



City of  
**ALACHUA**

THE GOOD LIFE COMMUNITY

**FOR PLANNING USE ONLY**

Case #: \_\_\_\_\_

Application Fee: \$ \_\_\_\_\_

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

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

Review Type: P&Z; CC; Admin

## Subdivision Application

Reference City of Alachua Land Development Regulations Article 2.4.10

- ☒ **Major Subdivision** – complete application and provide copy of original application with each type of submission.  
☐ **Minor Subdivision** – refer only to Final Plat section of this application.

**A. PROJECT**

1. Project Name: BRIARWOOD
2. Address of Subject Property: 17000 BLOCK NW COUNTY RD 235A
3. Parcel ID Number(s): 03044-011-001, 03044-011-002, 03044-011-003 AND 03044-010-003
4. Existing Use of Property: TIMBER
5. Future Land Use Map Designation : MODERATE DENSITY RESIDENTIAL (MOD)
6. Zoning Designation: RSF-4
7. Acreage: 74.17 ACRES

**B. APPLICANT**

1. Applicant's Status ☐ Owner (title holder) ☒ Agent
2. Name of Applicant(s) or Contact Person(s): CRAIG ROUHIER Title: MGR  
Company (if applicable): TROON DEVELOPMENT, LLC  
Mailing address: 405 CINNAMON OAK COURT  
City: LAKE MARY State: FL ZIP: 32745  
Telephone: ( ) 407 756-0058 FAX: ( ) \_\_\_\_\_ e-mail: CROUHIER@AOL.COM
3. If the applicant is agent for the property owner\*:  
Name of Owner (title holder): GOLDEN POND FARMS, INC.  
Mailing Address: PO BOX 357133  
City: GAINESVILLE State: FL ZIP: 32635

\* Must provide executed Property Owner Affidavit authorizing the agent to act on behalf of the property owner.

**C. ADDITIONAL INFORMATION**

1. Is there any additional contact for sale of, or options to purchase, the subject property? ☐ Yes ☐ No  
If yes, list names of all parties involved: \_\_\_\_\_  
If yes, is the contract/option contingent or absolute? ☐ Contingent ☐ Absolute

**D. ATTACHMENTS**

**Preliminary Plat Attachments:**

1. Plans, to include but not limited to:
  - a. Scale: at least 1inch = 200 ft;
  - b. Proposed name of subdivision.
  - c. Name, address, and telephone number of the subdivider and agent of subdivider.
  - d. Name, address, telephone number and registration number of surveyor or engineer.
  - e. Date of boundary survey, north arrow, graphic scale, date of plat drawing, and space for revision dates.
  - f. Vicinity map - indicating general location of the site and all abutting streets and properties, section lines and quarter section lines, etc., total acreage of the subdivision and total number of lots. The vicinity map shall be drawn to show clearly the information required, but not less than one (1) inch to 2,000 feet. USGS Maps may be used as a reference guide for the vicinity map.
  - g. Legal description of the property to be subdivided.

City of Alachua ♦ Planning and Community Development Department  
PO Box 9 ♦ Alachua, FL 32616 ♦ (386) 418-6121

Revised 4/1/2012

Page 1 of 5

- h. Names of owners of adjoining land with their approximate acreage or, if developed, names of abutting subdivisions.
- i. Preliminary layout including streets and easements with dimensions, lot lines with approximate dimensions, land to be reserved or dedicated for public or common uses, and any land to be used for purposes other than single-family dwellings.
- j. Block letters and lot numbers, lot lines, and scaled dimensions.
- k. Zoning district boundaries on abutting properties.
- l. Proposed method of water supply, sewage disposal, and drainage, and electric service.
- m. Minimum building setback lines as required by the Land Development Regulations.
- n. Natural features, including lakes, marshes or swamps, water courses, wooded areas, and land subject to the 100-year flood as defined by FEMA official flood maps.
- o. Surface drainage and direction of flow and method of disposition and retention indicated.
- p. Inscription stating "NOT FOR FINAL RECORDING".
- q. Tree location survey in conformance with LDR Article 6.2.1(G).
- r. Any other information that may be considered necessary by either the subdivider, the Planning and Zoning Board or the City Commission for full and proper consideration of the proposed subdivision.

**Sheet Size: 24" X 36" with 3" left margin and ½" top, bottom, and right margins**

- 2. Concurrency Impact Analysis showing the impact on public facilities, including potable water, sanitary sewer, transportation, solid waste, recreation, stormwater, and public schools in accordance with Article 2.4.14 of the Land Development Regulations.
- 3. Analysis of Consistency with the City of Alachua Comprehensive Plan (analysis must identify specific Goals, Objectives, and Policies and describe in detail how the application complies with the noted Goal, Objective, or Policy.)
- 4. Existing and/or proposed covenants and restrictions.
- 5. Two (2) sets of labels for all property owners within 400 feet of the subject property boundaries – even if property within 400 feet falls outside of City limits. (Obtain from the Alachua County Property Appraiser).
- 6. Neighborhood Meeting Materials, including:
  - i. Copy of the required published notice (advertisement) – must be published a newspaper of general circulation, as defined in Article 10 of the City's Land Development Regulations
  - ii. Copy of written notice (letter) sent to all property owners within 400 feet, and mailing labels or list of those who received written notice
  - iii. Written summary of meeting – must include (1) those in attendance; (2) a summary of the issues related to the development proposal discussed; (3) comments by those in attendance about the development proposal; and, (4) any other information deemed appropriate.
- 7. City of Alachua Public School Student Generation Form
- 8. Legal description with tax parcel number.
- 9. Proof of ownership.
- 10. Proof of payment of taxes.
- 11. Environmental Resource Permit (or Letter of Exemption) from the Suwannee River Water Management District.
- 12. If access is from a County Road, access management permit from Alachua County Public Works (or documentation providing evidence that a permit application has been submitted).
- 13. If access is from a State Road, access management permit from Florida Department of Transportation (or documentation providing evidence that a permit application has been submitted).
- 14. **Fee.** Please see fee schedule for fee determination. No application shall be accepted for processing until the required application fee is paid in full by the applicant. Any necessary technical review or additional reviews of the application beyond will be billed to the applicant at the rate of the reviewing entity. The invoice shall be paid in full prior to any legislative and/or quasi-judicial action of any kind on the petition, appeal, or development application.

**All 14 attachments are required for a complete application. A completeness review of the application will be conducted within five (5) business days of receipt. If the application is determined to be incomplete, the application will be returned to the applicant.**

**Within twelve (12) months of the approval of the Subdivision Preliminary Plat, Construction Plans must be reviewed and approved in accordance with LDR Article 2.4.10(G)(3).**

**Construction Plans Attachments:**

1. A copy of this original application must accompany the submission.
2. Plans, to include but not limited to:
  - a. Scale: 1 inch=200 ft.
  - b. A topographic map of the subdivision with maximum contour intervals of one foot where overall slopes are zero percent to two percent, two feet where slopes are over two percent, based on U.S. Coastal and Geographic Datum. This topographic map must be prepared by a land surveyor.
  - c. A contour drainage map of the stormwater basins. The outlines and sizes, measured in acres, of all existing and proposed drainage areas shall be shown and related to corresponding points of flow concentration. Each drainage area shall be clearly delineated. Flow paths must be indicated throughout. Any existing and proposed structures affecting the drainage must be shown.
  - d. Plans showing proposed design features and typical sections of canals, swales and all other open channels, storm sewers, all drainage structures and other proposed subdivision improvements.
  - e. Plans and profiles for all proposed streets and curbs. Where proposed streets intersect existing streets, elevations and other pertinent details shall be shown for existing streets for a distance of 300 feet from point of intersection.
  - f. Plans of any proposed water distribution system and sanitary sewer collection system showing pipe sizes and location of valves, pumping stations and fire hydrants, where installation of such facilities are required by these LDRs.
  - g. Plans for all road and street signs and street names signs showing the location of such signage and any other traffic safety control devices that is required or proposed. In addition, the specifications for such signage shall be provided as part of this plan, which shall detail in diagram form as necessary the size, material, color, and specifications for installation of such signage.
  - h. Other information on the construction plans as may be required by the Land Development Regulations Administrator and Public Services Director.

**Sheet Size: 24" X 36" with 3" left margin and ½" top, bottom, and right margins**

3. Concurrency Impact Analysis showing the impact on public facilities, including potable water, sanitary sewer, transportation, solid waste, recreation, stormwater, and public schools in accordance with Article 2.4.14 of the Land Development Regulations.
4. Analysis of Consistency with the City of Alachua Comprehensive Plan (analysis must identify specific Goals, Objectives, and Policies and describe in detail how the application complies with the noted Goal, Objective, or Policy.)
5. Legal description with tax parcel number.
6. Proof of ownership.
7. Proof of payment of taxes.
8. Environmental Resource Permit (or Letter of Exemption) from the Suwannee River Water Management District.
9. If access is from a County Road, access management permit from Alachua County Public Works (or documentation providing evidence that a permit application has been submitted).
10. If access is from a State Road, access management permit from Florida Department of Transportation (or documentation providing evidence that a permit application has been submitted).

**All 10 attachments are required for a complete application. A completeness review of the application will be conducted within 5 business days of receipt. If the application is determined to be incomplete, the application will be returned to the applicant.**

**Within six (6) months of the approval of Construction Plans, the applicant must submit an application for Final Plat for review. Concurrently with the review of the Final Plat, a Subdivider Agreement shall be prepared. The applicant must also provide a surety device for the public improvements in accordance with LDR Article 7.4, Improvement Guarantees for Public Improvements.**

### **Final Plat Attachments:**

1. A copy of this original application must accompany the submission.
2. Plans, to include but not limited to:
  - a. Scale: at least 1 inch = 200 ft.
  - b. Name of subdivision shall be shown in bold legible letters, as stated in Chapter 177, Florida Statutes. The name of the subdivision shall be shown on each sheet included and shall have legible lettering of the same size and type including the words "section," "unit," "replat," "amended," etc.
  - c. Name and address of subdivider.
  - d. North arrow, graphic scale, and date of plat drawing.
  - e. Vicinity map showing location with respect to existing streets, landmarks, etc., and total acreage of the subdivision and total number of lots. The vicinity map shall be drawn to show clearly the information required, but not less than one (1) inch to 2,000 feet. USGS Maps may be used as a reference guide for the vicinity map.
  - f. Exact boundary line of the tract, determined by a field survey, giving distances to the nearest one-hundredth foot and angles to the nearest minute, shall be balanced and closed with an apparent error of closure not to exceed one in 5,000.
  - g. Legal description of the property to be subdivided.
  - h. Names of owners of adjoining lands with their approximate acreage or, if developed, names of abutting subdivisions.
  - i. Location of streams, lakes and swamps, and land subject to the 100-year flood as defined by the Federal Emergency Management Agency, official flood maps.
  - j. Bearing and distance to permanent points on the nearest existing street lines or bench marks or other permanent monuments (not less than three (3)) shall be accurately described on the plat.
  - k. Municipal lines shall be accurately tied to the lines of the subdivision by distance and angles when such lines traverse or are reasonably close to the subdivision.
  - l. The closest land lot corner shall be accurately tied to the lines of the subdivision by distance and angles.
  - m. Location, dimensions, and purposes of any land reserved or dedicated for public use.
  - n. Exact locations, width, and names of all streets within and immediately adjoining the proposed subdivision.
  - o. Street right-of-way lines must show deflection angles of intersection, radii, and lines of tangents.
  - p. Lot lines, dimensions, and bearings must be shown to the nearest one hundredth (1/100) foot.
  - q. Lots must be numbered in numerical order and blocks lettered alphabetically.
  - r. Accurate location and description of monuments and markers.
  - s. Minimum building front yard setback lines as required by the Land Development Regulations as determined by the property's zoning.
  - t. Reference to recorded subdivision plats of adjoining platted land shall be shown by recorded names, plat book, and page number.
  - u. Covenants and restrictions notice in accordance with Chapter 177.091(28), Florida Statutes.
  - v. Dedication to the public by the owners of the land involved of all streets, drainage easements, and other rights-of-way however designated and shown on the plat for perpetual use for public purposes, including vehicular access rights where required. If the property is encumbered by a mortgage, the owner of the mortgage shall join in the dedication or in some other manner subordinate the mortgagee's interest to the dedication of public right-of-way.
  - w. Certification that all payable taxes have been paid and all tax sales against the land redeemed.
  - x. Title certification as required by Chapter 177, Florida Statutes.

### **Sheet Size: 24" X 36" with 3" left margin and ½" top, bottom, and right margins**

3. Concurrency Impact Analysis showing the impact on public facilities, including potable water, sanitary sewer, transportation, solid waste, recreation, stormwater, and public schools in accordance with Article 2.4.14 of the Land Development Regulations.
4. Analysis of Consistency with the City of Alachua Comprehensive Plan (analysis must identify specific Goals, Objectives, and Policies and describe in detail how the application complies with the noted Goal, Objective, or Policy.)
5. Legal description with tax parcel number.
6. City of Alachua Public School Student Generation Form.
7. One (1) set (two [2] sets for Minor Subdivisions) of labels for all property owners within 400 feet of the subject property boundaries – even if property within 400 feet falls outside of City limits. (Obtain from the Alachua County Property Appraiser).



8. Proof of ownership.
9. Proof of payment of taxes.
10. Environmental Resource Permit (or Letter of Exemption) from the Suwannee River Water Management District.
11. If access is from a County Road, access management permit from Alachua County Public Works (or documentation providing evidence that a permit application has been submitted).
12. If access is from a State Road, access management permit from Florida Department of Transportation (or documentation providing evidence that a permit application has been submitted).
13. **For Minor Subdivisions: Fee.** Please see fee schedule for fee determination. No application shall be accepted for processing until the required application fee is paid in full by the applicant. Any necessary technical review will be billed to the applicant at the rate of the reviewing entity. The invoice shall be paid in full prior to any legislative and/or quasi-judicial action of any kind on the petition, appeal, or development application.

**All 12/13 attachments are required for a complete application. A completeness review of the application will be conducted within five (5) business days of receipt. If the application is determined to be incomplete, the application will be returned to the applicant.**

I/We certify and acknowledge that the information contained herein is true and correct to the best of my/our knowledge.

Signature of Applicant

CRAIG ROUHIER, MGR

Typed or printed name and title of applicant

Signature of Co-applicant

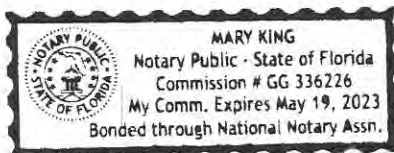
Typed or printed name of co-applicant

State of Florida County of Seminole

The foregoing application is acknowledged before me this 20 day of June, 2019 by \_\_\_\_\_

\_\_\_\_\_, who is/are personally known to me, or who has/have produced FIDL - Exp 12/05/2021 as identification.

NOTARY SEAL



Signature of Notary Public, State of Florida

**To Whom It May Concern:**

Golden Pond Farms, Inc. authorizes Troon Development, LLC to act as my agent/applicant for all applications to governmental authorities, including but not limited to plats, engineering, permits, utilities and easements for any or all portions of the property for development purposes.

Sincerely,

*Eric J. Parker* 9-18-18  
Date  
PRESIDENT

It's

STATE OF FLORIDA, COUNTY OF ALACHUA ss:

The foregoing instrument has been acknowledged, sworn to and subscribed by me this 18<sup>th</sup> day of September, 20 18 by Eric J. Parker, who is personally known to me or produced \_\_\_\_\_ as identification.

NOTARY PUBLIC:

(sign) *Sharon M. Grey*  
(print) Sharon M. Grey

Notary's Commission Expires:





## City of Alachua

---

**MAYOR GIB COERPER**

Vice Mayor Shirley Green Brown  
Commissioner Ben Boukari, Jr.  
Commissioner Gary Hardacre  
Commissioner Robert Wilford

**OFFICE OF THE CITY MANAGER****TRACI L. CAIN**

December 4, 2014

Mr. Eric Parker  
Golden Ponds Farm Inc.  
P.O. Box 357133  
Gainesville, Florida 32635

Dear Mr. Parker:

The City of Alachua is in receipt of your Notice of Intent to harvest trees on property known as Bonaventure/Benton Hills, located in a part of Section 8, Township 8, Range 18 along C.R. 235A, tax parcel numbers 03044-011-002, 03044-010-003, 03044-011-001, and 03044-011-003. Your Notice of Intent included Alachua County Property Appraiser data designating the use of the property as timber, and an aerial photograph showing the property in planted pines.

The City finds that the above referenced property meets the criteria of Section 6.2.1(F)(1)(e) of the Land Development Regulations (LDRs) for a bona fide commercial forestry operation. As such, the property is exempt from the requirements of Section 6.2 of the LDRs. Section 6.2.1(F)(1)(e) requires that owners of commercial forestry operations submit a notice of activity to the Land Development Regulations Administrator prior to commencement of any timber harvesting, mechanical site preparation, or land clearing.

Should you have any further questions, please contact Kathy Winburn, Planning & Community Development Director, at (386) 418-6100 x. 105.

Sincerely,

Traci Cain  
City Manager

Cc: Adam Boukari, Assistant City Manager  
Kathy Winburn, Planning & Community Development Director  
Grafton Wilson, Compliance & Risk Management Director



## CONCURRENCY IMPACT ANALYSIS MEMO

**To:** Adam Hall, AICP, City of Alachua Planning & Community Development

**From:** David F. Glunt, PE

**Date:** September 11, 2019

**RE:** Briarwood Phases 1A, 1B, 2 and 3

This application is for a 229-lot single-family detached subdivision on  $\pm 74.17$  acres of Alachua County Tax Parcels 03044-011-001, 03044-011-002, 03044-011-003 and 03044-010-003. The site is located north of the US Highway 441 on CR 235-A. The onsite Future Land Use (FLU) category is Moderate Density Residential and the Zoning District classification is Residential Single Family 4(RSF-4), which allows up to four (4) dwelling units per acre. The Benton Hills preliminary plat was previously approved for 210 lots in 2016 for the subject parcel. The site is proposed to be developed in 4 phases. The developer's future development plans will consist of providing medium density residential and town center commercial components to be constructed in 3 additional phases with the properties to the south.

The following analysis estimates the potential impacts on City of Alachua's public facilities from the proposed development.

### ROADWAYS / TRANSPORTATION

Land Use1	Units	Daily		AM Peak		PM Peak	
(ITE)		Rate	Trips	Rate	Trips	Rate	Trips
Proposed							
Single-Family Detached Housing (ITE 210)	229	9.44	2162	0.74	169	0.99	227

DATA SOURCE IS FROM THE ITE TRIP GENERATION 10<sup>TH</sup> EDITION

Approval of this application may generate **2,162 average daily vehicle trips**. The proposed development *is not anticipated to negatively* impact the adopted LOS for adjacent and nearby roadways, as demonstrated in the tables below.

Traffic Category	US Hwy 441 (SR 235 to NCL)	
	AADT	PM Peak Hour
Comp Plan Max Service Vol	39000	3510
Existing Traffic	25926	2463
Reserved Trips with Final Dev Order	3265	317
Available Capacity	9809	730
Project Trip Generation	1367	123
Remaining Capacity	8442	607

DATA SOURCE IS FROM THE CITY OF ALACHUA MAY 2019 DEVELOPMENT MONITORING REPORT



Traffic Category	CR 235-A (North of US Hwy 441)	
	AADT	PM Peak Hour
Comp Plan Max Service Vol	15120	1359
Existing Traffic	1507	182
Reserved Trips with Final Dev Order	196	166
Available Capacity	13417	1011
Project Trip Generation	2162	227
Remaining Capacity	11255	784

DATA SOURCE IS FROM THE CITY OF ALACHUA MAY 2019 DEVELOPMENT MONITORING REPORT

Per City LDR §2.4.14(H)(2), affected roadways are those within one-half mile of the subject property for developments generating 1,000 external average daily trips (ADT). The only affected roadways are CR 235-A, which the project site is directly fronting and US Hwy 441, which is the nearest major intersection. This development is not anticipated to contribute more than 5% to any other roadway's maximum service volume within the City of Alachua. The data above demonstrates that each affected roadway segment will have sufficient capacity to serve the project and the roadway segments will continue to operate within the allowable LOS.

#### POTABLE WATER / SANITARY SEWER

TABLE 3A. POTABLE WATER IMPACTS - FINAL DEVELOPMENT ORDERS	
System Category	Gallons Per Day
Current Permitted Capacity <sup>1</sup>	2,300,000
Less Actual Potable Water Flows <sup>1</sup>	1,295,603
Reserved Capacity <sup>2</sup>	79,775
Project Capacity (229 DU x 275 GPD)	62,975
<b>Residual Capacity</b>	<b>861,647</b>
<b>Percentage of Permitted Design Capacity Utilized</b>	<b>59.80%</b>
Sources:	
1. City of Alachua Public Services Department, March 2018	
2. Table 1	

The project will be served by the existing City of Alachua potable water infrastructure. The anticipated impacts from the proposed residential development *will not* adversely impact the City's adopted LOS for potable water.

<b>Table 4a. Sanitary Sewer Impacts - Final Development Orders</b>	
<b>System Category</b>	<b>Gallons Per Day</b>
Treatment Plant Current Permitted Capacity	1,500,000
Less Actual Treatment Plant Flows <sup>1</sup>	729,000
Reserved Capacity <sup>2</sup>	76,737
Project Capacity (229 DU x 250 GPD)	57,250
<b>Residual Capacity</b>	<b>637,013</b>
<b>Percentage of Permitted Design Capacity Utilized</b>	<b>53.72%</b>
<i>Sources:</i> 1. City of Alachua Public Services Department, April 2019 2. Table 1	

The project will be served by the existing City of Alachua wastewater infrastructure. The anticipated impacts from the residential development *will not* adversely impact the City's adopted LOS for sanitary sewer.

#### RECREATION AREA

<b>Table 5a. Recreational Impacts - Final Development Orders</b>	
<b>System Category</b>	<b>Acreage</b>
Existing City of Alachua Recreation Acreage <sup>1</sup>	117.65
Acreage Required to Serve Existing Population <sup>2</sup>	50.78
Reserved Capacity <sup>3</sup>	0.62
Project Capacity	2.87
<b>Available Recreation Acreage</b>	<b>63.39</b>
1. Table 5c. Recreational Facilities 2. Bureau of Economic & Business Research, University of Florida, <i>Estimates of Population by County and City in Florida (2018)</i> ; Policy 1.2.b, Recreation Element Formula: 10,155 persons / (5 acres / 1,000 persons) 3. Table 1	

The City of Alachua currently has excess recreation area acreage. In addition, will provide recreational areas. The residential development is anticipated to not adversely impact the City's existing recreational infrastructure.

## SOLID WASTE

<b>Table 6a. Solid Waste Impacts - Final Development Orders</b>		
<b>System Category</b>	<b>Lbs Per Day</b>	<b>Tons Per Year</b>
Existing Demand <sup>1</sup>	40,620.00	7,413.15
Reserved Capacity <sup>2</sup>	6,882.99	1,256.15
Project Capacity	2,292.00	418.29
<b>New River Solid Waste Facility Capacity<sup>3</sup></b>	<b>50 years</b>	
<p>1. Bureau of Economic &amp; Business Research, University of Florida, Estimates of Population by County and City in Florida (2018); Policy 2.1.a, CFNGAR Element</p> <p>Formula: 10,155 persons x 0.73 tons per year</p> <p>2. Table 1</p> <p>3. New River Solid Waste Association, April 2019</p>		

The City's solid waste facility has sufficient capacity to adequately serve the proposed residential development. The residential development is not anticipated to adversely impact the City's adopted LOS for this system.

## LOCAL AREA SCHOOLS

<b>Student Generation Multipliers</b>			
	Elementary	Middle	High
Single Family Rates	0.14	0.06	0.08
Briarwood (229 DU)	33	14	19
Source: Alachua County Public Schools 2015 Student Generator Multiplier Analysis			

The project generates a demand of **33 elementary, 14 middle, and 19 high school student stations** to this system. The residential development is not anticipated to adversely impact the adopted LOS for this system.

## COMPREHENSIVE PLAN CONSISTENCY MEMO

To: Adam Hall, AICP, City of Alachua Planning & Community Development  
From: David F Glunt P.E.  
Date: July 30, 2019  
RE: Briarwood Phases 1A, 1B, 2 and 3

This application is for a 229-lot single-family detached subdivision on  $\pm 74.17$  acres of Alachua County Tax Parcels 03044-011-001, 03044-011-002, 03044-011-003 and 03044-010-003. The site is located north of the US Highway 441 on CR 235-A. The onsite Future Land Use (FLU) category is Moderate Density Residential and the Zoning District classification is Residential Single Family 4(RSF-4), which allows up to four (4) dwelling units per acre. The Benton Hills preliminary plat was previously approved for 210 lots in 2016 for the subject parcel. The site is proposed to be developed in 4 phases. The developer's future development plans will consist of providing medium density residential and town center commercial components to be constructed in 3 additional phases on the properties to the south.

The following narrative explains the project's conformance and consistency to specific City of Alachua Comprehensive Plan Goals, Objectives, and Policies for this application. Conformance and consistency statements are provided in **bold**.

### FUTURE LAND USE ELEMENT

Policy 1.2.a: Moderate density residential (0 to 4 dwelling units per acre): The moderate density residential land use category allows residential development at a maximum density of 4 dwelling units per acre. The following uses are allowed in the moderate density residential land use category:

1. Single family, conventional dwelling units;
2. Accessory dwelling units;
3. Manufactured or modular homes meeting certain design criteria;
4. Mobile homes only within mobile home parks;
5. Duplexes and quadplexes;
6. Townhomes;
7. Residential Planned Developments (PD-R);
8. Supporting community services, such as schools, houses of worship, parks, and community centers

**The proposed subdivision has Moderate Density Residential FLU classification. This application seeks to permit 229 single-family dwelling units. The proposed 229 units over 74.17 acres yields 3.1 units per acre which is less than the allowable 4 units per acre.**



Policy 2.4.b: Landscaping: Buffering – A buffer consists of horizontal space (land) and vertical elements (plants, berms, fences, walls) that physically separate and visually screen adjacent land uses. The City shall establish buffer yard requirements that are based on the compatibility of the adjacent uses and the desired result of the buffer.

**Since the adjacent zonings are either residential or agricultural, landscape buffers are not required per Section 6.2.2(D)(3)(c). The developer is proposing to provide a perimeter landscape and stormwater tract along the north property line, adjacent to CR 235-A and along southern and eastern boundary. The landscape buffer area is adjacent to the property line with a planted, cascading, dry retention stormwater management system located internally in the tract. The western boundary and the far southern boundary are buffered with a stormwater tract with a cascading, dry retention stormwater management system that will be landscaped.**

Policy 2.5.a: There shall be a minimum of 10% percent open space required. The City shall establish incentives for the provision of open space beyond minimum requirements.

**The proposed development exceeds the 10% minimum open space requirement. Onsite open spaces are comprised of stormwater management facilities, landscaping, buffers, and a park.**

Policy 2.5.b: Open space shall not be limited to unusable portions of project sites. A portion of open space shall be usable and functional.

**The proposed development combines the onsite stormwater management facilities with a trail system which is enhanced with landscaping and a park.**

GOAL 5: Development Standards: The City shall include provisions through its comprehensive plan amendment process, development review process and in its land development regulations for development standards that address natural features and availability of facilities and services. These development standards will strive to protect natural resources and public facility resources while allowing for innovative and flexible development patterns.

**This application is consistent with the Comprehensive Plan and the RSF-4 development standards in the City of Alachua Land Development Code. The project was designed to maximize onsite natural features by utilizing the natural topography of the site.**

Objective 5.1: Natural features: The City shall coordinate Future Land Use designations with appropriate topography, soils, areas of seasonal flooding, wetlands and habitat during review of proposed amendments to the Future Land Use Map and the development review process. Natural features may be included as amenities within a development project.

**There are no onsite wetlands or flood prone areas onsite.**

**1982 State Road 44 ■ Suite 360 ■ New Smyrna Beach, FL 32168 ■ 407.325.5579**

Policy 5.1.a: Topography: The City shall protect the natural topography of the City, including steep and seepage slopes, by requiring new development to include techniques to minimize negative impacts on the natural terrain. An emphasis will be placed on retaining the natural function of seepage slopes during development. Additionally, retention of existing native vegetation will be encouraged as one method of protecting slopes.

**There are no steep slopes onsite.**

Policy 5.1.b: Soils: The City shall ensure soil protection and intervention measures are included in the development review process.

**There are eight soil types located onsite:**

- 3—Arredondo fine sand, 0 to 5 percent slopes (HSG: A)**
- 5—Fort Meade fine sand, 0 to 5 percent slopes (HSG: A)**
- 8—Millhopper sand, 0 to 5 percent slopes (HSG: A)**
- 29—Lochloosa fine sand, 2 to 5 percent slopes (HSG: B)**
- 30—Kendrick sand, 2 to 5 percent slopes (HSG: B)**
- 33—Norfolk loamy fine sand, 2 to 5 percent slopes (HSG: B)**
- 69—Arredondo fine sand, 5 to 8 percent slopes (HSG: A)**
- 72—Lochloosa fine sand, 5 to 8 percent slopes (HSG: B)**

**According to the NRCS soil database, each of the eight sandy soil types mentioned above are conducive to residential developments with minimal limitations. Site design will address these limitations with an improved stormwater management system.**

Policy 5.1.c: Flood prone areas: The City shall require as part of the development review process the identification of FEMA flood zone areas. Where necessary, base flood elevations and minimum finished floor elevations shall be established. The City shall also require finished floor elevations on subdivision plats, site plans and building permit plans when necessary to determine compliance with flood prone area regulations. The City shall establish standards for a limitation on filling in flood prone areas.

**There are no FEMA flood prone areas onsite.**

Policy 5.1.d: Wetlands: The City shall utilize statewide wetland delineation methodology in accordance with Florida Administrative Code (FAC) and regulations adopted by the FDEP and the Suwannee River Water Management District.

**There are no wetlands located onsite. A “Protected Species and Wetland Assessment” of the site was performed by Universal Engineering Sciences on June 3<sup>rd</sup>, 2019 and determined that there are no endangered species on site.**

Policy 5.1.e: Habitat: The City shall require as part of the development review process, an inventory of listed species for all new developments in areas identified as known habitat for listed species if listed species are known to exist in close proximity to the development. The survey shall include detailed information regarding type, quantity, location, and habitat requirements for any listed species identified. A de minimus threshold for properties required to complete the inventory shall be established in the City’s Land Development Regulations.

**The site is not known to have listed species.**

Objective 5.2: Availability of facilities and services: The City shall utilize a concurrency management system to ensure that the adopted level of service standards are maintained.

**The Concurrency Impact Analysis report estimates the impacts that development of the subdivision will have on available public facilities and services. There are no anticipated impacts to facilities and/or services and are anticipated to operate below the adopted capacity.**

Policy 5.2.a: All new development shall meet level of service requirements for roadways, potable water and sanitary sewer, stormwater, solid waste, public schools, and improved recreation in accordance with LOS standards adopted in the elements addressing these facilities.

**Public facilities shall continue to operate at or below established LOS standards with the development of the project.**

Policy 9.2: Any new residential subdivision within the corporate limits, where potable water service is available, as defined in Policy 4.2.a of the Community Facilities and Natural Groundwater Aquifer Recharge Element of the City of Alachua Comprehensive Plan, regardless of size, that is within either a Residential or Agriculture Future Land Use Map Designation shall connect to the City of Alachua’s potable water system. Any new residential subdivision within the corporate limits, where wastewater service is available, as defined in Policy 1.2.a of the Community Facilities and Natural Groundwater Aquifer Recharge Element of the City of Alachua Comprehensive Plan, regardless of size, that is within a Residential Future Land Use Map Designation shall connect to the City of Alachua’s wastewater system.

**The proposed subdivision will connect to the City's potable drinking water system and sanitary sewer collection system.**

#### **TRANSPORTATION ELEMENT**

Policy 1.2.b: The City shall establish the following access point requirements for City streets:

1. permitting 1 access point for ingress and egress purposes to a single property or development;
2. permitting 2 access points for ingress and egress to a single property or development if the minimum distance between the two access points exceeds 20 feet for a single residential lot or 100 feet for nonresidential development and new residential subdivisions;
3. permitting 3 access points for ingress and egress to a single property or development if the minimum distance between each access point is at least 100 feet for residential and non-residential development; or
4. permitting more than 3 access points for ingress and egress to a single property or development where a minimum distance of 1000 feet is maintained between each access point.

**The site's proposed ingress/egress on CR 235-A is located at the previously approved access location. One additional ingress/egress on CR 235-A, approximately 700 feet to the north will operate as an emergency access. Two internal roads are designed for future expansion to the south and to the west of the subject site.**

#### **CONSERVATION AND OPEN SPACE ELEMENT**

Objective 1.5:

Soils. The City shall protect soil resources through erosion and sedimentation control, by requiring proper design criteria on specific soils.

**There are eight soil types located onsite:**

- 3—Arredondo fine sand, 0 to 5 percent slopes (HSG: A)**
- 5—Fort Meade fine sand, 0 to 5 percent slopes (HSG: A)**
- 8—Millhopper sand, 0 to 5 percent slopes (HSG: A)**
- 29—Lochloosa fine sand, 2 to 5 percent slopes (HSG: B)**
- 30—Kendrick sand, 2 to 5 percent slopes (HSG: B)**
- 33—Norfolk loamy fine sand, 2 to 5 percent slopes (HSG: B)**
- 69—Arredondo fine sand, 5 to 8 percent slopes (HSG: A)**
- 72—Lochloosa fine sand, 5 to 8 percent slopes (HSG: B)**



**According to the NRCS soil database, each of the eight sandy soil types mentioned above are conducive to residential developments with minimal limitations. Site design will address these limitations with an improved stormwater management system.**

Objective 1.10: Wetlands. The City shall protect and preserve wetland values and functions from adverse, human caused, physical and hydrologic disturbances.

**The ±74.17-acre subject property does not contain onsite wetland features, as evidenced by the “Protected Species and Wetland Assessment” performed by Universal Engineering Sciences on June 3<sup>rd</sup>, 2019.**

#### **COMMUNITY FACILITIES AND NATURAL GROUNDWATER AQUIFER RECHARGE ELEMENT**

##### **GOAL 3:**

Stormwater. Develop and maintain a stormwater management system that minimizes flooding, protects, preserves and enhances desirable water quality conditions, and, where possible, preserves and utilizes existing natural features.

**The stormwater management system will be designed to maximize distribution of surface water runoff and utilize cascading dry retention systems to maximize aquifer recharge. Existing low areas are reserved for stormwater management applications to minimize onsite grading and preserve predevelopment hydrology patterns.**

##### **Objective 3.3:**

The City shall implement design guidelines for stormwater management facilities to promote dual use, protect natural features, and provide aesthetically pleasing facilities. Policy 3.3.a: Stormwater facility design shall incorporate the following features, where practicable:

1. Joint use of retention and detention basins for passive recreation, habitat and open space.
2. Use of vegetation, such as cypress and river birch, in retention and detention basin to enhance stormwater management objectives.
3. On-site retention and detention facilities shall be integrated with other elements of the proposed development through aesthetically sensitive design and the use of landscaping.
4. Maintain and enhance the existing hydrological and ecological function of stream or drainage corridors or wetland areas which serve stormwater facilities.
5. Where retention and detention basins are located along County roads or State roads, the basin design shall comply with the Gainesville Urbanized Area Metropolitan Transportation Planning Organization’s drainage retention basin landscaping standards.

**The proposed subdivision utilizes open space tracts for a “storm trail system” which will interconnect the onsite green spaces. The trail system will be designed in concert with the stormwater management system and onsite pocket parks. The stormwater management facilities will be landscaped to provide a more aesthetic park environment.**



# UNIVERSAL ENGINEERING SCIENCES

## **PROTECTED SPECIES & WETLANDS ASSESSMENT**

Conducted on

74-Acre County Road 235A Property  
NWC CT 235A (NW 173<sup>rd</sup> St.) & NW 175<sup>th</sup> Pl.  
Alachua, Alachua County, Florida

UES Project No. 0240.1900044.0000  
UES Report No. 1681081

Report Date: June 3, 2019

### *Prepared for:*

Troon Development, LLC  
405 Cinnamon Oak Court  
Lake Mary, FL 32746

### *Prepared by:*

Universal Engineering Sciences, Inc.  
3532 Maggie Boulevard  
Orlando, FL 32811

Prepared By:

---

David S. Whitney  
Senior Environmental Scientist

Consultants in: Geotechnical Engineering • Environmental Sciences • Construction Materials Testing • Threshold Inspection  
Offices in: Orlando • Daytona Beach • Fort Myers • Gainesville • Jacksonville • Ocala • Palm Coast • Rockledge • Sarasota • Miami  
Pensacola • Panama City • Fort Pierce • St. Petersburg • Tampa • West Palm Beach • Atlanta, GA • Tifton, GA

## REPORT TEXT

---

<b>1.0</b>	<b>GENERAL SITE DESCRIPTION .....</b>	<b>1</b>
<b>2.0</b>	<b>EXISTING CONDITIONS.....</b>	<b>1</b>
<b>3.0</b>	<b>PROTECTED SPECIES ASSESSMENT METHODOLOGY .....</b>	<b>2</b>
<b>4.0</b>	<b>PROTECTED SPECIES ASSESSMENT RESULTS.....</b>	<b>3</b>
4.1	POTENTIAL PROTECTED WILDLIFE.....	3
4.2	OBSERVED PROTECTED WILDLIFE/PLANTS .....	4
4.3	NON-PROTECTED WILDLIFE OBSERVATIONS/EVIDENCE .....	5
<b>5.0</b>	<b>WETLAND ASSESSMENT RESULTS .....</b>	<b>5</b>
<b>6.0</b>	<b>SUMMARY.....</b>	<b>5</b>

## ENCLOSURES

---

### FIGURES

Vicinity/USGS Topographic Map.....	1
Aerial/Land Use Map .....	2
NRCS/SCS Soils Map.....	3
Wetlands Assessment Map.....	4

### APPENDICES

Site Photographs.....	A
FNAI, FFWCC, USFWS Data/Maps.....	B
USFWS Eastern Indigo Snake Standard Protection Measures.....	C



## 1.0 GENERAL SITE DESCRIPTION

The site includes four (4) vacant parcels of agricultural land (PID Nos. 03044-010-003, 03044-011-001, 03044-011-002, & 03044-011-003) located on the west side of County Road 235 S (NW 173<sup>rd</sup> St) at NW 171 Place, in Alachua, Alachua County, Florida. The site is located within Section 8, Township 8 South, and Range 18 East, as referenced in the United States Geological Survey (USGS) topographic quadrangle map titled "High Springs, Florida." The property is currently used for silviculture. The property is approximately 74.5± acres in size.

## 2.0 EXISTING CONDITIONS

**On-site land uses:** The land uses described in this report are based on the Florida Department of Transportation's handbook "Florida Land Use Cover and Forms Classification System" 1999 edition (FLUCFCS). Currently there is only one (1) land use on the property including only uplands (Figure 2). Site photographs can be found in Appendix A. General on-site habitat descriptions are as follows:

### Uplands:

- FLUCFCS 441– *Coniferous Plantation (74.50 acres/ 100%):*

The entire site consists of a coniferous plantation. The canopy species within the property includes planted slash pine (*Pinus elliottii*), along with scattered laurel oak (*Quercus laurifolia*), southern red oak (*Quercus falcata*), black cherry (*Prunus serotina*), sweetgum (*Liquidambar styraciflua*), red maple (*Acer rubrum*). Dominant groundcover includes bahia grass (*Paspalum notatum*), blackberry (*Rubus* spp.), spanish needles (*Bidens* spp.), muscadine vine (*Vitis* spp.), Virginia creeper vine (*Parthenocissus quinquefolia*), and broomsedge bluestem (*Andropogon virginicus*).

**Topography:** The general topography of the site gently slopes down from east to west with slight rolling-hills. Based on the data from Google Earth and the USGS topographic map, the property averages approximately 95 to 115 feet above sea level. See Figure 1 for a topographic map.

**Soils:** According to the Soil Conservation Service, Alachua County Soil Survey, surficial soils at the site are classified as follows:

- **3. Arredondo Fine Sand (0-5% slopes).**

This soil is classified as well drained and is found on hills on marine terraces. The seasonal high water table is at a depth of more than 80 inches.

- **5. Fort Meade Fine Sand 0-5% slopes).**

This soil is classified as well drained and is found on ridges on marine terraces. The seasonal high water table is at a depth of more than 80 inches.

- **8. Millhopper Sand (0-5% slopes).**

This soil is classified as moderately well drained and is found on knolls and ridges on marine terraces. The seasonal high water table is at a depth of 42 to 72 inches

- **29. Lochloosa Fine Sand (2-5% slopes).**

This soil is classified as poorly drained and is found on knolls and ridges on marine terraces. The seasonal high water table is at a depth of 18 to 42 inches

- **30. Kendrick Sand (2-5% slopes).**

This soil is classified as poorly drained and is found on knolls and ridges on marine terraces. The seasonal high water table is at a depth of more than 80 inches

- **33. Norfolk Loamy Fine Sand (2-5% slopes).**

This soil is classified as well drained and is found on flats on marine terraces. The seasonal high water table is at a depth of 48 to 72 inches.

- **69. Arredondo Fine Sand (5-8% slopes).**

This soil is classified as well drained and is found on ridges and hills on marine terraces. The seasonal high water table is at a depth of more than 80 inches

- **72. Lochloosa Fine Sand 2-5% slopes).**

This soil is classified as well drained and is found on knolls and ridges on marine terraces. The seasonal high water table is at a depth of 18-42 inches

**Drainage:** There are no formal drainage systems in place on the subject property. The majority of runoff from the site likely percolates into the ground.

**Adjacent Land Uses:** The site is bordered to the north by single family residential homes. To the east by single family residential homes, to the south by additional silviculture, and to the west by cattle pasture.

### 3.0 PROTECTED SPECIES ASSESSMENT METHODOLOGY

A UES biologist reviewed the property for signs of utilization or presence of any flora or fauna listed as protected by the U.S. Fish and Wildlife Service (USFWS) and the Florida Fish & Wildlife Conservation Commission (FFWCC), and Florida Department of Agriculture and Consumer Services (FDACS) based on known habitat preference and geographical distribution. The field assessment was performed on May 15,

2019. Weather conditions were sunny and averaged 85-92° F with light wind during the field assessment. The protected species assessment included:

- A review of aerial photographs to assess past uses and the potential for protected wildlife species based on geographic area and ecological significance.
- Research and review of numerous databases and reference materials including, but not limited to those provided by the USFWS, FFWCC, and Florida Natural Areas Inventory (FNAI) to determine the potential species of protected wildlife that may inhabit or utilize the site.
- Site reconnaissance to evaluate existing site conditions. The survey included pedestrian and vehicular transects, along with quiet observation for 10-15 minutes at various locations on the property.
- A review of the FFWCC eagle nest database website for nearby bald eagle nesting sites and the waterbird colony locator for known wading bird nesting areas.

Site photographs are presented in **Appendix A**. Database and reference materials reviewed are presented in **Appendix B**. Species-specific protocols and documents are presented in **Appendix C**.

## 4.0 PROTECTED SPECIES ASSESSMENT RESULTS

Based on the existing habitat found onsite, the surrounding land uses, field observations, and the data obtained from the USFWS, FNAI, and FFWCC, the site generally has generally moderate potential to provide adequate habitat for a few listed species.

### 4.1 POTENTIAL PROTECTED WILDLIFE

Based on the existing habitat found on site, the surrounding land uses, field observations, and the data obtained from the FNAI, USFWS, and FFWCC (Appendix B), the site has good habitat to support foraging by a few listed species in its current condition. The species of protected wildlife that are most likely to be found on or near the site includes the gopher tortoise, the Florida burrowing owl, and the eastern indigo snake. The current listed status and potential for specific species to utilize the site are discussed in Table 1 below.

**TABLE 1**  
 Potential for Individual Listed Species to Occur Onsite

Common Name	Scientific Name	Status *(FFWCC/USFWS)	Potential (Low – Moderate - High)	Comments
Gopher Tortoise	<i>Gopherus polyphemus</i>	T/None	High (Observed)	The site offers good quality burrowing and foraging areas for this species. A total of five (5) potentially-occupied burrows were located on the site at the time of assessment. The assessment did not cover 100% of the property and more burrows are likely present.
FL Burrowing Owl	<i>Athene cunicularia floridana</i>	SSC/None	Moderate	The subject property offers some fair quality burrowing areas for this species. No burrows were observed on the property at the time of the assessment.
Sherman's Fox Squirrel	<i>Sciurus niger shermani</i>	SSC/None	Low	The subject property has a few grassed open areas within the pine plantation and there is pasture to the west of the site. There is also a combination of pines and oaks on the site, which are preferred foods. No evidence was observed.
American bald eagle	<i>Haliaeetus leucocephalus</i>	Protected under MBTA and Bald and Golden Eagle Act	Low	The site does offer suitable nesting habitat in the tall pine trees. No evidence was observed on the site at the time of assessment. The closest historically documented eagle nest is located approximately 6.2 miles southeast of the site.
Eastern indigo snake	<i>Drymarchon corais couperi</i>	T/T	Moderate	The site offers good quality foraging habitat and limited nesting habitat. No snags or other dense thickets for refugia were observed on the site. There are large undeveloped properties adjoining the site and in the vicinity that provide an undeveloped corridor for wildlife to and from the subject property. No evidence observed during the assessment.

## 4.2 OBSERVED PROTECTED WILDLIFE/PLANTS

UES observed a total of five (5) potentially occupied gopher tortoise burrows on the property during the assessment. The assessment did not cover 100% of the property so it is likely more burrows are located on the site. UES did not observe any other evidence of listed species on the subject property during the assessment.

---

#### 4.3 NON-PROTECTED WILDLIFE OBSERVATIONS/EVIDENCE

UES observed cottontail rabbits and burrows, brown anoles, Northern cardinal, rufus-sided towhee, blue-gray gnatcatcher, and feral/wild hog rooting evidence during the assessment. No other species or evidence were observed.

### 5.0 WETLAND ASSESSMENT RESULTS

The results of the wetland assessment found that there are no wetlands or surface waters currently located on the subject property.

### 6.0 SUMMARY

**Wetlands Assessment:** The results of the wetland assessment found that there are currently no wetlands or surface waters located on the subject property.

**Protected Species Assessment:** The results of the protected species assessment found direct evidence of a population of gopher tortoise on the property. A total of five (5) potentially occupied tortoise burrows were observed during the assessment and it is likely that more are present on the site. There was no other direct evidence observed that would indicate the site is used by any additional species of protected wildlife. However, the site does have some potential to provide foraging and nesting habitat for a few listed species. The listed species with the best potential to be found on the property includes the gopher tortoise, the Florida burrowing owl, the Sherman's fox squirrel, and the eastern indigo snake. Species-specific discussions/recommendations based on our observations are discussed below.

**Gopher Tortoise & FL Burrowing Owl:** UES observed direct evidence of the presence of a population of gopher tortoise (*Gopherus polyphemus*) on the property. The tortoise is listed as "Threatened" by the FFWCC. A total of five (5) potentially-occupied burrows were observed during this assessment where pedestrian and vehicular transects covered approximately 40% of the subject property. Prior to development, a formal 100% gopher tortoise burrow survey should be performed, the appropriate relocation permit should be obtained from the FFWCC, and the tortoises with burrows located within 25' of areas to be disturbed should be relocated to an off-site recipient site. Any commensal species to the gopher tortoise, where observed during relocation efforts, are to be allowed to leave the area unharmed.

**FL Burrowing Owl:** The subject property contains areas of fair quality burrowing and foraging habitat for the FL burrowing owl (*Athene cunicularia floridana*). However, no nests were observed on-site during this assessment and closest nest location documented by FWC in the vicinity of the site is approximately 7.65 miles west of the site. The burrowing owl is listed as a "Threatened" on the state level. Owl nests, eggs, and individuals are protected by the U.S. Migratory Bird Treaty

Act and state Wildlife Code. If nests are observed on-site, a permit can be obtained to remove the nest during the non-nesting season from FFWCC. Removing any owl nest during the nesting season would require a special incidental take permit from the USFWS. Surveying for owl burrows can be performed at the same time as the tortoise burrow survey recommended above.

**Eastern Indigo Snake:** There is potential for the eastern indigo snake (*Drymarchon couperii*) to be found utilizing the subject property. The site contains potential foraging and nesting habitat and there are large expanses of undeveloped lands surrounding the site. The eastern indigo snake is listed as “Threatened” pursuant to the Endangered Species Act of 1973 (state and federal level). The USFWS may recommend that the Standard Protection Measures for the Eastern Indigo Snake be implemented on the site during future construction activities. On properties where indigo snakes may be found, and the standard protection measures are going to be implemented during construction, a notification email indicating the plan will be used should be sent to the USFWS within 30 days of construction. No further action is required as long as the standard measures for protection are utilized. The standard measures typically include placing of signage at construction site entrances and in the construction office, along with educating construction staff on how to identify the indigo snake and what steps to take if one is observed or one is found injured/dead during construction activities. A copy of the “standard protection measures for eastern indigo snake” is included in Appendix D of this report. Summaries of recommended actions and samples of signage and pamphlets that can be utilized on the project site can be found on-line on the USFWS website.

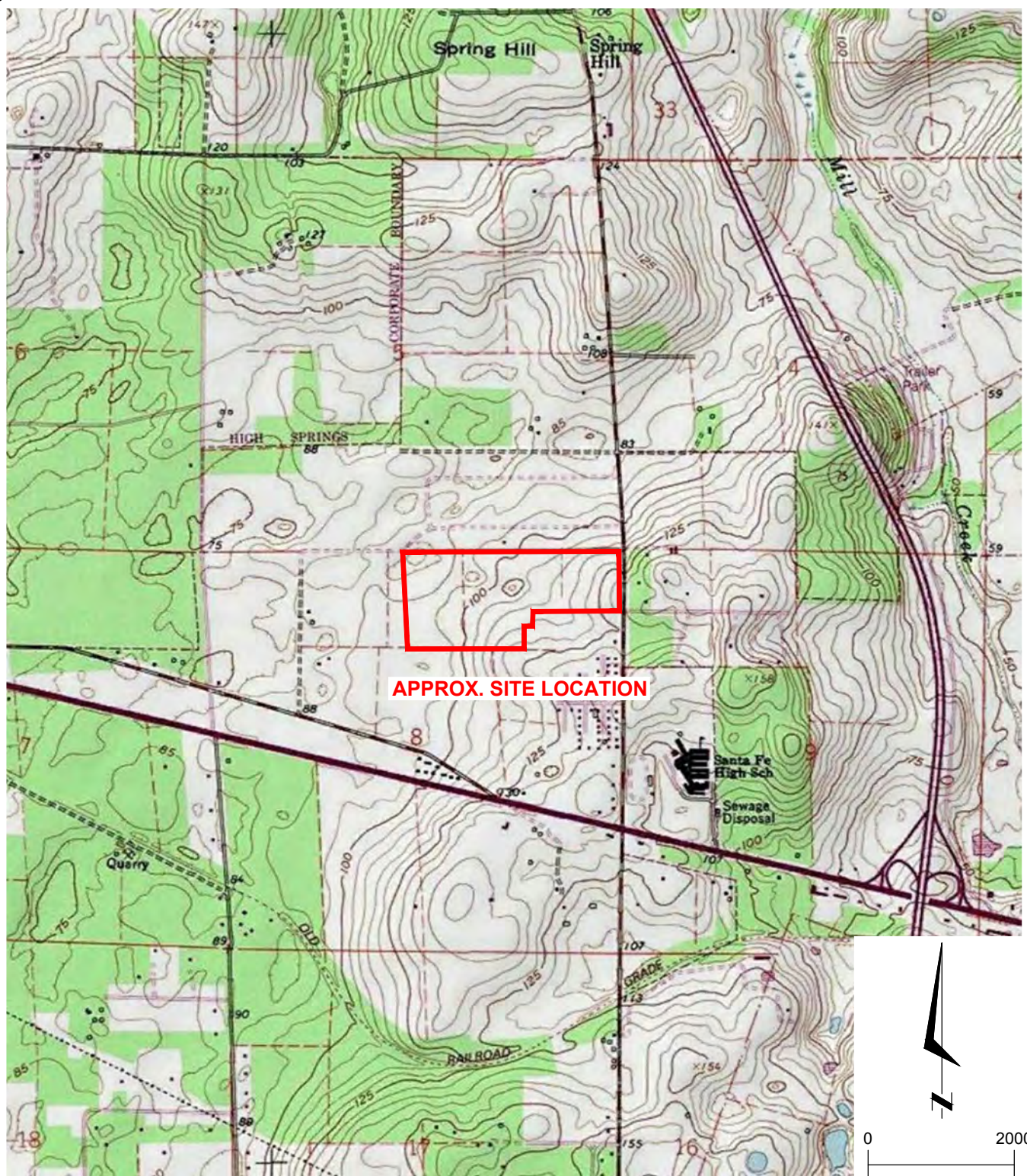
[http://www.fws.gov/northflorida/IndigoSnakes/20130812\\_Eastern\\_indigo\\_snake\\_Standard\\_Protection\\_Measures.htm](http://www.fws.gov/northflorida/IndigoSnakes/20130812_Eastern_indigo_snake_Standard_Protection_Measures.htm)

This assessment represents the results of our review on the date indicated. UES accepts no responsibility for recruitment of protected species to the site following the date(s) of this assessment. The USFWS, FFWCC, and local government agencies may request additional assessments and/or surveys at any time. Universal Engineering Sciences is pleased to provide this preliminary protected species assessment report for the above referenced site. If there are any comments and/or questions regarding this report, please contact David Whitney at (407) 423-0504.



**FIGURE 1**

**VICINITY/TOPO MAP**



SOURCE: USGS QUADRANGLE MAP OF "HIGH SPRINGS, FLORIDA".

SCALE (FT.)



**UNIVERSAL**  
ENGINEERING SCIENCES

# PROTECTED SPECIES & WETLAND ASSESSMENT COUNTY ROAD 235 A PROPERTY ALACHUA COUNTY, FLORIDA

## SITE LOCATION MAP

DRAWN BY: N.F.	DATE: 5 - 22 - 19	CHECKED BY: D.W.	DATE: - -
SCALE: AS SHOWN	PROJECT NO: 0240.1900044.0000	REPORT NO: #	PAGE NO: FIGURE 1

**FIGURE 2**

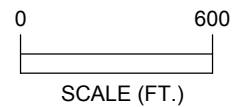
**AERIAL/LAND USE MAP**





### FLUCFCS LEGEND

441 - CONIFEROUS PLANTATIONS ( 74.50 ac / 100%)



AERIAL PHOTO SOURCE: GOOGLE EARTH



**UNIVERSAL**  
ENGINEERING SCIENCES

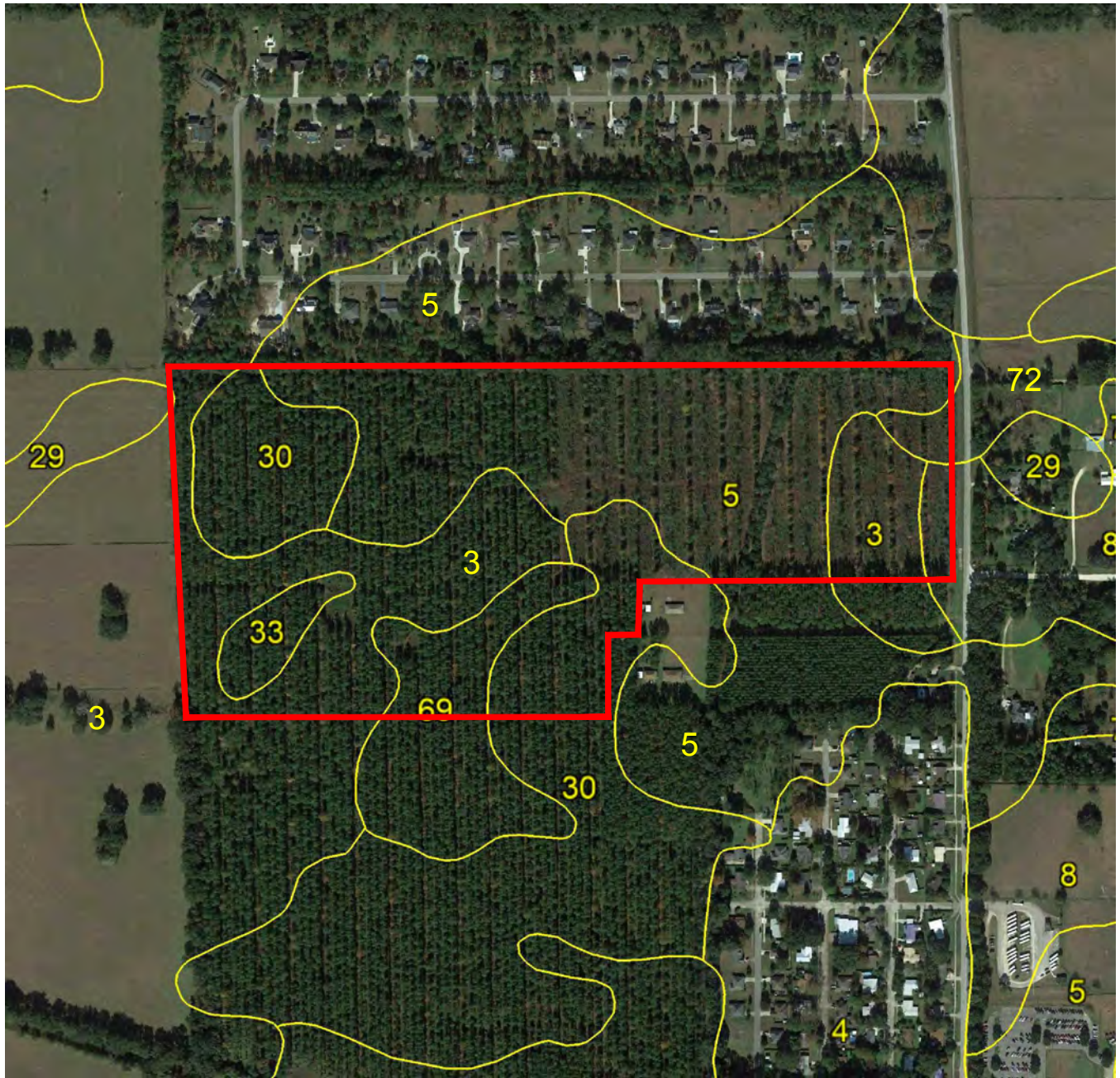
## PROTECTED SPECIES & WETLAND ASSESSMENT COUNTY ROAD 235 A PROPERTY ALACHUA COUNTY, FLORIDA

### FLUCFCS MAP / 2017 AERIAL PHOTOGRAPH

DRAWN BY: N.F.	DATE: 5 - 22 - 19	CHECKED BY: D.W.	DATE:
SCALE: AS SHOWN	PROJECT NO: 0240.1900044.0000	REPORT NO:	PAGE NO: FIGURE 2

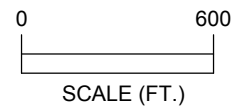
**FIGURE 3**  
**SOILS MAP**





### LEGEND

- |  |  |
|--|--|
| 3 - ARREDONDO FINE SAND, 0 - 5 % SLOPES  | 30 - KENDRICK SAND, 2 - 5 % SLOPES           |
| 5 - FORT MEADE FINE SAND, 0 - 5 % SLOPES | 33 - NORFOLK LOAMY FINE SAND, 2 - 5 % SLOPES |
| 8 - MILLHOPPER SAND, 0 - 5 % SLOPES      | 69 - ARREDONDO FINE SAND, 5 - 8 % SLOPES     |
| 29 - LOCHLOOSA FINE SAND, 2 - 5 % SLOPES | 72 - LOCHLOOSA FINE SAND, 5 - 8 % SLOPES     |



AERIAL PHOTO SOURCE: GOOGLE EARTH



**UNIVERSAL**  
ENGINEERING SCIENCES

## PROTECTED SPECIES & WETLAND ASSESSMENT COUNTY ROAD 235 A PROPERTY ALACHUA COUNTY, FLORIDA

### USDA - NRCS SOIL SURVEY MAP

DRAWN BY: N.F.	DATE: 5 - 22 - 19	CHECKED BY: D.W.	DATE:
SCALE: AS SHOWN	PROJECT NO: 0240.1900044.0000	REPORT NO:	PAGE NO: FIGURE 3

**FIGURE 4**

**WETLAND ASSESSMENT MAP**

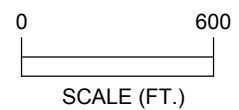




# LEGEND



UPLANDS (100%)



AERIAL PHOTO SOURCE: GOOGLE EARTH



UNIVERSAL  
ENGINEERING SCIENCES

## PROTECTED SPECIES & WETLAND ASSESSMENT COUNTY ROAD 235 A PROPERTY ALACHUA COUNTY, FLORIDA

### WETLAND ASSESSMENT MAP

DRAWN BY: N.F.	DATE: 5 - 22 - 19	CHECKED BY: D.W.	DATE:
SCALE: AS SHOWN	PROJECT NO: 0240.1900044.0000	REPORT NO:	PAGE NO: FIGURE 4

19-0327-01

**APPENDIX A**  
**SITE PHOTOS**





**PHOTO #1 – View from the northeast property corner facing south along the east property boundary.**



**PHOTO #2 - View from the northeast property corner facing west along the north property boundary.**





**PHOTO #3 – View from the northwest property corner facing southeast across the subject property.**



**PHOTO #4 - View from the central section of the north property boundary facing east along the north property boundary.**





**PHOTO #5 – View from the southwest property corner facing north along the west property boundary. Adjoining pasture to the west is visible.**



**PHOTO #6 - View of the pine plantation within the western portion of the property.**





**PHOTO #7 – View of the property boundary along the east-central property boundary. Adjacent residential structure visible.**



**PHOTO #8 - View down a typical row of pine trees on the western portion of the property.**





**PHOTO #9 – View within a typical silviculture row where pines have been harvested. This is typical of northeast portion of the property.**



**PHOTO #10 - View of an east-west access drive from within the eastern portion of the property.**





**PHOTO #11 – View of one of three small tree-less disturbed areas located throughout the property.**



**PHOTO #12 - View of one of five gopher tortoise burrows observed on the property.**

## **APPENDIX B**

### **FNAI, FFWCC, USFWS DATA/MAPS**



1018 Thomasville Road  
Suite 200-C  
Tallahassee, FL 32303  
850-224-8207  
850-681-9364 fax  
www.fnai.org

FLORIDA  
**Natural Areas**  
INVENTORY

## Florida Natural Areas Inventory

### Biodiversity Matrix Query Results

#### UNOFFICIAL REPORT

Created 5/17/2019

(Contact the FNAI Data Services Coordinator at 850.224.8207 or  
kbrinegar@fnai.fsu.edu for information on an official Standard Data Report)

NOTE: The Biodiversity Matrix includes only rare species and natural communities tracked by FNAI.

#### Report for 1 Matrix Unit: 24078



#### Descriptions

**DOCUMENTED** - There is a documented occurrence in the FNAI database of the species or community within this Matrix Unit.

**DOCUMENTED-HISTORIC** - There is a documented occurrence in the FNAI database of the species or community within this Matrix Unit; however the occurrence has not been observed/reported within the last twenty years.

**LIKELY** - The species or community is *known* to occur in this vicinity, and is considered likely within this Matrix Unit because:

1. documented occurrence overlaps this and adjacent Matrix Units, but the documentation isn't precise enough to indicate which of those Units the species or community is actually located in; *or*
2. there is a documented occurrence in the vicinity and there is suitable habitat for that species or community within this Matrix Unit.

**POTENTIAL** - This Matrix Unit lies within the known or predicted range of the species or community based on expert knowledge and environmental variables such as climate, soils, topography, and landcover.

#### Matrix Unit ID: 24078

0 **Documented** Elements Found

0 **Documented-Historic** Elements Found

4 **Likely** Elements Found

Scientific and Common Names	Global Rank	State Rank	Federal Status	State Listing
<a href="#">Drymarchon couperi</a> Eastern Indigo Snake	G3	S3	LT	FT
<i>Mesic flatwoods</i>	G4	S4	N	N
<i>Upland hardwood forest</i>	G5	S3	N	N
<i>Upland pine</i>	G3	S2	N	N

#### Matrix Unit ID: 24078

25 **Potential** Elements for Matrix Unit 24078



Scientific and Common Names	Global Rank	State Rank	Federal Status	State Listing
<i>Agrimonia incisa</i> Incised Groove-bur	G3	S2	N	T
<a href="#"><i>Asplenium heteroresiliens</i></a> Wagner's Spleenwort	GNA	S1	N	N
<a href="#"><i>Asplenium plenum</i></a> Ruffled Spleenwort	G1Q	S1	N	N
<a href="#"><i>Asplenium x curtissii</i></a> Curtiss' Spleenwort	GNA	S1	N	N
<a href="#"><i>Athene cunicularia floridana</i></a> Florida Burrowing Owl	G4T3	S3	N	SSC
<a href="#"><i>Calopogon multiflorus</i></a> Many-flowered Grass-pink	G2G3	S2S3	N	T
<a href="#"><i>Forestiera godfreyi</i></a> Godfrey's Swampprivet	G2	S2	N	E
<a href="#"><i>Gopherus polyphemus</i></a> Gopher Tortoise	G3	S3	C	ST
<a href="#"><i>Grus canadensis pratensis</i></a> Florida Sandhill Crane	G5T2T3	S2S3	N	ST
<i>Hydroptila wakulla</i> Wakulla Springs Vari-colored Microcaddisfly	G2	S2	N	N
<a href="#"><i>Lampropeltis extenuata</i></a> Short-tailed Snake	G3	S3	N	ST
<a href="#"><i>Lithobates capito</i></a> Gopher Frog	G3	S3	N	SSC
<a href="#"><i>Litsea aestivalis</i></a> Pondspice	G3?	S2	N	E
<i>Matelea floridana</i> Florida Spiny-pod	G2	S2	N	E
<i>Melanoplus querneus</i> Larger Sandhill Grasshopper	G2G3	S2S3	N	N
<a href="#"><i>Myotis austroriparius</i></a> Southeastern Bat	G3G4	S3	N	N
<a href="#"><i>Neofiber alleni</i></a> Round-tailed Muskrat	G3	S3	N	N
<i>Peucaea aestivalis</i> Bachman's Sparrow	G3	S3	N	N
<a href="#"><i>Pituophis melanoleucus mugitus</i></a> Florida Pine Snake	G4T3	S3	N	SSC
<a href="#"><i>Peromyscus floridanus</i></a> Florida Mouse	G3	S3	N	SSC
<i>Pycnanthemum floridanum</i> Florida Mountain-mint	G3	S3	N	T
<a href="#"><i>Salix floridana</i></a> Florida Willow	G2	S2	N	E
<a href="#"><i>Sciurus niger shermani</i></a> Sherman's Fox Squirrel	G5T3	S3	N	SSC
<a href="#"><i>Sideroxylon alachuense</i></a> Silver Buckthorn	G1	S1	N	E
<a href="#"><i>Ursus americanus floridanus</i></a> Florida Black Bear	G5T2	S2	N	N

### Disclaimer

The data maintained by the Florida Natural Areas Inventory represent the single most comprehensive source of information available on the locations of rare species and other significant ecological resources statewide. However, the data are not always based on comprehensive or site-specific field surveys. Therefore, this information should not be regarded as a final statement on the biological resources of the site being considered, nor should it be substituted for on-site surveys. FNAI shall not be held liable for the accuracy and completeness of these data, or opinions or conclusions drawn from these data. FNAI is not inviting reliance on these data. Inventory data are designed for the purposes of conservation planning and scientific research and are not intended for use as the primary criteria for regulatory decisions.

**Unofficial Report**



These results are considered unofficial. FNAI offers a [Standard Data Request](#) option for those needing certifiable data.





# Troon - Alachua Site

FWC Eagle Nest Locations

## Legend

-  Eagle Nest Location
-  Troon - Alachua

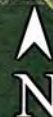
Troon - Alachua 

 Eagle Nest Location

Google Earth

© 2018 Google

6 mi









Last login May 31, 2019 11:05 AM MDT

# IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

## Location

Alachua County, Florida



## Local office

North Florida Ecological Services Field Office

☎ (904) 731-3336

📠 (904) 731-3045

7915 Baymeadows Way, Suite 200  
Jacksonville, FL 32256-7517

# Endangered species

**This resource list is for informational purposes only and does not constitute an analysis of project level impacts.**

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species<sup>1</sup> and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information.
2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

## Birds

NAME

STATUS

Eastern Black Rail <i>Laterallus jamaicensis</i> ssp. <i>jamaicensis</i> No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/10477">https://ecos.fws.gov/ecp/species/10477</a>	Proposed Threatened
Red-cockaded Woodpecker <i>Picoides borealis</i> No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/7614">https://ecos.fws.gov/ecp/species/7614</a>	Endangered
Wood Stork <i>Mycteria americana</i> No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/8477">https://ecos.fws.gov/ecp/species/8477</a>	Threatened

## Reptiles

NAME	STATUS
Eastern Indigo Snake <i>Drymarchon corais couperi</i> No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/646">https://ecos.fws.gov/ecp/species/646</a>	Threatened
Gopher Tortoise <i>Gopherus polyphemus</i> No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/6994">https://ecos.fws.gov/ecp/species/6994</a>	Candidate

## Amphibians

NAME	STATUS
Frosted Flatwoods Salamander <i>Ambystoma cingulatum</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. <a href="https://ecos.fws.gov/ecp/species/4981">https://ecos.fws.gov/ecp/species/4981</a>	Threatened

## Clams

NAME	STATUS
Oval Pigtoe <i>Pleurobema pyriforme</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. <a href="https://ecos.fws.gov/ecp/species/4132">https://ecos.fws.gov/ecp/species/4132</a>	Endangered
Suwannee Moccasinshell <i>Medionidus walkeri</i> No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/533">https://ecos.fws.gov/ecp/species/533</a>	Threatened

## Crustaceans

NAME	STATUS
------	--------



Squirrel Chimney Cave Shrimp *Palaemonetes cummingsi*

Threatened

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/1551>

## Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

## Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

#### American Kestrel *Falco sparverius paulus*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Breeds Apr 1 to Aug 31

#### Bald Eagle *Haliaeetus leucocephalus*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/1626>

Breeds Sep 1 to Jul 31

#### Common Ground-dove *Columbina passerina exigua*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Breeds Feb 1 to Dec 31

#### Lesser Yellowlegs *Tringa flavipes*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9679>

Breeds elsewhere

#### Magnificent Frigatebird *Fregata magnificens*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Oct 1 to Apr 30

#### Prairie Warbler *Dendroica discolor*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds May 1 to Jul 31



**Prothonotary Warbler** *Protonotaria citrea*

Breeds Apr 1 to Jul 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

**Red-headed Woodpecker** *Melanerpes erythrocephalus*

Breeds May 10 to Sep 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

**Semipalmated Sandpiper** *Calidris pusilla*

Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

**Swallow-tailed Kite** *Elanoides forficatus*

Breeds Mar 10 to Jun 30

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/8938>

**Yellow Warbler** *Dendroica petechia gundlachi*

Breeds May 20 to Aug 10

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

## Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

### Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .

3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

### Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

### Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

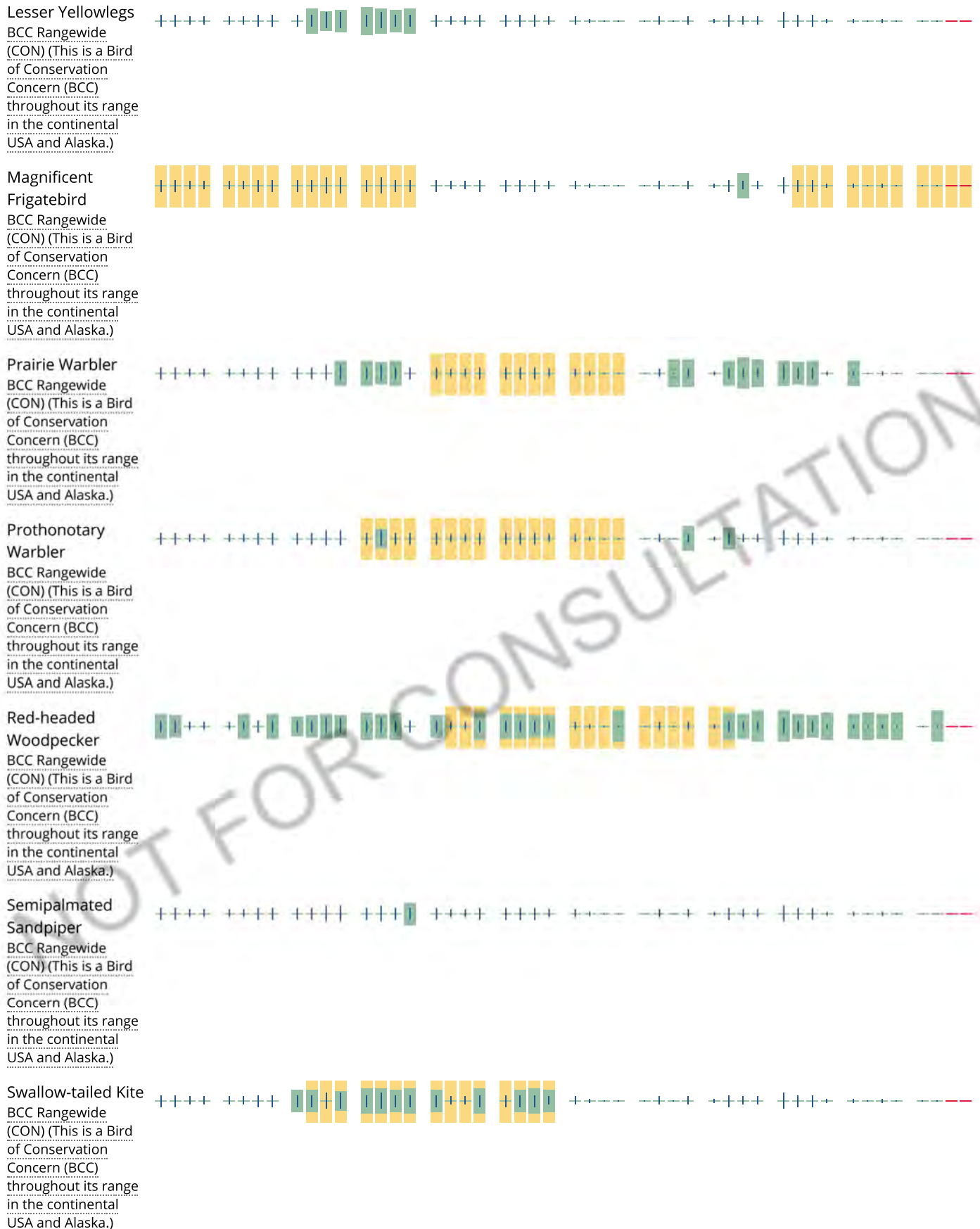
### No Data (—)

A week is marked as having no data if there were no survey events for that week.

### Survey Timeframe

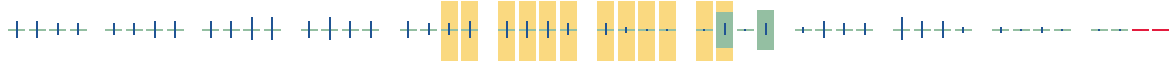
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.







Yellow Warbler  
 BCC - BCR (This is a  
 Bird of Conservation  
 Concern (BCC) only in  
 particular Bird  
 Conservation Regions  
 (BCRs) in the  
 continental USA)



**Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.**

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) and/or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

**What does IPaC use to generate the migratory birds potentially occurring in my specified location?**

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

**What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?**

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

**How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?**

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

**What are the levels of concern for migratory birds?**

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

### Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

### What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

### Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

## Facilities



## National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

## Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

## Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

THERE ARE NO KNOWN WETLANDS AT THIS LOCATION.

### Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

### Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

### Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION

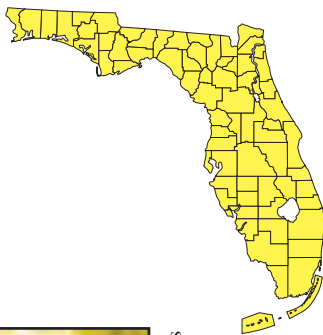
## **APPENDIX C**

### **USFWS STANDARD PROTECTION MEASURES FOR THE EASTERN INDIGO SNAKE**

## EASTERN INDIGO SNAKE

*Drymarchon corais couperi*

**Order:** Squamata  
**Family:** Colubridae  
**FNAI Ranks:** G4T3/S3  
**U.S. Status:** Threatened  
**FL Status:** Threatened



© Dan Hipes



© Dan Hipes

**Description:** A very large, stout-bodied, shiny black snake reaching lengths as great as 8 ft. (244 cm). Black ventrally, but chin, throat, and sides of head may be reddish or (rarely) white. Scales typically smooth (no ridges), though adult males have keel on front half of some scales along back; anal scale undivided. Young similar to adults though often more reddish anteriorly, 17 - 24 in. (430 - 610 mm) at hatching. When encountered, often hisses, flattens neck vertically (from side to side), and vibrates tail, but rarely bites.

## **EASTERN INDIGO SNAKE**     *Drymarchon corais couperi*

**Similar Species:** Black racer (*Coluber constrictor*), which rarely exceeds 5 ft. (152 cm), is more slender, a duller sooty black usually with a white chin and throat, and has a divided anal scale. The mostly aquatic mud snake (*Farancia abacura*) is glossy black above and can grow to 6 ft. (183 cm), but has a reddish, rarely white, belly, with the coloration encroaching the sides, and a sharp-pointed tail tip.

**Habitat:** Broad range of habitats, from scrub and sandhill to wet prairies and mangrove swamps. In northern part of range, often winters in gopher tortoise burrows in sandy uplands but forages in more hydric habitats. Requires very large tracts to survive.

**Seasonal Occurrence:** Active nearly year-round in southern Florida but winters underground farther north. Lays eggs in May and June.

**Florida Distribution:** Statewide, including Upper and Lower Keys, but rare in panhandle.

**Range-wide Distribution:** Florida and southern Georgia; formerly extended from southern South Carolina to southeastern Mississippi.

**Conservation Status:** Rare in most areas, though species has been recorded from many public lands statewide; however, whether most of these support viable populations is uncertain. Major threats are habitat loss, degradation, and fragmentation, with associated highway mortality. Other threats include gassing of tortoise burrows for rattlesnakes, collection for pets, and deliberate persecution, all of which are illegal.

**Protection and Management:** Protect very large tracts (> 5000 acres = 2025 ha) of appropriate natural habitat unfragmented by roads; use prescribed fire as needed. Maintain gopher tortoise populations and dead stumps to provide natural subterranean refugia. Enforce bans on tortoise burrow gassing and on collection or molestation of snake. Avoid construction of roads through unfragmented habitat. Educate public to avoid wanton destruction of large snakes.

**Selected References:** Ashton and Ashton 1988b, Conant and Collins 1991, Ernst and Barbour 1989, Georgia DNR 1999, Lazell 1989, Moler (ed.) 1992, Mount 1975, Tenant 1997.



**STANDARD PROTECTION MEASURES FOR THE EASTERN INDIGO SNAKE**  
**U.S. Fish and Wildlife Service**  
**August 12, 2013**

The eastern indigo snake protection/education plan (Plan) below has been developed by the U.S. Fish and Wildlife Service (USFWS) in Florida for use by applicants and their construction personnel. At least **30 days prior** to any clearing/land alteration activities, the applicant shall notify the appropriate USFWS Field Office via e-mail that the Plan will be implemented as described below (North Florida Field Office: [jaxregs@fws.gov](mailto:jaxregs@fws.gov); South Florida Field Office: [verobeach@fws.gov](mailto:verobeach@fws.gov); Panama City Field Office: [panamacity@fws.gov](mailto:panamacity@fws.gov)). As long as the signatory of the e-mail certifies compliance with the below Plan (including use of the attached poster and brochure), no further written confirmation or “approval” from the USFWS is needed and the applicant may move forward with the project.

If the applicant decides to use an eastern indigo snake protection/education plan other than the approved Plan below, written confirmation or “approval” from the USFWS that the plan is adequate must be obtained. At least 30 days prior to any clearing/land alteration activities, the applicant shall submit their unique plan for review and approval. The USFWS will respond via e-mail, typically within 30 days of receiving the plan, either concurring that the plan is adequate or requesting additional information. A concurrence e-mail from the appropriate USFWS Field Office will fulfill approval requirements.

The Plan materials should consist of: 1) a combination of posters and pamphlets (see **Poster Information** section below); and 2) verbal educational instructions to construction personnel by supervisory or management personnel before any clearing/land alteration activities are initiated (see **Pre-Construction Activities** and **During Construction Activities** sections below).

### **POSTER INFORMATION**

Posters with the following information shall be placed at strategic locations on the construction site and along any proposed access roads (a final poster for Plan compliance, to be printed on 11” x 17” or larger paper and laminated, is attached):

**DESCRIPTION:** The eastern indigo snake is one of the largest non-venomous snakes in North America, with individuals often reaching up to 8 feet in length. They derive their name from the glossy, blue-black color of their scales above and uniformly slate blue below. Frequently, they have orange to coral reddish coloration in the throat area, yet some specimens have been reported to only have cream coloration on the throat. These snakes are not typically aggressive and will attempt to crawl away when disturbed. Though indigo snakes rarely bite, they should NOT be handled.

**SIMILAR SNAKES:** The black racer is the only other solid black snake resembling the eastern indigo snake. However, black racers have a white or cream chin, thinner bodies, and WILL BITE if handled.

**LIFE HISTORY:** The eastern indigo snake occurs in a wide variety of terrestrial habitat types throughout Florida. Although they have a preference for uplands, they also utilize some wetlands

and agricultural areas. Eastern indigo snakes will often seek shelter inside gopher tortoise burrows and other below- and above-ground refugia, such as other animal burrows, stumps, roots, and debris piles. Females may lay from 4 - 12 white eggs as early as April through June, with young hatching in late July through October.

**PROTECTION UNDER FEDERAL AND STATE LAW:** The eastern indigo snake is classified as a Threatened species by both the USFWS and the Florida Fish and Wildlife Conservation Commission. “Taking” of eastern indigo snakes is prohibited by the Endangered Species Act without a permit. “Take” is defined by the USFWS as an attempt to kill, harm, harass, pursue, hunt, shoot, wound, trap, capture, collect, or engage in any such conduct. Penalties include a maximum fine of \$25,000 for civil violations and up to \$50,000 and/or imprisonment for criminal offenses, if convicted.

Only individuals currently authorized through an issued Incidental Take Statement in association with a USFWS Biological Opinion, or by a Section 10(a)(1)(A) permit issued by the USFWS, to handle an eastern indigo snake are allowed to do so.

**IF YOU SEE A LIVE EASTERN INDIGO SNAKE ON THE SITE:**

- Cease clearing activities and allow the live eastern indigo snake sufficient time to move away from the site without interference;
- Personnel must NOT attempt to touch or handle snake due to protected status.
- Take photographs of the snake, if possible, for identification and documentation purposes.
- Immediately notify supervisor or the applicant’s designated agent, **and** the appropriate USFWS office, with the location information and condition of the snake.
- If the snake is located in a vicinity where continuation of the clearing or construction activities will cause harm to the snake, the activities must halt until such time that a representative of the USFWS returns the call (within one day) with further guidance as to when activities may resume.

**IF YOU SEE A DEAD EASTERN INDIGO SNAKE ON THE SITE:**

- Cease clearing activities and immediately notify supervisor or the applicant’s designated agent, **and** the appropriate USFWS office, with the location information and condition of the snake.
- Take photographs of the snake, if possible, for identification and documentation purposes.
- Thoroughly soak the dead snake in water and then freeze the specimen. The appropriate wildlife agency will retrieve the dead snake.

**Telephone numbers of USFWS Florida Field Offices to be contacted if a live or dead eastern indigo snake is encountered:**

**North Florida Field Office – (904) 731-3336**

**Panama City Field Office – (850) 769-0552**

**South Florida Field Office – (772) 562-3909**

## **PRE-CONSTRUCTION ACTIVITIES**

1. The applicant or designated agent will post educational posters in the construction office and throughout the construction site, including any access roads. The posters must be clearly visible to all construction staff. A sample poster is attached.
2. Prior to the onset of construction activities, the applicant/designated agent will conduct a meeting with all construction staff (annually for multi-year projects) to discuss identification of the snake, its protected status, what to do if a snake is observed within the project area, and applicable penalties that may be imposed if state and/or federal regulations are violated. An educational brochure including color photographs of the snake will be given to each staff member in attendance and additional copies will be provided to the construction superintendent to make available in the onsite construction office (a final brochure for Plan compliance, to be printed double-sided on 8.5" x 11" paper and then properly folded, is attached). Photos of eastern indigo snakes may be accessed on USFWS and/or FWC websites.
3. Construction staff will be informed that in the event that an eastern indigo snake (live or dead) is observed on the project site during construction activities, all such activities are to cease until the established procedures are implemented according to the Plan, which includes notification of the appropriate USFWS Field Office. The contact information for the USFWS is provided on the referenced posters and brochures.

## **DURING CONSTRUCTION ACTIVITIES**

1. During initial site clearing activities, an onsite observer may be utilized to determine whether habitat conditions suggest a reasonable probability of an eastern indigo snake sighting (example: discovery of snake sheds, tracks, lots of refugia and cavities present in the area of clearing activities, and presence of gopher tortoises and burrows).
2. If an eastern indigo snake is discovered during gopher tortoise relocation activities (i.e. burrow excavation), the USFWS shall be contacted within one business day to obtain further guidance which may result in further project consultation.
3. Periodically during construction activities, the applicant's designated agent should visit the project area to observe the condition of the posters and Plan materials, and replace them as needed. Construction personnel should be reminded of the instructions (above) as to what is expected if any eastern indigo snakes are seen.

## **POST CONSTRUCTION ACTIVITIES**

Whether or not eastern indigo snakes are observed during construction activities, a monitoring report should be submitted to the appropriate USFWS Field Office within 60 days of project completion. The report can be sent electronically to the appropriate USFWS e-mail address listed on page one of this Plan.



# **ATTENTION:**

## **THREATENED EASTERN INDIGO SNAKES MAY BE PRESENT ON THIS SITE!!!**

### **IF YOU SEE A LIVE EASTERN INDIGO SNAKE ON THE SITE:**

- Cease clearing activities and allow the eastern indigo snake sufficient time to move away from the site without interference.
- Personnel must NOT attempt to touch or handle snake due to protected status.
- Take photographs of the snake, if possible, for identification and documentation purposes.
- Immediately notify supervisor or the applicant's designated agent, **and** the appropriate U.S. Fish and Wildlife Service (USFWS) office, with the location information and condition of the snake.
- If the snake is located in a vicinity where continuation of the clearing or construction activities will cause harm to the snake, the activities must halt until such time that a representative of the USFWS returns the call (within one day) with further guidance as to when activities may resume.

### **IF YOU SEE A DEAD EASTERN INDIGO SNAKE ON THE SITE:**

- Cease clearing activities and immediately notify supervisor or the applicant's designated agent, **and** the appropriate USFWS office, with the location information and condition of the snake.
- Take photographs of the snake, if possible, for identification and documentation purposes.
- Thoroughly soak the dead snake in water and then freeze the specimen. The appropriate wildlife agency will retrieve the dead snake.

#### **USFWS Florida Field Offices to be contacted if a live or dead eastern indigo snake is encountered:**

**North Florida Field Office – (904) 731-3336**

**Panama City Field Office – (850) 769-0552**

**South Florida Field Office – (772) 562-3909**

#### **Killing, harming, or harassing indigo snakes is strictly prohibited and punishable under State and Federal Law.**

DESCRIPTION:	The eastern indigo snake is one of the largest non-venomous snakes in North America, with individuals often reaching up to 8 feet in length. They derive their name from the glossy, blue-black color of their scales above and uniformly slate blue below. Frequently, they have orange to coral reddish coloration in the throat area, yet some specimens have been reported to only have cream coloration on the throat. These snakes are not typically aggressive and will attempt to crawl away when disturbed. Though indigo snakes rarely bite, they should NOT be handled.
SIMILAR SNAKES:	The black racer is the only other solid black snake resembling the eastern indigo snake. However, black racers have a white or cream chin, thinner bodies, and WILL BITE if handled.
LIFE HISTORY:	The eastern indigo snake occurs in a wide variety of terrestrial habitat types throughout Florida. Although they have a preference for uplands, they also utilize some wetlands and agricultural areas. Eastern indigo snakes will often seek shelter inside gopher tortoise burrows and other below- and above-ground refugia, such as other animal burrows, stumps, roots, and debris piles. Females may lay from 4 - 12 white eggs as early as April through June, with young hatching in late July through October.
PROTECTION:	The eastern indigo snake is classified as a Threatened species by both the USFWS and the Florida Fish and Wildlife Conservation Commission. "Taking" of eastern indigo snakes is prohibited by the Endangered Species Act without a permit. "Take" is defined by the USFWS as an attempt to kill, harm, harass, pursue, hunt, shoot, wound, trap, capture, collect, or engage in any such conduct. Penalties include a maximum fine of \$25,000 for civil violations and up to \$50,000 and/or imprisonment for criminal offenses, if convicted.

Only individuals currently authorized through an issued Incidental Take Statement in association with a USFWS Biological Opinion, or by a Section 10(a)(1)(A) permit issued by the USFWS, to handle an eastern indigo snake are allowed to do so.



**IF YOU SEE A LIVE EASTERN  
INDIGO SNAKE ON THE SITE:**

- Cease clearing activities and allow the eastern indigo snake sufficient time to move away from the site without interference.
- Personnel must NOT attempt to touch or handle snake due to protected status.
- Take photographs of the snake, if possible, for identification and documentation purposes.
- Immediately notify supervisor or the applicant's designated agent, **and** the appropriate U.S. Fish and Wildlife Service (USFWS) office, with the location information and condition of the snake.
- If the snake is located in a vicinity where continuation of the clearing or construction activities will cause harm to the snake, the activities must halt until such time that a representative of the USFWS returns the call (within one day) with further guidance as to when activities may resume.

**IF YOU SEE A DEAD EASTERN  
INDIGO SNAKE ON THE SITE:**

- Cease clearing activities and immediately notify supervisor or the applicant's designated agent, **and** the appropriate USFWS office, with the location information and condition of the snake.
- Take photographs of the snake, if possible, for identification and documentation purposes.
- Thoroughly soak the dead snake in water and then freeze the specimen. The appropriate wildlife agency will retrieve the dead snake.

**USFWS Florida Field Offices to be  
contacted if a live or dead eastern indigo  
snake is encountered:**

**North Florida ES Office – (904) 731-3336**  
**Panama City ES Office – (850) 769-0552**  
**South Florida ES Office – (772) 562-3909**

**DESCRIPTION:** The eastern indigo snake is one of the largest non-venomous snakes in North America, with individuals often reaching up to 8 feet in length. They derive their name from the glossy, blue-black color of their scales above and uniformly slate blue below. Frequently, they have orange to coral reddish coloration in the throat area, yet some specimens have been reported to only have cream coloration on the throat. These snakes are not typically aggressive and will attempt to crawl away when disturbed. Though indigo snakes rarely bite, they should NOT be handled.

**SIMILAR SNAKES:** The black racer is the only other solid black snake resembling the eastern indigo snake. However, black racers have a white or cream chin, thinner bodies, and WILL BITE if handled.

**LIFE HISTORY:** The eastern indigo snake occurs in a wide variety of terrestrial habitat types throughout Florida. Although they have a preference for uplands, they also utilize some wetlands and agricultural areas. Eastern indigo snakes will often seek shelter inside gopher tortoise burrows and other below- and above-ground refugia, such as other animal burrows, stumps, roots, and debris piles. Females may lay from 4 - 12 white eggs as early as April through June, with young hatching in late July through October.

**Killing, harming, or harassing indigo snakes is strictly prohibited and punishable under State and Federal Law.**

Only individuals currently authorized through an issued Incidental Take Statement in association with a USFWS Biological Opinion, or by a Section 10(a)(1)(A) permit issued by the USFWS, to handle an eastern indigo snake are allowed to do so.

**LEGAL STATUS:** The eastern indigo snake is classified as a Threatened species by both the USFWS and the Florida Fish and Wildlife Conservation Commission. “Taking” of eastern indigo snakes is prohibited by the Endangered Species Act without a permit. “Take” is defined by the USFWS as an attempt to kill, harm, harass, pursue, hunt, shoot, wound, trap, capture, collect, or engage in any such conduct. Penalties include a maximum fine of \$25,000 for civil violations and up to \$50,000 and/or imprisonment for criminal offenses, if convicted.



August 12, 2013

**ATTENTION:**  
THREATENED EASTERN INDIGO  
SNAKES MAY BE PRESENT ON  
THIS SITE!!!



Please read the following information provided by the U.S. Fish and Wildlife Service to become familiar with standard protection measures for the eastern indigo snake.

**This Instrument Prepared By:**

Jennifer Lawton Marquina, Esq.  
Nelson Mullins Broad and Cassel  
1905 NW Corporate Blvd., Suite 310  
Boca Raton, Florida 33431

**DECLARATION OF COVENANTS, CONDITIONS, AND RESTRICTIONS OF  
Alachua North**

This Declaration of Covenants, Conditions and Restrictions is hereby made this \_\_\_\_ day of \_\_\_\_\_ 2019 by Troon Creek LLC, a Florida limited liability company (the “Declarant”) whose mailing address is 405 Cinnamon Oak Court, Lake Mary, Florida 32746.

**WITNESSETH:**

Declarant is the record title owner in fee simple of the property described in **Exhibit “A”** attached hereto and made a part hereof (the “Property”); and

Troon Creek LLC, for purposes of this Declaration will be the Declarant; and

Declarant hereby desires to subject the Property, to be known as Alachua North, to the covenants, conditions and restrictions contained in this Declaration.

Declarant intends, but shall not be required, to develop the Property as a residential community and sell Lots to Builders who intend, but are not required, to construct single family homes upon the Property as a residential community, provided that in any event such construction will be subject to the covenants, conditions, restrictions, reservations, easements, liens and charges hereinafter set forth.

NOW, THEREFORE, Declarant hereby declares that the Property shall be held, sold, conveyed, leased, mortgaged and otherwise dealt with subject to the protective covenants, conditions, restrictions, reservations, easements, liens and charges as hereinafter set forth, all of which are for the purpose of enhancing and protecting the value, desirability and plan of development for the same. Said covenants, conditions, restrictions, reservations, easements, liens and charges shall run with the Property, and shall be binding upon all parties having and/or acquiring any right, title or interest in said property or any portion thereof, and shall inure to the benefit of each and every person or party, from time to time, owning or holding an interest in said Property.

**ARTICLE I**

**DEFINITIONS**

The following words and terms when used in this Declaration or any Supplemental Declaration hereto or any amendment thereto (unless the context shall clearly indicate otherwise)

shall have the following meanings:

Section 1. “Articles” mean and refer to the Articles of Incorporation of Alachua North Community Association, Inc., a not-for-profit Florida corporation, attached hereto as **Exhibit “B”**, and all exhibits which are attached thereto and made a part thereof, and shall include such amendments, if any, as may be adopted from time to time pursuant to the terms thereof.

Section 2. “Association” means Alachua North Community Association, Inc., a not-for-profit Florida corporation, its successors and assigns.

Section 3. “Builder” means any person or entity that purchases more than one Lot from the Declarant or other third party for the purpose of constructing Homes on such Lots for sale to third party purchasers, which shall specifically include D.R. Horton, Inc., a Delaware corporation.

Section 4. “Bylaws” mean the Bylaws of Alachua North Community Association, Inc., attached hereto as **Exhibit “C”** and all exhibits attached thereto and made a part thereof, and shall include such amendments, if any, as may be adopted from time to time pursuant to the terms thereof.

Section 5. “Common Area” is the property owned by or dedicated to the Association for the common use and enjoyment of the Members and all improvements constructed thereon and such other property as determined by Declarant, in its sole and absolute discretion, which may include entrance features, street lighting, signage, mail kiosks, landscape buffers, the Surface Water Management System, and open space, which are owned by or dedicated to the Association.

Section 6. “Community” or “Alachua North” means the planned community planned for development upon the Property described in Exhibit “A” or any property annexed as provided herein; the said being within the County, in the State of Florida.

Section 7. “County” shall mean Alachua County, Florida.

Section 8. “Declarant” means Troon Creek, LLC, or any successor of Declarant who may be assigned all or a part of the rights and obligations of Declarant pursuant to a written assignment executed by Declarant and recorded among the Public Records of the County, in the State of Florida. If Declarant assigns only a portion of its rights and obligations as Declarant hereunder to an assignee, then the term Declarant as used in this Declaration shall mean such assignee only when necessary to give such assignee the rights and obligations of Declarant hereunder which were assigned to such assignee to the same extent as if such assignee had been the original Declarant, and said assignee shall not have any of the rights and obligations of Declarant hereunder which were not specifically assigned to such assignee. Until such time that all Lots are sold by Declarant or assigned in full by the Declarant, the Declarant for the purposes of this Declaration even if a partial assignment of its rights have otherwise been assigned to another party shall be Troon Creek, LLC.



Section 9. “Declaration” means this instrument, together with the exhibits attached hereto and made a part hereof, and shall include such amendments and Supplemental Declarations, if any, as may be adopted from time to time pursuant to the terms hereof.

Section 10. “Development Period” means the period of time from the recording of this Declaration until the Declarant, or its successors or assigns, has sold the last Lot within the Property or any property annexed to the Property and becoming a part of the Property as provided herein to a third party purchasers other than Builders.

Section 11. “Governing Documents” means the Declaration, Articles, Bylaws, and Rules governing the administration and operation of the Community.

Section 12. “Home” is a single family dwelling constructed upon and including a Lot.

Section 13. “Institutional First Mortgage” is a mortgage executed in favor of an Institutional First Mortgagee, which mortgage is a first and prior mortgage encumbering a Home.

Section 14. “Institutional First Mortgagee” is a bank, federal savings bank, and loan association, any insurance company, pension fund, real estate trust, Federal National Mortgage Association or its assigns, Federal Home Loan Mortgage Company or its assigns, or any other party engaged in the business of mortgage financing, which owns or holds a first and prior mortgage encumbering a Home, and shall include any corporate subsidiary of such entity.

Section 15. “Lot” is a designated lot within the Property described on the Plat or any property annexed thereto and becoming a part of the Property conveyed or to be conveyed to an Owner upon which there has been constructed or will be constructed a Home.

Section 16. “Member” is every person or entity who is a Member in the Association by ownership of a Lot or as otherwise provided herein in accordance with Article IV, Section 1 and the Bylaws.

Section 17. “Owner” is the record owner, whether one or more persons or entities, of the fee simple title to any Lot which is a part of the Property, including contract sellers, but excluding those parties having such interest merely as security for the performance of any obligation.

Section 18. “Plat” is the Plat of the Property to be recorded in the Public Records of Alachua County, State of Florida, as the same may be amended or re-platted from time to time. The term Plat shall also include any additional plats or re-plats of property subsequently added to the terms of this Declaration by a Supplemental Declaration.

Section 19. “Permit” shall mean Environmental Resource Permit or other permits issued for Surface Water Management Systems (hereinafter defined) by the WMD (hereinafter defined).

Section 20. “Property” is the property described in **Exhibit “A”** and such additions thereto as may hereafter be brought within the jurisdiction of the Association and subject to the terms of this Declaration.

Section 21. “Rules” are collectively the rules and regulations which the Board of Directors of the Association may promulgate or impose and thereafter modify, alter, amend, rescind and augment any of the same with respect to the use, operation, and enjoyment of the Property and any improvements located thereon.

Section 22. “Supplemental Declaration” shall mean and refer to an instrument filed in the Public Records of the County pursuant to Article II, Section 3 which subjects additional property to this Declaration, creates additional classes of members, and/or imposes, expressly or by reference, additional restrictions and obligations on the land described in such instrument. The Declarant may, by Supplemental Declaration, create additional classes of membership with such rights, privileges and obligations as may be specified in such Supplemental Declaration in recognition of the different character and intended use of the property subject to such Supplemental Declaration.

Section 23. “Surface Water Management System” means a system which is designed and constructed or implemented to control discharges which are necessitated by rainfall events, incorporating methods to collect, convey, store, absorb, inhibit, treat, use or reuse water to prevent or reduce flooding, overdrainage, environmental degradation, and water pollution or otherwise affect the quantity and quality of discharges from the system, as permitted pursuant to section 62-330, F.A.C. The Surface Water Management System facilities are located on land that is owned by or dedicated to the Association, or located on land that is subject to an easement in favor of the Association and its successors.

Section 24. “WMD” shall mean and refer to the Suwannee River Water Management District.

Section 25. “Vacant Lot” shall mean any Lot not improved with a Home as evidenced by a certificate of occupancy or similar approval or occupied by the Owner or any third party.

The foregoing definitions shall be applicable to this Declaration and to any Supplemental Declaration hereto or any amendment to this Declaration, unless otherwise expressly provided herein or therein.

## ARTICLE II

### PROPERTY SUBJECT TO THIS DECLARATION

Section 1. Legal Description. The real property which is and shall be held, transferred, sold, conveyed and occupied subject to this Declaration is located in the County, and is the property described in Exhibit “A”, and such additions as may hereafter be brought within the jurisdiction of the Association and subject to the terms of this Declaration, less the portions thereof dedicated and/or conveyed to other entities or subsequently withdrawn herefrom.

Section 2. Application of Declaration. The Property shall be held, transferred, sold, conveyed and occupied subject to the terms and conditions of this Declaration, and any and all supplements and lawful amendments hereto and any and all supplements and lawful amendments thereto. By receipt of delivery of a deed to any of the Property or other instrument evidencing

ownership, whether or not it shall be so expressed in any such deed or other conveyance or adjudication, each Owner hereby agrees to abide by and accept title to such portion of the Property and all terms and provisions of this Declaration. The filing of this Declaration and subjecting the Property to the covenants, conditions, restrictions, reservations, easements, liens and charges contained herein shall not be construed in any way as inhibiting or prohibiting the Declarant from conveying the Lots or improvements within the Property to third parties free and clear of any covenants, conditions, restrictions, reservations, easements, liens and charges, except for those specifically provided for in this Declaration. Lots so conveyed by the Declarant to third parties shall be used and held by said third parties in accordance with this Declaration.

Section 3. Additional Property. Additional property may become subject to this Declaration or be withdrawn from the terms of this Declaration in the following manner:

(a) Annexation Without Approval of Class "A" Membership. As the owner thereof, or if not the owner, with the consent of the owner thereof, Declarant shall have the unilateral right, privilege and option, from time to time at any time to annex and subject to the provisions of this Declaration and the jurisdiction of the Association, all or any portion of the real property described in a Supplemental Declaration. Such Supplemental Declaration shall not require the consent of the Members or Institutional Mortgagees. Any such annexation shall be effective upon the filing of record of such Supplemental Declaration unless otherwise provided therein. Declarant shall have the unilateral right to transfer to any other person said right, privilege, and option to annex additional property which is herein reserved to Declarant, provided that such transfer or assignment is memorialized in a written, recorded instrument executed by Declarant. Notwithstanding the foregoing, nothing herein shall be construed as an obligation of Declarant to annex in additional Property to the Community or to construct the Community pursuant to the plan of development approved on the date of this Declaration, which may be modified by the Declarant in the future.

(b) Annexation With Approval of Class "A" Membership. Subject to the consent of the owner thereof, after the expiration of the Class B membership the Association may annex additional real property to the provisions of this Declaration and the jurisdiction of the Association. Such annexation shall require the affirmative vote of not less than sixty-seven (67%) percent of the Class "A" Members of the Association. Annexation shall be accomplished by filing of record in the public records of the County, a Supplemental Declaration describing the property being annexed. Any such Supplemental Declaration shall be signed by an authorized officer of the Association, and by the owner of the property being annexed, and any such annexation shall be effective upon filing unless otherwise provided therein. The relevant provisions of the Bylaws dealing with regular or special meetings, as the case may be, shall apply to determine the time required for and the proper form of notice of any meeting called for the purpose of considering annexation of property pursuant to this Section and to ascertain the presence of a quorum at such meeting.

(c) Acquisition of Additional Common Area. Declarant may convey to the Association additional real property, or any interest therein, improved or unimproved, and upon conveyance or dedication to the Association the same shall be accepted by the Association and thereafter shall be maintained by the Association at its expense as a Common Area for the benefit of all of its Members. Annexation of additional property or future development phases of



the Community, if annexed herein, may result in additional Common Areas being owned and maintained by the Association and conveyance of Common Areas therein shall not require the consent of any other Owner or Builder.

(d) Withdrawal of Property. Declarant shall be entitled to withdraw portions of the Property owned by Declarant from the terms and conditions of this Declaration, subject to the terms and conditions of this Section. For purposes of this Declaration, the portion of the Property withdrawn from the terms hereof shall be referred to as the “**Withdrawn Property.**” In order to withdraw such portion of the Property from the terms of this Declaration, Declarant shall record in the Public Records of the County an instrument executed with the formalities of a Deed, which instrument shall make reference to this Declaration, state that the purpose of the instrument is to withdraw the Withdrawn Property from the terms and conditions of this Declaration, and contain a legal description of the Withdrawn Property. Declarant shall have the right to withdraw portions of the Property from the terms and conditions of this Declaration without the joinder, ratification or approval of the Association, any Owner, or any lienholder, provided that Declarant is the fee simple owner of the Withdrawn Property, and provided that the withdrawal of the Withdrawn Property shall not result in a material change to the scheme of development of the Community. Upon the withdrawal of the Withdrawn Property from the terms and conditions of this Declaration, the Withdrawn Property shall no longer be subject to the terms of this Declaration, including all exhibits hereto, or any other covenants, restrictions and/or regulations provided herein or adopted hereunder, except for those easements, rights-of-way, or other portions hereof which, by their terms, specifically survive the termination of this Declaration, which shall include the withdrawal of such lands from the terms and conditions of this Declaration.

(e) Amendment. This Article II, Section 3 shall not be amended without the prior written consent of Declarant, during the Development Period or so long as the Declarant holds Lots or Homes for sale in the ordinary course of business.

### ARTICLE III

#### MEMBERSHIP

Section 1. Membership. Every person or entity who is a record Owner of a fee or undivided fee interest in any Lot which is subject to the covenants, conditions, restrictions, reservations, easements, liens and charges, of this Declaration, including contract sellers, shall be a Member of the Association. The foregoing is not intended to include persons or entities that hold an interest merely as security for the performance of an obligation. No Owner shall have more than one membership for each Lot owned. Membership shall be appurtenant to a Lot and may not be separated from ownership of the Lot. Ownership of a Lot shall be the sole qualification for membership. The Owner of record of each Lot shall be subject to assessment by the Association, as hereinafter provided, and shall be subject to enforcement by the Association in accordance with the terms and provisions of this Declaration.

## ARTICLE IV

### VOTING RIGHTS

The Association shall have two (2) classes of voting membership:

Class A. Class A Members shall be those Owners defined in Article III with the exception of the Declarant until the expiration of the Class B membership when the Class B memberships convert to Class A memberships. Class A Members shall be entitled to one (1) vote for each Lot in which they hold the interest required for membership by Article III. When more than one (1) person or entity holds such interest in any Lot, all such persons shall be Members. The vote for such Lot shall be exercised as they among themselves determine, but in no event shall more than one (1) vote be cast with respect to any Lot.

Class B. Declarant shall be the Class B Member. The Class B Member shall be entitled to three (3) votes for each Lot owned by a Class A Member. Notwithstanding the foregoing, the Class B membership shall cease and be converted to Class A membership on the happening of any of the following events, whichever occurs earlier, unless otherwise required by Florida law:

- (a) Three (3) months after ninety (90%) percent of the Lots have been conveyed to third-party purchasers; provided, however, this event shall be deemed not to have occurred if a Lot is conveyed to a Builder who becomes a successor Declarant by assignment of the original Declarant's rights; or
- (b) Thirty (30) days after Declarant elects to terminate the Class B membership by delivery to the Secretary of the Association of a certificate in recordable form signed by Declarant stating that Declarant elects to terminate the Class B membership; or
- (c) As required by Florida law.

Upon the conversion of the Class B membership to Class A membership, the Declarant shall be entitled to one vote for each Lot they own in the same manner as all other Class A Members.

Notwithstanding the foregoing, Declarant shall be entitled to appoint at least one (1) member of the Board of Directors of the Association as long as Declarant holds for sale in the ordinary course of business at least five percent (5%) of the Lots within the Property. After Declarant relinquishes control of the Association, Declarant may exercise the right to vote any Declarant owned voting interest in the same manner as any other Member, except for purposes of reacquiring control of the Association or selecting the majority of the Members of the Board of Directors.

## ARTICLE V

### PROPERTY RIGHTS

Section 1. Community Common Area. The Association shall have Common Area that may include open space, Surface Water Management Systems, landscape buffers, mail kiosks and related parking, and signage, and the following provisions shall apply to any the foregoing and any other real property Common Areas now or hereinafter owned by, dedicated to or for the benefit of the Association.

Section 2. Membership Easements of Enjoyment. Every Member shall have a right and easement of enjoyment in and to the non-exclusive use of the Common Area, and such easement shall be appurtenant to and shall pass with the title to every Lot, subject to the following provisions:

(a) The right of the Association, in accordance with its Articles of Incorporation and Bylaws, to borrow money for the purpose of improving the Common Area, and in aid thereof, to mortgage said Common Area, provided, the rights of such mortgagee in said Common Area shall be subordinate to the rights of the Owners hereunder. The right to mortgage the Common Area provided herein shall not become effective until a Home has been constructed upon each Lot within the Property and each Lot has been conveyed from the Declarant or a Builder to a purchaser. No such rights to mortgage shall be effective unless approved by an affirmative vote of two-thirds of the Members at a duly noticed meeting for the purpose of approving such mortgage.

(b) The right of the Association to dedicate or transfer all or any part of the Common Area to any public agency, authority or utility for such purposes, and subject to such conditions as may be agreed to by the Members. No such dedication or transfer shall be effective unless approved by an affirmative vote of two-thirds of the Members at a duly noticed meeting and the vote of the Class B membership, if any, agreeing to such dedication or transfer, and unless written notice of the proposed action is sent to every Member not less than thirty (30) days nor more than sixty (60) days in advance of the duly called meeting at which the vote on such dedication or transfer is held;

(c) The right of the Declarant or the Association to establish, from time to time, certain easements over the Common Area for utilities, broadband communications, cable television and other common services purposes;

(d) The right of the Association to charge reasonable fees for the use of designated facilities (if any) on the Common Area and to temporarily close facilities for repair or maintenance;

(e) Existing easements and agreements of record and those easement granted by the Declarant or the Association in accordance herewith and on the Plat. Recordation of an additional easement document in the public records shall not be required in order to effectuate such easements;



(f) Easements referred to in Article X hereof;

(g) The right to the use and enjoyment of the Common Area and facilities thereon, once construction has been completed, shall extend to all Members and their family, tenants, contract purchasers and invited guests, provided there is delegation of the right of enjoyment in accordance with the Bylaws and subject to regulation from time to time by the Association in its Rules;

(h) Access to certain Common Area within the Property may not be obtained from an Owner's or Member's Lot or other Common Area or publicly dedicated streets or properties. Thus, to obtain access to certain Common Area for which access cannot be obtained from the Owner's or Member's Lot, other Common Area or publicly dedicated streets or properties, the Owner or Member shall need to obtain the permission of a Owner whose Lot is contiguous to said Common Area. The fact that a Member or Owner shall not have access to certain Common Area from his or her Lot, Common Area or publicly dedicated streets or properties does not allow an Owner to avoid liability for Assessments provided for in Article VI of this Declaration; and

(i) The other provisions of this Declaration, the Articles and Bylaws, as the same may be amended from time to time.

### Section 3. Common Area.

(a) Ownership. The Declarant hereby represents that the fee simple title to the Common Area has been or will be conveyed to the Association and the Association shall maintain the Common Area from and after the recording of this Declaration. In addition, any easement granted in favor of the Association shall be maintained by the Association in accordance with the terms of any such grant or dedication as if such easements were Common Areas; provided, however, the use and enjoyment of such easements shall be limited to the purpose for which they were intended. The Association shall be obligated to accept conveyance of any Common Areas or grants of easements from the Declarant or third parties as deemed necessary or advisable by Declarant. The Association shall have the right to promulgate rules and regulations for the use of Common Areas and such restrictions shall be enforceable against all Owners and their guests, tenants and invitees.

(b) Maintenance. The Association shall be responsible for the maintenance of the Common Areas in a continuous and satisfactory manner in good order, condition, and repair. In addition, the Association shall replace as scheduled any and all improvements situated on the Common Areas (upon completion of construction), including, but not limited to, all landscaping, paving, street lighting fixtures, signs, common irrigation systems, drainage facilities, and other structures, including entry features, perimeter fences, gates or signage installed by the Declarant or the Association, but excluding any public utilities and municipal or County improvements, facilities and rights of way. The Association shall be authorized, but not required, to provide other services, such as providing emergency repairs and perform other work on Lots reasonably necessary for the proper maintenance and operation of the Community and shall have easement rights necessary to perform same. All work pursuant to this Section and all expenses hereunder shall be paid for by the Association through Assessments as provided in this Declaration;

provided, however, that the cost of any maintenance, repair or replacement caused by the negligent conduct of an Owner or its guest, tenants or other invitees or by the failure of an Owner to comply with the lawfully adopted rules and regulations of the Association shall be levied as an Individual Assessment against such Owner individually. No Owner may waive or otherwise escape liability for the Assessments for such maintenance by non-use of the Common Areas or abandonment of his right to use the Common Areas. **All governmental and or regulatory permits issued to the Declarant for construction and improvement of the "Alachua North" Subdivision that require ongoing reporting and adherence to such permits shall be administered and adhered to by the Association until such time that all governmental or regulatory agency requirements have been satisfied. It is expressly understood that this provision and any costs associated with this provision shall be borne by the Association.**

(c) Rules and Regulations. The Association, through its Board of Directors, may make and enforce reasonable Rules and regulations governing the Common Areas, which Rules and regulations shall be consistent with the rights and duties established by this Declaration. Sanctions may include reasonable monetary fines levied in accordance with the Declaration and applicable law and suspension of the right to vote. The Board of Directors shall, in addition, have the power to seek relief in any court for violations or to abate nuisances. Imposition of sanctions shall be as provided herein and in the Bylaws of the Association.

(d) Association's Obligation to Indemnify. Association and Owners each covenant and agree jointly and severally to indemnify, defend and hold harmless Declarant and its officers, directors, shareholders, and any related persons or corporations and their employees from and against any and all claims, suits, actions, causes of action or damages arising from any personal injury, loss of life, or damage to property, sustained on or about the Common Areas or other property serving Association, and improvements thereon, or resulting from or arising out of activities or operations of the Association or Owners, and from and against all costs, expenses, court costs, attorneys' fees and paraprofessional fees (including, but not limited to, all trial and appellate levels and whether or not suit be instituted), expenses and liabilities incurred or arising from any such claim, the investigation thereof, or the defense of any action or proceedings brought thereon, and from and against any orders judgments or decrees which may be entered relating thereto. The costs and expense of fulfilling this covenant of indemnification shall be operating expenses of the Association to the extent such matters are not covered by insurance maintained by the Association.

Section 4. Declarant's Reserved Rights. Notwithstanding any provision herein to the contrary, the property rights under this Article V shall be subject to:

(a) The right of Declarant to execute all documents and take such actions and do such acts affecting the Property or the Common Area which, in the Declarant's sole discretion, are desirable or necessary to facilitate the Declarant's or any Builder's development, construction, sales and marketing of the Property. However, nothing contained herein shall authorize Declarant or any Builder to take any action that will diminish the rights of any lienholder or the holder of any mortgage on any Lot or on the Common Area; take any action that will affect title to any of the Lots after conveyance to third parties; or unilaterally change the Declaration, Articles, Bylaws and Rules in violation of Chapter 720, Florida Statutes, after the Class B membership has terminated.

(b) Easements of record on the date hereof and any easements which may hereafter be granted by Declarant to any public or private utilities or governmental bodies for the installation and maintenance of cable television, electrical and telephone conduit and lines, sewers or water pipes, or any other utilities or services to any Lots within the Property or any portion of the Common Area or such easements as Declarant may determine are necessary or beneficial for the maintenance or preservation of the Property.

(c) The Declarant and Builders shall have full rights of ingress and egress to and through, and over and about the Property, including all Common Areas, during the Development Period and such additional period of time as Declarant or any Builder(s) are engaged in any development, construction or improvement work, sales, leasing or marketing of the Community on or within the Property, and the Declarant and any Builder(s) shall further have an easement thereon for the purpose of storage of materials, vehicles, tools, equipment, etc., which are being utilized in such development or construction and for the use and maintenance of signs, banners, and the like being used in connection with the sale or promotion of the Property, or any portion thereof. The Declarant and Builders shall further have the right to operate and maintain models, sales centers and leasing offices and to operate and open gates and access to the Community to facilitate sales and marketing of the Community in Declarant's sole and absolute discretion during the Development Period and such additional period of time as Declarant is engaged in any construction or improvement work, sales, leasing or marketing of the Community or within the Property. No Owner, his guests, employees, servants, agents and invitees shall in any way interfere or hamper Declarant or any Builder, or their agents, servants, employees, invitees, successors or assigns, in connection with such construction, development, promotion or sales activity.

(d) The Declarant shall have full right to assign any or all of its right, title and interest in the Property, both as Declarant and as a Member of the Association, to another party by the execution and recording of a proper instrument in the Public Records of the County. This provision shall not, however, be construed to allow Declarant to assign a membership in the Association in a transaction separate from ownership of a Lot. Notwithstanding the foregoing, the Declarant, in its sole discretion, shall also have the right to grant a Builder certain rights reserved hereunder to the Declarant for the purpose of constructing, selling and marketing Homes in the Community and conducting construction, sales and marketing thereof by executing a partial, non-exclusive assignment of rights in favor of the Builder to be kept in the official records of the Association. Any such assignment of rights shall not impose any obligation of the Declarant hereunder on any such Builder unless such obligations are expressly assumed by such Builder.

(e) Notwithstanding anything contained herein to the contrary, neither the Declarant, the Builders, nor the Association makes any representation whatsoever as to the commencement, completion or construction of any optional or recreational facilities within or upon the Common Areas. The Declarant expressly reserves the right to modify the plan of development, the site plan, the recreational or optional facilities, amenities, product types, and number of Homes or dwellings in the Community in such manner as Declarant and the Builder(s) deem desirable for the Community. Title to any portion of the Common Areas owned by Declarant may be transferred to the Association at any time, provided, that title to all portions



of the Common Areas owned by Declarant shall be transferred to the Association no later than the expiration of the Development Period. The transfer of title to any portion of the Common Areas to the Association shall be subject to: (i) all rights of Declarant, Builders and other persons set forth in this Declaration; and (ii) any restrictions or limitations contained in the instrument conveying such portion to the Association. THE ASSOCIATION AND THE MEMBERS SHALL BE OBLIGATED TO ACCEPT THE COMMON AREAS AND ANY IMPROVEMENTS LOCATED THEREON IN THEIR "AS-IS" CONDITION. NEITHER THE DECLARANT NOR ANY BUILDER MAKES ANY REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, ALL OF WHICH ARE DISCLAIMED TO THE FULLEST EXTENT PERMITTED BY LAW, WITH RESPECT TO THE COMMON AREAS AND THE IMPROVEMENTS THEREON INCLUDING WITHOUT LIMITATION THE MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE, THE CONSTRUCTION, DESIGN, ADEQUACY OF SIZE OR CAPACITY RELATED TO THE USE OF THE SAME, DATE OF COMPLETION OR FUTURE ECONOMIC PERFORMANCE OR OPERATION OF THE COMMON AREAS AND THE IMPROVEMENTS THEREON, INCLUDING ALL MATERIALS, FIXTURES, PERSONAL PROPERTY OR EQUIPMENT THEREIN.

Section 5. No Dedication to Public Use. Nothing contained in this Declaration shall be construed or be deemed to constitute a dedication, express or implied, of any part of the Common Area for use by the public, except for access to and from and throughout the property described in the Plat or any additions thereto for emergency access, law enforcement and persons providing essential services to the Community and its Members.

Section 6. Incorporation of Easements by Reference. Reference in the respective deeds of conveyance, or any mortgage or trust deeds or other evidence of obligation, to the easements and covenants herein described shall be sufficient to create and reserve such easements and covenants to the respective grantees, mortgagees or trustees of said parcels as fully and completely as though said easements and covenants were fully recited and set forth in their entirety in such documents.

Section 7. Surface Water Management. It is acknowledged that the Property is located within the boundaries of the WMD and that an easement is hereby created over the entire Property for the surface water drainage and storage, and for the installation and maintenance of the Surface Water Management System for the Property in accordance with the Permit; provided, however that such easement shall be subject to improvements constructed within the Property as permitted by controlling governmental authorities from time to time. The Surface Water Management System shall be part of the Common Area, owned by the Association, and operated and maintained by the Association or its agents, as Common Area, in compliance with all approvals, codes and regulations of governmental authorities and the WMD. Such operation and maintenance shall specifically include all utility costs and equipment related to the obligations hereunder. Maintenance of the Surface Water Management System shall mean the exercise of practices which allow the systems to provide drainage, water storage, conveyance or other surface water or stormwater management capabilities as permitted by the WMD and shall specifically include, but not be limited to, maintenance of aquatic vegetation, lake beds, lake banks, littoral planting and lake maintenance easements which, pursuant to the terms of this

Declaration, are not the responsibility of others, as well as water quality and wetland monitoring or testing. Any repair or reconstruction of the Surface Water Management System shall be as permitted, or if modified, as approved, by the WMD. Except as hereafter provided, the Association shall maintain as a Common Expense the entire Surface Water Management System for the Property in accordance with the Permit, including but not limited to all inlets, ditches, lakes and canals, swale areas, retention areas, culverts, pipes, pumps, catch basins, water control structures, retention and detention areas, floodplain compensation areas, wetlands and associated buffer area, and mitigation areas, and all related appurtenances, and any littoral zones in any lakes or other waterway, regardless of whether or not same are natural or man-made within the Property or are owned by the Association. Such maintenance shall be performed in conformance with the requirements of any governmental authority, and an easement for such maintenance is hereby created. The Association will have the right, but not the obligation, to maintain any portion of the Surface Water Management System for the Property which is owned and/or maintained by any controlling governmental authority, or which is outside of the Property. The Association will have the right to enter into agreements with any controlling governmental authority or any other property owner or association for the common maintenance of the Surface Water Management System serving the Property and any other property. The Property shall be required to accept surface water drainage from any other property pursuant to the requirements of any controlling governmental authority and an easement for such drainage is hereby created, and in connection therewith the Association will have the right, but not the obligation, to maintain any portion of the Surface Water Management System for such other property reasonably required in connection with the maintenance or operation of the Surface Water Management System for the Property.

## ARTICLE VI

### COVENANT FOR MAINTENANCE ASSESSMENTS

Creation of the Lien and Personal Obligation of Assessments to be Paid to the Association. The Declarant, For each Lot owned by it within the Property, hereby covenants, and each Owner of any Lot by acceptance of a deed therefore, whether or not it shall be so expressed in any such deed or other conveyance (including any purchaser at a judicial sale), is deemed to covenant, which covenant shall run with the land and be binding on every Owner, and agrees to pay to the Association: (1) any regular assessments or charges for the payment of operating expenses of the Association (including payment of property taxes which may be assessed against Common Area or any personal property which may in the future be owned by the Association) (“**Regular Assessments**” or “**Annual Assessments**”); and (2) any special assessments for improvements, or to fund any deficits between the amount collected for regular assessments in accordance with the annual budget and the amount determined necessary by the Association for the proper management and maintenance of the Common Area, together with other costs and/or expenses levied or imposed against the Association or property of the Association (“**Special Assessments**”); and (3) any individual assessments or charges incurred by the Association on behalf of one or more Lots but not all Lots (“**Individual Assessments**”). All such Regular Assessments, Special Assessments and Individual Assessments, collectively referred to as “**Assessments**,” shall be fixed, established and collected from time to time as hereinafter provided. The Assessments, together with such interest thereon and costs of

collection thereof, including attorney's fees, as hereinafter provided and any applicable late fee imposed by the Board of Directors of the Association, shall be a charge on the Property and shall be a ***continuing lien*** relating back to the date of recordation of the Declaration upon any Lot against which each such assessment is made, and said lien may be enforced in the same manner in which mortgages are enforced. Each such assessment, together with interest, costs (including applicable late fees), and reasonable attorneys' fees for its collection, including attorneys' fees involved at all appellate levels and whether or not suit is instituted, shall also be the personal obligation of the person or entity who was the Owner of the Lot at the time when the assessment becomes due. Each Owner shall be jointly and severally responsible with the previous Owner for all Assessments due to the Association prior to the transfer of title, without prejudice to any right the present Owner may have to recover any amounts paid by the present Owner from the previous Owner. **The Declarant shall not pay any special assessments or annual HOA dues. Maximum Annual Assessment.** Until January 1 of the year immediately following the conveyance of the first Lot to an Owner, the maximum annual assessment shall be FOUR HUNDRED FIFTY AND 00/100 DOLLARS (\$450.00) per Lot.

- (a) From and after January 1 of the year immediately following the conveyance of the first Lot to an Owner, the maximum annual assessment may be increased each year not more than 5% above the maximum assessment for the previous year without a vote of the membership.
- (b) From and after January 1 of the year immediately following the conveyance of the first Lot to an Owner, the maximum annual assessment may be increased above 5% by a vote of two-thirds (2/3) of each class of members who are voting in person or by proxy, at a meeting duly called for this purpose.
- (c) The Board of Directors may fix the annual assessment at an amount not in excess of the maximum.

Section 1. Purpose of Assessments. The Assessments to be levied by the Association shall be used for the purpose of promoting the recreation, health, safety, and welfare of the residents of the Property and shall specifically include, but not limited to: payment of all water or utility charges for the Lots and/or Common Area billed through the master meter (if any); any fees due under a bulk service agreement entered into on behalf of the Owners by the Association or Declarant; the maintenance of the Common Area and any improvements or equipment maintained by the Association; the payment of taxes and insurance for the Common Area; payment for the improvement and maintenance of the Common Area; and services and facilities related to the use and enjoyment of the Common Area. Special Assessments shall be used to fund capital improvements, deficits in the collection of Regular Assessments to cover operating expenses of the Association, and other purposes deemed necessary by a majority vote of Owners of the Association as set forth in Section 5 hereof. Individual Assessments shall be for the costs incurred by the Association which by nature are applicable only to one or more Lots, but less than all Lots. By way of example and not limitation, in the event an Owner fails to maintain their Lot in a manner required by the Governing Documents, the Association shall have the right, through its agents and employees, to enter upon the Lot and to repair, restore, and maintain the Lot and/or Home as required by the Governing Documents. The costs of any such repair, restoration and/or maintenance, plus the reasonable administrative expenses of the Association

and any costs incurred in bringing a Lot and/or Home into compliance with the Governing Documents, shall be an Individual Assessment charged against the Lot.

Section 2. Basis of Annual Assessments. For the initial year of operation of the Association, the monthly Assessment shall be the amount as set forth in the estimated operating budget of the Association for the initial year of operation. From and after January of the next operating year, the annual Assessment shall be determined in accordance with the Articles of Incorporation and Bylaws of the Association taking into account current maintenance costs and future needs of the Association. Each Owner acknowledges the Association is responsible for the repair and maintenance of capital improvements that may result in a Special Assessment due to reserves not being collected. Because reserve accounts are not being initially provided for by the Declarant, the Members of the Association may elect to collect reserves after the expiration of the Class B membership upon the affirmative approval of a majority of the total voting interests of the Association obtained by a vote of the Members at a duly called meeting of the membership or by the written consent of a majority of the total voting interests of the Association. The approval action of the membership must state that reserve accounts shall be provided for in the budget and must designate the components for which the reserve accounts are to be established. Upon approval by the membership, the Board of Directors shall include the required reserve accounts in the budget in the next fiscal year following the approval and each year thereafter. Once reserves are established as provided in this subsection, the reserve accounts must be maintained by collection of Assessments or have their funding waived in the manner provided by Chapter 720, Florida Statutes. Notwithstanding the same, reserves will not be funded by the Declarant for the Lots Declarant owns so long as Declarant is funding any deficits in operating costs pursuant to Section 12 herein.

Section 3. Uniform Rate of Assessment. Unless otherwise provided for herein, as to Lots that have been conveyed from the Declarant or from a Builder to a third party purchaser other than a Builder and upon which a Home has been completed or is occupied, both Annual and Special Assessments must be fixed at a uniform rate for all Lots with a Home and may be collected on an annual, quarterly or monthly basis or at any other interval as determined by the Board of Directors. Payments of all Assessments will be made directly to the Association or its designated management company and in no instance shall any mortgagees have the obligation to collect Assessments. Notwithstanding the foregoing, any Vacant Lot that does not have a Home that is occupied or that has been conveyed to a third party home purchaser shall in no event pay more than 25% of the Annual Assessment for such Vacant Lot until a Home is constructed thereon and is either occupied or has been issued a Certificate of Occupancy.

Section 4. Special Assessment for Capital Improvements. In addition to the Annual Assessment authorized above, the Association may levy in any assessment year, a Special Assessment applicable to that year only, for the purpose of defraying, in whole or in part, the cost of any construction or reconstruction, unexpected repair or replacement of a described capital improvement upon the Common Area, including the necessary fixtures and personal property related thereto, or to cover deficits in the collection of Regular Assessments to cover operating expenses of the Association; PROVIDED that any such Special Assessments shall have the assent of a majority of the votes of each class of Members who are voting in person or by proxy at a meeting at which a quorum is obtained and which is duly called for this purpose,



written notice of which shall be sent to all Members not less than 15 days nor more than 60 days in advance of the meeting setting forth the purpose of the meeting. Special Assessments shall be allocated equally among all Lots upon which a Home has been constructed and for which a Certificate of Occupancy has been issued. Builders owning Vacant Lots shall not be obligated to pay Special Assessments thereon unless a Certificate of Occupancy for the Home constructed thereon has been issued on the date the Special Assessment is approved by the Members.

Section 5. Quorum for Any Action Authorized Under Section 5. At each meeting called, as provided in Section 5 hereof, the presence of the meeting of Members or of proxies entitled to cast thirty percent (30%) of all the votes of each class of membership shall constitute a quorum. If the required quorum is not forthcoming at any meeting, one additional meeting may be called, subject to the notice requirements set forth in Section 5 and the required quorum at any such subsequent meeting shall be one-half (½) of the required quorum at the preceding meeting. No such subsequent meeting shall be held more than sixty (60) days following the preceding meeting.

Section 6. Date of Commencement of Annual Assessments; Due Dates. The Annual Assessments provided for herein shall commence as to each Lot on the conveyance of the Lot by the Declarant or a Builder to a third party purchaser other than a Builder. The first Annual Assessment shall be adjusted according to the number of months remaining in the calendar year. The Board of Directors of the Association shall fix the amount of the Annual Assessment against each Lot at least thirty (30) days in advance of each Annual Assessment period. Written notice of the Annual Assessment shall be sent to every Owner subject thereto together with the due date of such Assessments established by the Board of Directors. The Board of Directors, if necessary to insure cash flow, may institute reasonable late payment fees for any delinquent payment of the Annual Assessment. The Association shall upon demand at any time furnish a certificate in writing signed by an officer of the Association setting forth whether the Assessments on a specified Lot have been paid. A reasonable charge may be made by the Board of Directors or its agent for the issuance of these certificates. Such certificate shall be conclusive evidence of payment of any Assessment therein stated to have been paid.

Section 7. Effect of Nonpayment of Assessments: Remedies of the Association. Any Assessments which are not paid when due shall be delinquent. If the Assessment is not paid within ten (10) days (or such other period of time established by the Board of Directors) after the due date, an administrative late fee of the greater of Twenty-Five and no/100 Dollars (\$25.00) or 5% of the amount of the installment that is past due, together with interest in an amount equal to the maximum rate per annum allowable by law beginning from the due date until paid in full may be levied. The Association, acting through its Board of Directors, may bring an action at law against the Owner personally obligated to pay the same, or foreclose the lien against the Lot to which the Assessment is levied, and interest, costs and reasonable attorneys' fees, including at all appellate levels and whether or not suit is instituted, in collection or enforcement shall be added to the amount of such Assessment. Additionally, the Board of Directors of the Association may at its discretion accelerate the Assessments then due from a delinquent Owner for the next twelve (12) months. The Association may also notify any mortgagees or lenders of Owner, any co-borrowers and/or guarantor(s) (without recourse to Declarant and/or the Association) of delinquencies in the payment of Assessments. No Owner may waive or

otherwise escape liability for the Assessments provided for herein by non-use of the Common Area or abandonment of his or her Lot. All payments on accounts shall be first applied to fines levied in accordance with the terms of the Declaration, interest accrued by the Association, then to any administrative late fees, then to collection costs and attorney fees, and then to the delinquent Assessments. The allocation of payments described herein shall apply notwithstanding any restrictive endorsement, designation or instruction placed on or accompanying a payment. Additionally, if a Home is occupied by a Lessee and the Owner is delinquent in the payment of Assessments, the Association may demand from the Lessee payment to the Association of all monetary obligations, including without limitation, Assessments due from the Owner to the Association. So long as the Owner remains delinquent, future rent payments due to the Owner may be collected by the Association and shall be credited to the monetary obligations of the Owner to the Association. If within fourteen (14) days from written demand of the Association, the Lessee provides the Association with written evidence of making prepaid rent payments, the Lessee shall receive credit for the prepaid rent for the applicable period of such prepaid rent.

Section 8. Individual Assessment Against a Particular Owner of Lot. In the event an Owner of any Lot in the Property shall fail to maintain the premises and the improvements situated thereon in accordance with the terms and conditions of the Declaration and any promulgated Rules in a manner satisfactory to the Board of Directors to a minimum standard of consistency with the general appearance of the Property as initially constructed and improved by the Declarant or Builder (taking into account normal wear and tear and exposure to normal exterior conditions, but not to the point of unsightliness), the Association, after approval by a majority of the Board of Directors, shall have the right, through its agents and employees, to enter upon said Lot and to repair, maintain, and restore the Lot, and the exterior of the buildings and any other improvements erected thereon. The costs of such exterior maintenance performed on behalf of the Owner to which such Lot is subject may be assessed to the Lot as an Individual Assessment for such expense; and said Individual Assessment shall be enforced in the same manner as provided for in Section 8. In addition, in the event any Owner, its guests, tenants or invitees cause any damage to the Common Areas, including recreation or optional facilities, landscaping, drainage facilities, mail kiosks, or sidewalks, such Owner shall be responsible for the cost of any repairs required to correct such damage and the cost thereof may be assessed to the Owner as an Individual Assessment.

Section 9. Subordination of the Lien to Mortgages. The lien of the Assessments provided for herein shall be superior to all other liens except tax liens and the liens of any bona fide Institutional First Mortgage to an Institutional First Mortgagee recorded prior to any lien for Assessments by the Association; provided, however, that said mortgage liens are first liens against the property encumbered thereby, subject only to tax liens, and secure indebtednesses payable in monthly, quarterly or annual payments over a period of not less than ten (10) years.

Section 10. Exempt Property. The following Property subject to this Declaration shall be exempt from the Assessments created herein: (a) any portion of the Property dedicated to and accepted by a local public authority; (b) the Common Area; and (c) any portion of the Property owned by a charitable or non-profit organization exempt from taxation by the laws of the State of Florida; however, no Lot, land or improvements devoted to dwelling use shall be exempt from

said Assessments. Lots owned by the Declarant shall be exempt from payment of Assessments so long as Declarant is deficit funding operating expenses in accordance with Section 12 below.

Section 11. Declarant's Right to Deficit Fund Operating Expenses. Notwithstanding any provision that may be contained to the contrary in this Declaration, for as long as Declarant or any successor Declarant is in control of the Association, the Declarant shall not be liable for Assessments against such Lots owned by the Declarant, provided that the Declarant funds any deficit in operating expenses exclusive of reserves, cost of capital improvements, and non-budgeted repairs or replacement, as specified in Chapter 720.308(1)(b), Florida Statutes. For the purposes hereof, a deficit shall be computed by subtraction from said operating expenses (exclusive of the items described in the foregoing sentence) all Assessments, contributions, income and other sums and income received or receivable by the Association. The Declarant may at any time commence to pay Assessments to the Lots that it owns and thereby automatically terminate its obligations to fund a deficit in the operating expenses of the Association, or any time or from time to time elect again to fund deficits as aforesaid. When all Lots within the Property are sold and conveyed to purchasers, the Declarant shall have no further liability of any kind to the Association for the payment of Assessments or deficits other than those that arose to prior to such time. Should Declarant, in its sole discretion, elect to fund cash shortfalls caused by delinquencies or other matters which would not otherwise require deficit funds from the Declarant, such funds shall be considered a loan to the Association to be paid back to the Declarant by the Association. The Declarant's rights under this Section 12 shall not be construed as a guarantee of Assessments under Section 720.308(2), Florida Statutes.

Section 12. Surface Water Management System. The Association will be responsible for assessing and collecting fees for the operation, maintenance, inspection and inspection reporting, mitigation and mitigation reporting, and, if necessary, replacement of the Surface Water Management System which is owned and operated by the Association. Fees shall be assessed and collected through Assessments. In the event the Community contains on-site wetland mitigation requiring monitoring and maintenance, the Association should budget and collect sufficient funds for the monitoring and maintenance of the mitigation areas in accordance with the Permit.

## ARTICLE VII

### CAPITAL CONTRIBUTION

Section 1. Capital Contribution on Sale By Declarant. At the time of a the closing of the sale of a Home by the Declarant or a Builder to a third party purchaser other than a Builder, each purchaser shall pay to the Association the amount of **\$500.00** as a contribution to working capital. These monies (hereinafter called "**Capital Contribution**") shall be the Association's property, and shall be held by the Association through its Board of Directors, pursuant to the powers described in the Articles and Bylaws. The Capital Contribution shall be deemed ordinary Association income and need not be separated from or held or applied differently than Assessments. No refund of a Capital Contribution will be made on re-sale. No Capital Contribution shall be due from a Builder when a Builder acquires a Lot for the purpose of constructing a Home thereon.

Section 2. Capital Contribution on Sale By Owner Other Than Declarant. At the time of the closing of the sale of a Lot by an Owner other than Declarant or a Builder, each purchaser shall pay to the Association a Resale Capital Contribution, which shall initially be \$500.00 per Lot. The Board of the Association shall have the right to adjust the amount of the Resale Capital Contribution from time to time. These monies shall be the Association's property, and shall be held by the Association through its Board of Directors, pursuant to the powers described in the Articles and Bylaws. The Capital Contribution shall be deemed ordinary Association income and need not be separated from or held or applied differently than Assessments. No refund of a Capital Contribution will be made on re-sale.

## ARTICLE VIII

### ARCHITECTURAL CONTROL

Section 1. Review of Proposed Construction. No improvement or alteration of any kind, including, but not limited to, a fence, wall or other addition, structure, or equipment (including exterior paint, roofing, landscaping, antennas, awnings, and shutters) shall be installed, painted, erected, removed or maintained within the Property, until the plans and specifications showing the nature, kind, shape, height, materials and location of the same shall have been submitted to, and approved in writing by, a majority of the Board of Directors of the Association. The Board of Directors of the Association shall approve proposals or plans and specifications submitted for its approval only if it deems that the construction, alterations or additions contemplated thereby in the locations indicated will not be detrimental to the appearance of the surrounding area of the Property and that the appearance of any improvement or other structure affected thereby will be in harmony with surrounding structures and improvements (or the surrounding area contemplated by Declarant, if within the Development Period) and it otherwise desirable. The Board of Directors of the Association may condition its approval of proposals and plans and specifications as it deems appropriate, and may require submission of additional plans and specifications or other information prior to approving or disapproving material submitted. The Board of Directors of the Association may also issue rules or guidelines setting forth procedures for the submission of plans for approval. The Board of Directors of the Association may require such detail in plans and specifications submitted for its review as it deems proper, including, without limitation, floor plans, site plans, drainage plans, elevation drawings and descriptions or samples of exterior materials and colors. Until receipt by the Board of Directors of the Association of any required plans and specifications, the Board of Directors of the Association may postpone review of any plans submitted for approval. The Board of Directors of the Association shall have forty-five (45) days after delivery of all required materials to approve or reject any such plans. During the period of time the Declarant appoints the majority of the Board, if an Owner's plans are not approved within such 45-day period, said plans shall be deemed not approved; provided, however, once Owners other than the Declarant elect a majority of the Board, if an Owner's plans are not approved within such 45-day period, said plans shall be deemed approved. All changes and alterations shall be subject independently to all applicable governmental laws, statutes, ordinances, rules, regulations, orders and decrees. Any alteration or modification to the location and/or placement of exterior walls of any Home shall be further conditioned on compliance with the County ordinances and the obtaining of applicable governmental approvals, if any.



Section 2. No Waiver of Future Approvals. The approval of the Board of Directors of the Association of any proposals or plans and specifications or drawings for any work done or proposed, or in connection with any other matter requiring the approval and consent of the Board of Directors of the Association, shall not be deemed to constitute a waiver of any right to withhold approval or consent as to any similar proposals, plans and specifications, drawings or matters whether subsequently or additionally submitted for approval or consent.

Section 3. Liability of the Board of Directors of the Association. No member of the Board of Directors of the Association (or Declarant) shall be liable to any Owner or other person by reason of mistake in judgment, failure to point out deficiencies in plans, or any other act or omission in connection with the approval of any plans. Any Owner submitting plans hereunder by the submitting of same, agrees (i) not to seek any damages or make any claim arising out of approval of plans hereunder, and (ii) to indemnify and hold the Board of Directors of the Association, the Association, and Declarant harmless from any cost, claim, damage, expense or liability whatsoever, including attorneys' fees and costs at all tribunal and appellate levels (and whether or not suit is instituted), arising out of the approval of any plans regardless of the negligence of the committee members, their representatives, or appointing entity.

Section 4. Inspection of Work. Inspection of work and correction of defects therein shall proceed as follows:

(a) Upon the completion of any work for which approved plans are required hereunder the applicant for such approval ("**Applicant**") shall give written notice of completion to the Board of Directors of the Association.

(b) Within thirty (30) days thereafter, the Board of Directors of the Association (or its duly authorized representative) may inspect such completed work. If the Board of Directors of the Association finds that such work was not affected in substantial compliance with the approved plans, it shall notify the Applicant in writing of such noncompliance within such thirty (30) day period, specifying the particulars of noncompliance, and shall require the Applicant to remedy the same.

(c) If an Applicant is notified of any noncompliance, the Applicant shall remedy or remove the same within a period of not more than forty-five (45) days from the date of announcement of the Board of Directors ruling. If Applicant does not comply with the Board of Directors of the Association ruling within such period, the Board of Directors, at its option, may either remove the noncomplying improvement or remedy the noncompliance (an easement therefore being hereby created), and Applicant shall reimburse the Association, upon demand, for all expenses incurred in connection therewith. This amount, together with interest thereon at the rate of eighteen (18%) percent per annum from the date the noncompliance was to have been remedied or removed, the maximum late fee allowed under Florida Statutes for each month that a violation exists if payment is not made within thirty (30) days after announcement, and all costs and reasonable attorneys' fees incurred by the Association in collection, enforcement or abatement, as appropriate (including attorneys' fees incurred at all appellate levels and whether or not suit is instituted) shall be a personal obligation of Owner and shall not pass to the successors in title of Owner unless expressly assumed by such successors. Such amount (including interest, costs, late fees and attorneys' fees as provided above) shall also be a

***continuing lien*** and run with the land on the Owner's Property if not paid within thirty (30) days after notice enforceable in the same manner in which mortgages are enforced by foreclosure, or by bringing an action at law or equity against the Owner.

(d) If for any reason the Board of Directors of the Association fails to notify the Applicant of any noncompliance within forty-five (45) days after receipt of written notice of completion from the Applicant, the improvement shall be deemed to have been made in accordance with the approved plans.

Section 5. Variances. The Board of Directors of the Association may authorize variances from compliance with any of the architectural provisions of this Declaration when circumstances such as topography, natural obstructions, hardship, aesthetic or environmental considerations may require. Such variance must be evidenced in writing and must be signed by at least two (2) members of the Board of Directors of the Association. If such variances are granted, no violation of the covenants, conditions and restrictions contained in this Declaration shall be deemed to have occurred with respect to the matter for which the variance was granted. The granting of such a variance shall not operate to waive any of the terms and provisions of this Declaration for any purpose except as to the particular property and particular provisions hereof covered by the variance, nor shall it affect in any way the Owner's obligation to comply with all governmental laws and regulations affecting his use of the Lot and Home, including, but not limited to, zoning ordinances and lot setback lines or requirements imposed by any governmental or municipal authority.

Section 6. Architectural Review Committee. The Board of Directors of the Association may assign all of its responsibilities under Article VIII to an Architectural Review Committee to be appointed by the Board of Directors of the Association (the "**ARC**").

Section 7. Declarant's Exemption. Notwithstanding anything to the contrary, this Article does not apply to the Declarant or to D.R. Horton, Inc., as a Builder. Such exemption may be non-exclusively assigned by the Declarant to any other Builder. Notwithstanding anything to contrary, the Declarant shall have the right to approve any of the foregoing for any Builder in lieu of the Association. The Declarant's review and approval of any Builder plans shall be deemed approval of the ARC and the Association and such approval may not be revoked or modified and any modifications of such approved plans shall only require approval of the Declarant.

## ARTICLE IX

### USE RESTRICTIONS

Section 1. Residential Purposes. No Lot shall be used for any other purpose other than residential purposes. The occupancy of each Home shall be limited to the maximum number of persons allowable in accordance with Federal Regulations and local ordinances based on the size and configuration of the Home. No building shall be erected altered, placed or permitted to remain on any Lot other than a Home, related appurtenances, and other structures originally constructed by the Declarant or in accordance with ARC approval.

Section 2. Temporary Structures. No structure of a temporary character, trailer, tent, shack, barn, shed or other out-building shall be placed or used on any Lot without the approval of the ARC. No such structures shall at any time be used as a residence or appurtenance to such residence, either temporary or permanent. The foregoing shall not apply to temporary construction trailers or other temporary structures used by the Declarant or Builders.

Section 3. Offensive Activity. No noxious or offensive activity shall be carried on upon any Lot, nor shall anything be done thereon which may be or may become an annoyance or nuisance to the Community, or any matter which affects the health, safety or welfare of the owners or occupants of the Property, in the Association's reasonable discretion.

Section 4. Pets. No livestock or poultry shall be kept, maintained, or bred in any Home or elsewhere within the Property. No pets shall be kept, maintained, or bred in any Home or elsewhere within the Property, except for fish in an aquarium and birds in cages maintained in the interior of the Home and not more than a total of three (e) domestic dogs (other than dogs which in the reasonable determination of the Board of Directors or under applicable codes, ordinances, or regulations are determined to be a threat to the safety of the occupants of the Property which shall not be allowed under any circumstances in the Property) or three (e) domestic cats shall be permitted to be kept in a Home or Lot, provided such animals are not kept, bred or raised for commercial purposes. Notwithstanding the foregoing, the Board of Directors shall specifically have the power to either permit additional domestic dogs or cats to be kept as pets by an Owner if in the determination of the Board of Directors such pets shall not cause or be deemed by the Board of Directors to constitute a nuisance to any other Owner in the determination of the Board of Directors. Each person bringing or keeping a pet within the Property shall be absolutely liable to the Association, other Owners and their invitees for any damage to persons or property caused by any pet brought upon or kept upon the Property and it shall be the duty and responsibility of each such Owner to clean up after such animals which have deposited droppings or otherwise used any portion of the Property or public street abutting or visible from the Property. Animals belonging to Owners or invitees of any Owner must be kept within an enclosure or, on a leash held by a person capable of controlling the animal. No pets shall be "tied out" in a yard or on a porch or patio and left unattended for any extended period of time. The Association shall have the right to promulgate Rules and Regulations relating to animals and the right to restrict or require removal any such animals determined by the Board or applicable codes or regulations to constitute a nuisance or danger to the Community. In addition, all pet owners shall be required to maintain at all times adequate homeowners' insurance coverage for any and all liabilities related to the pet(s) owned and kept on the Lot, which insurance shall name the Association as an additional insured to the extent such endorsement is available. Proof of such insurance coverage shall be provided by the Owner to the Association upon reasonable request not more than one time per calendar year. If such coverage is not provided as required herein, the Association shall have the right to require the pet to be removed from the Lot until the appropriate insurance coverage is obtained.

Section 5. Signs. During the time period Declarant owns any Lot within the Property, Owners other than the Declarant shall not display signs of any kind to the public view on any Lot, except one sign not larger than 3" X 5" and placed in one ground floor window or one second story window advertising that property is for sale and except signs used by the Declarant

and Builders to advertise the Property during the construction and sale of Homes. Once the Declarant has conveyed all Lots it owns within the Property, then the size of the signs can be increased, as authorized by the Board of Directors of the Association or the ARC, to advertise that the property is for sale or rent which sign is to be placed on one ground floor window or one second story window. The foregoing shall not apply to any signs used by the Declarant or any Builder to advertise the Property during the construction and sale of Homes.

Section 6. Garbage. No Lot shall be used or maintained as a dumping ground for rubbish. All trash and garbage shall be regularly removed from each Lot and shall not be allowed to accumulate thereon. Trash, garbage or other waste shall be kept in sanitary, covered containers. All equipment for the storage or disposal of such materials shall be kept in a clean and sanitary condition. In no event shall such equipment and/or containers be visible from the Common Area streets, from neighboring Property or within property contained in the Plat, except for a reasonable time immediately prior to and after scheduled trash collection, and in all events in compliance with the County Code.

Section 7. Outdoor Property. No garments, rugs, towels or blankets or any other materials may be hung, exposed or dusted from the windows or from the front facade of any Home. Further, unless otherwise specifically prohibited by applicable local, State or Federal law, no outside clotheslines or other facilities for drying or airing clothes shall be erected in the front yard, side yard or back yard of any Home. All personal property of Owners or other occupants shall be stored inside; provided, however, patio furniture or other personal property which is specifically for the use and enjoyment of designated outdoor areas of the Home shall be permitted.

Section 8. Parking. Parking in the Community is limited to designated driveways, garages and guest parking spaces. There shall be no parking on the grass, the street, or any portion of any sidewalk which is not part of a designated driveway. An Owner may park in the Home's garage or in the driveway on the Lot. Car covers are prohibited and license tags on all vehicles must be current. No vehicle which cannot operate on its own power shall remain in the Community for more than twenty four (24) hours, except in the garage of a Home. No repair or maintenance, except for emergency repairs of vehicles shall be made unless in the garage of a Home. No vehicles shall be stored on blocks. No tarpaulin covers on vehicles shall be permitted anywhere within the public view. Any trailer, commercial vehicle, recreational vehicle, boat, rowboat, canoe, jet ski or boat trailer shall not be permitted to be parked outside of an enclosed garage. The term "commercial vehicle" includes trucks and vehicular equipment or other vehicles which are used or which are ordinarily intended to be used for commercial purposes or which contain materials regularly used in trade or business. No vehicles displaying commercial advertising shall be parked within the public view except those of visiting contractors making repairs to a Lot or Home and this provision is specifically intended to preclude any Owner from parking their personal commercial vehicle in public view. Automobiles issued by the County or other governmental entity (i.e., police cars), such automobile shall not be deemed to be a commercial vehicle and may be parked in the garage or driveway of the Lot. No vehicle shall be used as a domicile or residence either temporarily or permanently. No all terrain vehicles (ATVs) or mini motorcycles are permitted at any time on any paved surfaces forming a part of the Common Areas. Subject to applicable laws and ordinances, any vehicle parked in violation of



these or other restrictions contained herein, the Association is authorized to order the towing of any vehicle (at said vehicle owner's expense) for a violation of this Section if a vehicle remains in violation of this Section for a period of twenty-four (24) hours from the time a notice of violation is placed on the vehicle or if such a vehicle was cited for such violation within the preceding fourteen (14) day period. Each Owner by acceptance of title to a Home irrevocably grants the Association and its designated towing agent the right to enter a Lot or Common Area and tow vehicles which violate the terms of this Declaration or which are parked in violation of this Declaration. Neither the Association nor the towing company shall be liable to the owner of such vehicle for trespass, conversion or otherwise, nor guilty of any criminal act, by reason of such towing or removal and once the notice is posted, neither its removal, nor failure of the owner to receive it for any other reason, shall be grounds for relief of any kind. An affidavit of the person posting the aforesaid notice stating that it was properly posted shall be conclusive evidence of proper posting. Notwithstanding any other provision in this Declaration to the contrary, the foregoing restrictions shall not apply to construction vehicles utilized in connection with construction, improvement, installation, or repair by Declarant, Builders, or their agents. Further, the restrictions in this Section shall not be deemed to limit service vehicles whose purpose is to perform maintenance and delivery service to the Owners or the Association during normal working hours or for work performed for the Declarant, Builders, or the Association which are necessary in the development, maintenance or management of the Association.

Section 9.     Septic Tanks. No septic tanks or individual wells will be permitted on any Lot.

Section 10.    Garages. No garage may be improved for purposes of making same a living area, nor shall garage doors be removed except for replacement (in which case the Owner must obtain approval of any replacement door from the Board of Directors of the Association). No garage may be used for the operation of a business or for any commercial purpose of any kind.

Section 11.    Window Coverings. No external window covering, reflective window covering or iron or decorative bars(either interior or exterior) may be placed or permitted to remain on any window of any building without the prior written approval of the Board of Directors of the Association. Window treatments shall consist of drapery, blinds, decorative panels, or other window covering, and no newspaper, aluminum foil, sheets or other temporary window treatments are permitted, except for periods not exceeding one (1) week after an Owner or tenant first moves into a Home or when permanent window treatments are being cleaned or repaired. No bars shall be placed on the windows of any Home without prior written approval of the ARC. No awnings, canopies or shutters shall be affixed to the exterior of a Home without the prior written approval of the ARC. No reflective tinting or mirror finishes on windows shall be permitted unless approved by the ARC. Window treatments facing the street shall be of a neutral color, such as white, off-white or wood tones. Window or wall air conditioner units are prohibited.

Section 12.    Flags. No flags or banners other than a Flag permitted by Chapter 720.304, Florida Statutes, or other local, state or federal law, which must be displayed in a respectful manner and which is subject to reasonable standards for size, placement and safety as

may be adopted by the Association will be permitted. The foregoing sentence shall not apply to the Declarant.

Section 13. Reconstruction. In the event that a Home or other improvement is damaged or destroyed by casualty loss or other loss, then the Owner thereof shall commence to rebuild or repair the damaged Home or improvement in accordance this Declaration within 6 months of the date of the loss. As to any such reconstruction of a destroyed Home or improvements, the same shall only be replaced as approved by the ARC. Notwithstanding anything to the contrary herein, to the extent that insurance coverage obtained and maintained by the Association covers such casualty destruction, the Owner of such damaged or destroyed Home shall not perform any activities that would negate such coverage or impair the availability of such coverage.

Section 14. Business Activity. Except for normal construction activity, sale, and re-sale of a Home, sale or re-sale of other property owned by Declarant, administrative offices of Declarant, no commercial or business activity shall be conducted in the Community that disrupts the residents, including without limitation, within any Home. Notwithstanding the foregoing, and subject to applicable statutes and ordinances, an Owner may maintain a home business office within a Home for such Owner's personal use; provided, however, business invitees, customers, and clients shall not disrupt the residential nature of the Community unless the Board of Directors provides otherwise in the Rules and Regulations. No Owner may actively engage in any solicitations for commercial purposes within the Community. No solicitors of a commercial nature shall be allowed within the Community, without the prior written consent of Association. No day care center, child care facility, elder care or other assisted living facility or halfway house may be operated out of a Home. No garage sales are permitted, except as permitted by Association.

Section 15. Telecommunications. No exterior visible antennae, radio masts, towers, poles, aerials, satellite dishes, or other similar equipment shall be placed on any Home or Lot without the prior written approval thereof being first had and obtained from the ARC as required by this Declaration. The ARC may require, among other things, that all such improvements be screened so that they are not visible from adjacent Homes, or from the Common Areas. No Owner shall operate any equipment or device which will interfere with the radio or television reception of others. All antennas not covered by the Federal Communications Commission ("FCC") rules are prohibited. Installation, maintenance, and use of all antennas shall comply with restrictions adopted by the Board of Directors and shall be governed by the then current rules of the FCC.

Section 16. Fences. No Owner shall be permitted to install a fence to enclose any portion of the Lot without the prior approval of the Board or ARC in accordance with Article VIII, which shall approve the material, location and height. Any perimeter fences or fences along the rear lot line of two Lots with a common rear lot line originally installed by the Declarant or the Association shall be maintained by the Association for the benefit of all Owners. All other fences located on a Lot or approved fences installed by an Owner or Owners shall be maintained by the Owner or Owners of such benefitted Lots at such Owner's or Owners' sole cost and expense.

Section 17. Hurricane Shutters. Any hurricane shutters or other protective devices visible from outside a Home shall be of a type as approved by the ARC. Panel, accordion and roll-up style hurricane shutters may not be left closed during hurricane season. Any such approved hurricane shutters may be installed upon forty-eight (48) hours prior to the expected arrival of a hurricane and must be removed within seventy-two (72) hours after the end of a hurricane watch or warning or as the ARC may determine otherwise. Except as the Board may otherwise decide, shutters may not be closed at any time other than a storm event.

Section 18. Water Bodies. No Lot Owner shall use any body of water located within the Community for recreational purposes, including boating, jet skiing, or any other types of water sports. Swimming in any body of water within the Community is prohibited. No planting, fencing or other improvements or additions to the landscape area or grassed area surrounding any body of water in the Community and within the maintenance easements surrounding the bodies of water are permitted. No installation of sand or other materials intended to simulate a beach shall be permitted along the lake banks, within the maintenance easements surrounding the lake or rear yards of Lots adjacent to the lakes. The Association has the right to further restrict use of bodies of water in the Community in promulgated Rules established by the Association. BY ACCEPTANCE OF A DEED TO A HOME OR LOT, EACH OWNER ACKNOWLEDGES THAT THE WATER LEVELS OF ANY WATER BODIES IN THE COMMUNITY MAY VARY FROM TIME TO TIME. THERE IS NO GUARANTEE BY THE DECLARANT OR ASSOCIATION AND ANY OF THEIR OFFICERS, DIRECTORS, COMMITTEE MEMBERS, EMPLOYEES, MANAGEMENT AGENTS, CONTRACTORS OR SUBCONTRACTORS THAT WATER LEVELS WILL BE CONSTANT OR AESTHETICALLY PLEASING AT ANY PARTICULAR TIME. AT TIMES, AREAS IN THE COMMUNITY WHICH ARE DESIGNED TO RETAIN WATER, MAY HAVE LITTLE TO NO WATER RETENTION AND WATER LEVELS MAY BE NON-EXISTENT.

Section 19. Exemptions. Notwithstanding anything to the contrary, any restrictions contained in this Article that would disrupt the construction, sales, and marketing of Homes in the Community shall not apply to the Declarant or to any Builder.

## ARTICLE X

### EASEMENTS

Section 1. Public Services. Easements are reserved over each Lot and the Common Area for public service purposes including but not limited to, police protection, fire protection, emergency services, postal service and meter reading.

Section 2. Utilities. Easements for ingress and egress and for the installation and maintenance of all utilities, Surface Water Management Systems and drainage facilities, landscaping, irrigation, fencing, signage, and street lighting are reserved on and over each Lot and the Common Area in favor of the Association and other entities with maintenance responsibilities related to the same. Such easements are reserved for their intended purpose and shall not be removed by subsequent Owners. The right is also reserved to the Declarant and the Association to create additional utility easements by separate instrument as may be required from time to time.

Section 3. Encroachments. Notwithstanding any other provisions contained in this Declaration, in the event that any Home, as constructed by the Declarant or a Builder on a Lot, encroaches upon any portion of the Common Area or adjoining Lot, then a perpetual easement appurtenant to such Lot shall exist for the continuance of any such encroachment on the Common Area or adjoining Lot. In the event any fence, roof, overhanging roof, or portion of the Home, as constructed upon any Lot by Declarant or by a Builder, encroaches or overlaps upon any other Lot or the Common Area, then, in such event, a perpetual easement appurtenant to the Lot upon which the fence, roof, overhanging roof, or Home is construction shall exist for the continuation of any such encroachment or overlapping upon the adjoining Lots and Common Area.

Section 4. Drainage. The Association shall have the responsibility to maintain all drainage facilities and drainage pipes and equipment within the Property, landscape buffers, and easements and maintain irrigation lines and facilities within the landscape and utility easements and the expense for same will be a common expense of the Association. The Association shall also have the right to maintain any drainage easements on the Lots to the extent any Lot Owner fails to maintain the same. There shall be, and Declarant hereby grants, reciprocal, perpetual non-exclusive easements between all adjacent Lots, as easements appurtenant to the Lots, for the natural run-off of rainwater, in accordance with any stormwater management plan which may be applicable to the Community, provided, however, that in no event shall any Owner of a Lot be required to allow stormwater drainage across its Lot in such a manner as shall damage any permanent improvements located thereon.

Section 5. Common Area Maintenance. An easement is reserved over the Property, including each Lot, in favor of the Association for maintenance of the Common Area and to allow the Association to fulfill any and all of its maintenance obligations hereunder.

Section 6. Declarant and Builders. An easement is reserved over the Property, including each Lot, in favor of the Declarant and Builders for the purpose of carrying out any obligations of the Declarant or Builders under the terms of this Declaration or any governmental permit, order or applicable law in connection with the development of the community and construction of Homes therein. In addition, the Declarant and Builders shall also have an easement over, upon, across, and under the Property as may be required in connection with the development of the community and construction of Homes, including the right to keep gates open for public access and to use all roads and rights of way for vehicular and pedestrian ingress and egress for construction and maintenance purposes. Further, the Declarant and Builders shall have an easement to use all portions of the Property, including Common Areas but not including Lots which have been conveyed to third party purchasers other than Builders, for all types of promotional and sales activity in connection with marketing, sales, and leasing of Homes in the Community including the right to keep gates open for public access and to use all roads and rights of way for vehicular and pedestrian ingress and egress. The easements created by this section shall be broadly construed and supplement other rights of the Declarant and Builders herein, running with the land until such time as the Declarant and Builders no longer own any Lots in the Community and all of the Declarant's obligations hereunder are satisfied.

Section 7. Maintenance of Easement Areas. Within the easement areas hereby reserved or created, or shown on the Plat of the Community, or within any designated common



areas containing any component of the Surface Water Management System, no digging, excavation, depositing fill material, debris or any other material or item, or altering any water control structure, or any other construction to modify the Surface Water Management System shall be allowed, and no permanent structure may be placed or permitted to remain which may damage or interfere with the installation and maintenance of utilities or which may change the direction of flow or drainage canals in the easements, or which may obstruct or retard the flow of water through drainage channels in the easements. The surface area of each Lot upon which an easement is located shall be maintained continuously by the Owner of the Lot, except that any improvements which are the property of a public authority or utility company shall be maintained by such authority or utility company. Each Lot Owner shall maintain any drainage easement located on the Lot in the manner required by the Association and/or the Permit; provided, however, if the Lot Owners fails to maintain such easements, the Association shall have the right to enter on the Property and perform any necessary maintenance of the same, including without limitation the right to grade, sod or install improvement thereon.

Section 8. Right of Entry. The Association, through its duly authorized employees, agents or contractors, shall have the right after reasonable notice to the Owner thereof, to enter any Lot at any reasonable hour of the day to perform such maintenance, replacement or repair of the Surface Water Management System, or any other items, as may be authorized herein. In the event of any emergency which might reasonably result in damage to any Lot or the improvements located thereon, the Association shall have the right to enter any Lot as may be reasonably necessary to resolve such emergency without prior notice to the Owner thereof. Any such entrance by the Association shall not be deemed to be a trespass upon such Lot.

## ARTICLE XI

### COVENANTS FOR HOME MAINTENANCE

Section 1. Maintenance of Homes. Each Owner shall be responsible for maintaining, repairing, and replacing the Home and all other improvements situated on his Lot in a clean, sanitary, neat, safe and orderly condition, including without limitation, all obligations for structural maintenance, repair or replacement of walls, roofs, windows, window and patio screens, screened enclosures, doors, framing and casing, gutters, downspouts and skylights, and maintenance, repair and replacement of mailboxes, if any, and any air-conditioning or water softening fixtures or equipment, or any equipment, facilities or other items whatsoever installed within or placed upon any Lot by any Owner, including its agents, or other designees, and/or any other maintenance obligations designated as the Owners' responsibilities from time to time in the Declaration or the Rules. It will also be the duty of each Owner to maintain in good repair any driveway servicing only his or her Lot. The Owner shall obtain the written consent of the Association prior to making any modifications requiring approval under Article VIII hereof. If any Owner breaches these covenants, the Association may enforce these covenants in accordance with the provisions of this Declaration.

Section 2. Lawn Maintenance. Unless otherwise provided, it shall be the duty of each Owner to perform regular and routine lawn maintenance as well as regularly cut the grass located on the Owner's Lot at the Owners' expense. In addition, the Owner shall be responsible for mowing any grass located between a Lot boundary line and the top of the slope of any lake

bank and between the front Lot boundary line and the top of curb of the street. The Owner shall promptly replace any grass that has died or otherwise requires replacement. In the event an Owner fails to adequately maintain the lawn, cut the grass on the Owner's Lot or replace dead grass, after reasonable notice and the opportunity to do the required maintenance, the Association shall have the right to enter upon the Lot and perform necessary lawn maintenance or cut the grass. The Association is hereby granted an easement over and across the Owner's Lot for the purpose of maintaining and cutting the grass, if necessary, and the Owner shall not place any obstruction, fence, wall, tree or shrubbery on such ground without the consent of the Association. The Owner shall be responsible for all costs incurred by the Association in maintaining the lawn and landscaping on the Owner's Lot and shall promptly reimburse the Association within ten (10) days after receipt of an invoice from the Association for such maintenance. All such costs shall be deemed an Individual Assessment on such Lot.

Section 3. Irrigation. It shall be the duty of the Association to maintain the irrigation system for the Community Common Areas and within any landscape easements or buffers which are the Association's responsibility at the Association's expense. The cost of maintenance of such portion of the irrigation system shall be assumed by the Association for the benefit of the entire Property and such costs shall be considered with the budget as part of grounds maintenance charged as a Common Expense. It shall be the duty of each Owner to maintain all irrigation lines, sprinkler heads, timers and all related irrigation equipment located on and servicing a Lot and, if applicable, located between the front Lot boundary and the top of the curb of the adjacent road at the Owners' expense. The Association is hereby granted an easement over and across each Owner's Lot for the purpose of installing the irrigation system. No Lot Owner shall place any obstruction, fence, wall tree, or shrubbery over the irrigation system without the consent of the Association. Each Owner shall also be responsible for payment of any costs related to the repair and/or replacement to the irrigation system necessary as a result of any damage done to the irrigation system by the Owner any member of Owner's family, any guests, invitees, tenants, contractors, workers or agents of Owner, whether on the Owner's Lot, the Common Area, or within a landscape easement or buffer. Each Owner acknowledges that irrigation water will be provided by the Owner's potable water source at the expense of the Owner. Due to water quality and equipment, irrigation systems may cause staining on Homes and other improvements, structures or paved areas and it shall be each Owners' responsibility to treat and remove any such staining at the Owner's expense. The Owner shall be responsible for all costs incurred by the Association in maintaining the irrigation system on the Owner's Lot (excepting any portion within a dedicated landscape easement or buffer) and shall promptly reimburse the Association within ten (10) days after receipt of an invoice from the Association for such maintenance. All such costs shall be deemed an Individual Assessment on such Lot. Further, the Owner shall not place any obstruction, fence, wall, tree or shrubbery over the irrigation system without the written consent of the Association. The Association may provide Owners with a watering schedule for the Lots in the Association's sole discretion. In the event water from irrigation systems on the watering schedule is insufficient to maintain lawns or landscaping on Lots, Owners shall supplement irrigation watering or hand water. Notwithstanding the foregoing, if for any reason the grass or landscaping on a Lot dies, the Owner shall promptly replace the same at the Owner's sole expense.

Section 4. Landscaping. The Association shall only be responsible for the maintenance of landscaping within any landscape easement or buffer or landscaping originally installed by the Declarant, Builders or the Association to comply with governmental requirements. Such maintenance shall include routine trimming of hedges only, weeding of plant beds and pruning of the landscaping and the cost of such maintenance shall be considered with the budget as a Common Expense and paid through Assessments. Each Owner shall be solely responsible for all other maintenance of other landscaping (such as trees), any landscaping not required to be maintained by the Association or landscaping installed on the Lot for aesthetics or by the Owner. The Association is hereby granted an easement over and across an Owner's Lot for the purpose of maintaining any landscaping in accordance herewith. Owners hereby acknowledge some landscape material on the Property and within any landscape easement is intended to fulfill required landscape buffers of adjacent properties. Owners shall not cut or remove any landscape materials on landscape easements installed by the Declarant or the Association required to remain pursuant to a permit or other governmental regulation. Any Owner violating the restrictions of this section resulting in landscaping needing to be repaired or replaced will be charged the cost of such work. Notwithstanding the foregoing, the Association shall not be responsible for replacing dead or dying landscaping or trees, which shall be the Owner's obligation at the Owner's sole expense.

Section 5. Insurance. Each Owner of a Lot shall obtain insurance coverage upon the Lot insuring the Home and any improvements located thereon in an amount equal to the maximum insurable replacement value. Such coverage shall afford protection against (i) loss or damage by fire, hurricane, tornado, wind-storm, or other hazards covered by a standard extended coverage endorsement, and (ii) such other risks as from time to time shall be customarily covered with respect to similar construction, location and use as the Home including but not limited to vandalism and malicious mischief. Such coverage shall name the Association as an additional insured party. The Owner shall furnish proof of insurance to the Association at the time of purchase of a Lot and shall furnish proof of renewal of such insurance on the anniversary date thereof. In addition, any Owner owning or keeping a pet on a Lot shall also obtain and maintain adequate homeowners' insurance to cover pet liability, naming the Association as an additional insured.

Section 6. Exterior Painting and Pressure Cleaning. Each Owner shall be responsible for exterior painting and pressure cleaning of the Home and improvements thereon as required by the Association in accordance with this section. It is anticipated that the Association shall require all Homes to be painted every five to seven years, provided exceptions may be granted based on circumstances to be determined by the Board. In addition, it is anticipated that the Association shall require the roof, exterior walls, sidewalks, patios and driveways of all Homes to be pressured washed every three years. The Board of Directors shall convene a duly noticed meeting to determine when the uniform exterior painting and pressuring washing shall be required for all Homes in the Community and each Owner shall have at least 120 days to commence the work after the Association provides written notification of required painting or cleaning. Each Owner shall have the right to paint or clean more frequently than required by the Association, provided that prior written approval of paint color is obtained from the Board of Directors. Notwithstanding the foregoing, by majority vote of the Members at a duly notice meeting, the Association may enter into a contract for painting or pressuring washing of all

Homes in the Community and charge each Owner its equal share of the cost thereof as a Special Assessment. If any Owner fails or refuses to paint or pressure wash its Home or other improvements as required herein, the Association may perform the work and charge the Owner the cost thereof as an Individual Assessment.

## ARTICLE XII

### COVENANTS RELATING TO FIRST MORTGAGEES

Section 1. The following actions will require the prior written approval of two-thirds (2/3) of the holders of record of Institutional First Mortgages on Lots within the Property, (based upon one (1) vote for each Institutional First Mortgage holder): the abandonment, partition, subdivision, encumbrance, sale or transfer of the Common Area by the Association, other than the granting of easements for public utilities or for other public purposes consistent with the intended use of the Common Area; a material change in the method of determining the assessments or other charges that may be levied against an Owner; the failure of the Association to maintain fire and extended coverage on any insurable improvements hereafter on the Common Area and any insurable improvements thereon in an amount that shall not be less than one hundred (100%) percent of the insurable value, based on the current replacement costs; the use of the insurance proceeds paid to the Association for any loss to the Common Area, or the improvements thereon, for any purpose other than the repair, replacement or reconstruction of the Common Area and the improvements thereon; the amendment of the Declaration in any manner which materially affects or impairs the rights of an Institutional First Mortgagee; the conveyance, encumbrance or hypothecation in any manner of the Common Area.

Section 2. An Institutional First Mortgage encumbering any Lot in the Property may singly or jointly with other Institutional First Mortgagees: pay the taxes or other charges which are in default and which may or have become a charge against the Common Area; pay overdue premiums on hazard insurance policies for the Common Area; or secure new hazard insurance coverage for the Common Area after lapse of the existing coverage. In the event any Institutional First Mortgagee makes any of the aforementioned payments, such Institutional First Mortgagee shall be entitled to immediate reimbursement from the Association for the payments advanced, and such Mortgagee shall be subrogated to the assessment and lien rights of the Association against the Owners for the repayment of such advance, and the expense of making such reimbursement to the Institutional First Mortgagee shall be deemed a common expense of the Association.

Section 3. No provision of this Declaration shall be interpreted to give an Owner, or any other party, priority over the rights of any Institutional First Mortgagee pursuant to the terms of its Mortgage on any Lot on the Property in the event of a distribution to such Owner of insurance proceeds or condemnation awards for losses to or a taking of the Common Area.

Section 4. Any Institutional First Mortgagee of a Lot on the Property who obtains title to a Lot pursuant to the remedies provided in said Mortgagee's Institutional First Mortgage on that Lot, or obtains title by deed in lieu of foreclosure, shall not be jointly and severally liable with the prior owner for unpaid assessment or charges accrued against said Lot prior to the acquisition of title to said Lot by such Mortgagee; however, such Mortgagee, or its successors or



assigns as a subsequent holder of the first mortgage, acquiring title to a Lot by foreclosure or by deed in lieu of foreclosure, shall be liable for the unpaid Assessments that became due before the mortgagee's acquisition of title in the amount equal to the lesser of (i) the Lot's unpaid Assessments and Special Assessments that accrued or came due during the 12 months immediately preceding the acquisition of title and for which payment in full has not been received by the Association; or (ii) one percent of the original mortgage debt on the Lot. The limitations on Assessment liability for Institutional First Mortgagees obtaining title through foreclosure provided by this paragraph apply only if the Institutional First Mortgagee filed suit against the Owner and initially joined the Association as a defendant in the mortgagee foreclosure action. Joinder of the Association is not required if, on the date the complaint is filed, the Association was dissolved or did not maintain an office or agent for service of process at a location that was known to or reasonably discoverable. Institutional First Mortgagees shall be responsible for all Assessments on the Lot as of the date of acquisition, including any Special Assessment or Individual Assessment assessed or coming due after the date of acquisition of title to the Lot.

Section 5. The Institutional First Mortgagee of any Lot on the Property is entitled, upon request, to written notification from the Association of any default in the performance by the Owner of any of such Owner's obligations pursuant to the terms of this Declaration, which default is not cured after sixty (60) days notice to such Owner.

Section 6. Any Institutional First Mortgagee who acquires title to any portion of the Property by way of foreclosure, deed in lieu of foreclosure, or otherwise, shall be entitled to any exemption from the restrictions on sales and leasing of Homes and Lots to the same extent that Declarant would be exempt from such restrictions.

## ARTICLE XIII

### LEASE AND OCCUPANCY RESTRICTIONS

Section 1. Leases. All leases shall be in writing and a copy of such lease shall be reviewed by the Association prior to the effective date of the lease. The lease shall provide that the Association shall have the right to terminate the lease in the name of and as agent for the lessor upon default by tenant in observing any of the provisions of the Declaration, the Articles of Incorporation, Bylaws of the Association and applicable rules and regulations, if any. The Owner or lessee requesting the review shall pay to the Association or its management agent a fee of One Hundred and No/100 (\$100.00) Dollars or the maximum amount permitted by the Florida Statutes, to cover the costs of reviewing the lease and examining records. No lease shall be approved for a term of less than seven (7) months. No Home may be leased more than two (2) times in any calendar year unless otherwise approved by Association in the case of hardship. The prior written review of the Association for a lease shall not apply to Lots and/or Homes acquired by an Institutional Mortgagee who has acquired title to the Lot and/or Home through foreclosure or deed in lieu of foreclosure. The Owner will be jointly and severally liable with the tenant to the Association for any sum which is required by the Association to affect such repairs or to pay any claim for injury or damage to property caused by the negligence of the tenant. The Board of Directors may by a majority vote establish a requirement that a sum of money not to exceed One Thousand and No/100 (\$1,000.00) Dollars or one month's rent, whichever is greater,

be deposited in escrow with the Association as a security deposit for the purpose of covering the cost of any damage to the Common Area or other portions of the Property resulting from acts or omissions of tenants (as determined in the sole discretion of the Association). The number of occupants must comply with applicable Federal Law and local codes regarding the size of the Home. The tenant, as part of the Lease Agreement, shall agree to abide by and adhere to the terms and conditions of this Declaration together with all Rules and all policies adopted by Association. By acceptance of a deed to a Home, the Owner hereby agrees to remove, at the Owner's sole expense, by legal means including eviction, his or her tenant should the tenant refuse or fail to abide by and adhere to this Declaration, the Rules and Regulations and any other policies adopted by Association. Notwithstanding the foregoing, should an Owner fail to perform his or her obligations under this Section, the Association shall have the right, but not the obligation, to evict such tenant and the costs of the same shall be charged to the Owner as an Individual Assessment. During such time as a Home is leased, the Owner of such Home shall not enjoy the use privileges of the Common Areas appurtenant to such Home. If a Lot or Home is occupied by a tenant and the Owner is delinquent in paying any monetary obligation due to the Association, the Association may demand that the tenant pay to the Association all rental payments becoming due and continue to make such payments until all the monetary obligations of the Owner related to the Lot have been paid in full and the Association releases the tenant or until the tenant discontinues tenancy, in accordance with the terms of Florida law.

## ARTICLE XIV

### WATER MANAGEMENT SYSTEMS

Section 1. Transfer of Surface Water Management System. The Association shall exist in perpetuity. However, should the Association dissolve, the Surface Water Management System, property containing the Surface Water Management System and water management portions of Common Area shall be conveyed to one of the following: (i) local governing unit, municipal service taxing unit or special taxing unit, (ii) active water control district created pursuant to Chapter 298, Florida Statutes, drainage district created by special act, special district defined in Chapter 189, Florida Statutes, community development district created pursuant to Chapter 190, Florida Statutes, special assessment district created pursuant to Chapter 170, Florida Statutes, or water management district created pursuant to Chapter 373, Florida Statutes, (iii) state or federal agency, (iv) duly constituted communication, water, sewer, stormwater, electrical or other public utility, (v) construction permittee so long as such construction permittee continues to own the Surface Water Management System and water management portions of Common Area, or (vi) non-profits corporation, including homeowner's association, property owners' association, condominium owners' or master association so long as it submits the required paperwork and has the financial, legal and administrative capability to provide for the long term operation and maintenance of the Surface Water Management System (each an **"Approved Entity"**). The Approved Entity must have the powers listed in Section 12.3.4(b)1. through 8. of the WMD Applicant Handbook Volume 1 effective June 1, 2018 (the **"WMD Handbook"**), the covenants and restrictions required in Section 12.3.4(c)1. through 9. of the WMD Handbook, and the ability to accept responsibility for the operation and maintenance of the system described in Section 12.3.4(d)1. or 2. of the WMD Handbook, all as the same may be amended or renumbered from time to time.

Section 2. Amendments Pertaining to Surface Water and Stormwater Management System. Any amendment of this Declaration which would affect the Surface Water and Stormwater Management System or the responsibility of the Association, or its agents, to maintain, or cause to be maintained, the Surface Water and Stormwater Management System must be approved by the Association and WMD for a determination of whether the amendment necessitates a modification of the Permit. The amendment may not be finalized until any necessary Permit modification is approved.

Section 3. Surface Water Management. No Owner or any other person or entity other than Declarant shall do anything to adversely affect the surface water management and drainage of the Property, including the Surface Water Management System, without the prior written approval of the Association and any controlling governmental authority, including but not limited to the excavation or filling in of any lake or canal, or the changing of the elevation of any portion of the Property, provided the foregoing shall not be deemed to prohibit or restrict the initial construction of improvements upon the Property by Declarant or by the developer of any portion of the Property in accordance with permits issued by controlling governmental authorities. In particular, no Owner other than Declarant or the Association, shall install any landscaping, place any fill on a Lot, remove or cut littoral plantings or native vegetation, spray herbicide or grade portions of the Property which would adversely affect the drainage of any contiguous Lot. No construction activities may be conducted relative to any portion of the Surface Water Management System, including but not limited to digging or excavation; depositing fill, debris or any other material or item; constructing or altering any water control structure; or any other construction to modify the system as permitted without the consent of the Association or WMD. No Owner or other person or entity shall unreasonably deny or prevent access to water management areas for maintenance, repair or landscaping purposes by the Declarant, Association, the WMD, or any appropriate governmental agency that may require access. No person shall fill, dike, rip-rap, block, divert or change the water retention and drainage areas that have been or may be created without the prior written consent of the Association and WMD. No Owner may construct or maintain any building, residence, or structure, or undertake or perform any activity in the wetlands, wetland mitigation areas, buffer areas, upland conservation areas, and drainage easements described in the Permit or Plat, unless prior approval is received from the Association and WMD. If such actions are permitted by the Association and WMD, the Declarant or the Association may draw water for irrigation or other purposes from any water management area. All recreational activities, including without limitation, boating, swimming, wading or fishing, in water management areas are strictly prohibited. If the Permit requires monitoring or maintenance of the wetland mitigation areas, the Association shall allocate sufficient funds in its annual operating budget to complete such monitoring or maintenance until the WMD determines that areas are successful in accordance with the Permit.

Section 4. Conservation Areas. The Property, including the Common Areas and some Lots, may contain conservation tracts, wetland preservation areas, and upland buffers (collectively, the "Conservation Areas") subject to conservation and preservation easements for same. Conservation and preservation easements on the Property may be established or dedicated on the Plat, by a separate instrument and/or this Declaration. In addition to any additional restrictions set forth in the foregoing documents, the following activities are prohibited in the

Conservation Areas: (1) construction or placing of buildings, roads, signs, billboards or other advertising, utilities or other structures on or above the ground; (2) dumping or placing of soil or other substances or materials as landfill, or dumping or placing of trash, waste or unsightly or offensive materials; (3) removal or destruction of trees, shrubs or other vegetation, except for the removal of exotic or nuisance vegetation in accordance with a district approved maintenance plan; (4) excavation, dredging or removal of loam, peat, gravel, soil, rock or other material substance in such manner as to affect the surface; (5) surface use, except for purposes that permit the land or water easement to remain in its natural condition; (6) activities detrimental to drainage, flood control, water conservation, erosion control, soil conservation, or fish and wildlife habitat preservation, including, but not limited to, ditching, digging and fencing; (7) acts or uses detrimental to aforementioned retention of land or water easement; and (8) acts or uses which are detrimental to the preservation of any features or aspects of the conservation easements having historical or archaeological significance.

Section 5. Rights of Enforcement. The WMD, the Association, the Declarant and each Owner shall have the right to enforce, by a proceeding at law or in equity, the provisions contained in this Declaration which relate to the maintenance, operation, monitoring, repair and replacement of the Surface Water and Stormwater Management System. Notwithstanding the foregoing, the WMD has the right to take enforcement action, including a civil action for injunction and penalties, against the Association's insurance policy or Association, as applicable, to compel it to correct any outstanding problems with the Surface Water and Stormwater Management System facilities or the mitigation or conservation areas under the responsibility or control of the Association.

Section 6. WMD Permit. The Environmental Resource or Surface Water Management Permit is made a part of this Declaration and attached hereto as Exhibit "D". Copies of the Permit and any future permit actions of the WMD shall be maintained by the Registered Agent of the Association for the benefit of the Association.

## ARTICLE XV

### INSURANCE AND HAZARD LOSSES

Section 1. Authority. The Association's Board of Directors, or its duly authorized agent, shall have the authority to and shall obtain blanket all-risk insurance, if available at commercially reasonable rates, for all insurable improvements on the Common Areas. If blanket all-risk coverage is not available at commercially reasonable rates, then at a minimum an insurance policy providing fire and extended coverage shall be obtained. Insurance that shall be carried on the Common Areas and the Association Property, to the extent provided in this Article XV, shall be governed by the following provisions:

Section 2. Named Insured. All insurance policies upon the Common Areas and the Association Property shall be purchased by the Association and shall be placed in a single agency or company, if possible, licensed by the State of Florida. The named insured shall be the Association. The Association has the authority to use their discretion in obtaining the coverage listed hereinafter, as some of the requirements may be or become unobtainable, or may be cost prohibitive.



Section 3. Coverage. The Association shall use its best efforts to maintain insurance covering the following:

(a) Casualty. The Common Areas including any structures thereon, and all fixtures, installations or additions comprising that part of the Common Areas to be insured under the Association's policy(ies) and such improvements from time to time, together with all fixtures, building service equipment, personal property and supplies constituting the Common Areas or owned by the Association (collectively the "**Insured Property**"), shall be insured in an amount not less than 100% of the full insurance replacement value thereof. Such policies may contain reasonable deductible provisions as determined by the Board of Directors of the Association. Such coverage shall afford protection against:

(b) Loss or Damage by Fire and Other Hazards covered by a standard extended coverage endorsement; and

(c) Such Other Risk as from time to time are customarily covered with respect to the Common Areas and improvements similar to the Insured Property in construction, location and use, including, but not limited to, vandalism and malicious mischief.

(d) Flood Insurance. If any part of the Common Areas or Association Property is in a Special Flood Hazard Area as designated on a Flood Insurance Rate Map, the Association may maintain a master or blanket policy of flood insurance. The amount of flood insurance should be at least equal to the lesser of 100% of the insurable value of the facilities or the maximum coverage available under the appropriate National Flood Insurance Administration program.

(e) Liability Insurance. If the policy does not include "severability of interest" in its terms, a specific endorsement must be obtained to preclude the insurer's denial of an Owner's claim because of negligent acts of the Association or of other Owners.

(f) Public Liability Insurance. The Association shall obtain public liability and property damage insurance covering all of the Common Areas and the Association Property and insuring the Association and the Members as their interests appear in such amounts and providing such coverage as the Board of Directors of the Association may determine from time to time. The liability insurance shall include, but not be limited to, hired and non-owned automobile coverage.

(g) Workmen's Compensation Insurance. The Association shall obtain workmen's compensation insurance in order to meet the requirements of law, as necessary.

(h) Directors and Officers Liability Insurance. The Association shall obtain directors and officers liability insurance providing such coverage as the Board of Directors of the Association may determine from time to time.

(i) Other Insurance. The Board of Directors of the Association shall obtain such other insurance as they shall determine from time to time to be desirable.

Section 4. Subrogation Waiver. If available, the Association shall obtain policies which provide that the insurer waives its right to subrogation as to any claim against Members, the Association and their respective servants, agents and guests.

Section 5. Premiums. Premiums upon insurance policies purchased by the Association shall be paid by the Association. The cost of insurance premiums and other incidental expenses incurred by the Association in administering and carrying out any of the provisions of this Section shall be assessed against and collected from Members as part of the Annual Assessments.

Section 6. Association's Power to Compromise Claims. The Board of Directors of the Association is hereby irrevocably appointed agent for each Member and for each holder of a mortgage or other lien, for the purpose of compromising and settling all claims arising under insurance policies purchased by the Association, and to execute and deliver releases upon payment of claims.

## ARTICLE XVI

### GENERAL PROVISIONS

Section 1. Covenants Run With Land. All covenants, conditions, restrictions, reservations, easements, liens and charges contained in this Declaration shall constitute covenants running with the Property, and all grantees, devisees, or mortgagees, their heirs, personal representatives, successors and assigns, and all parties claiming by, through or under such persons, agree to be bound by the provisions of (a) this Declaration of Covenants, Restrictions, Conditions and Easements, and (b) the Articles of Incorporation and Bylaws of the Association. The Association shall be the entity responsible for the operation and maintenance of the Common Area.

Section 2. Enforcement. The Declarant or the Association shall have the right during the Development Period to enforce all restrictions, conditions, covenants, reservations, liens and charges now or hereafter imposed by the provisions of this Declaration by proceedings at law or in equity. After the Development Period, the Association or any Owner shall have the right to enforce, by proceedings at law or in equity, all restrictions, conditions, covenants, reservations, liens and charges now or hereafter imposed by the provisions of this Declaration. In any such legal or equitable proceedings to enforce any restriction, condition, covenant, reservation, lien or charge now or hereafter imposed by these covenants, the prevailing party shall be entitled to recover its reasonable attorneys' fees and costs including at all appellate levels.

Section 3. Severability. Invalidation of any one of these covenants or restrictions by judgment or court order shall not affect any other provisions which shall remain in full force and effect.

Section 4. Duration. The covenants, conditions, restrictions, reservations, easements, liens and charges provided for in this Declaration shall run with and bind the land, and shall inure to the benefit of and be enforceable by the Association, or the Owner of any Lot subject to this Declaration, their respective legal representatives, heirs, successors and assigns, for a term of

twenty-five (25) years from the date this Declaration is recorded, after which time said covenants shall be automatically extended for successive periods of ten (10) years. In the event the Association ceases to exist, except as provided in Article XIV, Section 1 herein, any Owner may petition the Circuit Court for the appointment of a Receiver to manage the affairs of the Association and all Common Area and the corresponding infrastructure will be dedicated or conveyed to a similar non-profit organization or entity to assure continued maintenance and operation.

Section 5. Amendment. So long as there is a Class B membership, Declarant reserves the right to amend this Declaration without the consent of the Owners, subject to the terms and conditions herein. Such amendments shall not require the consent of the Institutional First Mortgage Lenders and shall become effective when executed by Declarant and recorded in the Public Records of the County, Florida. After the Class B membership terminates, the covenants and restrictions of this Declaration may be amended by an affirmative vote of not less than a majority of the Owners at duly notice meeting for the purpose of voting on such amendment. Notwithstanding anything in this Declaration to the contrary, any amendment to the Declaration, Articles or Bylaws affecting any aspect of the Surface Water Management System must receive prior written approval of the WMD. Any amendments must be properly recorded in the Public Records of the County, in the State of Florida. Notwithstanding anything in the Declaration to the contrary, to the extent any amendment affects the Declarant's or the Builders' rights under the Declaration, such amendment shall require consent of the Declarant or the Builder(s) respectively. Any purported amendment without such approval shall be deemed void and of no force and effect unless subsequently approved by a written consent signed by Declarant and/or Builder(s) and recorded in the Public Records of the County.

Section 6. Remedies for Violation. In addition to all other remedies, in the sole discretion of the Board of Directors of the Association, a fine or fines may be imposed upon an Owner for failure of an Owner, his family, guests, invitees or employees, to comply with any covenant, restriction, rule or regulation, provided the following procedures are adhered to:

(a) Notice: The Association shall notify the Owner of the alleged infraction or infractions. Included in the notice shall be the date and time of a special meeting of a committee of the Association seated for the purpose of hearing such violation matters, at which time the Owner shall present reasons why a fine(s) should not be imposed. At least fourteen (14) days notice of such meeting shall be given.

(b) Hearing: The alleged non-compliance shall be presented to the committee after which the committee shall hear reasons why a fine(s) should not be imposed. A written decision of the committee shall be submitted to the Owner by not later than fifteen (15) days after the committee's meeting. The Owner shall have a right to be represented by counsel and to cross examine witnesses.

(c) Amounts: The Board of Directors (if the committee's findings are made against the Owner) may impose special assessments against the Lot owned by the Owner as follows:

(1) First non-compliance or violation which are of a continuing nature: a fine not in excess of One Hundred and No/100 (\$100.00) Dollars per day not to exceed One Thousand and No/100 (\$1,000.00) Dollars in the aggregate.

(2) Second non-compliance or violations which are of a continuing nature: a fine not in excess of One Hundred and No/100 (\$100.00) Dollars per day without a limitation on the aggregate amount of the amount due.

(d) Payment of Penalties. Fines shall be paid not later than five (5) days after notice of the imposition or assessment of the penalties.

(e) Collection of Fines. Fines shall be treated as an assessment subject to the provisions for the collection of assessments as set forth herein.

(f) Application of Proceeds. All monies received from fines shall be allocated as directed by the Board of Directors of the Association.

(g) Non-Exclusive Remedies. These fines shall not be construed to be exclusive, and shall exist in addition to all other rights and remedies to which the Association may be otherwise legally entitled; provided, however, any penalty paid by the offending Owner shall be deducted from or offset against any damages which the Association may otherwise be entitled to recover by law from such Owner.

(h) Right of Entry. In addition to the foregoing rights, whenever (a) there shall have been built within the Property any structure which is in violation of this Declaration or in the event of any damage or destruction of any of the Property or portion thereof by an Owner or any of its guests, invitees, lessees or occupants, into disrepair and/or has not been maintained as required by this Declaration and/or any Rules, or (b) any portion of the Property and/or Home owned by an Owner has fallen into disrepair and/or has not been maintained as required by this Declaration and/or any Rules, a duly authorized representative of the Association may enter upon the Property where such violation, damage or destruction exists and summarily abate, remove or correct the same at the expense of the Owner; provided, however, that the Association shall then make the necessary repairs, constructions, etc., to insure that the Property and improvements where such violation occurred is restored to the same condition in which it existed (or should have existed) prior to such violation, and any such entry, abatement, removal or restoration and construction work shall not be deemed a trespass. All amounts expended by the Association, together with interest thereon at the rate of eighteen (18%) percent per annum from thirty (30) days after the date of notification of the violation and all costs and reasonable attorneys fees incurred by the Association shall be treated as an assessment subject to the provisions for the collection of assessments as set forth herein.

Section 7. Effect of Waiver of Violation. No waiver of a breach of or violation of any of the terms, provisions and covenants in this Declaration, or in the Articles or Bylaws, shall be construed to be a waiver of any succeeding breach or violation of the same term, provision or covenant of this Declaration, or the Articles or Bylaws.



Section 8. Instruments Governing Common Area and Owners of Lots. This Declaration and the Articles and Bylaws, and any lawful amendments thereto shall govern the Common Area and the rights, duties and responsibilities of the Owners of Lots.

Section 9. HUD/FHA, VA, FNMA Approval. If the Property is approved by the Department of Housing and Urban Development ("HUD") as a Planned Unit Development, as long as there is a Class B membership, the following actions may require the prior approval of HUD/FHA or the Veterans Administration or the Federal National Mortgage Association: Annexation of additional properties, mergers and consolidations, mortgaging of Common Area, and amendment of this Declaration of Covenants, Conditions and Restrictions affecting or modifying rights of Institutional First Mortgagees hereunder.

Section 10. Agreements for Professional Management. Any agreement for professional management, or any other contract providing for services of the Declarant may not exceed three (3) years. Any such agreement must provide for the termination by either party without cause and payment of a termination fee on sixty (60) days or less written notice.

Section 11. Disclaimer of Representations. Notwithstanding anything to the contrary herein, neither Declarant nor any Builder makes any warranties or representations whatsoever that the plans presently envisioned for the development of the Property or surrounding land can or will be carried out, or that any real property now owned or hereafter acquired by the Declarant is or will be subjected to this Declaration, or that any such real property (whether or not is have been subjected to this Declaration) is or will be committed to or developed for a particular (or any) use, or that if such real property is once used for a particular use, such use will continue in effect. While Declarant has no reason to believe that any of the restrictive covenants and other provisions contained in this Declaration are or may be invalid or unenforceable for any reason or to any extent, Declarant makes no warranty or representation as to the present or future validity or enforceability of any such restrictive covenant and other provisions. Any Owner acquiring a Lot in reliance on or more of such restrictive covenants and other provisions herein shall assume all risks of the validity and enforceability thereof and by accepting a deed to the Lot agrees to hold Declarant and any Builder harmless therefrom.

Section 12. Notice to Owners. Whenever notices are required to be given hereunder, the same shall be sent to the Owner by United States First Class Mail, postage prepaid, at the address of the Home situated upon the Lot. Such notices shall be deemed given when deposited in the United States Mail. Any Owner may change his mailing address by written notice given to the Declarant or the Association in the official records of the Florida Department of State, Division of Corporations, or the official address of the Association as it may be designated from time to time.

Section 13. Grammatical Construction. Wherever the context so requires, the use of any gender shall be deemed to include all genders, and the use of the singular shall include the plural, and the plural shall include the singular.

Section 14. Conflicts. In the event of any conflict between the provisions of this Declaration, the Articles and the Bylaws, the provisions of this Declaration, the Articles and the Bylaws shall control in that order.

Section 15. CABLE TELEVISION, INTERNET AND HOME SECURITY MONITORING SERVICES. THE ASSOCIATION IS NOT OBLIGATED TO BUT MAY ENTER TO AN AGREEMENT WITH A CABLE TELEVISION COMPANY, INTERNET SERVICE PROVIDER AND/OR SECURITY MONITORING COMPANY PURSUANT TO WHICH ALL OF THE OWNERS WILL BE PROVIDED CABLE TELEVISION AND/OR INTERNET SERVICE AND/OR HOME SECURITY MONITORING SERVICES WHICH WILL BE CHARGED AS ASSESSMENTS. THE ASSOCIATION MAY REFUSE ENTRY INTO THE PROPERTY BY ANY REPRESENTATIVE OF ANY CABLE TELEVISION COMPANY, INTERNET SERVICE PROVIDER AND/OR SECURITY MONITORING COMPANIES OTHER THAN THE CABLE TELEVISION, INTERNET SERVICE PROVIDER AND/OR SECURITY MONITORING COMPANY WHICH HAS ENTERED INTO AN AGREEMENT WITH THE ASSOCIATION. IN THE EVENT SECURITY MONITORING IS PROVIDED TO THE OWNERS BY THE ASSOCIATION, THE DECLARANT AND THE ASSOCIATION WILL HAVE NO LIABILITY OF ANY KIND OR NATURE DUE TO THE FAILURE OF THE SECURITY MONITORING COMPANY TO DETECT OR REACT TO FIRE, UNAUTHORIZED ENTRY, OR OTHER SECURITY PROBLEM IN ANY HOME.

Section 16. LIMITATION OF LIABILITY OF ASSOCIATION. NOTWITHSTANDING ANYTHING CONTAINED HEREIN OR IN THE ARTICLES OF INCORPORATION, BYLAWS, ANY RULES OR REGULATIONS OF THE ASSOCIATION OR ANY OTHER DOCUMENT GOVERNING OR BINDING THE ASSOCIATION (COLLECTIVELY, THE "ASSOCIATION DOCUMENTS"), THE ASSOCIATION SHALL NOT BE LIABLE OR RESPONSIBLE FOR, OR IN ANY MANNER BE A GUARANTOR OR INSURER OF, THE HEALTH, SAFETY OR WELFARE OF ANY OWNER, OCCUPANT OR USER OF ANY PORTION OF THE PROPERTY, INCLUDING, WITHOUT LIMITATION, RESIDENTS AND THEIR FAMILIES, GUESTS, INVITEES, AGENTS, SERVANTS, CONTRACTORS OR SUBCONTRACTORS OR FOR ANY PROPERTY OF ANY SUCH PERSONS. WITHOUT LIMITING THE GENERALITY OF THE FOREGOING:

(a) IT IS THE EXPRESS INTENT OF THE ASSOCIATION DOCUMENTS THAT THE VARIOUS PROVISIONS THEREOF WHICH ARE ENFORCEABLE BY THE ASSOCIATION AND WHICH GOVERN OR REGULATE THE USES OF THE PROPERTY HAVE BEEN WRITTEN, AND ARE TO BE INTERPRETED AND ENFORCED, FOR THE SOLE PURPOSE OF ENHANCING AND MAINTAINING THE ENJOYMENT OF THE PROPERTY AND THE VALUE THEREOF;

(b) THE ASSOCIATION IS NOT EMPOWERED, AND HAS NOT BEEN CREATED, TO ACT AS AN ENTITY WHICH ENFORCES OR ENSURES THE COMPLIANCE WITH THE LAWS OF THE UNITED STATES, STATE OF FLORIDA, THE COUNTY AND/OR ANY OTHER JURISDICTION OR THE PREVENTION OF TORTIOUS ACTIVITIES; AND

(c) ANY PROVISIONS OF THE ASSOCIATION DOCUMENTS SETTING FORTH THE USES OF ASSESSMENTS WHICH RELATE TO HEALTH, SAFETY AND/OR WELFARE SHALL BE INTERPRETED AND APPLIED ONLY AS LIMITATIONS ON THE USES OF ASSESSMENT FUNDS AND NOT AS CREATING A DUTY OF THE

ASSOCIATION TO PROTECT OR FURTHER THE HEALTH, SAFETY OR WELFARE OF ANY PERSON(S), EVEN IF ASSESSMENT FUNDS ARE CHOSEN TO BE USED FOR ANY SUCH REASON.

EACH OWNER (BY VIRTUE OF HIS ACCEPTANCE OF TITLE TO HIS HOME) AND EACH OTHER PERSON HAVING AN INTEREST IN OR LIEN UPON, OR MAKING USE OF ANY PORTION OF THE PROPERTY (BY VIRTUE OF ACCEPTING SUCH INTEREST OF MAKING SUCH USES) SHALL BE BOUND BY THIS PROVISION AND SHALL BE DEEMED TO HAVE AUTOMATICALLY WAIVED ANY AND ALL RIGHTS, CLAIMS, DEMANDS AND CAUSES OF ACTION AGAINST THE ASSOCIATION ARISING FROM OR CONNECTED WITH ANY MATTER FOR WHICH THE LIABILITY OF THE ASSOCIATION HAS BEEN DISCLAIMED IN THIS PROVISION.

AS USED IN THIS SECTION, "ASSOCIATION" SHALL INCLUDE WITHIN ITS MEANING ALL OF THE ASSOCIATION'S DIRECTORS, OFFICERS, COMMITTEE AND BOARD OF DIRECTORS MEMBERS, EMPLOYEES, AGENTS, CONTRACTORS (INCLUDING MANAGEMENT COMPANIES), SUBCONTRACTORS, SUCCESSORS AND ASSIGNS. THE PROVISIONS OF THIS ARTICLE SHALL ALSO INURE TO THE BENEFIT OF THE DECLARANT, BUILDERS AND THEIR AFFILIATES, WHICH SHALL BE FULLY PROTECTED HEREBY.

Section 17. Construction Activities. ALL OWNERS, OCCUPANTS AND USERS OF THE PROPERTY ARE HEREBY PLACED ON NOTICE THAT THE DECLARANT, BUILDERS, THE ASSOCIATION, AND ANY OF THEIR OFFICERS, DIRECTORS, COMMITTEE MEMBERS, EMPLOYEES, MANAGEMENT AGENTS, CONTRACTORS OR SUBCONTRACTORS (THE "LISTED PARTIES") WILL BE, FROM TIME TO TIME, CONDUCTING EXCAVATION, CONSTRUCTION AND OTHER ACTIVITIES WITHIN OR IN PROXIMITY TO THE PROPERTY. BY THE ACCEPTANCE OF THEIR DEED OR OTHER CONVEYANCE OR MORTGAGE, LEASEHOLD, LICENSE OR OTHER INTEREST, OR BY USING ANY PORTION OF THE PROPERTY, EACH SUCH OWNER, OCCUPANT AND USER AUTOMATICALLY ACKNOWLEDGES, STIPULATES AND AGREES (i) THAT NONE OF THE AFORESAID ACTIVITIES SHALL BE DEEMED NUISANCES OR NOXIOUS OR OFFENSIVE ACTIVITIES, HEREUNDER OR AT LAW GENERALLY, (ii) NOT TO ENTER UPON, OR ALLOW THEIR CHILDREN OR OTHER PERSONS UNDER THEIR CONTROL OR DIRECTION TO ENTER UPON (REGARDLESS OF WHETHER SUCH ENTRY IS A TRESPASS OR OTHERWISE) ANY PROPERTY WITHIN OR IN PROXIMITY TO THE PROPERTY WHERE SUCH ACTIVITY IS BEING CONDUCTED (EVEN IF NOT BEING ACTIVELY CONDUCTED AT THE TIME OF ENTRY, SUCH AS AT NIGHT OR OTHERWISE DURING NON-WORKING HOURS), (iii) THAT ENTRY GATES MAY BE OPEN DURING ANY PERIODS OF CONSTRUCTION AT ANY TIMES OR ALL TIMES IN THE SOLE DISCRETION OF THE DECLARANT OR THE ASSOCIATION (iv) THE LISTED PARTIES SHALL NOT BE LIABLE FOR ANY AND ALL LOSSES, DAMAGES (COMPENSATORY, CONSEQUENTIAL, PUNITIVE OR OTHERWISE), INJURIES OR DEATHS ARISING FROM OR RELATING TO THE AFORESAID ACTIVITIES, (v) ANY PURCHASE OR USE OF ANY PORTION OF THE PROPERTY HAS BEEN AND WILL BE MADE WITH FULL KNOWLEDGE OF THE

FOREGOING AND (vi) THIS ACKNOWLEDGMENT AND AGREEMENT IS A MATERIAL INDUCEMENT TO DECLARANT TO SELL, CONVEY, LEASE AND/OR ALLOW THE USE OF THE APPLICABLE PORTION OF THE PROPERTY.

Section 18. Notices and Disclaimers as to Water Bodies and Wildlife. THE SUBDIVISION MAY CONTAIN WATER BODIES SUCH AS LAKES, PONDS, CANALS, CREEKS, STREAMS, PRESERVES OR OTHER BODIES OF WATER IN OR IN THE VICINITY OF THE SUBDIVISION (“WATER BODIES”). SUCH WATER BODIES MAY POSE HEALTH AND SAFETY RISKS TO OWNERS, OCCUPANTS AND USERS OF THE PROPERTY IN AND AROUND THE SUBDIVISION, INCLUDING THE RISK OF DANGEROUS WILDLIFE. ALL OWNERS, OCCUPANTS AND USERS OF THE PROPERTY ARE HEREBY PLACED ON NOTICE THAT THE DECLARANT, BUILDERS, THE ASSOCIATION, AND ANY OF THEIR OFFICERS, DIRECTORS, COMMITTEE MEMBERS, EMPLOYEES, MANAGEMENT AGENTS, CONTRACTORS OR SUBCONTRACTORS (THE “LISTED PARTIES”) SHALL NOT BE LIABLE TO OWNERS, OCCUPANTS AND USERS OR RESPONSIBLE FOR MAINTAINING OR ASSURING THE SAFETY, WATER QUALITY OR WATER LEVEL OF OR IN ANY WATER BODIES. ALL OWNERS, OCCUPANTS AND USERS OF ANY PORTION OF THE PROPERTY LOCATED ADJACENT TO OR HAVING A VIEW OF ANY OF THE WATER BODIES SHALL BE DEEMED, BY VIRTUE OF THEIR ACCEPTANCE OF THE DEED TO OR USE OF SUCH PROPERTY, TO HAVE AGREED TO RELEASE THE LISTED PARTIES FROM ALL CLAIMS FOR ANY AND ALL CHANGES IN THE QUALITY AND LEVEL OF THE WATER IN SUCH WATER BODIES. FURTHER, THE LISTED PARTIES ARE NOT RESPONSIBLE FOR MAINTAINING OR ASSURING SAFETY OF ANY OWNERS, OCCUPANTS OR USERS OF WATER BODIES OR AREAS IN OR AROUND SUCH WATER BODIES. NONE OF THE LISTED PARTIES SHALL BE LIABLE FOR ANY PROPERTY DAMAGE, PERSONAL INJURY OR DEATH OCCURRING IN, OR OTHERWISE RELATED TO ANY WATER BODIES. ALL PERSONS USING OR ENJOYING WATER BODIES OR SURROUNDING AREAS OF THE WATER BODIES SHALL DO SO AT THEIR OWN RISK. ALL OWNERS, OCCUPANTS AND USERS ARE HEREBY NOTIFIED THAT FROM TIME TO TIME ALL TYPES OF WILDLIFE, INCLUDING ALLIGATORS, SNAKES, PANTHERS, BEARS AND OTHER ANIMALS, MAY LIVE, MIGRATE, CREATE HABITATS OR ENTER INTO WATER BODIES AND SURROUNDING PROPERTY AND MAY POSE A HEALTH AND SAFETY THREAT TO PERSONS, PETS AND PROPERTY, BUT THAT THE LISTED PARTIES ARE UNDER NO DUTY TO PROTECT AGAINST, AND DO NOT IN ANY MANNER WARRANT OR INSURE AGAINST, ANY DEATH, INJURY OR DAMAGE CAUSED BY SUCH WILDLIFE. NO PERSONS SHALL SWIM IN ANY WATER BODIES WITHIN THE COMMUNITY NOT SPECIFICALLY DESIGNATED FOR SWIMMING AND NO PERSONS IN THE COMMUNITY SHALL FEED ANY WILDLIFE IN OR AROUND THE COMMUNITY.



**IN WITNESS WHEREOF**, Troon Creek, LLC has executed this Declaration, this \_\_\_\_\_ day of \_\_\_\_\_, 2019.

Signed, sealed and delivered  
in the presence of:

TROON CREEK, LLC, a Florida limited  
liability company

\_\_\_\_\_  
Name: \_\_\_\_\_

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

\_\_\_\_\_  
Name: \_\_\_\_\_

STATE OF FLORIDA                    )  
  ) SS  
COUNTY OF                            )

The foregoing instruction was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, 2019, by \_\_\_\_\_, as \_\_\_\_\_, of Troon Creek, LLC, a Florida limited liability company, on behalf of the company. The foregoing person identified himself by producing \_\_\_\_\_.

My Commission Expires:

\_\_\_\_\_  
Name: \_\_\_\_\_

Notary Public, State of Florida at Large

**ASSOCIATION JOINDER**

Alachua North Community Association, Inc., a not-for-profit Florida corporation, whose mailing address is 12602 Telecom Drive, Tampa, Florida 33637, hereby approves and joins in the Declaration of Covenants, Conditions and Restrictions of Alachua North and the Exhibits attached thereto, and agrees to be bound by the terms thereof and will comply with and perform the terms and conditions of the Declaration.

**In Witness Whereof**, Alachua North Community Association, Inc. has executed this Joinder on this \_\_\_\_ day of \_\_\_\_\_, 2019.

Signed, sealed and delivered  
in the presence of:

Alachua North Community Association, Inc.

\_\_\_\_\_  
Name: \_\_\_\_\_

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_ President \_\_\_\_\_

\_\_\_\_\_  
Name: \_\_\_\_\_

**(Corporate Seal)**

STATE OF FLORIDA                    )  
  :SS.  
COUNTY OF                         )

The foregoing instruction was acknowledged before me this \_\_\_\_ day of \_\_\_\_\_, 2019, by \_\_\_\_\_, as President of Alachua North Community Association, Inc., a not-for-profit Florida corporation, on behalf of said Corporation. The foregoing person is well known to me.

\_\_\_\_\_  
Name: \_\_\_\_\_

Notary Public, State of Florida  
at Large

My Commission Expires:

## **EXHIBIT "A"**

### **PROPERTY**

The land referred to herein below is situated in the County of Alachua, State of Florida, and described as follows:

A tract of land lying in Section 8, Township 8 South, Range 18 East, Alachua County, Florida. Being more particularly described as follows:

Commencing at the Northeast corner of said Section 8; thence run S 87°18'16" W, along the North line of said section, a distance of 58.60' to the West right of way line (R/W) of County Road No. S-235-A and the Point of Beginning; thence continuing S 87°18'16" W along said North line, a distance of 2949.98' to the West line of the East half of Section 8; thence S 05°35'27" E, along said West line, a distance of 1335.81'; thence N 87°18'22" E, a distance of 1577.01'; thence N 01°47'45" W, a distance of 322.90'; thence N 87°17'33" E, a distance of 94.86'; thence N 01°47'45" W, a distance of 200.00'; thence N 87°17'33" E, a distance of 1198.28' to the West R/W of County Road No. S-235-A; thence N 01°47'45" W, along said R/W line, a distance of 368.34' to the point of curvature of a tangent curve, concave to the West, having a radius of 11409.16' and a central angle of 02°13'25"; thence Northerly along said R/W curve, a distance of 442.77' to the North line of Section 8 and the Point of Beginning.

## **-ARTICLES OF INCORPORATION**

### Article IV - Purpose(s)

Section 2. To own and maintain, repair and replace the Association Property and the Common Areas and other items, including landscaping and other improvements in and/or benefiting said Association Property and Common Areas, for which the obligation to maintain and repair has been delegated and accepted. **The City of Alachua does not insure common areas, dedicated tracts or recreational facilities associated with Briarwood.**

## **-BYLAWS**

### 5. Powers and Duties.

**(w) The City of Alachua does not insure common areas, dedicated tracts or recreational facilities associated with Briarwood.**

## **-DECLARATION OF COVENANTS, CONDITIONS, AND RESTRICTIONS**

### **ARTICLE 1**

**Section 5.** "Common Area" is the property owned by or dedicated to the Association for the common use and enjoyment of the Members and all improvements constructed thereon and such other property as determined by Declarant, in its sole and absolute discretion, which may include entrance features, street lighting, signage, mail kiosks, landscape buffers, the Surface Water Management System, and open space, which are owned by or dedicated to the Association. **The City of Alachua does not insure common areas, dedicated tracts or recreational facilities associated with Briarwood.**



## NEIGHBORHOOD MEETING

For a residential subdivision located on the west side of SR-235A north of Santa Fe High School, Alachua , Florida.

Date: Monday, July 15, 2019

Time: 5:15 P.M.

Place: City of Alachua Public Library, 14913 NW 140th St, Alachua, FL 32615

Contact: Craig Rouhier at 407-756-0058

Troon Development, LLC will be holding a meeting to discuss the submission of the Preliminary Plat for 229 residential lots to the City of Alachua, Florida, located on 74.17 acres within the RSF-4 zoning classification (Residential Single Family, 4 units/acre). This is not a public hearing. Some of the uses permitted in this district include:

*RSF-4, Residential Single-Family-4.* The RSF-4 district is established as a district in which the principal use of land is single-family residential development at a moderate density for use in areas served by water and sewer systems. The regulations of this district are intended to discourage any use that would substantially interfere with the development of single-family dwellings and that would be detrimental to the residential nature of the district. Complementary uses customarily found in residential zone districts, such as community facilities, religious institutions, parks and playgrounds, and schools are also allowed. The minimum lot area for single-family detached is 7,500 square feet and the maximum density allowed is four dwelling units an acre.

The purpose of the public meeting is to inform neighboring property owners of the nature of the proposal and to seek their comments.

# ALACHUA COUNTY TODAY

Published Weekly  
Alachua, Alachua County, FLORIDA

STATE OF FLORIDA  
COUNTY OF ALACHUA:


Before the undersigned authority personally appeared **ROBERT BOUKARI**, who on oath says that he (she) is the Manager of *Alachua County Today*, a weekly newspaper published at Alachua in Alachua County, Florida; that the attached copy of advertisement, being a Public Notice in the Matter of: **NEIGHBORHOOD MEETING**, was published in said newspaper in the issues of **June 27, 2019**.

Affiant further says that *Alachua County Today* is a newspaper published at Alachua, in said Alachua County, Florida, and that the said newspaper has heretofore been continuously published in said Alachua County, Florida, each week and has been entered as periodicals matter at the post office in Alachua, in said Alachua County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that he (she) has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

Sworn to and subscribed before me this **27th day of June, 2019** by **Robert Boukari**, who is personally known to me.



(Signature of Affiant)



(Signature of Notary Public)



**HABIB BRYAN BOUKARI**  
Commission # **GG 327028**  
Expires **May 28, 2023**  
Bonded Thru Budget Notary Service

## SHOOTING:

Continued from page A1

# Police: Neither victim nor suspect have ties to area

Hospital where he is currently listed in stable condition. incident is not related to the recent gun violence incidents.

Later Tuesday, area law enforcement agencies surrounded a home in High Springs in search of the alleged shooter, Thaddeus Surrency, age 43, of Gainesville. Investigators had located the suspect's car at the residence. It was determined after a search that Surrency was not inside the home.

At this point in the investigation, it does not appear that the victim or suspect have ties to the Alachua area, and this

This is an on-going investigation and more information will be released as it becomes available. Anyone having information regarding this incident is asked to call the Alachua Police Department at 386-462-1396 or remain anonymous by calling Alachua County Crime Stoppers at 352-372-STOP.

# # #

Email [rcarson@alachuatoday.com](mailto:rcarson@alachuatoday.com)

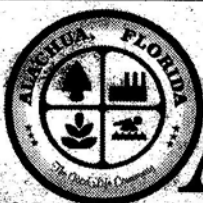
## PUBLIC NOTICE

A neighborhood meeting will be held to discuss the submission to the City of Alachua of the Preliminary Plat for 229 residential lots on 74.17 acres within the RSF-4 zoning classification (Residential Single Family, 4 units/acre) located on the west side of SR-235A north of Santa Fe High School. This is not a public hearing. The purpose of the public hearing is to inform neighboring property owners of the nature of the proposal and to seek their comments.

The meeting will be held on Monday, July 15, 2019 at 5:15 PM at the Alachua City Library 14913 NW 140th St, Alachua, FL 32615.

Contact person: Craig Rouhier  
407-756-0058

(Published: Alachua County Today - June 27, 2019)



City of  
**ALACHUA**

ort

most recent testing done in accordance

amiliar terms and abbreviations. To help provided the following definitions:

MCL: The highest level of a contaminant set as close to the MCLGs as feasible technology.

MCLG: The level of a contaminant in known or expected risk to health. MCLGs

of a contaminant which, if exceeded, that a water system must follow.

MRDL: The highest level of a there is convincing evidence that addition of microbial contaminants.

MRDLG: The level of a at there is no known or expected risk to of the use of disinfectants to control

ates that the substance was not found by

per liter (µg/l): one part by weight of the water sample.

per liter (mg/l): one part by weight of the water sample.

of the radioactivity in water.

the highest average at any of the

Likely Source of Contamination

Erosion of natural deposits

Source of Contamination

all deposits; runoff from orchards; and electronics production wastes

ling wastes; discharge from metal erosion of natural deposits

metal refineries and coal-burning ge from electrical, aerospace, and defense industries

steel and pulp mills; erosion of natural deposits

deposits; discharge from fertilizer factories. Water additive which leech when at the optimum level of 0.7 ppm

an-made pollution such as auto paint; lead pipe, casing, and solder

mining and refining operations. al occurrence in soil

fertilizer use; leaching from septic ; erosion of natural deposits

petroleum and metal refineries; deposits; discharge from mines

President  
TCMOA  
1000 Turkey Creek  
Alachua, FL 32615

Richard Gorman  
5716 NW 93rd Avenue  
Alachua, FL 32653

Peggy Arnold  
410 Turkey Creek  
Alachua, FL 32615

Tom Gorman  
9210 NW 59th Street  
Alachua, FL 32653

David Forest  
23 Turkey Creek  
Alachua, FL 32615

Dan Rhine  
288 Turkey Creek  
Alachua, FL 32615

Antoinette Endelicato  
5562 NW 93rd Avenue  
Gainesville, FL 32653

Linda Dixon, AICP  
Assistant Director Planning  
PO Box 115050  
Gainesville, FL 32611

Craig Parenteau  
FL Dept. of Environmental Protection  
4801 Camp Ranch Road  
Gainesville, FL 32641

Jeannette Hinsdale  
P.O. Box 1156  
Alachua, FL 32616

Lynn Coullias  
7406 NW 126th Ave  
Alachua, FL 32615

Lynda Coon  
7216 NW 126 Avenue  
Alachua, FL 32615

Tamara Robbins  
PO Box 2317  
Alachua, FL 32616

Michele L. Lieberman  
County Manager  
12 SE 1st Street  
Gainesville, FL 32601

Bonnie Flynn  
16801 NW 166th Drive  
Alachua, FL 32615



03024-010-009  
FORT GUERIAN & PHYLLIS  
17818 NW 175TH AVE  
ALACHUA, FL 32615-4763

03024-010-017  
KUNKEL HARRY R  
14416 NW 148TH PL  
ALACHUA, FL 32616

03024-010-030  
JONES RONNIE R JR  
17499 NW 175TH AVE  
ALACHUA, FL 32615

03024-030-006  
TAUBEL BRIAN & NICOLE  
17500 NW 175TH AVE  
ALACHUA, FL 32615

03024-010-003  
ASCENCIOS & HARRIS  
17582 NW 175TH AVE  
ALACHUA, FL 32615

03047-001-003  
JEFFORDS LILLIE BELLE LIFE ESTATE  
608 PARHAM RD NW  
MILLEDGEVILLE, GA 31061

03024-000-000  
JEFFORDS LILLIE BELLE TRUSTEE  
608 PARHAM RD NW  
MILLEDGEVILLE, GA 31061

03044-011-002  
GOLDEN POND FARMS INC  
PO BOX 357133  
GAINESVILLE, FL 32635

03024-010-028  
NIPPER & NIPPER  
17581 NW 175TH AVE  
ALACHUA, FL 32615

03024-010-006  
GRAY DEVLYN D & LISA M  
17710 NW 175TH AVE  
ALACHUA, FL 32615-4763

03024-010-012  
EXLEY & WARRINGTON  
17958 NW 175TH AVE  
ALACHUA, FL 32615

03044-010-002  
FLORIDA TIMBER CO  
PO BOX 357133  
GAINESVILLE, FL 32635-7133

03024-040-003  
BURGETT & BURGETT & FRIANT  
17413 NW 175TH AVE  
ALACHUA, FL 32615

03024-010-016  
LOFTHOUSE PHILIP & CARLA RAE  
17502 NW 181ST ST  
ALACHUA, FL 32615

03024-010-007  
BLALOCK & RINGERSEN  
17750 NW 175TH AVE  
ALACHUA, FL 32615

03044-011-003  
GOLDEN POND FARMS INC  
PO BOX 357133  
GAINESVILLE, FL 32635

03024-010-027  
COLDICOTT BRIAN T & JUDITH K  
17625 NW 175TH AVE  
ALACHUA, FL 32615

03024-010-029  
DAVIS LINDA L  
17541 NW 175TH AVE  
ALACHUA, FL 32615-4763

03024-010-011  
LOWNEY DAVID  
17918 NW 175TH AVE  
ALACHUA, FL 32615-5191

03024-010-005  
MACHIN ARIEL F & BARBARA M  
17666 NW 175TH AVE  
ALACHUA, FL 32615-4763

03024-010-020  
ROBERTS & ROBERTS TRUSTEES  
17917 NW 175TH AVE  
ALACHUA, FL 32615-4763

03024-010-022  
MORRIS JR & MORRIS  
17875 NW 175TH AVE  
ALACHUA, FL 32615-4763

03044-010-005  
SMYDER CHARLES R SR TRUSTEE  
PO BOX 852  
ALACHUA, FL 32616-0852

03024-010-013  
MENADIER WILLIAM & MELANIE  
17579 NW 181ST ST  
ALACHUA, FL 32615

03044-010-003  
GOLDEN POND FARMS INC  
PO BOX 357133  
GAINESVILLE, FL 32635

03024-010-018  
PELLETIER & PELLETIER  
17991 NW 175TH AVE  
ALACHUA, FL 32615-5192

03024-010-026  
BOUKARI BEN H & ELLEN B  
17665 NW 175TH AVE  
ALACHUA, FL 32615

03045-000-000  
MONAGHAN & SCHENCK TRUSTEES  
608 PARHAM RD NW  
MILLEDGEVILLE, GA 31061-6201

03024-010-024  
DEAN & WILLEMS  
17749 NW 175TH AVE  
ALACHUA, FL 32615

03024-010-010  
MURPHY GERARD & PISAMAI LIFE ESTATE  
17876 NW 175TH AVE  
ALACHUA, FL 32615-4763

03024-010-008  
GONZALEZ & RIOS H/W  
17794 NW 175TH AVE  
ALACHUA, FL 32615

03024-010-021  
MORRIS JR & MORRIS  
17875 NW 175TH AVE  
ALACHUA, FL 32615

03024-040-004  
CULP JAMES BRYSON  
17459 NW 175TH AVE  
ALACHUA, FL 32615

03044-011-001  
GOLDEN POND FARMS INC  
PO BOX 357133  
GAINESVILLE, FL 32635

03024-010-002  
INGO FRANK G SR & BARBARA H  
17542 NW 175TH AVE  
ALACHUA, FL 32615-4763

03024-010-004  
BUCHANAN THOMAS E & CAROL M  
17626 NW 175TH AVE  
ALACHUA, FL 32615-4763

03024-010-019  
BRINKLEY MATTHEW & LENA  
17957 NW 175TH AVE  
ALACHUA, FL 32615

03048-002-000  
JEFFORDS LILLIE BELLE TRUSTEE  
608 PARHAM RD NW  
MILLEDGEVILLE, GA 31061

03024-010-023  
ENFINGER MARK JAMES & LORETTA ANN  
17793 NW 175TH AVE  
ALACHUA, FL 32615-4763

03044-010-004  
SMYDER TOYO A  
PO BOX 1067  
HIGH SPRINGS, FL 32655-1067

03024-010-014  
DOUGLAS JASON D  
17598 NW 181ST ST  
ALACHUA, FL 32615

03024-010-025  
OSBORNE JIMMIE LEE JR & LEIGH C  
17709 NW 175TH AVE  
ALACHUA, FL 32615-4763

03024-040-003  
BURGETT & BURGETT & FRIANT  
17413 NW 175TH AVE  
ALACHUA, FL 32615

03024-030-010  
MILLER ANDREA E  
PO BOX 26  
HARTFORD, AL 36344-0026

03024-040-002  
BONDS DARRYL ARTHUR & JEANETTE MARIE  
17357 NW 175TH AVE  
ALACHUA, FL 32615-4774

03044-011-003  
GOLDEN POND FARMS INC  
PO BOX 357133  
GAINESVILLE, FL 32635

03024-040-004  
CULP JAMES BRYSON  
17459 NW 175TH AVE  
ALACHUA, FL 32615

03024-030-006  
TAUBEL BRIAN & NICOLE  
17500 NW 175TH AVE  
ALACHUA, FL 32615

03024-030-007  
LEVERETT JOSEPH & C KIM  
17452 NW 175TH AVE  
ALACHUA, FL 32615

03021-000-000  
BURNS JOHN A  
16583 NW 178TH AVE  
ALACHUA, FL 32615

03044-010-003  
GOLDEN POND FARMS INC  
PO BOX 357133  
GAINESVILLE, FL 32635

03024-030-008  
ROBERTSON ANEDRA M LIFE ESTATE  
17400 NW 175TH AVE  
ALACHUA, FL 32615

03044-011-001  
GOLDEN POND FARMS INC  
PO BOX 357133  
GAINESVILLE, FL 32635

03024-010-030  
JONES RONNIE R JR  
17499 NW 175TH AVE  
ALACHUA, FL 32615

03024-010-027  
COLDICOTT BRIAN T & JUDITH K  
17625 NW 175TH AVE  
ALACHUA, FL 32615

03049-001-008  
HOLLAND CHARLES TIMOTHY & ROBIN B  
17289 COUNTY RD 235A  
ALACHUA, FL 32615

03024-010-016  
LOFTHOUSE PHILIP & CARLA RAE  
17502 NW 181ST ST  
ALACHUA, FL 32615

03024-010-003  
ASCENCIOS & HARRIS  
17582 NW 175TH AVE  
ALACHUA, FL 32615

03024-010-002  
INGO FRANK G SR & BARBARA H  
17542 NW 175TH AVE  
ALACHUA, FL 32615-4763

03024-030-009  
FANNIN & TRAUTZ  
17352 NW 175TH AVE  
ALACHUA, FL 32615

03049-001-009  
CHERRY JACK M & FRANCES  
PO BOX 2048  
ALACHUA, FL 32616-2048

03044-011-002  
GOLDEN POND FARMS INC  
PO BOX 357133  
GAINESVILLE, FL 32635

03024-010-029  
DAVIS LINDA L  
17541 NW 175TH AVE  
ALACHUA, FL 32615-4763

03024-010-028  
NIPPER & NIPPER  
17581 NW 175TH AVE  
ALACHUA, FL 32615

03044-011-003  
GOLDEN POND FARMS INC  
PO BOX 357133  
GAINESVILLE, FL 32635

03044-010-003  
GOLDEN POND FARMS INC  
PO BOX 357133  
GAINESVILLE, FL 32635

03044-011-001  
GOLDEN POND FARMS INC  
PO BOX 357133  
GAINESVILLE, FL 32635

03044-010-004  
SMYDER TOYO A  
PO BOX 1067  
HIGH SPRINGS, FL 32655-1067

03044-010-005  
SMYDER CHARLES R SR TRUSTEE  
PO BOX 852  
ALACHUA, FL 32616-0852

03049-001-009  
CHERRY JACK M & FRANCES  
PO BOX 2048  
ALACHUA, FL 32616-2048

03049-001-007  
DAY TIMOTHY IAN & JOLI  
440 SW 18TH CT  
POMPANO BEACH, FL 33060-9036

03048-001-000  
THOMAS LEN M  
PO BOX 163  
ALACHUA, FL 32616-0163

03049-001-008  
HOLLAND CHARLES TIMOTHY & ROBIN B  
17289 COUNTY RD 235A  
ALACHUA, FL 32615

03044-011-002  
GOLDEN POND FARMS INC  
PO BOX 357133  
GAINESVILLE, FL 32635



**Briarwood Neighborhood Meeting**

Monday July 15, 2019 starting at 5:01 pm

Alachua County Public Library - Alachua Florida

**Sign In Sheet**

	Name - Please print legibly	Address	Email Address	Phone Number
1	GERARD MURPHY	17876 NW 175 AVE		386 418 3722
2	Linda Davis	17541 NW 175 AVE		386-418-8344
3	Charlotte Bungett	17413 N.W. 175 Ave		205-471-9727
4	Darryl Bonds	17357 NW 175 Ave		561-482-1483
5	Jean Bonds	"		
6	Bryan Boukari	17665 NW 175 Ave		
7	Ellen Boukari	17665 NW 175th Ave,		
8	Jeni Warrington	17958 NW 175 Ave		
9	Sandra Roberts	17917 NW 175 Ave		
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

## Meeting Notes

From: Applicant, Troon Development, LLC, Craig Rouhier, Sr., Managing Member

To: City of Alachua

Date: Monday July 15, 2019

Subj: Neighborhood Meeting – “Briarwood Subdivision”

---

1. The meeting was called to order at 5:01 pm at the Alachua County Public Library, Alachua Florida. The meeting ended at 6:00 pm.
2. David Glunt, Spruce Creek Engineering, introduced himself as the design civil engineer on the Briarwood project.
3. We circulated a sign in sheet for all the interested neighbors that were notified within 400 ft. of the project.
4. Mr. Glunt presented a Power Point presentation that covered the “Low Impact Development” (LID) benefits that the Briarwood subdivision would create as well as creating better buffer areas on all sides of adjoining property owners as opposed to traditional, non-LID style development. Specific items discussed were combining linear stormwater retention areas utilizing a variety of plantings at the base of the stormwater areas to increase permeability, coupled with internal walking paths / open space areas. Preserving natural grades as opposed to moving great quantities of dirt and disturbing natural habitat areas to create large stormwater retention ponds. We noted that all stormwater and open space tracts would be owned and maintained by the HOA.
5. At the end of the Power Point presentation Mr. Glunt addressed questions from the attendees.
6. Questions:
  - What will the development do to the condition of the existing pavement on CR-235A?  
Ans: CR-235A is a County Road. We’ve done a traffic study that shows that there is sufficient capacity on CR-235A to handle all 229 lots. We will construct a left turn lane into the subdivision for the first phase and during a future phase, may be required to construct a right turn lane into the project.
  - Will development of the subdivision cause flooding to the neighbors to the north?  
Ans: No, actually we will be improving the drainage of the property owners to the north because we will be constructing a linear retention area along the northern boundary that will be capturing some of the current runoff from our property as it exists today, pre-development.

-Would we erect a PVC fence along the border of the property to the north?

Ans: We would be willing to entertain PVC fence along the northern boundary; however, a number of the neighbors to the north did NOT want a fence constructed and were happy with the natural vegetation that exists today, buffering both properties. Only one person voiced a desire for some sort of fence, specifically along his property line

-Would we develop the lots on the northern boundary to match the lots in the subdivision to the north?

Ans: The subject property is currently zoned RFS-4 (4 units per acre, 7500 sq. ft per lot). The underlying comprehensive plan allows 4 units per acre. The layout is in compliance with the existing zoning classification and lot sizes in the City of Alachua. We are adding an *additional 10 feet (20% increase)* of buffer from the 40-foot buffer previously approved for the Benton Hills Preliminary Plat, along with additional landscape plantings along the northern boundary.

-Who's maintaining the stormwater tracts?

Ans: The Homeowners' Association

-What will the Briarwood subdivision do to the water pressure in the surrounding area?

Ans: Based on the existing water pressures phase 1 will have no effect. The City is in the process of upgrading water and sewer along US-441 and going north on CR-235A.

-When will the actual development start?

Ans: Late spring / early summer 2020.

-What are the prices of the homes in Briarwood going to be?

Ans: We're the developer building the subdivision, i.e., sewer, water, streets, entry monuments, landscaping etc. ... we're not the homebuilder that will be building the homes. An estimate would be the mid \$200K to the low \$300k's.

-If the Briarwood lots are smaller than the Hidden Hills subdivision to the north, that means that the prices of the homes built in Briarwood will be inexpensive and we don't want those people wondering from their backyards up and into our backyards (Meadowglen).

Ans: We will be constructing a 50-foot buffer and stormwater tract, owned and maintained by the HOA with landscaping and a retention pond with plantings that will separate the backyards. In addition, we can provide data on many subdivisions with lot sizes similar in overall square footage as Briarwood where the smaller lot size does NOT equate to inexpensive homes. So, are you

equating the developed lots in Briarwood to inexpensive homes, which means you don't want that prospective home buyer to live in Briarwood? No response.

Per the City of Alachua LDR, there is no required buffer separating residential properties. If the proposed 50-foot buffer and stormwater tract was eliminated, the rear building setback is 15 feet from the adjacent property line. With the rear buffer and stormwater tract, the minimum building setback is 65 feet from the Meadowglen Subdivision. Additionally, if the tract was removed and the lot lines were extended, the lot size would increase to 10,751 SF or ¼ acre in size. We feel that the buffer and stormwater tract provides adequate separation from existing structure to proposed structure to make a reasonable transition in lot sizes.

7. At the Staff meeting prior to the neighborhood meeting, we told staff that our long range vision is to add a 4<sup>th</sup> and 5<sup>th</sup> phase to the south going to US-441 with commercial outparcels that would create a "Tioga Town Center" style environment in the City of Alachua where people can live-work-play.



# City of Alachua

## PUBLIC SCHOOL STUDENT GENERATION CALCULATION FORM

PROJECT #

APPLICATION DATE

NAME & DESCRIPTION OF PROJECT

PROJECT ADDRESS (Contact 911 Addressing @ 352.338.7361)

Tax Parcel Numbers

Acreage

DEVELOPMENT DATA (check all that apply)

Single Family

Multi Family

Exempt (See exemptions on page 2)

Number of Units

Number of Units

Level of Review

Pre-Application Conference

Preliminary

Final

Revised

Staff Administrative Review

*A determination that there is adequate school capacity for a specific project will satisfy requirements for review for school concurrency for the periods of time consistent with the Interlocal Agreement and specified in local government land development regulations; an agreement by the School Board with the developer and local government is required to extend the period for approvals for phased projects beyond the generally applicable time period*

### EXPLANATION OF STUDENT GENERATION CALCULATION

Student Generation is calculated based on the type of residential development and the type of schools. The number of student stations (by school type - Elementary, Middle and High School) used for calculating the school concurrency impacts is equal to the number of dwelling units by housing type multiplied by the student generation multiplier (for housing type & school type) established by the School Board. Calculations are rounded to the nearest whole number. Student Generation for each school type is calculated individually to assess the impact on the **School Concurrency Service Area (SCSA)** for each school type (Elementary, Middle and High School).

### SCHOOL CONCURRENCY SERVICE AREAS (SCSA) FOR PROJECT LOCATION

Based on the project location, please identify the corresponding School Concurrency Service Areas for each school type. Maps of the SCSAs may be viewed on the Alachua County Public Schools website.

### SCHOOL CONCURRENCY SERVICE AREAS (SCSA)

Elementary

Middle

High

## SINGLE FAMILY RESIDENTIAL DEVELOPMENT STUDENT GENERATION CALCULATIONS

ELEMENTARY	units X 0.14 Elementary School Multiplier	Student Stations
MIDDLE	units X 0.06 Middle School Multiplier	Student Stations
HIGH	units X 0.08 High School Multiplier	Student Stations

## MULTI FAMILY RESIDENTIAL DEVELOPMENT STUDENT GENERATION CALCULATIONS

ELEMENTARY	units X 0.09 Elementary School Multiplier	Student Stations
MIDDLE	units X 0.03 Middle School Multiplier	Student Stations
HIGH	units X 0.03 High School Multiplier	Student Stations

Source: School Board of Alachua County 2015 Student Generation Multiplier Analysis

## EXEMPT DEVELOPMENTS (click all that apply)

*Existing legal lots eligible for a building permit*

*Development that includes residential uses that has received final development plan approval prior to the effective date for public school concurrency, or has received development plan approval prior to June 24, 2008, provided the development approval has not expired*

*Amendments to final development orders for residential development approved prior to the effective date for public school concurrency, and which do not increase the number of students generated by the development*

*Age-restricted developments that prohibit permanent occupancy by persons of school age, provided this condition is satisfied in accordance with the standards of the Public School Facilities Element or the ILA*

*Group quarters that do not generate public school students, as described in the ILA*

### AUTHORIZED AGENT

Name:

Mailing Address:

Phone:

Email:

### PROPERTY OWNER

Name:

Mailing Address

Phone:

Email

## CERTIFICATION

**PROJECT NAME :**

**PROJECT #:**

This application for a determination of the adequacy of public schools to accommodate the public school students generated by the subject development has been reviewed for compliance with the school concurrency management program and in accordance with the ILA. The following determinations have been made:

**Approved** based upon the following findings (see 2018-2019 Capacity Tables)

### Elementary SCSA

#### Capacity Required

Capacity Available

Available Capacity

Capacity Available in 3 yrs

Available Capacity

Capacity Available in Adjacent SCSA

Available Capacity

### Middle SCSA

#### Capacity Required

Capacity Available

Available Capacity

Capacity Available in 3 yrs

Available Capacity

Capacity Available in Adjacent SCSA

Available Capacity

### High SCSA

Capacity Available

Available Capacity

Capacity Available in 3 yrs

Available Capacity

Capacity Available in Adjacent SCSA

Available Capacity

**Denial** for reasons stated

### Approved by

### City of Alachua

#### School Board Staff Certification

A complete application for the development project was accepted on

Date:

**Suzanne M. Wynn**

Community Planning Director  
Alachua County Public Schools  
352.955.7400 x 1445

Signed:

Printed Name:

Date:

TAX PARCEL NUMBERS:

Alachua County Tax Parcels:

03044-011-001, 03044-011-002, 03044-011-003 and 03044-010-003

LEGAL DESCRIPTION:

(PER FIRST AMERICAN TITLE AMERICAN COMPANY, FILE NO. 2037-4228263, ISSUING AGENT AKERMAN LLP, ISSUING OFFICE NUMBER 060135.0345919, ISSUING OFFICE FILE NO. D.R. HORTON/ TROON CREEK, BEARING AN EFFECTIVE DATE OF JANUARY 24, 2019)

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE COUNTY OF ALACHUA, STATE OF FLORIDA, AND DESCRIBED AS FOLLOWS:

A TRACT OF LAND LYING IN SECTION 8, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA. BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF SAID SECTION 8; THENCE RUN S 87°18'16" W, ALONG THE NORTH LINE OF SAID SECTION, A DISTANCE OF 58.60' TO THE WEST RIGHT OF WAY LINE (R/W) OF COUNTY ROAD NO. S-235-A AND THE POINT OF BEGINNING; THENCE CONTINUING S 87°18'16" W ALONG SAID NORTH LINE, A DISTANCE OF 2949.98' TO THE WEST LINE OF THE EAST HALF OF SECTION 8; THENCE S 05°35'27" E, ALONG SAID WEST LINE, A DISTANCE OF 1335.81', THENCE N 87°18'22" E, A DISTANCE OF 1577.01', THENCE N 01°47'45" W, A DISTANCE OF 322.90'; THENCE N 87°17'33" E, A DISTANCE OF 94.86', THENCE N 01°47'45" W, A DISTANCE OF 200.00', THENCE N 87°17'33" E, A DISTANCE OF 1198.28' TO THE WEST R/W OF COUNTY ROAD NO. S-235-A; THENCE N 01°47'45" W, ALONG SAID R/W LINE, A DISTANCE OF 368.34' TO THE POINT OF CURVATURE OF A TANGENT CURVE, CONCAVE TO THE WEST, HAVING A RADIUS OF 11409.16' AND A CENTRAL ANGLE OF 02°13'25"; THENCE NORTHERLY ALONG SAID R/W CURVE, A DISTANCE OF 442.77' TO THE NORTH LINE OF SECTION 8 AND THE POINT OF BEGINNING.



Prepared by and return to:  
CARL L. JOHNSON  
Law Office of Carl L. Johnson  
4421 N.W. 39th Avenue, Bldg. 1, Suite 2  
Gainesville, FL 32606

Doc Stamp-Deed: \$0.70



Parcel No. 03044-010-003

Grantee(s) TIN:

**THIS SPECIAL WARRANTY DEED**, made this 21<sup>st</sup> day of December, 2012, by PARKER LAND CO., a Florida corporation, hereinafter called the Grantor, whose post office address is: P.O. Box 357133, Gainesville, FL 32635, to GOLDEN POND FARMS, INC., a Florida corporation, hereinafter called the Grantee, whose post office address is: P.O. Box 357135, Gainesville, FL 32635.

(Wherever used herein the terms "Grantor" and "Grantee" includes all the parties to this instrument and the heirs, legal representatives, and assigns of individuals, and the successors and assigns of corporations, wherever the context so admits or requires.)

**WITNESSETH**, That the Grantor, for and in consideration of the sum of \$10.00 and other valuable considerations, receipt whereof is hereby acknowledged, hereby grants, bargains, sells, aliens, remises, releases, conveys and confirms unto the Grantee all that certain land, situate in Alachua County, State of Florida, viz:

Property described in the legal description attached as Exhibit "A" and made a part hereof.

**TOGETHER**, with all the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining,

**TO HAVE AND TO HOLD**, the same in fee simple forever.

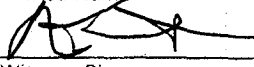
**AND** the Grantor hereby covenants with said Grantee that the Grantor is lawfully seized of said land in fee simple; that the Grantor has good right and lawful authority to sell and convey said land, and hereby warrants the title to said land and will defend the same against the lawful claims of all persons claiming by, through or under Grantors.

**IN WITNESS WHEREOF**, the said Grantor has caused these presents to be executed on the day and year first above written.

Signed, sealed and delivered in the presence of:

  
Witness Signature

Clifford Johnson  
Printed Name

  
Witness Signature

Michael Bennett  
Printed Name

PARKER LAND CO

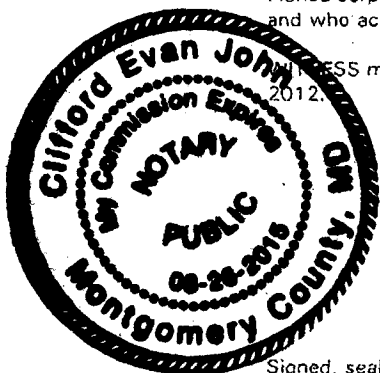
By:

  
LISA PARKER EHRLICH, Vice-Pres.

STATE OF Maryland  
 COUNTY OF Montgomery

I HEREBY CERTIFY that on this day, before me, an officer duly authorized to administer oaths and take acknowledgments, personally appeared LISA PARKER EHRlich, as Vice-President of PARKER LAND CO., a Florida corporation, known to me to be the person described in and who executed the foregoing instrument and who acknowledged before me that she executed the same. Said person is personally known to me.

WITNESS my hand and official seal in the County and State last aforesaid this 21st day of December, 2012.



[Signature]  
 NOTARY PUBLIC

My commission expires: 8-28-15

Signed, sealed and delivered in the presence of:

[Signature]  
 Witness Signature

CARL L JOHNSON  
 Printed Name

[Signature]  
 Witness Signature

[Signature]  
 Printed Name

PARKER LAND CO.

By: [Signature]

ERIC J. PARKER, Pres.

STATE OF FLORIDA  
 COUNTY OF ALACHUA

I HEREBY CERTIFY that on this day, before me, an officer duly authorized to administer oaths and take acknowledgments, personally appeared ERIC J. PARKER, as President of PARKER LAND CO., a Florida corporation, known to me to be the person(s) described in and who executed the foregoing instrument and who acknowledged before me that he executed the same. Said person is personally known to me.

WITNESS my hand and official seal in the County and State last aforesaid this 26th day of December, 2012.

[Signature]  
 NOTARY PUBLIC

My commission expires:



## Exhibit "A"

A TRACT OF LAND LYING IN SECTION 8, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF SAID SECTION 8; THENCE RUN S 87°18'16" W, ALONG THE NORTH LINE OF SAID SECTION, A DISTANCE OF 58.60' TO THE WEST RIGHT OF WAY LINE (R/W) OF COUNTY ROAD NO. S-235-A AND THE POINT OF BEGINNING; THENCE CONTINUING S 87°18'16" W ALONG SAID NORTH LINE, A DISTANCE OF 2949.98' TO THE WEST LINE OF THE EAST HALF OF SECTION 8; THENCE S 05°35'27" E, ALONG SAID WEST LINE, A DISTANCE OF 1335.81'; THENCE N 87°18'22" E, A DISTANCE OF 1577.01'; THENCE N 01°47'45" W, A DISTANCE OF 322.90'; THENCE N 87°17'33" E, A DISTANCE OF 94.86'; THENCE N 01°47'45" W, A DISTANCE OF 200.00'; THENCE N 87°17'33" E, A DISTANCE OF 1198.28' TO THE WEST R/W OF COUNTY ROAD NO. S-235-A; THENCE N 01°47'45" W, ALONG SAID R/W LINE, A DISTANCE OF 368.34' TO THE POINT OF CURVATURE OF A TANGENT CURVE, CONCAVE TO THE WEST, HAVING A RADIUS OF 11409.16' AND A CENTRAL ANGLE OF 02°13'25"; THENCE NORTHERLY ALONG SAID R/W CURVE, A DISTANCE OF 442.77' TO THE NORTH LINE OF SECTION 8 AND THE POINT OF BEGINNING. SAID DESCRIBED TRACT CONTAINING 74.141 ACRES, MORE OR LESS.

ACCOUNT NUMBER	ESCROW CD	MILLAGE CODE
03044 010 003		1700

APPLICABLE VALUES AND EXEMPTIONS BELOW

Unassigned Location RE

GOLDEN POND FARMS INC  
PO BOX 357133  
GAINESVILLE, FL 32635

COM NE COR SEC W 58.60 FT POB W  
2949.98 FT TO W LINE  
See Additional Legal on Tax Roll

AD VALOREM TAXES					
TAXING AUTHORITY	MILLAGE RATE	ASSESSED VALUE	EXEMPTION(S)	TAXABLE VALUE	TAXES LEVIED
BOARD OF COUNTY COMMISSIONERS					
CNTY GENERAL	8.2829	22,900	0	22,900	189.68
ALACHUA CNTY LIBRARY DISTRICT					
LIBRARY GENERAL	1.2303	22,900	0	22,900	28.17
SCHOOL BOARD OF ALACHUA COUNTY					
SCHL CAP34 PROJECT (S01)	1.5000	22,900	0	22,900	34.35
SCHL DISCRNRY & CN (S01)	0.7480	22,900	0	22,900	17.13
SCHL GENERAL	4.0160	22,900	0	22,900	91.97
SCHOOL VOTED (S01)	1.0000	22,900	0	22,900	22.90
SUWANNEE RIVER WATER MGT DIST	0.3948	22,900	0	22,900	9.04
17 CITY OF ALACHUA	5.3900	22,900	0	22,900	123.43
TOTAL MILLAGE					22.5620
AD VALOREM TAXES					\$516.67

WANT TO RECEIVE YOUR BILL ELECTRONICALLY NEXT YEAR? VISIT [www.AlachuaCollector.com](http://www.AlachuaCollector.com) AND SIGN UP FOR E-BILLS!

**PAY ONLINE WITH E-CHECK**



SCAN TO PAY

PAY ONLY ONE AMOUNT. U

NON-AD VALOREM ASSESSMENTS			
LEVYING AUTHORITY	UNIT	RATE	AMOUNT
NON-AD VALOREM ASSESSMENTS			\$0.00

**COMBINED TAXES AND ASSESSMENTS \$516.67**

If Paid By	Nov 30, 2018				
Please Pay	\$0.00				

JOHN POWER, CFC  
ALACHUA COUNTY TAX COLLECTOR

**2018 PAID REAL ESTATE**  
NOTICE OF AD VALOREM TAXES AND NON-AD VALOREM ASSESSMENTS

1011429

PLEASE PAY IN U.S. FUNDS (NO POSTDATED CHECKS) TO JOHN POWER, TAX COLLECTOR • 5830 NW 34TH BLVD • GAINESVILLE, FL 32653-2115

ACCOUNT NUMBER	SITUS	MESSAGE
03044 010 003	Unassigned Location RE	

GOLDEN POND FARMS INC  
PO BOX 357133  
GAINESVILLE, FL 32635

IF PAID BY	PLEASE PAY
<input checked="" type="checkbox"/> Nov 30, 2018	\$0.00
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	

*PAID*

Receipt # 18-0028326

\$496.00

Paid 11/26/2018

Please Retain this Portion for your Records. Receipt Available Online.



ACCOUNT NUMBER	ESCROW CD	MILLAGE CODE
03044 011 003		1700

APPLICABLE VALUES AND EXEMPTIONS BELOW

Unassigned Location RE

GOLDEN POND FARMS INC  
PO BOX 357133  
GAINESVILLE, FL 32635

COM NE COR SEC W 58.76 FT SLY ALG  
CURVE 442.88 S 107.  
See Additional Legal on Tax Roll

AD VALOREM TAXES					
TAXING AUTHORITY	MILLAGE RATE	ASSESSED VALUE	EXEMPTION(S)	TAXABLE VALUE	TAXES LEVIED
BOARD OF COUNTY COMMISSIONERS					
CNTY GENERAL	8.2829	2,000	0	2,000	16.57
ALACHUA CNTY LIBRARY DISTRICT					
LIBRARY GENERAL	1.2303	2,000	0	2,000	2.46
SCHOOL BOARD OF ALACHUA COUNTY					
SCHL CAP34 PROJECT (S01)	1.5000	2,000	0	2,000	3.00
SCHL DISCRNRY & CN (S01)	0.7480	2,000	0	2,000	1.50
SCHL GENERAL	4.0160	2,000	0	2,000	8.03
SCHOOL VOTED (S01)	1.0000	2,000	0	2,000	2.00
SUWANNEE RIVER WATER MGT DIST	0.3948	2,000	0	2,000	0.79
17 CITY OF ALACHUA	5.3900	2,000	0	2,000	10.78
TOTAL MILLAGE					22.5620
AD VALOREM TAXES					\$45.13

WANT TO RECEIVE YOUR BILL ELECTRONICALLY NEXT YEAR? VISIT [www.AlachuaCollector.com](http://www.AlachuaCollector.com) AND SIGN UP FOR E-BILLS!

**PAY ONLINE WITH E-CHECK**



SCAN TO PAY

PAY ONLY ONE AMOUNT. U

NON-AD VALOREM ASSESSMENTS			
LEVYING AUTHORITY	UNIT	RATE	AMOUNT
NON-AD VALOREM ASSESSMENTS			
			\$0.00

**COMBINED TAXES AND ASSESSMENTS \$45.13**

If Paid By	Nov 30, 2018				
Please Pay	\$0.00				

JOHN POWER, CFC  
ALACHUA COUNTY TAX COLLECTOR

**2018 PAID REAL ESTATE**  
NOTICE OF AD VALOREM TAXES AND NON-AD VALOREM ASSESSMENTS

1011435

PLEASE PAY IN U.S. FUNDS (NO POSTDATED CHECKS) TO JOHN POWER, TAX COLLECTOR • 5830 NW 34TH BLVD • GAINESVILLE, FL 32653-2115

ACCOUNT NUMBER	SITUS	MESSAGE
03044 011 003	Unassigned Location RE	

GOLDEN POND FARMS INC  
PO BOX 357133  
GAINESVILLE, FL 32635

IF PAID BY	PLEASE PAY
<input checked="" type="checkbox"/> Nov 30, 2018	\$0.00
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	

PAID

Receipt # 18-0028326

\$43.32

Paid 11/26/2018

Please Retain this Portion for your Records, Receipt Available Online.



ACCOUNT NUMBER	ESCROW CD	MILLAGE CODE
03044 011 002		1700

APPLICABLE VALUES AND EXEMPTIONS BELOW

Unassigned Location RE

GOLDEN POND FARMS INC  
PO BOX 357133  
GAINESVILLE, FL 32635

COM NE COR SEC W 58.74 FT SLY ALG  
CURVE 275 FT POB SL  
See Additional Legal on Tax Roll

AD VALOREM TAXES					
TAXING AUTHORITY	MILLAGE RATE	ASSESSED VALUE	EXEMPTION(S)	TAXABLE VALUE	TAXES LEVIED
BOARD OF COUNTY COMMISSIONERS					
CNTY GENERAL	8.2829	2,100	0	2,100	17.39
ALACHUA CNTY LIBRARY DISTRICT					
LIBRARY GENERAL	1.2303	2,100	0	2,100	2.58
SCHOOL BOARD OF ALACHUA COUNTY					
SCHL CAP34 PROJECT (S01)	1.5000	2,100	0	2,100	3.15
SCHL DISCRNRY & CN (S01)	0.7480	2,100	0	2,100	1.57
SCHL GENERAL	4.0160	2,100	0	2,100	8.43
SCHOOL VOTED (S01)	1.0000	2,100	0	2,100	2.10
SUWANNEE RIVER WATER MGT DIST	0.3948	2,100	0	2,100	0.83
17 CITY OF ALACHUA	5.3900	2,100	0	2,100	11.32
TOTAL MILLAGE 22.5620 AD VALOREM TAXES					\$47.37

WANT TO RECEIVE YOUR BILL ELECTRONICALLY NEXT YEAR? VISIT [www.AlachuaCollector.com](http://www.AlachuaCollector.com) AND SIGN UP FOR E-BILLS!

**PAY ONLINE WITH E-CHECK**



SCAN TO PAY

PAY ONLY ONE AMOUNT. U

NON-AD VALOREM ASSESSMENTS			
LEVYING AUTHORITY	UNIT	RATE	AMOUNT
NON-AD VALOREM ASSESSMENTS			\$0.00

**COMBINED TAXES AND ASSESSMENTS \$47.37**

If Paid By  
Please Pay **Nov 30, 2018**  
\$0.00

JOHN POWER, CFC  
ALACHUA COUNTY TAX COLLECTOR

**2018 PAID REAL ESTATE**  
NOTICE OF AD VALOREM TAXES AND NON-AD VALOREM ASSESSMENTS

1011434

PLEASE PAY IN U.S. FUNDS (NO POSTDATED CHECKS) TO JOHN POWER, TAX COLLECTOR • 5830 NW 34TH BLVD • GAINESVILLE, FL 32653-2115

ACCOUNT NUMBER	SITUS	MESSAGE
03044 011 002	Unassigned Location RE	

GOLDEN POND FARMS INC  
PO BOX 357133  
GAINESVILLE, FL 32635

IF PAID BY	PLEASE PAY
<input type="checkbox"/> Nov 30, 2018	\$0.00
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	

PAID

Receipt # 18-0028326

\$45.48

Paid 11/26/2018

Please Retain this Portion for your Records. Receipt Available Online.





Fee Information:

Amount Paid: \_\_\_\_\_ Receipt # \_\_\_\_\_

Posted By: \_\_\_\_\_

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

Road No. \_\_\_\_\_

Segment No. \_\_\_\_\_

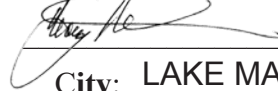
**RIGHT-OF-WAY CONNECTION PERMIT**

Alachua County Public Works Department  
5620 NW 120 Lane, Gainesville, FL 32653  
(352) 374-5245

Public Works Permit No.: \_\_\_\_\_

**Application Date:** 7/15/19

**Type of Connection:** ☒ Curb & Gutter Apron, ☐ Driveway & Sidewalk, ☐ Rural Driveway, ☒ Sidewalk,  
☒ Drainage, ☐ Easement Road (multiple lots), ☐ Reconstruct or pave existing driveway,  
☐ Common Drive (2 Lots) ☐ Bikepath, ☐ Temporary,  
☐ Common Drive (via Lot Split, Using Private Easement, BOA, or Variance - Please circle 1)  
PETITION NO. \_\_\_\_\_

(A) **Owner/Permittee:** TROON DEVELOPMENT, LLC **Signature:**   
**Mailing Address:** 405 CINNAMON OAK COURT **City:** LAKE MARY  
**State:** FL **Zip Code:** 32745 **Phone No.:** (407) 756-0058

(B) **Contractor:** \_\_\_\_\_ **Contractor's Phone No.:** ( )

(C) **Property Description:** **Parcel No.:** 03044-011-003, **Building Permit No.:** \_\_\_\_\_  
**Building Permit No.:** \_\_\_\_\_

**Section:** 08, **Township:** 08, **Range:** 18, **Grant:** \_\_\_\_\_

**Subdivision:** BRIARWOOD (PROPOSED) **Lot No.:** \_\_\_\_\_

**Specific Directions** (from nearest major road intersection): APPROXIMATELY 3,000 FEET NORTH OF US HWY 441  
AND NW CR 235A.

**911 Address:** 17000 BLOCK NW COUNTY RD 235A

(D) **Type of Building Construction:** ☐ Site Built Home ☐ Mobile Home ☐ Duplex  
☒ Subdivision, number of lots: 229 ☐ Multi-Family, number of units: \_\_\_\_\_

(E) **Estimated Number of Vehicle Trips Per Day:** 2,327 TPD

(F) **Normal Vehicle Usage:** ☒ Auto ☐ Truck ☐ Farm Trailers ☐ Semi-Trucks

(G) **Requested Date for Location Approval:** FEB 2020

OFFICE/INSPECTOR USE

(H) **Location Inspected By:** \_\_\_\_\_ **Date:** \_\_\_\_\_ ☐ Accepted, ☐ Rejected

(I) **Specified Construction or reason for Permit Rejection:** \_\_\_\_\_

(J) **Final Approval Date:** \_\_\_\_\_ **By:** \_\_\_\_\_

(K) **Building Department Notified (Date):** \_\_\_\_\_ **By:** \_\_\_\_\_

(L) ☐ Class I ☐ Class I (with sidewalk) ☐ Class II

☐ Class III ☐ Class IV

☐ Class III with Auxiliary Lanes ☐ Class IV with Auxiliary Lanes

Completion of this permit binds applicant to specific rights and privileges of the permittee as described in the Access Construction Standards and Procedures, available upon request.

# Fire Flow Node FlexTable: Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Fire Flow (Needed) (gpm)	Fire Flow (Available) (gpm)	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Residual Lower Limit) (psi)	Pressure (Calculated Residual) (psi)	Pressure (Calculated Zone Lower Limit) (psi)	Pressure (Calculated System Lower Limit) (psi)	Junction w/ Minimum Pressure (System)
H-1	True	1,000	1,923	1,000	1,923	20	34	33	33	H-2
H-2	True	1,000	1,956	1,000	1,956	20	30	32	32	J-2
H-3	True	1,000	1,921	1,000	1,921	20	35	33	33	H-2
H-4	True	1,000	1,775	1,000	1,775	20	39	38	38	J-2
H-5	True	1,000	1,566	1,000	1,566	20	39	40	40	J-26
H-6	True	1,000	1,780	1,000	1,780	20	41	38	38	J-2
H-7	True	1,000	1,922	1,000	1,922	20	36	33	33	H-2
H-8	True	1,000	1,895	1,000	1,895	20	38	34	34	J-2
H-9	True	1,000	1,918	1,000	1,918	20	38	33	33	J-2
J-1	True	1,000	2,500	1,000	2,500	20	23	35	35	J-2
J-2	True	1,000	2,020	1,021	2,041	20	29	32	32	H-2
J-3	True	1,000	1,937	1,021	1,959	20	33	31	31	H-2
J-4	True	1,000	1,924	1,020	1,944	20	36	33	33	H-2
J-5	True	1,000	1,922	1,023	1,945	20	32	32	32	J-6
J-6	True	1,000	1,565	1,002	1,567	20	35	38	38	J-2
J-7	True	1,000	1,921	1,018	1,940	20	36	33	33	H-2
J-8	True	1,000	1,922	1,015	1,937	20	34	33	33	H-2
J-9	True	1,000	1,921	1,006	1,927	20	36	33	33	H-2
J-10	True	1,000	1,921	1,003	1,924	20	36	33	33	H-2
J-11	True	1,000	1,921	1,006	1,927	20	36	33	33	J-2
J-12	True	1,000	1,921	1,003	1,924	20	36	33	33	J-2
J-13	True	1,000	1,920	1,008	1,928	20	37	33	33	J-2
J-14	True	1,000	1,918	1,018	1,936	20	38	33	33	J-2
J-15	True	1,000	1,921	1,006	1,927	20	37	33	33	H-2
J-16	True	1,000	1,924	1,012	1,936	20	35	33	33	J-2
J-17	True	1,000	1,902	1,021	1,924	20	40	34	34	J-2
J-18	True	1,000	1,872	1,021	1,893	20	39	35	35	J-2
J-19	True	1,000	1,800	1,021	1,821	20	41	37	37	J-2
J-20	True	1,000	1,803	1,018	1,821	20	40	37	37	J-2
J-21	True	1,000	1,727	1,023	1,749	20	41	40	40	J-2
J-22	True	1,000	1,730	1,006	1,736	20	40	40	40	J-2



### Fire Flow Node FlexTable: Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Fire Flow (Needed) (gpm)	Fire Flow (Available) (gpm)	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Residual Lower Limit) (psi)	Pressure (Calculated Residual) (psi)	Pressure (Calculated Zone Lower Limit) (psi)	Pressure (Calculated System Lower Limit) (psi)	Junction w/ Minimum Pressure (System)
J-23	True	1,000	1,729	1,003	1,732	20	41	40	40	J-2
J-24	True	1,000	1,726	1,015	1,741	20	42	40	40	J-2
J-25	True	1,000	1,624	1,012	1,636	20	39	38	38	J-28
J-26	True	1,000	1,566	1,009	1,575	20	40	40	40	H-5
J-27	True	1,000	1,517	1,014	1,531	20	41	43	43	H-5
J-28	True	1,000	1,565	1,002	1,567	20	36	39	39	J-25

FlexTable: Junction Table

ID	Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
31	J-1	106.00	0	222.46	50
33	J-2	112.00	21	223.62	48
37	J-3	102.00	21	223.67	53
39	J-4	89.00	20	223.68	58
50	J-5	85.00	23	223.68	60
52	J-6	87.00	2	223.68	59
54	J-7	84.00	18	223.71	60
57	J-8	94.00	15	223.72	56
60	J-9	81.00	6	223.71	62
62	J-10	81.00	3	223.71	62
64	J-11	80.00	6	223.72	62
66	J-12	80.00	3	223.74	62
68	J-13	81.00	8	223.74	62
70	J-14	87.00	18	223.77	59
73	J-15	91.00	6	223.75	57
76	J-16	97.00	12	223.77	55
79	J-17	95.00	21	223.99	56
83	J-18	96.00	21	224.06	55
86	J-19	99.00	21	224.60	54
88	J-20	102.00	18	224.60	53
92	J-21	105.00	23	225.17	52
94	J-22	105.00	6	225.17	52
96	J-23	103.00	3	225.17	53
98	J-24	101.00	15	225.17	54
102	J-25	112.00	12	225.95	49
104	J-26	116.00	9	226.43	48
106	J-27	119.00	14	226.72	47
113	J-28	113.00	2	225.95	49

FlexTable: Pipe Table

ID	Label	Length (Scaled) (ft)	Start Node	Stop Node	Diamet er (in)	Material	Hazen- Williams C	Minor Loss Coefficient (Local)	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/ft)
32	P-1	958	R-1	J-1	8.0	PVC	100.0	0.000	-161	1.03	0.001
34	P-2	1,144	J-1	J-2	8.0	PVC	100.0	0.000	-161	1.03	0.001
36	P-3	270	J-2	H-2	8.0	PVC	100.0	0.000	-57	0.36	0.000
38	P-4	126	H-2	J-3	8.0	PVC	100.0	0.000	-57	0.36	0.000
40	P-5	390	J-3	J-4	8.0	PVC	100.0	0.000	-18	0.12	0.000
49	P-6	203	J-4	H-1	8.0	PVC	100.0	0.000	-3	0.02	0.000
51	P-7	240	H-1	J-5	8.0	PVC	100.0	0.000	-3	0.02	0.000
53	P-8	172	J-5	J-6	8.0	PVC	100.0	0.000	2	0.01	0.000
55	P-9	587	J-5	J-7	8.0	PVC	100.0	0.000	-28	0.18	0.000
56	P-10	191	J-7	H-3	8.0	PVC	100.0	0.000	-22	0.14	0.000
58	P-11	277	H-3	J-8	8.0	PVC	100.0	0.000	-22	0.14	0.000
59	P-12	590	J-8	J-4	8.0	PVC	100.0	0.000	35	0.22	0.000
61	P-13	123	J-7	J-9	8.0	PVC	100.0	0.000	-25	0.16	0.000
63	P-14	87	J-9	J-10	8.0	PVC	100.0	0.000	-31	0.20	0.000
65	P-15	78	J-10	J-11	8.0	PVC	100.0	0.000	-34	0.22	0.000
67	P-16	233	J-11	J-12	8.0	PVC	100.0	0.000	-40	0.25	0.000
69	P-17	82	J-12	J-13	8.0	PVC	100.0	0.000	-43	0.27	0.000
136	P-18	264	J-13	H-9	8.0	PVC	100.0	0.000	-51	0.32	0.000
75	P-19	145	J-15	J-8	8.0	PVC	100.0	0.000	72	0.46	0.000
78	P-20	590	J-16	J-3	8.0	PVC	100.0	0.000	60	0.38	0.000
80	P-21	589	J-2	J-17	8.0	PVC	100.0	0.000	-125	0.80	0.001
85	P-22	650	J-18	J-14	8.0	PVC	100.0	0.000	104	0.66	0.000
87	P-23	400	J-18	J-19	8.0	PVC	100.0	0.000	-187	1.19	0.001
89	P-24	428	J-19	J-20	8.0	PVC	100.0	0.000	-8	0.05	0.000
90	P-25	401	J-20	J-17	8.0	PVC	100.0	0.000	200	1.28	0.002
91	P-26	114	J-20	H-4	8.0	PVC	100.0	0.000	-226	1.45	0.002
93	P-27	190	H-4	J-21	8.0	PVC	100.0	0.000	-226	1.45	0.002
95	P-28	56	J-21	J-22	8.0	PVC	100.0	0.000	22	0.14	0.000
97	P-29	311	J-22	J-23	8.0	PVC	100.0	0.000	16	0.10	0.000
99	P-30	68	J-23	J-24	8.0	PVC	100.0	0.000	13	0.08	0.000
100	P-31	280	J-24	H-6	8.0	PVC	100.0	0.000	201	1.28	0.002
101	P-32	97	H-6	J-19	8.0	PVC	100.0	0.000	201	1.28	0.002
103	P-33	507	J-24	J-25	8.0	PVC	100.0	0.000	-203	1.29	0.002

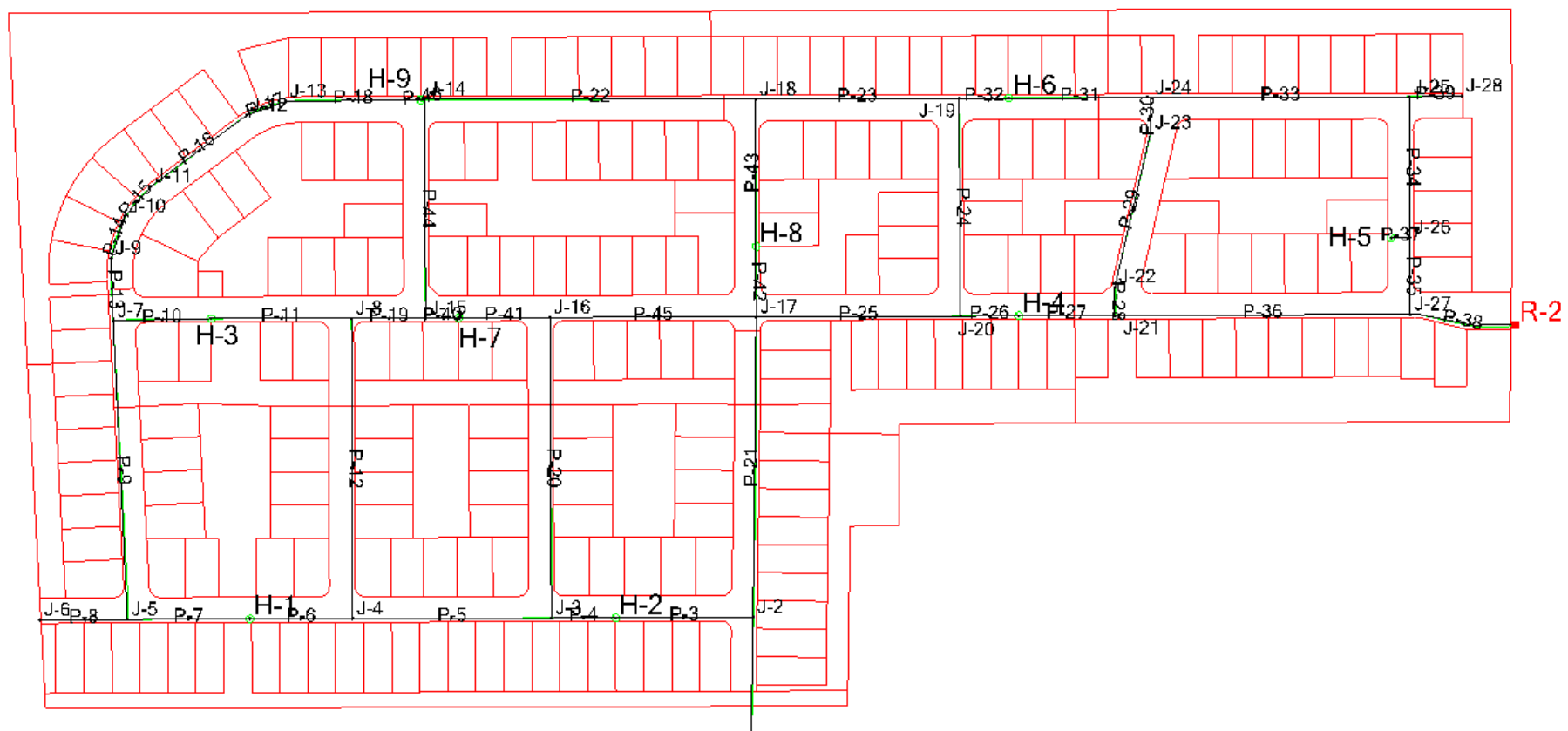
FlexTable: Pipe Table

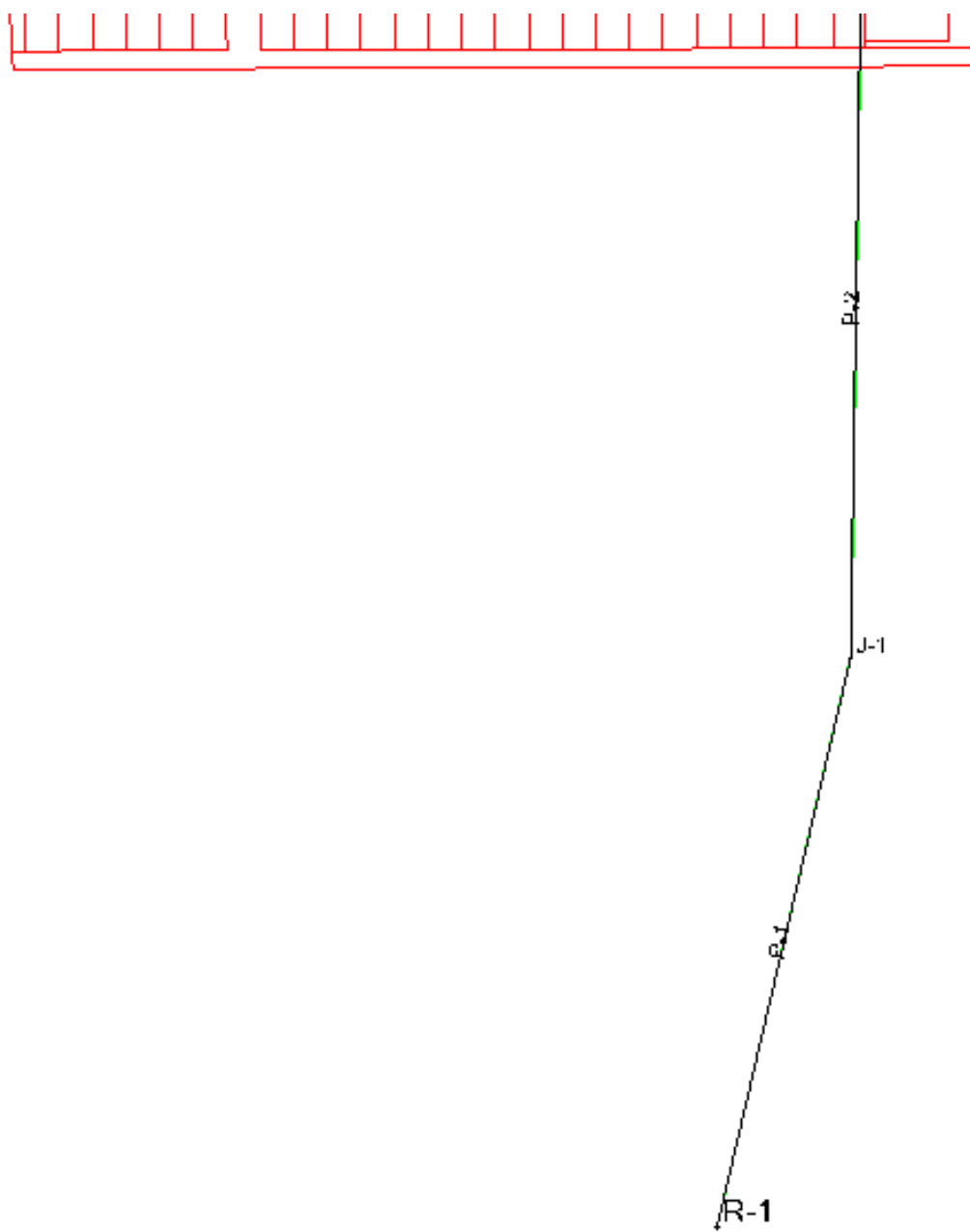
ID	Label	Length (Scaled) (ft)	Start Node	Stop Node	Diameter (in)	Material	Hazen- Williams C	Minor Loss Coefficient (Local)	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/ft)
105	P-34	276	J-25	J-26	8.0	PVC	100.0	0.000	-216	1.38	0.002
107	P-35	150	J-26	J-27	8.0	PVC	100.0	0.000	-226	1.44	0.002
108	P-36	580	J-27	J-21	8.0	PVC	100.0	0.000	272	1.73	0.003
109	P-37	36	J-26	H-5	8.0	PVC	100.0	0.000	0	0.00	0.000
111	P-38	208	J-27	R-2	8.0	PVC	100.0	0.000	-511	3.26	0.009
114	P-39	103	J-25	J-28	8.0	PVC	100.0	0.000	2	0.01	0.000
123	P-40	66	J-15	H-7	8.0	PVC	100.0	0.000	-43	0.27	0.000
124	P-41	178	H-7	J-16	8.0	PVC	100.0	0.000	-43	0.27	0.000
126	P-42	139	J-17	H-8	8.0	PVC	100.0	0.000	-62	0.39	0.000
127	P-43	288	H-8	J-18	8.0	PVC	100.0	0.000	-62	0.39	0.000
131	P-44	430	J-14	J-15	8.0	PVC	100.0	0.000	35	0.22	0.000
132	P-45	405	J-16	J-17	8.0	PVC	100.0	0.000	-115	0.74	0.001
137	P-46	9	H-9	J-14	8.0	PVC	100.0	0.000	-51	0.32	0.000

FlexTable: Reservoir Table

ID	Label	Elevation (ft)	Zone	Flow (Out net) (gpm)	Hydraulic Grade (ft)
30	R-1	221.50	<None>	-161	221.50
110	R-2	228.50	<None>	511	228.50







# PRELIMINARY LIFT STATION CALCULATIONS



## Lift Station

### I. Design Flow Rates:

Land Use	Units	Unit Flow Rate (GPD/Unit)	Avg. Daily Flow (GPD)	Peak Daily Flow (GPD)
Single Family	229	275	62,975	188,925
			62,975	188,925

LIFT STATION DESIGN AVERAGE DAILY FLOW = 62,975 GPD  
LIFT STATION DESIGN AVG. DAILY FLOW = 44 GPM

Peak Rate Factor = 2.5  
LIFT STATION DESIGN PEAK FLOW = 109 GPM

### II. Size Wet Well and Lift Station Yard Area:

$T = (V / (Q-S)) + (V/S)$  Where: T = Cycle Time (Min.)  
S = Avg. Flow into Wet Well (GPM)  
 $V = (S*T*(Q-S)) / Q$  Q = Rated Pump Discharge (GPM)  
V = Required Wet Well Storage Volume (Gal.)

For Minimum T = 10 Min. Wet Well Diameter = 6.0 Feet  
S = 44 GPM Storage = 212 Gal./Ft.  
Q = 109 GPM  
Storage Depth = 2.50 Feet  
Then V = 262 Gallons Storage Vol. = 528.80 Gallons

Cycle Time for Peak Flow Condition =  $T = 4V/Q = 19.3$  Minutes > 5.0 Minutes, OK

### III. Wet Well Dimensions and Control Levels:

100 Year Flood Elevation 88.00  
Wet Well Top Elevation 89.10  
Influent Gravity Sewer Invert Elev. 79.00  
Freeboard = 0.00 Feet  
Audible Alarm ON Elevation 79.00  
Freeboard = 0.50 Feet  
Lag Pump & Alarm Light ON Elev. 78.50  
Freeboard = 0.50 Feet  
Lead Pump ON Elev. 78.00  
Storage Depth = 2.00 Feet  
Both Pumps OFF Elev. 76.00  
Sump Depth = 2.00 Feet  
Wet Well Bottom Elevation 74.00  
Total Depth of Wet Well = 15.10 Feet  
Station Yard Finish Grade Elevation = 88.60  
Minimum Station Yard Width = 14.6 Feet  
Wet Well Outside Diameter = 7.3 Feet  
Min. Station Easement Length & Width = 37 Feet  
High Point Or HGL Elevation = 126.00 (HGL)  
Static Head for Pumps = 50.00 Feet

### IV. Check Wet Well Uplift:

Assume WT @ Elevation 89.10  
Wet Well Wall Thickness 8 Inches  
Bottom Slab Lip 24 Inches  
Bottom Slab Thickness 1 Feet  
Bottom Slab Diameter 11.33 Feet  
Volume of Water Displaced = 738.7 CF  
Total Uplift Force = 46,092 lbs.  
Volume of Concrete = 311.7 CF  
Weight of Concrete = 46,757 lbs.  
Volume of Soil Above Slab = 885.5 CF  
Weight of Soil Above Slab = 51,005 lbs.  
Total Resistance Force = 97,763 lbs.  
Factor of Safety = 2.1

## PRELIMINARY LIFT STATION CALCULATIONS

### V. Calculation of System Head Curve:

Total Static Head = 50.00 Feet

		<u>Station Piping</u>		<u>New 6" FM</u>			
Pipe Length (feet)		24		7000		0	
Pipe Inside Dia. (inches)		4		6		4	
Pipe Area (Sq.-Ft.)		0.087		0.196		0.087	
Roughness C		130		130		120	
Fittings:	<u>K-Value</u>	<u>No.</u>	<u>Tot K</u>	<u>No.</u>	<u>Tot K</u>	<u>No.</u>	<u>Tot K</u>
Discharge Conn.	1.0	1	1	1	1	0	0
90 Deg. Bend	0.6	2	1.2	0	0	0	0
45 Deg. Bend	0.4	2	0.8	6	2.4	0	0
22.5 Deg. Bend	0.25	0	0	0	0	0	0
11.25 Deg. Bend	0.15	0	0	2	0.3	0	0
Expansion	0.5	1	0.5	0	0	0	0
Gate Valve	0.4	1	0.4	6	2.4	0	0
Check Valve	2.5	1	2.5	0	0	0	0
Wye Branch	0.5	2	1	0	0	0	0
Tee Branch	0.6	1	0.6	0	0	0	0
Total K-Value		8		6.1		0.0	

SYSTEM HEAD CURVE	Q (gpm)	Friction Losses in Feet								TDH (feet)
		V (fps)	Pipe	Fittings	Pipe	Fittings	Pipe	Fittings	Total	
	30	0.3	0.02	0.07	0.79	0.01	0.00	0.00	0.89	50.89
	40	0.5	0.03	0.13	1.34	0.02	0.00	0.00	1.52	51.52
	50	0.6	0.05	0.20	2.02	0.03	0.00	0.00	2.31	52.31
	60	0.7	0.07	0.29	2.84	0.04	0.00	0.00	3.24	53.24
	70	0.8	0.09	0.40	3.77	0.06	0.00	0.00	4.32	54.32
	80	0.9	0.12	0.52	4.83	0.08	0.00	0.00	5.55	55.55
	90	1.0	0.15	0.66	6.01	0.10	0.00	0.00	6.91	56.91
	100	1.1	0.18	0.81	7.30	0.12	0.00	0.00	8.42	58.42
	110	1.2	0.22	0.98	8.71	0.15	0.00	0.00	10.06	60.06
	120	1.4	0.25	1.17	10.24	0.18	0.00	0.00	11.83	61.83
	130	1.5	0.29	1.37	11.87	0.21	0.00	0.00	13.74	63.74
	140	1.6	0.34	1.59	13.62	0.24	0.00	0.00	15.78	65.78
	150	1.7	0.38	1.82	15.47	0.27	0.00	0.00	17.95	67.95
	160	1.8	0.43	2.07	17.44	0.31	0.00	0.00	20.25	70.25
	170	1.9	0.48	2.34	19.51	0.35	0.00	0.00	22.69	72.69
	180	2.0	0.54	2.62	21.69	0.40	0.00	0.00	25.24	75.24
	190	2.2	0.59	2.92	23.97	0.44	0.00	0.00	27.93	77.93
	200	2.3	0.65	3.24	26.36	0.49	0.00	0.00	30.74	80.74
	210	2.4	0.71	3.57	28.85	0.54	0.00	0.00	33.68	83.68
	220	2.5	0.78	3.92	31.45	0.59	0.00	0.00	36.74	86.74
	230	2.6	0.84	4.28	34.15	0.65	0.00	0.00	39.92	89.92
	240	2.7	0.91	4.66	36.95	0.70	0.00	0.00	43.23	93.23
	250	2.8	0.98	5.06	39.85	0.76	0.00	0.00	46.66	96.66
	260	3.0	1.06	5.47	42.85	0.82	0.00	0.00	50.21	100.21
	270	3.1	1.14	5.90	45.96	0.89	0.00	0.00	53.88	103.88
280	3.2	1.21	6.35	49.16	0.96	0.00	0.00	57.68	107.68	
290	3.3	1.30	6.81	52.46	1.03	0.00	0.00	61.59	111.59	

\* ADF = Average Daily Flow.

\* PDF = Peak Daily Flow.

Operating Point = 229 gpm @ 89 feet TDH      Pumps: Flygt N 3127 SH 3~Adaptive 2p

Wet Well Area =	28.27	sf	Inflow =	44	gpm
Pump On El. =	78.00	ft	Outflow =	229	gpm
Pump Off El. =	76.00	ft			
Storage Volume =	56.55	cf			
	423.04	gal			
Pump On Time =	2.28	minutes			
Pump Off Time =	9.67	minutes			

## PRELIMINARY LIFT STATION CALCULATIONS

gpm= Flow in gallons per minute  
d= Pipe diameter in inches  
V= Velocity ft/sec  
 $V_{(m)}$ = Velocity ft/min

- i. Calculate *minimum required flow* for known pipe size and velocity:

2.0 ft/sec = min allowable velocity

d= 6.00 "  
V= 2.50 ft/sec  
 $V_{(m)}$ = 150.00 ft/min

### Selected Pump

gpm= 220.32 minimum required flow

- ii. Calculate *velocity* for known pipe size and flow:

4 " force main

gpm= 229.00 \* operating point  
d= 6.00 "

$$V = [\text{gpm}/(.0408)(d^2)]/60$$

V= 2.60 ft/sec. actual - at design flow

2.60 > 2.50 OK



## NP 3127 SH 3~ Adaptive 246

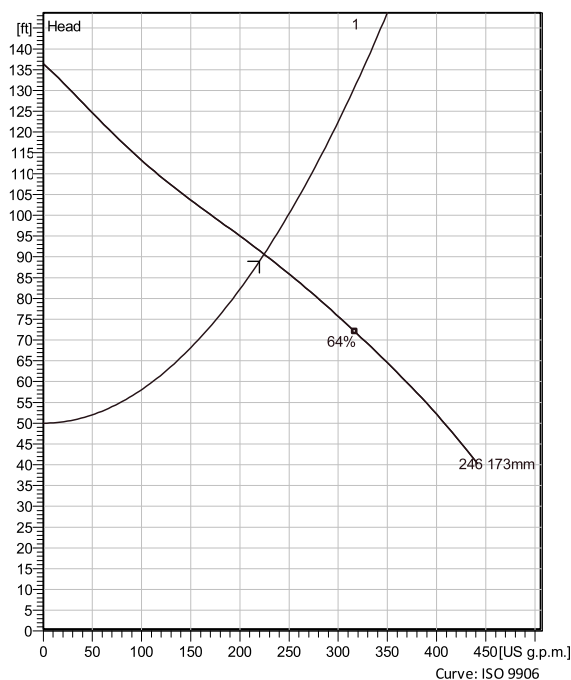
Patented self cleaning semi-open channel impeller, ideal for pumping in waste water applications. Possible to be upgraded with Guide-pin® for even better clogging resistance. Modular based design with high adaptation grade.



### Technical specification



Curves according to: Wastewater [100%], 39.2 °F, 62.42 lb/ft³, 1.69E-5 ft²/s



### Configuration

<b>Motor number</b> N3127.060 21-11-2AL-W 7.4KW	<b>Installation type</b> P - Semi permanent, Wet
<b>Impeller diameter</b> 173 mm	<b>Discharge diameter</b> 3 1/8 inch

### Pump information

<b>Impeller diameter</b> 173 mm
<b>Discharge diameter</b> 3 1/8 inch
<b>Inlet diameter</b> 80 mm
<b>Maximum operating speed</b> 2910 rpm
<b>Number of blades</b> 2

### Materials

<b>Impeller</b> Hard-Iron™
<b>Stator housing material</b> Grey cast iron

Project  
Block

Created by  
Created on 9/21/2019

Last update

## NP 3127 SH 3~ Adaptive 246

### Technical specification



#### Motor - General

<b>Motor number</b> N3127.060 21-11-2AL-W 7.4KW	<b>Phases</b> 3~	<b>Rated speed</b> 2910 rpm	<b>Rated power</b> 9.9 hp
<b>Approval</b> No	<b>Number of poles</b> 2	<b>Rated current</b> 30 A	<b>Stator variant</b> 28
<b>Frequency</b> 50 Hz	<b>Rated voltage</b> 190 V	<b>Insulation class</b> H	<b>Type of Duty</b> S1

#### Motor - Technical

<b>Power factor - 1/1 Load</b> 0.85	<b>Motor efficiency - 1/1 Load</b> 87.5 %	<b>Total moment of inertia</b> 0.513 lb ft <sup>2</sup>	<b>Starts per hour max.</b> 30
<b>Power factor - 3/4 Load</b> 0.79	<b>Motor efficiency - 3/4 Load</b> 87.9 %	<b>Starting current, direct starting</b> 274 A	
<b>Power factor - 1/2 Load</b> 0.69	<b>Motor efficiency - 1/2 Load</b> 86.7 %	<b>Starting current, star-delta</b> 91.3 A	

Project  
Block

Created by  
Created on 9/21/2019

Last update

# NP 3127 SH 3~ Adaptive 246

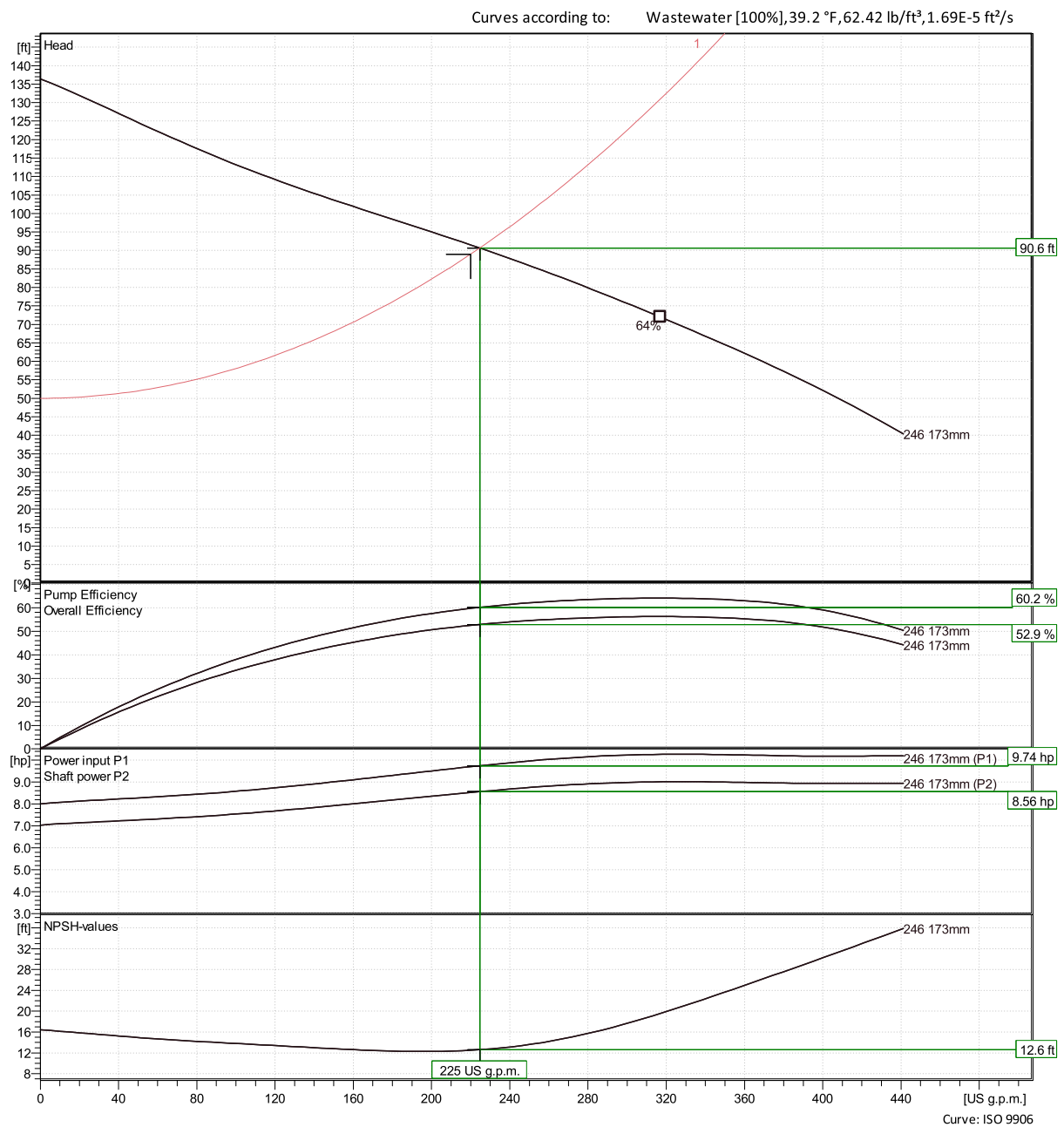
## Performance curve



### Duty point

Flow  
225 US g.p.m.

Head  
90.6 ft



Project  
Block

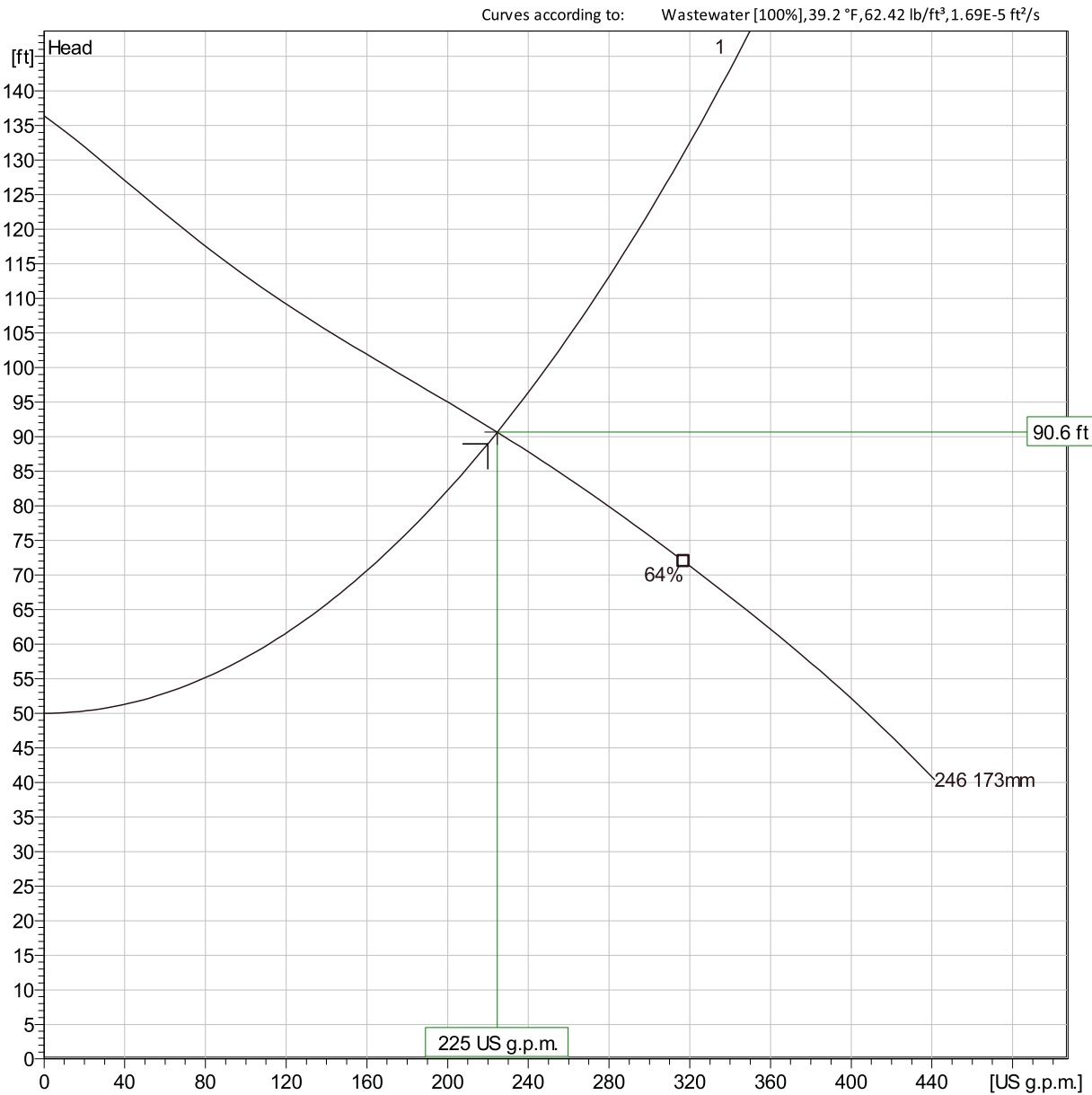
Created by  
Created on 9/21/2019

Last update

Curve: ISO 9906

NP 3127 SH 3~ Adaptive 246

Duty Analysis



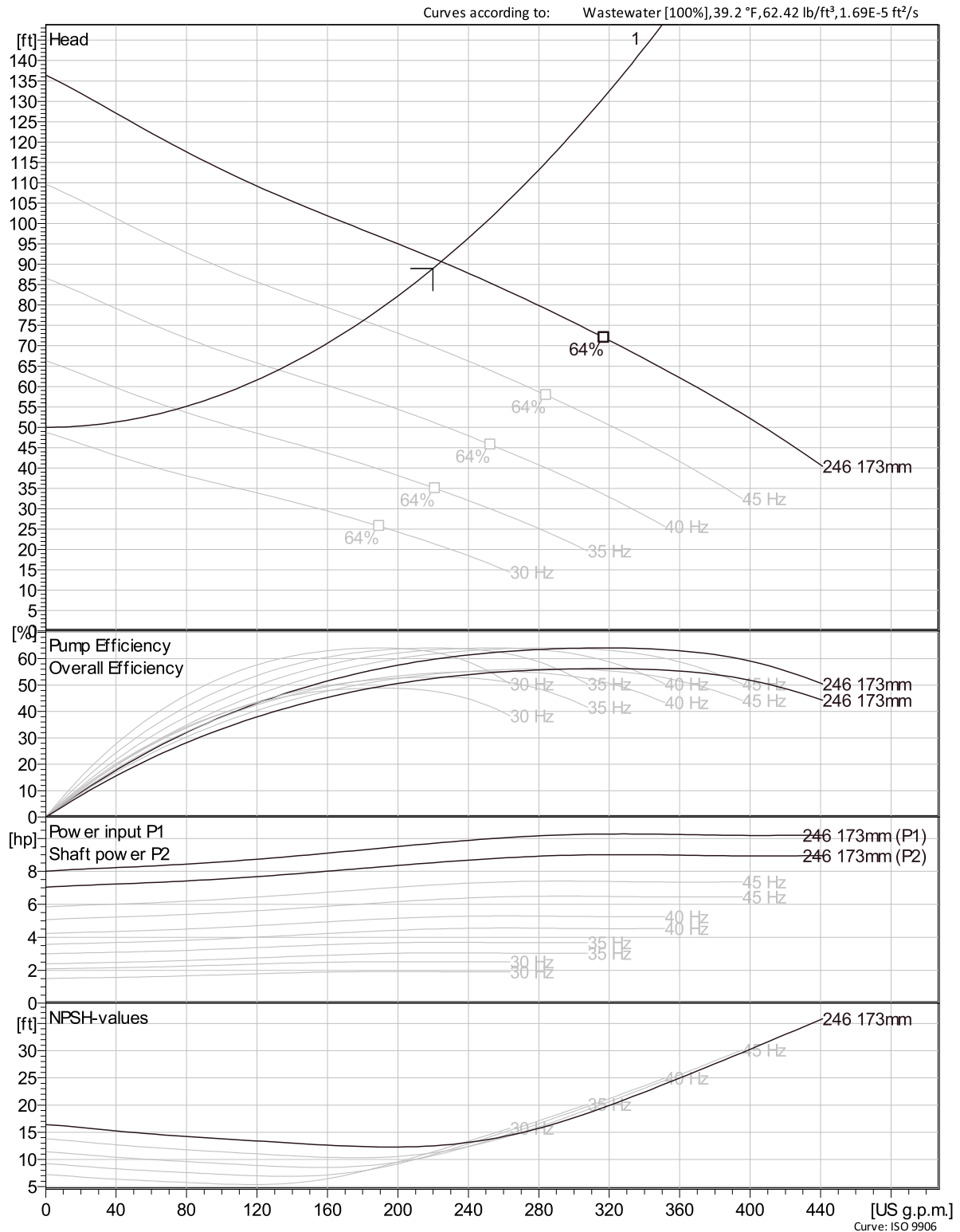
Operating characteristics

Pumps/Systems	Flow	Head	Shaft power	Flow	Head	Shaft power	Hydr.eff.	Specific energy	NPSHr
1	225 US g.p.m.	90.6 ft	8.56 hp	225 US g.p.m.	90.6 ft	8.56 hp	60.2 %	539 kWh/US M	12.6 ft

Project	Created by	Last update
Block	Created on 9/21/2019	

# NP 3127 SH 3~ Adaptive 246

VFD Curve



Project  
Block

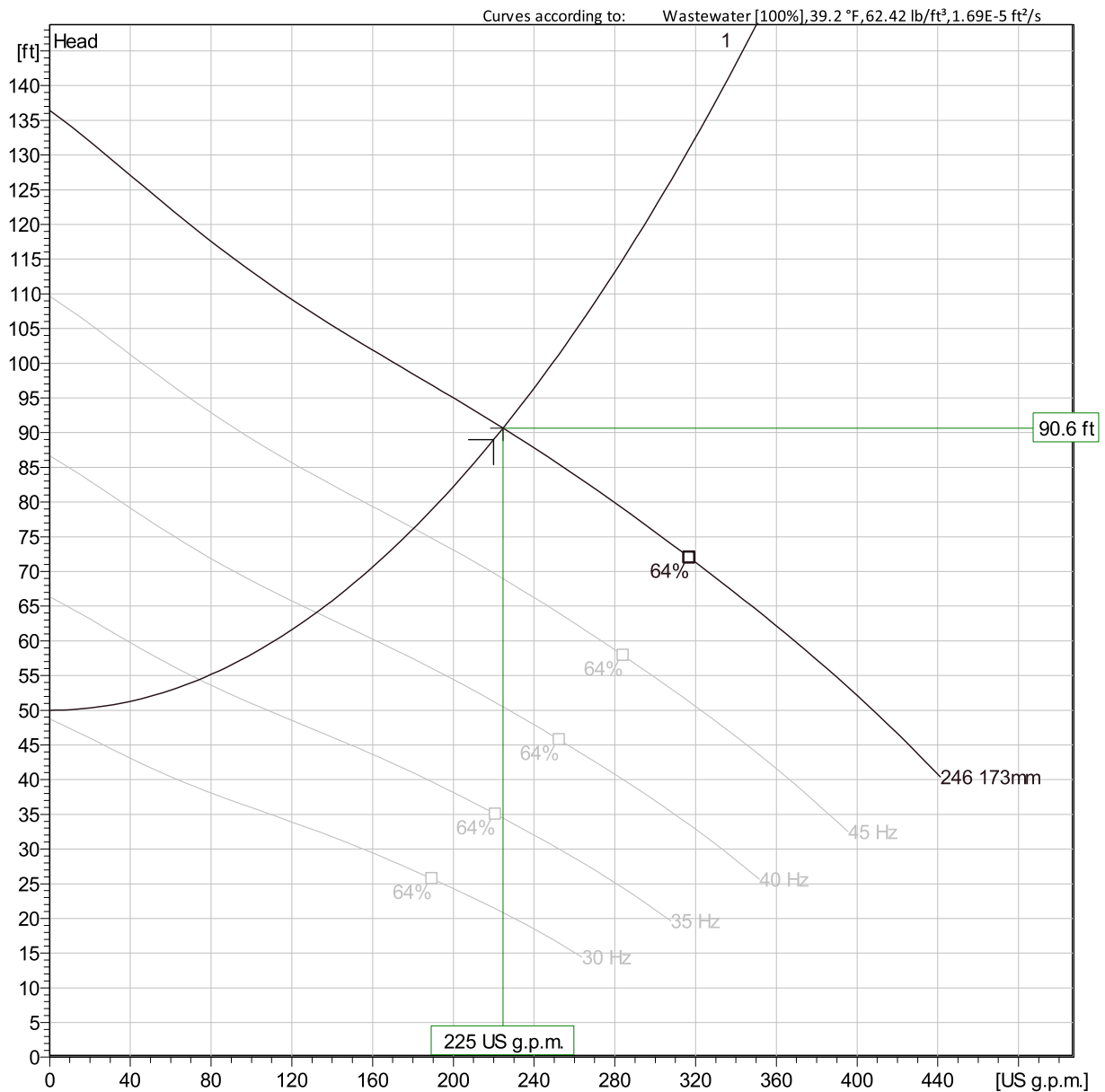
Created by  
Created on 9/21/2019

Last update



# NP 3127 SH 3~ Adaptive 246

## VFD Analysis



### Operating Characteristics

Pumps/Systems	Frequency	Flow	Head	Shaft power	Flow	Head	Shaft power	Hydr.eff.	Specific energy	NPSHr
1	50 Hz	225 US g.p.m.	90.6 ft	8.56 hp	225 US g.p.m.	90.6 ft	8.56 hp	60.2 %	539 kWh/US M	12.6 ft
1	45 Hz	181 US g.p.m.	76.3 ft	6.05 hp	181 US g.p.m.	76.3 ft	6.05 hp	57.7 %	475 kWh/US M	10.3 ft
1	40 Hz	133 US g.p.m.	64.2 ft	4.09 hp	133 US g.p.m.	64.2 ft	4.09 hp	52.6 %	449 kWh/US M	8.73 ft
1	35 Hz	74.7 US g.p.m.	54.5 ft	2.58 hp	74.7 US g.p.m.	54.5 ft	2.58 hp	39.8 %	533 kWh/US M	7.69 ft
1	30 Hz									

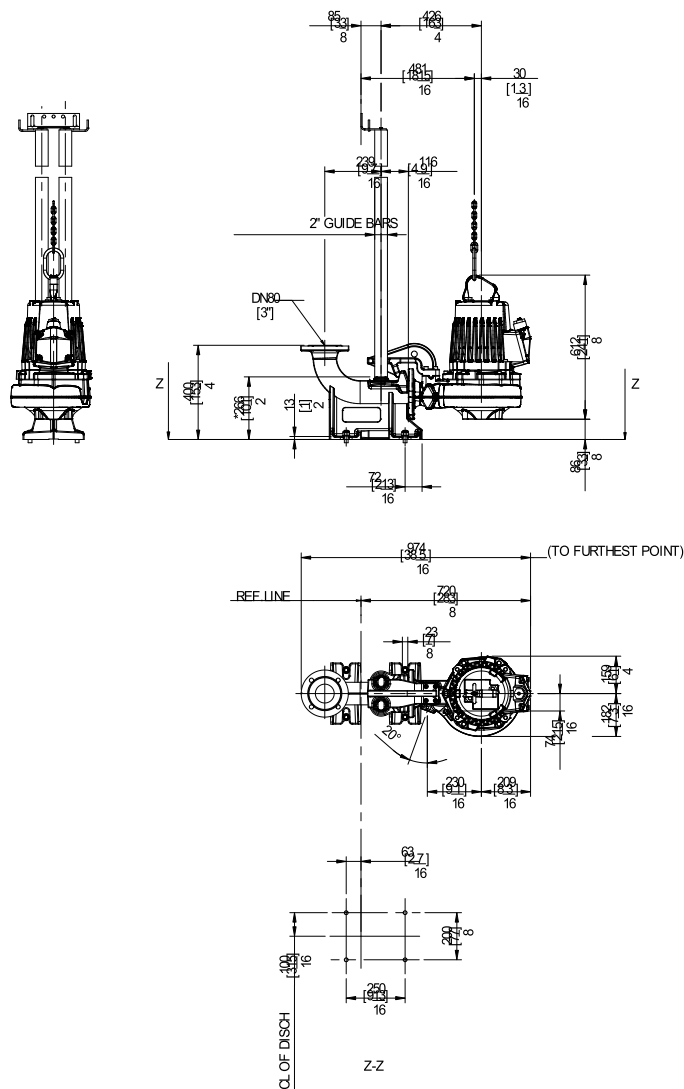
Project  
Block

Created by  
Created on 9/21/2019

Last update

# NP 3127 SH 3~ Adaptive 246

Dimensional drawing



\*DIMENSION TO ENDS OF GUIDE BARS

Weight	Pump	Stand
kg	147	35
lbs	325	80

Discharge	DN 80	Scale	Date
Pump outlet	DN 80	1:20	170914
Pump inlet		Drawing number	Revision
Suction inlet		7319700	2

FP, NP	3127	SH
--------	------	----

Project  
Block

Created by  
Created on 9/21/2019

Last update

**Briarwood****Preliminary Pre-development Drainage Basin Data****9/5/2019**

Drainage Basin Name	Basin Area (Acres)	% Impervious	Pervious CN	Composite CN	Low Area (Acres)	% Low Area
EXISTING BASIN : E-1	73.8	20%	43	54	6.664	7%
*EXISTING BASIN : E-2	25.6	25%	43	56.75	0.000	0%
EXISTING BASIN : E-3	95.5	0%	43	43	7.169	8%

\*Basin E-2 flows to Basin E-1

**Briarwood****Preliminary Post-development Onsite Drainage Basin Data****9/5/2019**

Drainage Basin Name	Basin Area (Acres)	% Impervious	Pervious CN	Composite CN	Pond Area (Acres)	% Pond Area
DRAINAGE BASIN : 1	1.177	45%	43	67.75	0.445	38%
DRAINAGE BASIN : 2	0.928	45%	43	67.75	0.232	25%
DRAINAGE BASIN : 3	4.716	45%	54	73.8	1.309	28%
DRAINAGE BASIN : 4	3.649	45%	43	67.75	0.993	27%
DRAINAGE BASIN : 5	2.441	45%	48.5	70.775	0.161	7%
DRAINAGE BASIN : 6	0.904	45%	43	67.75	0.261	29%
DRAINAGE BASIN : 7	1.08	45%	65	79.85	0.338	31%
DRAINAGE BASIN : 8	0.94	45%	43	67.75	0.244	26%
DRAINAGE BASIN : 9	0.56	45%	43	67.75	0.124	22%
DRAINAGE BASIN : 10	0.787	45%	43	67.75	0.106	14%
DRAINAGE BASIN : 11	1.035	45%	43	67.75	0.324	31%
DRAINAGE BASIN : 12	2.286	45%	43	67.75	0.656	29%
DRAINAGE BASIN : 13	4.449	45%	54	73.8	0.906	20%
DRAINAGE BASIN : 14	3.76	45%	43	67.75	0.622	17%
DRAINAGE BASIN : 15	1.031	45%	43	67.75	0.169	16%
DRAINAGE BASIN : 16	4.488	45%	54	73.8	1.999	45%
DRAINAGE BASIN : 17	0.305	45%	43	67.75	0.104	34%
DRAINAGE BASIN : 18	0.788	45%	43	67.75	0.261	33%
DRAINAGE BASIN : 19	0.631	45%	43	67.75	0.209	33%
DRAINAGE BASIN : 20	3.704	45%	43	67.75	0.475	13%
DRAINAGE BASIN : 21	0.551	45%	43	67.75	0.187	34%
DRAINAGE BASIN : 22	2.475	45%	43	67.75	0.091	4%
DRAINAGE BASIN : 23	1.028	45%	43	67.75	0.272	26%
DRAINAGE BASIN : 24	0.437	45%	43	67.75	0.143	33%
DRAINAGE BASIN : 25	0.382	45%	43	67.75	0.149	39%
DRAINAGE BASIN : 26	2.52	45%	48.5	70.775	0.519	21%
DRAINAGE BASIN : 27	5.355	45%	43	67.75	1.059	20%
DRAINAGE BASIN : 28	5.294	45%	43	67.75	0.968	18%
DRAINAGE BASIN : 29	4.011	45%	43	67.75	0.932	23%
DRAINAGE BASIN : 30	2.075	45%	43	67.75	0.164	8%
DRAINAGE BASIN : 31	2.41	45%	43	67.75	0.626	26%
DRAINAGE BASIN : 32	8.725	45%	65	79.85	2.154	25%
<b>Totals</b>	<b>74.922</b>				<b>17.205</b>	<b>23%</b>



---

Traffic Impact Study

# Briarwood

Alachua County, Florida

## PREPARED FOR

Troon Creek LLC  
405 Cinnamon Oak Court  
Lake Mary, Florida 32746

## PREPARED BY

---



225 East Robinson Street, Suite 300  
Orlando, FL 32801  
407.839.4006

June 2019





# Table of Contents

<b>Table of Contents.....</b>	<b>i</b>
<b>Introduction .....</b>	<b>1</b>
Project Description.....	1
Trip Generation.....	3
Trip Distribution and Assignment.....	4
<b>Existing Conditions .....</b>	<b>6</b>
Study Area.....	6
Existing Roadway Capacity Analysis .....	7
Existing Intersection Capacity Analysis.....	10
<b>Future Conditions .....</b>	<b>11</b>
2022 Future Roadway Capacity Analysis .....	11
2022 Intersection Capacity Analysis.....	13
Intersection Queue Analysis.....	17
<b>Conclusions.....</b>	<b>18</b>

## Appendices

Appendix A – Site Plan
Appendix B – ITE Trip Generation Sheets
Appendix C – Traffic Count Data
Appendix D – FDOT Seasonal Factor Rates
Appendix E – Synchro Analysis – Existing (2019) Conditions
Appendix F – Historic Growth Trends
Appendix G – Intersection Volume Derivation
Appendix H – FDOT Programmed Improvements
Appendix I – 2022 Synchro Analysis – Future Conditions
Appendix J – 2022 Synchro Queue Printouts



# List of Tables

<b>Table No.</b>	<b>Title</b>	<b>Page</b>
Table 1:	Project Trip Generation.....	3
Table 2:	Existing Roadway Capacity Analysis.....	9
Table 3:	Intersection Capacity Analysis – Existing (2019) Conditions.....	10
Table 4:	Year 2022 Future Background PM Peak Hour Roadway Capacity Analysis.....	12
Table 5:	Year 2022 Future Buildout PM Peak Hour Roadway Capacity Analysis.....	12
Table 5:	2022 Intersection Capacity Analysis – Future Conditions .....	14
Table 6:	2022 Intersection Queue Analysis.....	17



# List of Figures

Figure No.	Title	Page
Figure 1:	Project Location Map.....	2
Figure 2:	Project Trip Distribution .....	5
Figure 3:	Existing (2019) Turning Movement Volumes.....	8
Figure 4:	2022 Future Build AM Peak Hour Traffic Volumes.....	15
Figure 5:	2022 Future Build PM Peak Hour Traffic Volumes .....	16

# 1

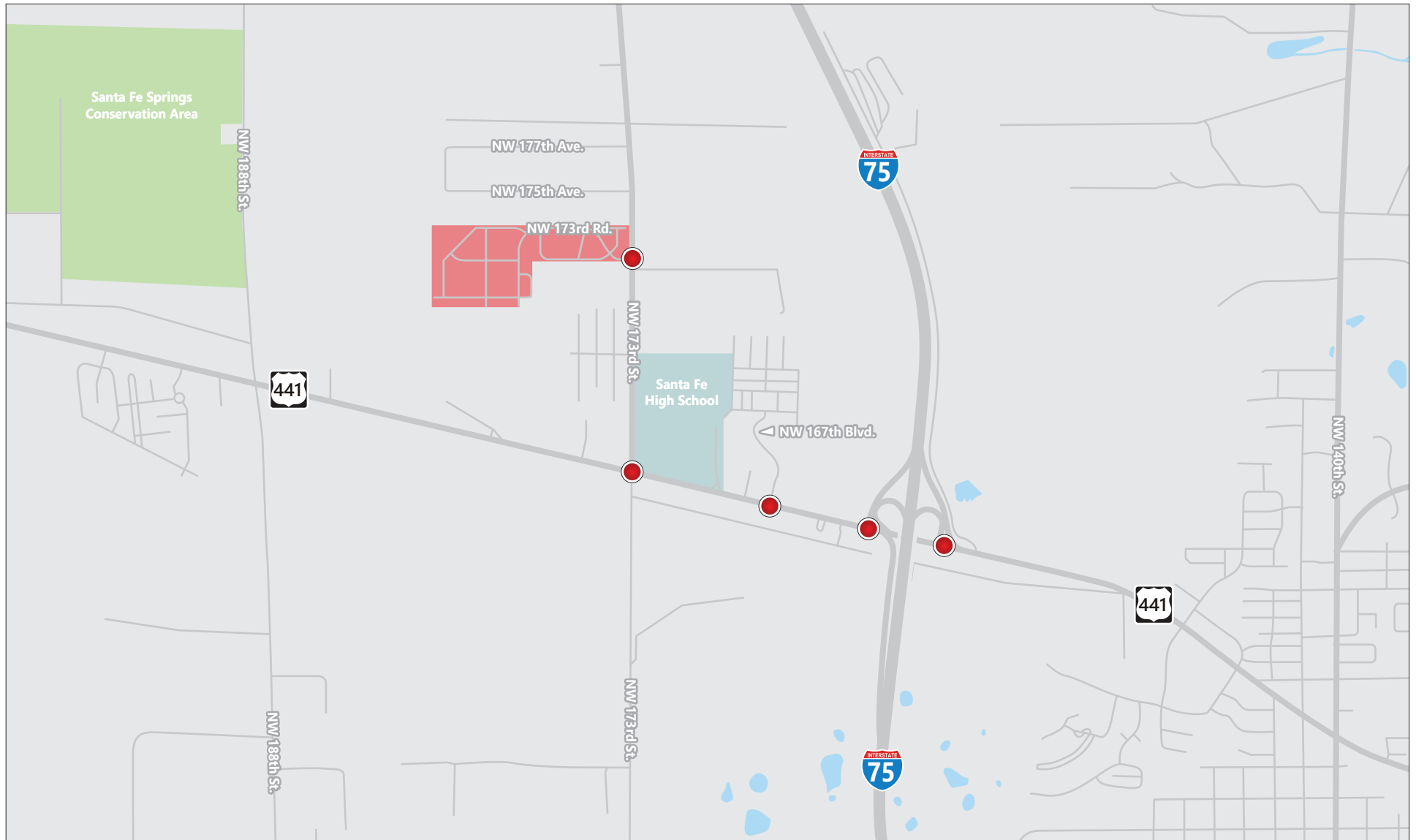
## Introduction

VHB has been retained by Troon Creek LLC to conduct a traffic impact study for the proposed Briarwood residential development to be located on the west side of NW 173<sup>rd</sup> Street (CR 235A), approximately 0.6 miles north of US 441 in Alachua, Florida. The project location is illustrated on **Figure 1**. A preliminary site plan is provided in **Appendix A**. The development is proposed to include 240 single-family residential units with a buildout year of 2022. The analysis quantifies both the existing traffic conditions along roadways within the study area and the projected future traffic conditions expected for the Build condition (including development of the proposed site). This document provides a detailed description of the study analysis and key findings following the requirements set forth in the Alachua County Land Development Code, Part III, Title 40, Chapter 407, Article XIII and Alachua County staff.

---

### Project Description

The proposed development will be located on the west side of NW 173<sup>rd</sup> Street (CR 235A), approximately 0.6 miles north of US 441 in the northwest part of Alachua, Florida. The site is just northwest of Santa Fe High School. Access is proposed to be provided via a full driveway connection to NW 173<sup>rd</sup> Street. Briarwood is proposed to include 240 market-rate single-family residential homes on approximately 74 acres.



Project Site



Study Intersections



**Figure 1**

**Project Location Map**  
Briarwood



## Trip Generation

**Table 1** summarizes the trip generation for the proposed development. The daily and peak hour trips were calculated based on equations and rates contained in the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 10<sup>th</sup> Edition. ITE Land Use Code 210 – Single-Family Residential was deemed the most appropriate for the proposed development. As shown in **Table 1**, the proposed development is expected to generate 2,327 new daily trips, 175 new AM peak hour trips, and 235 new PM peak hour trips for the 2022 Buildout condition. The sheets can be found in **Appendix B**.

**Table 1: Project Trip Generation**

Land Use	ITE Code	Intensity	DU	Daily Trip Ends	AM Peak Period					PM Peak Period				
					In %	Trips	Out %	Trips	Total	In %	Trips	Out %	Trips	Total
Single Family	210	240	DU	2,327	25%	44	75%	131	175	63%	148	37%	87	235

Source: | ITE Trip Generation, 10th Edition



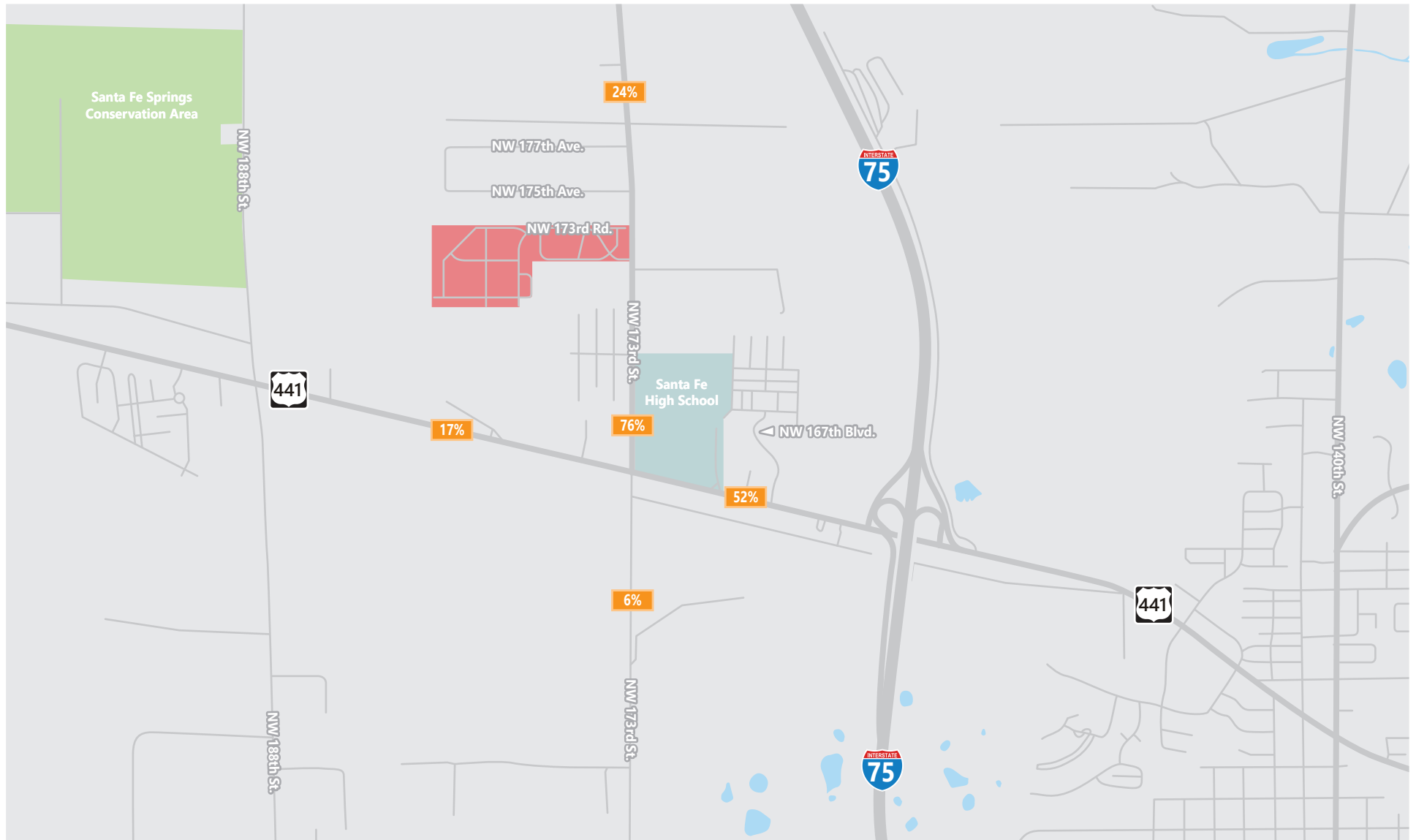
---

## Trip Distribution and Assignment

The distribution of site generated traffic is a function of population in surrounding areas, competing shopping opportunities, existing travel patterns, ease of access to the site, and traffic conditions on area roadways. The trip distribution and assignment is based on the existing travel patterns from the composite of AM and PM counts collected at the intersection of US 441 at NW 173<sup>rd</sup> Street. The distribution of primary trips to and from the site is shown in **Figure 2**.

In general, the distribution produced by the model shows the following pattern for project traffic:

- 24% north on NW 173<sup>rd</sup> Street
- 52% south on NW 173<sup>rd</sup> Street, then east on US 441
- 17% south on NW 173<sup>rd</sup> Street, then west on US 441
- 6% south on NW 173<sup>rd</sup> Street and continuing south of US 441



- Project Site
- Trip Distribution



**Figure 2**  
**Project Distribution**  
Briarwood

# 2

## Existing Conditions

This section summarizes existing transportation conditions observed in the study area, including roadway and intersection geometry, existing traffic control, and daily and evening peak hour traffic volumes.

### Study Area

The study area is based on daily trip generation thresholds contained in the Alachua County Code of Ordinances and consists of a one-quarter mile radius of influence for roadway segments and for intersections. Based on the limited roadway network in the area, the corresponding study area is as follows:

<u>Roadway</u>	<u>Segment(s)</u>
NW 173 <sup>rd</sup> Street	US 441 to Benton Hills Benton Hills to NW 178 <sup>th</sup> Avenue
US 441	NW 188 <sup>th</sup> Street to NW 173 <sup>rd</sup> Street NW 173 <sup>rd</sup> Street to I-75

In addition, the following five (5) intersections were analyzed:

- Project Entrance @ NW 173<sup>rd</sup> Street
- US 441 @ NW 173<sup>rd</sup> Street
- US 441 @ NW 167<sup>th</sup> Boulevard
- US 441 @ I-75 southbound ramps
- US 441 @ I-75 northbound ramps

Turning movement counts were collected at the study intersections on May 21, 2019. These counts were adjusted using the corresponding Seasonal Factor of 1.01 to reflect average conditions. A copy of the data collected, including existing signal timings, is found in **Appendix C**. The FDOT seasonal factor adjustment rates are included in **Appendix D**. The existing turning movement volumes are shown in **Figure 3**.

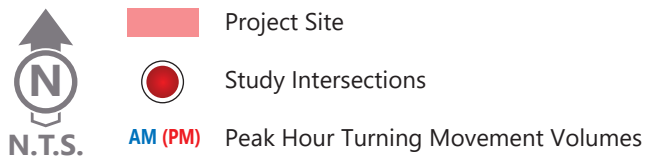
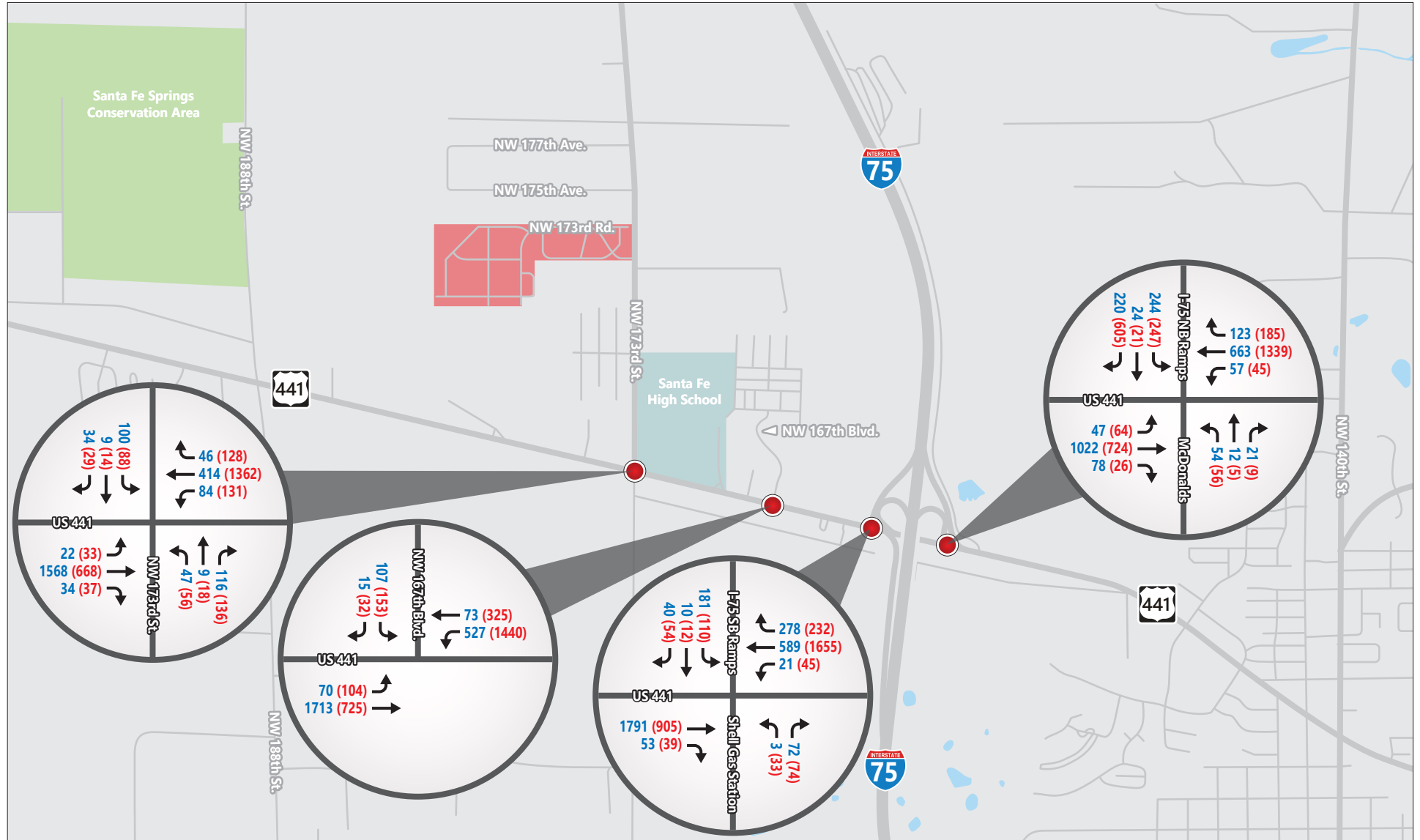
---

## Existing Roadway Capacity Analysis

VHB conducted an assessment to determine the existing level of service of the study roadways. The level of service (LOS) of a given roadway is related to prevailing traffic volumes and to capacity, which is defined as the maximum number of vehicles that can pass through a roadway section during a specified period of time. The capacity of a roadway is determined by a number of factors including composition of traffic (cars, buses, and trucks); roadway alignment; width and number of lanes; posted travel speeds and other variables.

The level of service and remaining capacity for each of the study roadways were based on the FDOT FTI Traffic Count System for US 441, existing traffic counts for NW 173<sup>rd</sup> Street, and the FDOT Q/LOS table 5 for peak-hour capacities. The LOS standard was taken from the Alachua County Transportation Element. A comparison of the peak-hour roadway traffic volumes were made against the roadway service capacities to determine the existing level of service. The existing roadway capacity analysis was performed for all roadways within the study area as shown in **Table 2**. In summary, all study roadways currently operate at an acceptable level of service.





**Figure 3**  
Existing (2019) Peak Hour  
Turning Movement Volumes  
Briarwood



**Table 2: Existing Roadway Capacity Analysis**

<b>Roadway</b>	<b>From</b>	<b>To</b>	<b># of Lanes</b>	<b>LOS Std.</b>	<b>2018 AADT</b>	<b>Peak-Hour Capacity</b>	<b>Peak-Hour Volume</b>	<b>Remaining Capacity</b>	<b>Vol/Cap</b>
NW 173rd Street	US 441	Briarwood	2L	C	N/A	1,170	310	860	0.26
	Briarwood	NW 178th Avenue	2L	C	N/A	1,170	310	860	0.26
US 441	NW 188th Street	NW 173rd Street (CR 235A)	4L	C	48,093	3,060	2,090	970	0.68
	NW 173rd Street (CR 235A)	I-75	4L	C	44,283	3,060	2,660	400	0.87

## Existing Intersection Capacity Analysis

The existing intersections were evaluated using the methodology outlined in the Highway Capacity Manual and using the Synchro 10 Software. The analysis and subsequent HCM output data can be found in **Appendix E**. The results of the intersection capacity analysis for the AM and PM peak hour are shown in **Table 3**.

**Table 3: Intersection Capacity Analysis – Existing (2019) Conditions**

Intersection	Intersection Control Type	Approach	Existing AM Peak Hour			Existing PM Peak Hour		
			Max v/c	Delay	LOS	Max v/c	Delay	LOS
1. US 441 at NW 173rd Street	Signalized	EB	0.999	54.7	D	0.485	25.7	C
		WB	0.539	7.8	A	0.864	47.1	D
		NB	0.552	54.3	D	0.656	53.6	D
		SB	0.479	47.9	D	0.395	40.2	D
		<b>Overall</b>		<b>44.0</b>	<b>D</b>		<b>41.4</b>	<b>D</b>
2. US 441 at NW 167th Boulevard	Signalized	EB	0.627	0.3	A	0.403	7.9	A
		WB	0.229	0.2	A	0.658	1.5	A
		SB	0.690	64.9	E	0.753	58.6	E
		<b>Overall</b>		<b>3.4</b>	<b>A</b>		<b>7.2</b>	<b>A</b>
3. US 441 at I-75 southbound ramps	Signalized	EB	0.823	4.6	A	0.532	19.7	B
		WB	0.246	0.4	A	0.711	1.6	A
		NB	0.000	0.0	A	0.000	0.0	A
		SB	0.421	53.8	D	0.319	47.4	D
		<b>Overall</b>		<b>14.5</b>	<b>B</b>		<b>10.5</b>	<b>B</b>
4. US 441 at I-75 northbound ramps	Signalized	EB	0.729	27.7	C	0.439	15.4	B
		WB	0.450	22.6	C	0.839	30.5	C
		NB	0.174	28.3	C	0.165	32.8	C
		SB	0.603	36.3	D	0.700	43.8	D
		<b>Overall</b>		<b>27.1</b>	<b>C</b>		<b>27.1</b>	<b>C</b>

v/c: Volume to Capacity Ratio

Delay: Average delay in seconds per vehicle

LOS: Level of Service

HCM 6th Edition based on Synchro 10 results are reported

As **Table 3** indicates, all the study intersections are operating at LOS D or better overall, with all movements having a volume-to-capacity of less than 1.0.

# 3

## Future Conditions

The background traffic was developed based on the existing traffic volumes and historic growth for each of the respective roadway segments. The anticipated number of trips generated from the development were calculated based on the trip generation rates/equations obtained from the ITE Trip Generation Manual, 10th Edition (see **Table 1**) and distributed to the roadways and intersections based on the site layout and existing travel patterns (see **Figure 2**). The historic growth trends for the study area roadway segments included in **Appendix F**. The intersection volume derivation is documented in **Appendix G**.

Within the area of influence of the project, the only roadway improvement scheduled for construction within the next three years is a resurfacing project on US 441 from NW 167<sup>th</sup> Boulevard to Columbia County line, a distance of 6.739 miles. The FDOT Project ID for this construction project is 436173-1. Information on the project is included in **Appendix H**. This project will not affect the capacity of the roadway.

---

### 2022 Future Roadway Capacity Analysis

The future capacity analysis for the study area roadways for the future background (Year 2022) conditions without the project can be found in **Table 4** for the PM peak hour conditions. The analysis shows that all study area roadways will continue to operate at acceptable level of service with the exception of US 441 from NW 173<sup>rd</sup> Street to I-75 will be over capacity if historic growth continues on the existing trend. The future volume-to-capacity ratio for this segment is 1.08. Compared to the existing v/c ratio of 0.87, this segment is shown to be near-capacity today, so future growth would result in capacity-constrained conditions.

Similarly, the future capacity analysis for the study area roadways for the future project buildout conditions can be found in **Table 5** for the PM peak hour conditions. No additional roadway segments are shown to be over capacity due to the project.



**Table 4: Year 2022 Future Background PM Peak Hour Roadway Capacity Analysis**

Roadway	From	To	LOS Std.	2018 AADT	Peak-Hour Capacity	Peak-Hour Volume	Year of Existing Count	Annual Growth Rate	2022 Peak-Hour	Remaining Capacity	Vol/Cap
NW 173rd Street	US 441	Benton Hills	C	N/A	1,170	310	2019	8.60%	390	780	0.33
	Benton Hills	NW 178th Avenue	C	N/A	1,170	310	2019	8.60%	390	780	0.33
US 441	NW 188th Street	NW 173rd Street (CR 235A)	C	48,093	3,060	2,090	2018	5.95%	2,587	473	0.85
	NW 173rd Street (CR 235A)	I-75	C	44,283	3,060	2,660	2018	6.13%	3,312	-252	1.08

**Table 5: Year 2022 Future Buildout PM Peak Hour Roadway Capacity Analysis**

Roadway	From	To	LOS Std.	2018 AADT	Peak-Hour Capacity	2022 Background Peak-Hour	Project Traffic	Project Significance	Total Traffic	Remaining Capacity	Vol/Cap
NW 173rd Street	US 441	Benton Hills	C	N/A	1,170	390	179	15.26%	569	601	0.49
	Benton Hills	NW 178th Avenue	C	N/A	1,170	390	56	4.82%	446	724	0.38
US 441	NW 188th Street	NW 173rd Street (CR 235A)	C	48,093	3,060	2,587	40	1.31%	2,627	433	0.86
	NW 173rd Street (CR 235A)	I-75	C	44,283	3,060	3,312	122	3.99%	3,434	-374	1.12



---

## 2022 Intersection Capacity Analysis

The 2022 intersections were evaluated for buildout conditions using the methodology outlined in the Highway Capacity Manual, 6<sup>th</sup> Edition and using the Synchro 10 Software. The intersection geometry is the same as the existing condition, but signalized intersections were further optimized to improve performance at the intersections. The results of the signalized intersection capacity analysis for the AM and PM peak hour are shown in **Table 5**. The Synchro 10 output reports based on HCM 6<sup>th</sup> Edition methodologies is included in **Appendix I**.

As **Table 5** indicates, all the study intersections are operating at LOS D or better overall, with no approaches having a volume-to-capacity ratio above 1.0. As expected for future conditions, delays increase slightly compared to existing conditions, even with project traffic.

The turning movement volumes for the future AM and PM peak-hours are shown on **Figure 4** and **Figure 5**, respectively.



**Table 5: 2022 Intersection Capacity Analysis – Future Conditions**

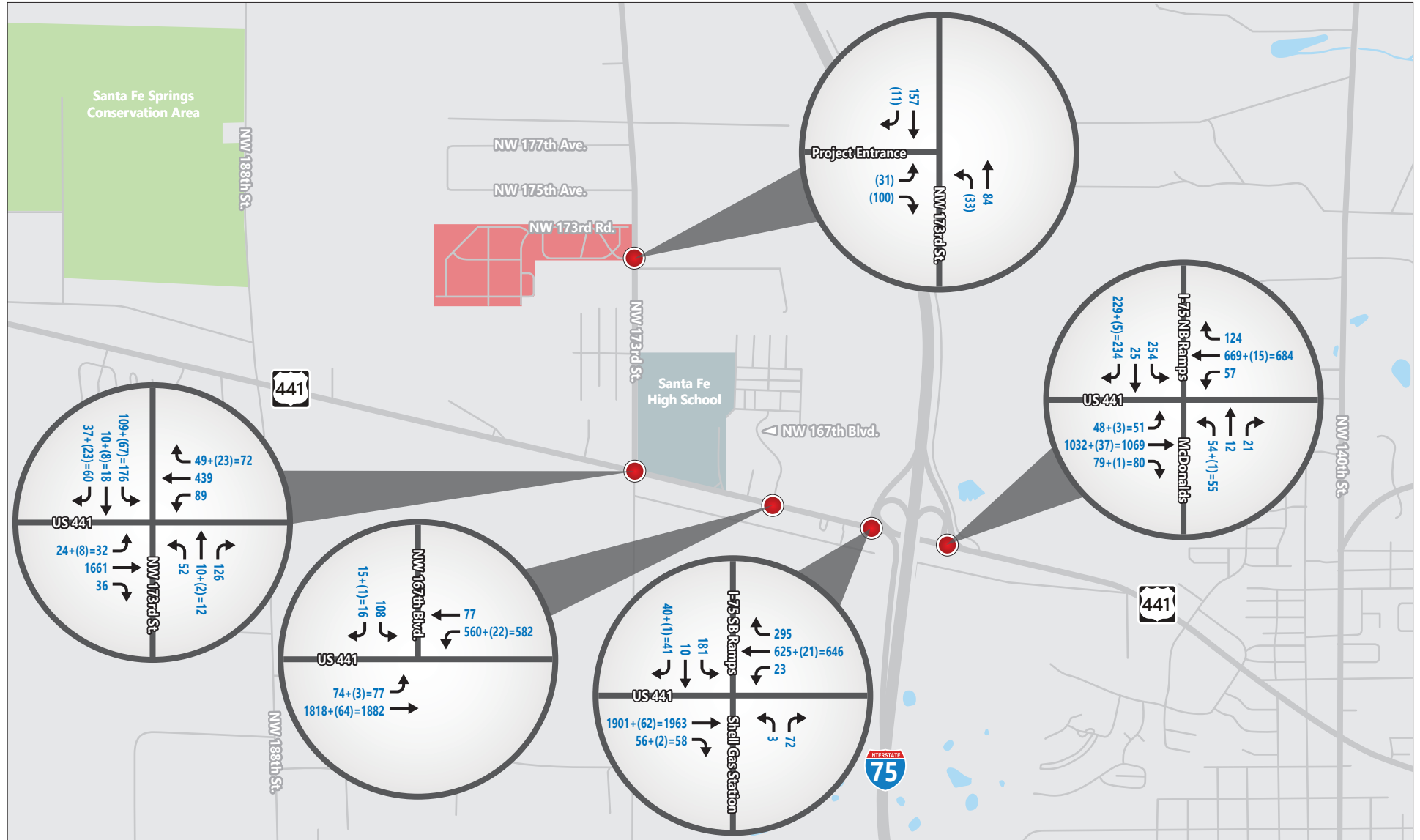
Intersection	Intersection Control Type	Approach	Future AM Peak Hour			Future PM Peak Hour		
			Max v/c	Delay	LOS	Max v/c	Delay	LOS
1. US 441 at NW 173rd Street	Signalized	EB	0.977	42.5	D	0.829	30.3	C
		WB	0.942	29.2	C	0.895	32.0	C
		NB	0.652	52.4	D	0.687	52.5	D
		SB	0.841	61.6	E	0.604	42.2	D
		<b>Overall</b>		<b>42.0</b>	<b>D</b>		<b>33.8</b>	<b>C</b>
2. US 441 at NW 167th Boulevard	Signalized	EB	0.720	5.7	A	0.603	5.6	A
		WB	0.276	5.8	A	0.754	11.9	B
		SB	0.648	48.4	D	0.740	53.8	D
		<b>Overall</b>		<b>7.6</b>	<b>A</b>		<b>12.5</b>	<b>B</b>
3. US 441 at I-75 southbound ramps	Signalized	EB	0.989	42.4	D	0.523	13.9	B
		WB	0.286	5.6	A	0.820	13.2	B
		NB	0.000	0.0	A	0.000	0.0	A
		SB	0.409	39.9	D	0.294	40.3	D
		<b>Overall</b>		<b>33.8</b>	<b>C</b>		<b>15.0</b>	<b>B</b>
4. US 441 at I-75 northbound ramps	Signalized	EB	0.869	36.0	D	0.529	22.5	C
		WB	0.530	23.4	C	0.901	32.6	C
		NB	0.165	22.5	C	0.163	30.0	C
		SB	0.508	29.0	C	0.693	40.4	D
		<b>Overall</b>		<b>30.6</b>	<b>C</b>		<b>30.1</b>	<b>C</b>
5. NW 173rd Street at Briarwood	TWSC	EB	0.178	10.5	B	0.140	11.2	B
		NB	0.026	7.7	A	0.088	7.9	A
		SB	0.000	0.0	A	0.000	0.0	A
		<b>Overall</b>		<b>3.9</b>	<b>A</b>		<b>3.2</b>	<b>A</b>

v/c: Volume to Capacity Ratio

Delay: Average delay in seconds per vehicle

LOS: Level of Service

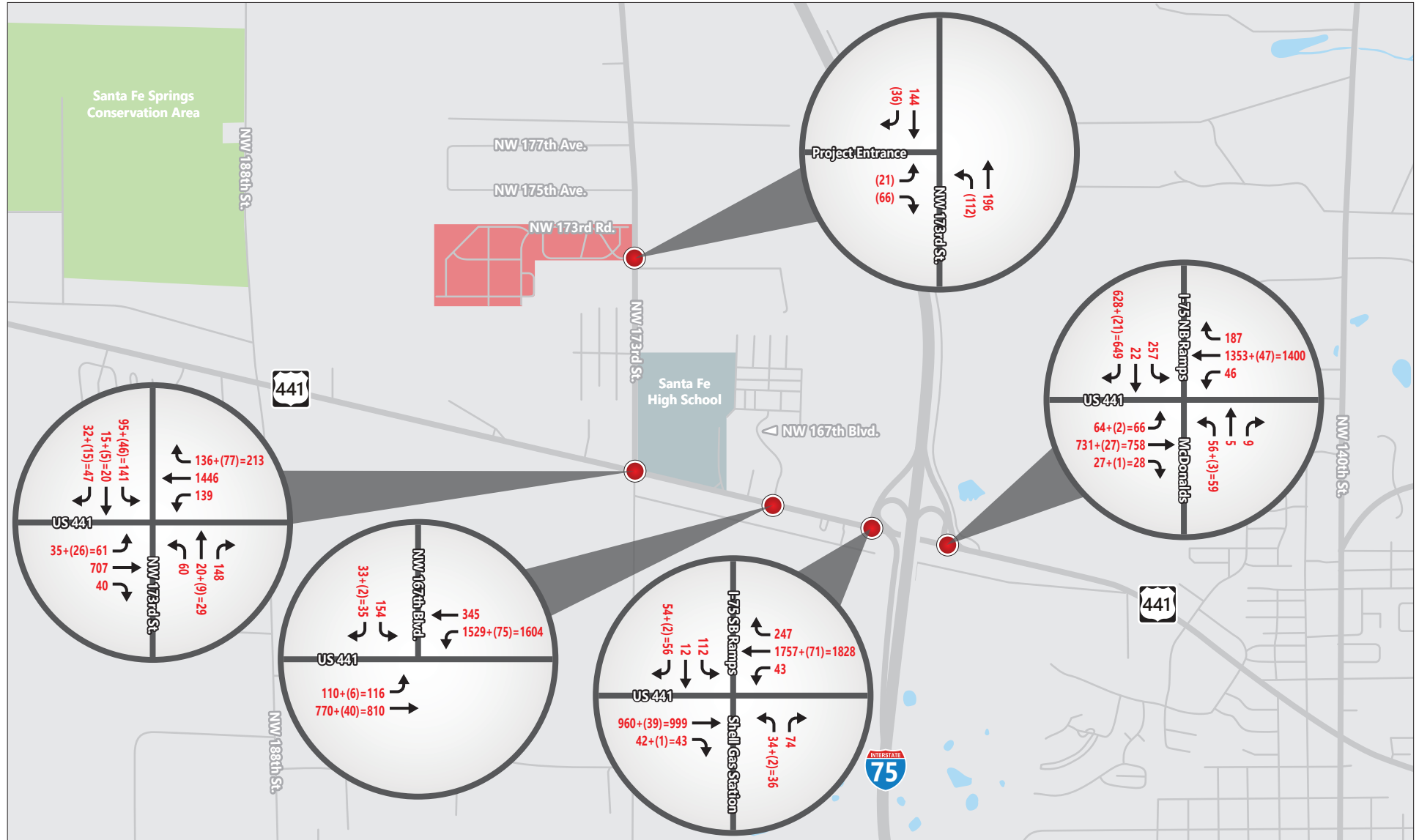
HCM 6th Edition based on Synchro 10 results are reported



- Project Site
- Study Intersections
- $00+(00)=00$  — Total Traffic
- Project Traffic
- Background Traffic



**Figure 4**  
2022 Future Build AM Peak Hour  
Turning Movement Volumes



**Figure 5**  
**2022 Future Build PM Peak**  
**Hour Turning Movement**  
**Volumes**

## Intersection Queue Analysis

An intersection queue analysis was performed for turning movements with exclusive turn lanes. The analysis compares the existing storage length to the 95<sup>th</sup> percentile queues for future total traffic conditions. As shown in **Table 6**, all storage lengths exceed the 95<sup>th</sup>-percentile queues with the exception of the southbound approach for US 441 at I-75 northbound off-ramps. However, the geometry of the cloverleaf off-ramp restricts the extension of the storage lanes without reconstructing the ramp and/or interchange. The Synchro movement queue printouts are provided in the **Appendix J**.

**Table 6: 2022 Intersection Queue Analysis**

Intersection	Movement	Movement Volume	95th % Queue (ft)	Rounded Queue (ft)	Existing Storage Length (ft)	Adequate?
1. US 441 at NW 173rd Street	EBL	61	137	150	300	Yes
	EBR	40	0	0	225	Yes
	WBL	139	190	200	300	Yes
	WBR	213	38	50	1,000	Yes
	NBL	40	74	75	160	Yes
	SBL	176 (AM)	213	225	380	Yes
2. US 441 at NW 167th Boulevard	EBL	116	90	100	250	Yes
	WBR	345	35	50	275	Yes
	SBL	154	106	125	150	Yes
3. US 441 at I-75 southbound ramps	WBL	48	29	50	180	Yes
	WBR	295 (AM)	32	50	700	Yes
	NBR	74	0	0	50	Yes
	SBR	56	0	0	220	Yes
4. US 441 at I-75 northbound ramps	EBL	66	74	75	300	Yes
	WBL	46	41	50	200	Yes
	WBR	187	47	50	275	Yes
	SBL	225	375	375	225	No
	SBR	225	284	300	225	No

The PM peak-hour volume representing the highest queue shown unless otherwise noted.



# 4

## Conclusions

This traffic analysis has been prepared in support of obtaining concurrency approval through Alachua County and for the proposed Briarwood Project development (240 single-family dwelling units), to be located on the west side of NW 173<sup>rd</sup> Street and north of US 441 in Alachua County, Florida.

The following is a summary of the study findings:

- The proposed development is projected to generate 2,327 daily trips, 175 AM peak hour trips, and 235 PM peak hour trips.
- The existing conditions analysis shows that all study roadways operate at an acceptable level of service.
- The existing signalized intersection analysis reveals that all intersections operate at an overall acceptable level of service. All lane groups show a volume-to-capacity less than 1.0, indicating that there is adequate capacity.
- The 2022 future condition unsignalized intersection analysis at the site entrance reveals that all movements operate at an acceptable level of service. Similar to comparable residential developments north and south of Benton Hills, no additional exclusive turn lanes are needed to provide acceptable operations.
- The 2019 future signalized intersection analysis reveals that all intersections operate at an acceptable level of service. In order to get all of the intersections to operate at an acceptable level of service and with v/c less than 1 signals were optimized at various intersections.
- The 2022 future condition analysis concludes that all study area roadways will continue to exhibit traffic volumes lower than their respective maximum service volumes.
- Most of the turn lanes with project traffic can accommodate the 95<sup>th</sup> percentile queues. The only approach that is deficient for accommodating the future 95<sup>th</sup>-percentile queue is the southbound approach at the US 441/I-75 northbound off-ramp intersection, which is exceeded by 75 feet (right turn) and 150 feet (left turn). However, this condition should be acceptable based on the geometric restrictions on the approach.

# ***APPENDICES***

**Appendix A – Site Plan**

**Appendix B – ITE Trip Generation Sheets**

**Appendix C – Traffic Count Data**

**Appendix D – FDOT Seasonal Factor Rates**

**Appendix E – Synchro Analysis – Existing (2019) Conditions**

**Appendix F – Historic Growth Trends**

**Appendix G – Intersection Volume Derivation**

**Appendix H – FDOT Programmed Improvements**

**Appendix I – 2022 Synchro Analysis – Future Conditions**

**Appendix J – 2022 Synchro Queue Printouts**

# ***APPENDIX A***

## ***Site Plan***



## ***APPENDIX B***

### ***ITE Trip Generation Summary Sheets***



## **Land Use: 210**

### **Single-Family Detached Housing**

#### **Description**

Single-family detached housing includes all single-family detached homes on individual lots. A typical site surveyed is a suburban subdivision.

#### **Additional Data**

The number of vehicles and residents had a high correlation with average weekday vehicle trip ends. The use of these variables was limited, however, because the number of vehicles and residents was often difficult to obtain or predict. The number of dwelling units was generally used as the independent variable of choice because it was usually readily available, easy to project, and had a high correlation with average weekday vehicle trip ends.

This land use included data from a wide variety of units with different sizes, price ranges, locations, and ages. Consequently, there was a wide variation in trips generated within this category. Other factors, such as geographic location and type of adjacent and nearby development, may also have had an effect on the site trip generation.

Single-family detached units had the highest trip generation rate per dwelling unit of all residential uses because they were the largest units in size and had more residents and more vehicles per unit than other residential land uses; they were generally located farther away from shopping centers, employment areas, and other trip attractors than other residential land uses; and they generally had fewer alternative modes of transportation available because they were typically not as concentrated as other residential land uses.

Time-of-day distribution data for this land use are presented in Appendix A. For the six general urban/suburban sites with data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 7:15 and 8:15 a.m. and 4:00 and 5:00 p.m., respectively. For the two sites with Saturday data, the overall highest vehicle volume was counted between 3:00 and 4:00 p.m. For the one site with Sunday data, the overall highest vehicle volume was counted between 10:15 and 11:15 a.m.

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in California, Connecticut, Delaware, Illinois, Indiana, Maryland, Minnesota, Montana, New Jersey, North Carolina, Ohio, Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Vermont, and Virginia.

#### **Source Numbers**

100, 105, 114, 126, 157, 167, 177, 197, 207, 211, 217, 267, 275, 293, 300, 319, 320, 356, 357, 367, 384, 387, 407, 435, 522, 550, 552, 579, 598, 601, 603, 614, 637, 711, 716, 720, 728, 735, 868, 903, 925, 936

# Single-Family Detached Housing (210)

Vehicle Trip Ends vs: Dwelling Units  
On a: Weekday

Setting/Location: General Urban/Suburban

Number of Studies: 159

Avg. Num. of Dwelling Units: 264

Directional Distribution: 50% entering, 50% exiting

## Vehicle Trip Generation per Dwelling Unit

Average Rate

9.44

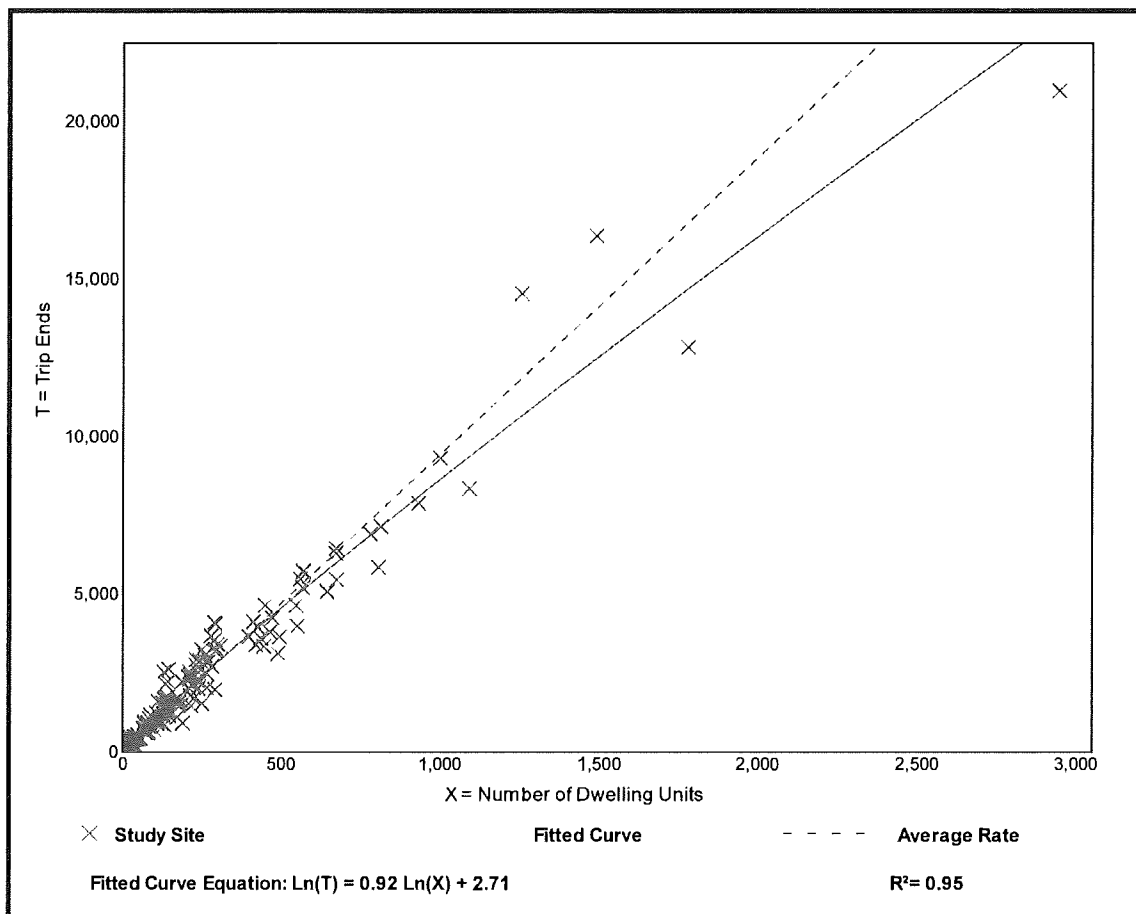
Range of Rates

4.81 - 19.39

Standard Deviation

2.10

## Data Plot and Equation



## Single-Family Detached Housing (210)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,  
Peak Hour of Adjacent Street Traffic,  
One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

Number of Studies: 173

Avg. Num. of Dwelling Units: 219

Directional Distribution: 25% entering, 75% exiting

### Vehicle Trip Generation per Dwelling Unit

Average Rate

0.74

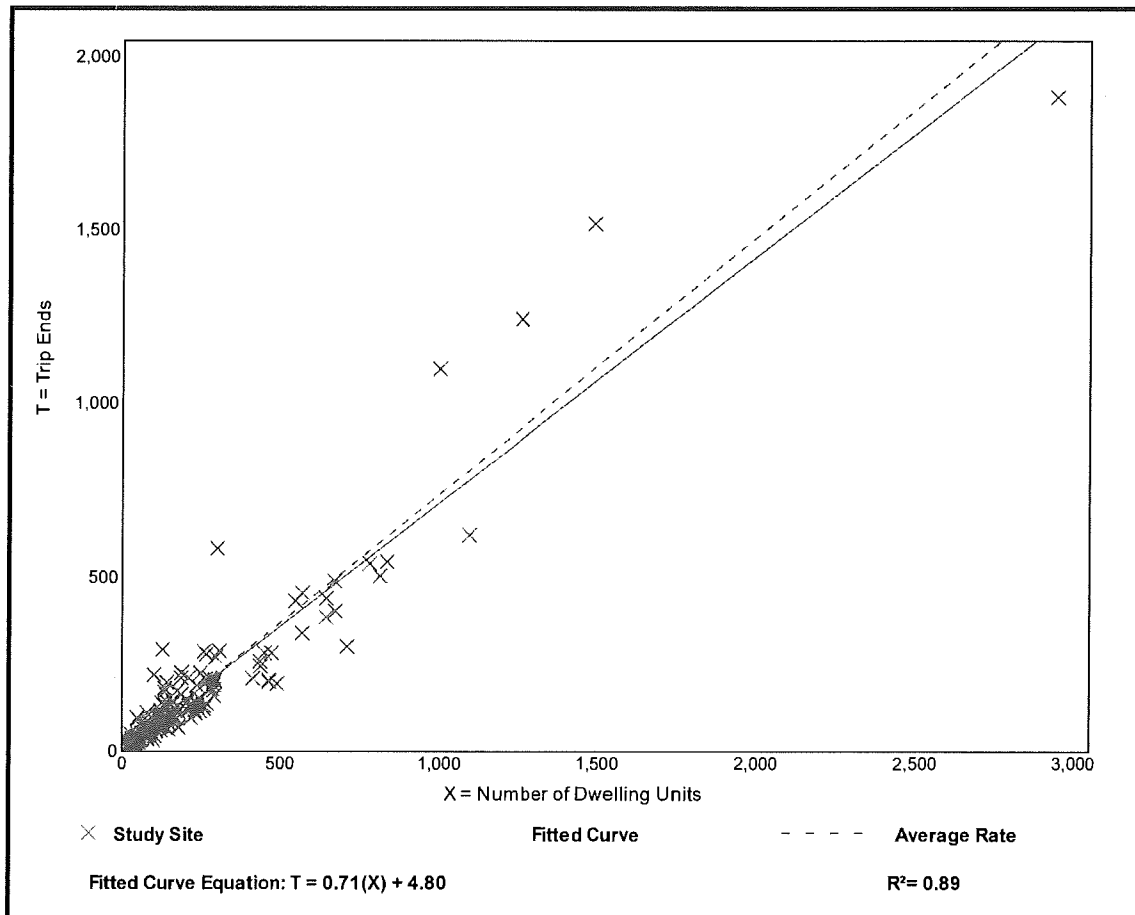
Range of Rates

0.33 - 2.27

Standard Deviation

0.27

### Data Plot and Equation



## Single-Family Detached Housing (210)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,  
Peak Hour of Adjacent Street Traffic,  
One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 190

Avg. Num. of Dwelling Units: 242

Directional Distribution: 63% entering, 37% exiting

### Vehicle Trip Generation per Dwelling Unit

Average Rate

0.99

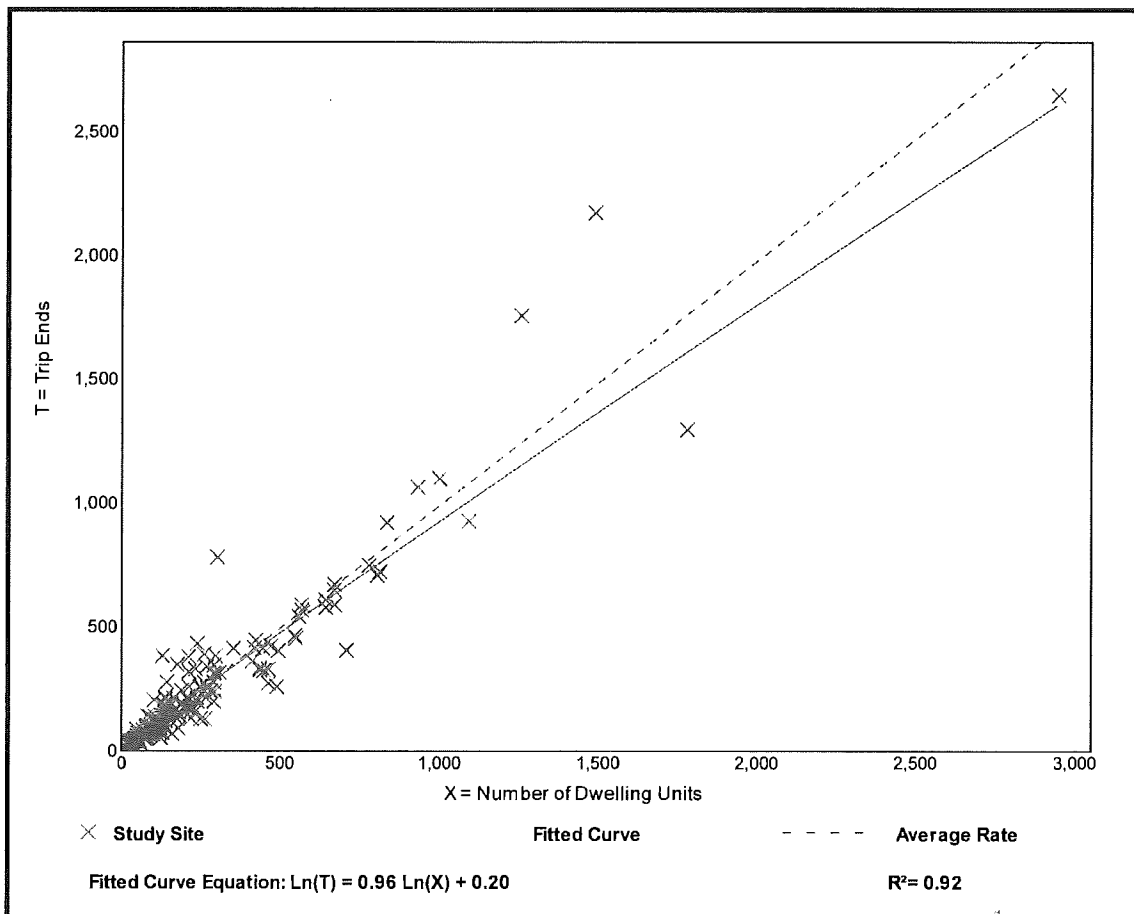
Range of Rates

0.44 - 2.98

Standard Deviation

0.31

### Data Plot and Equation



## ***APPENDIX C***

### ***Traffic Count Data***



# Roadway Count Summary

*Vanasse Hangen Brustlin, Inc.*

County Alachua City Alachua  
 Intersection NW 173rd St & US 441  
 Date Tuesday, May 21, 2019 7:00 All Vehicles  
 Time Period 7:00 to 9:00

VHB Project #: 63466

Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	15	3	26	20	1	3
7:15 - 7:30	9	2	30	31	1	13
7:30 - 7:45	15	3	29	23	4	9
7:45 - 8:00	8	1	30	25	3	9
8:00 - 8:15	8	9	35	17	2	7
8:15 - 8:30	3	12	17	32	3	8
8:30 - 8:45	6	18	31	50	4	11
8:45 - 9:00	8	24	22	39	4	15
	72	72	220	237	22	75

Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	4	399	7	18	66	8
7:15 - 7:30	5	434	6	20	87	7
7:30 - 7:45	5	371	10	25	126	12
7:45 - 8:00	8	348	11	20	131	19
8:00 - 8:15	13	253	9	15	95	22
8:15 - 8:30	19	248	10	24	93	42
8:30 - 8:45	28	266	7	16	104	65
8:45 - 9:00	40	213	1	18	102	91
	122	2,532	61	156	804	266

North / South	34	9	99	46
NW 173rd St				410
East / West				83
US 441				
Peak Hour				
7:00 - 8:00	22			
Peak Hour Factor	1,552			
0.95				
Total Pk Hr Voume	34			
2,460				

# Roadway Count Summary

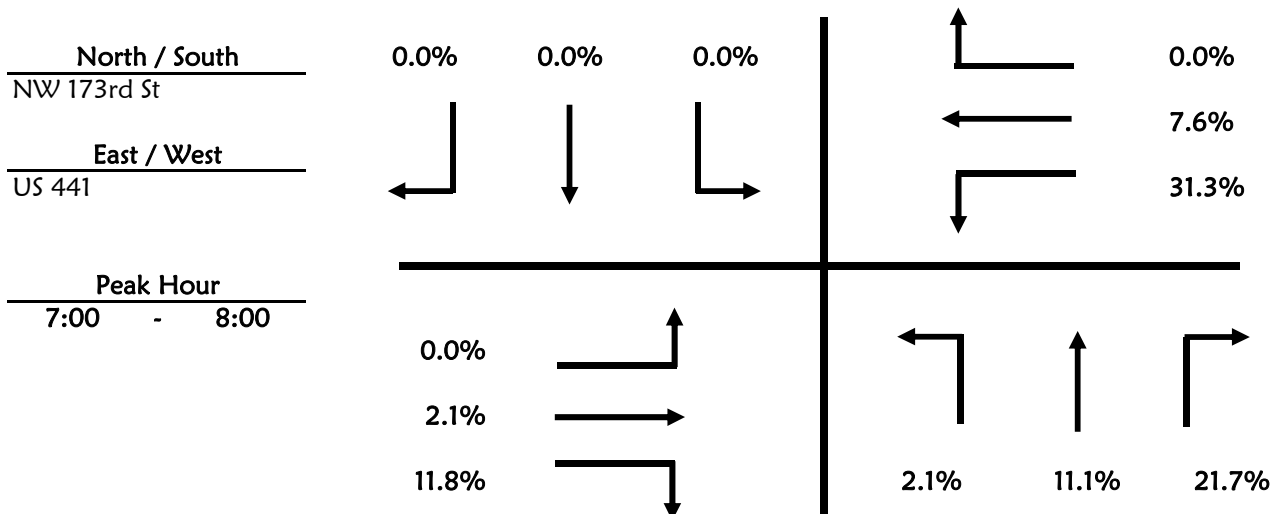
*Vanasse Hangen Brustlin, Inc.*

County Alachua City Alachua  
 Intersection NW 173rd St & US 441  
 Date Tuesday, May 21, 2019 7:00  
 Time Period 7:00 to 9:00 Trucks

VHB Project #: 63466

Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	0	0	10	0	0	0
7:15 - 7:30	0	1	6	0	0	0
7:30 - 7:45	1	0	6	0	0	0
7:45 - 8:00	0	0	3	0	0	0
8:00 - 8:15	1	0	10	0	0	0
8:15 - 8:30	1	0	4	2	0	0
8:30 - 8:45	2	0	8	1	0	2
8:45 - 9:00	3	0	8	1	0	1

Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	0	10	1	5	6	0
7:15 - 7:30	0	8	0	9	8	0
7:30 - 7:45	0	5	0	10	9	0
7:45 - 8:00	0	10	3	2	8	0
8:00 - 8:15	0	7	1	1	4	0
8:15 - 8:30	0	12	0	10	5	7
8:30 - 8:45	0	9	0	3	12	6
8:45 - 9:00	0	10	0	7	8	1



# Roadway Count Summary

*Vanasse Hangen Brustlin, Inc.*

County Alachua City Alachua  
 Intersection NW 173rd St & US 441  
 Date Tuesday, May 21, 2019 7:00 All Vehicles  
 Time Period 16:00 to 18:00

VHB Project #: 63466

Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
16:00 - 16:15	9	6	34	30	10	9
16:15 - 16:30	7	5	24	16	1	12
16:30 - 16:45	11	3	49	27	6	11
16:45 - 17:00	7	3	32	21	1	6
17:00 - 17:15	22	5	35	26	3	8
17:15 - 17:30	15	7	19	13	4	4
17:30 - 17:45	27	8	37	21	7	6
17:45 - 18:00	12	2	29	14	7	8
	110	39	259	168	39	64

Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
16:00 - 16:15	7	146	7	25	267	23
16:15 - 16:30	7	135	11	24	279	23
16:30 - 16:45	7	173	13	40	315	34
16:45 - 17:00	9	163	6	34	321	29
17:00 - 17:15	9	151	9	35	319	25
17:15 - 17:30	8	174	9	21	394	39
17:30 - 17:45	7	125	14	38	362	34
17:45 - 18:00	4	167	16	22	333	21
	58	1,234	85	239	2,590	228

North / South	29	14	87	127
NW 173rd St				1,349
East / West				130
US 441				
Peak Hour				
16:30 - 17:30	33			
Peak Hour Factor	661			
0.95				
Total Pk Hr Voume	37			
2,675				

# Roadway Count Summary

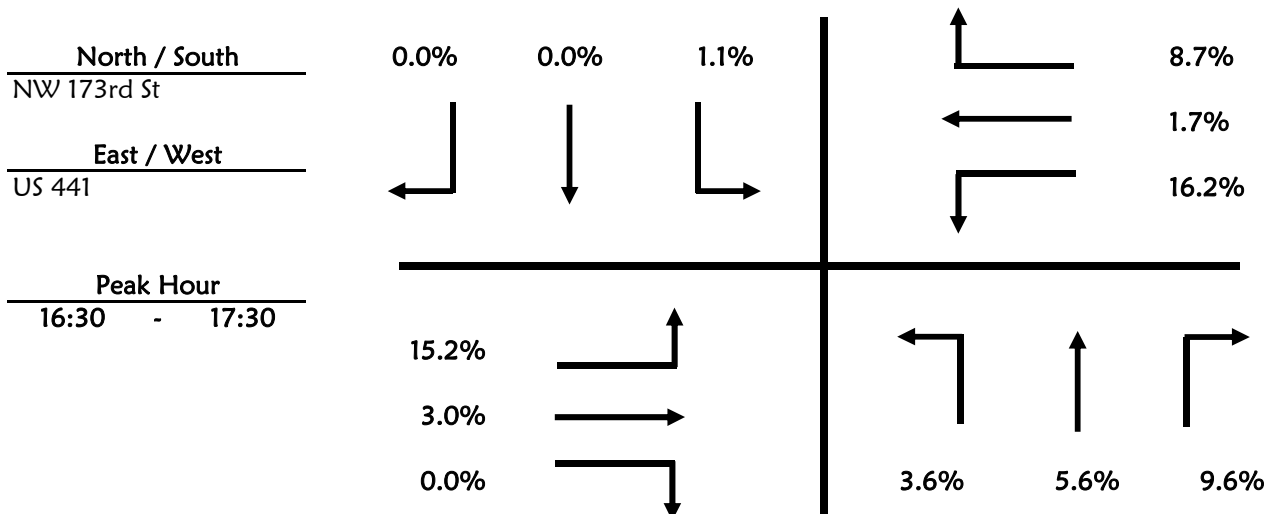
*Vanasse Hangen Brustlin, Inc.*

County Alachua City Alachua  
 Intersection NW 173rd St & US 441  
 Date Tuesday, May 21, 2019 7:00  
 Time Period 16:00 to 18:00 Trucks

VHB Project #: 63466

Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
16:00 - 16:15	0	0	4	0	1	0
16:15 - 16:30	0	1	6	0	0	1
16:30 - 16:45	1	0	3	0	0	0
16:45 - 17:00	1	0	3	0	0	0
17:00 - 17:15	0	1	5	1	0	0
17:15 - 17:30	0	0	2	0	0	0
17:30 - 17:45	0	0	8	1	0	0
17:45 - 18:00	0	0	6	0	0	1

Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
16:00 - 16:15	2	3	3	7	5	0
16:15 - 16:30	0	5	0	3	4	5
16:30 - 16:45	2	5	0	4	4	5
16:45 - 17:00	1	5	0	6	6	5
17:00 - 17:15	2	6	0	6	1	1
17:15 - 17:30	0	4	0	5	12	0
17:30 - 17:45	0	4	1	3	3	2
17:45 - 18:00	0	4	0	8	2	0



# Roadway Count Summary

*Vanasse Hangen Brustlin, Inc.*

County Alachua City Alachua  
 Intersection US 441 & I-75 SB Ramps  
 Date Tuesday, May 21, 2019 7:00 All Vehicles  
 Time Period 7:00 to 9:00

VHB Project #: 63466

Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	2	0	18	50	4	7
7:15 - 7:30	1	0	15	34	1	8
7:30 - 7:45	0	0	24	52	5	15
7:45 - 8:00	0	0	14	40	0	9
8:00 - 8:15	3	0	18	39	1	3
8:15 - 8:30	4	0	22	36	4	8
8:30 - 8:45	5	0	12	34	2	13
8:45 - 9:00	5	0	14	38	4	11
	20	0	137	323	21	74

Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	0	424	10	4	81	58
7:15 - 7:30	0	480	15	5	118	70
7:30 - 7:45	0	467	16	7	186	80
7:45 - 8:00	0	402	11	5	198	67
8:00 - 8:15	0	321	19	5	143	43
8:15 - 8:30	0	272	14	6	189	35
8:30 - 8:45	0	334	10	9	163	34
8:45 - 9:00	0	303	10	3	218	30
	0	3,003	105	44	1,296	417

North / South	39	10	176	275
US 441				583
East / West				21
I-75 SB Ramps				
Peak Hour				
7:00 - 8:00	0			
Peak Hour Factor	1,773			
0.88				
Total Pk Hr Voume	52			
3,003				



# Roadway Count Summary

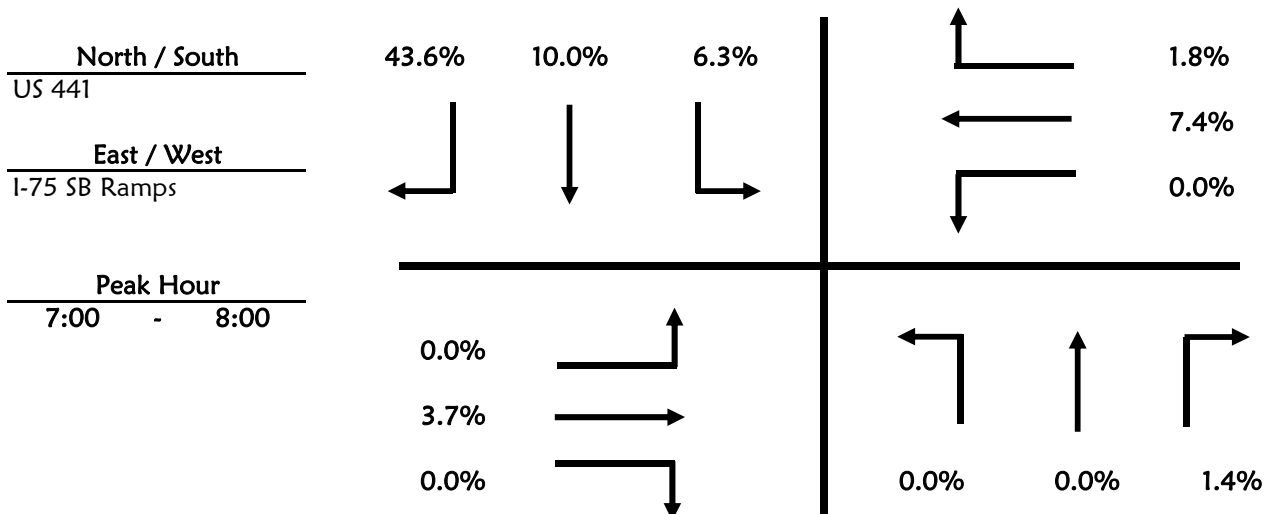
*Vanasse Hangen Brustlin, Inc.*

County                      Alachua                      City                      Alachua  
 Intersection              US 441                      & I-75 SB Ramps  
 Date                      Tuesday, May 21, 2019 7:00  
 Time Period              7:00                      to                      9:00                      Trucks

VHB Project #:              63466

Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	0	0	0	4	0	5
7:15 - 7:30	0	0	0	3	0	3
7:30 - 7:45	0	0	0	2	1	7
7:45 - 8:00	0	0	1	2	0	2
8:00 - 8:15	0	0	0	2	0	0
8:15 - 8:30	0	0	1	4	1	3
8:30 - 8:45	0	0	0	3	0	5
8:45 - 9:00	1	0	0	5	1	3

Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	0	19	0	0	7	3
7:15 - 7:30	0	21	0	0	12	0
7:30 - 7:45	0	10	0	0	13	2
7:45 - 8:00	0	16	0	0	11	0
8:00 - 8:15	0	16	0	0	7	3
8:15 - 8:30	0	14	0	1	21	3
8:30 - 8:45	0	17	1	0	12	2
8:45 - 9:00	0	22	0	1	12	2



# Roadway Count Summary

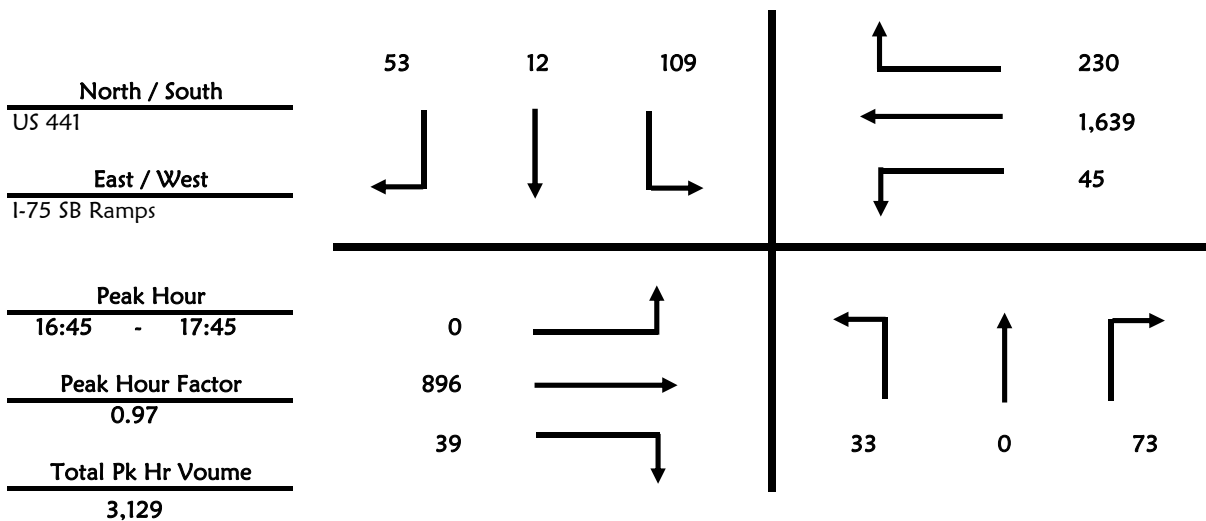
*Vanasse Hangen Brustlin, Inc.*

County Alachua City Alachua  
 Intersection US 441 & I-75 SB Ramps  
 Date Tuesday, May 21, 2019 7:00 All Vehicles  
 Time Period 16:00 to 18:00

VHB Project #: 63466

Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
16:00 - 16:15	6	0	24	25	3	17
16:15 - 16:30	7	0	14	26	3	8
16:30 - 16:45	6	0	20	23	5	14
16:45 - 17:00	10	0	22	31	5	11
17:00 - 17:15	4	0	18	19	2	11
17:15 - 17:30	13	0	17	26	3	17
17:30 - 17:45	6	0	16	33	2	14
17:45 - 18:00	3	0	12	35	3	10
	55	0	143	218	26	102

Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
16:00 - 16:15	0	225	11	9	331	39
16:15 - 16:30	0	193	13	13	357	42
16:30 - 16:45	0	218	19	19	369	58
16:45 - 17:00	0	226	10	12	380	29
17:00 - 17:15	0	247	11	7	398	79
17:15 - 17:30	0	209	9	17	435	60
17:30 - 17:45	0	214	9	9	426	62
17:45 - 18:00	0	227	16	4	368	40
	0	1,759	98	90	3,064	409



# Roadway Count Summary

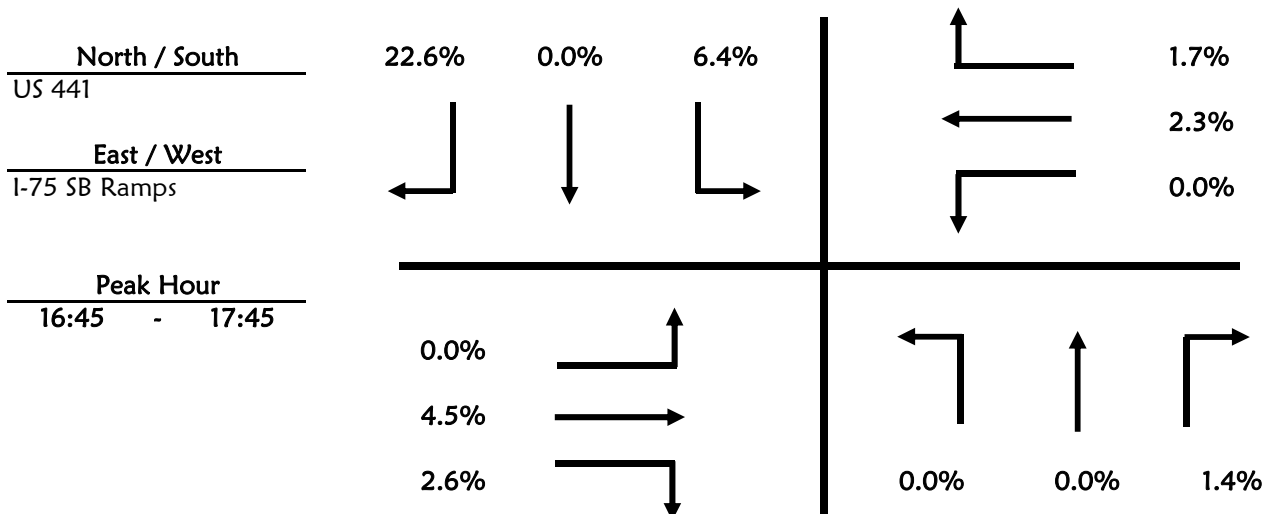
*Vanasse Hangen Brustlin, Inc.*

County Alachua City Alachua  
 Intersection US 441 & I-75 SB Ramps  
 Date Tuesday, May 21, 2019 7:00  
 Time Period 16:00 to 18:00 Trucks

VHB Project #: 63466

Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
16:00 - 16:15	1	0	0	6	0	4
16:15 - 16:30	0	0	0	2	0	0
16:30 - 16:45	0	0	0	5	0	1
16:45 - 17:00	0	0	0	3	0	5
17:00 - 17:15	0	0	0	1	0	3
17:15 - 17:30	0	0	0	1	0	3
17:30 - 17:45	0	0	1	2	0	1
17:45 - 18:00	0	0	0	1	0	4

Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
16:00 - 16:15	0	8	0	1	9	1
16:15 - 16:30	0	7	0	0	13	2
16:30 - 16:45	0	14	0	0	12	2
16:45 - 17:00	0	7	0	0	14	1
17:00 - 17:15	0	15	0	0	6	2
17:15 - 17:30	0	7	0	0	12	1
17:30 - 17:45	0	11	1	0	6	0
17:45 - 18:00	0	11	0	0	8	0



# Roadway Count Summary

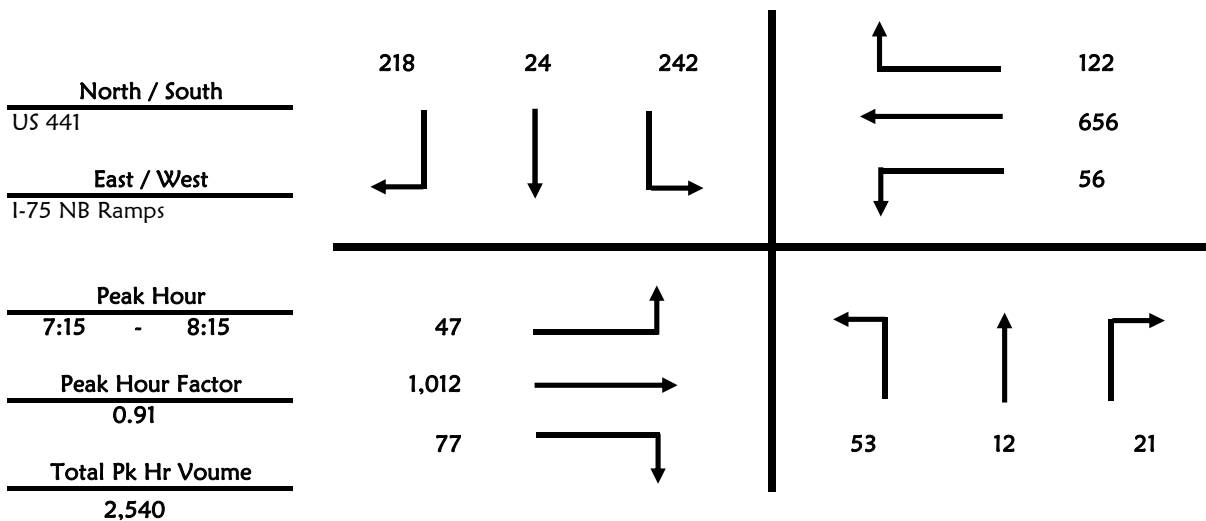
*Vanasse Hangen Brustlin, Inc.*

County Alachua City Alachua  
 Intersection US 441 & I-75 NB Ramps  
 Date Tuesday, May 21, 2019 7:00 All Vehicles  
 Time Period 7:00 to 9:00

VHB Project #: 63466

Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	12	3	3	36	8	29
7:15 - 7:30	13	3	7	51	4	46
7:30 - 7:45	15	1	5	61	7	70
7:45 - 8:00	17	4	7	72	8	69
8:00 - 8:15	8	4	2	58	5	33
8:15 - 8:30	13	5	7	53	18	64
8:30 - 8:45	17	9	5	44	3	48
8:45 - 9:00	19	6	4	47	5	52
	114	35	40	422	58	411

Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	11	258	21	12	96	29
7:15 - 7:30	10	256	15	9	153	36
7:30 - 7:45	8	289	13	18	179	36
7:45 - 8:00	15	254	27	12	175	25
8:00 - 8:15	14	213	22	17	149	25
8:15 - 8:30	10	192	15	17	152	29
8:30 - 8:45	12	210	23	16	128	27
8:45 - 9:00	8	229	16	15	193	24
	88	1,901	152	116	1,225	231



# Roadway Count Summary

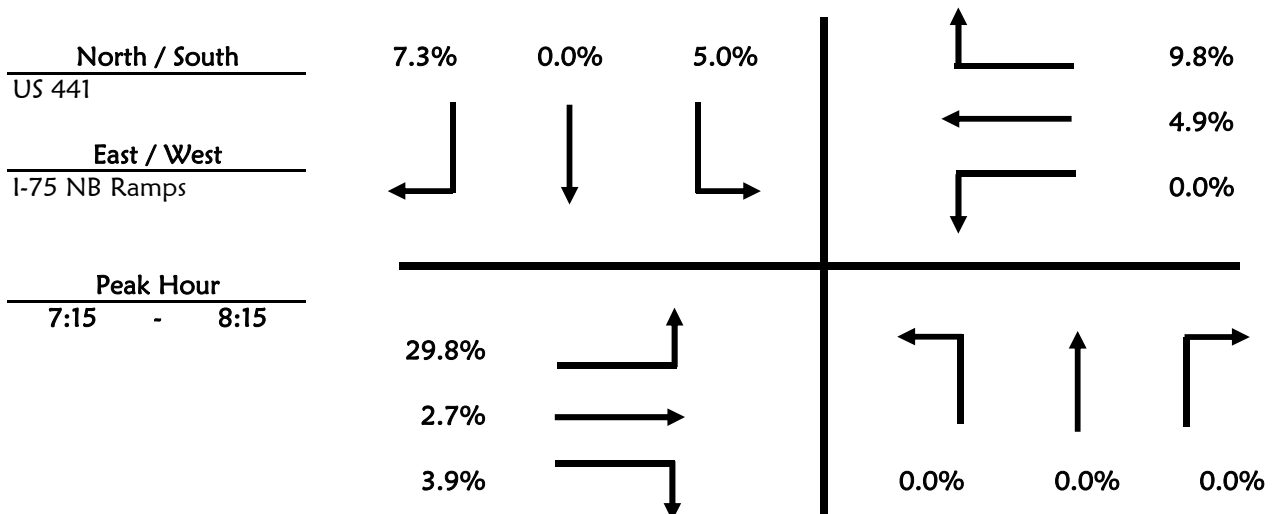
*Vanasse Hangen Brustlin, Inc.*

County Alachua City Alachua  
 Intersection US 441 & I-75 NB Ramps  
 Date Tuesday, May 21, 2019 7:00  
 Time Period 7:00 to 9:00 Trucks

VHB Project #: 63466

Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	0	0	0	3	0	3
7:15 - 7:30	0	0	0	3	0	5
7:30 - 7:45	0	0	0	2	0	4
7:45 - 8:00	0	0	0	1	0	3
8:00 - 8:15	0	0	0	6	0	4
8:15 - 8:30	0	0	0	0	0	12
8:30 - 8:45	1	0	0	4	0	7
8:45 - 9:00	0	0	0	2	0	5

Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	3	12	0	0	6	4
7:15 - 7:30	4	9	1	0	9	3
7:30 - 7:45	3	3	1	0	10	1
7:45 - 8:00	1	10	0	0	8	5
8:00 - 8:15	6	5	1	0	5	3
8:15 - 8:30	4	9	1	0	13	3
8:30 - 8:45	4	8	0	0	6	5
8:45 - 9:00	2	17	0	0	10	6



# Roadway Count Summary

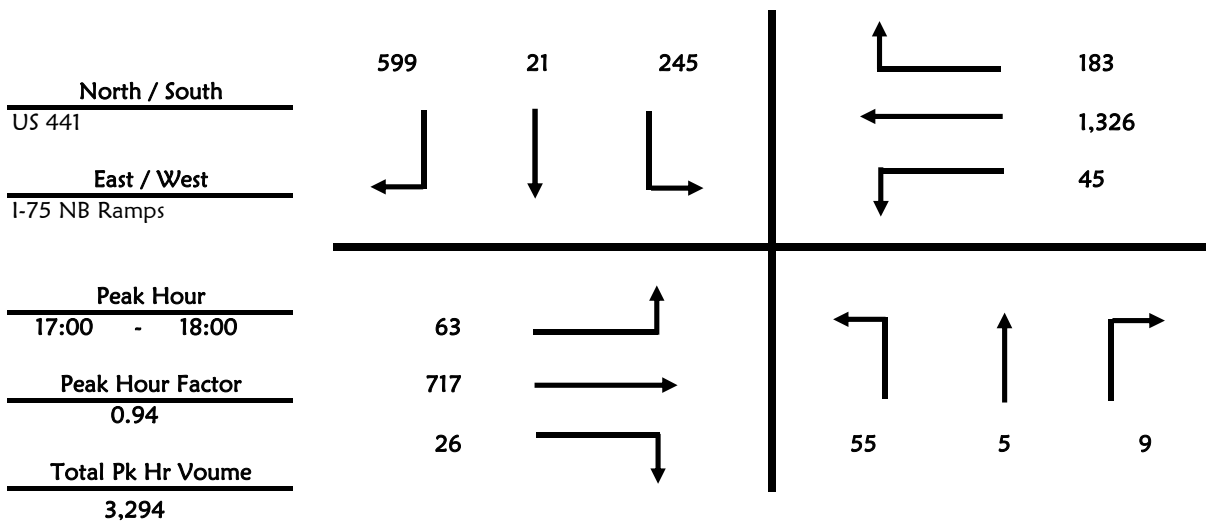
*Vanasse Hangen Brustlin, Inc.*

County Alachua City Alachua  
 Intersection US 441 & I-75 NB Ramps  
 Date Tuesday, May 21, 2019 7:00 All Vehicles  
 Time Period 16:00 to 18:00

VHB Project #: 63466

Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
16:00 - 16:15	15	2	2	43	5	122
16:15 - 16:30	11	6	0	52	7	135
16:30 - 16:45	7	3	1	56	5	165
16:45 - 17:00	19	1	3	50	5	166
17:00 - 17:15	12	2	2	62	8	141
17:15 - 17:30	21	2	1	76	2	199
17:30 - 17:45	15	1	0	52	8	148
17:45 - 18:00	7	0	6	55	3	111
	107	17	15	446	43	1,187

Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
16:00 - 16:15	10	182	7	9	256	35
16:15 - 16:30	16	147	7	11	256	35
16:30 - 16:45	17	171	8	9	276	36
16:45 - 17:00	13	185	8	11	253	41
17:00 - 17:15	18	180	9	18	348	39
17:15 - 17:30	12	169	4	11	323	56
17:30 - 17:45	18	181	5	9	345	38
17:45 - 18:00	15	187	8	7	310	50
	119	1,402	56	85	2,367	330





# Roadway Count Summary

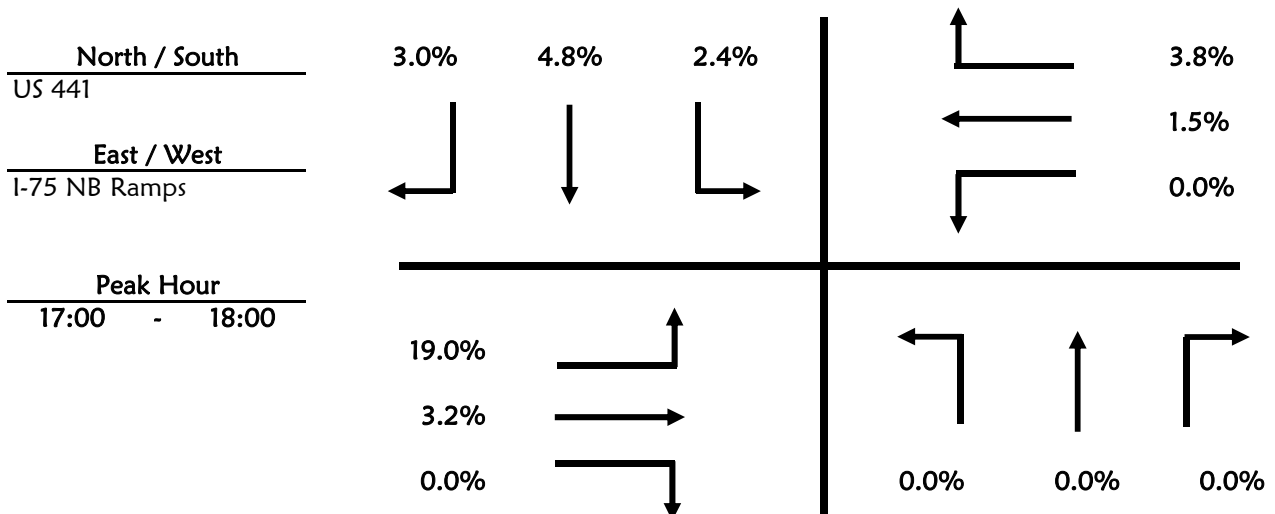
*Vanasse Hangen Brustlin, Inc.*

County Alachua City Alachua  
 Intersection US 441 & I-75 NB Ramps  
 Date Tuesday, May 21, 2019 7:00  
 Time Period 16:00 to 18:00 Trucks

VHB Project #: 63466

Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
16:00 - 16:15	0	0	0	0	0	5
16:15 - 16:30	0	0	0	0	0	3
16:30 - 16:45	0	0	0	0	0	8
16:45 - 17:00	0	0	0	1	0	6
17:00 - 17:15	0	0	0	1	1	3
17:15 - 17:30	0	0	0	1	0	8
17:30 - 17:45	0	0	0	3	0	1
17:45 - 18:00	0	0	0	1	0	6

Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
16:00 - 16:15	3	5	0	0	6	3
16:15 - 16:30	2	4	0	0	11	3
16:30 - 16:45	2	8	0	0	6	2
16:45 - 17:00	0	3	0	0	9	0
17:00 - 17:15	2	10	0	0	6	0
17:15 - 17:30	1	2	0	0	5	2
17:30 - 17:45	6	5	0	0	5	4
17:45 - 18:00	3	6	0	0	4	1



# Roadway Count Summary

*Vanasse Hangen Brustlin, Inc.*

County Alachua City Alachua  
 Intersection US 441 & NW 167 Blvd  
 Date Tuesday, May 21, 2019 7:00 All Vehicles  
 Time Period 7:00 to 9:00

VHB Project #: 63466

Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	0	0	0	23	0	7
7:15 - 7:30	0	0	0	30	0	1
7:30 - 7:45	0	0	0	29	0	5
7:45 - 8:00	0	0	0	24	0	2
8:00 - 8:15	0	0	0	32	0	4
8:15 - 8:30	0	0	0	32	0	2
8:30 - 8:45	0	0	0	21	0	1
8:45 - 9:00	0	0	0	27	0	3
	0	0	0	218	0	25

Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	7	411	0	0	81	7
7:15 - 7:30	19	491	0	0	114	14
7:30 - 7:45	13	417	0	0	157	22
7:45 - 8:00	30	377	0	0	170	29
8:00 - 8:15	19	296	0	0	120	24
8:15 - 8:30	27	271	0	1	154	35
8:30 - 8:45	20	331	0	0	157	30
8:45 - 9:00	26	259	0	1	202	23
	161	2,853	0	2	1,155	184

North / South	15	0	106	72
US 441				522
East / West				0
NW 167 Blvd				
Peak Hour	69			
7:00 - 8:00	1,696			
Peak Hour Factor	0			
0.93				
Total Pk Hr Voume				
2,480				

# Roadway Count Summary

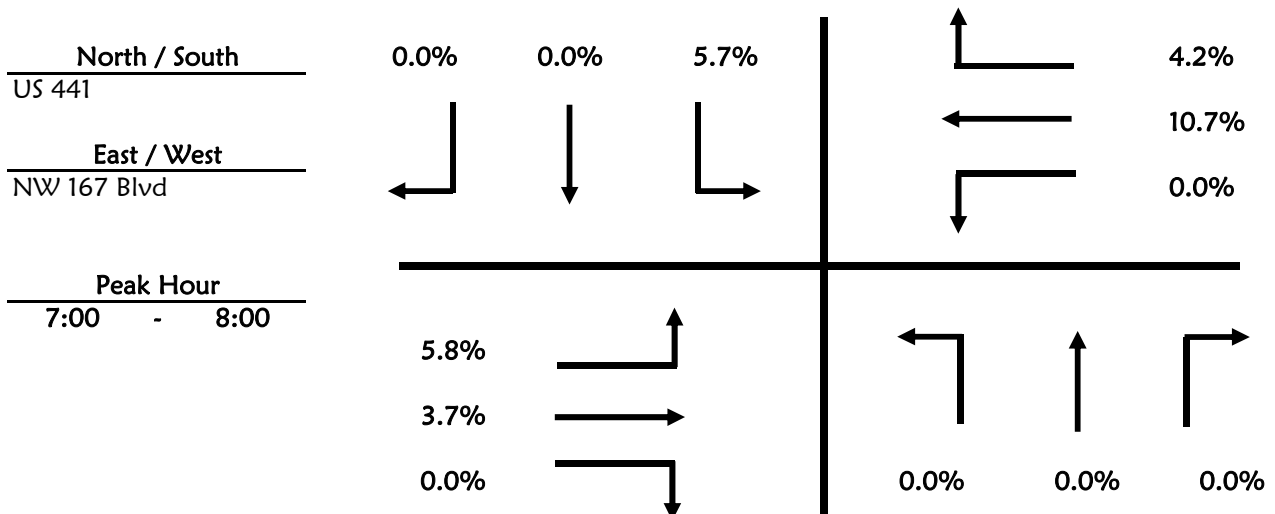
*Vanasse Hangen Brustlin, Inc.*

County Alachua City Alachua  
 Intersection US 441 & NW 167 Blvd  
 Date Tuesday, May 21, 2019 7:00  
 Time Period 7:00 to 9:00 Trucks

VHB Project #: 63466

Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	0	0	0	2	0	0
7:15 - 7:30	0	0	0	3	0	0
7:30 - 7:45	0	0	0	0	0	0
7:45 - 8:00	0	0	0	1	0	0
8:00 - 8:15	0	0	0	2	0	0
8:15 - 8:30	0	0	0	1	0	0
8:30 - 8:45	0	0	0	0	0	0
8:45 - 9:00	0	0	0	0	0	0

Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	1	20	0	0	12	0
7:15 - 7:30	0	16	0	0	15	0
7:30 - 7:45	1	9	0	0	19	1
7:45 - 8:00	2	18	0	0	10	2
8:00 - 8:15	0	13	0	0	6	1
8:15 - 8:30	3	13	0	0	23	2
8:30 - 8:45	1	21	0	0	17	0
8:45 - 9:00	1	19	0	0	15	1



# Roadway Count Summary

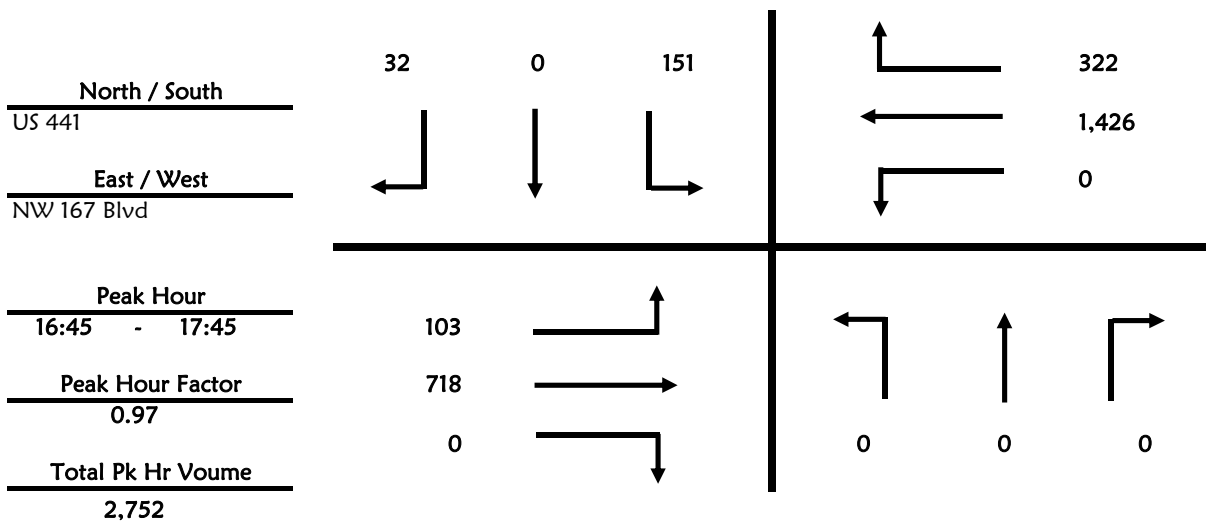
*Vanasse Hangen Brustlin, Inc.*

County Alachua City Alachua  
 Intersection US 441 & NW 167 Blvd  
 Date Tuesday, May 21, 2019 7:00 All Vehicles  
 Time Period 16:00 to 18:00

VHB Project #: 63466

Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
16:00 - 16:15	0	0	0	48	0	6
16:15 - 16:30	0	0	0	42	0	8
16:30 - 16:45	0	0	0	34	0	12
16:45 - 17:00	0	0	0	36	0	6
17:00 - 17:15	0	0	0	39	0	7
17:15 - 17:30	0	0	0	39	0	7
17:30 - 17:45	0	0	0	37	0	12
17:45 - 18:00	0	0	0	39	0	8
	0	0	0	314	0	66

Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
16:00 - 16:15	35	183	0	0	287	48
16:15 - 16:30	28	151	0	0	291	82
16:30 - 16:45	39	205	0	1	332	47
16:45 - 17:00	29	186	0	0	332	68
17:00 - 17:15	24	204	0	0	331	76
17:15 - 17:30	20	170	0	0	372	94
17:30 - 17:45	30	158	0	0	391	84
17:45 - 18:00	19	197	0	0	321	61
	224	1,454	0	1	2,657	560



# Roadway Count Summary

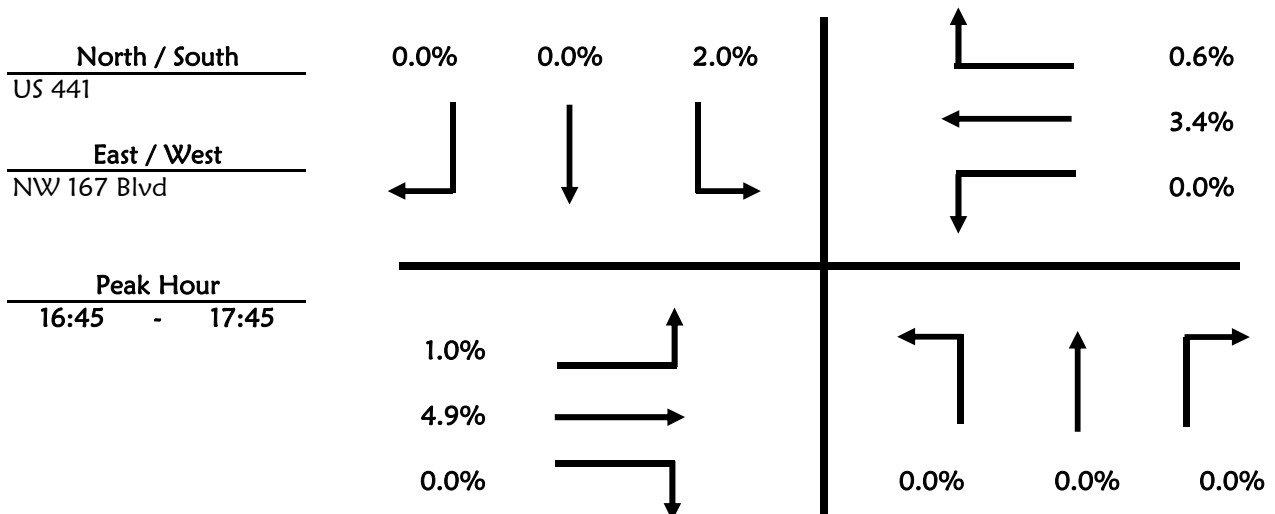
*Vanasse Hangen Brustlin, Inc.*

County Alachua City Alachua  
 Intersection US 441 & NW 167 Blvd  
 Date Tuesday, May 21, 2019 7:00  
 Time Period 16:00 to 18:00 Trucks

VHB Project #: 63466

Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
16:00 - 16:15	0	0	0	0	0	0
16:15 - 16:30	0	0	0	1	0	0
16:30 - 16:45	0	0	0	1	0	0
16:45 - 17:00	0	0	0	0	0	0
17:00 - 17:15	0	0	0	2	0	0
17:15 - 17:30	0	0	0	1	0	0
17:30 - 17:45	0	0	0	0	0	0
17:45 - 18:00	0	0	0	0	0	0

Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
16:00 - 16:15	0	8	0	0	12	0
16:15 - 16:30	0	8	0	0	12	1
16:30 - 16:45	0	11	0	0	13	0
16:45 - 17:00	0	6	0	0	17	1
17:00 - 17:15	1	13	0	0	9	0
17:15 - 17:30	0	5	0	0	15	0
17:30 - 17:45	0	11	0	0	7	1
17:45 - 18:00	1	10	0	0	11	0



# ***APPENDIX D***

## ***FDOT Seasonal Factor Report***



2018 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL  
 CATEGORY: 2600 ALACHUA COUNTYWIDE

RESORT - 2008 - RESORT COGNITIVE

MOCF: 0.97

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

\* PEAK SEASON

25-FEB-2019 16:26:21

830UPD

2\_2600\_PKSEASON.TXT























## ***APPENDIX E***

***Synchro Analysis – Existing (2019) Conditions***

# HCM 6th Signalized Intersection Summary

## 3: NW 173rd St & US 441

06/13/2019







												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	1568	34	84	414	46	47	9	116	100	9	34
Future Volume (veh/h)	22	1568	34	84	414	46	47	9	116	100	9	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1722	1441	1781	1870	1870	1737	1737	1870	1870	1870
Adj Flow Rate, veh/h	23	1651	36	88	436	48	49	9	122	105	9	36
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	12	31	8	2	2	11	11	2	2	2
Cap, veh/h	41	1734	712	100	1822	853	335	17	228	253	57	229
Arrive On Green	0.02	0.49	0.49	0.07	0.54	0.54	0.04	0.16	0.16	0.05	0.17	0.17
Sat Flow, veh/h	1781	3554	1459	1372	3385	1585	1781	102	1385	1781	327	1308
Grp Volume(v), veh/h	23	1651	36	88	436	48	49	0	131	105	0	45
Grp Sat Flow(s),veh/h/ln	1781	1777	1459	1372	1692	1585	1781	0	1488	1781	0	1635
Q Serve(g_s), s	1.4	48.6	1.0	6.9	7.5	1.6	2.5	0.0	8.8	5.0	0.0	2.6
Cycle Q Clear(g_c), s	1.4	48.6	1.0	6.9	7.5	1.6	2.5	0.0	8.8	5.0	0.0	2.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.93	1.00		0.80
Lane Grp Cap(c), veh/h	41	1734	712	100	1822	853	335	0	245	253	0	286
V/C Ratio(X)	0.56	0.95	0.05	0.88	0.24	0.06	0.15	0.00	0.54	0.42	0.00	0.16
Avail Cap(c_a), veh/h	81	1754	720	100	1822	853	353	0	245	253	0	286
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	52.9	26.8	7.4	50.2	13.4	12.0	36.0	0.0	41.9	37.2	0.0	38.3
Incr Delay (d2), s/veh	11.5	12.0	0.0	52.8	0.1	0.0	0.2	0.0	8.1	1.1	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	21.4	0.4	3.8	2.6	0.5	1.1	0.0	3.7	2.4	0.0	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.4	38.8	7.4	103.0	13.5	12.1	36.2	0.0	50.0	38.3	0.0	39.5
LnGrp LOS	E	D	A	F	B	B	D	A	D	D	A	D
Approach Vol, veh/h	1710		572				180		150			
Approach Delay, s/veh	38.5		27.1				46.2		38.7			
Approach LOS	D		C				D		D			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.5	23.5	15.0	60.4	9.4	24.6	9.5	65.9				
Change Period (Y+Rc), s	5.5	5.5	7.0	7.0	5.5	5.5	7.0	7.0				
Max Green Setting (Gmax), s	5.0	18.0	8.0	54.0	5.0	18.0	5.0	57.0				
Max Q Clear Time (g_c+I1), s	7.0	10.8	8.9	50.6	4.5	4.6	3.4	9.5				
Green Ext Time (p_c), s	0.0	0.3	0.0	2.8	0.0	0.1	0.0	3.0				
Intersection Summary												
HCM 6th Ctrl Delay	36.5											
HCM 6th LOS	D											

# HCM 6th Signalized Intersection Summary

## 6: US 441 & NW 167th Blvd

06/13/2019



Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations							
Traffic Volume (veh/h)	70	1713	527	73	107	15	
Future Volume (veh/h)	70	1713	527	73	107	15	
Initial Q (Qb), veh	0	0	0	0	0	0	
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00	
Parking Bus, Adj	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	1811	1841	1737	1841	1811	1900	
Adj Flow Rate, veh/h	76	1862	573	79	131	0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Percent Heavy Veh, %	6	4	11	4	6	0	
Cap, veh/h	629	2841	2296	1085	204	95	
Arrive On Green	0.04	0.81	0.70	0.70	0.06	0.00	
Sat Flow, veh/h	1725	3589	3387	1560	3450	1610	
Grp Volume(v), veh/h	76	1862	573	79	131	0	
Grp Sat Flow(s),veh/h/ln	1725	1749	1650	1560	1725	1610	
Q Serve(g_s), s	1.1	20.8	6.2	1.6	3.6	0.0	
Cycle Q Clear(g_c), s	1.1	20.8	6.2	1.6	3.6	0.0	
Prop In Lane	1.00			1.00	1.00	1.00	
Lane Grp Cap(c), veh/h	629	2841	2296	1085	204	95	
V/C Ratio(X)	0.12	0.66	0.25	0.07	0.64	0.00	
Avail Cap(c_a), veh/h	640	2841	2296	1085	656	306	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	
Uniform Delay (d), s/veh	3.3	3.7	5.4	4.7	44.8	0.0	
Incr Delay (d2), s/veh	0.1	1.2	0.3	0.1	3.4	0.0	
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	
%ile BackOfQ(50%),veh/ln	0.2	3.5	1.7	0.4	1.6	0.0	
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	3.4	4.9	5.7	4.9	48.1	0.0	
LnGrp LOS	A	A	A	A	D	A	
Approach Vol, veh/h		1938	652		131		
Approach Delay, s/veh		4.8	5.6		48.1		
Approach LOS		A	A		D		
Timer - Assigned Phs			4		6	7	8
Phs Duration (G+Y+Rc), s			86.0		11.2	11.4	74.6
Change Period (Y+Rc), s			7.0		5.5	7.0	7.0
Max Green Setting (Gmax), s			79.0		18.5	5.0	67.0
Max Q Clear Time (g_c+I1), s			22.8		5.6	3.1	8.2
Green Ext Time (p_c), s			24.1		0.3	0.0	4.2
Intersection Summary							
HCM 6th Ctrl Delay			7.1				
HCM 6th LOS			A				
Notes							
User approved pedestrian interval to be less than phase max green.							
User approved volume balancing among the lanes for turning movement.							

# HCM 6th Signalized Intersection Summary

## 10: Wendy's/I-75 SB ramp & US 441





















06/13/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↑	↑↑	↑	↑		↑	↑	↑	↑
Traffic Volume (veh/h)	0	1791	53	21	589	278	3	0	72	178	10	39
Future Volume (veh/h)	0	1791	53	21	589	278	3	0	72	178	10	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1841	1841	1870	1796	1870	1870	0	1870	1811	1752	1455
Adj Flow Rate, veh/h	0	1947	58	23	640	0	3	0	78	201	0	42
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	4	4	2	7	2	2	0	2	6	10	30
Cap, veh/h	0	2017	60	126	2314		0	0	0	645	0	231
Arrive On Green	0.00	0.58	0.58	0.02	0.68	0.00	0.00	0.00	0.00	0.19	0.00	0.19
Sat Flow, veh/h	0	3560	103	1781	3413	1585		0		3450	0	1233
Grp Volume(v), veh/h	0	977	1028	23	640	0		0.0		201	0	42
Grp Sat Flow(s),veh/h/ln	0	1749	1822	1781	1706	1585				1725	0	1233
Q Serve(g_s), s	0.0	51.0	52.2	0.5	7.2	0.0				4.8	0.0	2.8
Cycle Q Clear(g_c), s	0.0	51.0	52.2	0.5	7.2	0.0				4.8	0.0	2.8
Prop In Lane	0.00		0.06	1.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1017	1060	126	2314					645	0	231
V/C Ratio(X)	0.00	0.96	0.97	0.18	0.28					0.31	0.00	0.18
Avail Cap(c_a), veh/h	0	1017	1060	176	2410					645	0	231
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	19.1	19.4	23.6	6.1	0.0				33.8	0.0	33.0
Incr Delay (d2), s/veh	0.0	20.2	21.4	0.7	0.1	0.0				1.3	0.0	1.7
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	0.0	22.6	24.3	0.3	2.0	0.0				2.1	0.0	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	39.3	40.7	24.3	6.2	0.0				35.1	0.0	34.7
LnGrp LOS	A	D	D	C	A					D	A	C
Approach Vol, veh/h		2005			663	A					243	
Approach Delay, s/veh		40.0			6.8						35.0	
Approach LOS		D			A						C	
Timer - Assigned Phs			3	4		6		8				
Phs Duration (G+Y+Rc), s			9.3	63.0		24.0		72.3				
Change Period (Y+Rc), s			7.0	7.0		6.0		7.0				
Max Green Setting (Gmax), s			5.0	56.0		18.0		68.0				
Max Q Clear Time (g_c+I1), s			2.5	54.2		6.8		9.2				
Green Ext Time (p_c), s			0.0	1.6		0.6		4.5				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			32.0									
HCM 6th LOS			C									
<b>Notes</b>												
User approved volume balancing among the lanes for turning movement.												
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.												

# HCM 6th Signalized Intersection Summary

## 13: McDonald's/I-75 NB ramp & US 441

06/13/2019

























												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	1022	78	57	663	123	54	12	21	244	24	220
Future Volume (veh/h)	47	1022	78	57	663	123	54	12	21	244	24	220
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1455	1856	1856	1870	1826	1752	1870	1870	1870	1870	1870	1796
Adj Flow Rate, veh/h	51	1111	85	62	721	0	59	13	23	265	26	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	30	3	3	2	5	10	2	2	2	2	2	7
Cap, veh/h	258	1299	99	184	1368		411	94	143	553	48	
Arrive On Green	0.04	0.39	0.39	0.04	0.39	0.00	0.37	0.37	0.37	0.37	0.37	0.00
Sat Flow, veh/h	1386	3319	254	1781	3469	1485	957	256	387	1314	129	2679
Grp Volume(v), veh/h	51	590	606	62	721	0	95	0	0	291	0	0
Grp Sat Flow(s),veh/h/ln	1386	1763	1810	1781	1735	1485	1600	0	0	1443	0	1340
Q Serve(g_s), s	2.2	30.7	30.8	2.1	15.9	0.0	0.0	0.0	0.0	11.7	0.0	0.0
Cycle Q Clear(g_c), s	2.2	30.7	30.8	2.1	15.9	0.0	3.6	0.0	0.0	15.3	0.0	0.0
Prop In Lane	1.00		0.14	1.00		1.00	0.62		0.24	0.91		1.00
Lane Grp Cap(c), veh/h	258	690	708	184	1368		648	0	0	600	0	
V/C Ratio(X)	0.20	0.86	0.86	0.34	0.53		0.15	0.00	0.00	0.48	0.00	
Avail Cap(c_a), veh/h	275	843	865	200	1659		648	0	0	600	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	18.3	28.0	28.0	22.2	23.2	0.0	21.1	0.0	0.0	24.6	0.0	0.0
Incr Delay (d2), s/veh	0.4	7.3	7.2	1.1	0.3	0.0	0.5	0.0	0.0	2.8	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	13.3	13.7	0.8	6.1	0.0	1.6	0.0	0.0	5.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.7	35.3	35.2	23.3	23.6	0.0	21.6	0.0	0.0	27.4	0.0	0.0
LnGrp LOS	B	D	D	C	C		C	A	A	C	A	
Approach Vol, veh/h	1247				783		A		95		291	
Approach Delay, s/veh	34.6				23.5				21.6		27.4	
Approach LOS	C				C				C		C	
Timer - Assigned Phs	2		3	4		6		7	8			
Phs Duration (G+Y+Rc), s	43.0		11.1	46.3		43.0		10.8	46.6			
Change Period (Y+Rc), s	6.0		7.0	7.0		6.0		7.0	7.0			
Max Green Setting (Gmax), s	37.0		5.0	48.0		37.0		5.0	48.0			
Max Q Clear Time (g_c+I1), s	5.6		4.1	32.8		17.3		4.2	17.9			
Green Ext Time (p_c), s	0.5		0.0	6.5		1.7		0.0	4.9			
Intersection Summary												
HCM 6th Ctrl Delay	29.6											
HCM 6th LOS	C											
Notes												



# HCM 6th Signalized Intersection Summary

3: NW 173rd St & US 441

06/13/2019







												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	668	37	131	1362	128	56	18	136	88	14	29
Future Volume (veh/h)	33	668	37	131	1362	128	56	18	136	88	14	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1722	1441	1781	1870	1870	1737	1737	1870	1870	1870
Adj Flow Rate, veh/h	35	703	39	138	1434	135	59	19	143	93	15	31
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	12	31	8	2	2	11	11	2	2	2
Cap, veh/h	54	1438	591	161	1664	779	388	33	252	280	113	234
Arrive On Green	0.03	0.40	0.40	0.12	0.49	0.49	0.04	0.19	0.19	0.06	0.21	0.21
Sat Flow, veh/h	1781	3554	1459	1372	3385	1585	1781	176	1323	1781	544	1124
Grp Volume(v), veh/h	35	703	39	138	1434	135	59	0	162	93	0	46
Grp Sat Flow(s),veh/h/ln	1781	1777	1459	1372	1692	1585	1781	0	1499	1781	0	1668
Q Serve(g_s), s	2.1	15.8	1.8	10.6	40.3	3.4	2.8	0.0	10.6	4.5	0.0	2.4
Cycle Q Clear(g_c), s	2.1	15.8	1.8	10.6	40.3	3.4	2.8	0.0	10.6	4.5	0.0	2.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.88	1.00		0.67
Lane Grp Cap(c), veh/h	54	1438	591	161	1664	779	388	0	285	280	0	347
V/C Ratio(X)	0.65	0.49	0.07	0.86	0.86	0.17	0.15	0.00	0.57	0.33	0.00	0.13
Avail Cap(c_a), veh/h	83	1585	651	248	1965	920	410	0	285	293	0	347
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	51.7	23.8	19.6	46.7	24.2	6.7	33.2	0.0	39.7	32.9	0.0	34.8
Incr Delay (d2), s/veh	12.6	0.3	0.0	16.6	3.7	0.1	0.2	0.0	8.0	0.7	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	6.3	0.6	4.2	15.4	1.7	1.2	0.0	4.4	1.9	0.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.3	24.1	19.7	63.3	27.9	6.8	33.4	0.0	47.7	33.6	0.0	35.6
LnGrp LOS	E	C	B	E	C	A	C	A	D	C	A	D
Approach Vol, veh/h		777			1707			221			139	
Approach Delay, s/veh		25.7			29.1			43.8			34.2	
Approach LOS		C			C			D			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.6	26.0	19.6	50.6	9.6	27.9	10.2	60.0				
Change Period (Y+Rc), s	5.5	5.5	7.0	7.0	5.5	5.5	7.0	7.0				
Max Green Setting (Gmax), s	6.9	20.5	19.5	48.1	5.5	21.9	5.0	62.6				
Max Q Clear Time (g_c+I1), s	6.5	12.6	12.6	17.8	4.8	4.4	4.1	42.3				
Green Ext Time (p_c), s	0.0	0.5	0.2	4.9	0.0	0.1	0.0	10.7				
Intersection Summary												
HCM 6th Ctrl Delay			29.5									
HCM 6th LOS			C									

# HCM 6th Signalized Intersection Summary

## 6: US 441 & NW 167th Blvd

06/13/2019




Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations					 		
Traffic Volume (veh/h)	104	725	1440	325	153	32	
Future Volume (veh/h)	104	725	1440	325	153	32	
Initial Q (Qb), veh	0	0	0	0	0	0	
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00	
Parking Bus, Adj	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	1811	1841	1737	1841	1811	1900	
Adj Flow Rate, veh/h	113	788	1565	353	199	0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Percent Heavy Veh, %	6	4	11	4	6	0	
Cap, veh/h	238	2829	2316	1095	270	126	
Arrive On Green	0.04	0.81	0.70	0.70	0.08	0.00	
Sat Flow, veh/h	1725	3589	3387	1560	3450	1610	
Grp Volume(v), veh/h	113	788	1565	353	199	0	
Grp Sat Flow(s),veh/h/ln	1725	1749	1650	1560	1725	1610	
Q Serve(g_s), s	1.8	6.2	29.8	9.7	6.2	0.0	
Cycle Q Clear(g_c), s	1.8	6.2	29.8	9.7	6.2	0.0	
Prop In Lane	1.00			1.00	1.00	1.00	
Lane Grp Cap(c), veh/h	238	2829	2316	1095	270	126	
V/C Ratio(X)	0.47	0.28	0.68	0.32	0.74	0.00	
Avail Cap(c_a), veh/h	303	2829	2316	1095	561	262	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	
Uniform Delay (d), s/veh	12.4	2.6	9.4	6.4	49.9	0.0	
Incr Delay (d2), s/veh	1.5	0.2	1.6	0.8	3.9	0.0	
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	
%ile BackOfQ(50%),veh/ln	1.3	1.3	8.9	2.8	2.8	0.0	
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	13.9	2.9	11.0	7.1	53.8	0.0	
LnGrp LOS	B	A	B	A	D	A	
Approach Vol, veh/h		901	1918	199			
Approach Delay, s/veh		4.2	10.3	53.8			
Approach LOS		A	B	D			
Timer - Assigned Phs				4	6	7	8
Phs Duration (G+Y+Rc), s				96.5	14.2	11.8	84.7
Change Period (Y+Rc), s				7.0	5.5	7.0	7.0
Max Green Setting (Gmax), s				89.5	18.0	9.0	73.5
Max Q Clear Time (g_c+I1), s				8.2	8.2	3.8	31.8
Green Ext Time (p_c), s				5.9	0.4	0.1	18.6
Intersection Summary							
HCM 6th Ctrl Delay			11.3				
HCM 6th LOS			B				
Notes							
User approved pedestrian interval to be less than phase max green.							
User approved volume balancing among the lanes for turning movement.							

# HCM 6th Signalized Intersection Summary





















## 10: Wendy's/I-75 SB ramp & US 441

06/13/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↑	↑↑	↑	↑		↑	↑	↑	↑
Traffic Volume (veh/h)	0	905	39	45	1655	232	33	0	74	110	12	54
Future Volume (veh/h)	0	905	39	45	1655	232	33	0	74	110	12	54
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1841	1841	1870	1796	1870	1870	0	1870	1811	1752	1455
Adj Flow Rate, veh/h	0	984	42	49	1799	0	36	0	80	129	0	59
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	4	4	2	7	2	2	0	2	6	10	30
Cap, veh/h	0	2079	89	368	2423		0	0	0	581	0	208
Arrive On Green	0.00	0.61	0.61	0.04	0.71	0.00	0.00	0.00	0.00	0.17	0.00	0.17
Sat Flow, veh/h	0	3509	146	1781	3413	1585		0		3450	0	1233
Grp Volume(v), veh/h	0	504	522	49	1799	0		0.0		129	0	59
Grp Sat Flow(s),veh/h/ln	0	1749	1814	1781	1706	1585				1725	0	1233
Q Serve(g_s), s	0.0	16.9	16.9	0.0	34.6	0.0				3.5	0.0	4.5
Cycle Q Clear(g_c), s	0.0	16.9	16.9	0.0	34.6	0.0				3.5	0.0	4.5
Prop In Lane	0.00		0.08	1.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1064	1104	368	2423					581	0	208
V/C Ratio(X)	0.00	0.47	0.47	0.13	0.74					0.22	0.00	0.28
Avail Cap(c_a), veh/h	0	1064	1104	388	2460					581	0	208
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	11.5	11.5	16.6	9.5	0.0				38.4	0.0	38.8
Incr Delay (d2), s/veh	0.0	1.5	1.5	0.2	1.2	0.0				0.9	0.0	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.1	6.4	0.7	10.0	0.0				1.5	0.0	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	13.0	13.0	16.8	10.7	0.0				39.2	0.0	42.2
LnGrp LOS	A	B	B	B	B					D	A	D
Approach Vol, veh/h		1026			1848	A					188	
Approach Delay, s/veh		13.0			10.9						40.2	
Approach LOS		B			B						D	
Timer - Assigned Phs			3	4		6		8				
Phs Duration (G+Y+Rc), s			10.8	72.0		24.0		82.8				
Change Period (Y+Rc), s			7.0	7.0		6.0		7.0				
Max Green Setting (Gmax), s			5.0	65.0		18.0		77.0				
Max Q Clear Time (g_c+I1), s			2.0	18.9		6.5		36.6				
Green Ext Time (p_c), s			0.0	7.3		0.4		19.9				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			13.4									
HCM 6th LOS			B									
<b>Notes</b>												
User approved volume balancing among the lanes for turning movement.												
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.												

# HCM 6th Signalized Intersection Summary 13: McDonald's/I-75 NB ramp & US 441

06/13/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	724	26	45	1339	185	56	5	9	247	21	605
Future Volume (veh/h)	64	724	26	45	1339	185	56	5	9	247	21	605
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1455	1856	1856	1870	1826	1752	1870	1870	1870	1870	1870	1796
Adj Flow Rate, veh/h	70	787	28	49	1455	0	61	5	10	268	23	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	30	3	3	2	5	10	2	2	2	2	2	7
Cap, veh/h	142	1670	59	279	1652		446	39	65	473	35	
Arrive On Green	0.04	0.48	0.48	0.04	0.48	0.00	0.30	0.30	0.30	0.30	0.30	0.00
Sat Flow, veh/h	1386	3473	124	1781	3469	1485	1271	127	212	1348	116	2679
Grp Volume(v), veh/h	70	399	416	49	1455	0	76	0	0	291	0	0
Grp Sat Flow(s),veh/h/ln	1386	1763	1833	1781	1735	1485	1610	0	0	1464	0	1340
Q Serve(g_s), s	0.0	17.0	17.0	1.8	42.2	0.0	0.0	0.0	0.0	15.3	0.0	0.0
Cycle Q Clear(g_c), s	0.0	17.0	17.0	1.8	42.2	0.0	3.5	0.0	0.0	18.8	0.0	0.0
Prop In Lane	1.00		0.07	1.00		1.00	0.80		0.13	0.92		1.00
Lane Grp Cap(c), veh/h	142	848	882	279	1652		549	0	0	508	0	
V/C Ratio(X)	0.49	0.47	0.47	0.18	0.88		0.14	0.00	0.00	0.57	0.00	
Avail Cap(c_a), veh/h	162	964	1003	296	1866		549	0	0	508	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	50.0	19.4	19.4	20.3	26.4	0.0	28.2	0.0	0.0	33.2	0.0	0.0
Incr Delay (d2), s/veh	2.6	0.4	0.4	0.3	4.8	0.0	0.5	0.0	0.0	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	6.6	6.8	0.7	17.0	0.0	1.6	0.0	0.0	7.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.6	19.8	19.8	20.6	31.2	0.0	28.7	0.0	0.0	37.8	0.0	0.0
LnGrp LOS	D	B	B	C	C		C	A	A	D	A	
Approach Vol, veh/h	885				1504		A		76		291	
Approach Delay, s/veh	22.4				30.8				28.7		37.8	
Approach LOS	C				C				C		D	
Timer - Assigned Phs	2			3		4		6		7		8
Phs Duration (G+Y+Rc), s	40.0			10.9		60.6		40.0		11.4		60.1
Change Period (Y+Rc), s	6.0			7.0		7.0		6.0		7.0		7.0
Max Green Setting (Gmax), s	34.0			5.0		61.0		34.0		6.0		60.0
Max Q Clear Time (g_c+I1), s	5.5			3.8		19.0		20.8		2.0		44.2
Green Ext Time (p_c), s	0.4			0.0		5.2		1.4		0.0		8.9
Intersection Summary												
HCM 6th Ctrl Delay			28.8									
HCM 6th LOS			C									
Notes												

# ***APPENDIX F***

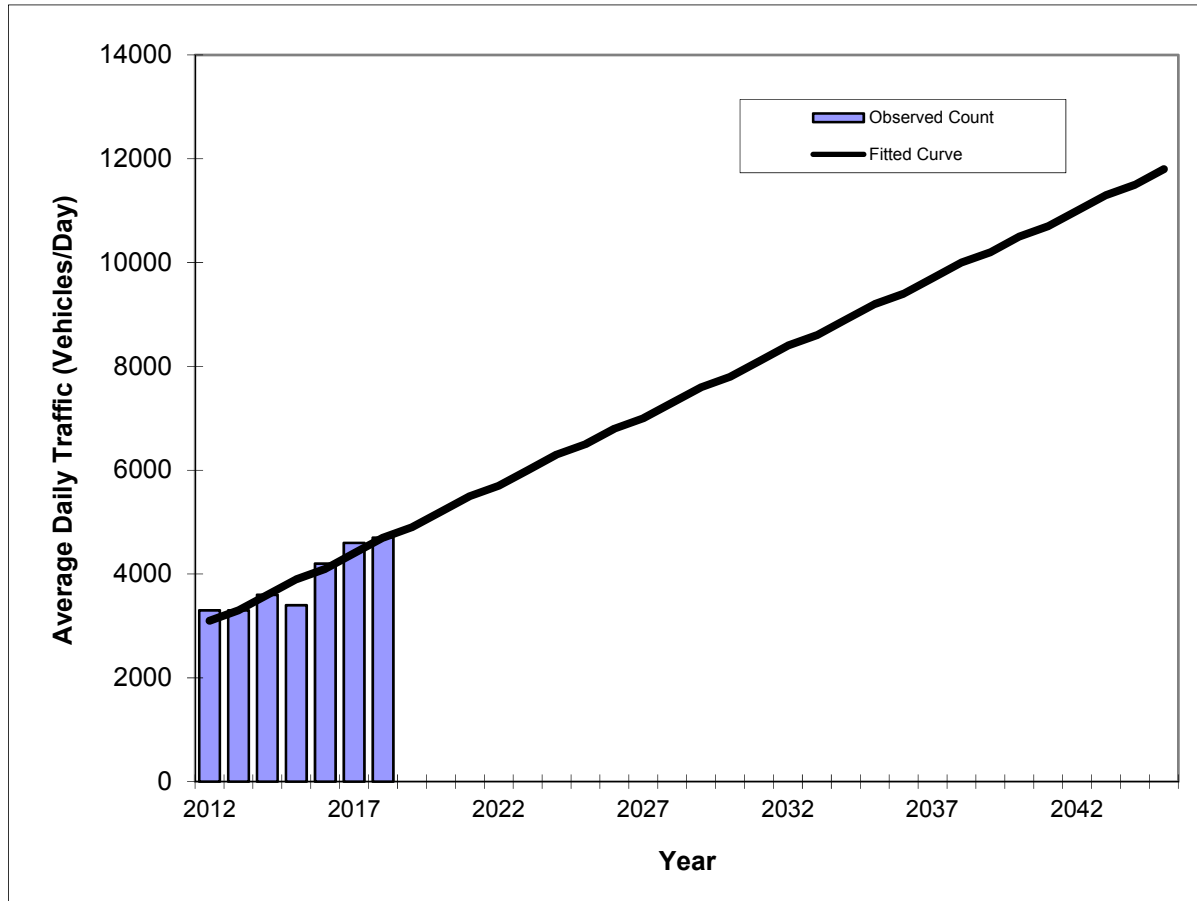
## ***Historic Growth Trends***

# Traffic Trends - V03.a

## CR-235A/NW 173 ST -- South of US 441

FIN#	0000000
Location	1

County:	Alachua (26)
Station #:	0435
Highway:	CR-235A/NW 173 ST



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2012	3300	3100
2013	3300	3300
2014	3600	3600
2015	3400	3900
2016	4200	4100
2017	4600	4400
2018	4700	4700
2020 Opening Year Trend		
2020	N/A	5200
2025 Mid-Year Trend		
2025	N/A	6500
2030 Design Year Trend		
2030	N/A	7800
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	264
Trend R-squared:	85.99%
Trend Annual Historic Growth Rate:	8.60%
Trend Growth Rate (2018 to Design Year):	5.50%
Printed:	13-Jun-19
Straight Line Growth Option	

\*Axle-Adjusted

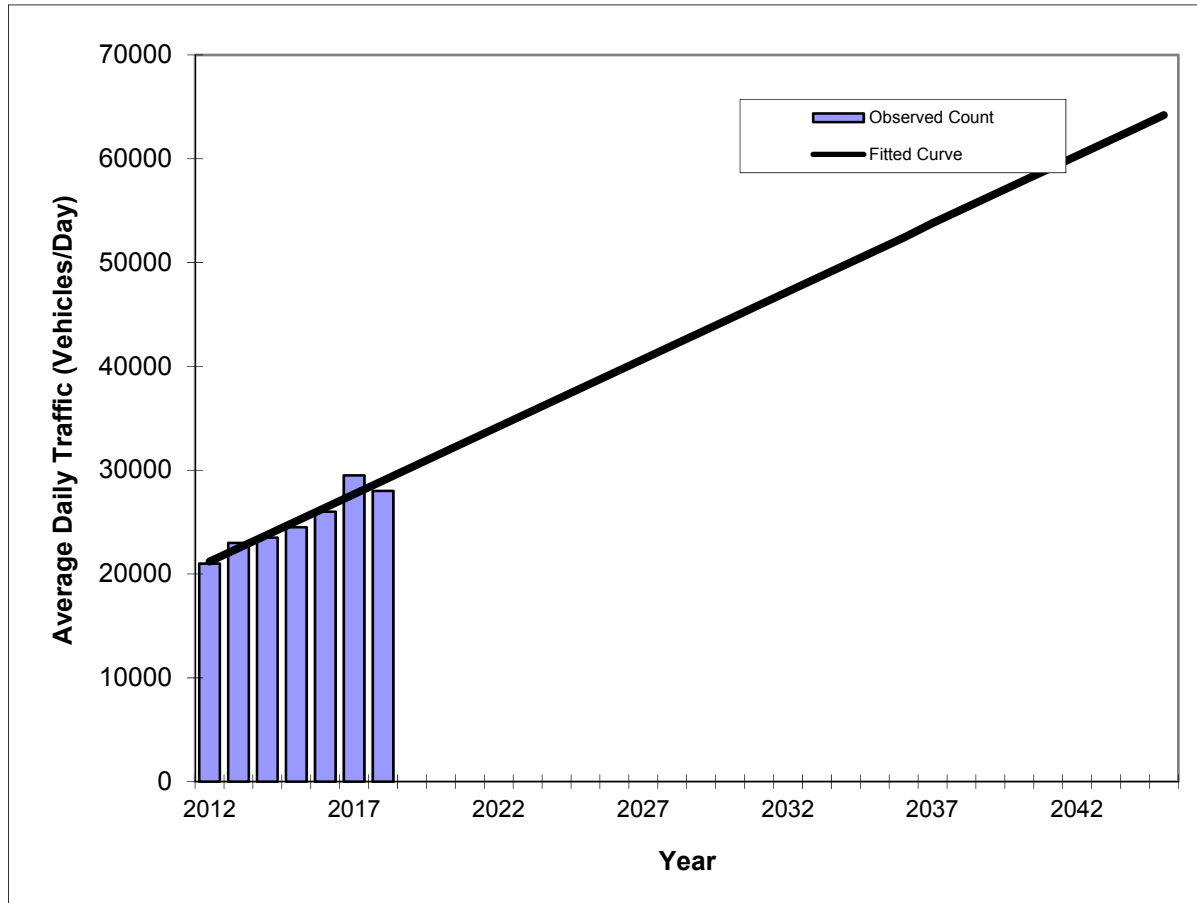


# Traffic Trends - V03.a

## US 441 -- west of I-75

FIN#	0000000
Location	1

County:	Alachua (26)
Station #:	0461
Highway:	US 441



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2012	21000	21200
2013	23000	22500
2014	23500	23800
2015	24500	25100
2016	26000	26400
2017	29500	27700
2018	28000	29000
2020 Opening Year Trend		
2020	N/A	31600
2025 Mid-Year Trend		
2025	N/A	38100
2030 Design Year Trend		
2030	N/A	44600
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	1,304
Trend R-squared:	90.26%
Trend Annual Historic Growth Rate:	6.13%
Trend Growth Rate (2018 to Design Year):	4.48%
Printed:	13-Jun-19
Straight Line Growth Option	

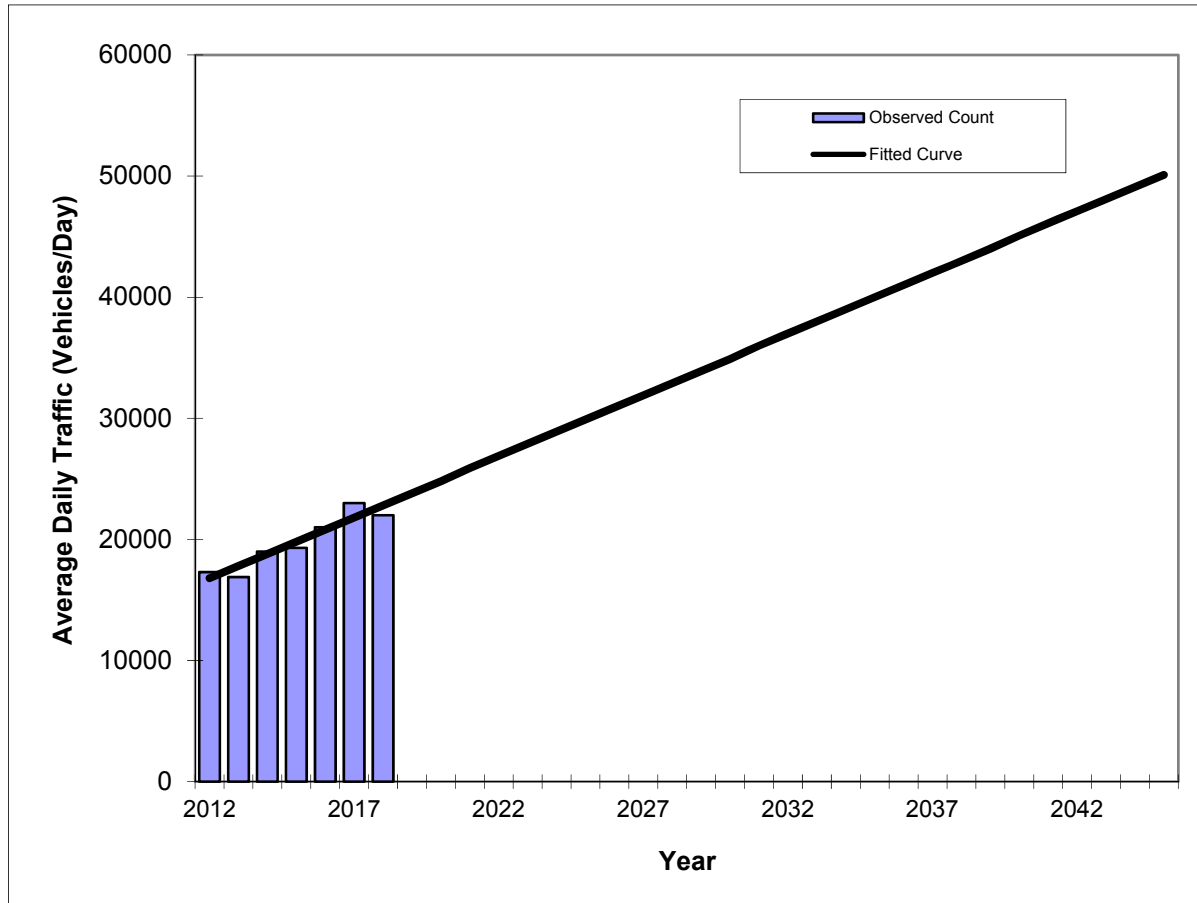
\*Axle-Adjusted

# Traffic Trends - V03.a

## US 441 -- west of NW 202nd St

FIN#	0000000
Location	1

County:	Alachua (26)
Station #:	0245
Highway:	US 441



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2012	17300	16800
2013	16900	17800
2014	19000	18800
2015	19300	19800
2016	21000	20800
2017	23000	21800
2018	22000	22800
2020 Opening Year Trend		
2020	N/A	24800
2025 Mid-Year Trend		
2025	N/A	29900
2030 Design Year Trend		
2030	N/A	34900
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	1,011
Trend R-squared:	89.19%
Trend Annual Historic Growth Rate:	5.95%
Trend Growth Rate (2018 to Design Year):	4.42%
Printed:	13-Jun-19
Straight Line Growth Option	

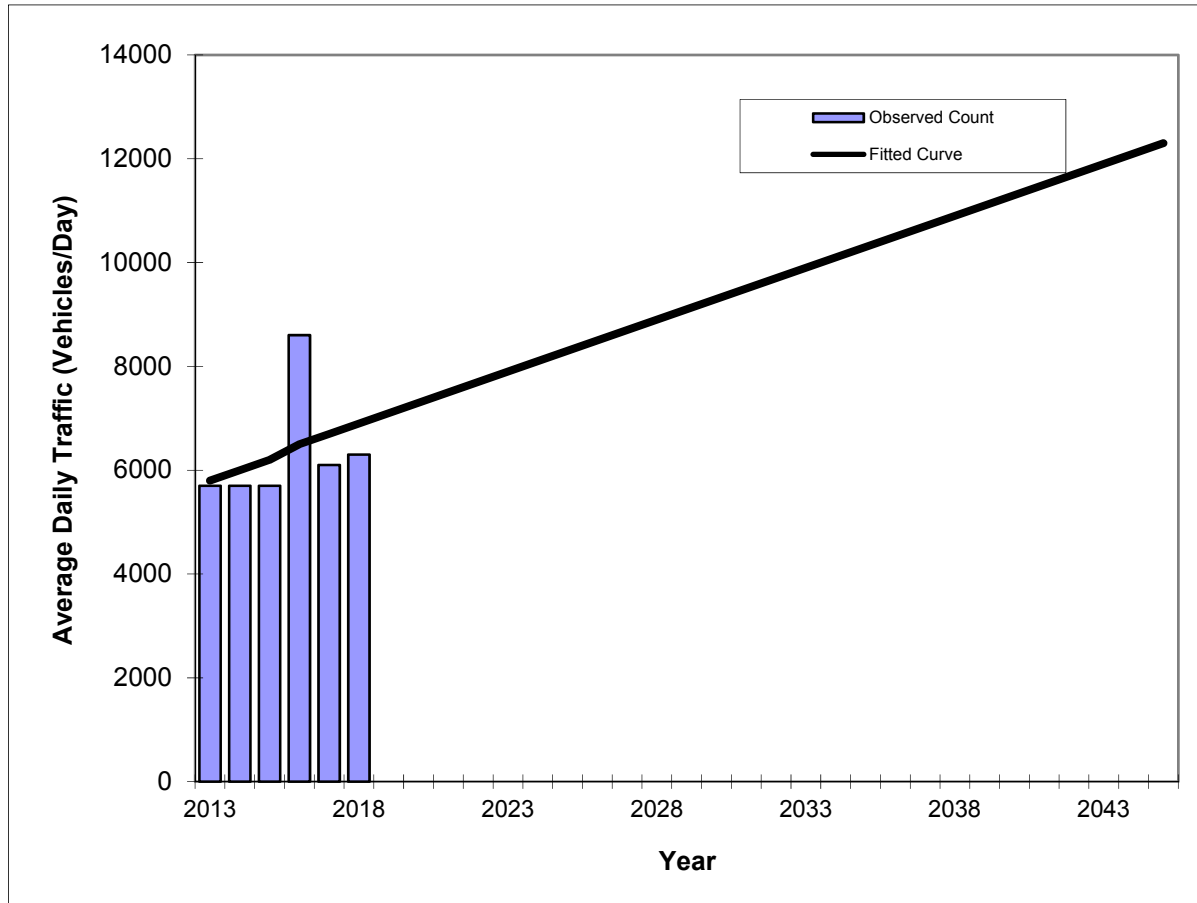
\*Axle-Adjusted

## Traffic Trends - V03.a

I-75 -- Northbound off-ramp at US 441

FIN#	0000000
Location	1

County:	Alachua (26)
Station #:	4021
Highway:	I-75



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2013	5700	5800
2014	5700	6000
2015	5700	6200
2016	8600	6500
2017	6100	6700
2018	6300	6900
2020 Opening Year Trend		
2020	N/A	7300
2025 Mid-Year Trend		
2025	N/A	8300
2030 Design Year Trend		
2030	N/A	9300
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	203
Trend R-squared:	11.26%
Trend Annual Historic Growth Rate:	3.79%
Trend Growth Rate (2018 to Design Year):	2.90%
Printed:	13-Jun-19
Straight Line Growth Option	

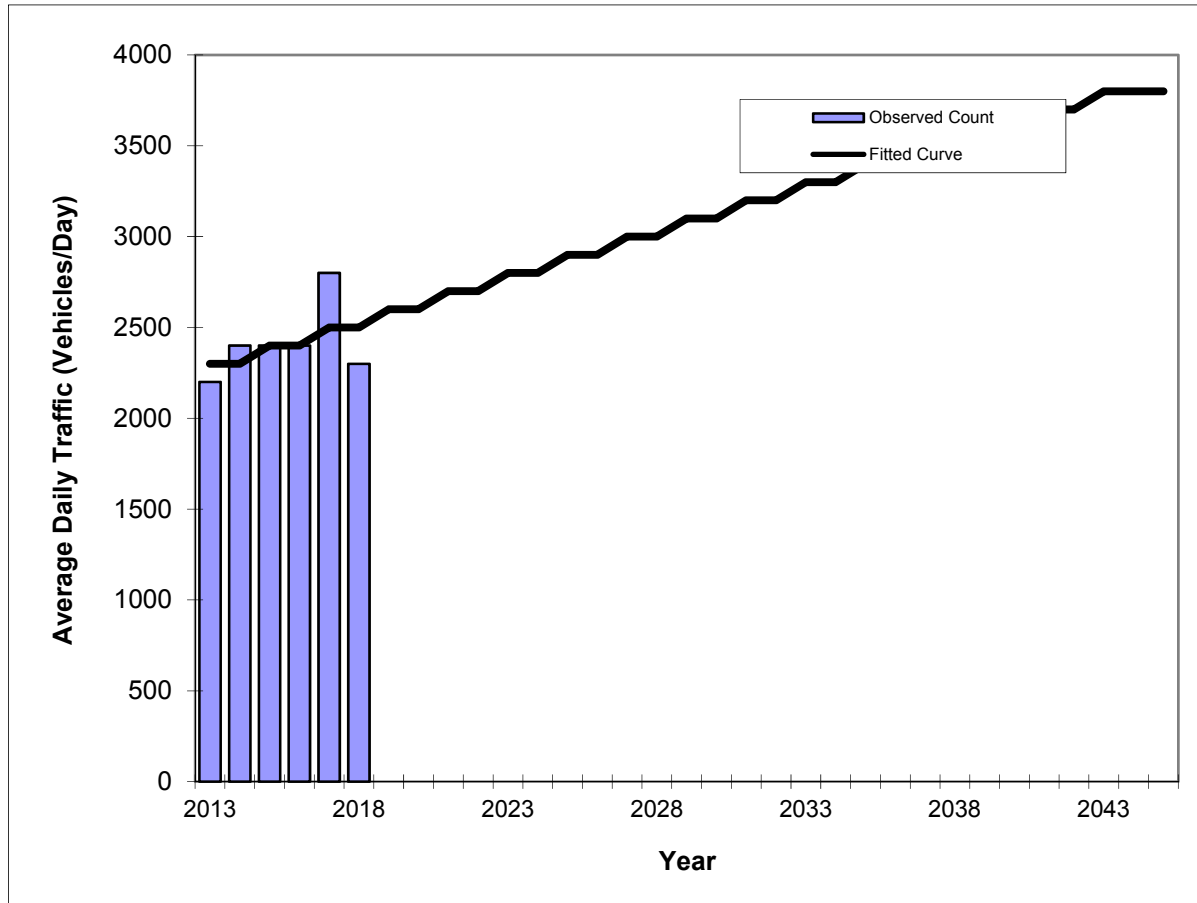
\*Axle-Adjusted

## Traffic Trends - V03.a

I-75 -- Southbound off-ramp at US 441

FIN#	0000000
Location	1

County:	Alachua (26)
Station #:	0461
Highway:	I-75



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2013	2200	2300
2014	2400	2300
2015	2400	2400
2016	2400	2400
2017	2800	2500
2018	2300	2500
2020 Opening Year Trend		
2020	N/A	2600
2025 Mid-Year Trend		
2025	N/A	2900
2030 Design Year Trend		
2030	N/A	3100
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	49
Trend R-squared:	19.82%
Trend Annual Historic Growth Rate:	1.74%
Trend Growth Rate (2018 to Design Year):	2.00%
Printed:	13-Jun-19
Straight Line Growth Option	

\*Axle-Adjusted

# *APPENDIX G*

## *Intersection Volume Derivation*


AM	Intersection	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Seasonal Factor
1	US 441 @ NW 173rd Street	Raw Vol	22	1552	34	83	410	46	47	9	115	99	9	34
		Seasonal Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
		Adjusted Volume	22	1568	34	84	414	46	47	9	116	100	9	34
		Truck %	0.0%	2.1%	11.8%	31.3%	7.6%	0.0%	2.1%	11.1%	21.7%	0.0%	0.0%	0.0%
		Growth Rate	5.95%	5.95%	5.95%	6.13%	6.13%	6.13%	8.60%	8.60%	8.60%	8.60%	8.60%	8.60%
		Future Background	24	1661	36	89	439	49	52	10	126	109	10	37
		Internal Capture	0	0	0	0	0	0	0	0	0	0	0	0
		Project Trips	8	0	0	0	0	23	0	2	0	67	8	23
		Future Total	32	1661	36	89	439	72	52	12	126	176	18	60
2	US 441 @ NW 167th Boulevard	Raw Vol	69	1696	0	0	522	72	0	0	0	106	0	15
		Seasonal Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
		Adjusted Volume	70	1713	0	0	527	73	0	0	0	107	0	15
		Truck %	5.8%	3.7%	0.0%	0.0%	10.7%	4.2%	0.0%	0.0%	0.0%	5.7%	0.0%	0.0%
		Growth Rate	6.13%	6.13%	6.13%	6.13%	6.13%	6.13%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
		Future Background	74	1818	0	0	560	77	0	0	0	108	0	15
		Internal Capture	0	0	0	0	0	0	0	0	0	0	0	0
		Project Trips	3	64	0	0	22	0	0	0	0	0	0	1
		Future Total	77	1882	0	0	582	77	0	0	0	108	0	16
3	US 441 @ I-75 SB Ramps	Raw Vol	0	1773	52	21	583	275	3	0	71	176	10	39
		Seasonal Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
		Adjusted Volume	0	1791	53	21	589	278	3	0	72	178	10	39
		Truck %	0.0%	3.7%	0.0%	0.0%	7.4%	1.8%	0.0%	0.0%	1.4%	6.3%	10.0%	43.6%
		Growth Rate	6.13%	6.13%	6.13%	6.13%	6.13%	6.13%	1.00%	1.00%	1.00%	1.74%	1.74%	1.74%
		Future Background	0	1901	56	23	625	295	3	0	72	181	10	40
		Internal Capture	0	0	0	0	0	0	0	0	0	0	0	0
		Project Trips	0	62	2	0	21	0	0	0	0	0	0	1
		Future Total	0	1963	58	23	646	295	3	0	72	181	10	41
4	US 441 @ I-75 NB Ramps	Raw Vol	47	1012	77	56	656	122	53	12	21	242	24	218
		Seasonal Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
		Adjusted Volume	47	1022	78	57	663	123	54	12	21	244	24	220
		Truck %	29.8%	2.7%	3.9%	0.0%	4.9%	9.8%	0.0%	0.0%	0.0%	5.0%	0.0%	7.3%
		Growth Rate	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	3.79%	3.79%	3.79%
		Future Background	48	1032	79	57	669	124	54	12	21	254	25	229
		Internal Capture	0	0	0	0	0	0	0	0	0	0	0	0
		Project Trips	3	37	1	0	15	0	1	0	0	0	0	5
		Future Total	51	1069	80	57	684	124	55	12	21	254	25	234
5	NW 173rd Street at Benton Hills	Raw Vol							77				143	
		Seasonal Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
		Adjusted Volume	0	0	0	0	0	0	78	0	0	144	0	
		Truck %												
		Growth Rate	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	8.60%	1.00%	1.00%	8.60%	1.00%	
		Future Background	0	0	0	0	0	0	84	0	0	157	0	
		Internal Capture	0	0	0	0	0	0	0	0	0	0	0	
		Project Trips	31	0	100	0	0	0	33	0	0	0	0	11
		Future Total	31	0	100	0	0	0	33	84	0	0	157	11



PM	Intersection	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Seasonal Factor
1	US 441 @ NW 173rd Street	Raw Vol	33	661	37	130	1349	127	55	18	135	87	14	29
		Seasonal Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
		Adjusted Volume	33	668	37	131	1362	128	56	18	136	88	14	29
		Truck %	15.2%	3.0%	0.0%	16.2%	1.7%	8.7%	3.6%	5.6%	9.6%	1.1%	0.0%	0.0%
		Growth Rate	5.95%	5.95%	5.95%	6.13%	6.13%	6.13%	8.60%	8.60%	8.60%	8.60%	8.60%	8.60%
		Future Background	35	707	40	139	1446	136	60	20	148	95	15	32
		Internal Capture	0	0	0	0	0	0	0	0	0	0	0	0
		Project Trips	26	0	0	0	0	77	0	9	0	46	5	15
		Future Total	61	707	40	139	1446	213	60	29	148	141	20	47
2	US 441 @ NW 167th Boulevard	Raw Vol	103	718	0	0	1426	322	0	0	0	151	0	32
		Seasonal Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
		Adjusted Volume	104	725	0	0	1440	325	0	0	0	153	0	32
		Truck %	1.0%	4.9%	0.0%	0.0%	3.4%	0.6%	0.0%	0.0%	0.0%	2.0%	0.0%	0.0%
		Growth Rate	6.13%	6.13%	6.13%	6.13%	6.13%	6.13%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
		Future Background	110	770	0	0	1529	345	0	0	0	154	0	33
		Internal Capture	0	0	0	0	0	0	0	0	0	0	0	0
		Project Trips	6	40	0	0	75	0	0	0	0	0	0	2
		Future Total	116	810	0	0	1604	345	0	0	0	154	0	35
3	US 441 @ I-75 SB Ramps	Raw Vol	0	896	39	45	1639	230	33	0	73	109	12	53
		Seasonal Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
		Adjusted Volume	0	905	39	45	1655	232	33	0	74	110	12	54
		Truck %	0.0%	4.5%	2.6%	0.0%	2.3%	1.7%	0.0%	0.0%	1.4%	6.4%	0.0%	22.6%
		Growth Rate	6.13%	6.13%	6.13%	6.13%	6.13%	6.13%	1.00%	1.00%	1.00%	1.74%	1.74%	1.74%
		Future Background	0	960	42	48	1757	247	34	0	74	112	12	54
		Internal Capture	0	0	0	0	0	0	0	0	0	0	0	0
		Project Trips	0	39	1	0	71	0	2	0	0	0	0	2
		Future Total	0	999	43	48	1828	247	36	0	74	112	12	56
4	US 441 @ I-75 NB Ramps	Raw Vol	63	717	26	45	1326	183	55	5	9	245	21	599
		Seasonal Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
		Adjusted Volume	64	724	26	45	1339	185	56	5	9	247	21	605
		Truck %	19.0%	3.2%	0.0%	0.0%	1.5%	3.8%	0.0%	0.0%	0.0%	2.4%	4.8%	3.0%
		Growth Rate	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	3.79%	3.79%	3.79%
		Future Background	64	731	27	46	1353	187	56	5	9	257	22	628
		Internal Capture	0	0	0	0	0	0	0	0	0	0	0	0
		Project Trips	2	27	1	0	47	0	3	0	0	0	0	21
		Future Total	66	758	28	46	1400	187	59	5	9	257	22	649
5	NW 173rd Street at Benton Hills	Raw Vol							179				131	
		Seasonal Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
		Adjusted Volume	0	0	0	0	0	0	181	0	0	132	0	
		Truck %												
		Growth Rate	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	8.60%	1.00%	1.00%	8.60%	1.00%
		Future Background	0	0	0	0	0	0	196	0	0	144	0	
		Internal Capture	0	0	0	0	0	0	0	0	0	0	0	
		Project Trips	21	0	66	0	0	0	112	0	0	0	0	36
		Future Total	21	0	66	0	0	0	112	196	0	0	144	36

## ***APPENDIX H***

### ***Planned and Programmed Improvements***

 **FDOT Emergency Travel Alert:** For information on the current situation, please visit the following page - [Alerts](#).



Florida Department of

# TRANSPORTATION

[E-Updates](#) | [FL511](#) | [Mobile](#) | [Site Map](#)

Search FDOT...

- [Home](#)
- [About FDOT](#)
- [Contact Us](#)
- [Offices](#)
- [Maps & Data](#)
- [Performance](#)
- [Projects](#)

## Web Application

### Office of Work Program and Budget Lisa Saliba - Director

#### Five Year Work Program

Selection Criteria	
District 02 (Updated: 4/3/2019-21.15.01) Phase:Construction	2019-2024 G1 Alachua County Item Number:436173-1

[Display current records in a Report Style](#)  
[Display current records in an Excel Document](#)

Project Summary						
Transportation System: INTRASTATE STATE HIGHWAY			District 02 - Alachua County			
Description: SR25(US441) FROM: NW 167TH BLVD TO: COLUMBIA COUNTY LINE						
Type of Work: RESURFACING			<a href="#">View Scheduled Activities</a>			
Item Number: 436173-1			<a href="#">View Map of Item</a>			
Length: 6.739						
Construction Contract Information						
Notice to Proceed Date	Work Begun Date	Present Contract Days	Contract Days Used	Percent Days Used		
04/05/2018	06/04/2018	374	335	89.57%		
Vendor Name: PREFERRED MATERIALS, INC.						
Project Detail						
Fiscal Year:	2019	2020	2021	2022	2023	2024
Highways/Preliminary Engineering						(On-Going)
Amount:	\$670					
Highways/Construction						(On-Going)
Amount:	\$687,884					
Item Total:	\$688,554					

---

This site is maintained by the Office of Work Program and Budget, located at 605 Suwannee Street, MS 21, Tallahassee, Florida 32399.

For additional information please e-mail questions or comments to Lisa Saliba: [Lisa.Saliba@dot.state.fl.us](mailto:Lisa.Saliba@dot.state.fl.us)

[View Contact Information for Office of Work Program and Budget](#)

**Application Home:** [Work Program](#)  
**Office Home:** [Office of Work Program and Budget](#)

- [Contact Us](#)
- [Employment](#)
- [MyFlorida.com](#)
- [Performance](#)
- [Statement of Agency](#)
- [Web Policies & Notices](#)



© 1996-2013 Florida Department of Transportation

Florida Department of Transportation

**Consistent, Predictable, Repeatable**























# ***APPENDIX I***

***2022 Synchro Analysis – Future Conditions***

# HCM 6th Signalized Intersection Summary

## 3: NW 173rd St & US 441

06/13/2019

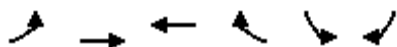
												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	1661	36	89	439	72	52	12	126	176	18	60
Future Volume (veh/h)	32	1661	36	89	439	72	52	12	126	176	18	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1722	1441	1781	1870	1870	1737	1737	1870	1870	1870
Adj Flow Rate, veh/h	34	1748	38	94	462	76	55	13	133	185	19	63
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	12	31	8	2	2	11	11	2	2	2
Cap, veh/h	52	1789	735	100	1851	867	283	20	204	220	61	201
Arrive On Green	0.03	0.50	0.50	0.07	0.55	0.55	0.04	0.15	0.15	0.05	0.16	0.16
Sat Flow, veh/h	1781	3554	1459	1372	3385	1585	1781	133	1359	1781	381	1262
Grp Volume(v), veh/h	34	1748	38	94	462	76	55	0	146	185	0	82
Grp Sat Flow(s),veh/h/ln	1781	1777	1459	1372	1692	1585	1781	0	1492	1781	0	1643
Q Serve(g_s), s	2.1	52.9	1.0	7.5	7.9	2.5	2.8	0.0	10.1	5.1	0.0	4.9
Cycle Q Clear(g_c), s	2.1	52.9	1.0	7.5	7.9	2.5	2.8	0.0	10.1	5.1	0.0	4.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.91	1.00		0.77
Lane Grp Cap(c), veh/h	52	1789	735	100	1851	867	283	0	224	220	0	262
V/C Ratio(X)	0.65	0.98	0.05	0.94	0.25	0.09	0.19	0.00	0.65	0.84	0.00	0.31
Avail Cap(c_a), veh/h	123	1791	735	100	1851	867	300	0	224	220	0	262
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	52.8	26.7	6.8	50.7	13.1	11.9	37.6	0.0	44.0	45.2	0.0	40.9
Incr Delay (d2), s/veh	12.8	16.1	0.0	71.2	0.1	0.0	0.3	0.0	13.8	24.2	0.0	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	23.9	0.5	4.5	2.8	0.8	1.2	0.0	4.5	3.9	0.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	65.5	42.8	6.8	121.9	13.1	11.9	37.9	0.0	57.8	69.4	0.0	44.0
LnGrp LOS	E	D	A	F	B	B	D	A	E	E	A	D
Approach Vol, veh/h	1820			632			201			267		
Approach Delay, s/veh	42.5			29.2			52.4			61.6		
Approach LOS	D			C			D			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.6	22.0	15.0	62.3	9.6	23.0	10.2	67.1				
Change Period (Y+Rc), s	5.5	5.5	7.0	7.0	5.5	5.5	7.0	7.0				
Max Green Setting (Gmax), s	5.1	16.5	8.0	55.4	5.1	16.5	7.6	55.8				
Max Q Clear Time (g_c+I1), s	7.1	12.1	9.5	54.9	4.8	6.9	4.1	9.9				
Green Ext Time (p_c), s	0.0	0.2	0.0	0.5	0.0	0.2	0.0	3.3				
Intersection Summary												
HCM 6th Ctrl Delay	42.0											
HCM 6th LOS	D											
Notes												









# HCM 6th Signalized Intersection Summary

## 6: US 441 & NW 167th Blvd

06/13/2019






Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations							
Traffic Volume (veh/h)	77	1882	582	77	108	16	
Future Volume (veh/h)	77	1882	582	77	108	16	
Initial Q (Qb), veh	0	0	0	0	0	0	
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00	
Parking Bus, Adj	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	1811	1841	1737	1841	1811	1900	
Adj Flow Rate, veh/h	84	2046	633	84	133	0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Percent Heavy Veh, %	6	4	11	4	6	0	
Cap, veh/h	596	2842	2294	1085	205	96	
Arrive On Green	0.05	0.81	0.70	0.70	0.06	0.00	
Sat Flow, veh/h	1725	3589	3387	1560	3450	1610	
Grp Volume(v), veh/h	84	2046	633	84	133	0	
Grp Sat Flow(s),veh/h/ln	1725	1749	1650	1560	1725	1610	
Q Serve(g_s), s	1.2	25.8	7.1	1.7	3.7	0.0	
Cycle Q Clear(g_c), s	1.2	25.8	7.1	1.7	3.7	0.0	
Prop In Lane	1.00			1.00	1.00	1.00	
Lane Grp Cap(c), veh/h	596	2842	2294	1085	205	96	
V/C Ratio(X)	0.14	0.72	0.28	0.08	0.65	0.00	
Avail Cap(c_a), veh/h	605	2842	2294	1085	635	296	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	0.00	
Uniform Delay (d), s/veh	3.4	4.1	5.6	4.8	45.0	0.0	
Incr Delay (d2), s/veh	0.1	1.6	0.3	0.1	3.4	0.0	
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	
%ile BackOfQ(50%),veh/ln	0.3	4.4	1.9	0.5	1.7	0.0	
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	3.5	5.7	5.9	4.9	48.4	0.0	
LnGrp LOS	A	A	A	A	D	A	
Approach Vol, veh/h		2130	717		133		
Approach Delay, s/veh		5.7	5.8		48.4		
Approach LOS		A	A		D		
Timer - Assigned Phs			4		6	7	8
Phs Duration (G+Y+Rc), s			86.5		11.3	11.5	75.0
Change Period (Y+Rc), s			7.0		5.5	7.0	7.0
Max Green Setting (Gmax), s			79.5		18.0	5.0	67.5
Max Q Clear Time (g_c+I1), s			27.8		5.7	3.2	9.1
Green Ext Time (p_c), s			27.7		0.3	0.0	4.8
Intersection Summary							
HCM 6th Ctrl Delay			7.6				
HCM 6th LOS			A				
Notes							
User approved pedestrian interval to be less than phase max green.							
User approved volume balancing among the lanes for turning movement.							

HCM 6th TWSC  
8: NW 173rd St & Briarwood

06/13/2019

Intersection

Int Delay, s/veh 3.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	31	100	33	84	157	11
Future Vol, veh/h	31	100	33	84	157	11
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	34	109	36	91	171	12

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	340	177	183
Stage 1	177	-	-
Stage 2	163	-	-
Critical Hdwy	6.42	6.22	4.12
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	2.218
Pot Cap-1 Maneuver	656	866	1392
Stage 1	854	-	-
Stage 2	866	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	638	866	1392
Mov Cap-2 Maneuver	638	-	-
Stage 1	831	-	-
Stage 2	866	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.5	2.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1392	-	798	-	-
HCM Lane V/C Ratio	0.026	-	0.178	-	-
HCM Control Delay (s)	7.7	0	10.5	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.6	-	-

# HCM 6th Signalized Intersection Summary

## 10: Wendy's/I-75 SB ramp & US 441

06/13/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↑	↑↑	↑	↑		↑	↑	↑	↑
Traffic Volume (veh/h)	0	1963	58	23	646	295	3	0	72	181	10	41
Future Volume (veh/h)	0	1963	58	23	646	295	3	0	72	181	10	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1841	1841	1870	1796	1870	1870	0	1870	1811	1752	1455
Adj Flow Rate, veh/h	0	2134	63	25	702	0	3	0	78	205	0	45
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	4	4	2	7	2	2	0	2	6	10	30
Cap, veh/h	0	2158	63	122	2457		0	0	0	501	0	179
Arrive On Green	0.00	0.62	0.62	0.03	0.72	0.00	0.00	0.00	0.00	0.15	0.00	0.15
Sat Flow, veh/h	0	3561	102	1781	3413	1585		0		3450	0	1233
Grp Volume(v), veh/h	0	1070	1127	25	702	0		0.0		205	0	45
Grp Sat Flow(s),veh/h/ln	0	1749	1822	1781	1706	1585				1725	0	1233
Q Serve(g_s), s	0.0	57.5	59.0	0.5	7.0	0.0				5.2	0.0	3.1
Cycle Q Clear(g_c), s	0.0	57.5	59.0	0.5	7.0	0.0				5.2	0.0	3.1
Prop In Lane	0.00		0.06	1.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1088	1134	122	2457					501	0	179
V/C Ratio(X)	0.00	0.98	0.99	0.21	0.29					0.41	0.00	0.25
Avail Cap(c_a), veh/h	0	1088	1134	169	2548					501	0	179
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(l)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	17.7	18.0	25.3	4.8	0.0				37.5	0.0	36.6
Incr Delay (d2), s/veh	0.0	23.7	25.3	0.8	0.1	0.0				2.5	0.0	3.3
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	0.0	25.3	27.3	0.4	1.7	0.0				2.4	0.0	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	41.4	43.3	26.1	4.8	0.0				39.9	0.0	39.9
LnGrp LOS	A	D	D	C	A					D	A	D
Approach Vol, veh/h		2197			727	A					250	
Approach Delay, s/veh		42.4			5.6						39.9	
Approach LOS		D			A						D	
Timer - Assigned Phs			3	4		6		8				
Phs Duration (G+Y+Rc), s			9.4	67.0		20.0		76.4				
Change Period (Y+Rc), s			7.0	7.0		6.0		7.0				
Max Green Setting (Gmax), s			5.0	60.0		14.0		72.0				
Max Q Clear Time (g_c+I1), s			2.5	61.0		7.2		9.0				
Green Ext Time (p_c), s			0.0	0.0		0.5		5.1				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			33.8									
HCM 6th LOS			C									
<b>Notes</b>												
User approved pedestrian interval to be less than phase max green.												
User approved volume balancing among the lanes for turning movement.												
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.												

# HCM 6th Signalized Intersection Summary

## 13: McDonald's/I-75 NB ramp & US 441

06/13/2019



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	1069	80	57	684	124	55	12	21	254	25	234
Future Volume (veh/h)	51	1069	80	57	684	124	55	12	21	254	25	234
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1455	1856	1856	1870	1826	1752	1870	1870	1870	1870	1870	1796
Adj Flow Rate, veh/h	55	1162	87	62	743	0	60	13	23	276	27	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	30	3	3	2	5	10	2	2	2	2	2	7
Cap, veh/h	259	1338	100	178	1402		408	92	139	543	47	
Arrive On Green	0.04	0.40	0.40	0.04	0.40	0.00	0.36	0.36	0.36	0.36	0.36	0.00
Sat Flow, veh/h	1386	3325	249	1781	3469	1485	969	254	385	1316	129	2679
Grp Volume(v), veh/h	55	616	633	62	743	0	96	0	0	303	0	0
Grp Sat Flow(s), veh/h/ln	1386	1763	1811	1781	1735	1485	1609	0	0	1444	0	1340
Q Serve(g_s), s	2.4	32.8	32.9	2.1	16.6	0.0	0.0	0.0	0.0	12.9	0.0	0.0
Cycle Q Clear(g_c), s	2.4	32.8	32.9	2.1	16.6	0.0	3.7	0.0	0.0	16.6	0.0	0.0
Prop In Lane	1.00		0.14	1.00		1.00	0.62		0.24	0.91		1.00
Lane Grp Cap(c), veh/h	259	709	729	178	1402		639	0	0	590	0	
V/C Ratio(X)	0.21	0.87	0.87	0.35	0.53		0.15	0.00	0.00	0.51	0.00	
Avail Cap(c_a), veh/h	273	827	850	193	1628		639	0	0	590	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	18.1	28.1	28.1	22.6	23.1	0.0	22.0	0.0	0.0	25.9	0.0	0.0
Incr Delay (d2), s/veh	0.4	8.7	8.6	1.2	0.3	0.0	0.5	0.0	0.0	3.2	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	14.4	14.8	0.8	6.4	0.0	1.6	0.0	0.0	6.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.5	36.8	36.7	23.8	23.4	0.0	22.5	0.0	0.0	29.0	0.0	0.0
LnGrp LOS	B	D	D	C	C		C	A	A	C	A	
Approach Vol, veh/h	1304			805			96			303		
Approach Delay, s/veh	36.0			23.4			22.5			29.0		
Approach LOS	D			C			C			C		
Timer - Assigned Phs	2		3	4		6		7	8			
Phs Duration (G+Y+Rc), s	43.0		11.1	48.2		43.0		11.0	48.4			
Change Period (Y+Rc), s	6.0		7.0	7.0		6.0		7.0	7.0			
Max Green Setting (Gmax), s	37.0		5.0	48.0		37.0		5.0	48.0			
Max Q Clear Time (g_c+I1), s	5.7		4.1	34.9		18.6		4.4	18.6			
Green Ext Time (p_c), s	0.5		0.0	6.3		1.7		0.0	5.1			

### Intersection Summary

HCM 6th Ctrl Delay	30.6
HCM 6th LOS	C























### Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

# HCM 6th Signalized Intersection Summary

3: NW 173rd St & US 441

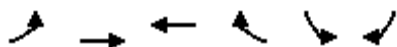
06/13/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	707	40	139	1446	213	60	27	148	141	20	47
Future Volume (veh/h)	61	707	40	139	1446	213	60	27	148	141	20	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1722	1441	1781	1870	1870	1737	1737	1870	1870	1870
Adj Flow Rate, veh/h	64	744	42	146	1522	224	63	28	156	148	21	49
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	12	31	8	2	2	11	11	2	2	2
Cap, veh/h	77	1505	618	168	1700	796	350	41	227	245	99	230
Arrive On Green	0.04	0.42	0.42	0.12	0.50	0.50	0.04	0.18	0.18	0.06	0.20	0.20
Sat Flow, veh/h	1781	3554	1459	1372	3385	1585	1781	229	1278	1781	498	1163
Grp Volume(v), veh/h	64	744	42	146	1522	224	63	0	184	148	0	70
Grp Sat Flow(s),veh/h/ln	1781	1777	1459	1372	1692	1585	1781	0	1507	1781	0	1661
Q Serve(g_s), s	4.1	17.6	2.0	12.1	46.9	6.3	3.3	0.0	13.2	6.9	0.0	4.1
Cycle Q Clear(g_c), s	4.1	17.6	2.0	12.1	46.9	6.3	3.3	0.0	13.2	6.9	0.0	4.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.85	1.00		0.70
Lane Grp Cap(c), veh/h	77	1505	618	168	1700	796	350	0	268	245	0	328
V/C Ratio(X)	0.83	0.49	0.07	0.87	0.90	0.28	0.18	0.00	0.69	0.60	0.00	0.21
Avail Cap(c_a), veh/h	77	1505	618	232	1838	861	363	0	268	245	0	328
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	54.7	24.2	19.7	49.7	26.0	7.3	36.6	0.0	44.4	39.0	0.0	38.7
Incr Delay (d2), s/veh	50.0	0.3	0.0	22.1	5.9	0.2	0.2	0.0	13.4	4.1	0.0	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	7.1	0.7	5.0	18.5	3.1	1.4	0.0	5.8	3.6	0.0	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	104.7	24.5	19.8	71.8	31.8	7.5	36.8	0.0	57.8	43.1	0.0	40.2
LnGrp LOS	F	C	B	E	C	A	D	A	E	D	A	D
Approach Vol, veh/h	850		1892				247		218			
Approach Delay, s/veh	30.3		32.0				52.5		42.2			
Approach LOS	C		C				D		D			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.4	26.0	21.1	55.8	10.1	28.3	12.0	64.9				
Change Period (Y+Rc), s	5.5	5.5	7.0	7.0	5.5	5.5	7.0	7.0				
Max Green Setting (Gmax), s	6.9	20.5	19.5	48.1	5.5	21.9	5.0	62.6				
Max Q Clear Time (g_c+I1), s	8.9	15.2	14.1	19.6	5.3	6.1	6.1	48.9				
Green Ext Time (p_c), s	0.0	0.4	0.2	5.2	0.0	0.2	0.0	9.0				
Intersection Summary												
HCM 6th Ctrl Delay	33.8											
HCM 6th LOS	C											

# HCM 6th Signalized Intersection Summary

## 6: US 441 & NW 167th Blvd

06/13/2019






Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	116	810	1604	345	154	35
Future Volume (veh/h)	116	810	1604	345	154	35
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	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	1811	1841	1737	1841	1811	1900
Adj Flow Rate, veh/h	126	880	1743	375	202	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	6	4	11	4	6	0
Cap, veh/h	209	2826	2312	1093	273	127
Arrive On Green	0.04	0.81	0.70	0.70	0.08	0.00
Sat Flow, veh/h	1725	3589	3387	1560	3450	1610
Grp Volume(v), veh/h	126	880	1743	375	202	0
Grp Sat Flow(s), veh/h/ln	1725	1749	1650	1560	1725	1610
Q Serve(g_s), s	2.1	7.2	37.1	10.5	6.3	0.0
Cycle Q Clear(g_c), s	2.1	7.2	37.1	10.5	6.3	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	209	2826	2312	1093	273	127
V/C Ratio(X)	0.60	0.31	0.75	0.34	0.74	0.00
Avail Cap(c_a), veh/h	273	2826	2312	1093	561	262
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	21.1	2.7	10.5	6.5	49.9	0.0
Incr Delay (d2), s/veh	2.8	0.3	2.3	0.9	3.9	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	2.5	1.5	11.2	3.0	2.9	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	23.8	3.0	12.9	7.4	53.8	0.0
LnGrp LOS	C	A	B	A	D	A
Approach Vol, veh/h		1006	2118		202	
Approach Delay, s/veh		5.6	11.9		53.8	
Approach LOS		A	B		D	
Timer - Assigned Phs			4		6	7 8
Phs Duration (G+Y+Rc), s			96.5		14.3	11.9 84.6
Change Period (Y+Rc), s			7.0		5.5	7.0 7.0
Max Green Setting (Gmax), s			89.5		18.0	9.0 73.5
Max Q Clear Time (g_c+I1), s			9.2		8.3	4.1 39.1
Green Ext Time (p_c), s			6.8		0.4	0.1 19.8
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			12.5			
HCM 6th LOS			B			
<b>Notes</b>						
User approved pedestrian interval to be less than phase max green.						
User approved volume balancing among the lanes for turning movement.						



HCM 6th TWSC  
8: NW 173rd St & Briarwood


06/13/2019

Intersection						
Int Delay, s/veh	3.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	21	66	112	196	144	36
Future Vol, veh/h	21	66	112	196	144	36
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	23	72	122	213	157	39
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	634	177	196	0	-	0
Stage 1	177	-	-	-	-	-
Stage 2	457	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	443	866	1377	-	-	-
Stage 1	854	-	-	-	-	-
Stage 2	638	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	399	866	1377	-	-	-
Mov Cap-2 Maneuver	399	-	-	-	-	-
Stage 1	769	-	-	-	-	-
Stage 2	638	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	11.2	2.9		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1377	-	675	-	-	
HCM Lane V/C Ratio	0.088	-	0.14	-	-	
HCM Control Delay (s)	7.9	0	11.2	-	-	
HCM Lane LOS	A	A	B	-	-	
HCM 95th %tile Q(veh)	0.3	-	0.5	-	-	

# HCM 6th Signalized Intersection Summary

## 10: Wendy's/I-75 SB ramp & US 441

06/13/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↑	↑↑	↑	↑		↑	↑	↑	↑
Traffic Volume (veh/h)	0	999	43	48	1828	247	36	0	74	112	12	56
Future Volume (veh/h)	0	999	43	48	1828	247	36	0	74	112	12	56
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1841	1841	1870	1796	1870	1870	0	1870	1811	1752	1455
Adj Flow Rate, veh/h	0	1086	47	52	1987	0	39	0	80	131	0	61
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	4	4	2	7	2	2	0	2	6	10	30
Cap, veh/h	0	2076	90	335	2423		0	0	0	581	0	208
Arrive On Green	0.00	0.61	0.61	0.04	0.71	0.00	0.00	0.00	0.00	0.17	0.00	0.17
Sat Flow, veh/h	0	3507	148	1781	3413	1585		0		3450	0	1233
Grp Volume(v), veh/h	0	556	577	52	1987	0		0.0		131	0	61
Grp Sat Flow(s),veh/h/ln	0	1749	1814	1781	1706	1585				1725	0	1233
Q Serve(g_s), s	0.0	19.5	19.6	0.0	43.2	0.0				3.5	0.0	4.6
Cycle Q Clear(g_c), s	0.0	19.5	19.6	0.0	43.2	0.0				3.5	0.0	4.6
Prop In Lane	0.00		0.08	1.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1063	1103	335	2423					581	0	208
V/C Ratio(X)	0.00	0.52	0.52	0.16	0.82					0.23	0.00	0.29
Avail Cap(c_a), veh/h	0	1063	1103	352	2458					581	0	208
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	12.1	12.1	18.5	10.8	0.0				38.4	0.0	38.9
Incr Delay (d2), s/veh	0.0	1.8	1.8	0.2	2.3	0.0				0.9	0.0	3.6
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	0.0	7.1	7.4	0.8	12.8	0.0				1.6	0.0	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	13.9	13.8	18.7	13.1	0.0				39.3	0.0	42.5
LnGrp LOS	A	B	B	B	B					D	A	D
Approach Vol, veh/h		1133			2039	A					192	
Approach Delay, s/veh		13.9			13.2						40.3	
Approach LOS		B			B						D	
Timer - Assigned Phs			3	4		6		8				
Phs Duration (G+Y+Rc), s			10.9	72.0		24.0		82.9				
Change Period (Y+Rc), s			7.0	7.0		6.0		7.0				
Max Green Setting (Gmax), s			5.0	65.0		18.0		77.0				
Max Q Clear Time (g_c+I1), s			2.0	21.6		6.6		45.2				
Green Ext Time (p_c), s			0.0	8.4		0.5		20.1				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			15.0									
HCM 6th LOS			B									
<b>Notes</b>												
User approved volume balancing among the lanes for turning movement.												
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.												

# HCM 6th Signalized Intersection Summary

## 13: McDonald's/I-75 NB ramp & US 441

06/13/2019



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	758	28	46	1400	187	59	5	9	257	22	649
Future Volume (veh/h)	66	758	28	46	1400	187	59	5	9	257	22	649
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1455	1856	1856	1870	1826	1752	1870	1870	1870	1870	1870	1796
Adj Flow Rate, veh/h	72	824	30	50	1522	0	64	5	10	279	24	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	30	3	3	2	5	10	2	2	2	2	2	7
Cap, veh/h	136	1706	62	275	1690		443	37	61	463	35	
Arrive On Green	0.04	0.49	0.49	0.03	0.49	0.00	0.30	0.30	0.30	0.30	0.30	0.00
Sat Flow, veh/h	1386	3469	126	1781	3469	1485	1295	123	205	1351	116	2679
Grp Volume(v), veh/h	72	419	435	50	1522	0	79	0	0	303	0	0
Grp Sat Flow(s),veh/h/ln	1386	1763	1833	1781	1735	1485	1623	0	0	1467	0	1340
Q Serve(g_s), s	0.0	18.1	18.1	1.8	45.7	0.0	0.0	0.0	0.0	16.6	0.0	0.0
Cycle Q Clear(g_c), s	0.0	18.1	18.1	1.8	45.7	0.0	3.8	0.0	0.0	20.4	0.0	0.0
Prop In Lane	1.00		0.07	1.00		1.00	0.81		0.13	0.92		1.00
Lane Grp Cap(c), veh/h	136	867	901	275	1690		541	0	0	498	0	
V/C Ratio(X)	0.53	0.48	0.48	0.18	0.90		0.15	0.00	0.00	0.61	0.00	
Avail Cap(c_a), veh/h	154	943	980	291	1825		541	0	0	498	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	51.6	19.3	19.3	20.1	26.7	0.0	29.4	0.0	0.0	34.9	0.0	0.0
Incr Delay (d2), s/veh	3.2	0.4	0.4	0.3	6.3	0.0	0.6	0.0	0.0	5.4	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	7.0	7.2	0.7	18.7	0.0	1.7	0.0	0.0	8.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.8	19.7	19.7	20.4	33.0	0.0	30.0	0.0	0.0	40.4	0.0	0.0
LnGrp LOS	D	B	B	C	C		C	A	A	D	A	
Approach Vol, veh/h	926			1572			79			303		
Approach Delay, s/veh	22.5			32.6			30.0			40.4		
Approach LOS	C			C			C			D		
Timer - Assigned Phs	2			3			4			6		
Phs Duration (G+Y+Rc), s	40.0			11.0			63.1			40.0		
Change Period (Y+Rc), s	6.0			7.0			7.0			6.0		
Max Green Setting (Gmax), s	34.0			5.0			61.0			34.0		
Max Q Clear Time (g_c+I1), s	5.8			3.8			20.1			22.4		
Green Ext Time (p_c), s	0.4			0.0			5.5			1.3		

### Intersection Summary

HCM 6th Ctrl Delay	30.1
HCM 6th LOS	C

### Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

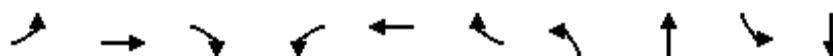
# ***APPENDIX J***

***2022 Synchro Queue Printouts***

# Queues

3: NW 173rd St & US 441

06/13/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	34	1748	38	94	462	76	55	146	185	82
v/c Ratio	0.31	0.99	0.05	0.96	0.25	0.08	0.19	0.44	0.74	0.23
Control Delay	57.3	48.6	0.1	133.3	14.5	0.2	33.9	13.6	57.2	16.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.3	48.6	0.1	133.3	14.5	0.2	33.9	13.6	57.2	16.5
Queue Length 50th (ft)	24	632	0	68	97	0	30	8	110	12
Queue Length 95th (ft)	57	#822	0	#176	132	0	64	67	#213	56
Internal Link Dist (ft)	2543				2011		1479		2987	
Turn Bay Length (ft)	300		225	300		1000	160		380	
Base Capacity (vph)	120	1758	791	98	1848	941	292	330	250	349
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.99	0.05	0.96	0.25	0.08	0.19	0.44	0.74	0.23

## Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

## Queues

### 6: US 441 & NW 167th Blvd

06/13/2019



Lane Group	EBL	EBT	WBT	WBR	SBL
Lane Group Flow (vph)	84	2046	633	84	134
v/c Ratio	0.15	0.75	0.28	0.08	0.44
Control Delay	3.2	8.0	7.0	1.6	44.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	3.2	8.0	7.0	1.6	44.4
Queue Length 50th (ft)	10	285	79	0	38
Queue Length 95th (ft)	22	420	115	16	68
Internal Link Dist (ft)		2011	1338		634
Turn Bay Length (ft)	250			275	150
Base Capacity (vph)	579	2746	2266	1107	579
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.15	0.75	0.28	0.08	0.23
Intersection Summary					



## Queues

### 10: Wendy's/I-75 SB ramp & US 441

06/13/2019



Lane Group	EBT	WBL	WBT	WBR	NBL	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	2197	25	702	321	3	78	104	104	45
v/c Ratio	1.12	0.17	0.33	0.29	0.04	0.33	0.38	0.38	0.13
Control Delay	87.6	10.5	10.1	1.6	53.3	3.7	46.5	46.5	0.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	87.6	10.5	10.1	1.6	53.3	3.7	46.5	46.5	0.8
Queue Length 50th (ft)	~1038	6	116	0	2	0	72	72	0
Queue Length 95th (ft)	#1178	17	150	32	12	0	131	131	0
Internal Link Dist (ft)	1338		955					384	
Turn Bay Length (ft)		180		700		50			220
Base Capacity (vph)	1957	147	2288	1177	83	235	274	275	351
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.12	0.17	0.31	0.27	0.04	0.33	0.38	0.38	0.13

#### Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

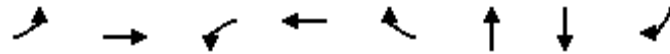
# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

## Queues

### 13: McDonald's/I-75 NB ramp & US 441

06/13/2019

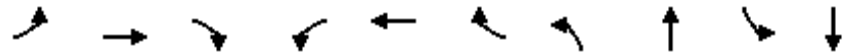


Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBT	SBR
Lane Group Flow (vph)	55	1249	62	743	135	96	303	254
v/c Ratio	0.24	0.87	0.39	0.52	0.20	0.22	0.65	0.22
Control Delay	14.8	34.9	19.7	24.0	4.0	23.1	37.4	3.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.8	34.9	19.7	24.0	4.0	23.1	37.4	3.8
Queue Length 50th (ft)	18	396	20	194	0	39	181	0
Queue Length 95th (ft)	38	491	40	249	35	82	292	30
Internal Link Dist (ft)		955		1362		197	455	
Turn Bay Length (ft)	300		200		275			225
Base Capacity (vph)	234	1660	158	1641	771	444	468	1138
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.24	0.75	0.39	0.45	0.18	0.22	0.65	0.22
Intersection Summary								

## Queues

3: NW 173rd St & US 441

06/13/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	64	744	42	146	1522	224	63	184	148	70
v/c Ratio	0.84	0.51	0.06	0.76	0.90	0.25	0.20	0.50	0.56	0.18
Control Delay	123.6	27.6	0.2	73.2	34.6	2.6	34.8	15.3	44.5	18.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	123.6	27.6	0.2	73.2	34.6	2.6	34.8	15.3	44.5	18.6
Queue Length 50th (ft)	50	221	0	109	524	0	37	19	91	14
Queue Length 95th (ft)	#137	286	0	#190	640	38	74	88	150	55
Internal Link Dist (ft)	2543				2011		1479		2987	
Turn Bay Length (ft)	300	225		300	1000		160	380		
Base Capacity (vph)	76	1482	683	231	1803	956	317	371	263	388
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.84	0.50	0.06	0.63	0.84	0.23	0.20	0.50	0.56	0.18

### Intersection Summary

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

## Queues

## 6: US 441 &amp; NW 167th Blvd

06/13/2019



Lane Group	EBL	EBT	WBT	WBR	SBL
Lane Group Flow (vph)	126	880	1743	375	205
v/c Ratio	0.61	0.32	0.82	0.33	0.58
Control Delay	26.5	4.0	19.5	1.7	50.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	26.5	4.0	19.5	1.7	50.4
Queue Length 50th (ft)	21	78	471	0	67
Queue Length 95th (ft)	90	118	644	35	106
Internal Link Dist (ft)		2011	1338		634
Turn Bay Length (ft)	250			275	150
Base Capacity (vph)	219	2730	2128	1145	534
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.58	0.32	0.82	0.33	0.38
Intersection Summary					

## Queues

## 10: Wendy's/I-75 SB ramp &amp; US 441

06/13/2019

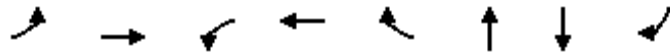


Lane Group	EBT	WBL	WBT	WBR	NBL	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	1133	52	1987	268	39	80	67	68	61
v/c Ratio	0.58	0.18	0.91	0.24	0.43	0.35	0.26	0.27	0.19
Control Delay	18.6	11.3	25.5	1.5	70.3	4.2	48.4	48.4	1.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.6	11.3	25.5	1.5	70.3	4.2	48.4	48.4	1.3
Queue Length 50th (ft)	300	14	654	0	30	0	49	49	0
Queue Length 95th (ft)	368	29	802	29	68	0	96	97	0
Internal Link Dist (ft)	1338		955					384	
Turn Bay Length (ft)		180		700		50			220
Base Capacity (vph)	1966	289	2272	1153	92	230	254	255	326
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.58	0.18	0.87	0.23	0.42	0.35	0.26	0.27	0.19
Intersection Summary									

## Queues

## 13: McDonald's/I-75 NB ramp &amp; US 441

06/13/2019



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBT	SBR
Lane Group Flow (vph)	72	854	50	1522	203	79	303	705
v/c Ratio	0.57	0.49	0.20	0.90	0.25	0.28	0.78	0.73
Control Delay	56.2	20.0	17.4	35.0	4.0	34.4	53.6	30.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	56.2	20.0	17.4	35.0	4.0	34.4	53.6	30.4
Queue Length 50th (ft)	28	217	19	539	8	44	221	200
Queue Length 95th (ft)	#74	272	41	653	47	90	#375	284
Internal Link Dist (ft)		955		1362		197	455	
Turn Bay Length (ft)	300		200		275			225
Base Capacity (vph)	126	1908	251	1849	873	280	390	963
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.57	0.45	0.20	0.82	0.23	0.28	0.78	0.73

## Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.