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	411	138	0	0	139
Stage 1	138	-	-	-	-
Stage 2	273	-	-	-	-
Critical Hdwy	5	5	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3	3	-	-	2.218
Pot Cap-1 Maneuver	801	1049	-	-	1445
Stage 1	1032	-	-	-	-
Stage 2	889	-	-	-	-
Platoon blocked, %					
Mov Cap-1 Maneuver	801	1049	-	-	1445
Mov Cap-2 Maneuver	801	-	-	-	-
Stage 1	1032	-	-	-	-
Stage 2	889	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.3	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	841	1445
HCM Lane V/C Ratio	-	-	0.006	-
HCM Control Delay (s)	-	-	9.3	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0	0

HCM 6th TWSC
6: NW 17th Avenue & North School Project Driveway

Future Total Conditions
AM Peak Hour

Intersection

Int Delay, s/veh	3.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	167	34	94	4	0	255
Future Vol, veh/h	167	34	94	4	0	255
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	182	37	102	4	0	277

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	381	104	0	0	106
Stage 1	104	-	-	-	-
Stage 2	277	-	-	-	-
Critical Hdwy	5	5	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3	3	-	-	2.218
Pot Cap-1 Maneuver	825	1084	-	-	1485
Stage 1	1071	-	-	-	-
Stage 2	886	-	-	-	-
Platoon blocked, %					
Mov Cap-1 Maneuver	825	1084	-	-	1485
Mov Cap-2 Maneuver	825	-	-	-	-
Stage 1	1071	-	-	-	-
Stage 2	886	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.6	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	860	1485
HCM Lane V/C Ratio	-	-	0.254	-
HCM Control Delay (s)	-	-	10.6	0
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	1	0

HCM 6th TWSC
7: NW 17th Avenue & South School Project Driveway

Future Total Conditions
AM Peak Hour

Intersection

Int Delay, s/veh 0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	98	353	73	349
Future Vol, veh/h	0	0	98	353	73	349
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	107	384	79	379

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	836	299	0
Stage 1	299	-	-
Stage 2	537	-	-
Critical Hdwy	5	5	-
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3	3	-
Pot Cap-1 Maneuver	522	895	-
Stage 1	864	-	-
Stage 2	663	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	473	895	-
Mov Cap-2 Maneuver	473	-	-
Stage 1	864	-	-
Stage 2	601	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	1.5
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	1072	-
HCM Lane V/C Ratio	-	-	0.074	-
HCM Control Delay (s)	-	-	0	8.6
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.2	-

Existing P.M.

Timings
1: NW 17th Avenue & SR 916/Opa-Locka Boulevard

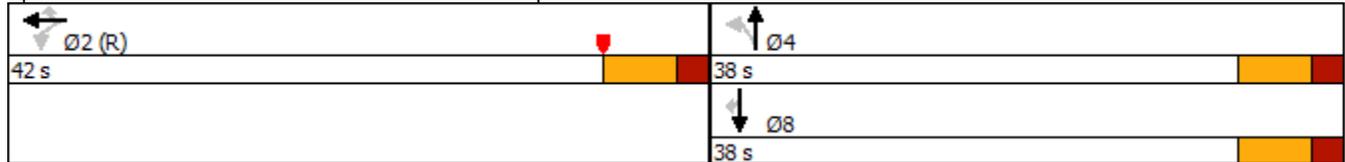
Existing Conditions
PM Peak Hour

Lane Group	←	↙	↘	↑	↓	↗
Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations	↔↔↔	↗	↘	↑	↑	↗
Traffic Volume (vph)	1041	27	297	182	88	136
Future Volume (vph)	1041	27	297	182	88	136
Turn Type	NA	Perm	Perm	NA	NA	Perm
Protected Phases	2			4	8	
Permitted Phases		2	4			8
Detector Phase	2	2	4	4	8	8
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	25.4	25.4	29.4	29.4	29.4	29.4
Total Split (s)	42.0	42.0	38.0	38.0	38.0	38.0
Total Split (%)	52.5%	52.5%	47.5%	47.5%	47.5%	47.5%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4
All-Red Time (s)	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
Total Lost Time (s)	6.4	6.4	6.4	6.4	6.4	6.4
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max	None	None	None	None

Intersection Summary

Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 16 (20%), Referenced to phase 2:WBTL, Start of Yellow
 Natural Cycle: 60
 Control Type: Actuated-Coordinated

Splits and Phases: 1: NW 17th Avenue & SR 916/Opa-Locka Boulevard



HCM 6th Signalized Intersection Summary
 1: NW 17th Avenue & SR 916/Opa-Locka Boulevard

Existing Conditions
 PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					  							
Traffic Volume (veh/h)	0	0	0	211	1041	27	297	182	0	0	88	136
Future Volume (veh/h)	0	0	0	211	1041	27	297	182	0	0	88	136
Initial Q (Qb), veh				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
Parking Bus, Adj				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	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				222	1096	28	313	192	0	0	93	143
Peak Hour Factor				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	0	0	2	2
Cap, veh/h				423	2247	805	427	617	0	0	617	522
Arrive On Green				0.68	0.68	0.68	0.55	0.55	0.00	0.00	0.33	0.33
Sat Flow, veh/h				830	4403	1577	1144	1870	0	0	1870	1584
Grp Volume(v), veh/h				489	829	28	313	192	0	0	93	143
Grp Sat Flow(s),veh/h/ln				1829	1702	1577	1144	1870	0	0	1870	1584
Q Serve(g_s), s				10.7	9.3	0.5	20.5	4.5	0.0	0.0	2.8	5.3
Cycle Q Clear(g_c), s				10.7	9.3	0.5	23.3	4.5	0.0	0.0	2.8	5.3
Prop In Lane				0.45		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				933	1737	805	427	617	0	0	617	522
V/C Ratio(X)				0.52	0.48	0.03	0.73	0.31	0.00	0.00	0.15	0.27
Avail Cap(c_a), veh/h				933	1737	805	502	739	0	0	739	626
HCM Platoon Ratio				1.33	1.33	1.33	1.67	1.67	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.63	0.63	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				8.0	7.8	6.4	18.6	13.0	0.0	0.0	18.9	19.8
Incr Delay (d2), s/veh				2.1	0.9	0.1	2.6	0.1	0.0	0.0	0.1	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
%ile BackOfQ(50%),veh/ln				3.7	2.8	0.2	4.0	1.7	0.0	0.0	1.2	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				10.1	8.7	6.5	21.2	13.2	0.0	0.0	19.0	20.0
LnGrp LOS				B	A	A	C	B	A	A	B	B
Approach Vol, veh/h					1346			505			236	
Approach Delay, s/veh					9.2			18.2			19.6	
Approach LOS					A			B			B	
Timer - Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		47.2		32.8				32.8				
Change Period (Y+Rc), s		6.4		6.4				6.4				
Max Green Setting (Gmax), s		35.6		31.6				31.6				
Max Q Clear Time (g_c+I1), s		12.7		25.3				7.3				
Green Ext Time (p_c), s		3.7		1.1				0.7				

Intersection Summary

HCM 6th Ctrl Delay	12.5
HCM 6th LOS	B

Notes

User approved changes to right turn type.

Timings
2: NW 17th Avenue & SR 916/NW 135th Street

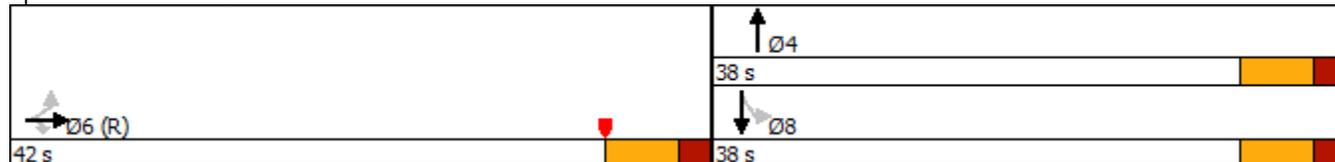
Existing Conditions
PM Peak Hour

	→	↘	↑	↙	↓
Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Configurations	↔↔↔	↗	↕↔	↖	↕↕
Traffic Volume (vph)	997	139	377	65	254
Future Volume (vph)	997	139	377	65	254
Turn Type	NA	Perm	NA	Perm	NA
Protected Phases	6		4		8
Permitted Phases		6		8	
Detector Phase	6	6	4	8	8
Switch Phase					
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	31.4	31.4	35.4	31.4	31.4
Total Split (s)	42.0	42.0	38.0	38.0	38.0
Total Split (%)	52.5%	52.5%	47.5%	47.5%	47.5%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.4	6.4	6.4	6.4	6.4
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	C-Max	C-Max	None	None	None

Intersection Summary

Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 16 (20%), Referenced to phase 6:EBTL, Start of Yellow
 Natural Cycle: 70
 Control Type: Actuated-Coordinated

Splits and Phases: 2: NW 17th Avenue & SR 916/NW 135th Street



HCM 6th Signalized Intersection Summary
2: NW 17th Avenue & SR 916/NW 135th Street

Existing Conditions
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑					↑↑		↑	↑↑	
Traffic Volume (veh/h)	114	997	139	0	0	0	0	377	238	65	254	0
Future Volume (veh/h)	114	997	139	0	0	0	0	377	238	65	254	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.99	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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	115	1007	140				0	381	240	66	257	0
Peak Hour Factor	0.99	0.99	0.99				0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	225	2110	704				0	592	367	186	1001	0
Arrive On Green	0.59	0.59	0.59				0.00	0.28	0.28	0.28	0.28	0.00
Sat Flow, veh/h	507	4743	1582				0	2194	1304	802	3647	0
Grp Volume(v), veh/h	419	703	140				0	321	300	66	257	0
Grp Sat Flow(s),veh/h/ln	1845	1702	1582				0	1777	1627	802	1777	0
Q Serve(g_s), s	10.6	9.3	3.3				0.0	12.7	13.0	6.3	4.5	0.0
Cycle Q Clear(g_c), s	10.6	9.3	3.3				0.0	12.7	13.0	19.3	4.5	0.0
Prop In Lane	0.27		1.00				0.00		0.80	1.00		0.00
Lane Grp Cap(c), veh/h	821	1515	704				0	501	459	186	1001	0
V/C Ratio(X)	0.51	0.46	0.20				0.00	0.64	0.65	0.35	0.26	0.00
Avail Cap(c_a), veh/h	821	1515	704				0	702	643	277	1404	0
HCM Platoon Ratio	1.33	1.33	1.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.99	0.99	0.00
Uniform Delay (d), s/veh	11.2	11.0	9.7				0.0	25.2	25.3	33.8	22.2	0.0
Incr Delay (d2), s/veh	2.3	1.0	0.6				0.0	1.0	1.2	0.8	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	3.1	1.2				0.0	5.3	5.0	1.2	1.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.5	12.0	10.4				0.0	26.2	26.5	34.6	22.3	0.0
LnGrp LOS	B	B	B				A	C	C	C	C	A
Approach Vol, veh/h		1262						621			323	
Approach Delay, s/veh		12.3						26.3			24.8	
Approach LOS		B						C			C	
Timer - Assigned Phs				4		6		8				
Phs Duration (G+Y+Rc), s				28.9		42.0		28.9				
Change Period (Y+Rc), s				6.4		6.4		6.4				
Max Green Setting (Gmax), s				31.6		35.6		31.6				
Max Q Clear Time (g_c+I1), s				15.0		12.6		21.3				
Green Ext Time (p_c), s				3.0		3.0		1.2				

Intersection Summary

HCM 6th Ctrl Delay	18.1
HCM 6th LOS	B

Notes

User approved changes to right turn type.

Timings
 3: NW 10th Avenue & SR 916/NW 135th Street

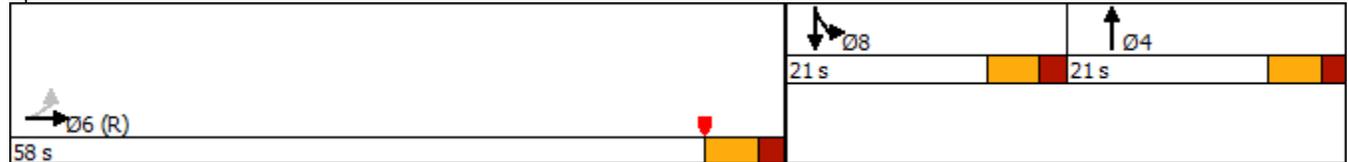
Existing Conditions
 PM Peak Hour

	→	↑	↓
Lane Group	EBT	NBT	SBT
Lane Configurations	↔↔↔	↔	↔
Traffic Volume (vph)	1223	87	41
Future Volume (vph)	1223	87	41
Turn Type	NA	NA	NA
Protected Phases	6	4	8
Permitted Phases			
Detector Phase	6	4	8
Switch Phase			
Minimum Initial (s)	15.0	7.0	7.0
Minimum Split (s)	21.0	22.0	22.0
Total Split (s)	58.0	21.0	21.0
Total Split (%)	58.0%	21.0%	21.0%
Yellow Time (s)	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0
Lead/Lag			
Lead-Lag Optimize?			
Recall Mode	C-Max	None	None

Intersection Summary

Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 78 (78%), Referenced to phase 6:EBTL, Start of Yellow
 Natural Cycle: 70
 Control Type: Actuated-Coordinated

Splits and Phases: 3: NW 10th Avenue & SR 916/NW 135th Street



HCM 6th Signalized Intersection Summary
 3: NW 10th Avenue & SR 916/NW 135th Street

Existing Conditions
 PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	62	1223	30	0	0	0	0	87	36	28	41	0
Future Volume (veh/h)	62	1223	30	0	0	0	0	87	36	28	41	0
Initial Q (Qb), veh	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
Parking Bus, Adj	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	
Adj Sat Flow, veh/h/ln	1900	1870	1900				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	64	1261	31				0	90	37	29	42	0
Peak Hour Factor	0.97	0.97	0.97				0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	2	0				0	2	2	2	2	0
Cap, veh/h	125	2620	66				0	113	46	45	65	0
Arrive On Green	0.69	0.69	0.69				0.00	0.09	0.09	0.06	0.06	0.00
Sat Flow, veh/h	240	5039	128				0	1259	518	749	1084	0
Grp Volume(v), veh/h	495	413	448				0	0	127	71	0	0
Grp Sat Flow(s),veh/h/ln	1858	1702	1847				0	0	1777	1833	0	0
Q Serve(g_s), s	12.7	11.0	11.0				0.0	0.0	7.0	3.8	0.0	0.0
Cycle Q Clear(g_c), s	12.7	11.0	11.0				0.0	0.0	7.0	3.8	0.0	0.0
Prop In Lane	0.13		0.07				0.00		0.29	0.41		0.00
Lane Grp Cap(c), veh/h	966	885	960				0	0	159	110	0	0
V/C Ratio(X)	0.51	0.47	0.47				0.00	0.00	0.80	0.64	0.00	0.00
Avail Cap(c_a), veh/h	966	885	960				0	0	267	275	0	0
HCM Platoon Ratio	1.33	1.33	1.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.93	0.93	0.93				0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	9.4	9.1	9.1				0.0	0.0	44.6	45.9	0.0	0.0
Incr Delay (d2), s/veh	1.8	1.6	1.5				0.0	0.0	6.7	4.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	3.7	4.0				0.0	0.0	3.4	1.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.2	10.7	10.6				0.0	0.0	51.3	50.5	0.0	0.0
LnGrp LOS	B	B	B				A	A	D	D	A	A
Approach Vol, veh/h		1356						127			71	
Approach Delay, s/veh		10.9						51.3			50.5	
Approach LOS		B						D			D	
Timer - Assigned Phs				4		6		8				
Phs Duration (G+Y+Rc), s				15.0		58.0		12.0				
Change Period (Y+Rc), s				6.0		6.0		6.0				
Max Green Setting (Gmax), s				15.0		52.0		15.0				
Max Q Clear Time (g_c+l1), s				9.0		14.7		5.8				
Green Ext Time (p_c), s				0.2		3.3		0.1				

Intersection Summary

HCM 6th Ctrl Delay	16.0
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Timings
4: US 441/NW 7th Avenue & SR 916/NW 135th Street

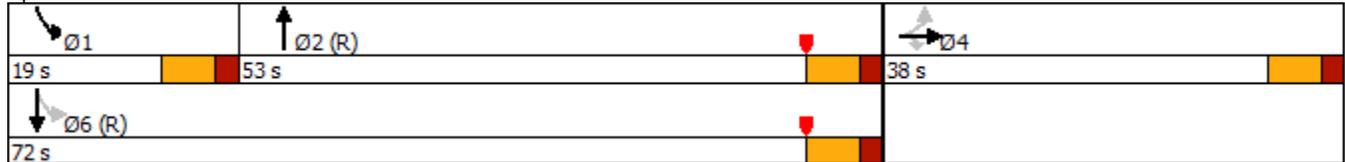
Existing Conditions
PM Peak Hour

Lane Group	EBL	EBT	EBR	NBT	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	165	1020	146	1036	244	927
Future Volume (vph)	165	1020	146	1036	244	927
Turn Type	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases		4		2	1	6
Permitted Phases	4		4		6	
Detector Phase	4	4	4	2	1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	7.0	5.0	7.0
Minimum Split (s)	35.4	35.4	35.4	31.4	11.5	31.4
Total Split (s)	38.0	38.0	38.0	53.0	19.0	72.0
Total Split (%)	34.5%	34.5%	34.5%	48.2%	17.3%	65.5%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4
All-Red Time (s)	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
Total Lost Time (s)	6.4	6.4	6.4	6.4	6.4	6.4
Lead/Lag				Lag	Lead	
Lead-Lag Optimize?				Yes	Yes	
Recall Mode	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 110
 Actuated Cycle Length: 110
 Offset: 18 (16%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow
 Natural Cycle: 90
 Control Type: Actuated-Coordinated

Splits and Phases: 4: US 441/NW 7th Avenue & SR 916/NW 135th Street



HCM 6th Signalized Intersection Summary
 4: US 441/NW 7th Avenue & SR 916/NW 135th Street

Existing Conditions
 PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	165	1020	146	0	0	0	0	1036	466	244	927	0
Future Volume (veh/h)	165	1020	146	0	0	0	0	1036	466	244	927	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	172	1062	152				0	1079	485	254	966	0
Peak Hour Factor	0.96	0.96	0.96				0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	453	1297	402				0	1653	742	319	3215	0
Arrive On Green	0.25	0.25	0.25				0.00	0.64	0.64	0.12	0.84	0.00
Sat Flow, veh/h	1781	5106	1581				0	3596	1539	1781	5274	0
Grp Volume(v), veh/h	172	1062	152				0	1072	492	254	966	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1581				0	1702	1562	1781	1702	0
Q Serve(g_s), s	8.8	21.5	8.7				0.0	21.4	21.4	7.7	4.5	0.0
Cycle Q Clear(g_c), s	8.8	21.5	8.7				0.0	21.4	21.4	7.7	4.5	0.0
Prop In Lane	1.00		1.00				0.00		0.99	1.00		0.00
Lane Grp Cap(c), veh/h	453	1297	402				0	1642	754	319	3215	0
V/C Ratio(X)	0.38	0.82	0.38				0.00	0.65	0.65	0.80	0.30	0.00
Avail Cap(c_a), veh/h	512	1467	454				0	1642	754	364	3215	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.33	1.33	1.33	1.33	1.00
Upstream Filter(I)	0.91	0.91	0.91				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.9	38.6	33.9				0.0	14.0	14.0	17.9	3.7	0.0
Incr Delay (d2), s/veh	0.4	3.0	0.4				0.0	2.0	4.4	8.9	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	9.3	3.4				0.0	7.0	7.0	3.8	1.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.2	41.6	34.3				0.0	16.1	18.4	26.9	3.9	0.0
LnGrp LOS	C	D	C				A	B	B	C	A	A
Approach Vol, veh/h		1386						1564			1220	
Approach Delay, s/veh		39.9						16.8			8.7	
Approach LOS		D						B			A	
Timer - Assigned Phs	1	2		4				6				
Phs Duration (G+Y+Rc), s	16.2	59.5		34.3				75.7				
Change Period (Y+Rc), s	6.4	6.4		6.4				6.4				
Max Green Setting (Gmax), s	12.6	46.6		31.6				65.6				
Max Q Clear Time (g_c+I1), s	9.7	23.4		23.5				6.5				
Green Ext Time (p_c), s	0.1	5.1		4.4				3.0				

Intersection Summary

HCM 6th Ctrl Delay	22.1
HCM 6th LOS	C

Notes

User approved changes to right turn type.

Future Background P.M.

Timings
1: NW 17th Avenue & SR 916/Opa-Locka Boulevard

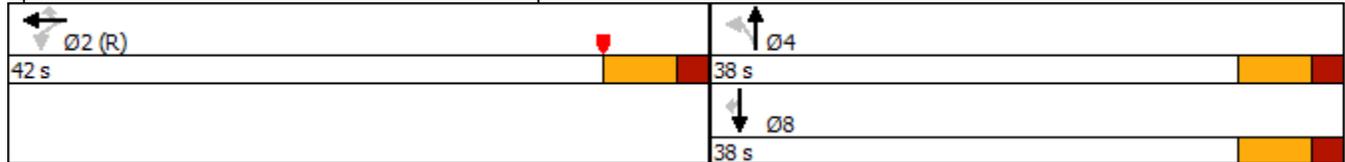
Future Background Conditions
PM Peak Hour

	←	↖	↗	↑	↓	↘
Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↖↖	↗	↘	↑	↑	↘
Traffic Volume (vph)	1109	29	316	194	94	145
Future Volume (vph)	1109	29	316	194	94	145
Turn Type	NA	Perm	Perm	NA	NA	Perm
Protected Phases	2			4	8	
Permitted Phases		2	4			8
Detector Phase	2	2	4	4	8	8
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	25.4	25.4	29.4	29.4	29.4	29.4
Total Split (s)	42.0	42.0	38.0	38.0	38.0	38.0
Total Split (%)	52.5%	52.5%	47.5%	47.5%	47.5%	47.5%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4
All-Red Time (s)	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
Total Lost Time (s)	6.4	6.4	6.4	6.4	6.4	6.4
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max	None	None	None	None

Intersection Summary

Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 16 (20%), Referenced to phase 2:WBTL, Start of Yellow
 Natural Cycle: 60
 Control Type: Actuated-Coordinated

Splits and Phases: 1: NW 17th Avenue & SR 916/Opa-Locka Boulevard



HCM 6th Signalized Intersection Summary
 1: NW 17th Avenue & SR 916/Opa-Locka Boulevard

Future Background Conditions
 PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					  							
Traffic Volume (veh/h)	0	0	0	225	1109	29	316	194	0	0	94	145
Future Volume (veh/h)	0	0	0	225	1109	29	316	194	0	0	94	145
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.99	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
Work Zone On Approach				No				No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				237	1167	31	333	204	0	0	99	153
Peak Hour Factor				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	0	0	2	2
Cap, veh/h				407	2155	772	444	655	0	0	655	555
Arrive On Green				0.65	0.65	0.65	0.59	0.59	0.00	0.00	0.35	0.35
Sat Flow, veh/h				832	4401	1577	1127	1870	0	0	1870	1584
Grp Volume(v), veh/h				521	883	31	333	204	0	0	99	153
Grp Sat Flow(s),veh/h/ln				1829	1702	1577	1127	1870	0	0	1870	1584
Q Serve(g_s), s				12.8	11.0	0.6	22.2	4.4	0.0	0.0	2.9	5.6
Cycle Q Clear(g_c), s				12.8	11.0	0.6	25.1	4.4	0.0	0.0	2.9	5.6
Prop In Lane				0.45		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				895	1667	772	444	655	0	0	655	555
V/C Ratio(X)				0.58	0.53	0.04	0.75	0.31	0.00	0.00	0.15	0.28
Avail Cap(c_a), veh/h				895	1667	772	494	739	0	0	739	626
HCM Platoon Ratio				1.33	1.33	1.33	1.67	1.67	1.00	1.00	1.00	1.00
Upstream Filter(l)				1.00	1.00	1.00	0.61	0.61	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				9.4	9.0	7.2	17.3	11.7	0.0	0.0	17.8	18.7
Incr Delay (d2), s/veh				2.8	1.2	0.1	3.3	0.1	0.0	0.0	0.1	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
%ile BackOfQ(50%),veh/ln				4.4	3.4	0.2	4.2	1.6	0.0	0.0	1.2	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				12.1	10.3	7.3	20.6	11.8	0.0	0.0	17.9	18.9
LnGrp LOS				B	B	A	C	B	A	A	B	B
Approach Vol, veh/h					1435			537			252	
Approach Delay, s/veh					10.9			17.3			18.5	
Approach LOS					B			B			B	
Timer - Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		45.6		34.4				34.4				
Change Period (Y+Rc), s		6.4		6.4				6.4				
Max Green Setting (Gmax), s		35.6		31.6				31.6				
Max Q Clear Time (g_c+I1), s		14.8		27.1				7.6				
Green Ext Time (p_c), s		4.0		0.9				0.8				

Intersection Summary

HCM 6th Ctrl Delay	13.3
HCM 6th LOS	B

Notes

User approved changes to right turn type.

Timings
2: NW 17th Avenue & SR 916/NW 135th Street

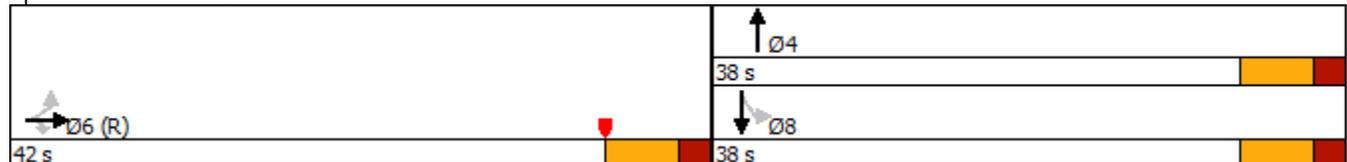
Future Background Conditions
PM Peak Hour

	→	↘	↑	↙	↓
Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Configurations	↔↔↔	↗	↕↔	↘	↕↕
Traffic Volume (vph)	1062	148	401	69	270
Future Volume (vph)	1062	148	401	69	270
Turn Type	NA	Perm	NA	Perm	NA
Protected Phases	6		4		8
Permitted Phases		6		8	
Detector Phase	6	6	4	8	8
Switch Phase					
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	31.4	31.4	35.4	31.4	31.4
Total Split (s)	42.0	42.0	38.0	38.0	38.0
Total Split (%)	52.5%	52.5%	47.5%	47.5%	47.5%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.4	6.4	6.4	6.4	6.4
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	C-Max	C-Max	None	None	None

Intersection Summary

Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 16 (20%), Referenced to phase 6:EBTL, Start of Yellow
 Natural Cycle: 70
 Control Type: Actuated-Coordinated

Splits and Phases: 2: NW 17th Avenue & SR 916/NW 135th Street



HCM 6th Signalized Intersection Summary
 2: NW 17th Avenue & SR 916/NW 135th Street

Future Background Conditions
 PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑					↑↑		↑	↑↑	
Traffic Volume (veh/h)	121	1062	148	0	0	0	0	401	253	69	270	0
Future Volume (veh/h)	121	1062	148	0	0	0	0	401	253	69	270	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.99	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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	122	1073	149				0	405	256	70	273	0
Peak Hour Factor	0.99	0.99	0.99				0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	225	2111	704				0	624	390	188	1058	0
Arrive On Green	0.59	0.59	0.59				0.00	0.30	0.30	0.30	0.30	0.00
Sat Flow, veh/h	505	4745	1582				0	2188	1309	773	3647	0
Grp Volume(v), veh/h	446	749	149				0	343	318	70	273	0
Grp Sat Flow(s),veh/h/ln	1845	1702	1582				0	1777	1627	773	1777	0
Q Serve(g_s), s	11.6	10.2	3.5				0.0	13.4	13.7	7.0	4.7	0.0
Cycle Q Clear(g_c), s	11.6	10.2	3.5				0.0	13.4	13.7	20.6	4.7	0.0
Prop In Lane	0.27		1.00				0.00		0.80	1.00		0.00
Lane Grp Cap(c), veh/h	821	1515	704				0	529	485	188	1058	0
V/C Ratio(X)	0.54	0.49	0.21				0.00	0.65	0.66	0.37	0.26	0.00
Avail Cap(c_a), veh/h	821	1515	704				0	702	643	263	1404	0
HCM Platoon Ratio	1.33	1.33	1.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.99	0.99	0.00
Uniform Delay (d), s/veh	11.4	11.1	9.8				0.0	24.4	24.5	33.5	21.4	0.0
Incr Delay (d2), s/veh	2.6	1.2	0.7				0.0	1.0	1.1	0.9	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	3.3	1.2				0.0	5.5	5.2	1.3	1.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.0	12.3	10.5				0.0	25.4	25.6	34.4	21.5	0.0
LnGrp LOS	B	B	B				A	C	C	C	C	A
Approach Vol, veh/h		1344						661			343	
Approach Delay, s/veh		12.7						25.5			24.1	
Approach LOS		B						C			C	
Timer - Assigned Phs				4		6		8				
Phs Duration (G+Y+Rc), s				30.2		42.0		30.2				
Change Period (Y+Rc), s				6.4		6.4		6.4				
Max Green Setting (Gmax), s				31.6		35.6		31.6				
Max Q Clear Time (g_c+I1), s				15.7		13.6		22.6				
Green Ext Time (p_c), s				3.2		3.3		1.2				

Intersection Summary

HCM 6th Ctrl Delay	18.0
HCM 6th LOS	B

Notes

User approved changes to right turn type.

Timings
 3: NW 10th Avenue & SR 916/NW 135th Street

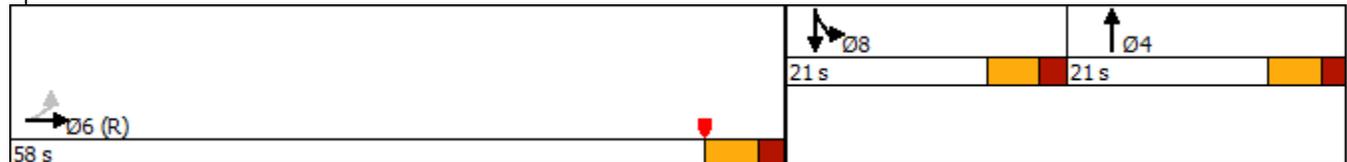
Future Background Conditions
 PM Peak Hour

	→	↑	↓
Lane Group	EBT	NBT	SBT
Lane Configurations	↔↔↔	↔	↔
Traffic Volume (vph)	1302	93	44
Future Volume (vph)	1302	93	44
Turn Type	NA	NA	NA
Protected Phases	6	4	8
Permitted Phases			
Detector Phase	6	4	8
Switch Phase			
Minimum Initial (s)	15.0	7.0	7.0
Minimum Split (s)	21.0	22.0	22.0
Total Split (s)	58.0	21.0	21.0
Total Split (%)	58.0%	21.0%	21.0%
Yellow Time (s)	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0
Lead/Lag			
Lead-Lag Optimize?			
Recall Mode	C-Max	None	None

Intersection Summary

Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 78 (78%), Referenced to phase 6:EBTL, Start of Yellow
 Natural Cycle: 70
 Control Type: Actuated-Coordinated

Splits and Phases: 3: NW 10th Avenue & SR 916/NW 135th Street



HCM 6th Signalized Intersection Summary
 3: NW 10th Avenue & SR 916/NW 135th Street

Future Background Conditions
 PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	1302	32	0	0	0	0	93	38	30	44	0
Future Volume (veh/h)	66	1302	32	0	0	0	0	93	38	30	44	0
Initial Q (Qb), veh	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
Parking Bus, Adj	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	
Adj Sat Flow, veh/h/ln	1900	1870	1900				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	68	1342	33				0	96	39	31	45	0
Peak Hour Factor	0.97	0.97	0.97				0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	2	0				0	2	2	2	2	0
Cap, veh/h	125	2621	66				0	119	49	46	67	0
Arrive On Green	0.69	0.69	0.69				0.00	0.09	0.09	0.06	0.06	0.00
Sat Flow, veh/h	240	5040	128				0	1264	514	748	1085	0
Grp Volume(v), veh/h	527	439	477				0	0	135	76	0	0
Grp Sat Flow(s),veh/h/ln	1858	1702	1847				0	0	1778	1833	0	0
Q Serve(g_s), s	14.0	12.1	12.1				0.0	0.0	7.4	4.1	0.0	0.0
Cycle Q Clear(g_c), s	14.0	12.1	12.1				0.0	0.0	7.4	4.1	0.0	0.0
Prop In Lane	0.13		0.07				0.00		0.29	0.41		0.00
Lane Grp Cap(c), veh/h	966	885	960				0	0	168	113	0	0
V/C Ratio(X)	0.55	0.50	0.50				0.00	0.00	0.80	0.67	0.00	0.00
Avail Cap(c_a), veh/h	966	885	960				0	0	267	275	0	0
HCM Platoon Ratio	1.33	1.33	1.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.91	0.91	0.91				0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	9.6	9.3	9.3				0.0	0.0	44.4	45.9	0.0	0.0
Incr Delay (d2), s/veh	2.0	1.8	1.7				0.0	0.0	7.0	5.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	4.0	4.3				0.0	0.0	3.6	2.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.6	11.1	10.9				0.0	0.0	51.3	51.1	0.0	0.0
LnGrp LOS	B	B	B				A	A	D	D	A	A
Approach Vol, veh/h		1443						135			76	
Approach Delay, s/veh		11.2						51.3			51.1	
Approach LOS		B						D			D	
Timer - Assigned Phs				4		6		8				
Phs Duration (G+Y+Rc), s				15.4		58.0		12.2				
Change Period (Y+Rc), s				6.0		6.0		6.0				
Max Green Setting (Gmax), s				15.0		52.0		15.0				
Max Q Clear Time (g_c+I1), s				9.4		16.0		6.1				
Green Ext Time (p_c), s				0.2		3.6		0.1				

Intersection Summary

HCM 6th Ctrl Delay	16.3
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Timings
4: US 441/NW 7th Avenue & SR 916/NW 135th Street

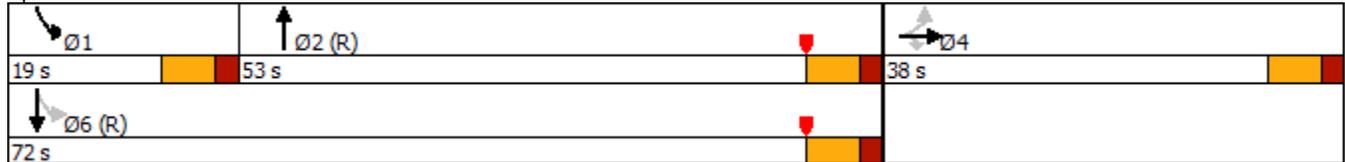
Future Background Conditions
PM Peak Hour

						
Lane Group	EBL	EBT	EBR	NBT	SBL	SBT
Lane Configurations		  		  		  
Traffic Volume (vph)	176	1086	155	1103	260	987
Future Volume (vph)	176	1086	155	1103	260	987
Turn Type	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases		4		2	1	6
Permitted Phases	4		4		6	
Detector Phase	4	4	4	2	1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	7.0	5.0	7.0
Minimum Split (s)	35.4	35.4	35.4	31.4	11.5	31.4
Total Split (s)	38.0	38.0	38.0	53.0	19.0	72.0
Total Split (%)	34.5%	34.5%	34.5%	48.2%	17.3%	65.5%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4
All-Red Time (s)	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
Total Lost Time (s)	6.4	6.4	6.4	6.4	6.4	6.4
Lead/Lag				Lag	Lead	
Lead-Lag Optimize?				Yes	Yes	
Recall Mode	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 110
 Actuated Cycle Length: 110
 Offset: 18 (16%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow
 Natural Cycle: 90
 Control Type: Actuated-Coordinated

Splits and Phases: 4: US 441/NW 7th Avenue & SR 916/NW 135th Street



HCM 6th Signalized Intersection Summary

4: US 441/NW 7th Avenue & SR 916/NW 135th Street

Future Background Conditions
PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	176	1086	155	0	0	0	0	1103	496	260	987	0
Future Volume (veh/h)	176	1086	155	0	0	0	0	1103	496	260	987	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	183	1131	161				0	1149	517	271	1028	0
Peak Hour Factor	0.96	0.96	0.96				0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	469	1346	417				0	1596	716	307	3166	0
Arrive On Green	0.26	0.26	0.26				0.00	0.62	0.62	0.13	0.82	0.00
Sat Flow, veh/h	1781	5106	1581				0	3597	1538	1781	5274	0
Grp Volume(v), veh/h	183	1131	161				0	1141	525	271	1028	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1581				0	1702	1562	1781	1702	0
Q Serve(g_s), s	9.3	23.0	9.2				0.0	25.3	25.5	8.5	5.3	0.0
Cycle Q Clear(g_c), s	9.3	23.0	9.2				0.0	25.3	25.5	8.5	5.3	0.0
Prop In Lane	1.00		1.00				0.00		0.98	1.00		0.00
Lane Grp Cap(c), veh/h	469	1346	417				0	1585	727	307	3166	0
V/C Ratio(X)	0.39	0.84	0.39				0.00	0.72	0.72	0.88	0.32	0.00
Avail Cap(c_a), veh/h	512	1467	454				0	1585	727	339	3166	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.33	1.33	1.33	1.33	1.00
Upstream Filter(l)	0.89	0.89	0.89				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.2	38.3	33.2				0.0	16.0	16.0	20.2	4.1	0.0
Incr Delay (d2), s/veh	0.3	3.7	0.4				0.0	2.9	6.1	20.2	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	10.0	3.6				0.0	8.6	8.6	4.8	1.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.6	42.0	33.6				0.0	18.9	22.2	40.4	4.4	0.0
LnGrp LOS	C	D	C				A	B	C	D	A	A
Approach Vol, veh/h		1475						1666			1299	
Approach Delay, s/veh		40.0						19.9			11.9	
Approach LOS		D						B			B	
Timer - Assigned Phs	1	2		4				6				
Phs Duration (G+Y+Rc), s	17.0	57.6		35.4				74.6				
Change Period (Y+Rc), s	6.4	6.4		6.4				6.4				
Max Green Setting (Gmax), s	12.6	46.6		31.6				65.6				
Max Q Clear Time (g_c+l1), s	10.5	27.5		25.0				7.3				
Green Ext Time (p_c), s	0.1	5.3		3.9				3.2				

Intersection Summary

HCM 6th Ctrl Delay 24.3
HCM 6th LOS C

Notes

User approved changes to right turn type.

Future Total P.M.

Timings
1: NW 17th Avenue & SR 916/Opa-Locka Boulevard

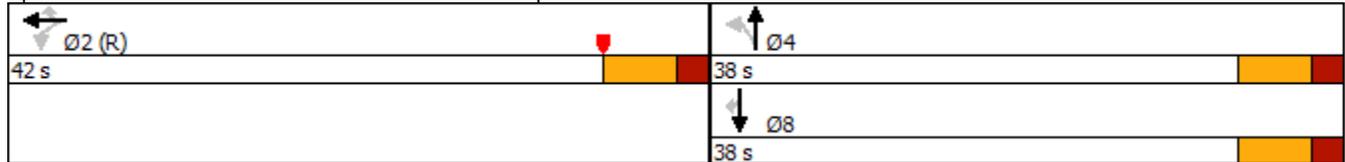
Future Total Conditions
PM Peak Hour

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1109	55	316	258	256	216
Future Volume (vph)	1109	55	316	258	256	216
Turn Type	NA	Perm	Perm	NA	NA	Perm
Protected Phases	2			4	8	
Permitted Phases		2	4			8
Detector Phase	2	2	4	4	8	8
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	25.4	25.4	29.4	29.4	29.4	29.4
Total Split (s)	42.0	42.0	38.0	38.0	38.0	38.0
Total Split (%)	52.5%	52.5%	47.5%	47.5%	47.5%	47.5%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4
All-Red Time (s)	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
Total Lost Time (s)	6.4	6.4	6.4	6.4	6.4	6.4
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max	None	None	None	None

Intersection Summary

Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 16 (20%), Referenced to phase 2:WBTL, Start of Yellow
 Natural Cycle: 55
 Control Type: Actuated-Coordinated

Splits and Phases: 1: NW 17th Avenue & SR 916/Opa-Locka Boulevard



HCM 6th Signalized Intersection Summary
 1: NW 17th Avenue & SR 916/Opa-Locka Boulevard

Future Total Conditions
 PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	225	1109	55	316	258	0	0	256	216
Future Volume (veh/h)	0	0	0	225	1109	55	316	258	0	0	256	216
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.99	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
Work Zone On Approach				No				No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				237	1167	58	333	272	0	0	269	227
Peak Hour Factor				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	0	0	2	2
Cap, veh/h				370	1959	701	354	739	0	0	739	626
Arrive On Green				0.59	0.59	0.59	0.66	0.66	0.00	0.00	0.40	0.40
Sat Flow, veh/h				832	4401	1576	901	1870	0	0	1870	1584
Grp Volume(v), veh/h				521	883	58	333	272	0	0	269	227
Grp Sat Flow(s),veh/h/ln				1829	1702	1576	901	1870	0	0	1870	1584
Q Serve(g_s), s				15.0	12.9	1.3	23.5	5.2	0.0	0.0	8.1	8.1
Cycle Q Clear(g_c), s				15.0	12.9	1.3	31.6	5.2	0.0	0.0	8.1	8.1
Prop In Lane				0.45		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				814	1515	701	354	739	0	0	739	626
V/C Ratio(X)				0.64	0.58	0.08	0.94	0.37	0.00	0.00	0.36	0.36
Avail Cap(c_a), veh/h				814	1515	701	354	739	0	0	739	626
HCM Platoon Ratio				1.33	1.33	1.33	1.67	1.67	1.00	1.00	1.00	1.00
Upstream Filter(l)				1.00	1.00	1.00	0.68	0.68	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				12.1	11.7	9.3	20.1	9.1	0.0	0.0	17.1	17.1
Incr Delay (d2), s/veh				3.8	1.6	0.2	25.1	0.2	0.0	0.0	0.2	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
%ile BackOfQ(50%),veh/ln				5.4	4.1	0.5	8.2	1.8	0.0	0.0	3.4	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				16.0	13.3	9.5	45.2	9.3	0.0	0.0	17.3	17.4
LnGrp LOS				B	B	A	D	A	A	A	B	B
Approach Vol, veh/h					1462			605			496	
Approach Delay, s/veh					14.1			29.1			17.3	
Approach LOS					B			C			B	
Timer - Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		42.0		38.0				38.0				
Change Period (Y+Rc), s		6.4		6.4				6.4				
Max Green Setting (Gmax), s		35.6		31.6				31.6				
Max Q Clear Time (g_c+l1), s		17.0		33.6				10.1				
Green Ext Time (p_c), s		3.9		0.0				1.8				

Intersection Summary

HCM 6th Ctrl Delay	18.3
HCM 6th LOS	B

Notes

User approved changes to right turn type.

Timings
2: NW 17th Avenue & SR 916/NW 135th Street

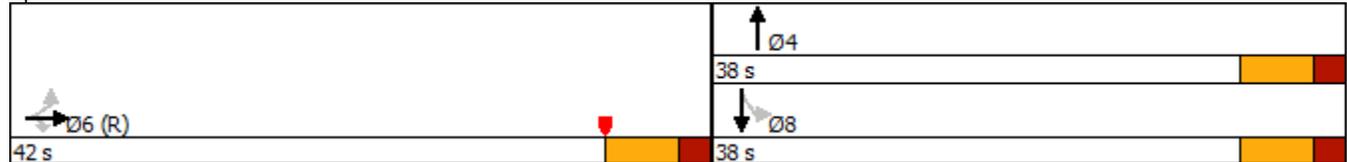
Future Total Conditions
PM Peak Hour

	→	↘	↑	↙	↓
Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Configurations	↑↑↑	↗	↑↔	↘	↑↑
Traffic Volume (vph)	1062	148	438	136	365
Future Volume (vph)	1062	148	438	136	365
Turn Type	NA	Perm	NA	Perm	NA
Protected Phases	6		4		8
Permitted Phases		6		8	
Detector Phase	6	6	4	8	8
Switch Phase					
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	31.4	31.4	35.4	31.4	31.4
Total Split (s)	42.0	42.0	38.0	38.0	38.0
Total Split (%)	52.5%	52.5%	47.5%	47.5%	47.5%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.4	6.4	6.4	6.4	6.4
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	C-Max	C-Max	None	None	None

Intersection Summary

Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 16 (20%), Referenced to phase 6:EBTL, Start of Yellow
 Natural Cycle: 70
 Control Type: Actuated-Coordinated

Splits and Phases: 2: NW 17th Avenue & SR 916/NW 135th Street



HCM 6th Signalized Intersection Summary
2: NW 17th Avenue & SR 916/NW 135th Street

Future Total Conditions
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  						 			 	
Traffic Volume (veh/h)	148	1062	148	0	0	0	0	438	253	136	365	0
Future Volume (veh/h)	148	1062	148	0	0	0	0	438	253	136	365	0
Initial Q (Qb), veh	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
Parking Bus, Adj	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	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	149	1073	149				0	442	256	137	369	0
Peak Hour Factor	0.99	0.99	0.99				0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	268	2066	704				0	810	465	248	1326	0
Arrive On Green	0.59	0.59	0.59				0.00	0.37	0.37	0.37	0.37	0.00
Sat Flow, veh/h	602	4642	1582				0	2264	1247	747	3647	0
Grp Volume(v), veh/h	455	767	149				0	361	337	137	369	0
Grp Sat Flow(s),veh/h/ln	1840	1702	1582				0	1777	1640	747	1777	0
Q Serve(g_s), s	12.0	10.5	3.5				0.0	12.8	13.0	14.2	5.8	0.0
Cycle Q Clear(g_c), s	12.0	10.5	3.5				0.0	12.8	13.0	27.1	5.8	0.0
Prop In Lane	0.33		1.00				0.00		0.76	1.00		0.00
Lane Grp Cap(c), veh/h	819	1515	704				0	663	612	248	1326	0
V/C Ratio(X)	0.56	0.51	0.21				0.00	0.54	0.55	0.55	0.28	0.00
Avail Cap(c_a), veh/h	819	1515	704				0	702	648	264	1404	0
HCM Platoon Ratio	1.33	1.33	1.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00				0.00	1.00	1.00	0.92	0.92	0.00
Uniform Delay (d), s/veh	11.5	11.2	9.8				0.0	19.7	19.8	30.5	17.5	0.0
Incr Delay (d2), s/veh	2.7	1.2	0.7				0.0	0.6	0.7	1.6	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	3.4	1.2				0.0	5.1	4.8	2.6	2.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.2	12.4	10.5				0.0	20.3	20.5	32.1	17.6	0.0
LnGrp LOS	B	B	B				A	C	C	C	B	A
Approach Vol, veh/h		1371						698			506	
Approach Delay, s/veh		12.8						20.4			21.5	
Approach LOS		B						C			C	
Timer - Assigned Phs				4		6		8				
Phs Duration (G+Y+Rc), s				36.3		42.0		36.3				
Change Period (Y+Rc), s				6.4		6.4		6.4				
Max Green Setting (Gmax), s				31.6		35.6		31.6				
Max Q Clear Time (g_c+I1), s				15.0		14.0		29.1				
Green Ext Time (p_c), s				3.5		3.3		0.7				

Intersection Summary

HCM 6th Ctrl Delay	16.6
HCM 6th LOS	B

Notes

User approved changes to right turn type.

Timings
 3: NW 10th Avenue & SR 916/NW 135th Street

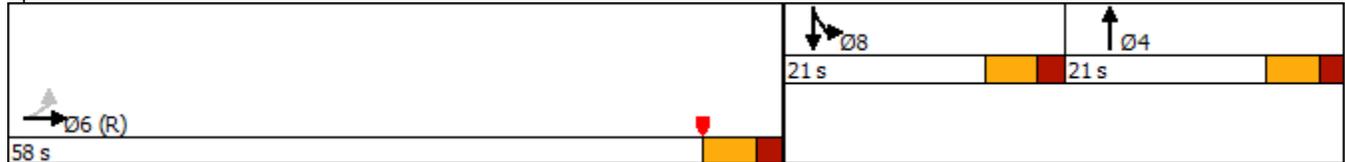
Future Total Conditions
 PM Peak Hour

	→	↑	↓
Lane Group	EBT	NBT	SBT
Lane Configurations	↔↔↔	↔	↔
Traffic Volume (vph)	1369	93	44
Future Volume (vph)	1369	93	44
Turn Type	NA	NA	NA
Protected Phases	6	4	8
Permitted Phases			
Detector Phase	6	4	8
Switch Phase			
Minimum Initial (s)	15.0	7.0	7.0
Minimum Split (s)	21.0	22.0	22.0
Total Split (s)	58.0	21.0	21.0
Total Split (%)	58.0%	21.0%	21.0%
Yellow Time (s)	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0
Lead/Lag			
Lead-Lag Optimize?			
Recall Mode	C-Max	None	None

Intersection Summary

Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 78 (78%), Referenced to phase 6:EBTL, Start of Yellow
 Natural Cycle: 70
 Control Type: Actuated-Coordinated

Splits and Phases: 3: NW 10th Avenue & SR 916/NW 135th Street



HCM 6th Signalized Intersection Summary
3: NW 10th Avenue & SR 916/NW 135th Street

Future Total Conditions
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  						 				
Traffic Volume (veh/h)	66	1369	32	0	0	0	0	93	38	30	44	0
Future Volume (veh/h)	66	1369	32	0	0	0	0	93	38	30	44	0
Initial Q (Qb), veh	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
Parking Bus, Adj	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	
Adj Sat Flow, veh/h/ln	1900	1870	1900				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	68	1411	33				0	96	39	31	45	0
Peak Hour Factor	0.97	0.97	0.97				0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	2	0				0	2	2	2	2	0
Cap, veh/h	119	2630	63				0	119	49	46	67	0
Arrive On Green	0.69	0.69	0.69				0.00	0.09	0.09	0.06	0.06	0.00
Sat Flow, veh/h	229	5058	122				0	1264	514	748	1085	0
Grp Volume(v), veh/h	552	460	500				0	0	135	76	0	0
Grp Sat Flow(s),veh/h/ln	1859	1702	1848				0	0	1778	1833	0	0
Q Serve(g_s), s	15.1	13.0	13.0				0.0	0.0	7.4	4.1	0.0	0.0
Cycle Q Clear(g_c), s	15.1	13.0	13.0				0.0	0.0	7.4	4.1	0.0	0.0
Prop In Lane	0.12		0.07				0.00		0.29	0.41		0.00
Lane Grp Cap(c), veh/h	967	885	961				0	0	168	113	0	0
V/C Ratio(X)	0.57	0.52	0.52				0.00	0.00	0.80	0.67	0.00	0.00
Avail Cap(c_a), veh/h	967	885	961				0	0	267	275	0	0
HCM Platoon Ratio	1.33	1.33	1.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.86	0.86	0.86				0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	9.7	9.4	9.4				0.0	0.0	44.4	45.9	0.0	0.0
Incr Delay (d2), s/veh	2.1	1.9	1.7				0.0	0.0	7.0	5.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	4.2	4.5				0.0	0.0	3.6	2.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.8	11.3	11.1				0.0	0.0	51.3	51.1	0.0	0.0
LnGrp LOS	B	B	B				A	A	D	D	A	A
Approach Vol, veh/h		1512						135			76	
Approach Delay, s/veh		11.4						51.3			51.1	
Approach LOS		B						D			D	
Timer - Assigned Phs				4		6		8				
Phs Duration (G+Y+Rc), s				15.4		58.0		12.2				
Change Period (Y+Rc), s				6.0		6.0		6.0				
Max Green Setting (Gmax), s				15.0		52.0		15.0				
Max Q Clear Time (g_c+I1), s				9.4		17.1		6.1				
Green Ext Time (p_c), s				0.2		3.8		0.1				

Intersection Summary

HCM 6th Ctrl Delay	16.3
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Timings
4: US 441/NW 7th Avenue & SR 916/NW 135th Street

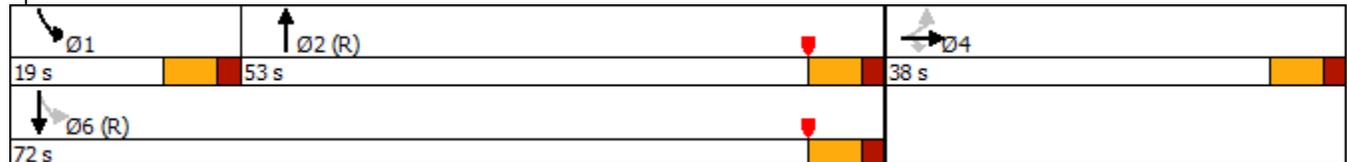
Future Total Conditions
PM Peak Hour

						
Lane Group	EBL	EBT	EBR	NBT	SBL	SBT
Lane Configurations		  		  		  
Traffic Volume (vph)	184	1128	172	1103	260	987
Future Volume (vph)	184	1128	172	1103	260	987
Turn Type	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases		4		2	1	6
Permitted Phases	4		4		6	
Detector Phase	4	4	4	2	1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	7.0	5.0	7.0
Minimum Split (s)	35.4	35.4	35.4	31.4	11.5	31.4
Total Split (s)	38.0	38.0	38.0	53.0	19.0	72.0
Total Split (%)	34.5%	34.5%	34.5%	48.2%	17.3%	65.5%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4
All-Red Time (s)	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
Total Lost Time (s)	6.4	6.4	6.4	6.4	6.4	6.4
Lead/Lag				Lag	Lead	
Lead-Lag Optimize?				Yes	Yes	
Recall Mode	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 110
 Actuated Cycle Length: 110
 Offset: 18 (16%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow
 Natural Cycle: 90
 Control Type: Actuated-Coordinated

Splits and Phases: 4: US 441/NW 7th Avenue & SR 916/NW 135th Street



HCM 6th Signalized Intersection Summary
 4: US 441/NW 7th Avenue & SR 916/NW 135th Street

Future Total Conditions
 PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  						  			  	
Traffic Volume (veh/h)	184	1128	172	0	0	0	0	1103	496	260	987	0
Future Volume (veh/h)	184	1128	172	0	0	0	0	1103	496	260	987	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	192	1175	179				0	1149	517	271	1028	0
Peak Hour Factor	0.96	0.96	0.96				0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	480	1375	426				0	1574	706	305	3137	0
Arrive On Green	0.27	0.27	0.27				0.00	0.61	0.61	0.13	0.82	0.00
Sat Flow, veh/h	1781	5106	1582				0	3597	1538	1781	5274	0
Grp Volume(v), veh/h	192	1175	179				0	1141	525	271	1028	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1582				0	1702	1562	1781	1702	0
Q Serve(g_s), s	9.7	24.0	10.3				0.0	25.9	26.1	8.6	5.5	0.0
Cycle Q Clear(g_c), s	9.7	24.0	10.3				0.0	25.9	26.1	8.6	5.5	0.0
Prop In Lane	1.00		1.00				0.00		0.98	1.00		0.00
Lane Grp Cap(c), veh/h	480	1375	426				0	1562	717	305	3137	0
V/C Ratio(X)	0.40	0.85	0.42				0.00	0.73	0.73	0.89	0.33	0.00
Avail Cap(c_a), veh/h	512	1467	454				0	1562	717	336	3137	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.33	1.33	1.33	1.33	1.00
Upstream Filter(l)	0.88	0.88	0.88				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	32.9	38.2	33.1				0.0	16.6	16.7	20.5	4.4	0.0
Incr Delay (d2), s/veh	0.4	4.2	0.4				0.0	3.0	6.5	21.3	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	10.4	4.0				0.0	9.0	9.0	4.9	1.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.3	42.4	33.6				0.0	19.7	23.2	41.8	4.7	0.0
LnGrp LOS	C	D	C				A	B	C	D	A	A
Approach Vol, veh/h		1546						1666			1299	
Approach Delay, s/veh		40.2						20.8			12.4	
Approach LOS		D						C			B	
Timer - Assigned Phs	1	2		4				6				
Phs Duration (G+Y+Rc), s	17.1	56.9		36.0				74.0				
Change Period (Y+Rc), s	6.4	6.4		6.4				6.4				
Max Green Setting (Gmax), s	12.6	46.6		31.6				65.6				
Max Q Clear Time (g_c+l1), s	10.6	28.1		26.0				7.5				
Green Ext Time (p_c), s	0.1	5.2		3.6				3.2				

Intersection Summary

HCM 6th Ctrl Delay	25.0
HCM 6th LOS	C

Notes

User approved changes to right turn type.

HCM 6th TWSC
5: NW 17th Avenue & Residential Project Driveway

Future Total Conditions
PM Peak Hour

Intersection

Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	4	0	270	5	1	255
Future Vol, veh/h	4	0	270	5	1	255
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	0	293	5	1	277

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	575	296	0	0	298
Stage 1	296	-	-	-	-
Stage 2	279	-	-	-	-
Critical Hdwy	5	5	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3	3	-	-	2.218
Pot Cap-1 Maneuver	680	898	-	-	1263
Stage 1	867	-	-	-	-
Stage 2	884	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	679	898	-	-	1263
Mov Cap-2 Maneuver	679	-	-	-	-
Stage 1	867	-	-	-	-
Stage 2	883	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.3	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	679	1263
HCM Lane V/C Ratio	-	-	0.006	0.001
HCM Control Delay (s)	-	-	10.3	7.9
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0	0

HCM 6th TWSC
6: NW 17th Avenue & North School Project Driveway

Future Total Conditions
PM Peak Hour

Intersection

Int Delay, s/veh	4.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	229	47	228	3	0	259
Future Vol, veh/h	229	47	228	3	0	259
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	249	51	248	3	0	282

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	532	250	0	0	251
Stage 1	250	-	-	-	-
Stage 2	282	-	-	-	-
Critical Hdwy	5	5	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3	3	-	-	2.218
Pot Cap-1 Maneuver	710	939	-	-	1314
Stage 1	912	-	-	-	-
Stage 2	881	-	-	-	-
Platoon blocked, %					
Mov Cap-1 Maneuver	710	939	-	-	1314
Mov Cap-2 Maneuver	710	-	-	-	-
Stage 1	912	-	-	-	-
Stage 2	881	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.1	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	741	1314
HCM Lane V/C Ratio	-	-	0.405	-
HCM Control Delay (s)	-	-	13.1	0
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	2	0

HCM 6th TWSC
7: NW 17th Avenue & South School Project Driveway

Future Total Conditions
PM Peak Hour

Intersection

Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	231	82	18	470
Future Vol, veh/h	0	0	231	82	18	470
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	251	89	20	511

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	847	296	0	0	340
Stage 1	296	-	-	-	-
Stage 2	551	-	-	-	-
Critical Hdwy	5	5	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3	3	-	-	2.218
Pot Cap-1 Maneuver	516	898	-	-	1219
Stage 1	867	-	-	-	-
Stage 2	653	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	504	898	-	-	1219
Mov Cap-2 Maneuver	504	-	-	-	-
Stage 1	867	-	-	-	-
Stage 2	638	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	1219
HCM Lane V/C Ratio	-	-	-	0.016
HCM Control Delay (s)	-	-	0	8
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0



August 19, 2020

Ms. Debbie Love
City Planner
Community Planning & Development
City of North Miami, Florida

I have reviewed the subject traffic impact study as prepared by Kimley-Horn and recommend my approval with a condition of a provision of a sidewalk along NW 17 Avenue within the property frontage. This condition is required pursuant to Miami-Dade County development regulations and City of North Miami Comprehensive Plan.

Sincerely,



Mohammad Zaid, PE
Transportation Manager



Mohammad Ayub Zaid

Transportation Manager

Public Works

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North Miami, FL 33161

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