

SAN FELASCO VENTURES PROJECT (±251.42 ACRES)

ALACHUA COUNTY, FLORIDA

ECOLOGICAL SURVEY REPORT

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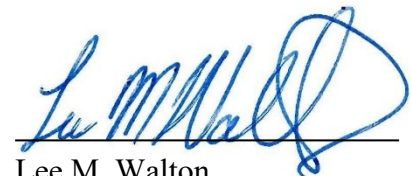
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1.0 INTRODUCTION

Flatwoods Consulting Group Inc. (Flatwoods) was retained by CHW Professional Consultants (Client) to conduct a jurisdictional wetland delineation for the approximate 251.42-acre San Felasco Ventures Project on May 19 and 21, 2021. The site is located east of County Road 241 and north and south of Progress Boulevard in Alachua, Florida. (Location Map). The site consists of Parcel ID No. 03970-000-000 and 03929-000-000, according to the Alachua County Property Appraiser and is in Sections 23 and 26, Township 8 South, and Range 18 East (Quad Map).

2.0 METHODOLOGY

The following sections describe the methods used by Flatwoods to determine the wetland limits and the potential presence of listed wildlife and plants within the study site.

2.1 Preliminary Review

Information on the potential presence of listed species was collected through literature and data review. Flatwoods reviewed information from the U.S. Fish and Wildlife Service (FWS), the Florida Fish and Wildlife Conservation Commission (FWC), the Florida Natural Areas Inventory (FNAI), the Suwannee River Water Management District (SRWMD), and the Florida Department of Environmental Protection (FDEP) Geographic Information System (GIS) databases regarding the occurrence of listed species and protected habitats.

To further identify which federally and state listed plant and animal species have the potential to occur within the study site, upland and wetland vegetative communities were assessed to determine their plant species composition, approximate boundaries, and general condition and quality. To establish the approximate locations and boundaries of existing upland and wetland communities within the study site, available site-specific data were collected and reviewed using the following resources and methods (see References for complete source information):

- Infrared and true color aerial imagery of the project area
- U.S. Department of Agriculture (USDA)/Natural Resource Conservation Service (NRCS) Soil Survey of Alachua County, Florida
- Florida U.S. Geological Survey (USGS) Topographic Quadrangle maps
- FWS Critical Habitat Portal
- FNAI Biodiversity Matrix
- Florida Department of Transportation (FDOT) Florida Land Use, Cover, and Forms Classification System (FLUCCS)
- SRWMD land use mapping

2.2 Survey Methods

2.2.1 Wetland Delineation

Wetlands and surface waters are delineated in accordance with The Florida Wetlands Delineation Manual (Chapter 62-340, F.A.C.) and the U.S. Army Corps of Engineers (USACE) 1987 Wetlands Delineation Manual, 2010 Supplement, suitable for submittal to the SRWMD, the USACE, and Alachua County. These delineation methods are based on the identification of specific hydrologic characteristics, including the presence of hydric soils and hydric soil conditions (periodic, continuous, or saturated), a dominance of hydrophytic vegetation, and other indicators of hydrologic conditions (e.g., evidence of frequent inundation, moss collars, and the presence of muck soils). If any wetlands or surface waters were found, the landward extent of each jurisdictional wetland was flagged in the field. Each flag location was recorded using a sub-meter Global Positioning System (GPS). Wetlands and surface waters found occurring within the site, are shown on the Ecological Survey map.

2.2.2 Standard Listed Species Survey

Flatwoods conducted a listed species survey within the study site in accordance with the FWC Florida Wildlife Conservation Guide. The purpose of the listed species survey was to identify presence and relative abundance of species considered Endangered, Threatened, or of Special Concern by the FWS under 50 CFR 11-12 and the FWC under Chapter 68A-27 F.A.C. During these surveys, all habitats within the site are canvassed for listed species. Any observations of listed species, as well as physical features that may indicate the presence of these species, such as tracks, scat, nests, burrows, and nest cavities in trees were shown on the Ecological Survey Map, if present.

2.2.3 Listed Plant Survey

Flatwoods conducted a survey in all suitable habitats within the site for plant species listed by the FWS as Threatened or Endangered. If found, any observations of listed plant species will be recorded using a sub-meter GPS and shown on the Ecological Survey Map, if present.

3.0 RESULTS

3.1 Soil Descriptions

Based on the USDA/NRCS Soil Survey for Alachua County (1982), nine soil types were mapped: Arredondo Fine Sand, 0 to 5 Percent Slopes (3); Fort Meade Fine Sand, 0 to 5 Percent Slopes (5); Millhopper Sand, 0 to 5 Percent Slopes (8); Kendrick Sand, 2 to 5 Percent Slopes (30); Gainesville Sand, 0 to 5 Percent Slopes (35); Arredondo Fine Sand, 5 to 8 Percent Slopes (69); Millhopper Sand, 5 to 8 Percent Slopes (71); Lochloosa Fine Sand, 5 to 8 Percent Slopes (72); and Kendrick Sand, 5 to 8 Percent Slopes (73) (Soil Map). According to the *Hydric Soils of Florida Handbook*, no hydric soils occur onsite.

3.2 Existing Upland Communities

Existing land use within the site was determined using a combination of the FLUCCS descriptions, SRWMD land use mapping, and field reconnaissance (Land Use Map). The FLUCCS represents current habitat conditions on the property. Representative photographs of the site are depicted in the Photo Document.

Land Use Communities

Row Crops (FLUCCS 214)

This habitat consisted of well-defined rows for growing peanuts, cabbage, and melons.

Fallow Crop Land (FLUCCS 261)

This habitat is previously harvested agricultural land that is no longer in crop production. Vegetation within this land use included ruderal species such as dogfennel (*Eupatorium capillifolium*), fireweed (*Erechtites hieraciifolius*), hairy indigo (*Indigofera hirsuta*), and broomsedge bluestem (*Andropogon virginicus*).

Upland Hardwood Forest (FLUCCS 420)

The canopy within this habitat consisted of live oak (*Quercus virginiana*), chinaberry (*Melia azedarach*), Carolina laurelcherry (*Prunus caroliniana*), and hackberry (*Celtis occidentalis*). Other vegetative species within this habitat included American beauty-berry (*Callicarpa americana*), greenbrier (*Smilax* spp.), Virginia creeper (*Parthenocissus quinquefolia*), and poison ivy (*Toxicodendron radicans*).

3.3 Existing Wetland Communities

Seven surface waters were delineated on the San Felasco Ventures property during the field review. No wetlands were found on the property. The text below provides a brief description the surface waters.

Reservoirs less than 10 Acres (FLUCCS 534)

This land use category designates man-made surface waters that are less than 10 acres. The surface waters found on site were constructed to serve as stormwater management features. Conveyances are stabilized with rip rap, areas that serve as ponds contain a sand bottom. These systems are maintained by mowing. Vegetative species included bahiagrass (*Paspalum notatum*), falsefennel (*Eupatorium leptophyllum*), and saltbush (*Baccharis halimifolia*).

3.4 Listed Species Survey Results

No listed wildlife or plant species were observed. In addition to the field review, Flatwoods conducted a desktop review of possible nearby wildlife species. Flatwoods reviewed the FWC Eagle Nest Locator (2016-2017 Survey), the 1999 FWC Wading Bird Colony Database, and the FWS Wood Stork (*Mycteria americana*) Consultation Area. No known bald eagle (*Haliaeetus leucocephalus*) nests or wading bird colonies occur within one mile of the site. The project is not located within any wood stork Core Foraging Areas (CFAs) (FNAI/FWC Map).

Based on the project's available habitats and location, other listed species (animals and plants) have the potential to occur. Table 1 describes the potentially occurring species' habitat preferences, preferred survey window (breeding season or flowering time), their likelihood of occurrence, whether they were observed on the site, and their FWS and FWC listing status. The species that have a moderate or high probability of occurrence on the site are described in the sections below.

3.4.1 Florida Pine Snake

The Florida pine snake (*Pituophis melanoleucus mugitus*) is listed as Threatened by the FWC and not listed by the FWS. The Florida pine snake is a large, stocky, tan or rusty colored snake with an indistinct pattern of large blotches on a lighter background. They have a muscular body, with keeled scales with a relatively small head, somewhat pointed snout, and four prefrontal scales. These snakes may hiss loudly and vibrate their tail when encountered. They are found in sandhill and former sandhill, including old fields and pastures, but also sand pine scrub and scrubby flatwoods with open canopies and dry sandy soils. They often coexist with pocket gophers and gopher tortoises. Flatwoods did not observe the Florida pine snake during the survey.

3.4.2 Gopher Tortoise

The gopher tortoise is listed as Threatened by the FWC and is a candidate for listing by the FWS. Gopher tortoises are terrestrial turtles averaging 9 to 11 inches in length. They are typically found in sandhill, pine flatwoods, scrub, dry prairie, coastal dunes, and other well-drained, open habitats. Gopher tortoises dig half-moon-shaped burrows that average 15 feet long and 7 feet deep. No gopher tortoise burrows were observed during the ecological survey. Please note, a 100 percent gopher tortoise was not conducted at the time of this survey. Flatwoods will conduct a gopher tortoise survey at a future date. Completion of this survey will determine if gopher tortoises are present onsite and if an FWC Gopher Tortoise Relocation Permit will be required for site development.

3.4.3 Little Blue Heron

This medium-sized, slate-blue wading bird is listed as Threatened by the FWC and not listed by the FWS. The little blue heron (*Egretta caerulea*) prefers both fresh and saltwater habitats, such as fresh and saltwater mudflats and marshes, coastal beaches, mangrove swamps, cypress swamps, hardwood swamps, wet prairies, cypress wetlands,

bay swamps, and ditches. No communal roosts or rookeries were observed on the site. According to the 1999 FWC wading bird colony database, one wading bird colony is located within a mile of the project (FNAI/FWC Map). No FWC approvals should be required for the project.

3.4.4 *Southeastern American Kestrel*

The southeastern American kestrel (*Falco sparverius paulus*) is listed as Threatened by the FWC. It is a resident subspecies of the American kestrel (*Falco sparverius*) and kestrels observed in Florida during the breeding season (April-August) are assumed to be resident southeastern American kestrels. They are found in upland habitats, including sandhills, flatwoods, pastures, sand pine scrubs, and prairies. As cavity nesters and sit and wait predators, they require suitable cavity trees and perches in their territories as well as open ground cover to see and capture their prey. Typical prey items include insects, lizards, small rodents, and small birds. No kestrels were observed foraging during the site review.

3.4.5 *Tricolored Heron*

This medium-sized, two-toned wading bird is listed as Threatened by the FWC and not listed by the FWS. The tricolored heron (*Egretta tricolor*) prefers both fresh and saltwater habitats, such as fresh and saltwater mudflats and marshes, coastal beaches, mangrove swamps, cypress swamps, hardwood swamps, wet prairies, cypress wetlands, bay swamps, ditches, inland waterways, and urban and agricultural environments. No communal roosts or rookeries were observed on the site. According to the 1999 FWC wading bird colony database, one wading bird colony is located within a mile of the project (FNAI/FWC Map). No FWC approvals should be required for the project.

Table 1 Protected Plants and Animals Potentially Occurring on the San Felasco Ventures Project in Alachua County, Florida

Species	Habitat of Occurrence	Preferred Survey Window ¹	Likelihood of Occurrence	Status ²	
				FWS ³	FWC ⁴
BIRDS					
<i>Antigone canadensis pratensis</i> Florida sandhill crane	Open wetland habitats surrounded by shrubs or trees. Commonly found foraging in irrigated croplands, pastures, grasslands, or wetlands.	S - Year round B - January-June	Low: Little habitat present	---	T
<i>Aphelocoma coerulescens</i> Florida scrub-jay	Inhabits fire dominated, low-growing, oak scrub habitat found on well-drained sandy soils. May persist in areas with sparser oaks or scrub areas that are overgrown.	S - March-October B - March-July	Low: Lack of suitable habitat	T	T
<i>Egretta caerulea</i> Little blue heron	Shallow freshwater, brackish water, and saltwater habitats.	S - Year round B - March-July	Moderate: Some suitable habitat present	---	T
<i>Egretta tricolor</i> Tricolored heron	Forages in a variety of permanently and seasonally flooded wetlands, ditches, edges of ponds, and lakes. Inland nesting colonies typically found in Carolina willow dominated wetlands.	S - Year round B - March-July	Moderate: Some suitable habitat present	---	T
<i>Falco sparverius paulus</i> Southeastern American kestrel	Found in open pine habitats, woodland edges, dry prairies, and pastures.	S - April-August B - April-August	Moderate: Some habitat present	---	T
<i>Haliaeetus leucocephalus</i> Bald eagle	Areas close to the coast, bays, rivers, lakes, or other bodies of water. Typically nests in live mature pines and cypress trees.	S - Year round B - October-May	Low: Little habitat present	---	---
<i>Mycteria americana</i> Wood stork	Forages in shallow water in freshwater marshes, swamps, lagoons, ponds, tidal creeks, flooded pastures, and ditches. Nests in colonies in cypress swamps.	S - Year round B - March-August	Low: Little habitat present	T	T

Species	Habitat of Occurrence	Preferred Survey Window ¹	Likelihood of Occurrence	Status ²	
				FWS ³	FWC ⁴
<i>Picoides borealis</i> Red-cockaded woodpecker	Open pine woodlands with mature to over-mature pine trees and a diversity of grass, forbs, and shrub species.	S - Year round B - April-July	Low: Lack of suitable habitat	E	E
REPTILES					
<i>Drymarchon corais couperi</i> Eastern indigo snake	Broad range of habitats from scrub and sandhill to wet prairies, forested wetlands, and mangrove swamps. Often seeks refuge in gopher tortoise burrows in sandy uplands, but also forages in mesic and hydric habitats.	S - Year round B - November-April	Low: Little habitat present	T	T
<i>Gopherus polyphemus</i> Gopher tortoise	Found in dry upland habitats, including sandhills, scrub, xeric oak hammock, and dry prairie flatwoods; also, commonly uses disturbed habitats such as pastures, old fields, abandoned citrus groves, and road shoulders.	S - Year round B - March-October	Moderate: Some habitat present	---	T
<i>Pituophis melanoleucus mugitus</i> Florida pine snake	Found in sandhill and former sandhill, including old fields and pastures, but also sand pine scrub and scrubby flatwoods with open canopies and dry sandy soils. Often coexists with pocket gophers and gopher tortoises.	S - Year round B - April-February	Moderate: Some habitat present	---	T

1 - S - Survey Window, B - Breeding Season

2 - E = Endangered, T = Threatened, T (S/A) = Similarity of Appearance to a Threatened Taxon

3 - U.S. Fish and Wildlife Service

4 - Florida Fish and Wildlife Conservation Commission

Table Source: Florida Wildlife Conservation Guide, Florida's Breeding Bird Atlas, FWS Listed Species by County, and Florida Natural Areas Inventory

4.0 PROTECTED HABITATS AND WATERS

The site was evaluated for the potential occurrence of Critical Habitat as defined by the Endangered Species Act of 1973, as amended. The FWS regulates the adverse modification of the biological or physical constituent elements essential to the conservation of the listed species within the Critical Habitat. There are no lands designated as Critical Habitat within or adjacent to the site. The site was also evaluated for the potential occurrence of Protected Waters and Protected Lands. No Protected Waters or Protected Lands occur onsite. The San Felasco Hammock Preserve State Park is immediately adjacent to the eastern boundary of the site (Protected Lands Map, Protected Waters Map).

5.0 FEMA FLOODPLAIN

Federal Emergency Management Agency (FEMA) identifies flood hazards and assesses flood risks. Based on the attached Floodplain Map, the northeast portion of the site occurs within Flood Zone A. Zone A is defined as areas subject to inundation by the 1-percent-annual-chance flood event generally determined using approximate methodologies.

6.0 PERMITTING DISCUSSION

State Permitting

Four existing surface waters were observed on the site, constructed in accordance with Environmental Resource Permit (ERP) Individual Permit No. 001-205889-3, issued by the SRWMD on April 5, 2019. An ERP permit from the SRWMD will be required for the operation, maintenance, and any alteration of the existing systems, or the creation of any new surface waters.

No listed species were observed during the surveys. Flatwoods plans to conduct a 100% gopher tortoise survey at a future date. This survey will be conducted to determine whether gopher tortoise burrows are present onsite and if future construction will impact gopher tortoises. Upon completion of this survey, additional permitting requirements, if applicable, will be provided.

According to Section 3.6 of the SRWMD ERP Applicant's Handbook Volume II, there must be no net decrease in storage volume within the floodplain. Compensating storage may be used to offset impacts if impacts within the floodplain were to occur.

Local Government Permitting

Section 406.04 of Alachua County's Land Development Regulations requires a Resource Assessment as supporting documentation for various applications. This report is sufficient to support the application for Alachua County.

According to Article VII of Chapter 406 of Alachua County's Land Development Regulations, a floodplain development permit may be required if development occurs wholly or partially within the flood prone area (Floodplain Map).

According to Article II of Chapter 406 of Alachua County's Land Development Regulations, a permit is required to remove any champion trees, heritage trees, woody native tree species eight inches or more in diameter at breast height (DBH), specimen trees, and small specimen trees listed under Section 406.16. For protected trees permitted for removal, trees shall be either relocated, replaced, or a fee may be paid to Alachua County in lieu of replacement planting.

According to Section 6.2 of the City of Alachua's Code of Ordinances, a tree removal permit must be obtained before removing any champion or heritage tree. A tree survey was not conducted as part of this Ecological Survey but will likely be required for site development.

7.0 REFERENCES

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U.S. Fish and Wildlife Survey (FWS). National Wetland Inventory (NWI). Online resources available from <http://www.fws.gov/wetlands/Data/Mapper.html>.

U.S. Fish and Wildlife Survey Critical Habitat Designations. Online resources available from <http://criticalhabitat.fws.gov/>.



 Project Area

Feet
0 1 in = 900 feet 900

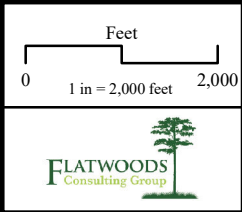
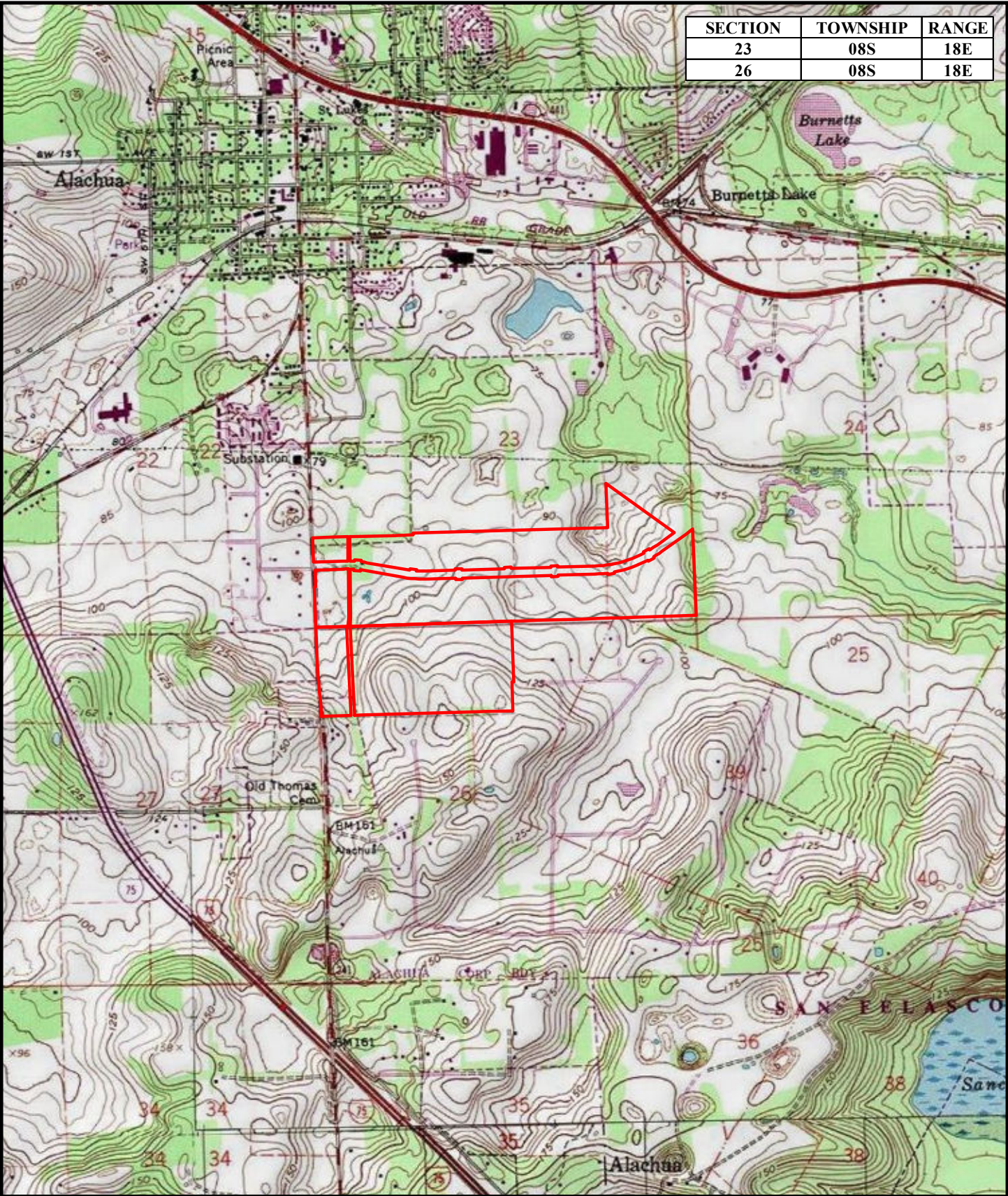


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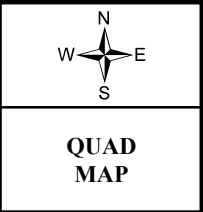
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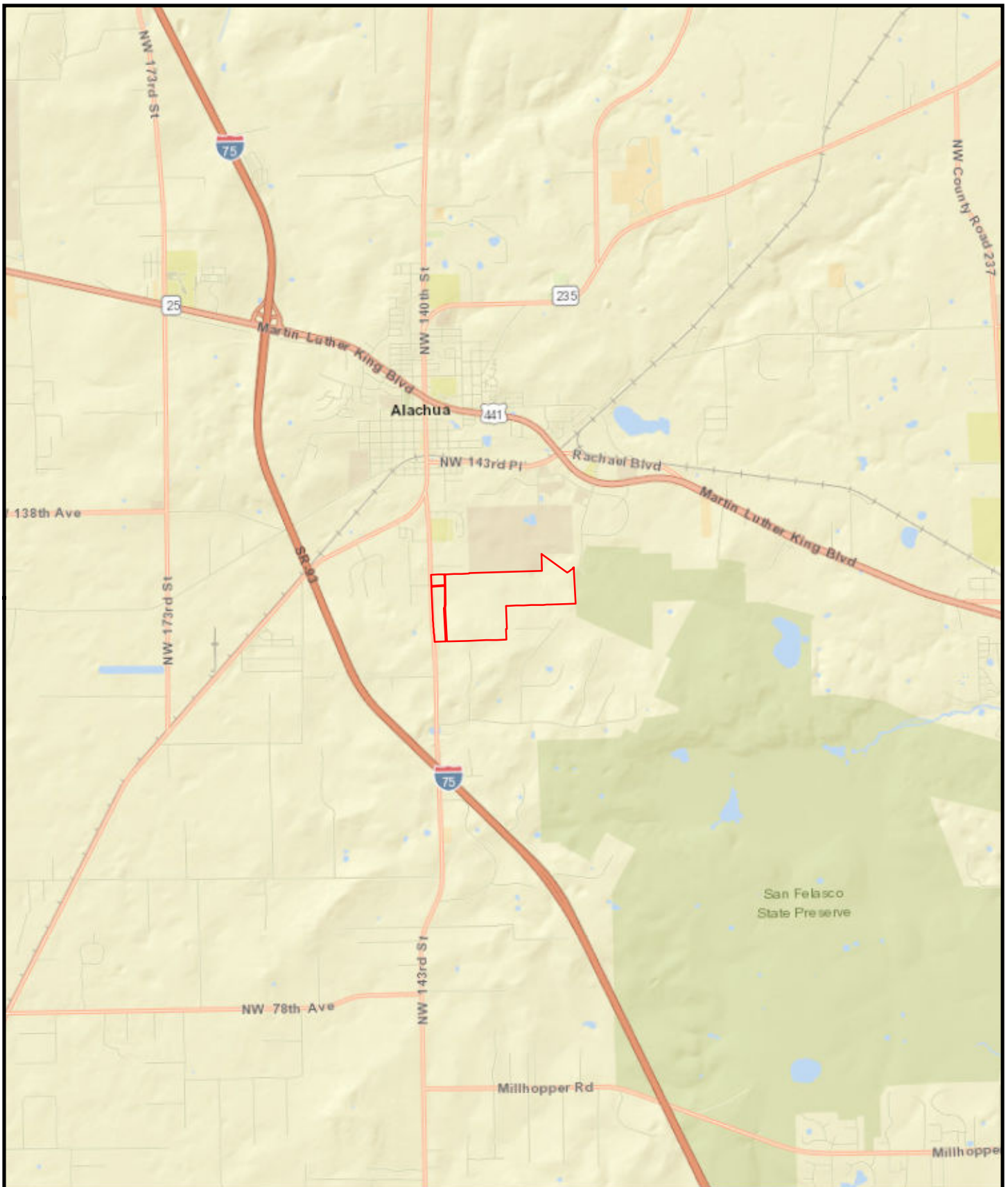




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CHW PROFESSIONAL CONSULTANTS**

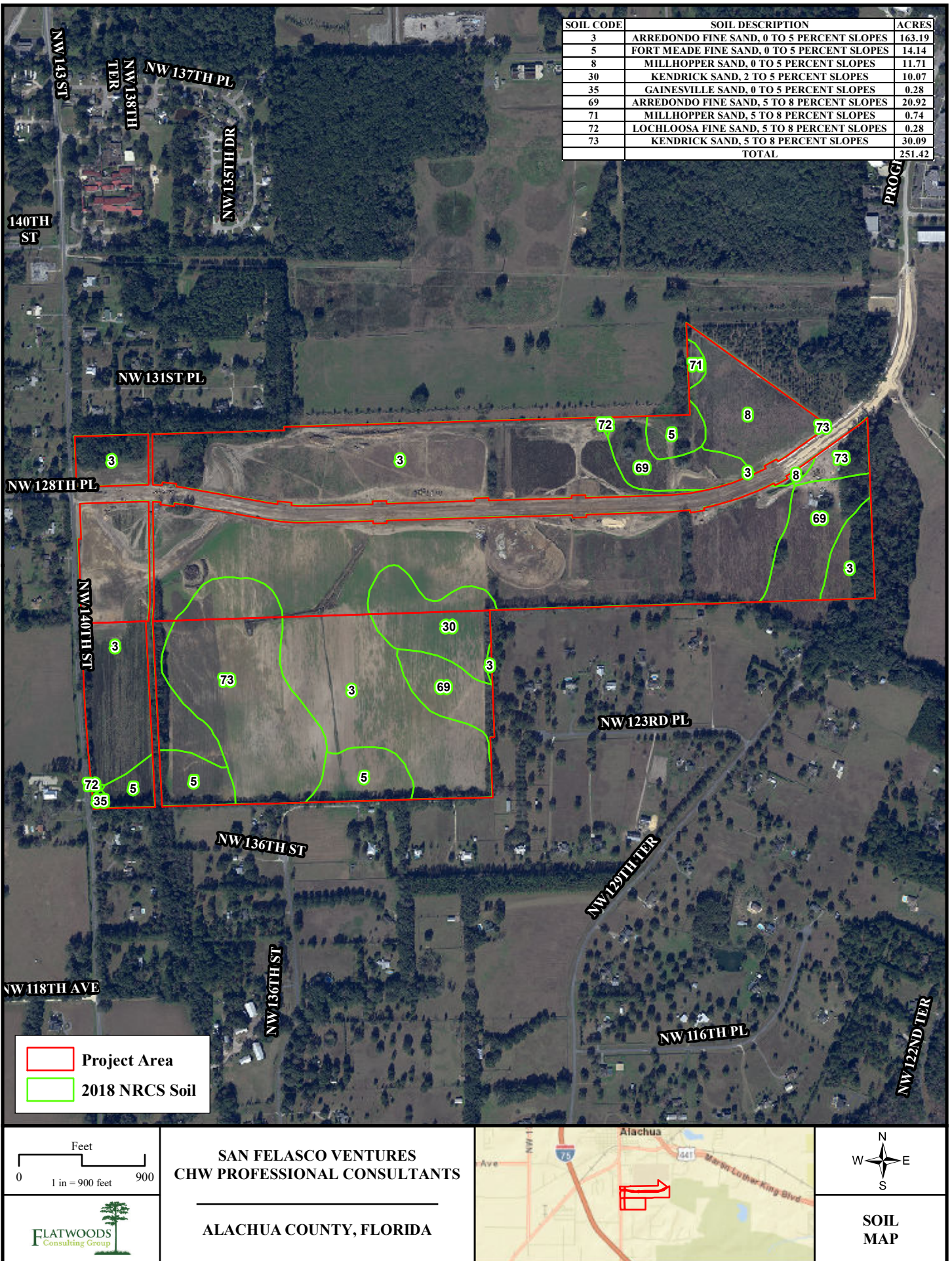
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 **Project Area**





<p>Miles</p> <p>0 1 in = 1 miles 1</p>	<p>SAN FELASCO VENTURES CHW PROFESSIONAL CONSULTANTS</p>	<p> Project Area</p>	<p>N W E S</p>
<p></p>	<p>ALACHUA COUNTY, FLORIDA</p>		<p>LOCATION MAP</p>



Feet
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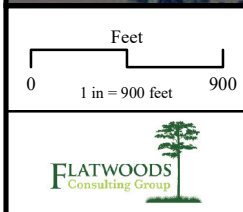
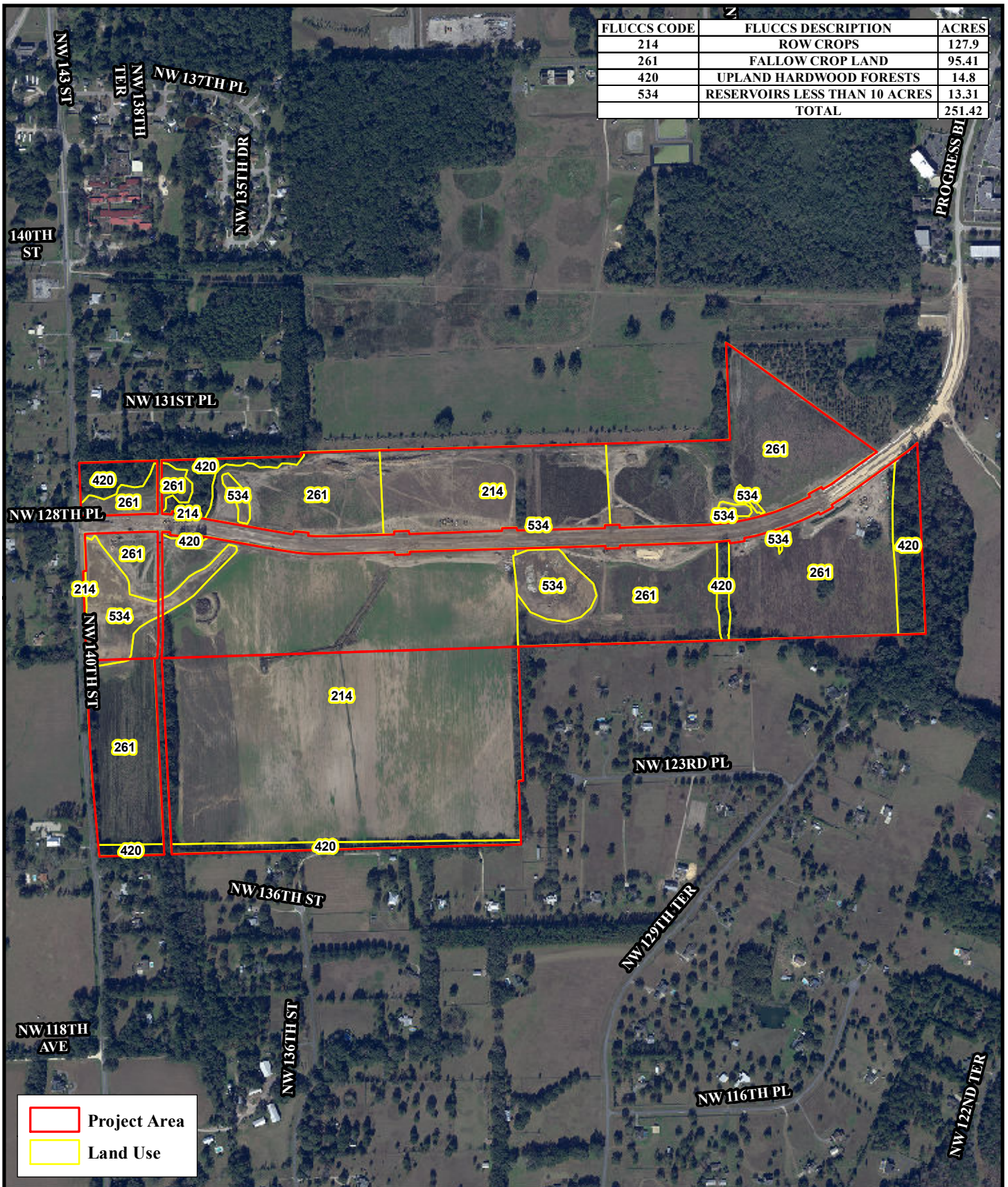
SAN FELASCO VENTURES
CHW PROFESSIONAL CONSULTANTS

ALACHUA COUNTY, FLORIDA



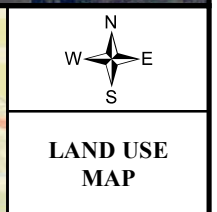
SOIL
MAP

FLUCCS CODE	FLUCCS DESCRIPTION	ACRES
214	ROW CROPS	127.9
261	FALLOW CROP LAND	95.41
420	UPLAND HARDWOOD FORESTS	14.8
534	RESERVOIRS LESS THAN 10 ACRES	13.31
	TOTAL	251.42



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Project Area

Surface Water

Feet

0 1 in = 900 feet 900

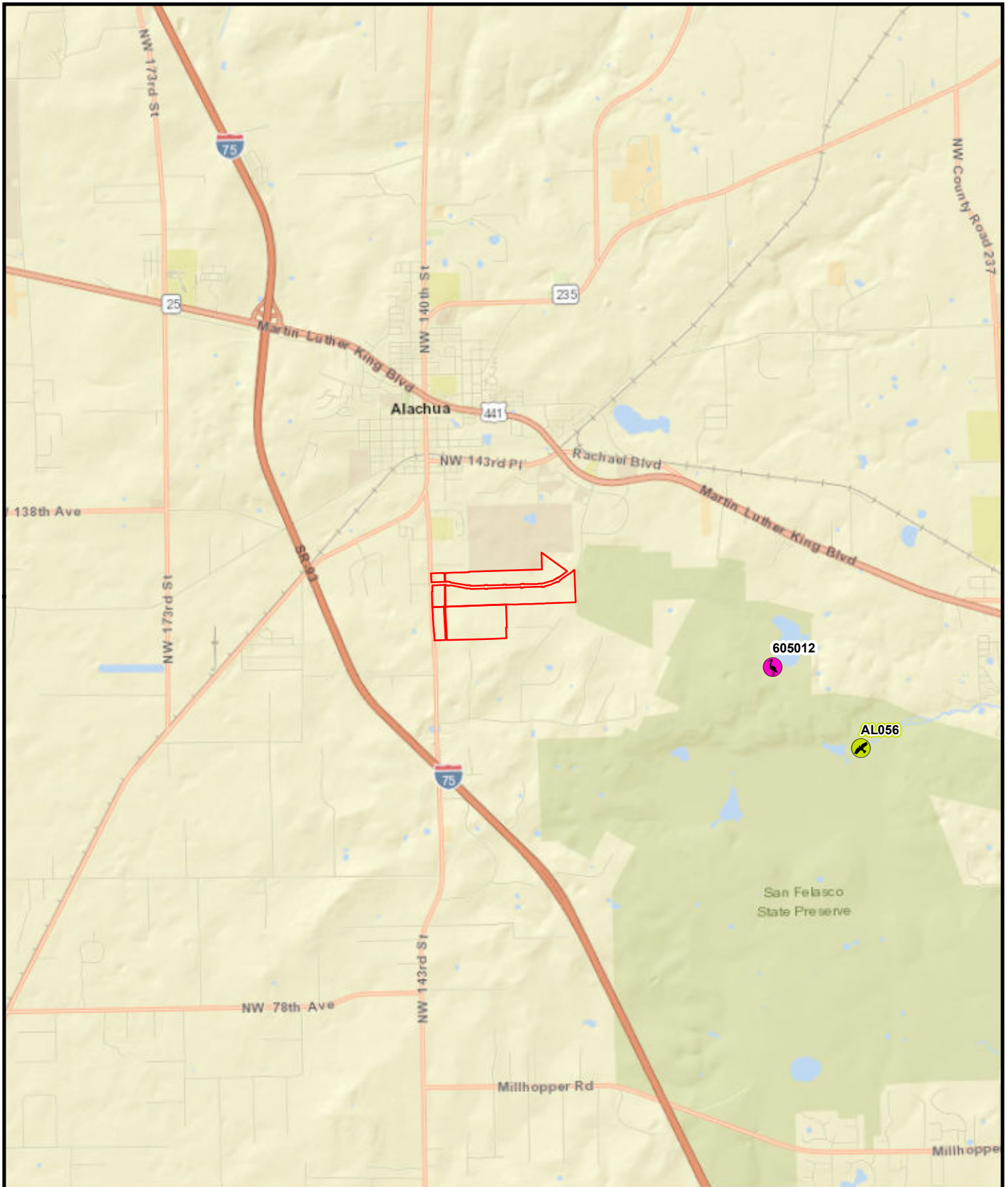






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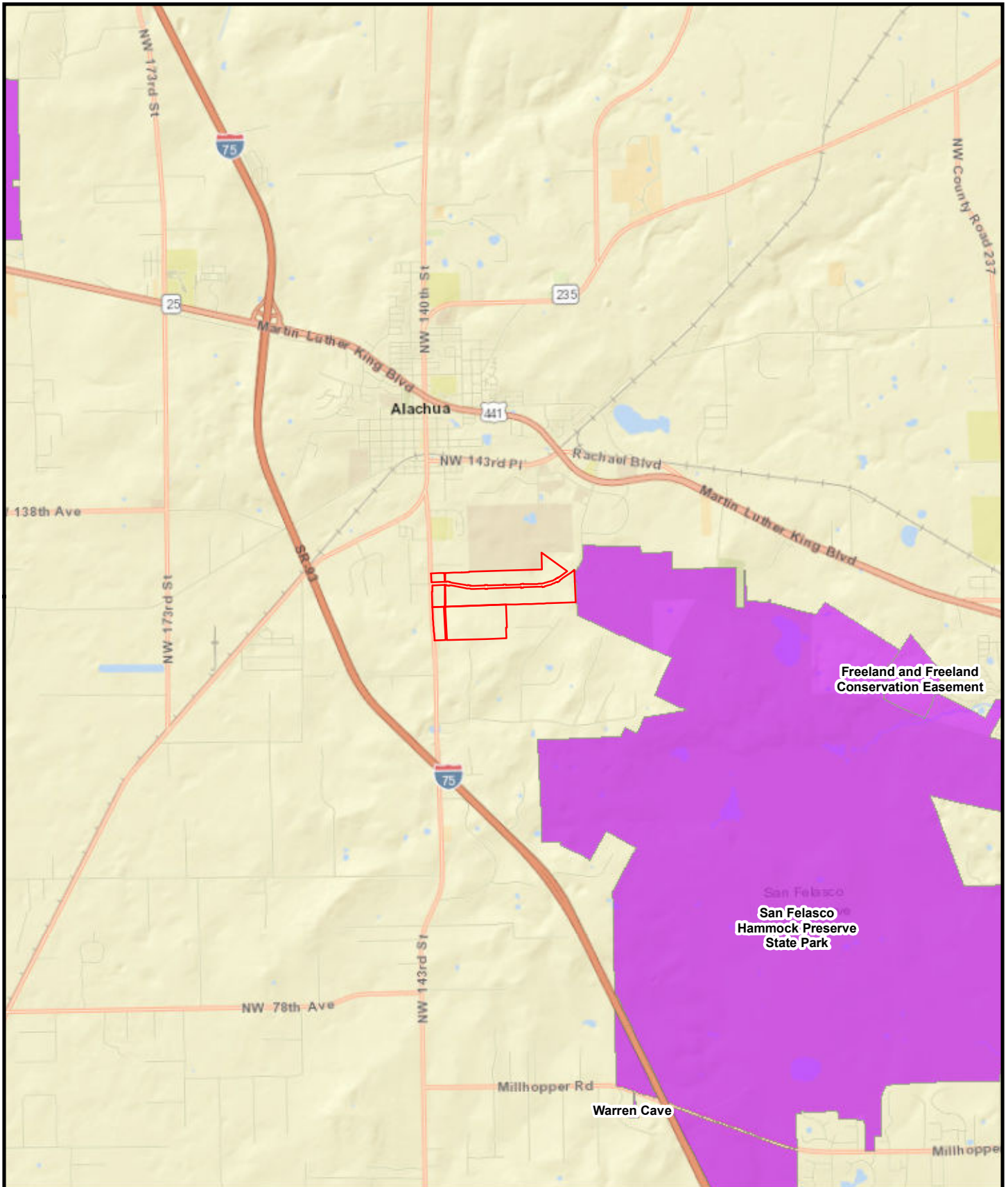
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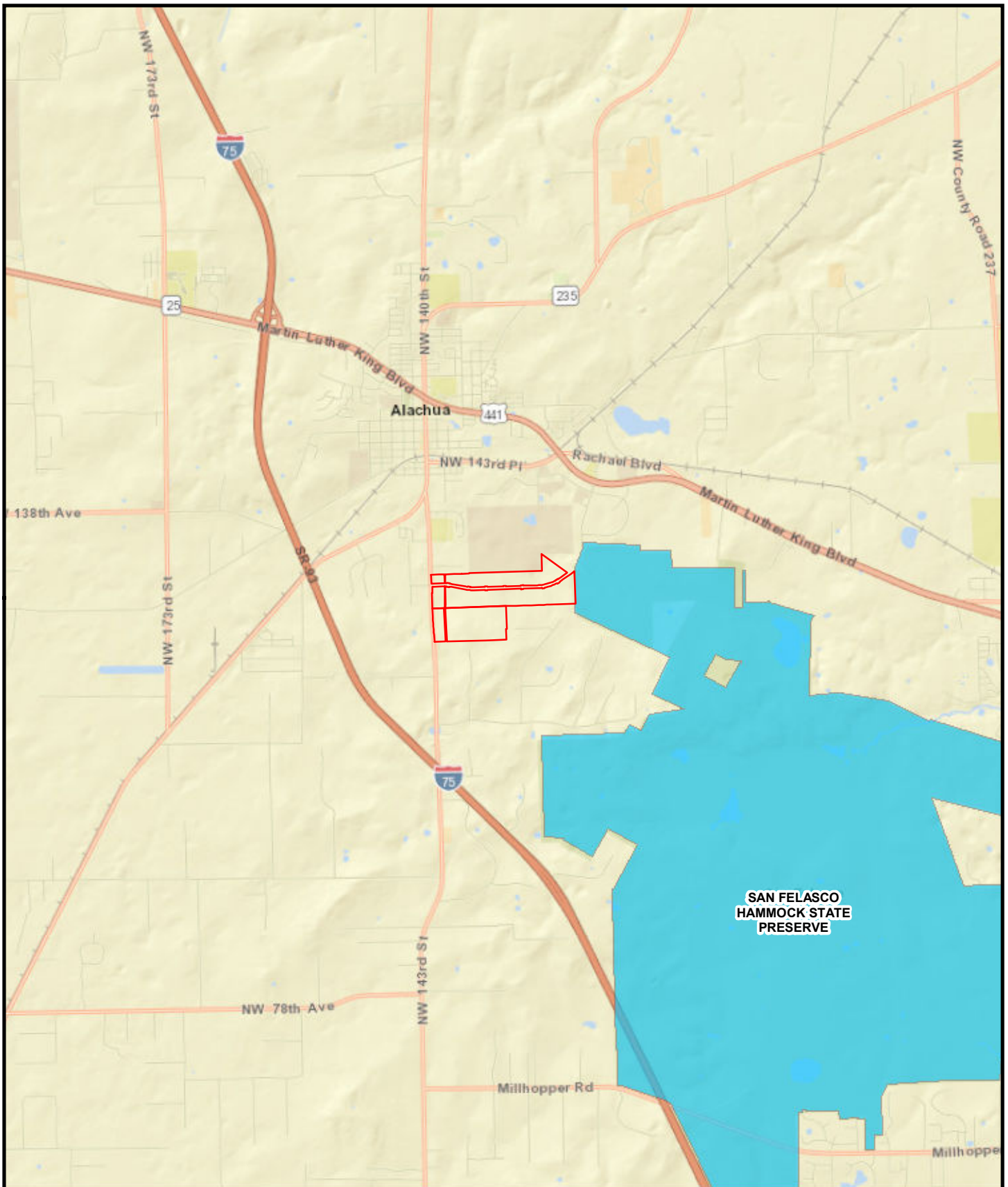
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MAP




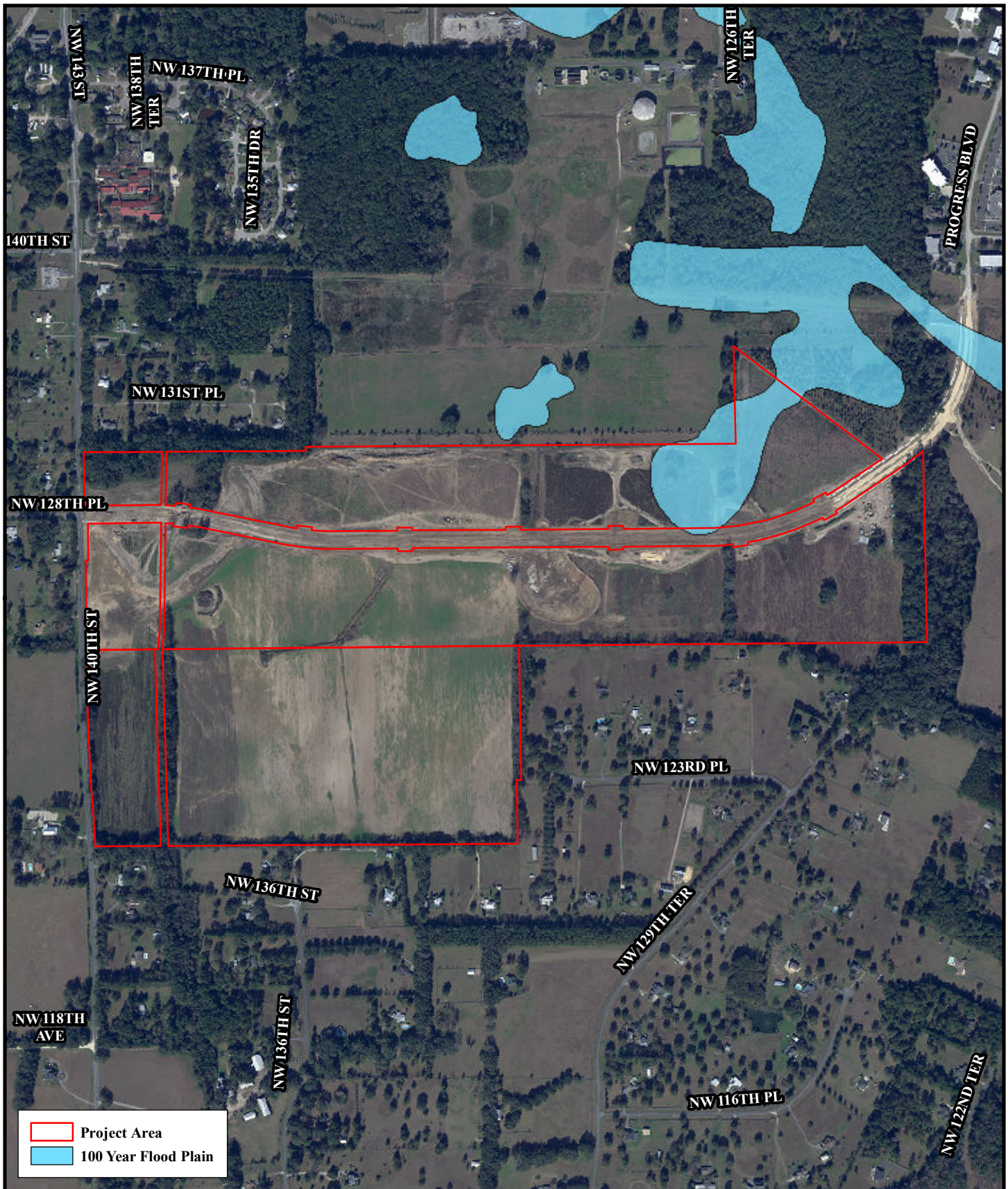
<p>Miles</p> <p>0 1 in = 1 miles 1</p>	<p>SAN FELASCO VENTURES CHW PROFESSIONAL CONSULTANTS</p>	<p> Project Area</p> <p> Active Wading Bird Colony</p> <p> Eagle Nest</p>	<p>N W E S</p>
<p></p>	<p>ALACHUA COUNTY, FLORIDA</p>		<p>FNAI / FWC MAP</p>



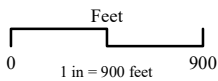
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<p>Miles</p> <p>0 1 in = 1 miles 1</p>	<p>SAN FELASCO VENTURES CHW PROFESSIONAL CONSULTANTS</p>	<p> Project Area</p> <p> Outstanding Florida Waters April 2020</p>	<p>N W E S</p>
	<p>ALACHUA COUNTY, FLORIDA</p>		<p>PROTECTED WATERS MAP</p>



- Project Area
- 100 Year Flood Plain



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**FLOODPLAIN
MAP**

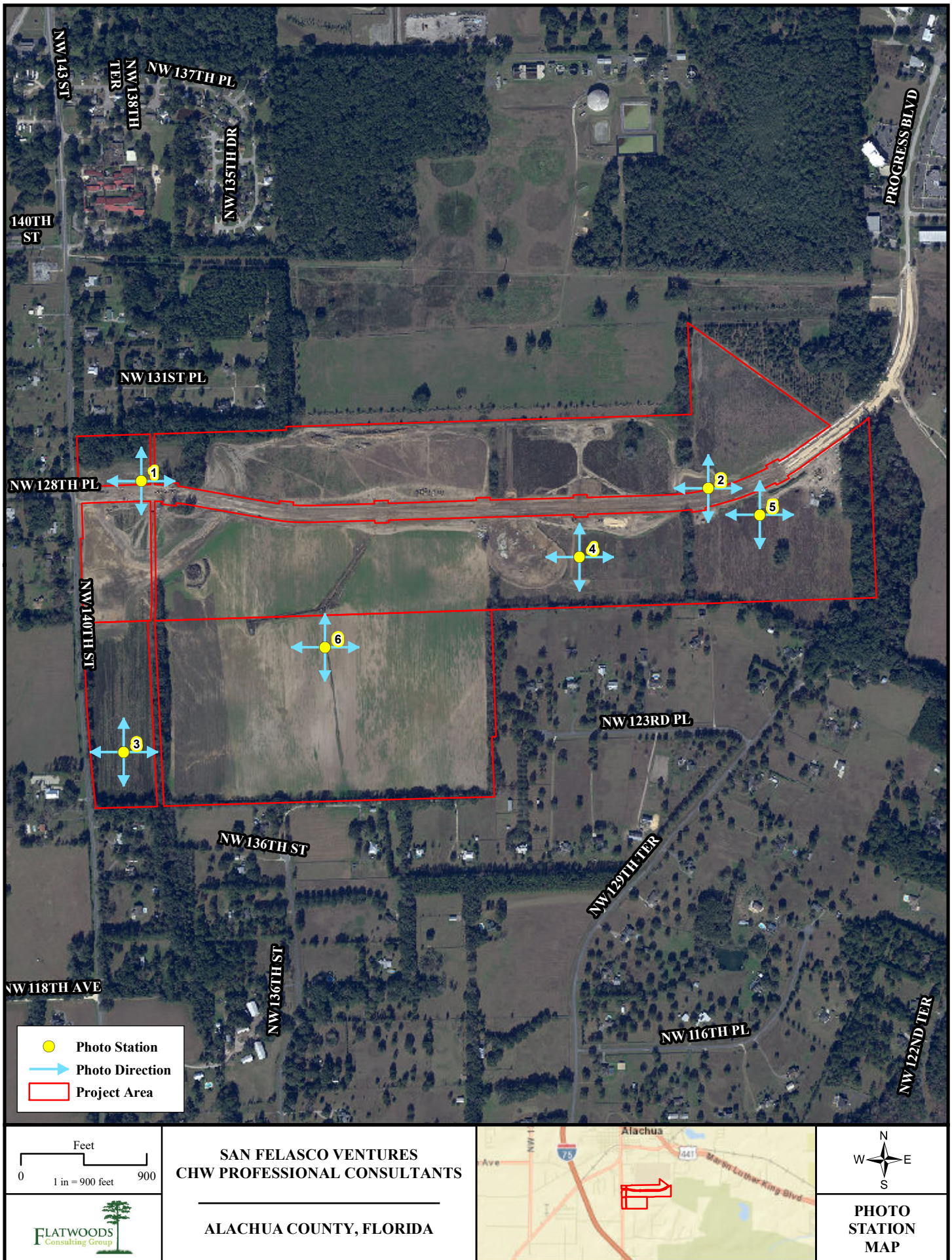




Photo Station 1, view north



Photo Station 1, view east



Photo Station 1, view south



Photo Station 1, view west



Photo Station 2, view north



Photo Station 2, view east



Photo Station 2, view south



Photo Station 2, view west



Photo Station 3, view north



Photo Station 3, view east



Photo Station 3, view south



Photo Station 3, view west



Photo Station 4, view north



Photo Station 4, view east



Photo Station 4, view south



Photo Station 4, view west



Photo Station 5, view north



Photo Station 5, view east



Photo Station 5, view south



Photo Station 5, view west



Photo Station 6, view north



Photo Station 6, view east



Photo Station 6, view south



Photo Station 6, view west



Surface Water 1



Surface Water 2



Surface Water 3



Surface Water 4



Surface Water 5



Surface Water 6



Surface Water 7

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Executive Summary

CHW has reviewed the intersection of NW 140th Street (CR 241) and NW 128th Place, with the proposed San Felasco Parkway connection during the opening year 2020, year 2030, and design year 2040.

NW 140th Street at NW 128th Place is an existing T-intersection. NW 140th Street is a two-lane county road with a posted speed of 45 mph, connecting SR 26 with CR 235. NW 128th Place is local road serving a small subdivision.

The following conclusions were derived from this analysis:

- The two-way stop control is expected to operate acceptably well after year 2030.
- A roundabout is not a recommended control type for this intersection, based on the analysis results indicating volumes exceeding capacity during the AM and PM peak hours.
- A traffic signal is expected to be warranted at some point beyond year 2030 if the UF Foundation site develops to the extent provided in this analysis.

Based on the results of this study, CHW provides the following recommendations:

- A two-way stop-controlled intersection with the following lane configuration should be provided with the proposed San Felasco Parkway connection to NW 140th Street:
 - A southbound left-turn lane, with a queue length of 50 FT
 - A northbound right-turn lane with no queue length
 - A westbound left-turn lane, with a queue length of 200 FT
 - A westbound thru/right turn lane
- A signal warrant analysis should be performed at the time either of the scenarios below occur. A traffic signal should be constructed if the analysis demonstrates that a traffic signal is warranted.
 - For any development or roadway plan impacting traffic volumes along San Felasco Parkway, that occurs beyond year 2030; or
 - For any development within the UF Foundation site that exceeds 75% of full build-out, equivalent to 1,360,000 SF Gross Leasable Area (GLA), before year 2030.

Traffic Forecast

The forecasted traffic volumes that was analyzed in the subject intersection will come from the following three sources:

- Trips generated by the proposed UF Foundation site. This site is expected to consist primarily of research and development land use (ITE land use code 760).
- The existing trips at the intersection of NW 140th Street and NW 128th Place
- The rerouted trips along the roadway network that will use San Felasco Parkway instead of alternative routes

Trip Generation

The Institute of Transportation Engineer's (ITE) Trip Generation Manual, 10th Edition was used to estimate the trip generation for the UF Foundation site, as provided in Table 1. Pass-by trips and internal capture were not applied to the trip generation volumes. The UF Foundation site along the proposed San Felasco Parkway extension is 277.5 acres. A floor area ratio (FAR) of 15% was applied to the 277.5 acres of property to estimate the gross floor area of 1,813,446 SF. This estimated gross floor area was used to determine the trip generation provided in Table 1.

The studies used to derive the trip generation for "the peak hour of adjacent street traffic" from the ITE manual, use smaller scale sites ranging in sizes up to a maximum of about 260,000 SF GLA. The studies used to derive the trip generation for "the peak hour of generator" use larger scale sites, ranging in sizes up to about 800,000 SF GLA. Therefore, the AM and PM "peak hour of generator" was used to calculate the AM and PM peak hour trip generation, as the study sites are closer in size to the UF Foundation site.

UF Foundation Trip Generation												
Land Use	ITE LU Code	Variable Type	Variable	Daily ¹			AM Peak ²			PM Peak ²		
				Total	In	Out	Total	In	Out	Total	In	Out
Research and Development	760	1000 GFA	1,813.446	1,8756	9,378	9,378	1,330	1,104	226	1,899	304	1,595

Land use: R&D at a 0.15 FAR, resulting in a GFA of 1,813,446 square feet

¹Used fitted curve equation of trips vs. 1000 square feet GFA, according to ITE Trip Generation Manual

²Used Peak Hour of Generator fitted curve equations for AM and PM peak, according to ITE Trip Generation Manual

Table 1: Trip Generation

The Signal Warrants program, packaged in the HCS7 software, allows traffic volume input from 7:00 AM to 7:00 PM, to determine whether signal warrants are met, in accordance with the Manual on Uniform Traffic Control Devices (MUTCD). To estimate these hourly project trips, the ITE Journal, January 2015 Edition¹ was used, see citation in the footnote below. This document provides daily office use trip percentages for each hour of the day. Table 2 provides the estimated trip generation volumes throughout the day. The daily project trip distribution calculations are provided in Appendix A. The traffic forecast estimates full build-out of the UF Foundation site by the design year 2040. The projects are assumed to increase linearly from opening year 2020, with 0 project trips, to full build-out during design year 2040.

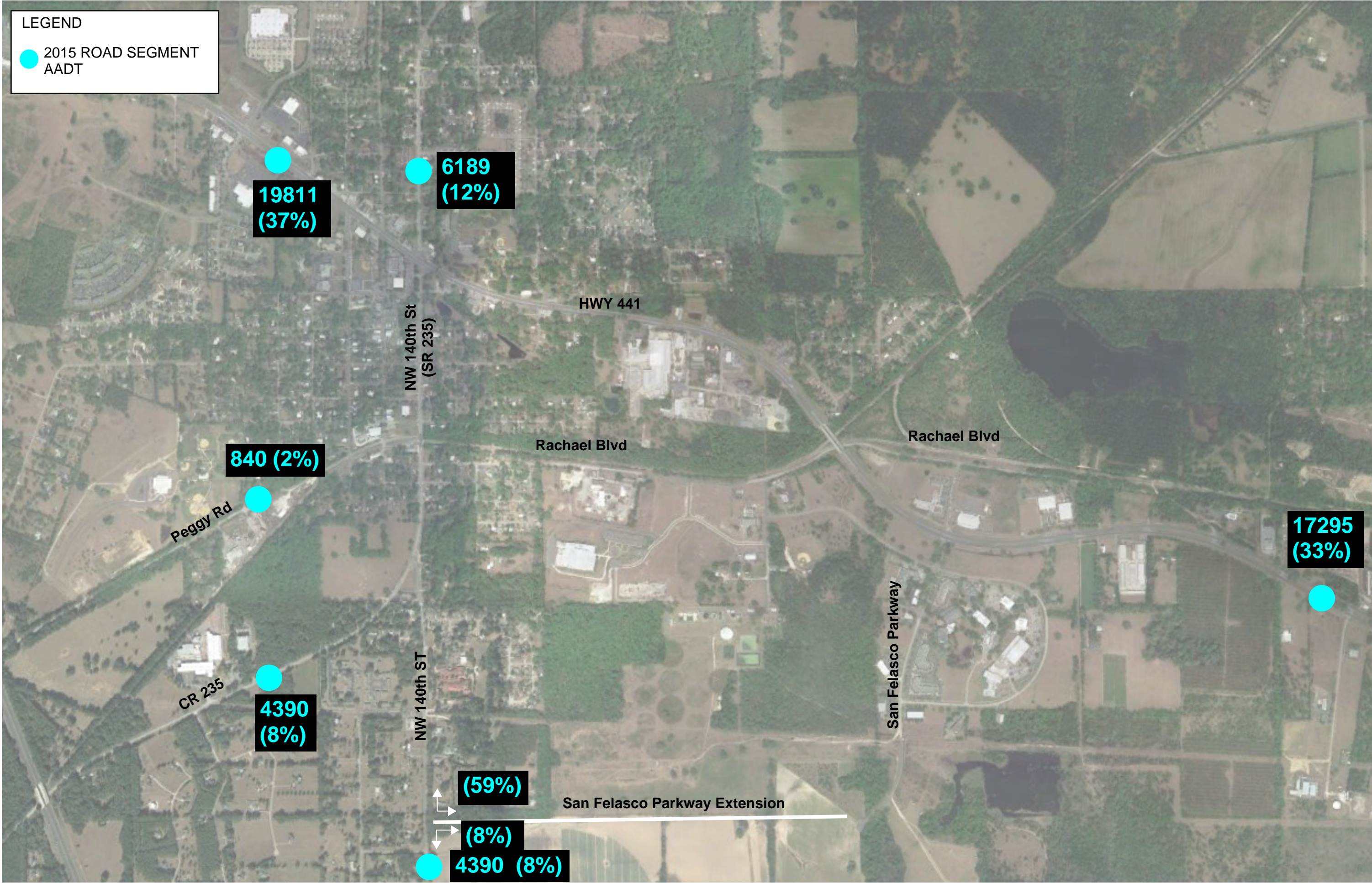
Daily Project Volumes - Trip Generation		
Time	Average Weekday	
	Hourly Entering Traffic	Hourly Exiting Traffic
6-7 AM	477	66
7-8 AM	1544	178
8-9 AM	1104	226
9-10 AM	850	300
10-11 AM	518	366
11-12 AM	529	806
12-1 PM	902	984
1-2 PM	1036	619
2-3 PM	611	591
3-4 PM	446	900
4-5 PM	352	1444
5-6 PM	304	1595
6-7 PM	145	516
7-8 PM	93	234
8-9 PM	73	150
9-10 PM	62	103
10 PM - 6 AM	332	300
Non-Peak Total	7969	7557
Peak Total	9378	9378

Table 2: Daily Distributed Trip Generation

¹ Zimmerman, Aaron T. (2015, January) Hourly Variations in Trip Generation for Office and Residential Land Use, Institute of Transportation
URL: [http://digitaleditions.sheridan.com/publication/?i=240553&article_id=1896126&view=articleBrowser&ver=html5#{"issue_id":"240553","page":16}](http://digitaleditions.sheridan.com/publication/?i=240553&article_id=1896126&view=articleBrowser&ver=html5#{)

Project Trip Distribution

The project trip distribution is based on the ADT of the major roadways in the area. As illustrated in Figure 1, approximately 59% of the project trips will be destined to or originate from NW 140th Street to/from the north, while 8% of the project trips will be destined to or originate from NW 140th Street to/from the south. The remaining 33% of the project trips will be destined to or originate from US 441 to/from the east, and will not travel through the subject intersection.



LEGEND

● 2015 ROAD SEGMENT AADT

Figure 1 - Project Trip Distribution



Data Collection

Data collection was performed on Wednesday October 3rd, 2018. Turning movement counts were collected from the following intersections:

- NW 140th Street and NW 128th Place (12-hour count)
- NW 140th Street and CR 235 (2-hour AM peak and 2-hour PM peak count)
- US 441 and NW 140th Street (2-hour AM peak and 2-hour PM peak count)
- US 441 and Progress Blvd (2-hour AM peak and 2-hour PM peak count)

Additionally, a 2-hour AM peak and 2-hour PM peak turning movement count was performed at the intersection of NW 140th Street and Rachael Boulevard on October 16th, 2018. The results from this data collection are provided in Appendix B. The collected data was then used to provide the base from which background and build-out conditions would be analyzed.

Diverted Trips

San Felasco Parkway will provide an alternative route for vehicles to connect from NW 140th Street (south) to US 441 (east) and vice versa, in the City of Alachua. Currently vehicles are using either Rachael Boulevard or connecting directly between US 441 and NW 140th Street to follow this trip pattern.

Based on the turning movement counts it is estimated that about half of the vehicles making a westbound left from Rachael Boulevard to NW 140th Street will continue to NW 140th Street while the other half will drive to CR 235. This forecast conservatively assumes that all of these trips destined to NW 140th Street will now be served by the proposed San Felasco Parkway extension. It is estimated that a quarter of the vehicles making a westbound left from US 441 to NW 140th Street will continue to NW 140th Street while the remaining vehicles are expected to have other destinations. Therefore, a quarter of the westbound lefts at the intersection of US 441 and NW 140th Street will use the proposed San Felasco Parkway extension. Similarly, it is estimated that half of the northbound rights at the intersection of NW 140th Street at Rachael Boulevard and a quarter of the northbound rights at the intersection of NW 140th Street at US 441 will be rerouted to the proposed San Felasco Parkway extension. This rerouting of vehicle trips is illustrated in Figure 2.

Background Trips

The turning movements at the intersection of NW 140th Street and NW 128th Place, with the added rerouted trips, were adjusted based on the seasonal adjustment factor of 1.02 provided by FDOT Traffic Online. These volumes were then adjusted by the growth rate of 1.0% to derive the background volumes for each of the study years. The growth

rate of 1.0% along NW 140th Street was derived from Alachua County's Long Range Transportation Plan which used historical counts provided by Alachua County. The peak season adjustment factor and the growth rate documentation are provided in Appendix C.

The spreadsheets prepared to derive the background and build-out conditions for the opening year 2020, year 2030, and design year 2040 are provided in Appendix D. The AM and PM peak hour build-out volumes for each of these scenarios are provided in Figures 3 through 5.

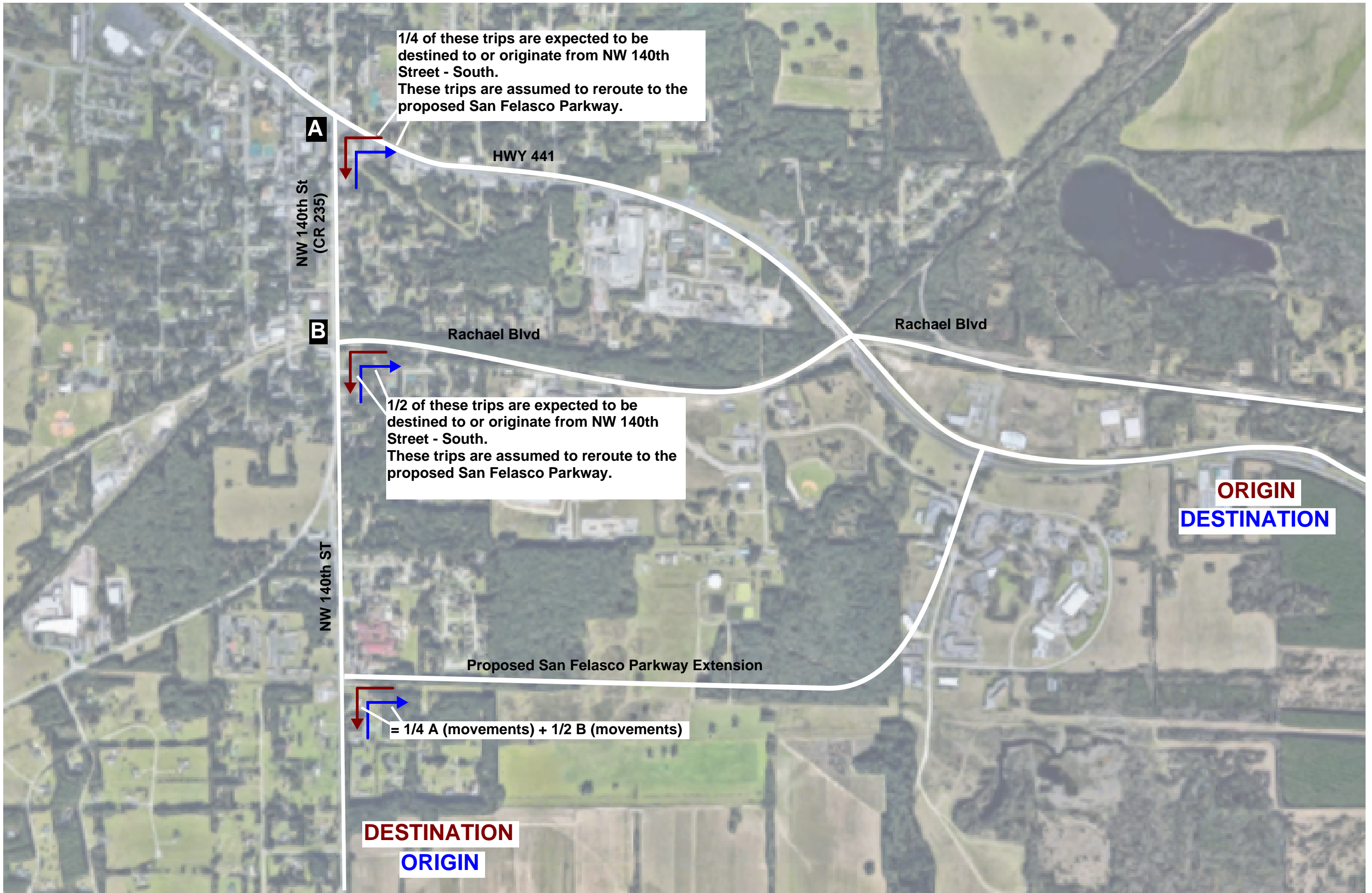
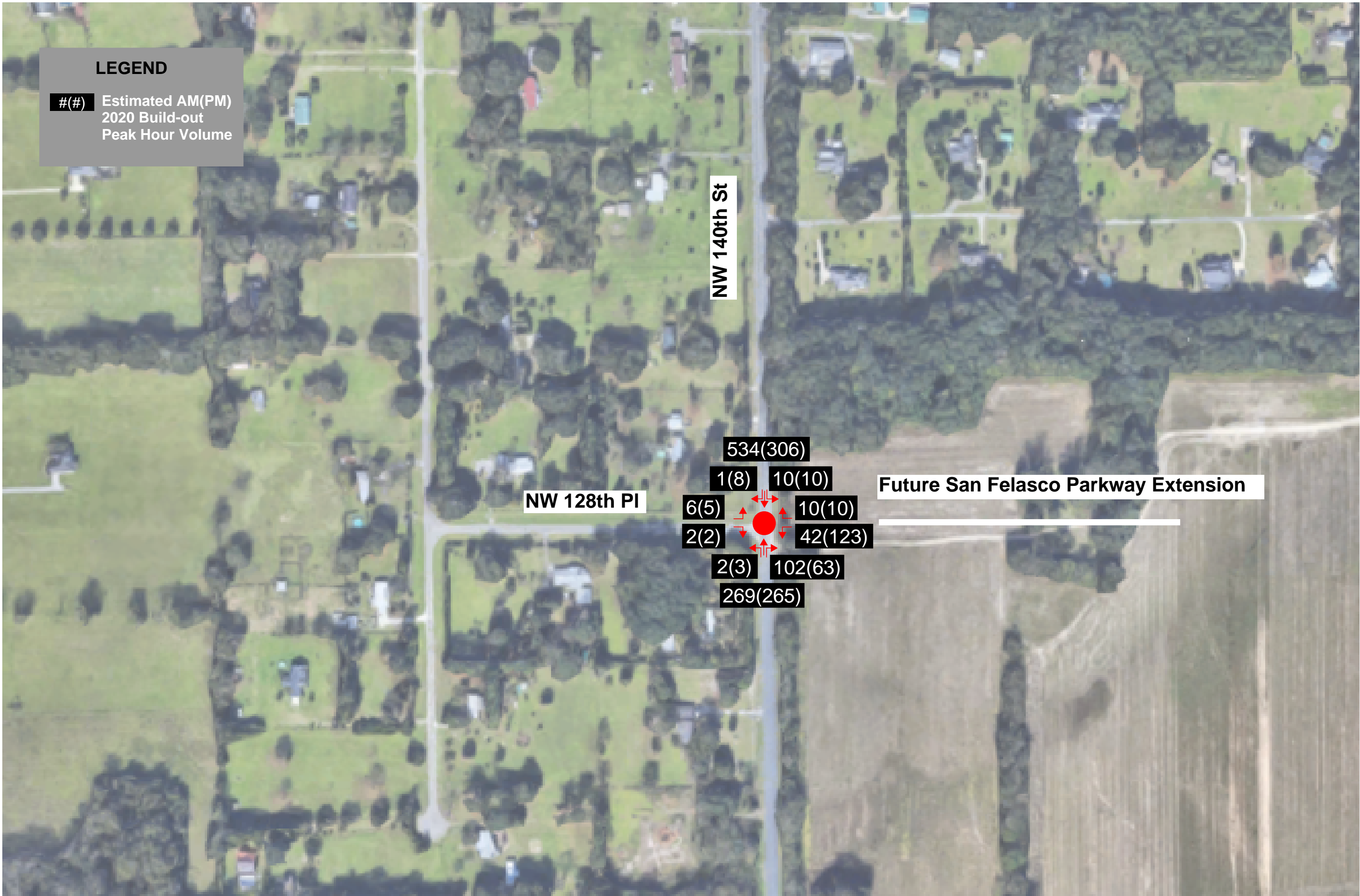


Figure 2 - Diverted Trips



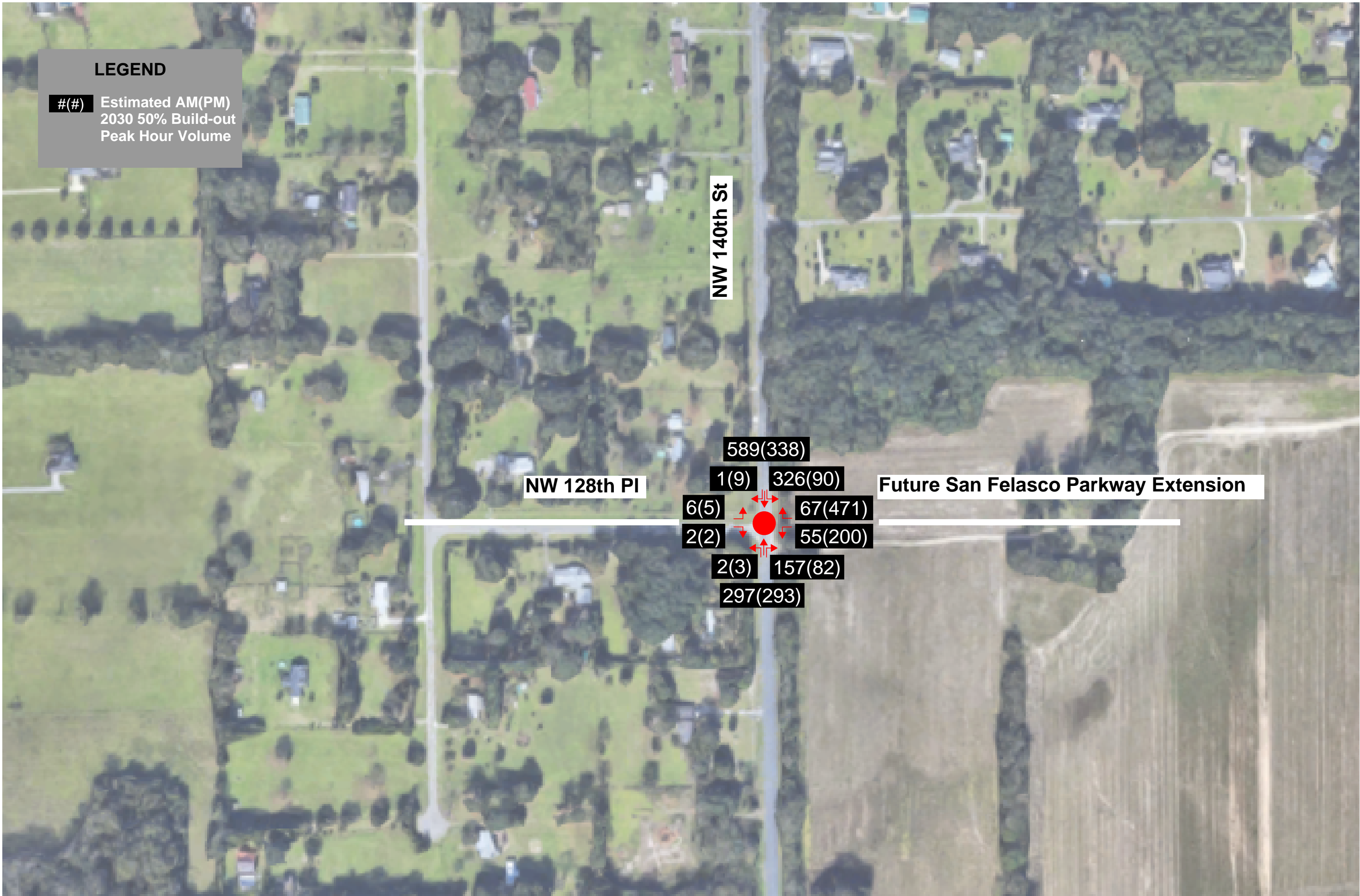


Figure 4 - Year 2030 Build-out



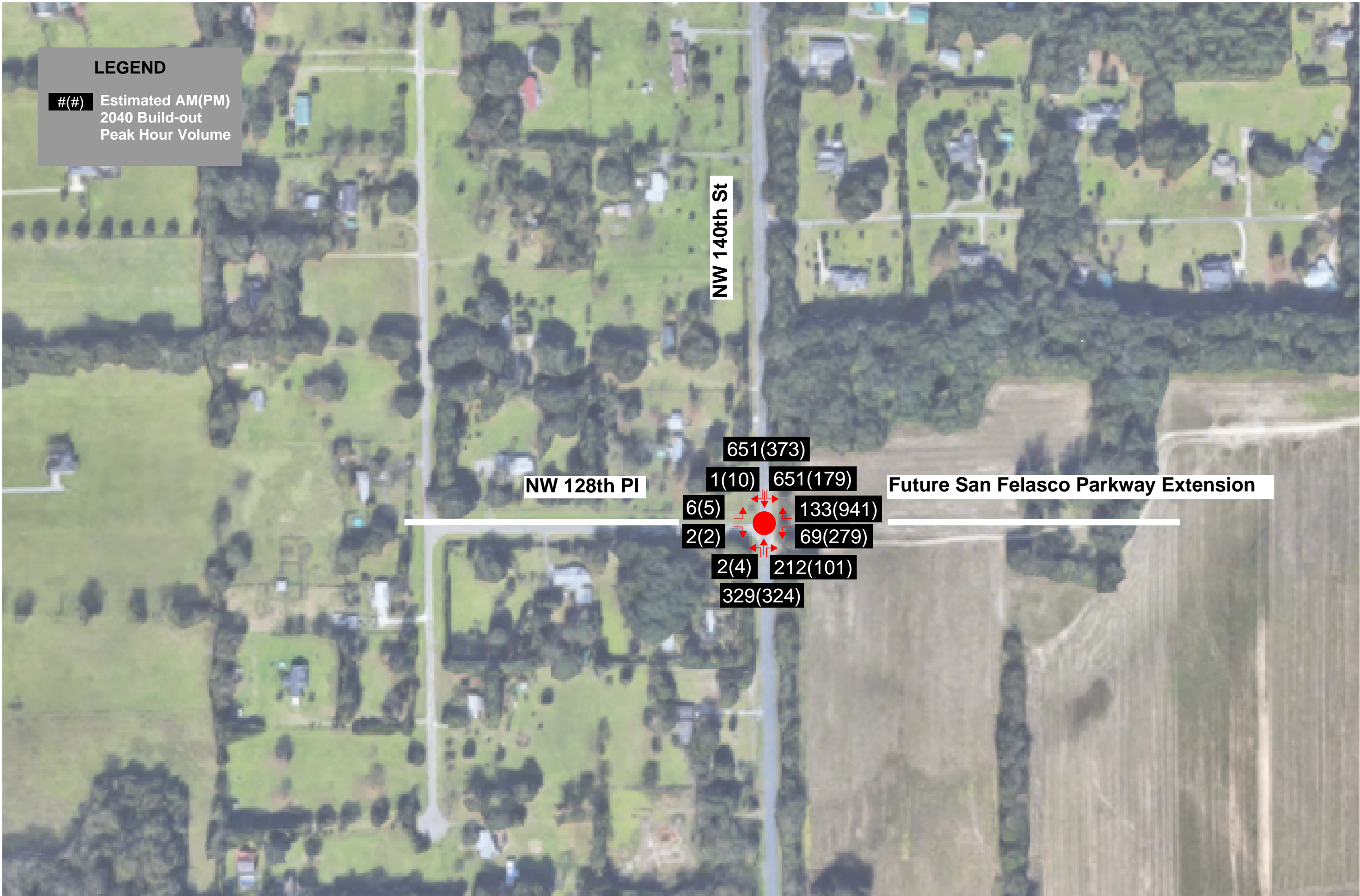


Figure 5 - Design Year 2040 Build-out



Analysis

The following analyses were performed to provide the most suitable control type and configuration for the intersection of the proposed San Felasco Parkway Extension with NW 140th Street:

- Traffic Signal Warrant Analysis (Opening Year 2020, year 2030, Design year 2040)
- Two-way Stop Control Operational Analysis (Opening Year 2020, year 2030, Design year 2040)
- Traffic Signal Control Operational Analysis (year 2030, Design year 2040)
- Roundabout Control Operational Analysis (Design Year 2040)

The traffic signal warrant analysis used the 7:00 AM to 7:00 PM forecasted traffic volumes. Under the existing T-intersection condition five years of crash history were reviewed which revealed only one crash at this intersection, therefore, Warrant 7 was not met during any of the scenarios. The Signal Warrants program, packaged with the HCS7 software, was used to perform the traffic signal warrant analysis. See Appendix E for the signal warrant documentation.

The two-way stop control was modeled with the following lane additions:

- southbound left-turn lane
- northbound right-turn lane
- westbound left-turn lane
- westbound thru/right lane

HCS7 was used to analyze the two-way stop-controlled conditions.

The traffic signal control was modeled with the lane additions described above, as well as a northbound left-turn lane. The traffic signal was not synchronized with other traffic signals. The left-turn treatment used was permitted/protected for the southbound left-turn and permitted only at all other approaches. The left turn treatment was applied based on the recommendations of the FHWA Signal Timing Manual. The cycle length and phase splits were optimized. Synchro 9 was used to analyze the traffic signal-controlled condition.

The roundabout was modeled as a single lane roundabout with a single approach in each direction. HCS7 was used to analyze the roundabout controlled condition.

Results from all operational analyses are provided in Table 3. Operational analysis reports from HCS7 and Synchro 9 are provided in Appendix F.

AM Intersection LOS Analysis Summary																									
Intersection	Movement	2020 Buildout- Stop Control				2030 50% Buildout - Stop Control				2030 50% Buildout - Signalized				2040 Build-out - Stop Control				2040 Build-out - Signalized				2040 Build-out - Roundabout			
		LOS	Delay(s)	v/c	95% Queue (FT)	LOS	Delay(s)	v/c	95% Queue (FT)	LOS	Delay(s)	v/c	95% Queue (FT)	LOS	Delay(s)	v/c	95% Queue (FT)	LOS	Delay(s)	v/c	95% Queue (FT)	LOS	Delay(s)	v/c	95% Queue (FT)
NW 140th St & NW 128th Pl/San Felasco Parkway	EBL/T/R	C	17.6	0.03	25	F	66.6	0.12	25	A	0.4	0.06	0	F	729.3	0.85	50	A	0.6	0.08	0				
	EBR*																					B	12.6	0.03	25
	WBL	C	20.1	0.15	25	F	165.0	0.83	100	C	26.1	0.32	50	F	2844.8	5.93	250	E	72.1	0.70	125				
	WBT/R	A	9.7	0.01	0	B	10.3	0.09	25	A	0.4	0.12	0	B	11.3	0.19	25	A	0.5	0.19	0				
	WBR*																					A	5.8	0.21	25
	NBL**									B	13.0	0.01	25					C	27.0	0.01	25				
	NBT**									B	17.3	0.49	175					E	64.7	0.93	350				
	NBL/T	A	8.5	0.00	0	A	8.7	0.00	0					A	8.9	0.00	0								
	NBR**									A	3.7	0.26	50					A	6.7	0.46	50	D	33.9	0.86	25
	SBL	A	8.2	0.01	0	A	9.9	0.31	50	A	9.3	0.59	100	C	15.8	0.67	150	C	25.1	0.89	375				
	SBT/R**									A	7.9	0.53	225					A	5.4	0.53	200				
	SBR*																					F	82.2	1.12	50
	Total		1.2				9.0			B	10.0				104.0			C	23.6			F	61.7		
Yellow highlight = deficiency																									

PM Intersection LOS Analysis Summary																									
Intersection	Movement	2020 Buildout- Stop Control				2030 50% Buildout - Stop Control				2030 50% Buildout - Signalized				2040 Build-out - Stop Control				2040 Build-out - Signalized				2040 Build-out - Roundabout			
		LOS	Delay(s)	v/c	95% Queue (FT)	LOS	Delay(s)	v/c	95% Queue (FT)	LOS	Delay(s)	v/c	95% Queue (FT)	LOS	Delay(s)	v/c	95% Queue (FT)	LOS	Delay(s)	v/c	95% Queue (FT)	LOS	Delay(s)	v/c	95% Queue (FT)
NW 140th St & NW 128th Pl/San Felasco Parkway	EBL/T/R	B	13.8	0.02	25	F	66.8	0.11	25	A	0.1	0.03	0	RESULTS NOT REPORTED IN HCS				A	0.0	0.02	0				
	EBR*																					A	6.7	0.01	0
	WBL	C	19.3	0.35	50	F	69.4	0.86	200	C	22.6	0.58	125	F	508.2	1.97	600	B	13.6	0.40	175				
	WBT/R	A	9.8	0.01	0	C	20.3	0.69	150	A	7.9	0.68	100	F	226.7	1.45	1200	D	40.3	0.99	750				
	WBR*																					F	191.8	1.38	75
	NBL**									B	14.3	0.01	25					C	29.8	0.02	25				
	NBT**									B	17.1	0.44	175					E	77.6	0.97	375				
	NBL/T	A	8.0	0.00	0	A	8.0	0.00	0					A	8.2	0.00	0								
	NBR**									A	1.6	0.13	25					A	8.4	0.28	50	A	7.7	0.42	25
	SBL	A	8.0	0.01	0	A	8.4	0.08	25	A	8.3	0.19	50	A	8.9	0.17	25	E	66.0	0.89	200				
	SBT/R									B	10.8	0.41	150					C	34.1	0.70	325				
	SBR*																					B	11.9	0.60	25
	Total			3.4				16.5			B	12.0				RESULTS NOT REPORTED			D	42.4			F	110.0	
Yellow highlight = deficiency																									

Table 3: Intersection Operational Analysis Summary

Opening Year 2020

The traffic signal warrant analysis resulted with no warrants being met during the opening year 2020. The two-way stop analysis resulted with no deficiencies for the AM and PM peak hours.

Year 2030

The traffic signal warrant analysis resulted with the following warrants being met during the year 2030 condition:

- Warrant 1: Eight-Hour Vehicular Volume
- Warrant 2: Four-Hour Vehicular Volume
- Warrant 3: Peak Hour

The two-way stop operates with a LOS of F for the eastbound approach and westbound left movements for the AM and PM peak hours. However, all v/c ratios are well below 1.0, demonstrating that backups are not expected. It is typical for main street left-turning movements and side street movements to operate with a LOS of F as the right-of-way is provided to the higher volume main street through movements.

The traffic signal operates with no deficiencies during year 2030. All movements operate well, providing a total intersection LOS of B during the AM and PM peak hours.

With the conservative estimates used in the traffic forecast it is expected that a two-way stop-controlled intersection will operate acceptably well after year 2030. Though three of the signal warrants are met, the two-way stop control continues to operate with no major deficiencies and no delay for the higher-volume NW 140th Street through movements.

Design Year 2040

The traffic signal warrant analysis resulted with the following warrants being met during the 2040 condition:

- Warrant 1: Eight-Hour Vehicular Volume
- Warrant 2: Four-Hour Vehicular Volume
- Warrant 3: Peak Hour

The two-way stop AM peak analysis resulted with a LOS of F for the eastbound approach and westbound left movements. The volume exceeds capacity for the westbound left, indicating that backups will occur for this movement. Additionally, the two-way stop PM peak analysis indicates that the westbound left and westbound through/right movements operate with a LOS of F and v/c ratios exceeding 1.0, indicating that backups are expected for these movements. If drivers from these failing movements are required to wait an extended length of time for a gap in traffic, the

drivers will be inclined to accept shorter gaps which could create safety issues at the intersection. The results for the eastbound left/thru/right movement and intersection total are not provided from HCS7 for the PM condition. Disregarding the eastbound approach, the total intersection delay during the PM peak hour is calculated as 161.4 seconds.

The traffic signal modeled during design year 2040 resulted with no deficient movements during the AM peak hour and PM peak hour analysis. The traffic signal operates with a total intersection delay that is lower than the roundabout during both the AM and PM peak hours. The traffic signal operates with a total intersection delay that is much lower, approximately one quarter, than the stop-controlled intersection delay, during the AM and PM peak hours.

A roundabout was modeled during the design year 2040. The roundabout analysis resulted with a LOS of F and a v/c exceeding 1.0 for the southbound approach during the AM and a LOS of F with a v/c exceeding 1.0 for the westbound approach during the PM. Comparing the total intersection operations, the roundabout operates with an average delay of 61.7 s during the AM peak and operates with a LOS of F and an average delay of 110s during the PM peak. This intersection delay is approximately 2.6 times that of the traffic signal.

Intersection Configuration

The following lane additions are recommended for the two-way stop-controlled intersection of NW 140th Street and NW 128th Place to accommodate the traffic added by the proposed San Felasco Parkway extension and future development along this roadway:

- A southbound left-turn lane with a queue length of 50 FT
- A northbound right-turn lane with no queue length
- A westbound left-turn lane with a queue length of 200 FT
- A westbound thru/right turn lane

By the design year 2040, the site is expected to warrant a traffic signal, should the UF Foundation site develop to the extent projected in this analysis. If the intersection is signalized in the future, the northbound left-turn lane would be needed as a northbound through vehicle could view a green light and rear-end a northbound left turning driver stopped to make a northbound left-turn at the intersection. Additionally, the southbound left-turn lane may need to be extended to accommodate the project trips.

Conclusion and Recommendations

Based on our analysis, and the understanding that the project trip traffic forecasted is conservatively high, with 18,756 daily trips estimated at full build-out, the following conclusions are made:

- The two-way stop control is expected to operate acceptably well after year 2030.
- A roundabout is not a recommended control type for this intersection.
- A traffic signal is expected to be warranted at some point beyond year 2030 given that the UF Foundation site develops to the extent provided in this analysis.

Similarly, CHW provides the following recommendations:

- A two-way stop-controlled intersection with the following lane configuration should be provided with the proposed San Felasco Parkway connection to NW 140th Street:
 - A southbound left-turn lane, with a queue length of 50 FT
 - A northbound right-turn lane with no queue length
 - A westbound left-turn lane
 - A westbound thru/right turn lane with a queue length of 200 FT
- A signal warrant analysis should be performed at the time either of the scenarios below occur. A traffic signal should be constructed if the analysis demonstrates that a traffic signal is warranted.
 - For any development or roadway plan impacting traffic volumes along San Felasco Parkway, that occurs beyond year 2030; or
 - For any development within the UF Foundation site that exceeds 75% of full build-out, equivalent to 1,360,000 SF Gross Leasable Area (GLA), before year 2030.

Appendix A:

Project Trip Distribution

Table 1: Office Uses Combined

Time	Average Weekday		Average Saturday		Average Sunday	
	Percent of 24-Hour Entering Traffic	Percent of 24-Hour Exiting Traffic	Percent of 24-Hour Entering Traffic	Percent of 24-Hour Exiting Traffic	Percent of 24-Hour Entering Traffic	Percent of 24-Hour Exiting Traffic
6–7 a.m.	4.6	0.7	4.1	1.4	1.8	2.4
7–8 a.m.	14.9	1.9	5.4	2.5	3.8	1.2
8–9 a.m.	20.7	3.0	9.1	1.5	6.0	2.9
9–10 a.m.	8.2	3.2	7.2	3.9	6.6	3.8
10–11 a.m.	5.0	3.9	6.8	4.6	9.7	7.5
11–12 p.m.	5.1	8.6	7.1	11.3	8.9	9.6
12–1 p.m.	8.7	10.5	8.1	14.0	6.9	9.1
1–2 p.m.	10.0	6.6	7.3	8.3	8.6	12.0
2–3 p.m.	5.9	6.3	7.6	7.7	6.6	8.2
3–4 p.m.	4.3	9.5	6.0	9.6	4.6	6.3
4–5 p.m.	3.4	15.4	3.1	7.9	5.5	7.5
5–6 p.m.	2.5	16.5	3.2	6.9	3.1	6.7
6–7 p.m.	1.4	5.5	2.5	3.2	3.5	4.1
7–8 p.m.	0.9	2.5	2.0	2.2	2.7	2.9
8–9 p.m.	0.7	1.6	2.4	2.1	3.3	4.3
9–10 p.m.	0.6	1.1	1.4	1.4	3.1	3.1
10 p.m.–6 a.m.	3.2	3.2	16.9	11.4	15.3	8.4

Table 2: Residential Uses Combined – Excluding Senior-Oriented Facilities

Time	Average Weekday		Average Saturday		Average Sunday	
	Percent of 24-Hour Entering Traffic	Percent of 24-Hour Exiting Traffic	Percent of 24-Hour Entering Traffic	Percent of 24-Hour Exiting Traffic	Percent of 24-Hour Entering Traffic	Percent of 24-Hour Exiting Traffic
6–7 a.m.	1.6	5.7	1.1	2.1	0.9	1.9
7–8 a.m.	2.5	9.0	1.8	3.6	1.6	3.3
8–9 a.m.	3.7	9.1	2.8	5.6	2.6	4.7
9–10 a.m.	3.7	6.5	4.4	7.3	3.5	6.8
10–11 a.m.	4.1	5.5	5.6	7.7	6.3	7.5
11–12 p.m.	4.5	5.7	6.9	7.5	6.4	9.5
12–1 p.m.	5.3	5.3	6.6	7.8	6.9	7.6
1–2 p.m.	5.4	5.7	7.1	6.9	7.2	7.4
2–3 p.m.	6.5	5.9	7.1	6.7	7.2	6.6
3–4 p.m.	8.1	6.3	7.4	6.1	7.3	6.6
4–5 p.m.	9.8	6.3	8.5	5.9	8.0	6.7
5–6 p.m.	10.8	6.5	8.6	6.3	7.3	6.9
6–7 p.m.	8.5	6.1	6.4	6.0	5.8	5.1
7–8 p.m.	5.9	4.9	5.2	4.9	5.5	4.1
8–9 p.m.	5.1	3.4	4.2	3.6	4.6	3.3
9–10 p.m.	4.2	2.3	3.8	2.6	4.3	2.7
10 p.m.–6 a.m.	10.3	5.6	12.4	9.3	14.6	9.4

Daily Percentages - ITE Journal		
Time	Average Weekday	
	% of 24-Hour Entering Traffic	% of 24-Hour Exiting Traffic
6-7 AM	4.6%	0.7%
7-8 AM	14.9%	1.9%
8-9 AM	20.7%	3.0%
9-10 AM	8.2%	3.2%
10-11 AM	5.0%	3.9%
11-12 AM	5.1%	8.6%
12-1 PM	8.7%	10.5%
1-2 PM	10.0%	6.6%
2-3 PM	5.9%	6.3%
3-4 PM	4.3%	9.6%
4-5 PM	3.4%	15.4%
5-6 PM	2.5%	16.5%
6-7 PM	1.4%	5.5%
7-8 PM	0.9%	2.5%
8-9 PM	0.7%	1.6%
9-10 PM	0.6%	1.1%
10 PM - 6 AM	3.2%	3.2%
Total	100.1%	100.1%

Daily Relative Percentages - ITE Journal		
Time	Average Weekday	
	% of 24-Hour Entering Traffic	% of 24-Hour Exiting Traffic
6-7 AM	5.98%	0.9%
7-8 AM	19.38%	2.4%
8-9 AM	0.00%	0.0%
9-10 AM	10.66%	4.0%
10-11 AM	6.50%	4.8%
11-12 AM	6.63%	10.7%
12-1 PM	11.31%	13.0%
1-2 PM	13.00%	8.2%
2-3 PM	7.67%	7.8%
3-4 PM	5.59%	11.9%
4-5 PM	4.42%	19.1%
5-6 PM	0.00%	0.0%
6-7 PM	1.82%	6.8%
7-8 PM	1.17%	3.1%
8-9 PM	0.91%	2.0%
9-10 PM	0.78%	1.4%
10 PM - 6 AM	4.16%	4.0%
Total		

% Non-peak Entering 76.9%
 % Non-peak exiting 80.6%

Daily Project Volumes - Trip Generation- Original		
Time	Average Weekday	
	# Trips 24-Hour Entering Traffic	# Trips 24-Hour Exiting Traffic
6-7 AM	477	66
7-8 AM	1544	178
8-9 AM	1104	226
9-10 AM	850	300
10-11 AM	518	366
11-12 AM	529	806
12-1 PM	902	984
1-2 PM	1036	619
2-3 PM	611	591
3-4 PM	446	900
4-5 PM	352	1444
5-6 PM	304	1595
6-7 PM	145	516
7-8 PM	93	234
8-9 PM	73	150
9-10 PM	62	103
10 PM - 6 AM	332	300
Non-Peak Total	7969	7557
Peak Total	9378	9378

GOAL - To determine the entering and exiting project trips during the non-peak hours.

Step 1 - Determine the percentage of non-peak entering (76.9%) and exiting traffic (80.6%).

Step 2 - Determine the relative percentages of all non-peak hours. This is determined by dividing the original Office Use Daily percentages by the percentages of non-peak traffic.

Example: During 6:00 AM to 7:00 PM the relative percentage of entering project trips is $4.6\% / 76.9\% = 6.0\%$

Step 3 - Determine the non-peak total daily trips by subtracting the AM and PM peak hour totals from the daily project trips resulting in 7969 entering trips and 7557 exiting trips.

Step 4 - Determine the non-peak hour project trips by multiplying the relative percentages by the non-peak total daily trips.

Example: During 6:00 AM to 7:00 PM the entering project trips = $5.98\% \times 7969 = 477$

Appendix B:

Turning Movement Counts

NW 140th St. and NW 128th Pl.

Peggy Malone & Associates

(888) 247-8602

File Name : 2-NW 140th St and NW 128th Place

Site Code :

Start Date : 10/3/2018

Page No : 1

Groups Printed- Car

	NW 140th St Southbound				NW 140th St Northbound				NW 128th Pl Eastbound				
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total
07:00 AM	0	94	0	94	50	0	0	50	2	2	0	4	148
07:15 AM	0	96	0	96	66	0	0	66	0	0	0	0	162
07:30 AM	0	104	0	104	72	0	0	72	2	1	0	3	179
07:45 AM	1	115	0	116	62	0	0	62	0	4	0	4	182
Total	1	409	0	410	250	0	0	250	4	7	0	11	671
08:00 AM	0	105	0	105	78	1	0	79	1	4	0	5	189
08:15 AM	1	111	0	112	69	1	0	70	0	1	0	1	183
08:30 AM	0	121	0	121	58	0	0	58	1	0	0	1	180
08:45 AM	0	135	0	135	49	0	0	49	0	1	0	1	185
Total	1	472	0	473	254	2	0	256	2	6	0	8	737
09:00 AM	0	96	0	96	36	0	0	36	0	0	0	0	132
09:15 AM	1	119	0	120	33	0	0	33	3	0	0	3	156
09:30 AM	0	86	0	86	33	0	0	33	1	1	0	2	121
09:45 AM	0	64	0	64	46	0	0	46	2	0	0	2	112
Total	1	365	0	366	148	0	0	148	6	1	0	7	521
10:00 AM	0	65	0	65	40	0	0	40	0	0	0	0	105
10:15 AM	0	42	0	42	29	0	0	29	0	0	0	0	71
10:30 AM	0	45	0	45	38	1	0	39	2	0	0	2	86
10:45 AM	0	40	0	40	38	0	0	38	0	0	0	0	78
Total	0	192	0	192	145	1	0	146	2	0	0	2	340
11:00 AM	1	32	0	33	27	0	0	27	0	0	0	0	60
11:15 AM	0	39	0	39	37	0	0	37	0	1	0	1	77
11:30 AM	0	30	0	30	41	0	0	41	0	0	0	0	71
11:45 AM	0	45	0	45	37	0	0	37	0	0	0	0	82
Total	1	146	0	147	142	0	0	142	0	1	0	1	290
12:00 PM	0	30	0	30	51	0	0	51	0	1	0	1	82
12:15 PM	1	37	0	38	35	1	0	36	0	1	0	1	75
12:30 PM	1	47	0	48	46	0	0	46	0	1	0	1	95
12:45 PM	0	46	0	46	27	0	0	27	0	0	0	0	73
Total	2	160	0	162	159	1	0	160	0	3	0	3	325
01:00 PM	1	39	0	40	38	1	0	39	0	0	0	0	79
01:15 PM	1	32	0	33	44	0	0	44	0	0	0	0	77
01:30 PM	0	28	0	28	48	0	0	48	0	0	0	0	76
01:45 PM	1	30	0	31	36	1	0	37	0	0	0	0	68
Total	3	129	0	132	166	2	0	168	0	0	0	0	300
02:00 PM	0	43	0	43	25	0	0	25	0	1	0	1	69
02:15 PM	0	41	0	41	30	0	0	30	0	0	0	0	71
02:30 PM	1	28	0	29	30	0	0	30	0	0	0	0	59
02:45 PM	0	44	0	44	38	1	0	39	0	0	0	0	83
Total	1	156	0	157	123	1	0	124	0	1	0	1	282
03:00 PM	0	41	0	41	48	1	0	49	1	0	0	1	91
03:15 PM	2	29	0	31	40	0	0	40	1	1	0	2	73
03:30 PM	2	64	0	66	42	0	0	42	0	1	0	1	109
03:45 PM	1	49	0	50	58	0	0	58	0	0	0	0	108
Total	5	183	0	188	188	1	0	189	2	2	0	4	381
04:00 PM	1	50	0	51	49	3	0	52	0	0	0	0	103
04:15 PM	5	59	0	64	45	2	0	47	1	0	0	1	112
04:30 PM	2	47	0	49	66	3	0	69	0	0	0	0	118
04:45 PM	0	57	0	57	69	0	0	69	1	1	0	2	128
Total	8	213	0	221	229	8	0	237	2	1	0	3	461
05:00 PM	3	78	0	81	64	2	0	66	1	1	0	2	149
05:15 PM	2	79	0	81	62	0	0	62	0	3	0	3	146
05:30 PM	3	78	0	81	55	1	0	56	0	0	0	0	137
05:45 PM	1	56	0	57	49	0	0	49	1	2	0	3	109
Total	9	291	0	300	230	3	0	233	2	6	0	8	541
06:00 PM	1	52	0	53	55	1	0	56	0	0	0	0	109
06:15 PM	1	54	0	55	40	0	0	40	0	0	0	0	95
06:30 PM	0	47	0	47	36	0	0	36	0	1	0	1	84
06:45 PM	2	51	0	53	35	0	0	35	0	2	0	2	90
Total	4	204	0	208	166	1	0	167	0	3	0	3	378
Grand Total	36	2920	0	2956	2200	20	0	2220	20	31	0	51	5227
Apprch %	1.2	98.8	0		99.1	0.9	0		39.2	60.8	0		
Total %	0.7	55.9	0	56.6	42.1	0.4	0	42.5	0.4	0.6	0	1	

Peggy Malone & Associates

(888) 247-8602

File Name : 2-NW 140th St and NW 128th Place
 Site Code :
 Start Date : 10/3/2018
 Page No : 2

	NW 140th St Southbound			NW 140th St Northbound			NW 128th Pl Eastbound			
Start Time	Right	Thru	App. Total	Thru	Left	App. Total	Right	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	0	105	105	78	1	79	1	4	5	189
08:15 AM	1	111	112	69	1	70	0	1	1	183
08:30 AM	0	121	121	58	0	58	1	0	1	180
08:45 AM	0	135	135	49	0	49	0	1	1	185
Total Volume	1	472	473	254	2	256	2	6	8	737
% App. Total	0.2	99.8		99.2	0.8		25	75		
PHF	.250	.874	.876	.814	.500	.810	.500	.375	.400	.975

Peak Hour Analysis From 12:00 PM to 06:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	0	57	57	69	0	69	1	1	2	128
05:00 PM	3	78	81	64	2	66	1	1	2	149
05:15 PM	2	79	81	62	0	62	0	3	3	146
05:30 PM	3	78	81	55	1	56	0	0	0	137
Total Volume	8	292	300	250	3	253	2	5	7	560
% App. Total	2.7	97.3		98.8	1.2		28.6	71.4		
PHF	.667	.924	.926	.906	.375	.917	.500	.417	.583	.940

Peggy Malone & Associates

(888) 247-8602

File Name : 2-NW 140th St and NW 128th Place

Site Code :

Start Date : 10/3/2018

Page No : 1

Groups Printed- Truck

	NW 140th St Southbound				NW 140th St Northbound				NW 128th Pl Eastbound				
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total
07:00 AM	0	5	0	5	0	0	0	0	0	0	0	0	5
07:15 AM	0	6	0	6	1	0	0	1	0	0	0	0	7
07:30 AM	0	8	0	8	0	0	0	0	0	0	0	0	8
07:45 AM	0	6	0	6	6	0	0	6	0	0	0	0	12
Total	0	25	0	25	7	0	0	7	0	0	0	0	32
08:00 AM	0	5	0	5	2	0	0	2	0	0	0	0	7
08:15 AM	0	8	0	8	2	0	0	2	0	0	0	0	10
08:30 AM	0	18	0	18	1	0	0	1	0	0	0	0	19
08:45 AM	0	10	0	10	0	0	0	0	0	0	0	0	10
Total	0	41	0	41	5	0	0	5	0	0	0	0	46
09:00 AM	0	3	0	3	1	0	0	1	0	0	0	0	4
09:15 AM	0	9	0	9	4	0	0	4	0	0	0	0	13
09:30 AM	0	8	0	8	1	0	0	1	0	0	0	0	9
09:45 AM	0	5	0	5	3	0	0	3	0	0	0	0	8
Total	0	25	0	25	9	0	0	9	0	0	0	0	34
10:00 AM	0	10	0	10	2	0	0	2	0	0	0	0	12
10:15 AM	0	3	0	3	0	1	0	1	0	1	0	1	5
10:30 AM	0	0	0	0	2	0	0	2	0	0	0	0	2
10:45 AM	0	1	0	1	2	0	0	2	0	0	0	0	3
Total	0	14	0	14	6	1	0	7	0	1	0	1	22
11:00 AM	0	0	0	0	2	0	0	2	0	0	0	0	2
11:15 AM	0	1	0	1	1	0	0	1	0	0	0	0	2
11:30 AM	0	1	0	1	3	0	0	3	0	0	0	0	4
11:45 AM	0	4	0	4	1	0	0	1	0	0	0	0	5
Total	0	6	0	6	7	0	0	7	0	0	0	0	13
12:00 PM	0	1	0	1	3	0	0	3	0	0	0	0	4
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	1	0	1	3	0	0	3	0	0	0	0	4
12:45 PM	0	7	0	7	0	0	0	0	0	0	0	0	7
Total	0	9	0	9	6	0	0	6	0	0	0	0	15
01:00 PM	0	0	0	0	2	0	0	2	0	0	0	0	2
01:15 PM	0	1	0	1	1	0	0	1	0	0	0	0	2
01:30 PM	0	1	0	1	2	0	0	2	0	0	0	0	3
01:45 PM	0	2	0	2	2	0	0	2	0	0	0	0	4
Total	0	4	0	4	7	0	0	7	0	0	0	0	11
02:00 PM	1	1	0	2	3	0	0	3	0	0	0	0	5
02:15 PM	0	1	0	1	2	0	0	2	1	0	0	1	4
02:30 PM	0	1	0	1	0	0	0	0	0	0	0	0	1
02:45 PM	0	2	0	2	2	0	0	2	0	0	0	0	4
Total	1	5	0	6	7	0	0	7	1	0	0	1	14
03:00 PM	0	1	0	1	1	0	0	1	0	0	0	0	2
03:15 PM	0	2	0	2	2	0	0	2	0	0	0	0	4
03:30 PM	0	2	0	2	2	0	0	2	0	0	0	0	4
03:45 PM	0	1	0	1	2	0	0	2	0	0	0	0	3
Total	0	6	0	6	7	0	0	7	0	0	0	0	13
04:00 PM	0	3	0	3	1	0	0	1	1	0	0	1	5
04:15 PM	0	0	0	0	1	0	0	1	0	0	0	0	1
04:30 PM	0	1	0	1	1	0	0	1	0	0	0	0	2
04:45 PM	0	1	0	1	1	0	0	1	0	0	0	0	2
Total	0	5	0	5	4	0	0	4	1	0	0	1	10
05:00 PM	0	0	0	0	3	0	0	3	0	0	0	0	3
05:15 PM	0	1	0	1	1	0	0	1	0	0	0	0	2
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	4	0	0	4	0	0	0	0	5
06:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	1
06:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30 PM	0	1	0	1	2	0	0	2	0	0	0	0	3
06:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	2	0	2	2	0	0	2	0	0	0	0	4
Grand Total	1	143	0	144	71	1	0	72	2	1	0	3	219
Apprch %	0.7	99.3	0		98.6	1.4	0		66.7	33.3	0		
Total %	0.5	65.3	0	65.8	32.4	0.5	0	32.9	0.9	0.5	0	1.4	

Peggy Malone & Associates

(888) 247-8602

File Name : 2-NW 140th St and NW 128th Place
 Site Code :
 Start Date : 10/3/2018
 Page No : 2

	NW 140th St Southbound			NW 140th St Northbound			NW 128th Pl Eastbound			
Start Time	Right	Thru	App. Total	Thru	Left	App. Total	Right	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	0	6	6	6	0	6	0	0	0	12
08:00 AM	0	5	5	2	0	2	0	0	0	7
08:15 AM	0	8	8	2	0	2	0	0	0	10
08:30 AM	0	18	18	1	0	1	0	0	0	19
Total Volume	0	37	37	11	0	11	0	0	0	48
% App. Total	0	100		100	0		0	0		
PHF	.000	.514	.514	.458	.000	.458	.000	.000	.000	.632

Peak Hour Analysis From 12:00 PM to 06:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 01:30 PM										
01:30 PM	0	1	1	2	0	2	0	0	0	3
01:45 PM	0	2	2	2	0	2	0	0	0	4
02:00 PM	1	1	2	3	0	3	0	0	0	5
02:15 PM	0	1	1	2	0	2	1	0	1	4
Total Volume	1	5	6	9	0	9	1	0	1	16
% App. Total	16.7	83.3		100	0		100	0		
PHF	.250	.625	.750	.750	.000	.750	.250	.000	.250	.800

Peggy Malone & Associates

(888) 247-8602

File Name : 2-NW 140th St and NW 128th Place

Site Code :

Start Date : 10/3/2018

Page No : 1

Groups Printed- Combined

	NW 140th St Southbound				NW 140th St Northbound				NW 128th Pl Eastbound				
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total
07:00 AM	0	99	0	99	50	0	0	50	2	2	0	4	153
07:15 AM	0	102	0	102	67	0	0	67	0	0	0	0	169
07:30 AM	0	112	0	112	72	0	0	72	2	1	0	3	187
07:45 AM	1	121	0	122	68	0	0	68	0	4	0	4	194
Total	1	434	0	435	257	0	0	257	4	7	0	11	703
08:00 AM	0	110	0	110	80	1	0	81	1	4	0	5	196
08:15 AM	1	119	0	120	71	1	0	72	0	1	0	1	193
08:30 AM	0	139	0	139	59	0	0	59	1	0	0	1	199
08:45 AM	0	145	0	145	49	0	0	49	0	1	0	1	195
Total	1	513	0	514	259	2	0	261	2	6	0	8	783
09:00 AM	0	99	0	99	37	0	0	37	0	0	0	0	136
09:15 AM	1	128	0	129	37	0	0	37	3	0	0	3	169
09:30 AM	0	94	0	94	34	0	0	34	1	1	0	2	130
09:45 AM	0	69	0	69	49	0	0	49	2	0	0	2	120
Total	1	390	0	391	157	0	0	157	6	1	0	7	555
10:00 AM	0	75	0	75	42	0	0	42	0	0	0	0	117
10:15 AM	0	45	0	45	29	1	0	30	0	1	0	1	76
10:30 AM	0	45	0	45	40	1	0	41	2	0	0	2	88
10:45 AM	0	41	0	41	40	0	0	40	0	0	0	0	81
Total	0	206	0	206	151	2	0	153	2	1	0	3	362
11:00 AM	1	32	0	33	29	0	0	29	0	0	0	0	62
11:15 AM	0	40	0	40	38	0	0	38	0	1	0	1	79
11:30 AM	0	31	0	31	44	0	0	44	0	0	0	0	75
11:45 AM	0	49	0	49	38	0	0	38	0	0	0	0	87
Total	1	152	0	153	149	0	0	149	0	1	0	1	303
12:00 PM	0	31	0	31	54	0	0	54	0	1	0	1	86
12:15 PM	1	37	0	38	35	1	0	36	0	1	0	1	75
12:30 PM	1	48	0	49	49	0	0	49	0	1	0	1	99
12:45 PM	0	53	0	53	27	0	0	27	0	0	0	0	80
Total	2	169	0	171	165	1	0	166	0	3	0	3	340
01:00 PM	1	39	0	40	40	1	0	41	0	0	0	0	81
01:15 PM	1	33	0	34	45	0	0	45	0	0	0	0	79
01:30 PM	0	29	0	29	50	0	0	50	0	0	0	0	79
01:45 PM	1	32	0	33	38	1	0	39	0	0	0	0	72
Total	3	133	0	136	173	2	0	175	0	0	0	0	311
02:00 PM	1	44	0	45	28	0	0	28	0	1	0	1	74
02:15 PM	0	42	0	42	32	0	0	32	1	0	0	1	75
02:30 PM	1	29	0	30	30	0	0	30	0	0	0	0	60
02:45 PM	0	46	0	46	40	1	0	41	0	0	0	0	87
Total	2	161	0	163	130	1	0	131	1	1	0	2	296
03:00 PM	0	42	0	42	49	1	0	50	1	0	0	1	93
03:15 PM	2	31	0	33	42	0	0	42	1	1	0	2	77
03:30 PM	2	66	0	68	44	0	0	44	0	1	0	1	113
03:45 PM	1	50	0	51	60	0	0	60	0	0	0	0	111
Total	5	189	0	194	195	1	0	196	2	2	0	4	394
04:00 PM	1	53	0	54	50	3	0	53	1	0	0	1	108
04:15 PM	5	59	0	64	46	2	0	48	1	0	0	1	113
04:30 PM	2	48	0	50	67	3	0	70	0	0	0	0	120
04:45 PM	0	58	0	58	70	0	0	70	1	1	0	2	130
Total	8	218	0	226	233	8	0	241	3	1	0	4	471
05:00 PM	3	78	0	81	67	2	0	69	1	1	0	2	152
05:15 PM	2	80	0	82	63	0	0	63	0	3	0	3	148
05:30 PM	3	78	0	81	55	1	0	56	0	0	0	0	137
05:45 PM	1	56	0	57	49	0	0	49	1	2	0	3	109
Total	9	292	0	301	234	3	0	237	2	6	0	8	546
06:00 PM	1	53	0	54	55	1	0	56	0	0	0	0	110
06:15 PM	1	54	0	55	40	0	0	40	0	0	0	0	95
06:30 PM	0	48	0	48	38	0	0	38	0	1	0	1	87
06:45 PM	2	51	0	53	35	0	0	35	0	2	0	2	90
Total	4	206	0	210	168	1	0	169	0	3	0	3	382
Grand Total	37	3063	0	3100	2271	21	0	2292	22	32	0	54	5446
Apprch %	1.2	98.8	0		99.1	0.9	0		40.7	59.3	0		
Total %	0.7	56.2	0	56.9	41.7	0.4	0	42.1	0.4	0.6	0	1	

Peggy Malone & Associates

(888) 247-8602

File Name : 2-NW 140th St and NW 128th Place
 Site Code :
 Start Date : 10/3/2018
 Page No : 2

	NW 140th St Southbound			NW 140th St Northbound			NW 128th Pl Eastbound			
Start Time	Right	Thru	App. Total	Thru	Left	App. Total	Right	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	0	110	110	80	1	81	1	4	5	196
08:15 AM	1	119	120	71	1	72	0	1	1	193
08:30 AM	0	139	139	59	0	59	1	0	1	199
08:45 AM	0	145	145	49	0	49	0	1	1	195
Total Volume	1	513	514	259	2	261	2	6	8	783
% App. Total	0.2	99.8		99.2	0.8		23	73		
PHF	.250	.884	.886	.809	.500	.806	.500	.375	.400	.984

Peak Hour Analysis From 12:00 PM to 06:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	0	58	58	70	0	70	1	1	2	130
05:00 PM	3	78	81	67	2	69	1	1	2	152
05:15 PM	2	80	82	63	0	63	0	3	3	148
05:30 PM	3	78	81	55	1	56	0	0	0	137
Total Volume	8	294	302	255	3	258	2	5	7	567
% App. Total	2.6	97.4		98.8	1.2		28.6	71.4		
PHF	.667	.919	.921	.911	.375	.921	.500	.417	.583	.933

NW 140th Street and CR-235

Peggy Malone & Associates

(888) 247-8602

File Name : 3-CR 235 and NW 140th St AM
 Site Code :
 Start Date : 10/3/2018
 Page No : 1

Groups Printed- Car

CR 235 Southbound					NW 140th St Westbound				CR 235 Northbound				Int. Total
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	
06:45 AM	35	112	0	147	37	3	0	40	2	57	0	59	246
Total	35	112	0	147	37	3	0	40	2	57	0	59	246
07:00 AM	35	132	0	167	64	0	0	64	8	61	0	69	300
07:15 AM	30	133	0	163	82	0	0	82	17	81	0	98	343
07:30 AM	25	129	0	154	117	2	0	119	15	97	0	112	385
07:45 AM	48	151	0	199	119	6	0	125	5	91	0	96	420
Total	138	545	0	683	382	8	0	390	45	330	0	375	1448
08:00 AM	56	97	0	153	100	2	0	102	8	74	0	82	337
08:15 AM	56	102	0	158	77	1	0	78	6	72	0	78	314
08:30 AM	44	102	0	146	67	2	0	69	16	65	0	81	296
Grand Total	329	958	0	1287	663	16	0	679	77	598	0	675	2641
Apprch %	25.6	74.4	0		97.6	2.4	0		11.4	88.6	0		
Total %	12.5	36.3	0	48.7	25.1	0.6	0	25.7	2.9	22.6	0	25.6	

	CR 235 Southbound			NW 140th St Westbound			CR 235 Northbound			
Start Time	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	30	133	163	82	0	82	17	81	98	343
07:30 AM	25	129	154	117	2	119	15	97	112	385
07:45 AM	48	151	199	119	6	125	5	91	96	420
08:00 AM	56	97	153	100	2	102	8	74	82	337
Total Volume	159	510	669	418	10	428	45	343	388	1485
% App. Total	23.8	76.2		97.7	2.3		11.6	88.4		
PHF	.710	.844	.840	.878	.417	.856	.662	.884	.866	.884

Peggy Malone & Associates

(888) 247-8602

File Name : 3-CR 235 and NW 140th St AM
 Site Code :
 Start Date : 10/3/2018
 Page No : 1

Groups Printed- Truck

	CR 235 Southbound				NW 140th St Westbound				CR 235 Northbound				
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
06:45 AM	8	21	0	29	2	0	0	2	0	5	0	5	36
Total	8	21	0	29	2	0	0	2	0	5	0	5	36
07:00 AM	7	5	0	12	1	0	0	1	0	5	0	5	18
07:15 AM	14	10	0	24	7	0	0	7	0	13	0	13	44
07:30 AM	9	12	0	21	3	0	0	3	2	10	0	12	36
07:45 AM	32	4	0	36	8	0	0	8	1	10	0	11	55
Total	62	31	0	93	19	0	0	19	3	38	0	41	153
08:00 AM	23	3	0	26	4	0	0	4	2	11	0	13	43
08:15 AM	25	7	0	32	3	0	0	3	0	17	0	17	52
08:30 AM	11	14	0	25	1	0	0	1	2	11	0	13	39
Grand Total	129	76	0	205	29	0	0	29	7	82	0	89	323
Apprch %	62.9	37.1	0		100	0	0		7.9	92.1	0		
Total %	39.9	23.5	0	63.5	9	0	0	9	2.2	25.4	0	27.6	

	CR 235 Southbound			NW 140th St Westbound			CR 235 Northbound			
Start Time	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	32	4	36	8	0	8	1	10	11	55
08:00 AM	23	3	26	4	0	4	2	11	13	43
08:15 AM	25	7	32	3	0	3	0	17	17	52
08:30 AM	11	14	25	1	0	1	2	11	13	39
Total Volume	91	28	119	16	0	16	5	49	54	189
% App. Total	76.5	23.5		100	0		9.3	90.7		
PHF	.711	.500	.826	.500	.000	.500	.625	.721	.794	.859

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(888) 247-8602

File Name : 3-CR 235 and NW 140th St AM
 Site Code :
 Start Date : 10/3/2018
 Page No : 1

Groups Printed- Combined

	CR 235 Southbound				NW 140th St Westbound				CR 235 Northbound				
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
06:45 AM	43	133	0	176	39	3	0	42	2	62	0	64	282
Total	43	133	0	176	39	3	0	42	2	62	0	64	282
07:00 AM	42	137	0	179	65	0	0	65	8	66	0	74	318
07:15 AM	44	143	0	187	89	0	0	89	17	94	0	111	387
07:30 AM	34	141	0	175	120	2	0	122	17	107	0	124	421
07:45 AM	80	155	0	235	127	6	0	133	6	101	0	107	475
Total	200	576	0	776	401	8	0	409	48	368	0	416	1601
08:00 AM	79	100	0	179	104	2	0	106	10	85	0	95	380
08:15 AM	81	109	0	190	80	1	0	81	6	89	0	95	366
08:30 AM	55	116	0	171	68	2	0	70	18	76	0	94	335
Grand Total	458	1034	0	1492	692	16	0	708	84	680	0	764	2964
Apprch %	30.7	69.3	0		97.7	2.3	0		11	89	0		
Total %	15.5	34.9	0	50.3	23.3	0.5	0	23.9	2.8	22.9	0	25.8	

	CR 235 Southbound			NW 140th St Westbound			CR 235 Northbound			
Start Time	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	44	143	187	89	0	89	17	94	111	387
07:30 AM	34	141	175	120	2	122	17	107	124	421
07:45 AM	80	155	235	127	6	133	6	101	107	475
08:00 AM	79	100	179	104	2	106	10	85	95	380
Total Volume	237	539	776	440	10	450	50	387	437	1663
% App. Total	30.5	69.5		97.8	2.2		11.4	88.6		
PHF	.741	.869	.826	.866	.417	.846	.735	.904	.881	.875

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(888) 247-8602

File Name : 3-CR 235 and NW 140th St PM
 Site Code :
 Start Date : 10/3/2018
 Page No : 1

Groups Printed- Car

	CR 235 Southbound				NW 140th St Westbound				CR 235 Northbound				
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
04:30 PM	65	63	0	128	66	3	0	69	7	46	0	53	250
04:45 PM	64	72	0	136	75	4	4	83	1	51	0	52	271
Total	129	135	0	264	141	7	4	152	8	97	0	105	521
05:00 PM	98	95	0	193	78	2	4	84	8	75	0	83	360
05:15 PM	81	108	0	189	82	3	3	88	3	58	0	61	338
05:30 PM	97	80	0	177	72	2	1	75	2	47	0	49	301
05:45 PM	89	59	0	148	52	2	1	55	4	36	3	43	246
Total	365	342	0	707	284	9	9	302	17	216	3	236	1245
06:00 PM	69	56	0	125	47	1	0	48	3	39	0	42	215
06:15 PM	46	59	0	105	50	3	0	53	1	31	1	33	191
Grand Total	609	592	0	1201	522	20	13	555	29	383	4	416	2172
Apprch %	50.7	49.3	0		94.1	3.6	2.3		7	92.1	1		
Total %	28	27.3	0	55.3	24	0.9	0.6	25.6	1.3	17.6	0.2	19.2	

	CR 235 Southbound			NW 140th St Westbound			CR 235 Northbound			
Start Time	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	64	72	136	75	4	79	1	51	52	267
05:00 PM	98	95	193	78	2	80	8	75	83	356
05:15 PM	81	108	189	82	3	85	3	58	61	335
05:30 PM	97	80	177	72	2	74	2	47	49	300
Total Volume	340	355	695	307	11	318	14	231	245	1258
% App. Total	48.9	51.1		96.5	3.5		5.7	94.3		
PHF	.867	.822	.900	.936	.688	.935	.438	.770	.738	.883

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(888) 247-8602

File Name : 3-CR 235 and NW 140th St PM
 Site Code :
 Start Date : 10/3/2018
 Page No : 1

Groups Printed- Truck

	CR 235 Southbound				NW 140th St Westbound				CR 235 Northbound				
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
04:30 PM	6	0	0	6	1	0	0	1	0	3	0	3	10
04:45 PM	1	1	0	2	1	0	0	1	0	4	0	4	7
Total	7	1	0	8	2	0	0	2	0	7	0	7	17
05:00 PM	4	0	0	4	2	0	0	2	0	5	0	5	11
05:15 PM	6	4	0	10	0	0	0	0	0	7	0	7	17
05:30 PM	0	0	0	0	0	0	0	0	0	8	0	8	8
05:45 PM	5	0	0	5	0	0	0	0	0	2	0	2	7
Total	15	4	0	19	2	0	0	2	0	22	0	22	43
06:00 PM	5	1	0	6	0	0	0	0	0	4	0	4	10
06:15 PM	3	0	0	3	0	0	0	0	0	2	0	2	5
Grand Total	30	6	0	36	4	0	0	4	0	35	0	35	75
Apprch %	83.3	16.7	0		100	0	0		0	100	0		
Total %	40	8	0	48	5.3	0	0	5.3	0	46.7	0	46.7	

	CR 235 Southbound			NW 140th St Westbound			CR 235 Northbound			
Start Time	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	6	0	6	1	0	1	0	3	3	10
04:45 PM	1	1	2	1	0	1	0	4	4	7
05:00 PM	4	0	4	2	0	2	0	5	5	11
05:15 PM	6	4	10	0	0	0	0	7	7	17
Total Volume	17	5	22	4	0	4	0	19	19	45
% App. Total	77.3	22.7		100	0		0	100		
PHF	.708	.313	.550	.500	.000	.500	.000	.679	.679	.662

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(888) 247-8602

File Name : 3-CR 235 and NW 140th St PM
 Site Code :
 Start Date : 10/3/2018
 Page No : 1

Groups Printed- Combined

	CR 235 Southbound				NW 140th St Westbound				CR 235 Northbound				
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
04:30 PM	71	63	0	134	67	3	0	70	7	49	0	56	260
04:45 PM	65	73	0	138	76	4	4	84	1	55	0	56	278
Total	136	136	0	272	143	7	4	154	8	104	0	112	538
05:00 PM	102	95	0	197	80	2	4	86	8	80	0	88	371
05:15 PM	87	112	0	199	82	3	3	88	3	65	0	68	355
05:30 PM	97	80	0	177	72	2	1	75	2	55	0	57	309
05:45 PM	94	59	0	153	52	2	1	55	4	38	3	45	253
Total	380	346	0	726	286	9	9	304	17	238	3	258	1288
06:00 PM	74	57	0	131	47	1	0	48	3	43	0	46	225
06:15 PM	49	59	0	108	50	3	0	53	1	33	1	35	196
Grand Total	639	598	0	1237	526	20	13	559	29	418	4	451	2247
Apprch %	51.7	48.3	0		94.1	3.6	2.3		6.4	92.7	0.9		
Total %	28.4	26.6	0	55.1	23.4	0.9	0.6	24.9	1.3	18.6	0.2	20.1	

	CR 235 Southbound			NW 140th St Westbound			CR 235 Northbound			
Start Time	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	65	73	138	76	4	80	1	55	56	274
05:00 PM	102	95	197	80	2	82	8	80	88	367
05:15 PM	87	112	199	82	3	85	3	65	68	352
05:30 PM	97	80	177	72	2	74	2	55	57	308
Total Volume	351	360	711	310	11	321	14	255	269	1301
% App. Total	49.4	50.6		96.6	3.4		5.2	94.8		
PHF	.860	.804	.893	.945	.688	.944	.438	.797	.764	.886

US 441 at NW 140th Street

Peggy Malone & Associates

(888) 247-8602

File Name : 5-NW 140th St and US 441 AM
 Site Code :
 Start Date : 10/3/2018
 Page No : 1

Groups Printed- Car

	NW 140th St Southbound					NW US 441 Westbound					NW 140th St Northbound					NW US 441 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
06:45 AM	1	27	29	0	57	3	62	5	0	70	15	17	10	1	43	36	279	6	0	321	491
Total	1	27	29	0	57	3	62	5	0	70	15	17	10	1	43	36	279	6	0	321	491
07:00 AM	3	30	30	0	63	12	67	37	0	116	19	19	20	0	58	34	226	12	0	272	509
07:15 AM	0	34	40	0	74	14	90	35	0	139	15	17	11	0	43	22	220	12	0	254	510
07:30 AM	1	25	15	0	41	13	102	14	0	129	12	31	12	0	55	15	173	10	0	198	423
07:45 AM	7	26	37	1	71	2	98	27	0	127	17	16	15	0	48	14	225	10	0	249	495
Total	11	115	122	1	249	41	357	113	0	511	63	83	58	0	204	85	844	44	0	973	1937
08:00 AM	2	27	16	0	45	7	97	25	0	129	13	11	15	0	39	25	272	8	0	305	518
08:15 AM	3	25	21	1	50	5	87	19	0	111	25	15	6	1	47	30	245	13	0	288	496
08:30 AM	5	22	18	1	46	8	85	22	0	115	17	19	12	0	48	27	229	5	0	261	470
Grand Total	22	216	206	3	447	64	688	184	0	936	133	145	101	2	381	203	1869	76	0	2148	3912
Apprch %	4.9	48.3	46.1	0.7		6.8	73.5	19.7	0		34.9	38.1	26.5	0.5		9.5	87	3.5	0		
Total %	0.6	5.5	5.3	0.1	11.4	1.6	17.6	4.7	0	23.9	3.4	3.7	2.6	0.1	9.7	5.2	47.8	1.9	0	54.9	

	NW 140th St Southbound					NW US 441 Westbound					NW 140th St Northbound					NW US 441 Eastbound					
Start Time	Right	Thru	Left	App. Total		Right	Thru	Left	App. Total		Right	Thru	Left	App. Total		Right	Thru	Left	App. Total		Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	7	26	37	70		2	98	27	127		17	16	15	48		14	225	10	249		494
08:00 AM	2	27	16	45		7	97	25	129		13	11	15	39		25	272	8	305		518
08:15 AM	3	25	21	49		5	87	19	111		25	15	6	46		30	245	13	288		494
08:30 AM	5	22	18	45		8	85	22	115		17	19	12	48		27	229	5	261		469
Total Volume	17	100	92	209		22	367	93	482		72	61	48	181		96	971	36	1103		1975
% App. Total	8.1	47.8	44			4.6	76.1	19.3			39.8	33.7	26.5			8.7	88	3.3			
PHF	.607	.926	.622	.746		.688	.936	.861	.934		.720	.803	.800	.943		.800	.892	.692	.904		.953

Peggy Malone & Associates

(888) 247-8602

File Name : 5-NW 140th St and US 441 AM
 Site Code :
 Start Date : 10/3/2018
 Page No : 1

Groups Printed- Truck

	NW 140th St Southbound					NW US 441 Westbound					NW 140th St Northbound					NW US 441 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
06:45 AM	0	17	2	0	19	1	5	0	0	6	2	8	2	0	12	10	22	1	0	33	70
Total	0	17	2	0	19	1	5	0	0	6	2	8	2	0	12	10	22	1	0	33	70
07:00 AM	7	9	1	0	17	0	3	1	0	4	0	2	1	0	3	3	32	0	0	35	59
07:15 AM	3	9	1	0	13	0	6	3	0	9	2	13	1	0	16	12	16	2	0	30	68
07:30 AM	2	7	2	0	11	0	8	8	0	16	0	10	0	0	10	11	3	0	0	14	51
07:45 AM	4	11	3	0	18	0	8	6	0	14	1	9	1	0	11	6	28	0	0	34	77
Total	16	36	7	0	59	0	25	18	0	43	3	34	3	0	40	32	79	2	0	113	255
08:00 AM	2	8	1	0	11	2	5	4	0	11	2	8	3	0	13	4	40	1	0	45	80
08:15 AM	2	11	1	0	14	1	12	9	0	22	4	6	1	0	11	10	34	1	0	45	92
08:30 AM	3	6	2	0	11	0	6	5	0	11	3	4	2	0	9	15	35	0	0	50	81
Grand Total	23	78	13	0	114	4	53	36	0	93	14	60	11	0	85	71	210	5	0	286	578
Apprch %	20.2	68.4	11.4	0		4.3	57	38.7	0		16.5	70.6	12.9	0		24.8	73.4	1.7	0		
Total %	4	13.5	2.2	0	19.7	0.7	9.2	6.2	0	16.1	2.4	10.4	1.9	0	14.7	12.3	36.3	0.9	0	49.5	

	NW 140th St Southbound				NW US 441 Westbound				NW 140th St Northbound				NW US 441 Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	4	11	3	18	0	8	6	14	1	9	1	11	6	28	0	34	77
08:00 AM	2	8	1	11	2	5	4	11	2	8	3	13	4	40	1	45	80
08:15 AM	2	11	1	14	1	12	9	22	4	6	1	11	10	34	1	45	92
08:30 AM	3	6	2	11	0	6	5	11	3	4	2	9	15	35	0	50	81
Total Volume	11	36	7	54	3	31	24	58	10	27	7	44	35	137	2	174	330
% App. Total	20.4	66.7	13		5.2	53.4	41.4		22.7	61.4	15.9		20.1	78.7	1.1		
PHF	.688	.818	.583	.750	.375	.646	.667	.659	.625	.750	.583	.846	.583	.856	.500	.870	.897

Peggy Malone & Associates

(888) 247-8602

File Name : 5-NW 140th St and US 441 AM
 Site Code :
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Groups Printed- Combined

	NW 140th St Southbound					NW US 441 Westbound					NW 140th St Northbound					NW US 441 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
06:45 AM	1	44	31	0	76	4	67	5	0	76	17	25	12	1	55	46	301	7	0	354	561
Total	1	44	31	0	76	4	67	5	0	76	17	25	12	1	55	46	301	7	0	354	561
07:00 AM	10	39	31	0	80	12	70	38	0	120	19	21	21	0	61	37	258	12	0	307	568
07:15 AM	3	43	41	0	87	14	96	38	0	148	17	30	12	0	59	34	236	14	0	284	578
07:30 AM	3	32	17	0	52	13	110	22	0	145	12	41	12	0	65	26	176	10	0	212	474
07:45 AM	11	37	40	1	89	2	106	33	0	141	18	25	16	0	59	20	253	10	0	283	572
Total	27	151	129	1	308	41	382	131	0	554	66	117	61	0	244	117	923	46	0	1086	2192
08:00 AM	4	35	17	0	56	9	102	29	0	140	15	19	18	0	52	29	312	9	0	350	598
08:15 AM	5	36	22	1	64	6	99	28	0	133	29	21	7	1	58	40	279	14	0	333	588
08:30 AM	8	28	20	1	57	8	91	27	0	126	20	23	14	0	57	42	264	5	0	311	551
Grand Total	45	294	219	3	561	68	741	220	0	1029	147	205	112	2	466	274	2079	81	0	2434	4490
Apprch %	8	52.4	39	0.5		6.6	72	21.4	0		31.5	44	24	0.4		11.3	85.4	3.3	0		
Total %	1	6.5	4.9	0.1	12.5	1.5	16.5	4.9	0	22.9	3.3	4.6	2.5	0	10.4	6.1	46.3	1.8	0	54.2	

	NW 140th St Southbound					NW US 441 Westbound					NW 140th St Northbound					NW US 441 Eastbound					
Start Time	Right	Thru	Left	App. Total		Right	Thru	Left	App. Total		Right	Thru	Left	App. Total		Right	Thru	Left	App. Total		Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	11	37	40	88		2	106	33	141		18	25	16	59		20	253	10	283		571
08:00 AM	4	35	17	56		9	102	29	140		15	19	18	52		29	312	9	350		598
08:15 AM	5	36	22	63		6	99	28	133		29	21	7	57		40	279	14	333		586
08:30 AM	8	28	20	56		8	91	27	126		20	23	14	57		42	264	5	311		550
Total Volume	28	136	99	263		25	398	117	540		82	88	55	225		131	1108	38	1277		2305
% App. Total	10.6	51.7	37.6			4.6	73.7	21.7			36.4	39.1	24.4			10.3	86.8	3			
PHF	.636	.919	.619	.747		.694	.939	.886	.957		.707	.880	.764	.953		.780	.888	.679	.912		.964

Peggy Malone & Associates

(888) 247-8602

File Name : 5-NW 140th St and US 441 PM
 Site Code :
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Groups Printed- Car

	NW 140th St Southbound					NW US 441 Westbound					NW 140th St Northbound					NW US 441 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:30 PM	16	24	12	1	53	26	218	41	0	285	17	35	36	0	88	32	116	17	1	166	592
04:45 PM	14	29	10	1	54	25	219	31	0	275	12	36	31	0	79	23	100	24	0	147	555
Total	30	53	22	2	107	51	437	72	0	560	29	71	67	0	167	55	216	41	1	313	1147
05:00 PM	16	30	19	0	65	21	236	61	0	318	29	33	38	0	100	42	144	22	0	208	691
05:15 PM	14	34	17	0	65	23	270	46	0	339	19	31	33	0	83	40	133	32	0	205	692
05:30 PM	15	32	27	0	74	25	250	39	0	314	16	40	29	0	85	32	121	32	0	185	658
05:45 PM	18	25	14	0	57	26	268	33	0	327	14	31	30	0	75	42	89	33	0	164	623
Total	63	121	77	0	261	95	1024	179	0	1298	78	135	130	0	343	156	487	119	0	762	2664
06:00 PM	12	25	14	0	51	26	253	27	0	306	17	20	28	0	65	26	113	21	0	160	582
06:15 PM	15	27	14	0	56	13	195	22	0	230	12	20	31	0	63	31	98	24	0	153	502
Grand Total	120	226	127	2	475	185	1909	300	0	2394	136	246	256	0	638	268	914	205	1	1388	4895
Apprch %	25.3	47.6	26.7	0.4		7.7	79.7	12.5	0		21.3	38.6	40.1	0		19.3	65.9	14.8	0.1		
Total %	2.5	4.6	2.6	0	9.7	3.8	39	6.1	0	48.9	2.8	5	5.2	0	13	5.5	18.7	4.2	0	28.4	

	NW 140th St Southbound					NW US 441 Westbound					NW 140th St Northbound					NW US 441 Eastbound					
Start Time	Right	Thru	Left	App. Total		Right	Thru	Left	App. Total		Right	Thru	Left	App. Total		Right	Thru	Left	App. Total		Int. Total
Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	16	30	19	65		21	236	61	318		29	33	38	100		42	144	22	208		691
05:15 PM	14	34	17	65		23	270	46	339		19	31	33	83		40	133	32	205		692
05:30 PM	15	32	27	74		25	250	39	314		16	40	29	85		32	121	32	185		658
05:45 PM	18	25	14	57		26	268	33	327		14	31	30	75		42	89	33	164		623
Total Volume	63	121	77	261		95	1024	179	1298		78	135	130	343		156	487	119	762		2664
% App. Total	24.1	46.4	29.5			7.3	78.9	13.8			22.7	39.4	37.9			20.5	63.9	15.6			
PHF	.875	.890	.713	.882		.913	.948	.734	.957		.672	.844	.855	.858		.929	.845	.902	.916		.962

Peggy Malone & Associates

(888) 247-8602

File Name : 5-NW 140th St and US 441 PM
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Groups Printed- Truck

	NW 140th St Southbound					NW US 441 Westbound					NW 140th St Northbound					NW US 441 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:30 PM	0	5	0	0	5	1	5	1	0	7	0	4	0	0	4	0	3	1	0	4	20
04:45 PM	2	1	1	0	4	0	4	2	0	6	1	3	0	0	4	0	5	0	0	5	19
Total	2	6	1	0	9	1	9	3	0	13	1	7	0	0	8	0	8	1	0	9	39
05:00 PM	0	2	0	0	2	2	4	1	0	7	3	3	2	0	8	2	13	1	0	16	33
05:15 PM	0	5	0	0	5	0	6	1	0	7	3	3	0	0	6	2	2	0	0	4	22
05:30 PM	1	3	0	0	4	1	4	1	0	6	2	1	1	0	4	0	3	1	0	4	18
05:45 PM	1	5	1	0	7	0	3	0	0	3	1	2	0	0	3	0	2	2	0	4	17
Total	2	15	1	0	18	3	17	3	0	23	9	9	3	0	21	4	20	4	0	28	90
06:00 PM	0	3	0	0	3	0	5	2	0	7	1	3	0	0	4	1	0	1	0	2	16
06:15 PM	0	2	0	0	2	0	4	0	0	4	0	2	0	0	2	0	3	0	0	3	11
Grand Total	4	26	2	0	32	4	35	8	0	47	11	21	3	0	35	5	31	6	0	42	156
Apprch %	12.5	81.2	6.2	0		8.5	74.5	17	0		31.4	60	8.6	0		11.9	73.8	14.3	0		
Total %	2.6	16.7	1.3	0	20.5	2.6	22.4	5.1	0	30.1	7.1	13.5	1.9	0	22.4	3.2	19.9	3.8	0	26.9	

	NW 140th St Southbound				NW US 441 Westbound				NW 140th St Northbound				NW US 441 Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	5	0	5	1	5	1	7	0	4	0	4	0	3	1	4	20
04:45 PM	2	1	1	4	0	4	2	6	1	3	0	4	0	5	0	5	19
05:00 PM	0	2	0	2	2	4	1	7	3	3	2	8	2	13	1	16	33
05:15 PM	0	5	0	5	0	6	1	7	3	3	0	6	2	2	0	4	22
Total Volume	2	13	1	16	3	19	5	27	7	13	2	22	4	23	2	29	94
% App. Total	12.5	81.2	6.2		11.1	70.4	18.5		31.8	59.1	9.1		13.8	79.3	6.9		
PHF	.250	.650	.250	.800	.375	.792	.625	.964	.583	.813	.250	.688	.500	.442	.500	.453	.712

Peggy Malone & Associates

(888) 247-8602

File Name : 5-NW 140th St and US 441 PM
 Site Code :
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Groups Printed- Combined

	NW 140th St Southbound					NW US 441 Westbound					NW 140th St Northbound					NW US 441 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:30 PM	16	29	12	1	58	27	223	42	0	292	17	39	36	0	92	32	119	18	1	170	612
04:45 PM	16	30	11	1	58	25	223	33	0	281	13	39	31	0	83	23	105	24	0	152	574
Total	32	59	23	2	116	52	446	75	0	573	30	78	67	0	175	55	224	42	1	322	1186
05:00 PM	16	32	19	0	67	23	240	62	0	325	32	36	40	0	108	44	157	23	0	224	724
05:15 PM	14	39	17	0	70	23	276	47	0	346	22	34	33	0	89	42	135	32	0	209	714
05:30 PM	16	35	27	0	78	26	254	40	0	320	18	41	30	0	89	32	124	33	0	189	676
05:45 PM	19	30	15	0	64	26	271	33	0	330	15	33	30	0	78	42	91	35	0	168	640
Total	65	136	78	0	279	98	1041	182	0	1321	87	144	133	0	364	160	507	123	0	790	2754
06:00 PM	12	28	14	0	54	26	258	29	0	313	18	23	28	0	69	27	113	22	0	162	598
06:15 PM	15	29	14	0	58	13	199	22	0	234	12	22	31	0	65	31	101	24	0	156	513
Grand Total	124	252	129	2	507	189	1944	308	0	2441	147	267	259	0	673	273	945	211	1	1430	5051
Apprch %	24.5	49.7	25.4	0.4		7.7	79.6	12.6	0		21.8	39.7	38.5	0		19.1	66.1	14.8	0.1		
Total %	2.5	5	2.6	0	10	3.7	38.5	6.1	0	48.3	2.9	5.3	5.1	0	13.3	5.4	18.7	4.2	0	28.3	

	NW 140th St Southbound					NW US 441 Westbound					NW 140th St Northbound					NW US 441 Eastbound					
Start Time	Right	Thru	Left	App. Total		Right	Thru	Left	App. Total		Right	Thru	Left	App. Total		Right	Thru	Left	App. Total		Int. Total
Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	16	32	19	67		23	240	62	325		32	36	40	108		44	157	23	224		724
05:15 PM	14	39	17	70		23	276	47	346		22	34	33	89		42	135	32	209		714
05:30 PM	16	35	27	78		26	254	40	320		18	41	30	89		32	124	33	189		676
05:45 PM	19	30	15	64		26	271	33	330		15	33	30	78		42	91	35	168		640
Total Volume	65	136	78	279		98	1041	182	1321		87	144	133	364		160	507	123	790		2754
% App. Total	23.3	48.7	28			7.4	78.8	13.8			23.9	39.6	36.5			20.3	64.2	15.6			
PHF	.855	.872	.722	.894		.942	.943	.734	.954		.680	.878	.831	.843		.909	.807	.879	.882		.951

US 441 and Progress Blvd

Peggy Malone & Associates

(888) 247-8602

File Name : 1-Progress Blvd and US 441 AM
 Site Code :
 Start Date : 10/3/2018
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Groups Printed- Car

	NW 119th Ter Southbound					NW US 441 Westbound					Progress Blvd Northbound					NW US 441 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
06:45 AM	2	0	0	0	2	0	69	2	0	71	8	0	1	0	9	4	335	0	0	339	421
Total	2	0	0	0	2	0	69	2	0	71	8	0	1	0	9	4	335	0	0	339	421
07:00 AM	2	0	0	0	2	0	94	1	0	95	7	0	0	0	7	9	277	2	0	288	392
07:15 AM	0	0	1	0	1	2	110	12	0	124	6	0	1	0	7	6	286	2	0	294	426
07:30 AM	1	1	3	0	5	3	129	9	0	141	5	0	1	0	6	11	227	1	0	239	391
07:45 AM	1	0	0	0	1	4	109	18	0	131	7	0	1	0	8	22	254	2	0	278	418
Total	4	1	4	0	9	9	442	40	0	491	25	0	3	0	28	48	1044	7	0	1099	1627
08:00 AM	4	0	3	0	7	5	87	22	0	114	7	1	4	0	12	31	262	8	0	301	434
08:15 AM	2	0	1	0	3	1	98	26	0	125	10	1	1	0	12	29	278	6	0	313	453
08:30 AM	3	0	1	0	4	7	106	25	0	138	9	0	1	0	10	31	245	7	0	283	435
Grand Total	15	1	9	0	25	22	802	115	0	939	59	2	10	0	71	143	2164	28	0	2335	3370
Apprch %	60	4	36	0		2.3	85.4	12.2	0		83.1	2.8	14.1	0		6.1	92.7	1.2	0		
Total %	0.4	0	0.3	0	0.7	0.7	23.8	3.4	0	27.9	1.8	0.1	0.3	0	2.1	4.2	64.2	0.8	0	69.3	

	NW 119th Ter Southbound				NW US 441 Westbound				Progress Blvd Northbound				NW US 441 Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	1	0	0	1	4	109	18	131	7	0	1	8	22	254	2	278	418
08:00 AM	4	0	3	7	5	87	22	114	7	1	4	12	31	262	8	301	434
08:15 AM	2	0	1	3	1	98	26	125	10	1	1	12	29	278	6	313	453
08:30 AM	3	0	1	4	7	106	25	138	9	0	1	10	31	245	7	283	435
Total Volume	10	0	5	15	17	400	91	508	33	2	7	42	113	1039	23	1175	1740
% App. Total	66.7	0	33.3		3.3	78.7	17.9		78.6	4.8	16.7		9.6	88.4	2		
PHF	.625	.000	.417	.536	.607	.917	.875	.920	.825	.500	.438	.875	.911	.934	.719	.938	.960

Peggy Malone & Associates

(888) 247-8602

File Name : 1-Progress Blvd and US 441 AM
 Site Code :
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Groups Printed- Truck

	NW 119th Ter Southbound					NW US 441 Westbound					Progress Blvd Northbound					NW US 441 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
06:45 AM	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	20	0	0	20	25
Total	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	20	0	0	20	25
07:00 AM	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	0	36	0	0	36	45
07:15 AM	0	0	0	0	0	0	13	0	0	13	0	0	0	0	0	0	18	0	0	18	31
07:30 AM	0	0	0	0	0	0	7	0	0	7	1	0	0	0	1	0	9	0	0	9	17
07:45 AM	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	1	18	0	0	19	28
Total	0	0	0	0	0	0	38	0	0	38	1	0	0	0	1	1	81	0	0	82	121
08:00 AM	0	0	0	0	0	0	12	0	0	12	1	1	1	0	3	0	48	0	0	48	63
08:15 AM	0	0	0	0	0	0	18	0	0	18	0	0	0	0	0	1	31	0	0	32	50
08:30 AM	0	0	0	0	0	0	9	0	0	9	0	0	1	0	1	0	44	0	0	44	54
Grand Total	0	0	0	0	0	0	82	0	0	82	2	1	2	0	5	2	224	0	0	226	313
Apprch %	0	0	0	0	0	0	100	0	0	40	20	40	0	0	0.9	99.1	0	0	0		
Total %	0	0	0	0	0	0	26.2	0	0	26.2	0.6	0.3	0.6	0	1.6	0.6	71.6	0	0	72.2	

	NW 119th Ter Southbound				NW US 441 Westbound				Progress Blvd Northbound				NW US 441 Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	0	0	0	0	9	0	9	0	0	0	0	1	18	0	19	28
08:00 AM	0	0	0	0	0	12	0	12	1	1	1	3	0	48	0	48	63
08:15 AM	0	0	0	0	0	18	0	18	0	0	0	0	1	31	0	32	50
08:30 AM	0	0	0	0	0	9	0	9	0	0	1	1	0	44	0	44	54
Total Volume	0	0	0	0	0	48	0	48	1	1	2	4	2	141	0	143	195
% App. Total	0	0	0	0	0	100	0	25	25	50		1.4	98.6	0			
PHF	.000	.000	.000	.000	.000	.667	.000	.667	.250	.250	.500	.333	.500	.734	.000	.745	.774

Peggy Malone & Associates

(888) 247-8602

File Name : 1-Progress Blvd and US 441 AM
 Site Code :
 Start Date : 10/3/2018
 Page No : 1

Groups Printed- Combined

	NW 119th Ter Southbound					NW US 441 Westbound					Progress Blvd Northbound					NW US 441 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
06:45 AM	2	0	0	0	2	0	74	2	0	76	8	0	1	0	9	4	355	0	0	359	446
Total	2	0	0	0	2	0	74	2	0	76	8	0	1	0	9	4	355	0	0	359	446
07:00 AM	2	0	0	0	2	0	103	1	0	104	7	0	0	0	7	9	313	2	0	324	437
07:15 AM	0	0	1	0	1	2	123	12	0	137	6	0	1	0	7	6	304	2	0	312	457
07:30 AM	1	1	3	0	5	3	136	9	0	148	6	0	1	0	7	11	236	1	0	248	408
07:45 AM	1	0	0	0	1	4	118	18	0	140	7	0	1	0	8	23	272	2	0	297	446
Total	4	1	4	0	9	9	480	40	0	529	26	0	3	0	29	49	1125	7	0	1181	1748
08:00 AM	4	0	3	0	7	5	99	22	0	126	8	2	5	0	15	31	310	8	0	349	497
08:15 AM	2	0	1	0	3	1	116	26	0	143	10	1	1	0	12	30	309	6	0	345	503
08:30 AM	3	0	1	0	4	7	115	25	0	147	9	0	2	0	11	31	289	7	0	327	489
Grand Total	15	1	9	0	25	22	884	115	0	1021	61	3	12	0	76	145	2388	28	0	2561	3683
Apprch %	60	4	36	0		2.2	86.6	11.3	0		80.3	3.9	15.8	0		5.7	93.2	1.1	0		
Total %	0.4	0	0.2	0	0.7	0.6	24	3.1	0	27.7	1.7	0.1	0.3	0	2.1	3.9	64.8	0.8	0	69.5	

	NW 119th Ter Southbound					NW US 441 Westbound					Progress Blvd Northbound					NW US 441 Eastbound					
Start Time	Right	Thru	Left	App. Total		Right	Thru	Left	App. Total		Right	Thru	Left	App. Total		Right	Thru	Left	App. Total		Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	1	0	0	1		4	118	18	140		7	0	1	8		23	272	2	297		446
08:00 AM	4	0	3	7		5	99	22	126		8	2	5	15		31	310	8	349		497
08:15 AM	2	0	1	3		1	116	26	143		10	1	1	12		30	309	6	345		503
08:30 AM	3	0	1	4		7	115	25	147		9	0	2	11		31	289	7	327		489
Total Volume	10	0	5	15		17	448	91	556		34	3	9	46		115	1180	23	1318		1935
% App. Total	66.7	0	33.3			3.1	80.6	16.4			73.9	6.5	19.6			8.7	89.5	1.7			
PHF	.625	.000	.417	.536		.607	.949	.875	.946		.850	.375	.450	.767		.927	.952	.719	.944		.962

Peggy Malone & Associates

(888) 247-8602

File Name : 1-Progress Blvd and US 441 PM
 Site Code :
 Start Date : 10/3/2018
 Page No : 1

Groups Printed- Car

	NW 119th Ter Southbound					NW US 441 Westbound					Progress Blvd Northbound					NW US 441 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:30 PM	9	0	10	0	19	0	266	2	0	268	17	0	23	0	40	3	104	5	0	112	439
04:45 PM	7	1	6	0	14	0	235	2	0	237	16	1	17	0	34	3	102	2	0	107	392
Total	16	1	16	0	33	0	501	4	0	505	33	1	40	0	74	6	206	7	0	219	831
05:00 PM	8	0	4	0	12	0	314	2	0	316	36	0	30	1	67	3	149	2	0	154	549
05:15 PM	3	1	7	0	11	0	282	2	0	284	20	0	17	0	37	9	153	3	0	165	497
05:30 PM	11	0	0	0	11	2	311	5	0	318	24	0	26	0	50	2	127	3	0	132	511
05:45 PM	3	0	2	0	5	2	251	1	0	254	16	1	22	0	39	2	113	2	0	117	415
Total	25	1	13	0	39	4	1158	10	0	1172	96	1	95	1	193	16	542	10	0	568	1972
06:00 PM	3	0	1	0	4	0	259	0	0	259	15	0	35	0	50	1	117	2	0	120	433
06:15 PM	2	0	2	0	4	0	197	1	0	198	10	0	13	0	23	2	100	3	0	105	330
Grand Total	46	2	32	0	80	4	2115	15	0	2134	154	2	183	1	340	25	965	22	0	1012	3566
Apprch %	57.5	2.5	40	0		0.2	99.1	0.7	0		45.3	0.6	53.8	0.3		2.5	95.4	2.2	0		
Total %	1.3	0.1	0.9	0	2.2	0.1	59.3	0.4	0	59.8	4.3	0.1	5.1	0	9.5	0.7	27.1	0.6	0	28.4	

	NW 119th Ter Southbound				NW US 441 Westbound				Progress Blvd Northbound				NW US 441 Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	8	0	4	12	0	314	2	316	36	0	30	66	3	149	2	154	548
05:15 PM	3	1	7	11	0	282	2	284	20	0	17	37	9	153	3	165	497
05:30 PM	11	0	0	11	2	311	5	318	24	0	26	50	2	127	3	132	511
05:45 PM	3	0	2	5	2	251	1	254	16	1	22	39	2	113	2	117	415
Total Volume	25	1	13	39	4	1158	10	1172	96	1	95	192	16	542	10	568	1971
% App. Total	64.1	2.6	33.3		0.3	98.8	0.9		50	0.5	49.5		2.8	95.4	1.8		
PHF	.568	.250	.464	.813	.500	.922	.500	.921	.667	.250	.792	.727	.444	.886	.833	.861	.899

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(888) 247-8602

File Name : 1-Progress Blvd and US 441 PM
 Site Code :
 Start Date : 10/3/2018
 Page No : 1

Groups Printed- Truck

	NW 119th Ter Southbound					NW US 441 Westbound					Progress Blvd Northbound					NW US 441 Eastbound						
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total	
04:30 PM	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	0	1	0	0	0	1	10
04:45 PM	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	6	0	0	0	6	13
Total	0	0	0	0	0	0	16	0	0	16	0	0	0	0	0	0	7	0	0	0	7	23
05:00 PM	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	13	0	0	0	13	19
05:15 PM	0	0	0	0	0	0	3	0	0	3	1	0	0	0	0	1	9	0	0	0	9	13
05:30 PM	0	0	0	0	0	0	5	0	0	5	1	0	0	0	0	1	3	0	0	0	3	9
05:45 PM	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	4	0	0	0	4	9
Total	0	0	0	0	0	0	19	0	0	19	2	0	0	0	0	2	29	0	0	0	29	50
06:00 PM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3
06:15 PM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	1	0	0	0	1	4
Grand Total	0	0	0	0	0	0	41	0	0	41	2	0	0	0	0	2	37	0	0	0	37	80
Apprch %	0	0	0	0	0	0	100	0	0	100	100	0	0	0	0	100	100	0	0	0	100	
Total %	0	0	0	0	0	0	51.2	0	0	51.2	2.5	0	0	0	0	2.5	46.2	0	0	0	46.2	

	NW 119th Ter Southbound				NW US 441 Westbound				Progress Blvd Northbound				NW US 441 Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	0	9	0	9	0	0	0	0	0	1	0	0	1
04:45 PM	0	0	0	0	0	7	0	7	0	0	0	0	0	6	0	0	6
05:00 PM	0	0	0	0	0	6	0	6	0	0	0	0	0	13	0	13	19
05:15 PM	0	0	0	0	0	3	0	3	1	0	0	1	0	9	0	9	13
Total Volume	0	0	0	0	0	25	0	25	1	0	0	1	0	29	0	29	55
% App. Total	0	0	0	0	0	100	0	100	100	0	0	100	0	100	0	100	
PHF	.000	.000	.000	.000	.000	.694	.000	.694	.250	.000	.000	.250	.000	.558	.000	.558	.724

Peggy Malone & Associates

(888) 247-8602

File Name : 1-Progress Blvd and US 441 PM
 Site Code :
 Start Date : 10/3/2018
 Page No : 1

Groups Printed- Combined

	NW 119th Ter Southbound					NW US 441 Westbound					Progress Blvd Northbound					NW US 441 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:30 PM	9	0	10	0	19	0	275	2	0	277	17	0	23	0	40	3	105	5	0	113	449
04:45 PM	7	1	6	0	14	0	242	2	0	244	16	1	17	0	34	3	108	2	0	113	405
Total	16	1	16	0	33	0	517	4	0	521	33	1	40	0	74	6	213	7	0	226	854
05:00 PM	8	0	4	0	12	0	320	2	0	322	36	0	30	1	67	3	162	2	0	167	568
05:15 PM	3	1	7	0	11	0	285	2	0	287	21	0	17	0	38	9	162	3	0	174	510
05:30 PM	11	0	0	0	11	2	316	5	0	323	25	0	26	0	51	2	130	3	0	135	520
05:45 PM	3	0	2	0	5	2	256	1	0	259	16	1	22	0	39	2	117	2	0	121	424
Total	25	1	13	0	39	4	1177	10	0	1191	98	1	95	1	195	16	571	10	0	597	2022
06:00 PM	3	0	1	0	4	0	262	0	0	262	15	0	35	0	50	1	117	2	0	120	436
06:15 PM	2	0	2	0	4	0	200	1	0	201	10	0	13	0	23	2	101	3	0	106	334
Grand Total	46	2	32	0	80	4	2156	15	0	2175	156	2	183	1	342	25	1002	22	0	1049	3646
Apprch %	57.5	2.5	40	0		0.2	99.1	0.7	0		45.6	0.6	53.5	0.3		2.4	95.5	2.1	0		
Total %	1.3	0.1	0.9	0	2.2	0.1	59.1	0.4	0	59.7	4.3	0.1	5	0	9.4	0.7	27.5	0.6	0	28.8	

	NW 119th Ter Southbound					NW US 441 Westbound					Progress Blvd Northbound					NW US 441 Eastbound					
Start Time	Right	Thru	Left	App. Total		Right	Thru	Left	App. Total		Right	Thru	Left	App. Total		Right	Thru	Left	App. Total		Int. Total
Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	8	0	4	12		0	320	2	322		36	0	30	66		3	162	2	167		567
05:15 PM	3	1	7	11		0	285	2	287		21	0	17	38		9	162	3	174		510
05:30 PM	11	0	0	11		2	316	5	323		25	0	26	51		2	130	3	135		520
05:45 PM	3	0	2	5		2	256	1	259		16	1	22	39		2	117	2	121		424
Total Volume	25	1	13	39		4	1177	10	1191		98	1	95	194		16	571	10	597		2021
% App. Total	64.1	2.6	33.3			0.3	98.8	0.8			50.5	0.5	49			2.7	95.6	1.7			
PHF	.568	.250	.464	.813		.500	.920	.500	.922		.681	.250	.792	.735		.444	.881	.833	.858		.891

Rachael Blvd at NW 140th Street

, ,

Analyst: Fabio Sasahara

Interval starts	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
06:45	12	51	0	6	6	4	1	51	47	0	0	0	178
07:00	14	91	0	9	2	4	3	77	44	0	3	1	248
07:15	13	119	0	17	2	3	4	102	72	0	1	4	337
07:30	13	119	1	9	1	1	2	115	91	0	1	3	356
07:45	27	100	0	9	2	3	7	126	86	0	3	3	366
08:00	20	95	1	11	1	5	6	86	75	0	4	3	307
08:15	17	70	2	12	2	3	1	68	66	0	4	2	247
08:30	5	86	0	10	2	4	3	84	30	0	0	1	225
08:45	0	0	0	0	0	1	0	1	0	0	0	0	2

Car traffic

Truck traffic

Bicycle traffic

Pedestrian volumes

[illegible]

Intersection Peak Hour

07:15 - 08:15

	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Vehicle Total	73	433	2	46	6	12	19	429	324	0	9	13	1366
Factor	0.68	0.91	0.50	0.68	0.75	0.60	0.68	0.85	0.89	0.00	0.56	0.81	0.93
Approach Factor	0.95			0.73			0.88			0.79			

Peak Hour Vehicle Summary

Vehicle	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Car	73	351	2	43	6	11	18	381	303	0	9	13	1210
Truck	0	80	0	2	0	1	1	48	19	0	0	0	151
Bicycle	0	2	0	1	0	0	0	0	2	0	0	0	5

Peak Hour Pedestrians

	NE			NW			SW			SE			Total
	Left	Right	Total	Left	Right	Total	Left	Right	Total	Left	Right	Total	
Pedestrians	1	0	1	0	0	0	0	0	0	0	1	1	2

Intersection Peak Hour

Location: FL-235 at Rachael Blvd, Alachua FL

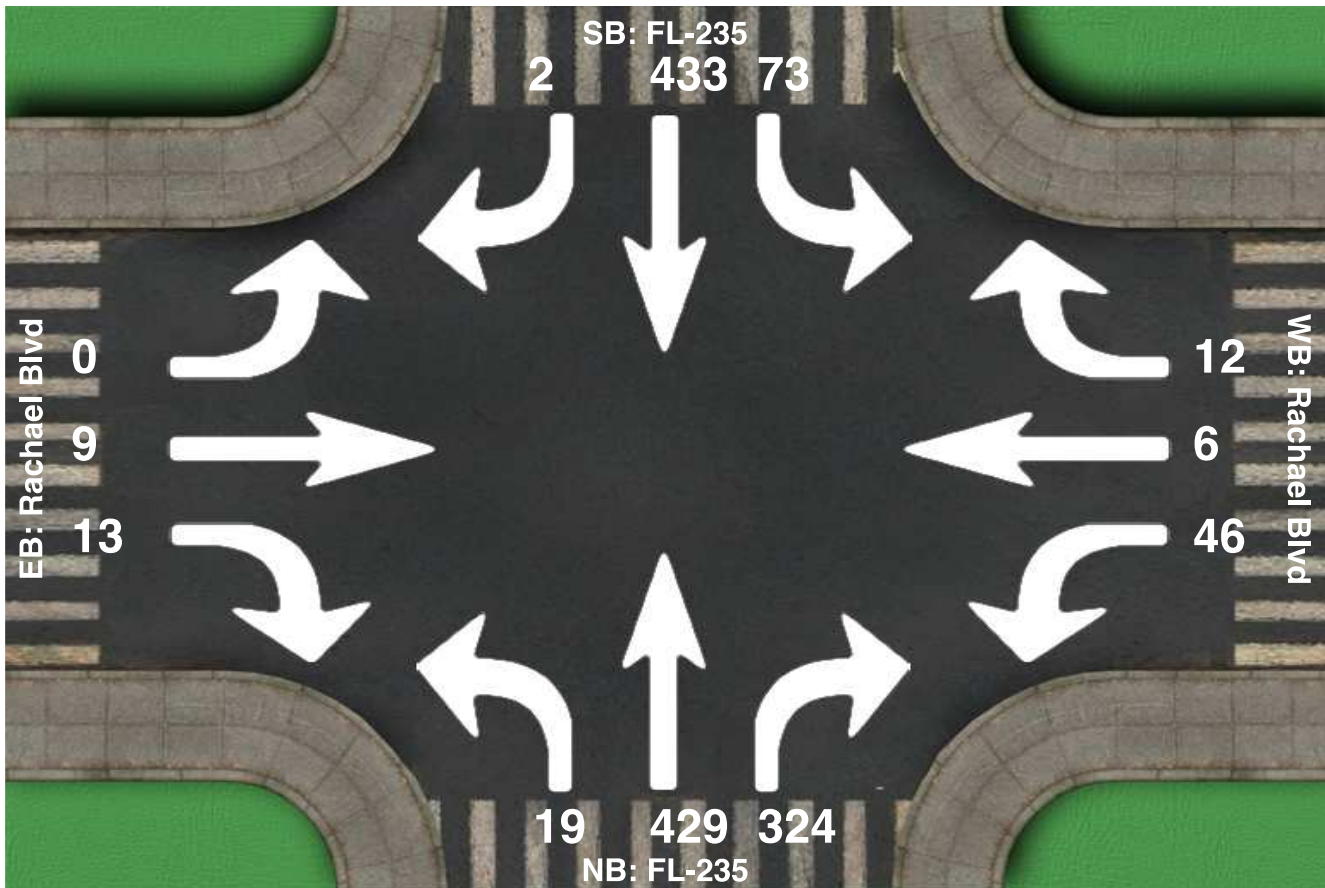
GPS Coordinates: Lat=29.786539, Lon=-82.494180

Date: 2018-10-16

Day of week: Tuesday

Weather:

Analyst: Fabio Sasahara



Intersection Peak Hour

07:15 - 08:15

	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Vehicle Total	73	433	2	46	6	12	19	429	324	0	9	13	1366
Factor	0.68	0.91	0.50	0.68	0.75	0.60	0.68	0.85	0.89	0.00	0.56	0.81	0.93
Approach Factor	0.95			0.73			0.88			0.79			

22

Total vehicle traffic

5 - 6:00 PM	16	395	5	149	45	47	9	399	82	1	14	13
-------------	----	-----	---	-----	----	----	---	-----	----	---	----	----

Interval starts	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
16:45	7	85	0	31	6	14	4	84	16	0	3	2	252
17:00	5	110	1	44	6	8	2	105	19	0	1	6	307
17:15	3	92	2	33	14	17	1	93	25	1	2	2	285
17:30	3	85	0	36	18	11	4	87	18	0	7	3	272
17:45	5	98	2	36	7	11	2	96	18	0	4	2	281
18:00	4	91	1	31	11	13	0	65	11	1	2	0	230
18:15	5	69	0	24	7	6	0	57	15	0	3	3	189
18:30	6	61	0	19	11	8	1	63	8	0	2	3	182

[illegible][illegible][illegible]

Intersection Peak Hour

17:00 - 18:00

	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Vehicle Total	16	395	5	149	45	47	9	399	82	1	14	13	1175
Factor	0.80	0.88	0.62	0.85	0.62	0.69	0.56	0.89	0.82	0.25	0.50	0.54	0.93
Approach Factor	0.88			0.93			0.92			0.70			

Peak Hour Vehicle Summary

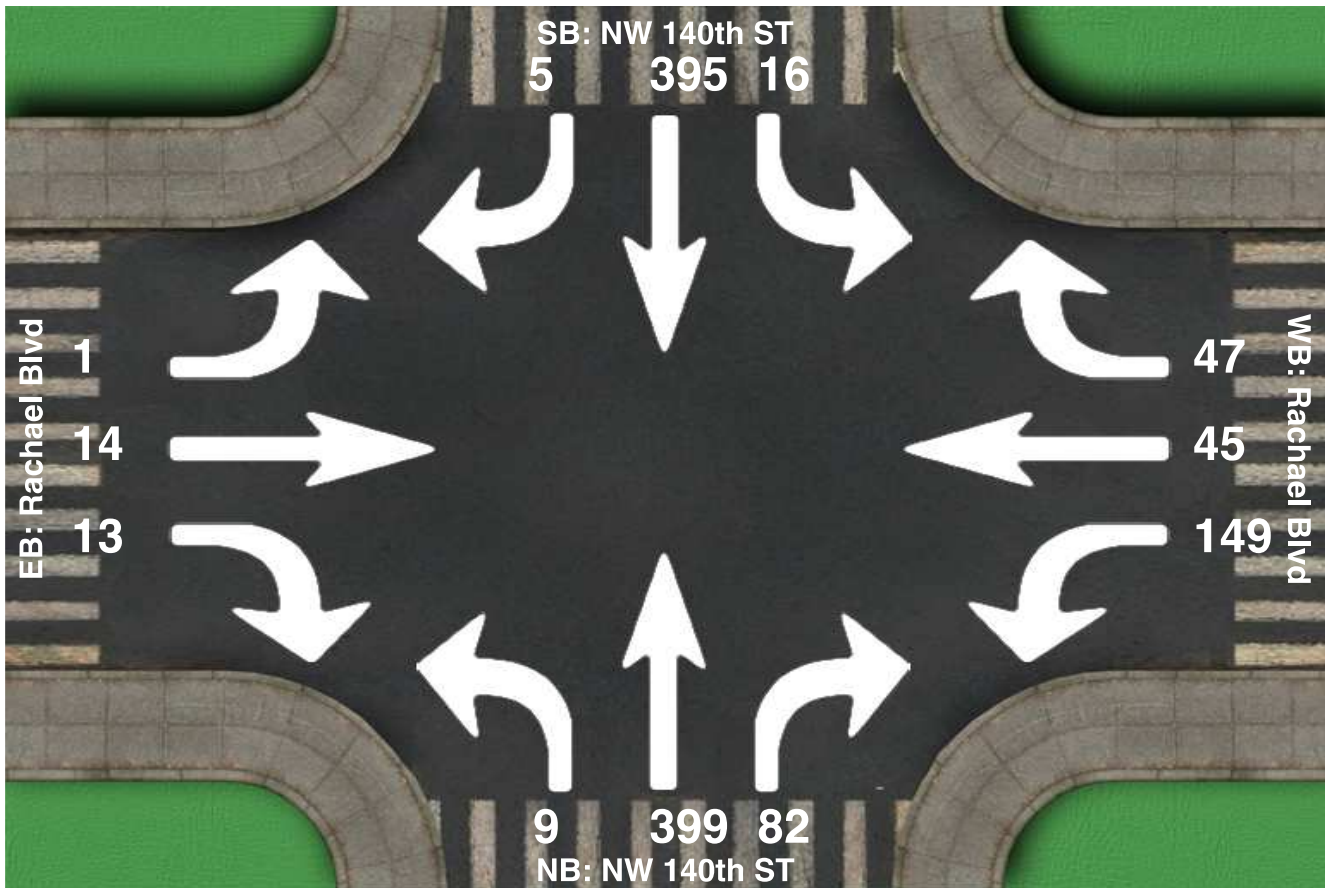
Vehicle	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Car	16	385	5	149	45	47	9	381	80	1	14	13	1145
Truck	0	10	0	0	0	0	0	18	2	0	0	0	30
Bicycle	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak Hour Pedestrians

	NE			NW			SW			SE			Total
	Left	Right	Total	Left	Right	Total	Left	Right	Total	Left	Right	Total	
Pedestrians	0	0	0	0	1	1	0	0	0	0	0	0	1

Intersection Peak Hour

Location: NW 140th ST at Rachael Blvd, Alachua, FL
GPS Coordinates: Lat=29.786775, Lon=-82.494098
Date: 2018-10-16
Day of week: Tuesday
Weather: Sunny
Analyst: Tejas Thyagaraja



Intersection Peak Hour

17:00 - 18:00

	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Vehicle Total	16	395	5	149	45	47	9	399	82	1	14	13	1175
Factor	0.80	0.88	0.62	0.85	0.62	0.69	0.56	0.89	0.82	0.25	0.50	0.54	0.93
Approach Factor	0.88			0.93			0.92			0.70			

Appendix C: Background Data

2017 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
 CATEGORY: 2600 ALACHUA COUNTYWIDE

				MOCF: 0.96
WEEK	DATES	SF	PSCF	
=====				
1	01/01/2017 - 01/07/2017	1.06	1.10	
2	01/08/2017 - 01/14/2017	1.04	1.08	
3	01/15/2017 - 01/21/2017	1.03	1.07	
4	01/22/2017 - 01/28/2017	1.02	1.06	
5	01/29/2017 - 02/04/2017	1.00	1.04	
6	02/05/2017 - 02/11/2017	0.99	1.03	
* 7	02/12/2017 - 02/18/2017	0.98	1.02	
* 8	02/19/2017 - 02/25/2017	0.97	1.01	
* 9	02/26/2017 - 03/04/2017	0.97	1.01	
*10	03/05/2017 - 03/11/2017	0.97	1.01	
*11	03/12/2017 - 03/18/2017	0.96	1.00	
*12	03/19/2017 - 03/25/2017	0.96	1.00	
*13	03/26/2017 - 04/01/2017	0.95	0.99	
*14	04/02/2017 - 04/08/2017	0.94	0.98	
*15	04/09/2017 - 04/15/2017	0.93	0.97	
*16	04/16/2017 - 04/22/2017	0.95	0.99	
*17	04/23/2017 - 04/29/2017	0.96	1.00	
*18	04/30/2017 - 05/06/2017	0.98	1.02	
*19	05/07/2017 - 05/13/2017	0.99	1.03	
20	05/14/2017 - 05/20/2017	1.01	1.05	
21	05/21/2017 - 05/27/2017	1.01	1.05	
22	05/28/2017 - 06/03/2017	1.02	1.06	
23	06/04/2017 - 06/10/2017	1.03	1.07	
24	06/11/2017 - 06/17/2017	1.04	1.08	
25	06/18/2017 - 06/24/2017	1.04	1.08	
26	06/25/2017 - 07/01/2017	1.05	1.09	
27	07/02/2017 - 07/08/2017	1.05	1.09	
28	07/09/2017 - 07/15/2017	1.06	1.10	
29	07/16/2017 - 07/22/2017	1.05	1.09	
30	07/23/2017 - 07/29/2017	1.04	1.08	
31	07/30/2017 - 08/05/2017	1.04	1.08	
32	08/06/2017 - 08/12/2017	1.03	1.07	
33	08/13/2017 - 08/19/2017	1.03	1.07	
34	08/20/2017 - 08/26/2017	1.01	1.05	
35	08/27/2017 - 09/02/2017	1.00	1.04	
36	09/03/2017 - 09/09/2017	0.99	1.03	
37	09/10/2017 - 09/16/2017	0.98	1.02	
38	09/17/2017 - 09/23/2017	0.98	1.02	
39	09/24/2017 - 09/30/2017	0.98	1.02	
40	10/01/2017 - 10/07/2017	0.98	1.02	
41	10/08/2017 - 10/14/2017	0.98	1.02	
42	10/15/2017 - 10/21/2017	0.98	1.02	
43	10/22/2017 - 10/28/2017	0.99	1.03	
44	10/29/2017 - 11/04/2017	1.00	1.04	
45	11/05/2017 - 11/11/2017	1.01	1.05	
46	11/12/2017 - 11/18/2017	1.02	1.06	
47	11/19/2017 - 11/25/2017	1.03	1.07	
48	11/26/2017 - 12/02/2017	1.04	1.08	
49	12/03/2017 - 12/09/2017	1.05	1.09	
50	12/10/2017 - 12/16/2017	1.06	1.10	
51	12/17/2017 - 12/23/2017	1.05	1.09	
52	12/24/2017 - 12/30/2017	1.04	1.08	
53	12/31/2017 - 12/31/2017	1.03	1.07	

* PEAK SEASON

02-MAR-2018 15:35:05

830UPD

2_2600_PKSEASON.TXT

ALACHUA CITY LTRP GROWTH RATES

ID	Map ID - FL LOS Report 2014	Location	growth rate %	K Factor	2015 Peak Hour	2015 AADT	2036 Peak Hour	2036 AADT	AADT growth factor
32	7	I-75 from US 441 to CR 236	1.7	0.105	4463	42505	6056	57676	1.357
31	6	I-75 from SR 222 to US 441	1.6	0.105	5930	56476	7922	75448	1.336
4127	17	US 441 from SR 121 to CR 25A	1.7	0.09	1890	21000	2565	28500	1.357
4107	14	US 441 from I-75 to NW 173rd St	1.0	0.095	2319	24411	2805	29526	1.210
14	13	US 441 from NW 173rd St to E City Limit for High Springs	1.1	0.095	1834	19305	2258	23768	1.231
107	15	US 441 from SR 235 to I-75	1.3	0.095	1882	19811	2396	25221	1.273
106	16	US 441 from CR 25A to SR 235	1.6	0.095	1643	17295	2195	23105	1.336
108	136	SR 235 from CR 2054 to US 441 (south of 441)	1.0	0.095	950	10000	1149	12095	1.210
109	137	SR 241 from US 441 to NW 159th Pl (north of 441)	1.4	0.095	588	6189	761	8011	1.294
4109	138	SR 241 from NW 159th Place to E City Limit (north of 441)	1.3	0.095	352	3705	448	4716	1.273
A	N/A	NW 140th St: 4,000' North of I-75	1.0	0.095	417	4390	509	5355	1.220
B	N/A	NW 143rd St: 1,000' North of NW 78th Ave	1.6	0.095	527	5546	704	7409	1.336
C	N/A	NW 143rd St: 1,200' North of 94th Ave	1.0	0.095	433	4560	524	5518	1.210
D	N/A	NW 143rd St: 1,700' South of NW Millhopper Rd	1.6	0.095	846	8904	1130	11896	1.336
E	N/A	NW 143rd St: 4,000' North of NW Millhopper Rd	1.6	0.095	827	8710	1106	11637	1.336
F	N/A	NW 173rd St: 750' South of US 441	2.7	0.095	359	3780	563	5923	1.567
G	N/A	NW CR 235: 470' South of NW CR235A	2.7	0.095	491	5165	769	8094	1.567
H	N/A	NW CR 235: 570' North of NW CR235A	2.7	0.095	417	4390	654	6879	1.567
I	N/A	NW CR 235: 1,000' South of NW 78th Ave	2.7	0.095	378	3977	592	6232	1.567
J	N/A	NW CR 235: 770' South of NW 46th Ave	2.7	0.095	282	2965	441	4646	1.567
K	N/A	NW CR 235A: 2,400' North of US 441	2.7	0.095	136	1428	213	2237	1.567
L	N/A	Peggy Rd: 1,700' East of I-75	1.0	0.095	84	879	102	1072	1.220
M	N/A	Peggy Rd: 2,750' East of CR 235A	1.0	0.095	80	840	97	1024	1.219
N	N/A	Peggy Rd: 400' West of NW 142 Ter	1.0	0.095	97	1026	119	1252	1.220
O	N/A	CR 2054 (Peggy Rd): 550' East of NW CR 235A	2.6	0.095	160	1686	247	2607	1.546
P	N/A	CR 2054 (Rachael Blvd): 2,750' West of US HWY 441	1.0	0.095	205	2161	250	2636	1.220

Counts used for Roadway Segment Analysis are shown in red

Growth factors used for Intersection Analysis are shown in green

COUNTY: 26
STATION: 5027
DESCRIPTION: SR 20 SE OF SR 235
START DATE: 05/31/2017
START TIME: 0000

TIME	DIRECTION: N				TOTAL	DIRECTION: S				TOTAL	COMBINED TOTAL	
	1ST	2ND	3RD	4TH		1ST	2ND	3RD	4TH			
0000	16	13	13	12	54	13	15	10	14	52	106	
0100	12	7	8	10	37	11	6	7	9	33	70	
0200	16	18	10	9	53	11	6	6	10	33	86	
0300	6	4	14	14	38	11	7	10	14	42	80	
0400	6	8	28	23	65	11	6	11	15	43	108	
0500	37	83	97	126	343	22	27	28	22	99	442	
0600	121	166	250	200	737	36	51	55	93	235	972	
0700	283	294	276	288	1141	120	196	195	119	630	1771	
0800	270	225	261	195	951	125	151	148	140	564	1515	
0900	171	151	156	172	650	147	137	139	163	586	1236	
1000	153	160	149	160	622	142	123	143	148	556	1178	
1100	159	146	174	152	631	130	157	170	215	672	1303	
1200	180	208	187	221	796	215	186	190	177	768	1564	
1300	175	198	186	159	718	182	152	218	145	697	1415	
1400	190	151	147	145	633	163	160	220	205	748	1381	
1500	157	160	139	138	594	174	210	271	231	886	1480	
1600	164	163	150	148	625	231	211	248	276	966	1591	
1700	164	151	146	148	609	355	292	376	294	1317	1926	
1800	142	139	103	106	490	241	217	187	149	794	1284	
1900	91	82	86	70	329	131	142	136	102	511	840	
2000	71	63	71	55	260	101	77	91	72	341	601	
2100	61	54	40	54	209	79	78	62	60	279	488	
2200	39	45	25	37	146	40	59	59	30	188	334	
2300	18	25	18	16	77	29	29	29	30	117	194	
24-HOUR TOTALS:					10808						11157	21965

7-7 TOTAL
17644

PEAK VOLUME INFORMATION				COMBINED DIRECTIONS			
DIRECTION: N		DIRECTION: S		DIRECTION: S		DIRECTIONS	
HOURLY	VOLUME	HOURLY	VOLUME	HOURLY	VOLUME	HOURLY	VOLUME
A.M.	700	1141	635	700	1771	700	1771
P.M.	1200	796	1317	1700	1926	1700	1926
DAILY	700	1141	1317	1700	1926	1700	1926

Alachua County Public Works

Page 1

Direction: North/South
Counter Number: 16210
Installed By: Kevin

5620 NW 120 LN
Gainesville, FL 32653

Station ID: 1-241-7-1
Date Start: 14-Feb-17
Date End: 16-Feb-17

Start Time	14-Feb-17 Tue	North	South	Total
12:00 AM		1	1	2
12:15		4	4	8
12:30		2	0	2
12:45		0	0	0
01:00		2	3	5
01:15		1	0	1
01:30		2	1	3
01:45		2	1	3
02:00		0	0	0
02:15		2	1	3
02:30		1	1	2
02:45		0	0	0
03:00		0	2	2
03:15		3	0	3
03:30		2	0	2
03:45		1	3	4
04:00		1	1	2
04:15		1	1	2
04:30		0	1	1
04:45		9	3	12
05:00		5	2	7
05:15		4	2	6
05:30		9	6	15
05:45		12	8	20
06:00		25	14	39
06:15		19	15	34
06:30		36	19	55
06:45		35	29	64
07:00		66	33	99
07:15		59	42	101
07:30		50	50	100
07:45		49	35	84
08:00		72	51	123
08:15		53	34	87
08:30		41	47	88
08:45		52	45	97
09:00		35	26	61
09:15		23	34	57
09:30		28	16	44
09:45		29	34	63
10:00		26	28	54
10:15		33	28	61
10:30		36	29	65
10:45		26	28	54
11:00		38	34	72
11:15		21	34	55
11:30		42	34	76
11:45		35	28	63
Total		993	808	1801
Percent		55.1%	44.9%	
Peak	-	07:15	07:15	07:15
Vol.	-	230	178	408
P.H.F.		0.799	0.873	0.829

Alachua County Public Works

Page 2

Direction: North/South
Counter Number: 16210
Installed By: Kevin

5620 NW 120 LN
Gainesville, FL 32653

Station ID: 1-241-7-1
Date Start: 14-Feb-17
Date End: 16-Feb-17

Start Time	14-Feb-17 Tue	North	South	Total
12:00 PM		33	42	75
12:15		38	37	75
12:30		38	38	76
12:45		32	35	67
01:00		33	29	62
01:15		42	35	77
01:30		31	25	56
01:45		30	26	56
02:00		38	35	73
02:15		44	39	83
02:30		38	47	85
02:45		38	40	78
03:00		43	43	86
03:15		40	38	78
03:30		37	48	85
03:45		45	54	99
04:00		46	57	103
04:15		56	48	104
04:30		59	60	119
04:45		55	57	112
05:00		60	93	153
05:15		62	77	139
05:30		66	68	134
05:45		52	63	115
06:00		47	63	110
06:15		42	40	82
06:30		37	36	73
06:45		31	28	59
07:00		30	22	52
07:15		23	23	46
07:30		21	30	51
07:45		23	14	37
08:00		17	15	32
08:15		21	19	40
08:30		17	17	34
08:45		17	23	40
09:00		18	9	27
09:15		14	8	22
09:30		7	10	17
09:45		9	8	17
10:00		15	13	28
10:15		10	8	18
10:30		11	5	16
10:45		9	0	9
11:00		1	3	4
11:15		5	2	7
11:30		0	2	2
11:45		3	2	5
Total		1484	1534	3018
Percent		49.2%	50.8%	
Peak	-	16:45	17:00	17:00
Vol.	-	243	301	541
P.H.F.		0.920	0.809	0.884

7-7
TOTAL
4018

TOTAL 4819

Appendix D:

Background and Build-out Calculations

NW 140th St at Rachael Blvd - Rerouted Trips

Interval Starts		Southbound			Westbound			Northbound			Eastbound			Total Rachael Blvd	Westbound		Eastbound	
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right		Volume	Percent	Volume	Percent
AM	7:00:00 AM	67	429	1	44	7	11	16	420	293	0	8	11	[A] 430	62	[B] 14.42%	368	85.58%
	8:00:00 AM	38			26	4	6			168		5		247	36	14.42%	211	85.58%
	9:00:00 AM	38			26	4	6			168		5		247	36	14.42%	211	85.58%
	10:00:00 AM	38			26	4	6			168		5		247	36	14.42%	211	85.58%
	11:00:00 AM	38			26	4	6			168		5		247	36	14.42%	211	85.58%
	12:00:00 PM	38			26	4	6			168		5		247	36	14.42%	211	85.58%
PM	1:00:00 PM	11			104	32	33			57		10		247	169	68.27%	78	31.73%
	2:00:00 PM	11			104	32	33			57		10		247	169	68.27%	78	31.73%
	3:00:00 PM	11			104	32	33			57		10		247	169	68.27%	78	31.73%
	4:00:00 PM	11			104	32	33			57		10		247	169	68.27%	78	31.73%
	5:00:00 PM	16	395	5	149	45	47	9	399	82	1	14	13	[A] 353	241	[B] 68.27%	112	31.73%
	6:00:00 PM	11			104	32	33			57		10		247	169	68.27%	78	31.73%
TOTAL		331			843	230	255			1501		94		3253	1328		1925	
Peak Hour: 4:45-5:45 PM		18	390	3	147	44	50	11	392	80	1	13	13	1162				

AADT NW 140th St	4819	[C]
7-7 Total Trips NW 140th St	4018	
Percent of 7-7 trips	83.38%	
AADT Rachael Blvd	3900	[D]
(AADT X 83%)7-7 Total Trips Rachael Blvd	3252	

Percentage Calculations - Total Rachel Blvd			[D]		
Total Trips 7-7		3252			
Total minus 7AM & 5PM		2469			
Volume per hour		247			
Percentage Calculations - Turning Movements AM			Percentage Calculations - Turning Movements PM		
WB	WBL	70.97%	WB [D]	WBL	61.83%
	WBT	11.29%		WBT	18.67%
	WBR	17.74%		WBR	19.50%
EB	SBL	18.21%	EB [D]	SBL	14.29%
	NBR	79.62%		NBR	73.21%
	EBT	2.17%		EBT	12.50%

Interval Starts	Rerouted HWY Rachael Blvd Trips to San Felasco	
	WBL	NBR
7:00:00 AM	22	147
8:00:00 AM	13	84
9:00:00 AM	13	84
10:00:00 AM	13	84
11:00:00 AM	13	84
12:00:00 PM	13	84
1:00:00 PM	52	29
2:00:00 PM	52	29
3:00:00 PM	52	29
4:00:00 PM	52	29
5:00:00 PM	75	41
6:00:00 PM	52	29
4:45 to 5:45 PM	74	40

Goal: Estimate the volume of trips that will be rerouted from Rachael BLVD. to San Felasco

Step 1: Determine the total trips on Rachael BLVD. during the 7:00 AM and 5:00 PM peak hours based on the turning movement count [A] and determine the AM and PM directional distribution [B]

Step 2: Use the NW 140th St. 24-hour count from Appendix C to estimate the percentage o 7AM-7PM trips to the total daily trips. [C]

Step 3: Multiply the Rachael BLVD. daily trips by the percentage of 7AM - 7PM, subtract the peak hour volumes and divide by 10 to derive the average vehicles per hour throughout the day.

Step 4: Apply the directional distribution percentage and movement percentages to the total Rachael BLVD. vehicles per hour to determine the movement vehicles per hour throughout the day.

Step 5: Divide the estimated westbound left-turn and northbound right turns by 2 to determine the hourly volume of trips that will be rerouted to San Felasco.

NW 140th St at US 441 - Rerouted Trips

Interval Starts		NW 140th St Southbound			HWY 441 Westbound			NW 140th St Northbound			HWY 441 Eastbound			Total HWY 441	Westbound		Eastbound	
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right		Volume	Percent	Volume	Percent
AM	7:00:00 AM	129	151	27	131	382	41	61	117	66	46	923	117	[A] 1672	554	[B] 33.13%	1118	66.87%
	8:00:00 AM	108			109	319	35			55		772		1398	463	33.13%	935	66.87%
	9:00:00 AM	108			109	319	35			55		772		1398	463	33.13%	935	66.87%
	10:00:00 AM	108			109	319	35			55		772		1398	463	33.13%	935	66.87%
	11:00:00 AM	108			109	319	35			55		772		1398	463	33.13%	935	66.87%
	12:00:00 PM	108			109	319	35			55		772		1398	463	33.13%	935	66.87%
PM	1:00:00 PM	55			128	731	68			61		355		1398	927	66.28%	471	33.72%
	2:00:00 PM	55			128	731	68			61		355		1398	927	66.28%	471	33.72%
	3:00:00 PM	55			128	731	68			61		355		1398	927	66.28%	471	33.72%
	4:00:00 PM	55			128	731	68			61		355		1398	927	66.28%	471	33.72%
	5:00:00 PM	78	136	65	182	1041	98	133	144	87	123	507	160	[A] 1993	1321	[B] 66.28%	672	33.72%
	6:00:00 PM	55			128	731	68			61		355		1398	927	66.28%	471	33.72%
TOTAL		1022			1500	6673	652			733		7064		17644	8825		8819	
PM Peak: 4:45-5:45		74	136	62	182	993	97	134	150	85	112	521	141					

AADT HWY 441 21965
 7-7 Total Trips HWY 441 17644 [C]

Percentage Calculations - Total HWY 441					
Total Trips		17644			
Total minus 7AM & 5PM		13979			
Volume per hour		1398			
Percentage Calculations - Turning Movements AM			Percentage Calculations - Turning Movements PM		
WB	WBL	23.65%	WB	WBL	13.78%
	WBT	68.95%		WBT	78.80%
	WBR	7.40%		WBR	7.42%
EB	SBL	11.54%	EB	SBL	11.61%
	NBR	5.90%		NBR	12.95%
	EBT	82.56%		EBT	75.45%

Interval Starts	Rerouted HWY 441 Trips to San Felasco	
	WBL	NBR
7:00:00 AM	33	17
8:00:00 AM	27	14
9:00:00 AM	27	14
10:00:00 AM	27	14
11:00:00 AM	27	14
12:00:00 PM	27	14
1:00:00 PM	32	15
2:00:00 PM	32	15
3:00:00 PM	32	15
4:00:00 PM	32	15
5:00:00 PM	46	22
6:00:00 PM	32	15
4:45 to 5:45 PM	46	21

Goal: Estimate the volume of trips that will be rerouted from HWY 441 to San Felasco

Step 1: Determine the total trips on HWY 441 during the 7:00 AM and 5:00 PM peak hours based on the turning movement count [A] and determine the AM and PM directional distribution [B]

Step 2: Use the HWY 441 Synopsis data provided in Appendix C to derive the 7AM-7PM vehicles per hour. [C]

Step 3: Subtract the 7 AM and 5 PM vehicles per hour from the 7 AM to 7 PM total and divide by 10 to derive the average vehicles per hour throughout the day.

Step 4: Apply the directional distribution percentage and movement percentages to the total Rachael BLVD. vehicles per hour to determine the movement vehicles per hour throughout the day.

Step 5: Divide the estimated westbound left-turn and northbound right turns by 4 to determine the hourly volume of trips that will be rerouted to San Felasco.

NW 140th St at NW 128th PI (Existing)- With Rerouted Trips

Existing Volumes Estimation									
Interval Starts		NW 140th St Southbound		NW 128th PI Westbound	NW 140th St Northbound			NW 128th PI Eastbound	
		Thru	Right	Left	Left	Thru	Right	Left	Right
AM	7:00:00 AM	434	1	55	0	257	163	7	4
	8:00:00 AM	513	1	40	2	259	98	6	2
	9:00:00 AM	390	1	40	0	157	98	1	6
	10:00:00 AM	206	0	40	2	151	98	1	2
	11:00:00 AM	152	1	40	0	149	98	1	0
	12:00:00 PM	169	2	40	1	165	98	3	0
PM	1:00:00 PM	133	3	84	2	173	44	0	0
	2:00:00 PM	161	2	84	1	130	44	1	1
	3:00:00 PM	189	5	84	1	195	44	2	2
	4:00:00 PM	218	8	84	8	233	44	1	3
	5:00:00 PM	292	9	120	3	234	63	6	2
	6:00:00 PM	206	4	84	1	168	44	3	0
TOTAL		3063	37	795	21	2271	936	32	22
PM Peak : 4:45-5:45PM		294	8	119	3	255	61	5	2

NW 140th St at NW 128th PI - 2020 Background

Peak Season	1.02
-------------	------

Growth Rate		Growth Factor
140th St SB	1.01	1.020
140th St NB	1.01	1.020
128th PI WB	1.01	1.020
128th PI EB	0	1.000

Peak Season									
Interval Starts		NW 140th St Southbound		NW 128th PI Westbound	NW 140th St Northbound			NW 128th PI Eastbound	
		Thru	Right	Left	Left	Thru	Right	Left	Right
AM	7:00:00 AM	443	1	56	0	262	166	7	4
	8:00:00 AM	523	1	41	2	264	100	6	2
	9:00:00 AM	398	1	41	0	160	100	1	6
	10:00:00 AM	210	0	41	2	154	100	1	2
	11:00:00 AM	155	1	41	0	152	100	1	0
	12:00:00 PM	172	2	41	1	168	100	3	0
PM	1:00:00 PM	136	3	86	2	176	45	0	0
	2:00:00 PM	164	2	86	1	133	45	1	1
	3:00:00 PM	193	5	86	1	199	45	2	2
	4:00:00 PM	222	8	86	8	238	45	1	3
	5:00:00 PM	298	9	122	3	239	64	6	2
	6:00:00 PM	210	4	86	1	171	45	3	0
TOTAL		3124	37	813	21	2316	955	32	22
PM Peak : 4:45-5:45PM		300	8	121	3	260	62	5	2

2020 Background									
Interval Starts		NW 140th St Southbound		NW 128th PI Westbound	NW 140th St Northbound			NW 128th PI Eastbound	
		Thru	Right	Left	Left	Thru	Right	Left	Right
AM	7:00:00 AM	452	1	57	0	267	169	7	4
	8:00:00 AM	534	1	42	2	269	102	6	2
	9:00:00 AM	406	1	42	0	163	102	1	6
	10:00:00 AM	214	0	42	2	157	102	1	2
	11:00:00 AM	158	1	42	0	155	102	1	0
	12:00:00 PM	175	2	42	1	171	102	3	0
PM	1:00:00 PM	139	3	88	2	180	46	0	0
	2:00:00 PM	167	2	88	1	136	46	1	1
	3:00:00 PM	197	5	88	1	203	46	2	2
	4:00:00 PM	226	8	88	8	243	46	1	3
	5:00:00 PM	304	9	124	3	244	65	6	2
	6:00:00 PM	214	4	88	1	174	46	3	0
TOTAL		3186	37	831	21	2362	974	32	22
PM Peak : 4:45-5:45PM		306	8	123	3	265	63	5	2

* Westbound right and and southbound left trips are expected to be minor, estimated at 10 vph.

** Westbound through and eastbound thru trips are expected to be minor, etimated at 0 vph.

NW 140th St at NW 128th PI - 2030 Background

Peak Season	1.02
-------------	------

	Growth Rate	Growth Factor
140th St SB	1.01	1.127
140th St NB	1.01	1.127
128th PI WB	1.01	1.127
128th PI EB	0	1.000

Peak Season									
Interval Starts		NW 140th St Southbound		NW 128th PI Westbound	NW 140th St Northbound			NW 128th PI Eastbound	
		Thru	Right	Left	Left	Thru	Right	Left	Right
AM	7:00:00 AM	443	1	56	0	262	166	7	4
	8:00:00 AM	523	1	41	2	264	100	6	2
	9:00:00 AM	398	1	41	0	160	100	1	6
	10:00:00 AM	210	0	41	2	154	100	1	2
	11:00:00 AM	155	1	41	0	152	100	1	0
	12:00:00 PM	172	2	41	1	168	100	3	0
PM	1:00:00 PM	136	3	86	2	176	45	0	0
	2:00:00 PM	164	2	86	1	133	45	1	1
	3:00:00 PM	193	5	86	1	199	45	2	2
	4:00:00 PM	222	8	86	8	238	45	1	3
	5:00:00 PM	298	9	122	3	239	64	6	2
	6:00:00 PM	210	4	86	1	171	45	3	0
TOTAL		3124	37	813	21	2316	955	32	22
PM Peak : 4:45-5:45PM		300	8	121	3	260	62	5	2

2030 Background									
Interval Starts		NW 140th St Southbound		NW 128th PI Westbound	NW 140th St Northbound			NW 128th PI Eastbound	
		Thru	Right	Left	Left	Thru	Right	Left	Right
AM	7:00:00 AM	499	1	63	0	295	187	7	4
	8:00:00 AM	589	1	46	2	297	113	6	2
	9:00:00 AM	448	1	46	0	180	113	1	6
	10:00:00 AM	237	0	46	2	174	113	1	2
	11:00:00 AM	175	1	46	0	171	113	1	0
	12:00:00 PM	194	2	46	1	189	113	3	0
PM	1:00:00 PM	153	3	97	2	198	51	0	0
	2:00:00 PM	185	2	97	1	150	51	1	1
	3:00:00 PM	217	6	97	1	224	51	2	2
	4:00:00 PM	250	9	97	9	268	51	1	3
	5:00:00 PM	336	10	137	3	269	72	6	2
	6:00:00 PM	237	5	97	1	193	51	3	0
TOTAL		3520	41	915	22	2608	1079	32	22
PM Peak : 4:45-5:45PM		338	9	136	3	293	70	5	2

* Westbound right and and southbound left trips are expected to be minor, estimated at 10 vph.

** Westbound through and eastbound thru trips are expected to be minor, etimated at 0 vph.

NW 140th St at NW 128th PI - 2030 Build-out

2030 Background									
Interval Starts		NW 140th St Southbound		NW 128th PI Westbound	NW 140th St Northbound			NW 128th PI Eastbound	
		Thru	Right	Left	Left	Thru	Right	Left	Right
AM	7:00:00 AM	499	1	63	0	295	187	7	4
	8:00:00 AM	589	1	46	2	297	113	6	2
	9:00:00 AM	448	1	46	0	180	113	1	6
	10:00:00 AM	237	0	46	2	174	113	1	2
	11:00:00 AM	175	1	46	0	171	113	1	0
	12:00:00 PM	194	2	46	1	189	113	3	0
PM	1:00:00 PM	153	3	97	2	198	51	0	0
	2:00:00 PM	185	2	97	1	150	51	1	1
	3:00:00 PM	217	6	97	1	224	51	2	2
	4:00:00 PM	250	9	97	9	268	51	1	3
	5:00:00 PM	336	10	137	3	269	72	6	2
	6:00:00 PM	237	5	97	1	193	51	3	0
TOTAL		3520	41	915	22	2608	1079	32	22
PM Peak : 4:45-5:45PM		338	9	136	3	293	70	5	2

Daily Project Volumes - 50%		
Time	Average Weekday	
	# Trips 24-Hour Entering Traffic	# Trips 24-Hour Exiting Traffic
7-8 AM	772	89
8-9 AM	552	113
9-10 AM	425	150
10-11 AM	259	183
11-12 AM	264	403
12-1 PM	451	492
1-2 PM	518	309
2-3 PM	306	295
3-4 PM	223	450
4-5 PM	176	722
5-6 PM	152	798
6-7 PM	73	258

2030 50% Build-out											
Interval Starts		NW 140th St Southbound			NW 128th PI Westbound		NW 140th St Northbound			NW 128th PI Eastbound	
		Left	Thru	Right	Left	Right	Left	Thru	Right	Left	Right
AM (phf: .984)	7:00:00 AM	455	499	1	70	53	0	295	249	7	4
	8:00:00 AM	326	589	1	55	67	2	297	157	6	2
	9:00:00 AM	251	448	1	58	89	0	180	147	1	6
	10:00:00 AM	153	237	0	61	108	2	174	134	1	2
	11:00:00 AM	156	175	1	78	238	0	171	134	1	0
	12:00:00 PM	266	194	2	85	290	1	189	149	3	0
PM (phf: .933)	1:00:00 PM	306	153	3	122	183	2	198	92	0	0
	2:00:00 PM	180	185	2	121	174	1	150	75	1	1
	3:00:00 PM	131	217	6	133	266	1	224	69	2	2
	4:00:00 PM	104	250	9	155	426	9	268	65	1	3
	5:00:00 PM	90	336	10	201	471	3	269	84	6	2
	6:00:00 PM	43	237	5	118	152	1	193	57	3	0
TOTAL		2461	3520	41	1257	2517	22	2608	1412	32	2
PM Peak : 4:45-5:45PM		90	338	9	200	471	3	293	82	5	2

59% X 1/2 Project
Entering Traffic

Background Trips
+ 8% X 1/2 Project
Entering Traffic

59% X 1/2 Project
Entering Traffic

Background Trips
+ 8% X 1/2 Project
Entering Traffic

NW 140th St at NW 128th PI - 2040 Background

Peak Season	1.02
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	Growth Rate	Growth Factor
140th St SB	1.01	1.24
140th St NB	1.01	1.24
128th PI WB	1.01	1.24
128th PI EB	0	1

Peak Season									
Interval Starts		NW 140th St Southbound		NW 128th PI Westbound	NW 140th St Northbound			NW 128th PI Eastbound	
		Thru	Right	Left	Left	Thru	Right	Left	Right
AM	7:00:00 AM	443	1	56	0	262	166	7	4
	8:00:00 AM	523	1	41	2	264	100	6	2
	9:00:00 AM	398	1	41	0	160	100	1	6
	10:00:00 AM	210	0	41	2	154	100	1	2
	11:00:00 AM	155	1	41	0	152	100	1	0
	12:00:00 PM	172	2	41	1	168	100	3	0
PM	1:00:00 PM	136	3	86	2	176	45	0	0
	2:00:00 PM	164	2	86	1	133	45	1	1
	3:00:00 PM	193	5	86	1	199	45	2	2
	4:00:00 PM	222	8	86	8	238	45	1	3
	5:00:00 PM	298	9	122	3	239	64	6	2
	6:00:00 PM	210	4	86	1	171	45	3	0
TOTAL		3124	37	813	21	2316	955	32	22
PM Peak : 4:45-5:45PM		300	8	121	3	260	62	5	2

2040 Background									
Interval Starts		NW 140th St Southbound		NW 128th PI Westbound	NW 140th St Northbound			NW 128th PI Eastbound	
		Thru	Right	Left	Left	Thru	Right	Left	Right
AM	7:00:00 AM	551	1	70	0	326	207	7	4
	8:00:00 AM	651	1	51	2	329	124	6	2
	9:00:00 AM	495	1	51	0	199	124	1	6
	10:00:00 AM	261	0	51	2	192	124	1	2
	11:00:00 AM	193	1	51	0	189	124	1	0
	12:00:00 PM	214	2	51	1	209	124	3	0
PM	1:00:00 PM	169	4	107	2	219	56	0	0
	2:00:00 PM	204	2	107	1	166	56	1	1
	3:00:00 PM	240	6	107	1	248	56	2	2
	4:00:00 PM	276	10	107	10	296	56	1	3
	5:00:00 PM	371	11	152	4	297	80	6	2
	6:00:00 PM	261	5	107	1	213	56	3	0
TOTAL		3886	44	1012	24	2883	1187	32	22

NW 140th St at NW 128th PI - 2040 Build-out

2040 Background									
Interval Starts		NW 140th St Southbound		NW 128th PI Westbound	NW 140th St Northbound			NW 128th PI Eastbound	
		Thru	Right	Left	Left	Thru	Right	Left	Right
AM	7:00:00 AM	551	1	70	0	326	207	7	4
	8:00:00 AM	651	1	51	2	329	124	6	2
	9:00:00 AM	495	1	51	0	199	124	1	6
	10:00:00 AM	261	0	51	2	192	124	1	2
	11:00:00 AM	193	1	51	0	189	124	1	0
	12:00:00 PM	214	2	51	1	209	124	3	0
PM	1:00:00 PM	169	4	107	2	219	56	0	0
	2:00:00 PM	204	2	107	1	166	56	1	1
	3:00:00 PM	240	6	107	1	248	56	2	2
	4:00:00 PM	276	10	107	10	296	56	1	3
	5:00:00 PM	371	11	152	4	297	80	6	2
	6:00:00 PM	261	5	107	1	213	56	3	0
TOTAL		3886	44	1012	24	2883	1187	32	22
PM Peak : 4:45-5:45PM		373	10	151	4	324	77	5	2

Daily Project Volumes -Original		
Time	Average Weekday	
	# Trips 24-Hour Entering Traffic	# Trips 24-Hour Exiting Traffic
7-8 AM	1544	178
8-9 AM	1104	226
9-10 AM	850	300
10-11 AM	518	366
11-12 PM	529	806
12-1 PM	902	984
1-2 PM	1036	619
2-3 PM	611	591
3-4 PM	446	900
4-5 PM	352	1444
5-6 PM	304	1595
6-7 PM	145	516

2040 Build-out											
Interval Starts		NW 140th St Southbound			NW 128th PI Westbound		NW 140th St Northbound			NW 128th PI Eastbound	
		Left	Thru	Right	Left	Right	Left	Thru	Right	Left	Right
AM (phf: .984)	7:00:00 AM	911	551	1	84	105	0	326	331	7	4
	8:00:00 AM	651	651	1	69	133	2	329	212	6	2
	9:00:00 AM	501	495	1	75	177	0	199	192	1	6
	10:00:00 AM	306	261	0	80	216	2	192	165	1	2
	11:00:00 AM	312	193	1	116	476	0	189	166	1	0
	12:00:00 PM	532	214	2	130	581	1	209	196	3	0
PM (phf: .933)	1:00:00 PM	611	169	4	157	365	2	219	139	0	0
	2:00:00 PM	361	204	2	154	349	1	166	105	1	1
	3:00:00 PM	263	240	6	179	531	1	248	92	2	2
	4:00:00 PM	208	276	10	223	852	10	296	84	1	3
	5:00:00 PM	179	371	11	280	941	4	297	104	6	2
	6:00:00 PM	86	261	5	148	304	1	213	68	3	0
TOTAL		4921	3886	44	1695	5030	24	2883	1854	32	2
PM Peak : 4:45-5:45PM		179	373	10	279	941	4	324	101	5	2

59% Project Entering Traffic

Background Trips + 8% Project Entering Traffic

Background Trips + 8% Project Entering Traffic

59% Project Entering Traffic

Appendix E:

Traffic Signal Warrant Analysis

Layers

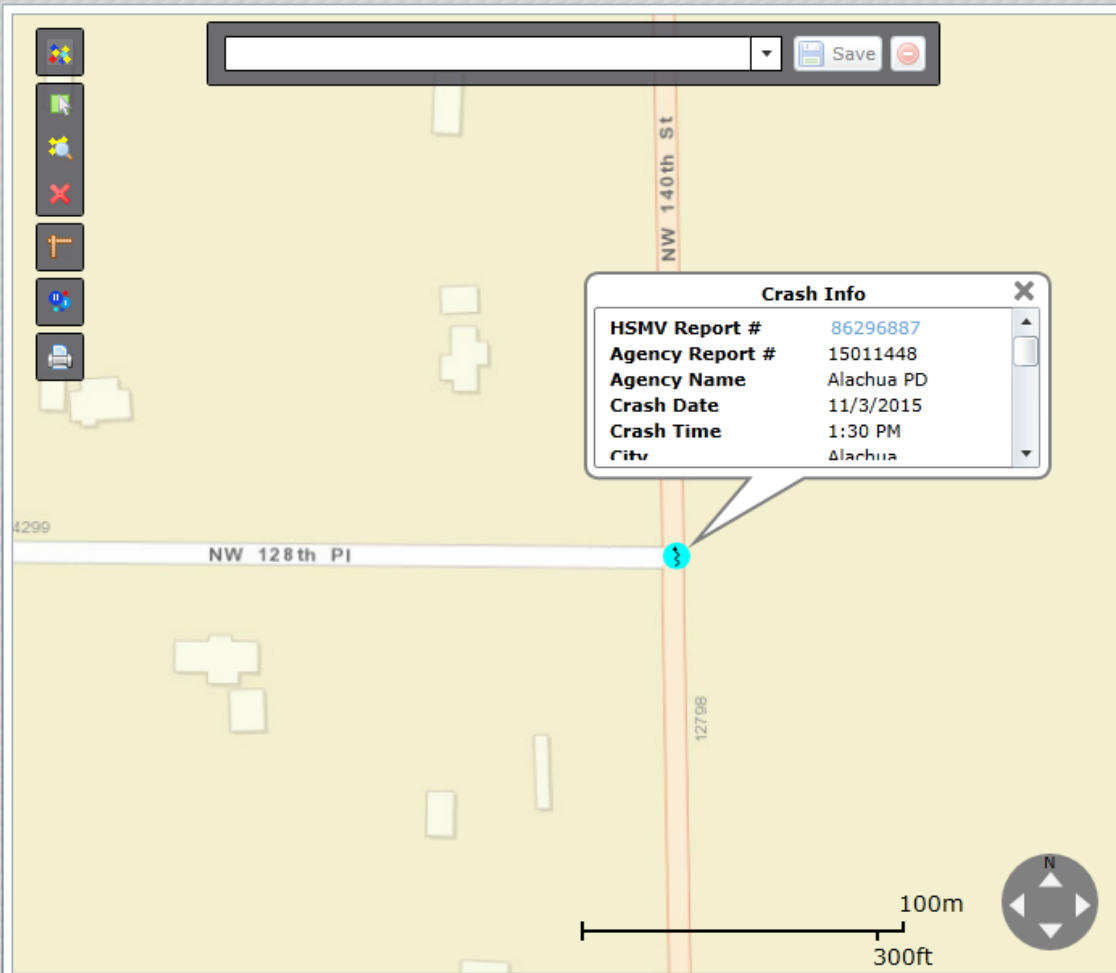
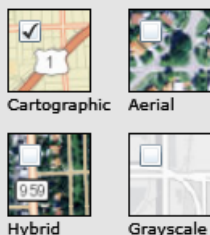
Events

- ☒ Crash
- ☐ Violation

Reference

- ☐ Hospital
- ☐ School
- ☐ Fire Department
- ☐ Police Station

Base Map



	HSMV Report #	Agency Report #	Reporting Agency	Form Type	Crash Date	Crash Time	
	87813896	18005221	Alachua PD	Long	5/31/2018	10:22 AM	Ala
	86819054	17007528	Alachua PD	Long	7/27/2017	8:44 AM	Ala
	87400751	18004952	Alachua PD	Long	5/25/2018	3:02 PM	Ala
	86296887	15011448	Alachua PD	Short	11/3/2015	1:30 PM	Ala

Showing: All (7) / Mapped (7) / Selected (0)

Retrieved 7 (7 Mapped)

Crashes Violations

Time, Place and Agency

Date/Time

- Date Range: 1/1/2013 - 10/29/2018
- Day of Week: All
- Time of Day: All

Geographic Area

- Geographic Extent: Current Map Extent

Reporting Agency

- Reporting Agency: All

Crash Filters

Street Network

- Network Extent: None

Database

- DHSMV Report No.: DHSMV Report Number(s):
- Crashes: All Crashes
- Form Type: All
- DHSMV Codeable Crashes: All

Participants

- Driver Gender: All
- Driver Age: All
- Pedestrian Age: All
- Cyclist Age: All

Hide Unused Filters

Search Clear

HCS7 Warrants Report

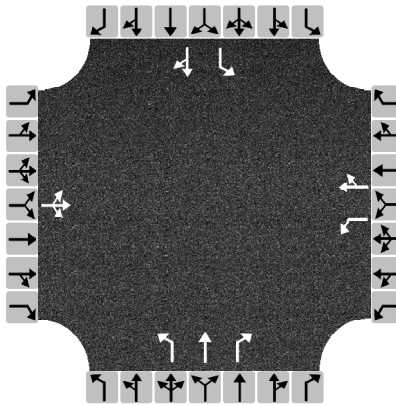
Project Information

Analyst	Brian Snyder	Date	11/26/2018
Agency	CHW Consultants	Analysis Year	2020
Jurisdiction	Alachua County	Time Period Analyzed	7AM to 7PM
Project Description	140th and 128th Opening Year		

General

Major Street Direction	North-South	Population < 10,000	No
Starting Time Interval	7	Coordinated Signal System	No
Median Type	Undivided	Crashes (crashes/year)	1
Major Street Speed (mi/h)	45	Adequate Trials of Crash Exp. Alt.	No
Nearest Signal (ft)	7444		

Geometry and Traffic



Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Number of Lanes, N	0	1	0	1	1	0	1	1	1	1	1	0
Lane Usage		LTR		L	TR		L	T	R	L	TR	
Vehicle Volumes Averages (veh/h)	2	0	1	69	0	10	1	196	81	10	265	3
Pedestrian Averages (peds/h)	0			0			0			0		
Gap Averages (gaps/h)	0			0			0			0		
Delay (s/veh)	2.6			3.0			0.0			0.0		
Delay (veh-hrs)	0.0			0.1			0.0			0.0		

School Crossing and Roadway Network

Number of Students in Highest Hour	0	Two or More Major Routes	No
Number of Adequate Gaps in Period	0	Weekend Counts	No
Number of Minutes in Period	0	5-year Growth Factor (%)	0

Railroad Crossing

Grade Crossing Approach	None	Rail Traffic (trains/day)	0
Highest Volume Hour with Trains	Unknown	High Occupancy Buses (%)	0
Distance to Stop Line (ft)		Tractor-Trailer Trucks (%)	4

HCS7 Warrants Report

Volume Summary

Hour	Major Volume	Minor Volume	Total Volume	Peds/h	Gaps/h	1A (70%)	1A (56%)	1B (70%)	1B (56%)	2 (70%)	3A (70%)	3B (70%)	4A (70%)	4B (70%)
07 - 08	899	67	977	0	0	No	No	No	Yes	No	No	No	No	No
08 - 09	918	52	978	0	0	No	No	No	No	No	No	No	No	No
09 - 10	682	52	741	0	0	No	No	No	No	No	No	No	No	No
10 - 11	485	52	540	0	0	No	No	No	No	No	No	No	No	No
11 - 12	426	52	479	0	0	No	No	No	No	No	No	No	No	No
12 - 13	461	52	516	0	0	No	No	No	No	No	No	No	No	No
13 - 14	380	98	478	0	0	No	No	No	No	No	No	No	No	No
14 - 15	362	98	462	0	0	No	No	No	No	No	No	No	No	No
15 - 16	462	98	564	0	0	No	No	No	No	No	No	No	No	No
16 - 17	541	98	643	0	0	No	No	No	Yes	No	No	No	No	No
17 - 18	635	134	777	0	0	No	Yes	Yes	Yes	No	No	No	No	No
18 - 19	449	98	550	0	0	No	No	No	No	No	No	No	No	No
Total	6700	951	7705	0	0	0	1	1	3	0	0	0	0	0

Warrants

Warrant 1: Eight-Hour Vehicular Volume	
A. Minimum Vehicular Volumes (Both major approaches --and-- higher minor approach) --or--	
B. Interruption of Continuous Traffic (Both major approaches --and-- higher minor approach) --or--	
56% Vehicular --and-- Interruption Volumes (Both major approaches --and-- higher minor approach)	
Warrant 2: Four-Hour Vehicular Volume	
Four-Hour Vehicular Volume (Both major approaches --and-- higher minor approach)	
Warrant 3: Peak Hour	
A. Peak-Hour Conditions (Minor delay -- and-- minor volume --and-- total volume) --or--	
B. Peak-Hour Vehicular Volumes (Both major approaches --and-- higher minor approach)	
Warrant 4: Pedestrian Volume	
A. Four Hour Volumes --or--	
B. One-Hour Volumes	
Warrant 5: School Crossing	
Gaps Same Period --and--	
Student Volumes	
Nearest Traffic Control Signal (optional)	✓
Warrant 6: Coordinated Signal System	
Degree of Platooning (Predominant direction or both directions)	
Warrant 7: Crash Experience	
A. Adequate trials of alternatives, observance and enforcement failed --and--	
B. Reported crashes susceptible to correction by signal (12-month period) --and--	
C. 56% Volumes for Warrants 1A, 1B, --or-- 4 are satisfied	
Warrant 8: Roadway Network	
A. Weekday Volume (Peak hour total --and-- projected warrants 1, 2, or 3) --or--	
B. Weekend Volume (Five hours total)	
Warrant 9: Grade Crossing	
A. Grade Crossing within 140 ft --and--	
B. Peak-Hour Vehicular Volumes	

HCS7 Warrants Report

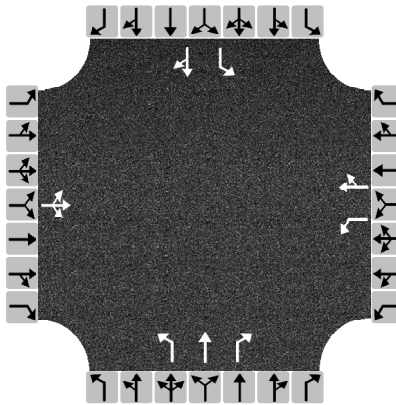
Project Information

Analyst	Brian Snyder	Date	11/26/2018
Agency	CHW Consultants	Analysis Year	2030
Jurisdiction	Alachua County	Time Period Analyzed	7AM to 7PM
Project Description	140th and 128th 50% Year 2030		

General

Major Street Direction	North-South	Population < 10,000	No
Starting Time Interval	7	Coordinated Signal System	No
Median Type	Undivided	Crashes (crashes/year)	1
Major Street Speed (mi/h)	45	Adequate Trials of Crash Exp. Alt.	No
Nearest Signal (ft)	7444		

Geometry and Traffic



Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Number of Lanes, N	0	1	0	1	1	0	1	1	1	1	1	0
Lane Usage		LTR		L	TR		L	T	R	L	TR	
Vehicle Volumes Averages (veh/h)	2	0	1	104	0	209	1	217	117	205	293	3
Pedestrian Averages (peds/h)	0			0			0			0		
Gap Averages (gaps/h)	0			0			0			0		
Delay (s/veh)	10.8			9.3			0.0			0.4		
Delay (veh-hrs)	0.0			0.7			0.0			0.1		

School Crossing and Roadway Network

Number of Students in Highest Hour	0	Two or More Major Routes	No
Number of Adequate Gaps in Period	0	Weekend Counts	No
Number of Minutes in Period	0	5-year Growth Factor (%)	0

Railroad Crossing

Grade Crossing Approach	None	Rail Traffic (trains/day)	0
Highest Volume Hour with Trains	Unknown	High Occupancy Buses (%)	0
Distance to Stop Line (ft)		Tractor-Trailer Trucks (%)	4

HCS7 Warrants Report

Volume Summary

Hour	Major Volume	Minor Volume	Total Volume	Peds/h	Gaps/h	1A (70%)	1A (56%)	1B (70%)	1B (56%)	2 (70%)	3A (70%)	3B (70%)	4A (70%)	4B (70%)
07 - 08	1499	123	1633	0	0	No	Yes	Yes	Yes	Yes	No	Yes	No	No
08 - 09	1372	122	1502	0	0	No	Yes	Yes	Yes	Yes	No	Yes	No	No
09 - 10	1027	147	1181	0	0	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No
10 - 11	700	169	872	0	0	Yes	Yes	Yes	Yes	Yes	No	No	No	No
11 - 12	637	316	954	0	0	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No
12 - 13	801	375	1179	0	0	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No
13 - 14	754	305	1059	0	0	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No
14 - 15	593	295	890	0	0	Yes	Yes	No	Yes	Yes	No	No	No	No
15 - 16	648	399	1051	0	0	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No
16 - 17	705	581	1290	0	0	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No
17 - 18	792	672	1472	0	0	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
18 - 19	536	270	809	0	0	Yes	Yes	No	Yes	Yes	No	No	No	No
Total	10064	3774	13892	0	0	10	12	10	12	12	1	9	0	0

Warrants

Warrant 1: Eight-Hour Vehicular Volume	✓
A. Minimum Vehicular Volumes (Both major approaches --and-- higher minor approach) --or--	✓
B. Interruption of Continuous Traffic (Both major approaches --and-- higher minor approach) --or--	✓
56% Vehicular --and-- Interruption Volumes (Both major approaches --and-- higher minor approach)	✓
Warrant 2: Four-Hour Vehicular Volume	✓
Four-Hour Vehicular Volume (Both major approaches --and-- higher minor approach)	✓
Warrant 3: Peak Hour	✓
A. Peak-Hour Conditions (Minor delay -- and-- minor volume --and-- total volume) --or--	✓
B. Peak-Hour Vehicular Volumes (Both major approaches --and-- higher minor approach)	✓
Warrant 4: Pedestrian Volume	
A. Four Hour Volumes --or--	
B. One-Hour Volumes	
Warrant 5: School Crossing	
Gaps Same Period --and--	
Student Volumes	
Nearest Traffic Control Signal (optional)	✓
Warrant 6: Coordinated Signal System	
Degree of Platooning (Predominant direction or both directions)	
Warrant 7: Crash Experience	
A. Adequate trials of alternatives, observance and enforcement failed --and--	
B. Reported crashes susceptible to correction by signal (12-month period) --and--	
C. 56% Volumes for Warrants 1A, 1B, --or-- 4 are satisfied	✓
Warrant 8: Roadway Network	
A. Weekday Volume (Peak hour total --and-- projected warrants 1, 2, or 3) --or--	
B. Weekend Volume (Five hours total)	
Warrant 9: Grade Crossing	
A. Grade Crossing within 140 ft --and--	
B. Peak-Hour Vehicular Volumes	

HCS7 Warrants Report

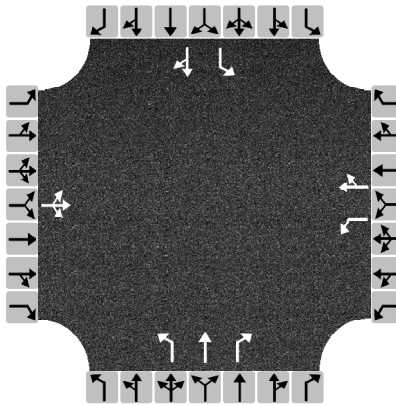
Project Information

Analyst	Sophia Semensky	Date	11/9/2018
Agency	CHW Consultants	Analysis Year	2040
Jurisdiction	Alachua County	Time Period Analyzed	7AM to 7PM
Project Description	140th and 128th Build-Out	Design year 2040	

General

Major Street Direction	North-South	Population < 10,000	No
Starting Time Interval	7	Coordinated Signal System	No
Median Type	Undivided	Crashes (crashes/year)	1
Major Street Speed (mi/h)	45	Adequate Trials of Crash Exp. Alt.	No
Nearest Signal (ft)	7444		

Geometry and Traffic



Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Number of Lanes, N	0	1	0	1	1	0	1	1	1	1	1	0
Lane Usage		LTR		L	TR		L	T	R	L	TR	
Vehicle Volumes Averages (veh/h)	2	0	1	141	0	419	2	240	154	410	323	3
Pedestrian Averages (peds/h)	0			0			0			0		
Gap Averages (gaps/h)	0			0			0			0		
Delay (s/veh)	60.8			103.5			0.0			0.9		
Delay (veh-hrs)	0.1			12.0			0.0			0.3		

School Crossing and Roadway Network

Number of Students in Highest Hour	0	Two or More Major Routes	No
Number of Adequate Gaps in Period	0	Weekend Counts	No
Number of Minutes in Period	0	5-year Growth Factor (%)	0

Railroad Crossing

Grade Crossing Approach	None	Rail Traffic (trains/day)	0
Highest Volume Hour with Trains	Unknown	High Occupancy Buses (%)	0
Distance to Stop Line (ft)		Tractor-Trailer Trucks (%)	4

HCS7 Warrants Report

Volume Summary

Hour	Major Volume	Minor Volume	Total Volume	Peds/h	Gaps/h	1A (70%)	1A (56%)	1B (70%)	1B (56%)	2 (70%)	3A (70%)	3B (70%)	4A (70%)	4B (70%)
07 - 08	2120	189	2320	0	0	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No
08 - 09	1846	202	2056	0	0	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
09 - 10	1388	252	1647	0	0	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No
10 - 11	926	296	1225	0	0	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No
11 - 12	861	592	1454	0	0	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No
12 - 13	1154	711	1868	0	0	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No
13 - 14	1144	522	1666	0	0	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No
14 - 15	839	503	1344	0	0	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No
15 - 16	850	710	1564	0	0	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No
16 - 17	884	1075	1963	0	0	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No
17 - 18	966	1221	2195	0	0	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
18 - 19	634	452	1089	0	0	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No
Total	13612	6725	20391	0	0	12	12	12	12	12	2	12	0	0

Warrants

Warrant 1: Eight-Hour Vehicular Volume	✓
A. Minimum Vehicular Volumes (Both major approaches --and-- higher minor approach) --or--	✓
B. Interruption of Continuous Traffic (Both major approaches --and-- higher minor approach) --or--	✓
56% Vehicular --and-- Interruption Volumes (Both major approaches --and-- higher minor approach)	✓
Warrant 2: Four-Hour Vehicular Volume	✓
Four-Hour Vehicular Volume (Both major approaches --and-- higher minor approach)	✓
Warrant 3: Peak Hour	✓
A. Peak-Hour Conditions (Minor delay -- and-- minor volume --and-- total volume) --or--	✓
B. Peak-Hour Vehicular Volumes (Both major approaches --and-- higher minor approach)	✓
Warrant 4: Pedestrian Volume	
A. Four Hour Volumes --or--	
B. One-Hour Volumes	
Warrant 5: School Crossing	
Gaps Same Period --and--	
Student Volumes	
Nearest Traffic Control Signal (optional)	✓
Warrant 6: Coordinated Signal System	
Degree of Platooning (Predominant direction or both directions)	
Warrant 7: Crash Experience	
A. Adequate trials of alternatives, observance and enforcement failed --and--	
B. Reported crashes susceptible to correction by signal (12-month period) --and--	
C. 56% Volumes for Warrants 1A, 1B, --or-- 4 are satisfied	✓
Warrant 8: Roadway Network	
A. Weekday Volume (Peak hour total --and-- projected warrants 1, 2, or 3) --or--	
B. Weekend Volume (Five hours total)	
Warrant 9: Grade Crossing	
A. Grade Crossing within 140 ft --and--	
B. Peak-Hour Vehicular Volumes	

Appendix F:

Operational Analysis Results

Opening Year 2020

HCS7 Two-Way Stop-Control Report

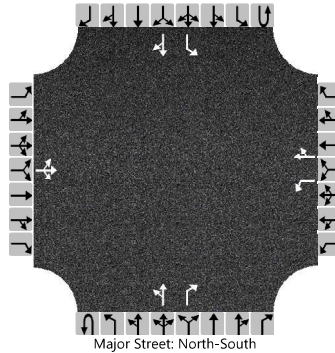
General Information

Analyst	Brian Snyder
Agency/Co.	CHW Consultants
Date Performed	11/26/2018
Analysis Year	2020
Time Analyzed	AM 2020 Opening Year
Intersection Orientation	North-South
Project Description	San Felasco Parkway

Site Information

Intersection	NW 140th at NW 128th Pl
Jurisdiction	Alachua County
East/West Street	NW 128th Pl
North/South Street	NW 140th St
Peak Hour Factor	0.98
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		1	1	0	0	0	1	1	0	1	1	0
Configuration			LTR			L		TR		LT		R		L		TR
Volume (veh/h)		6	0	2		42	0	10		2	269	102		10	534	1
Percent Heavy Vehicles (%)		0	0	0		0	0	0		2				8		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized									No							
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		4.12				4.18		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.22				2.27		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			8			43		10		2				10		
Capacity, c (veh/h)			294			281		769		1023				1148		
v/c Ratio			0.03			0.15		0.01		0.00				0.01		
95% Queue Length, Q ₉₅ (veh)			0.1			0.5		0.0		0.0				0.0		
Control Delay (s/veh)			17.6			20.1		9.7		8.5				8.2		
Level of Service (LOS)			C			C		A		A				A		
Approach Delay (s/veh)	17.6				18.1				0.1				0.1			
Approach LOS	C				C											

HCS7 Two-Way Stop-Control Report

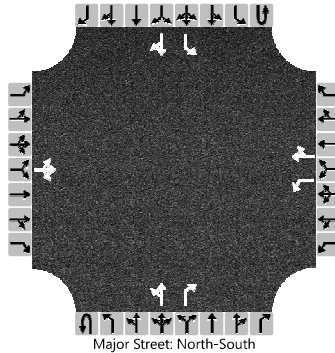
General Information

Analyst	Brian Snyder
Agency/Co.	CHW Consultants
Date Performed	11/26/2018
Analysis Year	2020
Time Analyzed	PM Peak Hr 2020 Build-out
Intersection Orientation	North-South
Project Description	San Felasco Parkway

Site Information

Intersection	NW 140th at NW 128th Pl
Jurisdiction	Alachua County
East/West Street	NW 128th Pl
North/South Street	NW 140th St
Peak Hour Factor	0.93
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		1	1	0	0	0	1	1	0	1	1	0
Configuration			LTR			L		TR		LT		R		L		TR
Volume (veh/h)		5	0	2		123	0	10		3	265	63		10	306	8
Percent Heavy Vehicles (%)		0	0	0		0	0	0		2				1		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized									No							
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		4.12				4.11		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.22				2.21		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			8			132		11		3				11		
Capacity, c (veh/h)			416			382		759		1222				1212		
v/c Ratio			0.02			0.35		0.01		0.00				0.01		
95% Queue Length, Q ₉₅ (veh)			0.1			1.5		0.0		0.0				0.0		
Control Delay (s/veh)			13.8			19.3		9.8		8.0				8.0		
Level of Service (LOS)			B			C		A		A				A		
Approach Delay (s/veh)	13.8				18.6				0.1				0.2			
Approach LOS	B				C											

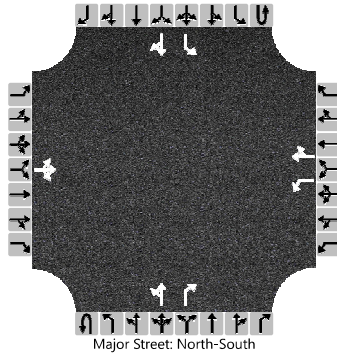
Year 2030

HCS7 Two-Way Stop-Control Report

General Information

Analyst	Sophia Semensky	Intersection	NW 140th at NW 128th Pl
Agency/Co.	CHW Consultants	Jurisdiction	Alachua County
Date Performed	11/26/2018	East/West Street	NW 128th Pl
Analysis Year	2030	North/South Street	NW 140th St
Time Analyzed	AM 2030 50% Build-out	Peak Hour Factor	0.98
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	San Felasco Parkway		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		1	1	0	0	0	1	1	0	1	1	0
Configuration			LTR			L		TR		LT		R		L		TR
Volume (veh/h)		6	0	2		55	0	67		2	297	157		326	589	1
Percent Heavy Vehicles (%)		0	0	0		0	0	0		2				8		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized									No							
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		4.12				4.18		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.22				2.27		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			8			56		68		2				333		
Capacity, c (veh/h)			66			68		741		975				1067		
v/c Ratio			0.12			0.83		0.09		0.00				0.31		
95% Queue Length, Q ₉₅ (veh)			0.4			3.9		0.3		0.0				1.3		
Control Delay (s/veh)			66.6			165.0		10.3		8.7				9.9		
Level of Service (LOS)			F			F		B		A				A		
Approach Delay (s/veh)	66.6				80.1				0.1				3.5			
Approach LOS	F				F											

HCS7 Two-Way Stop-Control Report

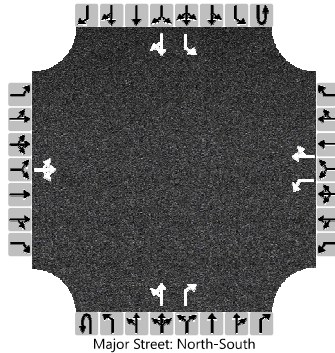
General Information

Analyst	Sophia Semensky
Agency/Co.	CHW Consultants
Date Performed	11/26/2018
Analysis Year	2030
Time Analyzed	PM Peak 2030 50% Buildout
Intersection Orientation	North-South
Project Description	San Felasco Parkway

Site Information

Intersection	NW 140th at NW 128th Pl
Jurisdiction	Alachua County
East/West Street	NW 128th Pl
North/South Street	NW 140th St
Peak Hour Factor	0.93
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments






















Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		1	1	0	0	0	1	1	0	1	1	0
Configuration			LTR			L		TR		LT		R		L		TR
Volume (veh/h)		5	0	2		200	0	471		3	293	82		90	338	9
Percent Heavy Vehicles (%)		0	0	0		0	0	0		2				1		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized									No							
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		4.12				4.11		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.22				2.21		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			8			215		506		3				97		
Capacity, c (veh/h)			66			249		730		1185				1161		
v/c Ratio			0.11			0.86		0.69		0.00				0.08		
95% Queue Length, Q ₉₅ (veh)			0.4			7.1		5.7		0.0				0.3		
Control Delay (s/veh)			66.8			69.4		20.3		8.0				8.4		
Level of Service (LOS)			F			F		C		A				A		
Approach Delay (s/veh)	66.8				34.9				0.1				1.7			
Approach LOS	F				D											

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	0	2	55	0	67	2	297	157	326	589	1
Future Volume (vph)	6	0	2	55	0	67	2	297	157	326	589	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	300		0	0		0
Storage Lanes	0		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.966			0.850				0.850			
Flt Protected		0.964		0.950			0.950			0.950		
Satd. Flow (prot)	0	1769	0	1719	1538	0	1770	1863	1583	1671	1759	0
Flt Permitted		0.729		0.744			0.413			0.374		
Satd. Flow (perm)	0	1338	0	1346	1538	0	769	1863	1583	658	1759	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		151			518				194			
Link Speed (mph)		25			30			45			45	
Link Distance (ft)		801			940			813			905	
Travel Time (s)		21.8			21.4			12.3			13.7	
Peak Hour Factor	0.40	0.40	0.40	0.85	0.85	0.85	0.81	0.81	0.81	0.89	0.89	0.89
Heavy Vehicles (%)	0%	0%	0%	5%	5%	5%	2%	2%	2%	8%	8%	8%
Adj. Flow (vph)	15	0	5	65	0	79	2	367	194	366	662	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	20	0	65	79	0	2	367	194	366	663	0
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2		2	6		
Detector Phase	4	4		8	8		2	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5	22.5	16.0	22.5	
Total Split (s)	22.5	22.5		22.5	22.5		26.5	26.5	26.5	16.0	42.5	
Total Split (%)	34.6%	34.6%		34.6%	34.6%		40.8%	40.8%	40.8%	24.6%	65.4%	
Maximum Green (s)	16.5	16.5		16.5	16.5		20.5	20.5	20.5	10.0	36.5	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0	
Lead/Lag							Lag	Lag	Lag	Lead		
Lead-Lag Optimize?							Yes	Yes	Yes	Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		Max	Max	Max	None	Max	
Act Effect Green (s)		8.1		8.1	8.1		21.8	21.8	21.8	37.0	38.6	
Actuated g/C Ratio		0.15		0.15	0.15		0.40	0.40	0.40	0.68	0.71	
v/c Ratio		0.06		0.32	0.12		0.01	0.49	0.26	0.59	0.53	
Control Delay		0.4		26.1	0.4		13.0	17.3	3.7	9.3	7.9	
Queue Delay		0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay		0.4		26.1	0.4		13.0	17.3	3.7	9.3	7.9	
LOS		A		C	A		B	B	A	A	A	
Approach Delay		0.4			12.0			12.6			8.4	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		A			B			B			A	
Queue Length 50th (ft)		0		20	0		0	95	0	46	103	
Queue Length 95th (ft)		0		47	0		4	157	27	98	215	
Internal Link Dist (ft)		721			860			733			825	
Turn Bay Length (ft)							300					
Base Capacity (vph)		516		414	831		307	745	749	636	1247	
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		0.04		0.16	0.10		0.01	0.49	0.26	0.58	0.53	

Intersection Summary

Area Type: Other

Cycle Length: 65

Actuated Cycle Length: 54.4

Natural Cycle: 65

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.59

Intersection Signal Delay: 10.0

Intersection LOS: A






















Intersection Capacity Utilization 55.8%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 4: NW 140th St & NW 128th Pl/San Felasco Parkway

16 s	26.5 s	22.5 s
42.5 s	22.5 s	

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	0	2	200	0	471	3	293	82	90	338	9
Future Volume (vph)	5	0	2	200	0	471	3	293	82	90	338	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	300		0	0		0
Storage Lanes	0		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.966			0.850				0.850		0.996	
Flt Protected		0.964		0.950			0.950			0.950		
Satd. Flow (prot)	0	1769	0	1770	1583	0	1770	1863	1583	1787	1874	0
Flt Permitted		0.495		0.750			0.538			0.438		
Satd. Flow (perm)	0	909	0	1397	1583	0	1002	1863	1583	824	1874	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		149			456				149			3
Link Speed (mph)		25			35			45				45
Link Distance (ft)		801			940			813				905
Travel Time (s)		21.8			18.3			12.3				13.7
Peak Hour Factor	0.58	0.58	0.58	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	2%	2%	2%	2%	2%	2%	1%	1%	1%
Adj. Flow (vph)	9	0	3	217	0	512	3	318	89	98	367	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	12	0	217	512	0	3	318	89	98	377	0
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2		2	6		
Detector Phase	4	4		8	8		2	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	24.0	24.0		24.0	24.0		20.0	20.0	20.0	9.5	24.0	
Total Split (s)	24.0	24.0		24.0	24.0		21.5	21.5	21.5	9.5	31.0	
Total Split (%)	43.6%	43.6%		43.6%	43.6%		39.1%	39.1%	39.1%	17.3%	56.4%	
Maximum Green (s)	18.0	18.0		18.0	18.0		15.5	15.5	15.5	5.0	25.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	3.5	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	1.0	2.0	
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.0		6.0	6.0		6.0	6.0	6.0	4.5	6.0	
Lead/Lag							Lag	Lag	Lag	Lead		
Lead-Lag Optimize?							Yes	Yes	Yes	Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		Max	Max	Max	None	Max	
Act Effect Green (s)		13.6		13.6	13.6		19.8	19.8	19.8	26.7	25.2	
Actuated g/C Ratio		0.27		0.27	0.27		0.39	0.39	0.39	0.52	0.50	
v/c Ratio		0.03		0.58	0.68		0.01	0.44	0.13	0.19	0.41	
Control Delay		0.1		22.6	7.9		14.3	17.1	1.6	8.3	10.8	
Queue Delay		0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay		0.1		22.6	7.9		14.3	17.1	1.6	8.3	10.8	
LOS		A		C	A		B	B	A	A	B	
Approach Delay		0.1			12.3			13.7			10.2	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		A				B			B			B
Queue Length 50th (ft)		0		55	13		1	81	0	14	67	
Queue Length 95th (ft)		0		109	76		6	159	11	37	137	
Internal Link Dist (ft)		721			860			733			825	
Turn Bay Length (ft)							300					
Base Capacity (vph)		419		497	857		389	725	707	527	928	
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		0.03		0.44	0.60		0.01	0.44	0.13	0.19	0.41	

Intersection Summary

Area Type: Other

Cycle Length: 55

Actuated Cycle Length: 50.9

Natural Cycle: 55

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.68

Intersection Signal Delay: 12.0

Intersection LOS: B

Intersection Capacity Utilization 66.7%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 4: NW 140th St & NW 128th Pl/San Felasco Parkway

Ø1	Ø2	Ø4
9.5 s	21.5 s	24 s
Ø6	Ø8	
31 s	24 s	

Design Year 2040

HCS7 Two-Way Stop-Control Report

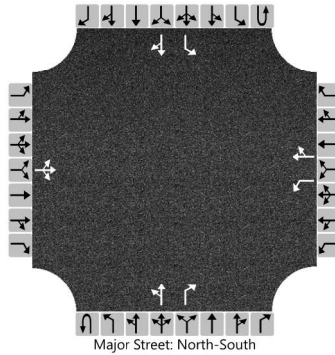
General Information

Analyst	Sophia Semensky
Agency/Co.	CHW Consultants
Date Performed	11/15/2018
Analysis Year	2040
Time Analyzed	AM 2040 Build-out
Intersection Orientation	North-South
Project Description	San Felasco Parkway

Site Information

Intersection	NW 140th at NW 128th Pl
Jurisdiction	Alachua County
East/West Street	NW 128th Pl
North/South Street	NW 140th St
Peak Hour Factor	0.98
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		1	1	0	0	0	1	1	0	1	1	0
Configuration			LTR			L		TR		LT		R		L		TR
Volume (veh/h)		6	0	2		69	0	133		2	329	212		651	651	1
Percent Heavy Vehicles (%)		0	0	0		0	0	0		2				8		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized									No							
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		4.12				4.18		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.22				2.27		

Delay, Queue Length, and Level of Service

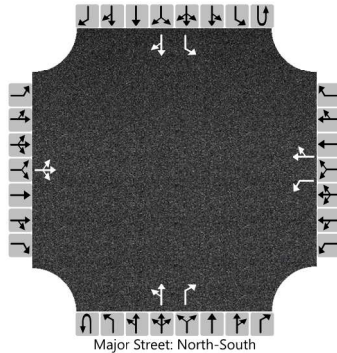
Flow Rate, v (veh/h)			8			70		136		2				664		
Capacity, c (veh/h)			10			12		711		924				989		
v/c Ratio			0.85			5.93		0.19		0.00				0.67		
95% Queue Length, Q ₉₅ (veh)			1.7			10.0		0.7		0.0				5.4		
Control Delay (s/veh)			729.3			2844.8		11.3		8.9				15.8		
Level of Service (LOS)			F			F		B		A				C		
Approach Delay (s/veh)	729.3				979.1				0.0				7.9			
Approach LOS	F				F											

HCS7 Two-Way Stop-Control Report

General Information

Analyst	Sophia Semensky	Intersection	NW 140th at NW 128th Pl
Agency/Co.	CHW Consultants	Jurisdiction	Alachua County
Date Performed	11/15/2018	East/West Street	NW 128th Pl
Analysis Year	2040	North/South Street	NW 140th St
Time Analyzed	PM Peak Hr 2040 Build-out	Peak Hour Factor	0.93
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	San Felasco Parkway		

Lanes



Vehicle Volumes and Adjustments






















Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		1	1	0	0	0	1	1	0	1	1	0
Configuration			LTR			L		TR		LT		R		L		TR
Volume (veh/h)		5	0	2		279	0	941		4	324	101		179	373	10
Percent Heavy Vehicles (%)		0	0	0		0	0	0		2				1		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized									No							
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		4.12				4.11		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.22				2.21		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			8			300		1012		4				192		
Capacity, c (veh/h)						152		699		1147				1109		
v/c Ratio						1.97		1.45		0.00				0.17		
95% Queue Length, Q ₉₅ (veh)						23.3		47.1		0.0				0.6		
Control Delay (s/veh)						508.2		226.7		8.2				8.9		
Level of Service (LOS)						F		F		A				A		
Approach Delay (s/veh)					291.1				0.1				2.8			
Approach LOS					F											

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	0	2	69	0	133	2	329	212	651	651	1
Future Volume (vph)	6	0	2	69	0	133	2	329	212	651	651	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	300		0	0		0
Storage Lanes	0		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.966			0.850				0.850			
Flt Protected		0.964		0.950			0.950			0.950		
Satd. Flow (prot)	0	1769	0	1719	1538	0	1770	1863	1583	1671	1759	0
Flt Permitted		0.524		0.744			0.387			0.206		
Satd. Flow (perm)	0	962	0	1346	1538	0	721	1863	1583	362	1759	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		182			735				262			
Link Speed (mph)		25			30			45			45	
Link Distance (ft)		801			940			813			905	
Travel Time (s)		21.8			21.4			12.3			13.7	
Peak Hour Factor	0.40	0.40	0.40	0.85	0.85	0.85	0.81	0.81	0.81	0.89	0.89	0.89
Heavy Vehicles (%)	0%	0%	0%	5%	5%	5%	2%	2%	2%	8%	8%	8%
Adj. Flow (vph)	15	0	5	81	0	156	2	406	262	731	731	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	20	0	81	156	0	2	406	262	731	732	0
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	pm+pt	NA	
Protected Phases		4			8			2		19	6	
Permitted Phases	4			8			2		2	6		
Detector Phase	4	4		8	8		2	2	2	19	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0		5.0	
Minimum Split (s)	14.0	14.0		14.0	14.0		22.5	22.5	22.5		22.5	
Total Split (s)	14.0	14.0		14.0	14.0		27.0	27.0	27.0		76.0	
Total Split (%)	15.6%	15.6%		15.6%	15.6%		30.0%	30.0%	30.0%		84.4%	
Maximum Green (s)	8.0	8.0		8.0	8.0		21.0	21.0	21.0		70.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0		4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0		2.0	
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0	0.0		0.0	
Total Lost Time (s)		6.0		6.0	6.0		6.0	6.0	6.0		6.0	
Lead/Lag							Lag	Lag	Lag			
Lead-Lag Optimize?							Yes	Yes	Yes			
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0		3.0	
Recall Mode	None	None		None	None		Max	Max	Max		Max	
Act Effect Green (s)		7.7		7.7	7.7		21.0	21.0	21.0	70.0	70.0	
Actuated g/C Ratio		0.09		0.09	0.09		0.23	0.23	0.23	0.78	0.78	
v/c Ratio		0.08		0.70	0.19		0.01	0.93	0.46	0.89	0.53	
Control Delay		0.6		72.1	0.5		27.0	64.7	6.7	25.1	5.4	
Queue Delay		0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay		0.6		72.1	0.5		27.0	64.7	6.7	25.1	5.4	
LOS		A		E	A		C	E	A	C	A	
Approach Delay		0.6			25.0			41.9			15.3	

Lane Group	Ø1	Ø9
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Heavy Vehicles (%)		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	1	9
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)	5.0	5.0
Minimum Split (s)	16.0	9.5
Total Split (s)	31.0	18.0
Total Split (%)	34%	20%
Maximum Green (s)	25.0	13.5
Yellow Time (s)	4.0	3.5
All-Red Time (s)	2.0	1.0
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag	Lead	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	3.0
Recall Mode	None	None
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		A			C			D			B	
Queue Length 50th (ft)		0		46	0		1	227	0	135	122	
Queue Length 95th (ft)		0		#107	0		6	#337	40	#357	181	
Internal Link Dist (ft)		721			860			733			825	
Turn Bay Length (ft)							300					
Base Capacity (vph)		251		119	806		168	435	571	854	1372	
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		0.08		0.68	0.19		0.01	0.93	0.46	0.86	0.53	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 89.7

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.93

Intersection Signal Delay: 23.6

Intersection LOS: C

Intersection Capacity Utilization 76.6%

ICU Level of Service D

Analysis Period (min) 15






















95th percentile volume exceeds capacity, queue may be longer.













Queue shown is maximum after two cycles.

Splits and Phases: 4: NW 140th St & NW 128th Pl/San Felasco Parkway

Ø1	Ø2	Ø9	Ø4
31 s	27 s	18 s	14 s
Ø6			Ø8
76 s			14 s

Lane Group	Ø1	Ø9
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		
Intersection Summary		

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	0	2	279	0	941	4	324	101	179	373	10
Future Volume (vph)	5	0	2	279	0	941	4	324	101	179	373	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	300		0	0		0
Storage Lanes	0		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.966			0.850				0.850		0.996	
Flt Protected		0.964		0.950			0.950			0.950		
Satd. Flow (prot)	0	1769	0	1770	1583	0	1770	1863	1583	1787	1874	0
Flt Permitted		0.605		0.750			0.476			0.181		
Satd. Flow (perm)	0	1110	0	1397	1583	0	887	1863	1583	340	1874	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		91			367				110		2	
Link Speed (mph)		25			35			45			45	
Link Distance (ft)		801			940			813			905	
Travel Time (s)		21.8			18.3			12.3			13.7	
Peak Hour Factor	0.58	0.58	0.58	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	2%	2%	2%	2%	2%	2%	1%	1%	1%
Adj. Flow (vph)	9	0	3	303	0	1023	4	352	110	195	405	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	12	0	303	1023	0	4	352	110	195	416	0
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2		2	6		
Detector Phase	4	4		8	8		2	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	24.0	24.0		24.0	24.0		20.0	20.0	20.0	9.5	24.0	
Total Split (s)	55.4	55.4		55.4	55.4		23.6	23.6	23.6	11.0	34.6	
Total Split (%)	61.6%	61.6%		61.6%	61.6%		26.2%	26.2%	26.2%	12.2%	38.4%	
Maximum Green (s)	49.4	49.4		49.4	49.4		17.6	17.6	17.6	6.5	28.6	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	3.5	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	1.0	2.0	
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.0		6.0	6.0		6.0	6.0	6.0	4.5	6.0	
Lead/Lag							Lag	Lag	Lag	Lead		
Lead-Lag Optimize?							Yes	Yes	Yes	Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		Max	Max	Max	None	Max	
Act Effect Green (s)		49.4		49.4	49.4		17.6	17.6	17.6	30.1	28.6	
Actuated g/C Ratio		0.55		0.55	0.55		0.20	0.20	0.20	0.33	0.32	
v/c Ratio		0.02		0.40	0.99		0.02	0.97	0.28	0.89	0.70	
Control Delay		0.0		13.6	40.3		29.8	77.6	8.4	66.0	34.1	
Queue Delay		0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay		0.0		13.6	40.3		29.8	77.6	8.4	66.0	34.1	
LOS		A		B	D		C	E	A	E	C	
Approach Delay					34.2			60.8			44.3	

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS	C						E			D		
Queue Length 50th (ft)		0		93	403		2	200	0	82	205	
Queue Length 95th (ft)		0		152	#742		11	#370	42	#179	310	
Internal Link Dist (ft)		721			860			733			825	
Turn Bay Length (ft)							300					
Base Capacity (vph)		650		766	1034		173	364	398	218	596	
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		0.02		0.40	0.99		0.02	0.97	0.28	0.89	0.70	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.99

Intersection Signal Delay: 41.7

Intersection LOS: D

Intersection Capacity Utilization 99.0%






ICU Level of Service F

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 4: NW 140th St & NW 128th Pl/San Felasco Parkway

 Ø1	 Ø2	 Ø4
11 s	23.6 s	55.4 s
 Ø6		 Ø8
34.6 s		55.4 s

HCS7 Roundabouts Report

General Information

Analyst	Sophia Semensky
Agency or Co.	CHW Consultants
Date Performed	11/16/2018
Analysis Year	2040
Time Analyzed	AM 2040 Build-Out
Project Description	San Felasco Parkway

Site Information

Intersection	NW 128th Pl at NW 140th S
E/W Street Name	NW 128th Pl
N/S Street Name	NW 140th St
Analysis Time Period (hrs)	0.25
Peak Hour Factor	0.98
Jurisdiction	Alachua County

Volume Adjustments and Site Characteristics

Approach	EB				WB				NB				SB			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Number of Lanes (N)	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0
Lane Assignment	LTR				LTR				LTR				LTR			
Volume (V), veh/h	0	6	0	2	0	69	0	133	0	2	329	212	0	651	651	1
Percent Heavy Vehicles, %	0	0	0	0	0	0	0	0	2	2	2	2	8	8	8	8
Flow Rate (V_{PCE}), pc/h	0	6	0	2	0	70	0	136	0	2	342	221	0	717	717	1
Right-Turn Bypass	None				None				None				None			
Conflicting Lanes	1				1				1				1			
Pedestrians Crossing, p/h	0				0				0				0			

Critical and Follow-Up Headway Adjustment

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Critical Headway (s)		4.9763			4.9763			4.9763			4.9763	
Follow-Up Headway (s)		2.6087			2.6087			2.6087			2.6087	

Flow Computations, Capacity and v/c Ratios

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Entry Flow (v_e), pc/h		8.00			206.00			565.00			1435.00	
Entry Volume veh/h		8.00			206.00			553.92			1328.70	
Circulating Flow (v_c), pc/h	1504			350			723			72		
Exiting Flow (v_{ex}), pc/h	938			3			484			789		
Capacity (c_{pce}), pc/h		297.61			965.69			660.10			1282.28	
Capacity (c), veh/h		297.61			965.69			647.15			1187.30	
v/c Ratio (x)		0.03			0.21			0.86			1.12	

Delay and Level of Service

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Lane Control Delay (d), s/veh		12.6			5.8			33.9			82.2	
Lane LOS		B			A			D			F	
95% Queue, veh		0.1			0.8			9.7			32.8	
Approach Delay, s/veh	12.6			5.8			33.9			82.2		
Approach LOS	B			A			D			F		
Intersection Delay, s/veh LOS	61.7						F					

HCS7 Roundabouts Report

General Information

Analyst	Sophia Semensky
Agency or Co.	CHW Consultants
Date Performed	11/16/2018
Analysis Year	2040
Time Analyzed	PM 2040 Build-Out
Project Description	San Felasco Parkway

Site Information

Intersection	NW 128th PI NW 140th St
E/W Street Name	NW 128th PI
N/S Street Name	NW 140th St
Analysis Time Period (hrs)	0.25
Peak Hour Factor	0.93
Jurisdiction	Alachua County

Volume Adjustments and Site Characteristics

Approach	EB				WB				NB				SB			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Number of Lanes (N)	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0
Lane Assignment	LTR				LTR				LTR				LTR			
Volume (V), veh/h	0	5	0	2	0	279	0	941	0	4	324	101	0	179	373	10
Percent Heavy Vehicles, %	0	0	0	0	0	0	0	0	2	2	2	2	1	1	1	1
Flow Rate (V_{PCE}), pc/h	0	5	0	2	0	300	0	1012	0	4	355	111	0	194	405	11
Right-Turn Bypass	None				None				None				None			
Conflicting Lanes	1				1				1				1			
Pedestrians Crossing, p/h	0				0				0				0			

Critical and Follow-Up Headway Adjustment

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Critical Headway (s)		4.9763			4.9763			4.9763			4.9763	
Follow-Up Headway (s)		2.6087			2.6087			2.6087			2.6087	

Flow Computations, Capacity and v/c Ratios

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Entry Flow (v_e), pc/h		7.00			1312.00			470.00			610.00	
Entry Volume veh/h		7.00			1312.00			460.78			603.96	
Circulating Flow (v_c), pc/h	899			364			199			304		
Exiting Flow (v_{ex}), pc/h	305			15			1372			707		
Capacity (c_{pce}), pc/h		551.63			952.00			1126.49			1012.08	
Capacity (c), veh/h		551.63			952.00			1104.40			1002.06	
v/c Ratio (x)		0.01			1.38			0.42			0.60	

Delay and Level of Service

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Lane Control Delay (d), s/veh		6.7			191.8			7.7			11.9	
Lane LOS		A			F			A			B	
95% Queue, veh		0.0			54.1			2.1			4.2	
Approach Delay, s/veh	6.7			191.8			7.7			11.9		
Approach LOS	A			F			A			B		
Intersection Delay, s/veh LOS	110.1						F					