



City of Deltona

2345 Providence Blvd.
Deltona, FL 32725

Agenda

Planning and Zoning Board

Member Tom Burbank
Member Adam Walosik
Member Wendy Hickey
Member Victor M. Ramos
Member Noble Olasimbo
Member Herb Zischkau
Member Stony Sixma

Wednesday, August 19, 2015

7:00 PM

Deltona Commission Chambers

1. CALL TO ORDER:

2. ROLL CALL

3. APPROVAL OF MINUTES & AGENDA:

Approval of Minutes for July 15, 2015

4. PRESENTATIONS/AWARDS/REPORTS:

5. PUBLIC FORUM:

6. OLD BUSINESS:

7. NEW BUSINESS:

a. Rezoning Application, RZ15-003, Deltona Welcome Center, Ordinance No. 14-2015

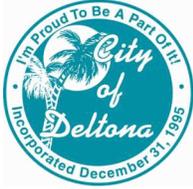
b. Rezoning Application RZ15-004, Gold Choice, Ordinance No. 15-2015

c. Ordinance No. 16-2015, Amending Section 110-311, RM-2, Multiple Family Residential Dwelling District, of the City Land Development Code.

8. STAFF COMMENTS:

9. BOARD/COMMITTEE MEMBERS COMMENTS:

10. ADJOURNMENT:



**DRAFT Minutes - Draft
Planning and Zoning Board**

Wednesday, July 15, 2015

7:00 PM

Council Chambers

1. CALL TO ORDER:

The meeting was called to order at 7:00 p.m.

2. ROLL CALL:

Also present: Chris Bowley, AICP, Planning and Development Services; Ron Paradise, Planning and Development Services; Kathrine Kyp, Planning and Development Services and Jane Shang, City Manager.

Present: 5 - Member Tom Burbank
Member Adam Walosik
Member Wendy Hickey
Member Noble Olasimbo
Member Stony Sixma

Excused: 2 - Member Victor M. Ramos
Member Herb Zischkau

3. APPROVAL OF MINUTES & AGENDA:

Approval of Minutes for - May 20, 2015.

Motion by Member Sixma, seconded by Member Hickey, to approve the Minutes for May 20, 2015. The motion carried unanimously.

For: 5 - Member Burbank, Member Walosik, Member Hickey,
Member Olasimbo and Member Sixma

4. PRESENTATIONS/AWARDS/REPORTS:

5. PUBLIC FORUM:

6. OLD BUSINESS:

7. NEW BUSINESS:

A. Rezoning Application, RZ15-002, Fernanda Place, Ordinance No. 05-2015

Mr. Paradise provided a brief summary regarding the rezoning application.

Discussion between Member Sixma and Mr. Paradise ensued regarding Osteen Cemetery Road and the current road improvements on Howland Boulevard. Mr. Paradise explained that all access will be directed into the subdivision through Howland Boulevard and not Osteen Cemetery Road.

Member Hickey asked, how would the emergency services personnel access the subdivision? Mr. Paradise explained that a secondary access to the north would provide access to Howland Boulevard and would be a dedicated access.

Member Olasimbo asked how the City would be addressing the floodplain area. Mr. Paradise explained that the conservation area and wetland area are located within the floodplain and any construction would be directed away from the floodplain area.

Member Walosik asked why the City will be taking on ownership of these roads as there are only two access roads and there would be no benefit for the City to take responsibility of them. Mr. Paradise stated that, the Homeowners Association over time would not be able to financially repair the roads within the subdivision. Member Olasimbo asked, whether the subdivision would be gated. Mr. Paradise replied there are no plans for the subdivision to be gated.

Dave Kelly, P.E., Evans Engineering 719 Irma Avenue Orlando, FL 32803 introduced himself to the board as the applicant, in case there were any questions.

Chairman Burbank open and closed the public hearing.

Discussion amongst the Board regarding the internal subdivision roads being privately owned or publicly owned ensued.

Motion by Member Olasimbo, to recommend for approval of the Rezoning Application, RZ15-002, Fernanda Place, Ordinance No. 05-2015 as presented. The motion failed for lack of second.

Motion by Member Hickey to recommend for approval of the Rezoning Application, RZ15-002, Fernanda Place, Ordinance No. 05-2015 with the condition that the roads to be provided within the development be privately owned. The motion carried unanimously.

For: 5 - Member Burbank, Member Walosik, Member Hickey, Member Olasimbo and Member Sixma

C. Ordinance No. 09-2015: Amending Section 110-806, Fences, Walls & Hedges, of the City's Land Development Code (LDC)

Mr. Bowley provided a brief summary regarding Ordinance No. 09-2015. The amendment within the Ordinance is recommending the change to hedges, specifically ones that grow above four feet in height and within the front yards. He explained that all requests would go before city staff as a check and balance for safety review.

Discussion regarding police safety and hedge height ensued amongst the board and staff.

Motion by Member Olasimbo, seconded by Member Walosik, to recommend for approval of Ordinance No. 09-2015: Amending Section 110-806, Fences, Walls & Hedges, of the City’s Land Development Code (LDC) . The motion carried by unanimously.

For: 5 - Member Burbank, Member Walosik, Member Hickey, Member Olasimbo and Member Sixma

B. Ordinance No. 27-2015: Amending Sections 58-34 and 58-37 of the City of Deltona’s Code of Ordinances allowing for an 811 Report to Release City Easement Abandonment

Mr. Bowley provided a brief summary of Ordinance No. 27-2015, amending the required documentation to include an 811 report as a potential alternative in lieu of a utility company letter of release for City easement abandonment. This could potentially expedite easement vacations for property owners of non-essential utility easements.

Motion by Member Olasimbo, seconded by Member Sixma, to recommend for approval of Ordinance No. 27-2015: Amending Sections 58-34 and 58-37 of the City of Deltona’s Code of Ordinances allowing for an 811 Report to Release City Easement Abandonment . The motion carried unanimously.

For: 5 - Member Burbank, Member Walosik, Member Hickey, Member Olasimbo and Member Sixma

8. STAFF COMMENTS:

9. BOARD/COMMITTEE MEMBERS COMMENTS:

10. ADJOURNMENT:

The meeting was adjourned at 7:37 p.m.

Tom Burbank, CHAIRMAN

Kathrine Kyp, RECORDING SECRETARY

NOTE: If any person decides to appeal any decision made by the Deltona Board/Committee with respect to any matter considered at this meeting or hearing, he/she will need a record of the proceedings, and for such purpose he/she may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based (F.S. 286.0105).

Individuals with disabilities needing assistance to participate in any of these proceedings should contact the City Clerk, Joyce Raftery 48 hours in advance of the meeting date and time at (386) 878-8500.



Staff Report

To: Planning and Zoning Board

From: Scott McGrath, Planner II

Date: August 7, 2015

Re: Project No. RZ15-003

A. Summary of Application:

Applicant: Mikal R Hale, P.E.
Traffic Engineering Solutions, Inc.

Request: amend the existing Deltona Welcome Center Business Planned Unit Development (BPUD) Development Agreement

Tax Parcel No.: 01-19-30-08-00-0020 & 01-19-30-08-00-0030

Property Acreage: ±1.98 Acres

Property Location: northeast corner of the intersection of Deltona Boulevard and Dirkson/DeBary Avenue.

Legal Description: Lots 2 and 3, Deltona Welcome Center, Map Book 45, pages 17 and 37, of the public records of Volusia County, Florida

Existing Zoning: BPUD

B. Background: The City has received an application to amend the Deltona Welcome Center Business Planned unit Development (BPUD) zoning Development Agreement to allow more than one convenience store with fuel pumps and to allow greater access via the allowance of a driveway cut on both Deltona Boulevard and Dirkson/DeBary Avenue. The request is submitted on behalf of the RaceTrac Corporation, who intends to build a nearly 6,000 square feet convenience store with 20 fuel pumps.

C. Support Information

Public Facilities:

- a. Potable Water: to be supplied by Deltona Water
- b. Sanitary Sewer: to be supplied by Deltona Water
- c. Fire Protection: Deltona Fire Station 62
- d. Law Enforcement: Volusia County Sheriff's Office (VCSO)
- e. Electricity: Duke Energy

D. Matters for Consideration:

Section 110-1101, Code of City Ordinances, states that the City shall consider the following matters when reviewing applications for amendments to the Official Zoning Map:

1. Whether it is consistent with all adopted elements of the Comprehensive Plan.

The original zoning and the proposed amendment are both consistent the goals and objectives of the City's Comprehensive plan.

Policy FLU1-7.26

The City shall seek to expand commercial, industrial and mixed-use development at appropriate locations, including the three target areas identified in accordance with economic development strategies and initiatives.

The subject property is located in one of three major gateways into the City, and is an ideal location for commercial development. Located with-in 600 feet of I-4, this property is an ideal fit for this use.

Policy T1-3.2

The City of Deltona shall maintain land use regulations which provide for the continued safe and efficient movement of local traffic, and maintain a transportation system which accommodates demand at an acceptable level of service. 9J-5.019(4)(c)

The Thoroughfares in the area operate well within the acceptable level of service threshold and the proposed use will largely serve passer-by traffic, thus not creating undue congestion.

Policy I1-PW3.5

The "infilling" of developed areas shall be directed to locations where an existing central system of potable water is available and where capacity is adequate to service the intended development or to those areas where funds have been committed for the provision of adequate capacity. 9J-5.011(2)(c)(1)

Development at this site would be an example of infill. Water and sewer utilities are already established in this area, and capacity is available.

2. Its impact upon the environment or natural resources.

The subject property has been planned for urban and highway interchange development for quite some time. The site is densely wooded with a mix of palms hardwoods and a few pines. Gopher tortoises are known to inhabit the site and the applicant will need to follow state and federal procedures to remove those animals. No other listed species are known to inhabit the site.

3. Its impact upon the economy of any affected area.

The development of a RaceTrac gas station will create short-term construction trickle down economic growth and later result in several full-time management positions as well as up to 20 part-time positions.

4. Notwithstanding the provisions of Article XIV of the Land Development Code, Ordinance No. 92-25 [Chapter 86, Code of Ordinances] as it may be amended from time to time, its impact upon necessary governmental services, such as schools, sewage disposal, potable water, drainage, fire and police protection, solid waste or transportation systems.

- a. **Schools:** This amendment should have no negative impact on local schools
- b. **Sewage Disposal:** Wastewater will be treated by Deltona Water. The proposed use will generate approximately 1,300 Gallons Per Day (GPD) of wastewater; the Deltona Water sanitary sewer system currently has 250,000 GPD remaining treatment capacity.
- c. **Potable Water:** Potable water will be supplied by Deltona Water. The proposed use will use approximately 1,300 GPD of potable water, which is equivalent to four residential dwelling units. Deltona Water has ample potable water capacity.
- d. **Drainage:** The site will not exceed an Impervious Surface Ratio (ISR) of 70%, leaving at minimum 30% of the site for absorbing runoff and rainfall.

The Deltona Welcome Center PUD has a master stormwater system to compensate for any onsite detention need that is not met.

e. **Transportation Systems:** The surrounding thoroughfares have capacity and currently operate at a level of “D”, with the exception of Dirkson/DeBary Avenue from Deltona Blvd to I-4 which operates at a level of “E”. The applicant has provided a Transportation Impact Analysis (TIA) that indicates the following:

- The proposed development will generate a total of 1,704 net new daily trips, of which 82 new trips will occur in the AM peak hour and 102 new trips will occur in the PM peak hour.
- A review of roadway capacity indicates that currently all roadway segments operate within their capacities and are projected to continue to do so at project build-out.
- An analysis of intersection capacity and operations reveals that the study intersections currently operate adequately. The intersections are projected to continue to operate adequately after project build-out.

5. Any changes in circumstances or conditions affecting the area.

The Deltona Welcome Center PUD has underperformed for many years; even with the widening of DeBary Avenue five years ago. The Proposed project represents an opportunity for renewed investment in the welcome center area. Restrictions on the site may be hampering development and reducing restrictions on uses and access may encourage development in this area.

6. Any mistakes in the original classification.

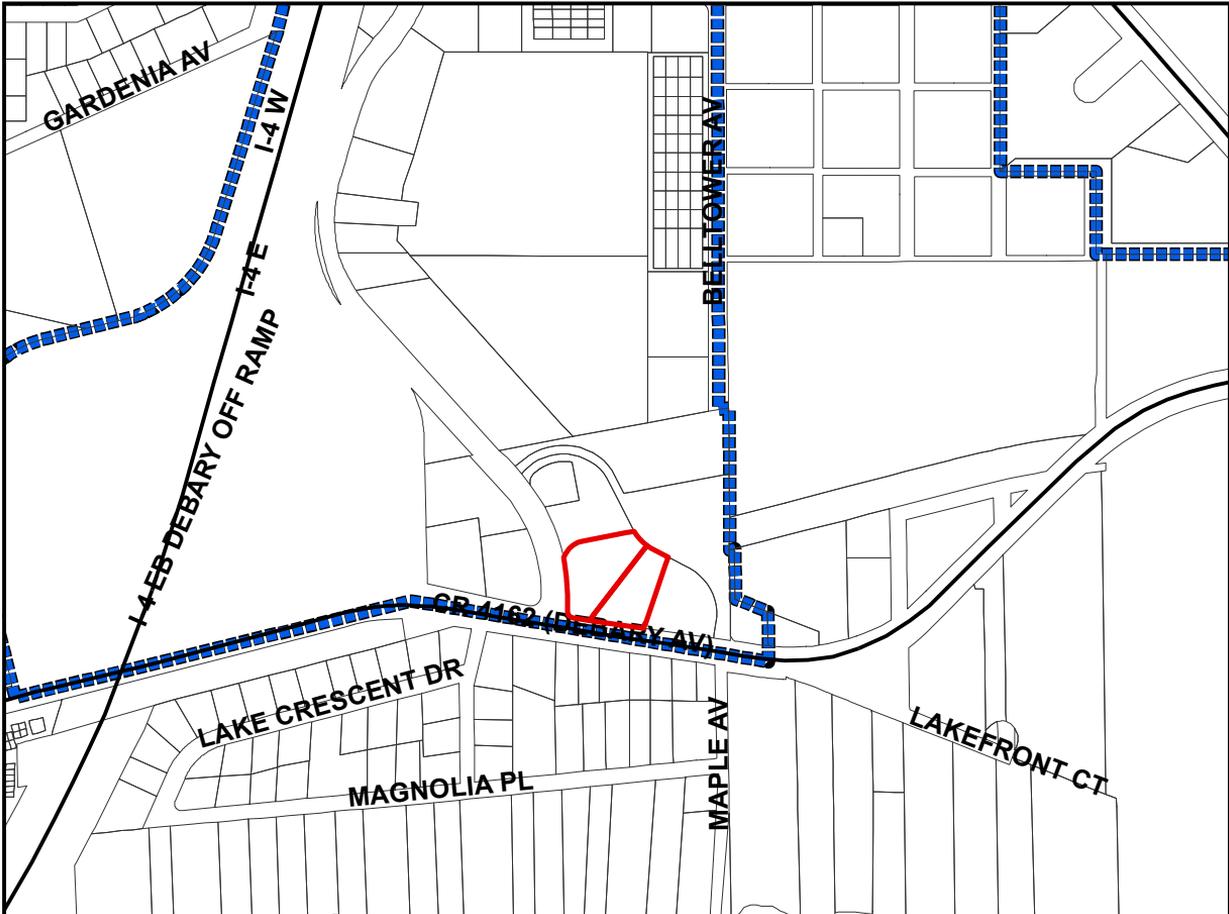
No known mistakes.

7. Its effect upon the public health, welfare, safety, or morals.

Amending the Developers Agreement and the development of this site should have any negative impacts on the health safety or welfare of the City or its residents.

CONCLUSION/STAFF RECOMMENDATION:

Staff recommends approval of Ordinance 15-2015, removing the restrictions multiple fueling stations and allowing access to Deltona Boulevard and Dirkson/DeBary Avenue.

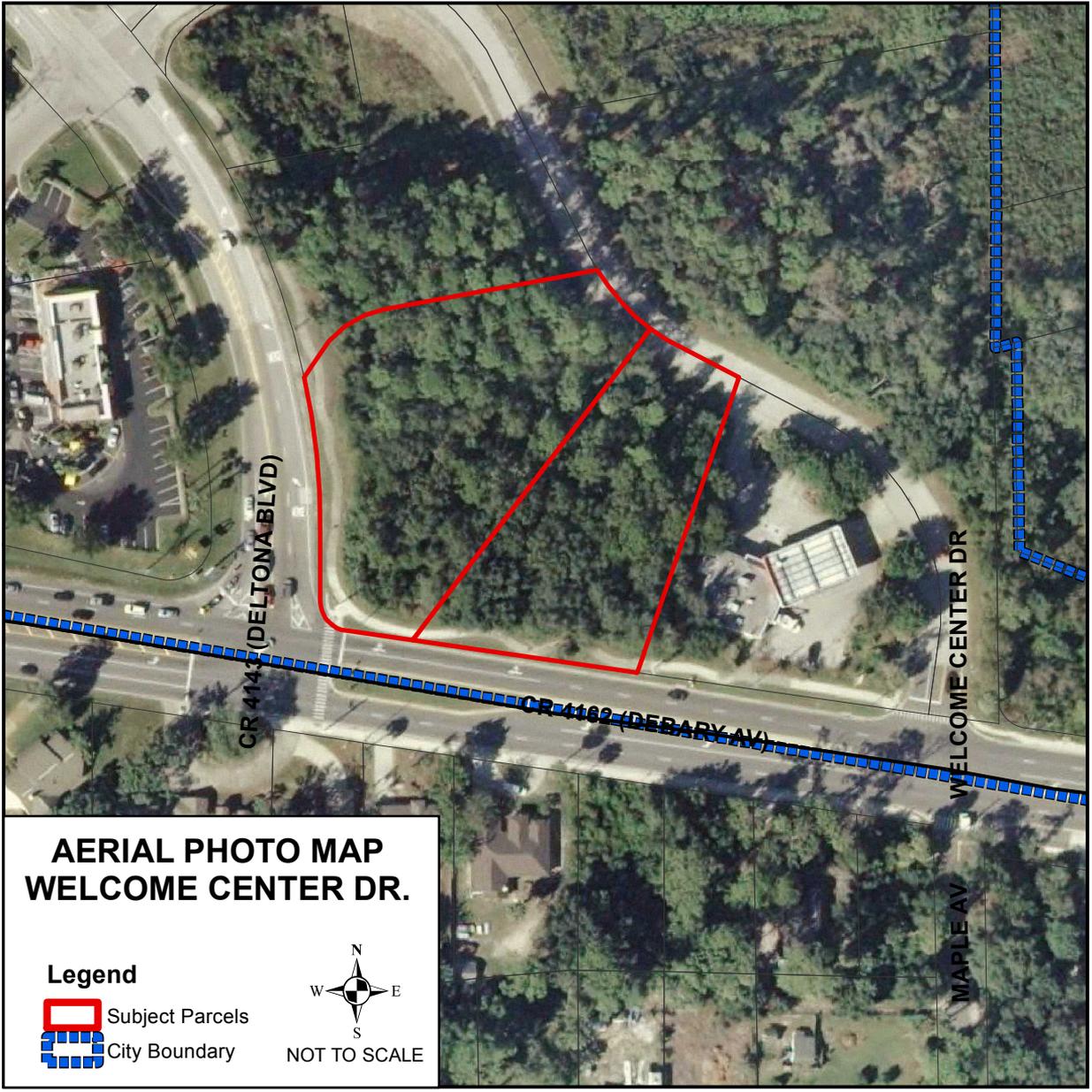


LOCATION MAP WELCOME CENTER DR.

- Legend**
-  Subject Parcels
 -  City Boundary



NOT TO SCALE



CR 4143 (DELTONA BLVD)

CR 4162 (DEBARY AV)

WELCOME CENTER DR

MAPLE AV

AERIAL PHOTO MAP WELCOME CENTER DR.

Legend

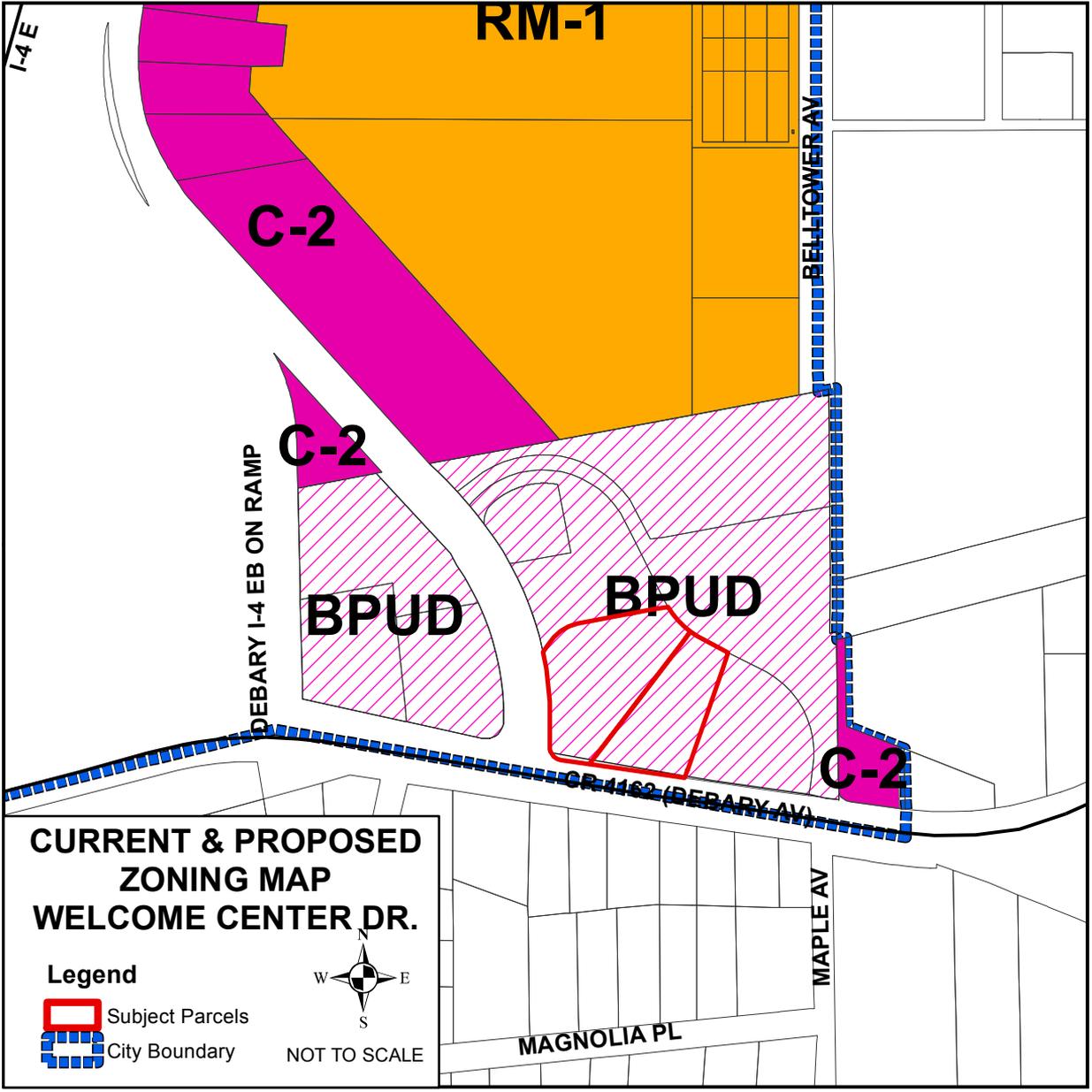


Subject Parcels

City Boundary



NOT TO SCALE



RM-1

C-2

C-2

BPUD

BPUD

BELL TOWER AV

DEBARY I-4 EB ON RAMP

MAPLE AV

C-2

CP 4162 (DEBARY AV)

MAGNOLIA PL

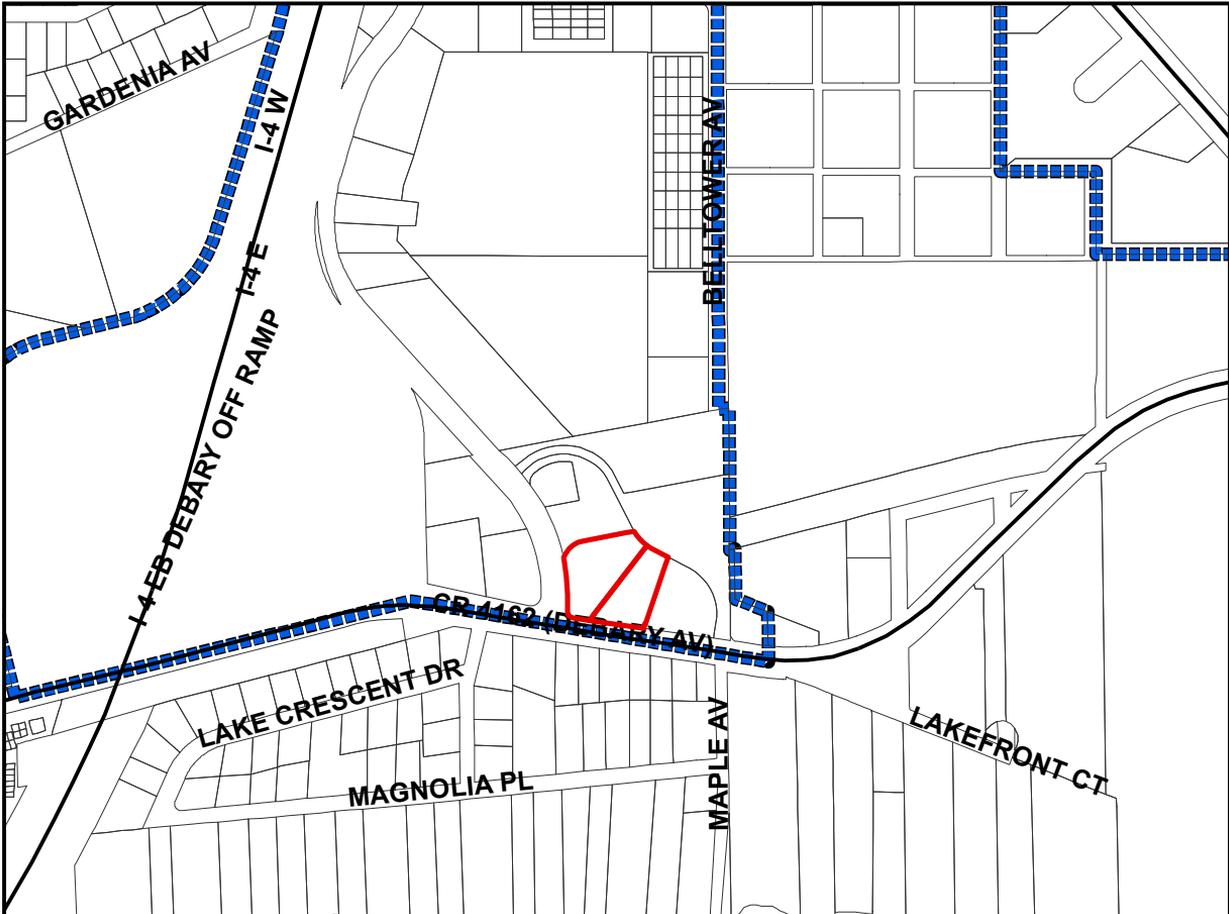
CURRENT & PROPOSED ZONING MAP WELCOME CENTER DR.

Legend

-  Subject Parcels
-  City Boundary



NOT TO SCALE



LOCATION MAP WELCOME CENTER DR.

- Legend**
-  Subject Parcels
 -  City Boundary



NOT TO SCALE



FLOOD MAP

Legend

-  A Flood Zone no BFE
-  AE Flood Zone w BFE
-  Subject Parcels
-  City Boundary



NOT TO SCALE

RACETRAC #863 – DEBARY AVE

Project № 15-027

May 2014

**TRAFFIC IMPACT ANALYSIS
CITY OF DELTONA
FLORIDA**

Prepared by:



Traffic & Mobility Consultants

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Orlando, Florida 32835

www.trafficmobility.com

(407) 531-5332

Prepared for:

RaceTrac Petroleum

3225 Cumberland Boulevard, Suite 100

Atlanta, GA 30339

EXECUTIVE SUMMARY

This traffic analysis was conducted to assess the traffic operations of the proposed RaceTrac convenience market with gas located in the northeast quadrant of the intersection of DeBary Avenue and Deltona Boulevard in the City of Deltona, Florida. The proposed project is a 5,928 square foot convenience store with 20 vehicle fueling positions. The analysis included a determination of project trip generation, a review of existing and projected roadway and intersection capacity, and a review of the proposed site access plan.

The results of the traffic analysis are summarized as follows:

- The proposed development will generate a total of 1,704 net new daily trips, of which 82 new trips will occur in the AM peak hour and 102 new trips will occur in the PM peak hour.
- A review of roadway capacity indicates that currently all roadway segments operate within their capacities and are projected to continue to do so at project buildout.
- An analysis of intersection capacity and operations reveals that the study intersections currently operate adequately. The intersections are projected to continue to operate adequately for the projected background and project buildout.
- A review of the project access plan reveals the following:
 - All proposed access points will operate with adequate capacity during the morning and evening peak hours.
 - The proposed driveway on DeBary Avenue allows westbound traffic to access the site without significantly affecting the adjacent signal. The limited right-in/right-out movements will minimize friction on the flow of traffic on the road.
 - The proposed driveway on Deltona Boulevard allows northbound traffic to access the site without significantly affecting the adjacent signal. The limited right-in/right-out movements and the existing right turn lane minimize friction from the driveway on the flow of traffic on the road.
 - The proposed site access plan is adequate for the site and presents minimal friction on the flow of traffic in the vicinity of the site.

PROFESSIONAL ENGINEERING CERTIFICATION

I hereby certify that I am a Professional Engineer properly registered in the State of Florida practicing with Traffic & Mobility Consultants, LLC, a corporation authorized to operate as an engineering business, CA-30024, by the State of Florida Department of Professional Regulation, Board of Professional Engineers, and that I have prepared or approved the evaluations, findings, opinions, conclusions, or technical advice attached hereto for:

PROJECT: RaceTrac # 863 – DeBary Ave

LOCATION: City of Deltona, Florida

CLIENT: RaceTrac Petroleum

I hereby acknowledge that the procedures and references used to develop the results contained in these computations are standard to the professional practice of Transportation Engineering as applied through professional judgment and experience.

NAME: Mohammed Abdallah

P.E. No.: Florida P.E. No. 56169

DATE: May 8, 2015

SIGNATURE: _____

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1.0 INTRODUCTION

This traffic analysis was conducted to assess the traffic operations of the proposed RaceTrac gas station located in the northeast quadrant of the intersection of DeBary Boulevard and Deltona Avenue Boulevard in the City of Deltona. The proposed project is a 5,928 square foot convenience store with 20 vehicle fueling positions. **Figure 1** depicts the site location and the surrounding transportation network. The proposed site plan is included in **Appendix A**.

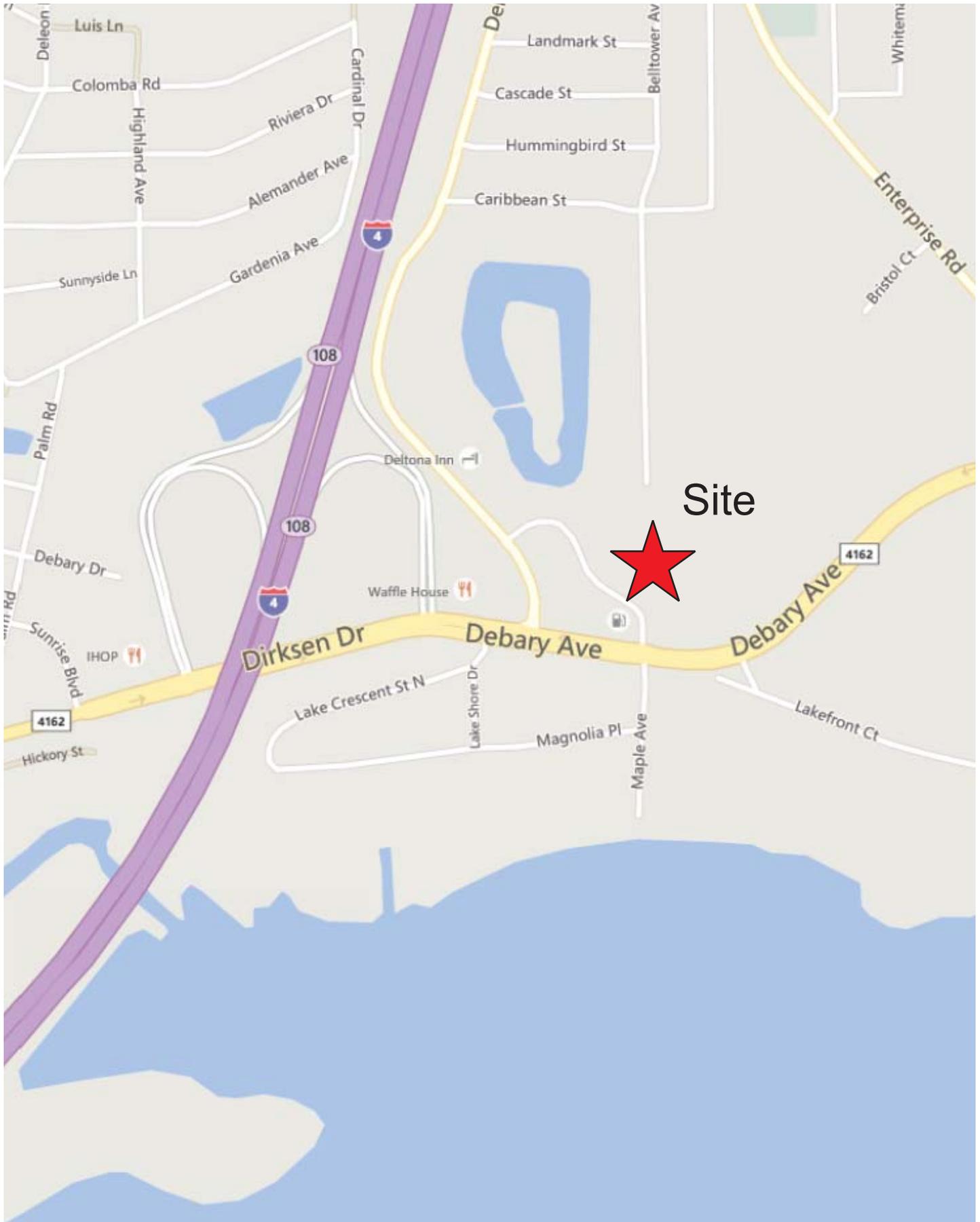
The analysis was conducted in accordance with City of Deltona requirements. The roadway segments considered in the analysis are listed in **Table 1**.

Table 1
Roadway Segments Analyzed

Roadway	Segment
DeBary Avenue	I-4 to Deltona Blvd
	Deltona Blvd to Enterprise Rd
Deltona Boulevard	DeBary Avenue to Enterprise Rd

Additionally, the intersections within the project's influence area were analyzed:

1. DeBary Avenue & I-4 NB Ramps
2. DeBary Avenue & Deltona Boulevard
3. DeBary Avenue & Welcome Center Drive
4. Deltona Boulevard & Welcome Center Drive



Site



2.0 PROJECT TRAFFIC

2.1 Trip Generation

Information published by the Institute of Transportation Engineers (ITE) in the *Trip Generation Manual, 9th Edition* was used to determine the trip generation of the existing land use and the proposed development as summarized in **Table 2**. The ITE information sheets are included in **Appendix B**.

Table 2
Trip Generation Analysis

Description	LU Code	Quantity	Daily		AM Peak Hour Trips				PM Peak Hour Trips			
			Rate	Trips	Rate	Enter	Exit	Total	Rate	Enter	Exit	Total
Convenience w/Gas	853	5.928 KSF	845.60	5,013	40.92	122	121	243	50.92	151	151	302
<i>Convenience Store Pass-by (66%)</i>				3,309	--	81	80	161	--	100	100	200
Net New Trips				1,704	--	41	41	82	--	51	51	102

Based on this calculation, the proposed development will generate a total of 1,704 net new daily trips, of which 82 new trips will occur in the AM Peak hour and 102 new trips will occur during the PM peak hour.

2.2 Trip Distribution/Assignment

The distribution of primary project trips was developed using engineering judgment and is based on the prevailing traffic flow patterns in the vicinity of the site and on the location of related attractions and productions in the area.

The trip distribution is described as follows:

To/from West on DeBary Ave	45%
To/from East on DeBary Ave	30%
To/from North on Deltona Blvd	25%

Pass-by traffic is drawn from the existing traffic stream on DeBary Avenue and Deltona Boulevard.

3.0 CAPACITY ANALYSIS

A capacity analysis was conducted for the roadway segments and intersections within the project's influence area. The analysis was prepared for existing traffic, projected background traffic, and projected traffic with proposed development.

3.1 Existing and Projected Background Traffic

Existing traffic volume counts were obtained at the study intersections during the AM and PM peak hours. The FDOT seasonal adjustment factor is 1.0 for the time period of the count, therefore, the data did not require seasonal adjustment. The existing volumes are illustrated in **Figure 2** and **Figure 3**. Existing PM peak hour segment volumes were extracted from the intersection volumes.

A review of historical traffic growth on the DeBary Avenue and Deltona Boulevard indicates that traffic volumes have been decreasing consistently over the past few years and through the year 2015. Therefore, to project 2016 background traffic volume on the roadway network, a conservative 2% annual growth rate was applied to existing traffic volumes. Historical traffic volumes are included in **Appendix C**.

3.2 Roadway Segment Analysis

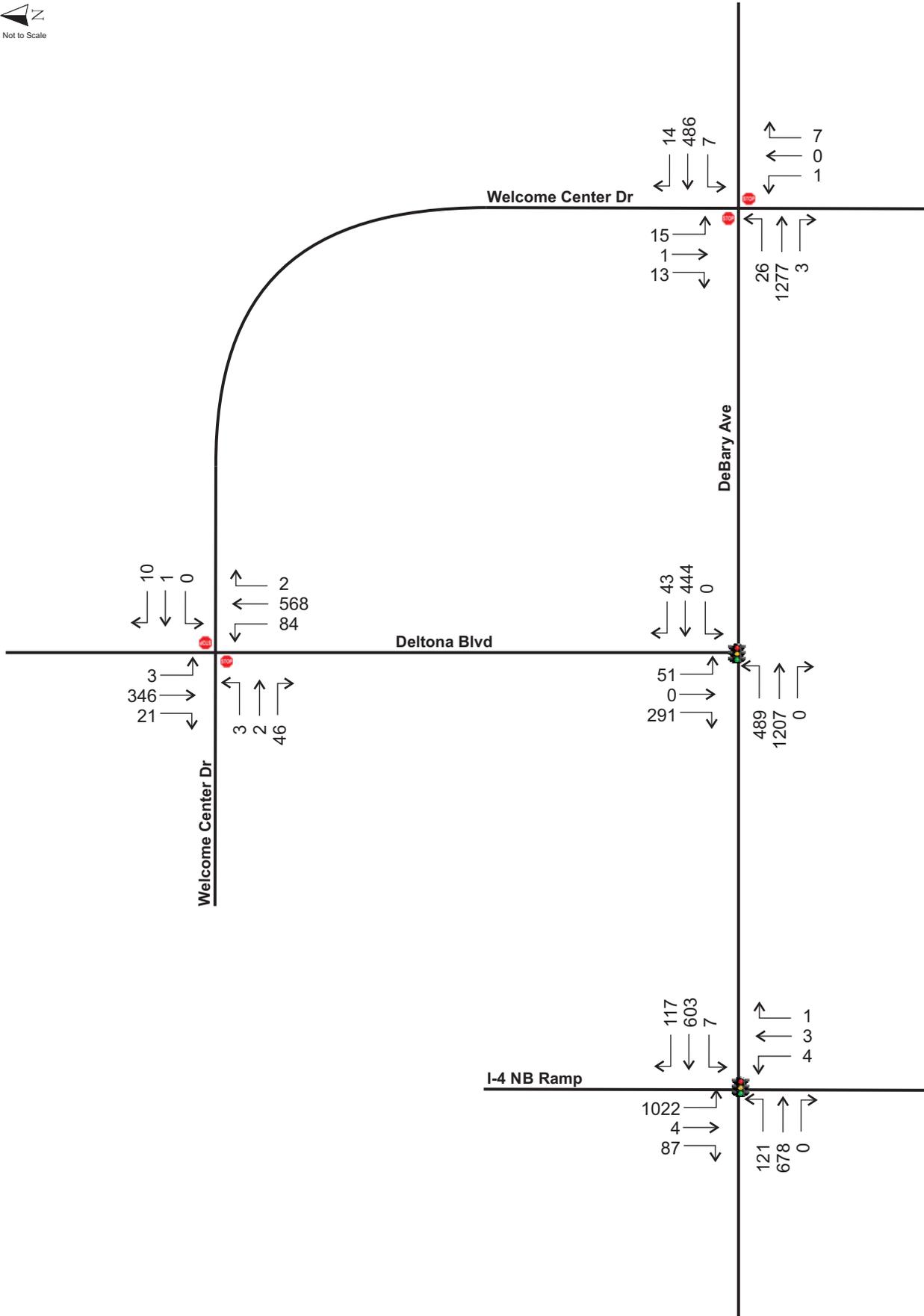
Roadway segment capacity was analyzed by comparing the traffic volumes on the study roadway segments to the service volumes at the adopted Level of Service (LOS) standard. The roadway segment analysis is summarized in **Table 3**.

**Table 3
Segment Capacity Analysis**

Roadway	Segment	# of Lns	Max Service Volume	Existing		Projected Backg'd		Project Trips		Total Projected	
				Volume	Deficient (Yes/No)?	Peak Hr	Deficient (Yes/No)?	Distrib (%)	Volume	Volume	Deficient (Yes/No)?
DeBary Ave	I-4 to Deltona Blvd	4	3,580	2,431	No	2,480	No	45%	46	2,526	No
	Deltona Blvd to Enterprise Rd	4	3,580	1,813	No	1,849	No	30%	31	1,880	No
Deltona Blvd	DeBary Ave to Enterprise Rd	2	1,480	874	No	891	No	25%	26	917	No

Existing Volumes were obtained from Intersection Volume Counts (2015)
Service Volume from FDOT LOS Tables

The results of the analysis indicate that all the study roadway segments currently operate within their adopted capacity and are projected to continue to do so at project buildout.



3.3 Intersection Analysis

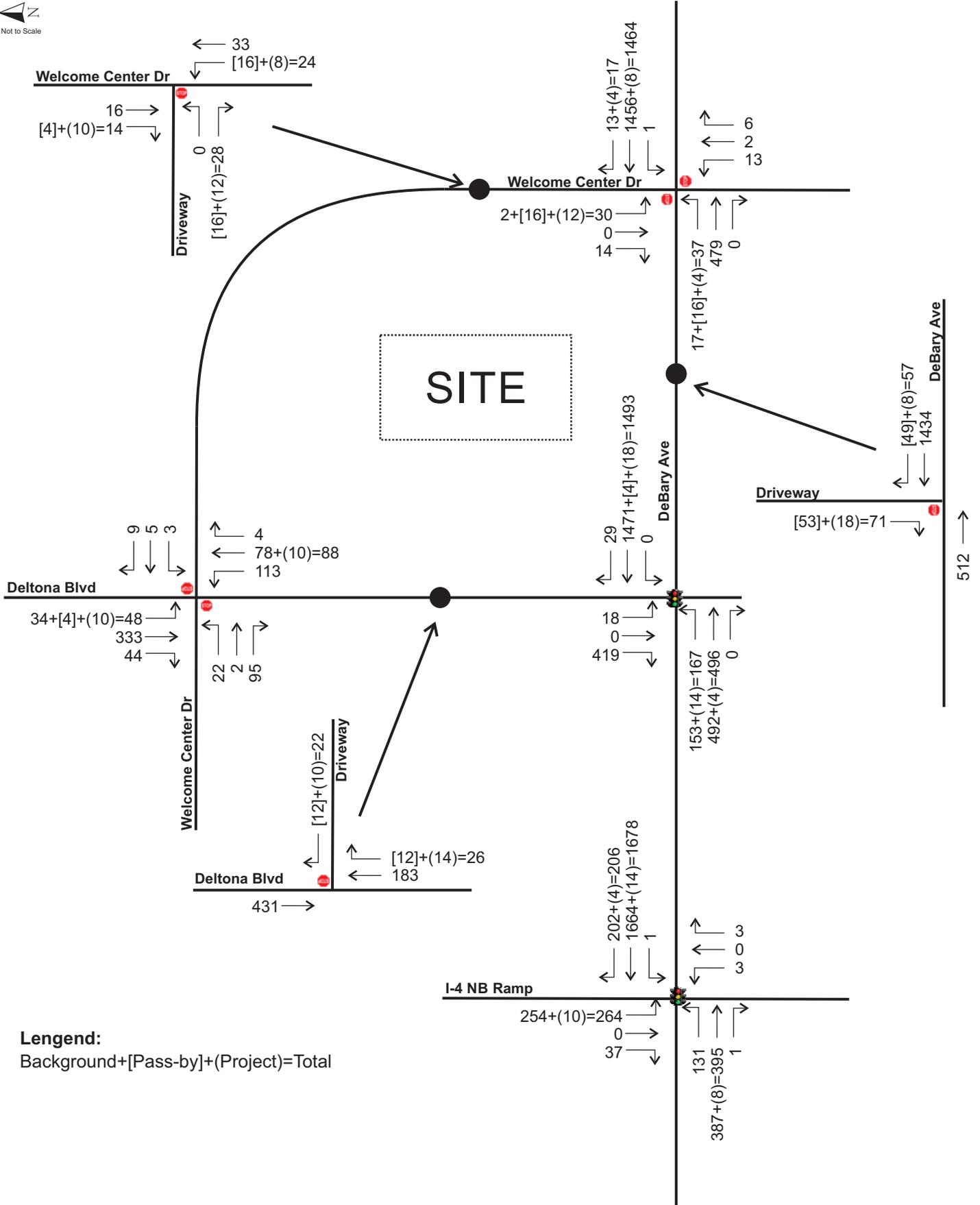
An intersection analysis was conducted using the *Synchro* software and the methods of the *Highway Capacity Manual (HCM) 2010*. The capacity analysis was performed using the existing and projected traffic volumes during the AM and PM peak hour. Existing turning movement counts were obtained at the study intersections and adjusted using an annual growth rate of 2%. **Figure 4** and **Figure 5** illustrate the projected AM and PM peak hour volumes, respectively.

A summary of the intersection capacity analysis is provided in **Table 4**. This analysis indicates that all the study intersections and the project's access points operate at satisfactory LOS and are projected to continue to do so at project buildout. The raw intersection turning movement counts are included in **Appendix D** and the detailed intersection capacity analysis worksheets are included in **Appendix E**.

Table 4
Intersection Capacity Analysis

Intersection	Control	Analysis	EB		WB		NB		SB		Overall	
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
AM Peak Hour												
DeBary Ave & I4 NB Ramps	Signal	Existing	4.6	A	2.0	A	--	--	72.3	E	10.8	B
		Projected	4.6	A	2.2	A	--	--	73.6	E	11.3	B
DeBary Ave & Deltona Blvd	Signal	Existing	14.9	B	52.6	D	--	--	63.9	E	44.2	D
		Projected	16.8	B	57.4	E	--	--	64.5	E	47.5	D
DeBary Ave & Welcome Ctr	Stop	Existing	13.5	B	8.4	A	20.1	C	18.8	C	--	--
		Projected	14.3	B	8.4	A	22.0	C	48.3	E	--	--
Deltona Blvd & Welcome Ctr	Stop	Existing	12.4	B	13.0	B	8.3	A	7.4	A	--	--
		Projected	12.7	B	13.6	B	8.3	A	7.5	A	--	--
Deltona Blvd & Driveway	Stop	Projected	--	--	9.3	A	--	--	--	--	--	--
DeBary Ave & Driveway	Stop	Projected	--	--	--	--	--	--	18.6	C	--	--
Welcome Center & Driveway	Stop	Projected	8.5	A	--	--	7.3	A	--	--	--	--
PM Peak Hour												
DeBary Ave & I4 NB Ramps	Signal	Existing	16.6	B	48.4	D	--	--	42.7	D	35.8	D
		Projected	16.8	B	49.2	D	--	--	45.2	D	37.1	D
DeBary Ave & Deltona Blvd	Signal	Existing	4.5	A	43.1	D	--	--	56.2	E	17.5	B
		Projected	5.0	A	44.6	D	--	--	56.4	E	18.3	B
DeBary Ave & Welcome Ctr	Stop	Existing	8.5	A	12.1	B	16.9	C	16.4	C	--	--
		Projected	8.8	A	12.0	B	17.5	C	26.7	D	--	--
Deltona Blvd & Welcome Ctr	Stop	Existing	12.3	B	13.4	B	8.2	A	8.7	A	--	--
		Projected	12.5	B	13.8	B	8.2	A	8.8	A	--	--
Deltona Blvd & Driveway	Stop	Projected	--	--	13.6	B	--	--	--	--	--	--
DeBary Ave & Driveway	Stop	Projected	--	--	--	--	--	--	10.5	B	--	--
Welcome Center & Driveway	Stop	Projected	8.7	A	--	--	7.4	A	--	--	--	--

Average delay is expressed in Seconds/Vehicle



3.4 Access Review

DeBary Avenue

A limited right-in/right-out driveway is proposed from DeBary Avenue. The location of the driveway is approximately 225 feet east of the signal at Deltona Boulevard. This driveway will allow traffic from westbound DeBary Avenue to access the site with minimal impact on the adjacent intersections. The limited movements minimize the friction presented by this driveway to the flow of traffic on DeBary Avenue.

Deltona Boulevard Access

A limited right-in/right-out driveway is proposed on Deltona Boulevard. The location of the driveway is approximately 250 feet north of the signal at DeBary Avenue. This driveway will allow traffic from northbound Deltona Boulevard to access the site with minimal impact on the adjacent intersections. The limited movements and the location of the driveway in an existing right-turn deceleration lane, minimize the friction presented by this driveway to the flow of traffic on Deltona Boulevard.

Welcome Center Drive Access

A driveway is proposed on Welcome Center Drive, which is a local access road located to the east of the site. The full access driveway will serve traffic movements that are otherwise restricted at the site's primary access points on Deltona Boulevard and DeBary Avenue.

Generally, the proposed site access allows for adequate traffic flow to and from the site and presents minimal friction to the primary roadways and intersections in the vicinity of the site.

4.0 STUDY CONCLUSIONS

This traffic analysis was conducted to assess the traffic operations of the proposed RaceTrac convenience market with gas located in the northeast quadrant of the intersection of DeBary Avenue and Deltona Boulevard in the City of Deltona, Florida. The proposed project is a 5,928 square foot convenience store with 20 vehicle fueling positions. The analysis included a determination of project trip generation, a review of existing and projected roadway and intersection capacity, and a review of the proposed site access plan.

The results of the traffic analysis are summarized as follows:

- The proposed development will generate a total of 1,704 net new daily trips, of which 82 new trips will occur in the AM peak hour and 102 new trips will occur in the PM peak hour.
- A review of roadway capacity indicates that currently all roadway segments operate within their capacities and are projected to continue to do so at project buildout.
- An analysis of intersection capacity and operations reveals that the study intersections currently operate adequately. The intersections are projected to continue to operate adequately for the projected background and project buildout.
- A review of the project access plan reveals the following:
 - All proposed access points will operate with adequate capacity during the morning and evening peak hours.
 - The proposed driveway on DeBary Avenue allows westbound traffic to access the site without significantly affecting the adjacent signal. The limited right-in/right-out movements will minimize friction on the flow of traffic on the road.
 - The proposed driveway on Deltona Boulevard allows northbound traffic to access the site without significantly affecting the adjacent signal. The limited right-in/right-out movements and the existing right turn lane minimize friction from the driveway on the flow of traffic on the road.
 - The proposed site access plan is adequate for the site and presents minimal friction on the flow of traffic in the vicinity of the site.

APPENDICES

Appendix A
Proposed Site Plan

Appendix B
ITE Information Sheets

Convenience Market with Gasoline Pumps (853)

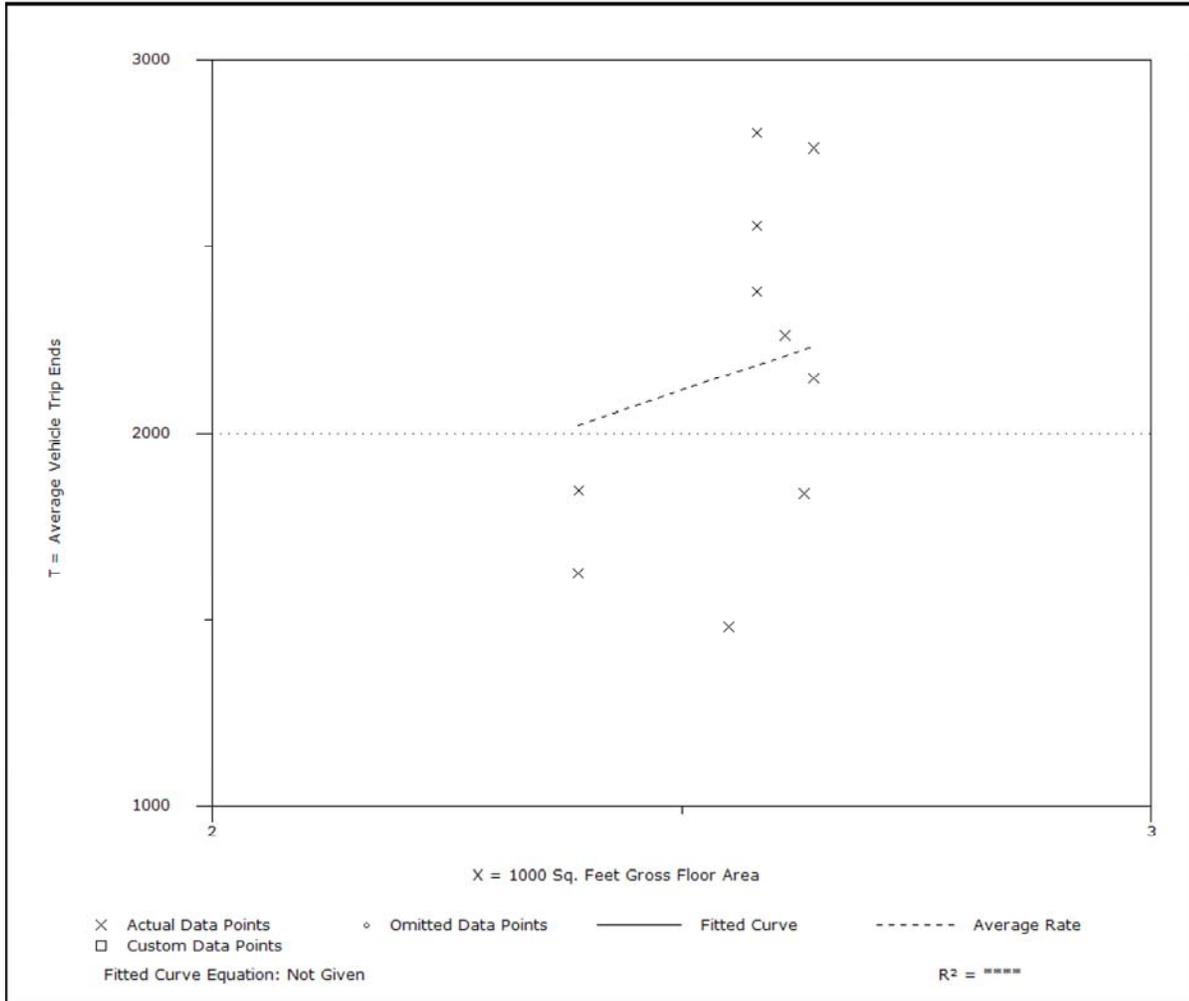
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday

Number of Studies: 10
Average 1000 Sq. Feet GFA: 3
Directional Distribution: 50% entering, 50% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
845.60	578.52 - 1,084.72	163.67

Data Plot and Equation



Trip Generation, 9th Edition

Convenience Market with Gasoline Pumps (853)

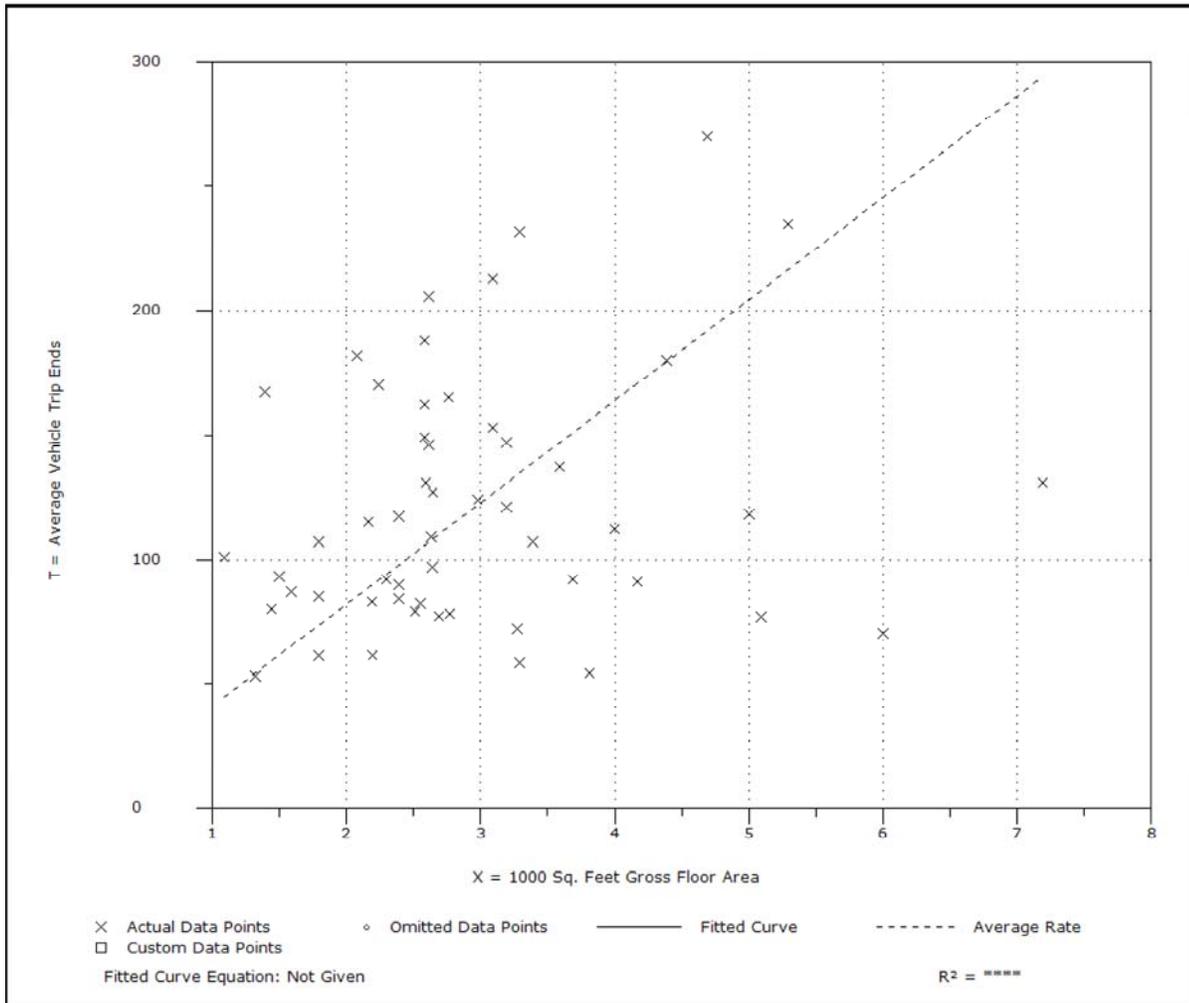
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday
Peak Hour of Adjacent Street Traffic
One Hour Between 7 and 9 a.m.

Number of Studies: 53
 Average 1000 Sq. Feet GFA: 3
 Directional Distribution: 50% entering, 50% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
40.92	11.67 - 119.29	20.75

Data Plot and Equation



Trip Generation, 9th Edition

Convenience Market with Gasoline Pumps (853)

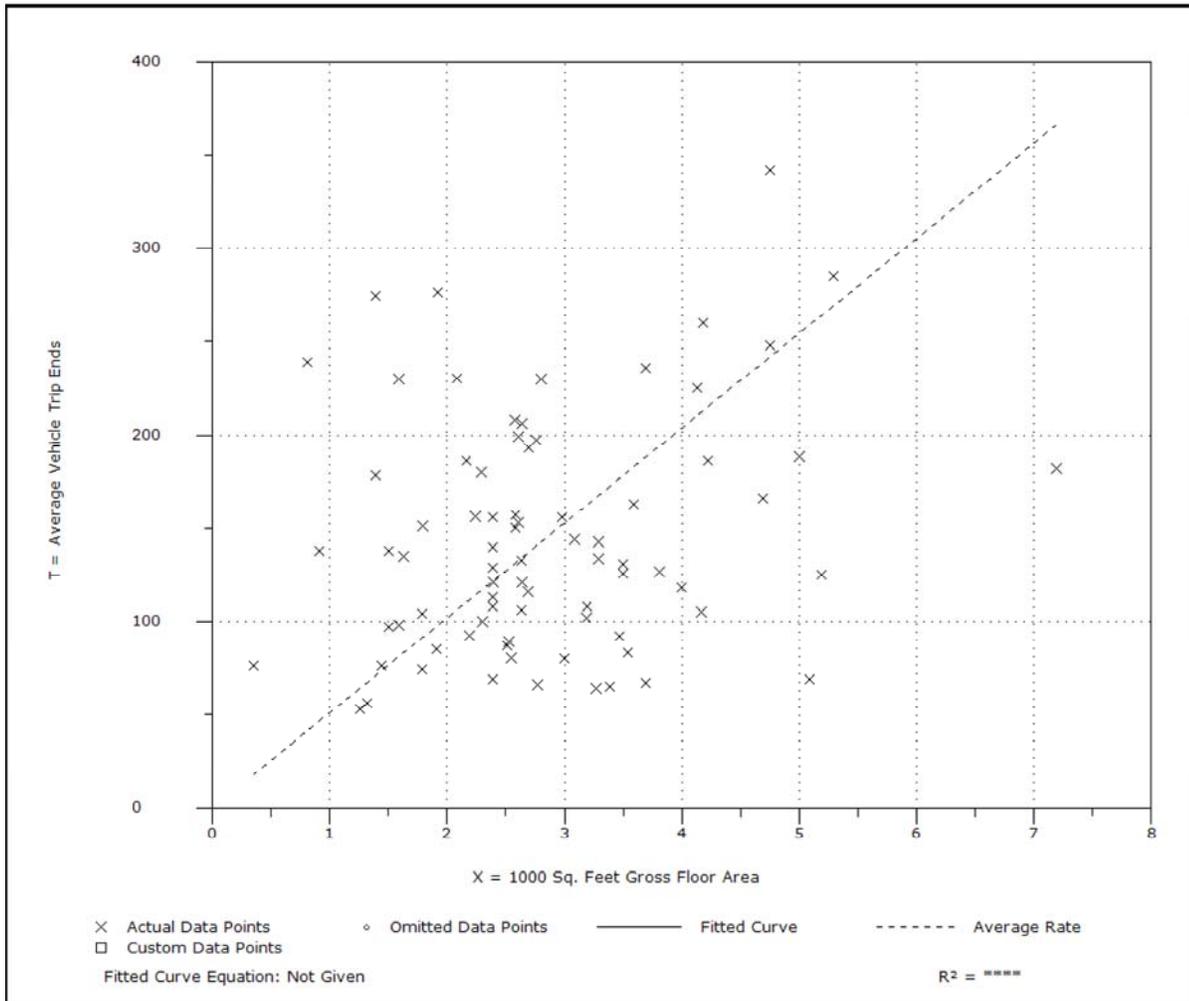
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday
Peak Hour of Adjacent Street Traffic
One Hour Between 4 and 6 p.m.

Number of Studies: 78
 Average 1000 Sq. Feet GFA: 3
 Directional Distribution: 50% entering, 50% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
50.92	13.53 - 292.89	32.15

Data Plot and Equation



Trip Generation, 9th Edition

Appendix C
Historical Volumes & Seasonal Factors

2012 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
 CATEGORY: 7900 VOLUSIA COUNTYWIDE

MOCF: 0.95

WEEK	DATES	SF	PSCF
1	01/01/2012 - 01/07/2012	1.01	1.07
2	01/08/2012 - 01/14/2012	1.00	1.06
3	01/15/2012 - 01/21/2012	1.00	1.06
4	01/22/2012 - 01/28/2012	0.98	1.04
* 5	01/29/2012 - 02/04/2012	0.97	1.03
* 6	02/05/2012 - 02/11/2012	0.95	1.00
* 7	02/12/2012 - 02/18/2012	0.94	0.99
* 8	02/19/2012 - 02/25/2012	0.93	0.98
* 9	02/26/2012 - 03/03/2012	0.93	0.98
*10	03/04/2012 - 03/10/2012	0.93	0.98
*11	03/11/2012 - 03/17/2012	0.92	0.97
*12	03/18/2012 - 03/24/2012	0.93	0.98
*13	03/25/2012 - 03/31/2012	0.94	0.99
*14	04/01/2012 - 04/07/2012	0.95	1.00
*15	04/08/2012 - 04/14/2012	0.96	1.01
*16	04/15/2012 - 04/21/2012	0.97	1.03
*17	04/22/2012 - 04/28/2012	0.98	1.04
18	04/29/2012 - 05/05/2012	0.99	1.05
19	05/06/2012 - 05/12/2012	1.00	1.06
20	05/13/2012 - 05/19/2012	1.01	1.07
21	05/20/2012 - 05/26/2012	1.02	1.08
22	05/27/2012 - 06/02/2012	1.02	1.08
23	06/03/2012 - 06/09/2012	1.02	1.08
24	06/10/2012 - 06/16/2012	1.03	1.09
25	06/17/2012 - 06/23/2012	1.03	1.09
26	06/24/2012 - 06/30/2012	1.04	1.10
27	07/01/2012 - 07/07/2012	1.04	1.10
28	07/08/2012 - 07/14/2012	1.04	1.10
29	07/15/2012 - 07/21/2012	1.05	1.11
30	07/22/2012 - 07/28/2012	1.05	1.11
31	07/29/2012 - 08/04/2012	1.05	1.11
32	08/05/2012 - 08/11/2012	1.05	1.11
33	08/12/2012 - 08/18/2012	1.05	1.11
34	08/19/2012 - 08/25/2012	1.05	1.11
35	08/26/2012 - 09/01/2012	1.04	1.10
36	09/02/2012 - 09/08/2012	1.04	1.10
37	09/09/2012 - 09/15/2012	1.04	1.10
38	09/16/2012 - 09/22/2012	1.03	1.09
39	09/23/2012 - 09/29/2012	1.02	1.08
40	09/30/2012 - 10/06/2012	1.01	1.07
41	10/07/2012 - 10/13/2012	1.00	1.06
42	10/14/2012 - 10/20/2012	0.99	1.05
43	10/21/2012 - 10/27/2012	1.00	1.06
44	10/28/2012 - 11/03/2012	1.00	1.06
45	11/04/2012 - 11/10/2012	1.00	1.06
46	11/11/2012 - 11/17/2012	1.00	1.06
47	11/18/2012 - 11/24/2012	1.01	1.07
48	11/25/2012 - 12/01/2012	1.01	1.07
49	12/02/2012 - 12/08/2012	1.01	1.07
50	12/09/2012 - 12/15/2012	1.01	1.07
51	12/16/2012 - 12/22/2012	1.01	1.07
52	12/23/2012 - 12/29/2012	1.00	1.06
53	12/30/2012 - 12/31/2012	1.00	1.06

* PEAK SEASON

08-FEB-2013 12:30:05

830UPD [1,0,0,1]

5_7900_PKSEASON.TXT

Appendix D
Intersections Traffic Volume

TURNING MOVEMENT COUNT ANALYSIS
AUTOS & TRUCKS

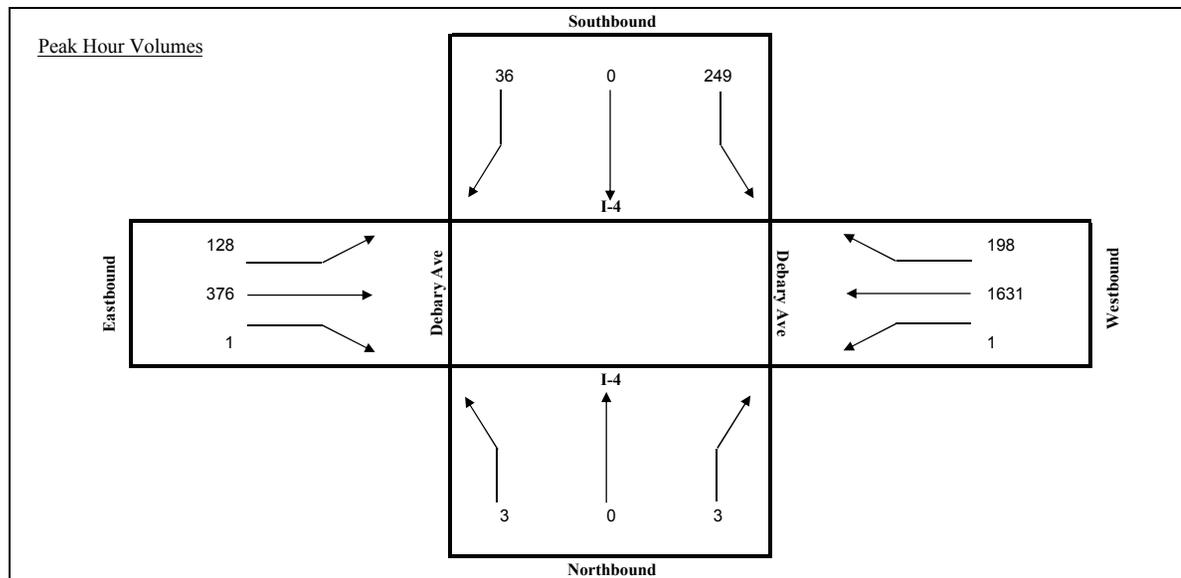
Intersection (N/S): I-4

Intersection (E/W): Debary Ave

Date: 5/7/2015

Start	End	I-4			I-4			Debary Ave			Debary Ave			TOTAL
		L	T	R	L	T	R	L	T	R	L	T	R	
7:00 AM	7:15 AM	3	0	2	37	0	2	28	59	0	1	422	37	591
7:15 AM	7:30 AM	1	0	0	61	0	8	25	96	0	0	444	40	675
7:30 AM	7:45 AM	1	0	1	55	0	6	33	88	1	1	389	51	626
7:45 AM	8:00 AM	0	0	0	70	0	12	29	105	0	0	420	48	684
8:00 AM	8:15 AM	1	0	2	63	0	10	41	87	0	0	378	59	641
8:15 AM	8:30 AM	0	0	1	59	0	9	30	66	1	1	359	47	573
8:30 AM	8:45 AM	1	0	1	72	0	17	33	49	0	1	303	36	513
8:45 AM	9:00 AM	1	0	0	51	0	11	36	51	1	2	275	32	460

Total for:	7:00 AM	8:00 AM	5	0	3	223	0	28	115	348	1	2	1675	176	2576
Total for:	8:00 AM	9:00 AM	3	0	4	245	0	47	140	253	2	4	1315	174	2187
Tota Peak Hour:	7:15 AM	8:15 AM	3	0	3	249	0	36	128	376	1	1	1631	198	2626
Overall PHF:	0.96														



**TURNING MOVEMENT COUNT ANALYSIS
AUTOS & TRUCKS**

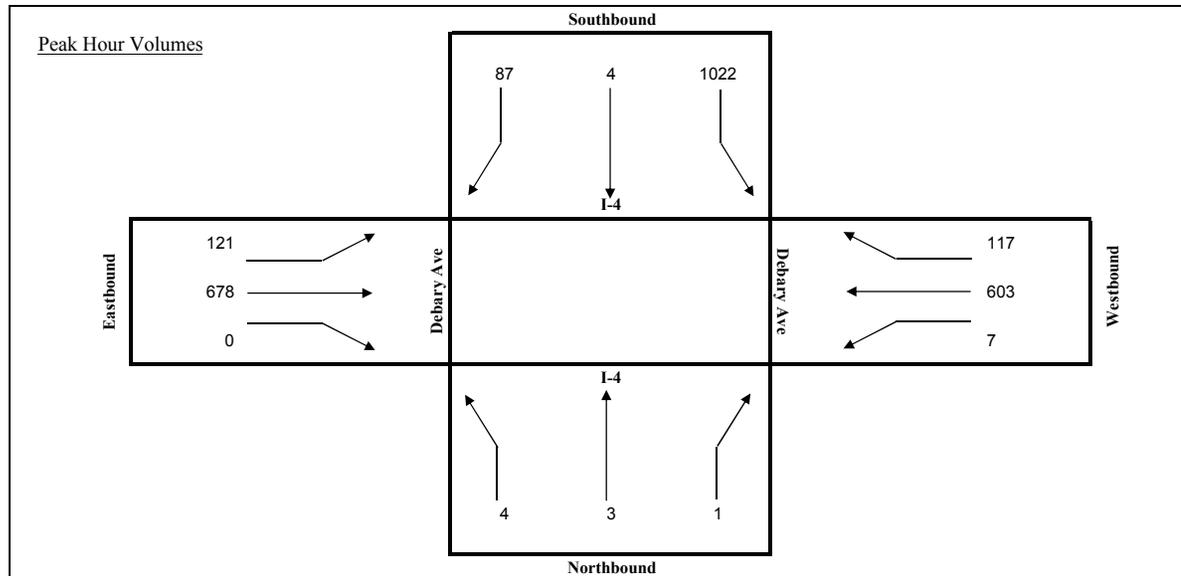
Intersection (N/S): I-4

Intersection (E/W): Debary Ave

Date: 5/7/2015

Start	End	I-4			I-4			Debary Ave			Debary Ave			TOTAL
		L	T	R	L	T	R	L	T	R	L	T	R	
4:00 PM	4:15 PM	1	1	0	259	2	23	24	103	0	2	130	37	582
4:15 PM	4:30 PM	1	0	1	268	0	28	27	108	0	2	122	29	586
4:30 PM	4:45 PM	2	1	1	246	1	33	25	111	0	6	137	31	594
4:45 PM	5:00 PM	0	0	0	222	1	25	30	133	0	1	155	30	597
5:00 PM	5:15 PM	1	2	0	243	2	22	25	175	0	3	141	28	642
5:15 PM	5:30 PM	2	1	1	291	0	22	36	169	0	1	163	32	718
5:30 PM	5:45 PM	1	0	0	266	1	18	30	201	0	2	144	27	690
5:45 PM	6:00 PM	0	1	1	205	0	10	27	166	0	3	137	36	586

Total for:	4:00 PM	5:00 PM	4	2	2	995	4	109	106	455	0	11	544	127	2359
Total for:	5:00 PM	6:00 PM	4	4	2	1005	3	72	118	711	0	9	585	123	2636
Tota Peak Hour:	4:45 PM	5:45 PM	4	3	1	1022	4	87	121	678	0	7	603	117	2647
Overall PHF:	0.92														

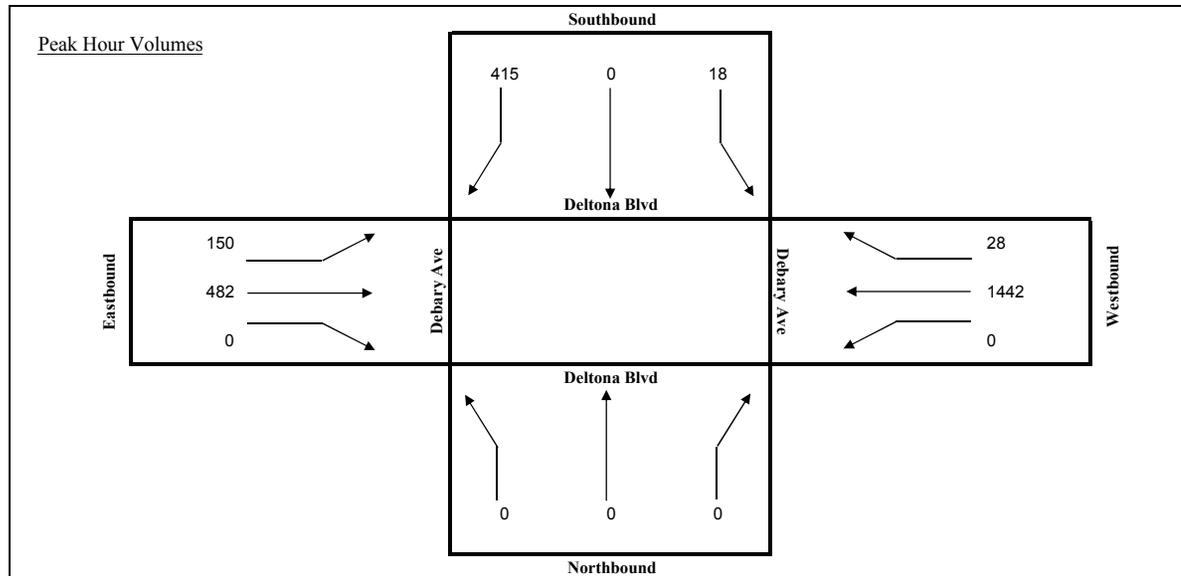


TURNING MOVEMENT COUNT ANALYSIS
AUTOS & TRUCKS

Intersection (N/S): Deltona Blvd
 Intersection (E/W): Debary Ave
 Date: 5/7/2015

Start	End	Deltona Blvd			Deltona Blvd			Debary Ave			Debary Ave			TOTAL
		L	T	R	L	T	R	L	T	R	L	T	R	
7:00 AM	7:15 AM	0	0	0	7	0	96	25	74	0	0	360	6	568
7:15 AM	7:30 AM	0	0	0	3	0	110	41	120	0	0	378	4	656
7:30 AM	7:45 AM	0	0	0	7	0	105	36	107	0	0	340	10	605
7:45 AM	8:00 AM	0	0	0	5	0	99	40	140	0	0	372	5	661
8:00 AM	8:15 AM	0	0	0	3	0	101	33	115	0	0	352	9	613
8:15 AM	8:30 AM	0	0	0	7	0	88	29	99	0	0	336	11	570
8:30 AM	8:45 AM	0	0	0	2	0	75	18	108	0	0	275	9	487
8:45 AM	9:00 AM	0	0	0	6	0	81	23	87	0	0	241	8	446

Total for:	7:00 AM	8:00 AM	0	0	0	22	0	410	142	441	0	0	1450	25	2490
Total for:	8:00 AM	9:00 AM	0	0	0	18	0	345	103	409	0	0	1204	37	2116
Tota Peak Hour:	7:15 AM	8:15 AM	0	0	0	18	0	415	150	482	0	0	1442	28	2535
Overall PHF:	0.96														

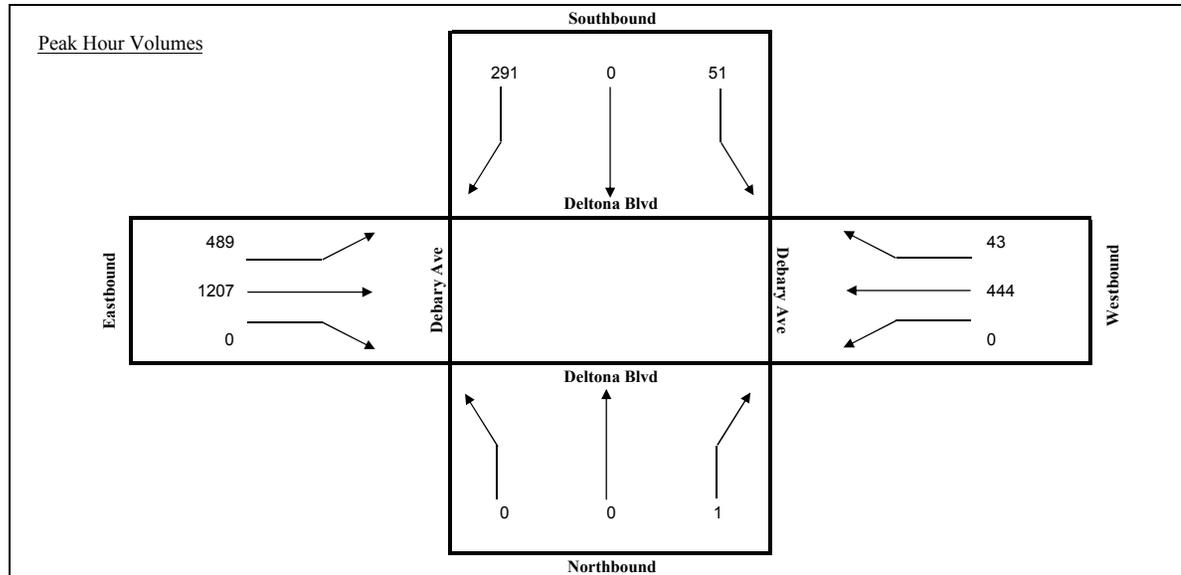


**TURNING MOVEMENT COUNT ANALYSIS
AUTOS & TRUCKS**

Intersection (N/S): Deltona Blvd
 Intersection (E/W): Debary Ave
 Date: 5/7/2015

Start	End	Deltona Blvd			Deltona Blvd			Debary Ave			Debary Ave			TOTAL
		L	T	R	L	T	R	L	T	R	L	T	R	
4:00 PM	4:15 PM	0	0	0	9	0	53	88	274	0	0	115	3	542
4:15 PM	4:30 PM	0	0	1	11	0	62	115	280	0	0	99	4	572
4:30 PM	4:45 PM	0	0	1	12	0	70	121	242	0	0	102	5	553
4:45 PM	5:00 PM	0	0	0	14	0	80	133	230	0	0	109	9	575
5:00 PM	5:15 PM	0	0	0	11	0	74	115	298	0	0	102	11	611
5:15 PM	5:30 PM	0	0	1	15	0	72	122	341	0	0	125	8	684
5:30 PM	5:45 PM	0	0	0	11	0	65	119	338	0	0	108	15	656
5:45 PM	6:00 PM	0	0	0	15	0	57	94	274	0	0	123	9	572

Total for:	4:00 PM	5:00 PM	0	0	2	46	0	265	457	1026	0	0	425	21	2242
Total for:	5:00 PM	6:00 PM	0	0	1	52	0	268	450	1251	0	0	458	43	2523
Tota Peak Hour:	4:45 PM	5:45 PM	0	0	1	51	0	291	489	1207	0	0	444	43	2526
Overall PHF:	0.92														



TURNING MOVEMENT COUNT ANALYSIS
AUTOS & TRUCKS

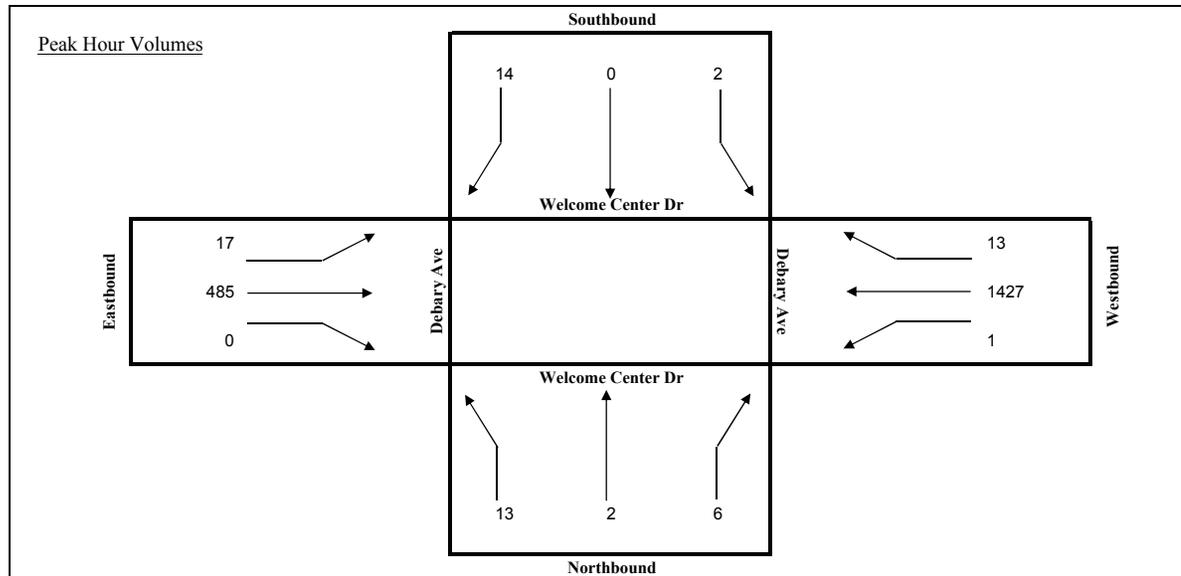
Intersection (N/S): Welcome Center Dr

Intersection (E/W): Debary Ave

Date: 5/7/2015

Start	End	Welcome Center Dr			Welcome Center Dr			Debary Ave			Debary Ave			TOTAL
		L	T	R	L	T	R	L	T	R	L	T	R	
7:00 AM	7:15 AM	2	0	0	2	0	2	2	78	0	0	357	2	445
7:15 AM	7:30 AM	1	1	3	0	0	5	2	120	0	0	370	1	503
7:30 AM	7:45 AM	5	0	1	1	0	3	5	108	0	0	337	3	463
7:45 AM	8:00 AM	4	0	0	0	0	0	3	146	0	0	375	4	532
8:00 AM	8:15 AM	3	1	2	1	0	6	7	111	0	1	345	5	482
8:15 AM	8:30 AM	3	0	0	2	0	6	6	98	2	1	328	4	450
8:30 AM	8:45 AM	2	1	1	4	0	2	5	103	1	0	270	6	395
8:45 AM	9:00 AM	4	0	3	3	0	4	6	84	0	0	246	5	355

Total for:	7:00 AM	8:00 AM	12	1	4	3	0	10	12	452	0	0	1439	10	1943
Total for:	8:00 AM	9:00 AM	12	2	6	10	0	18	24	396	3	2	1189	20	1682
Tota Peak Hour:	7:15 AM	8:15 AM	13	2	6	2	0	14	17	485	0	1	1427	13	1980
Overall PHF:	0.93														



**TURNING MOVEMENT COUNT ANALYSIS
AUTOS & TRUCKS**

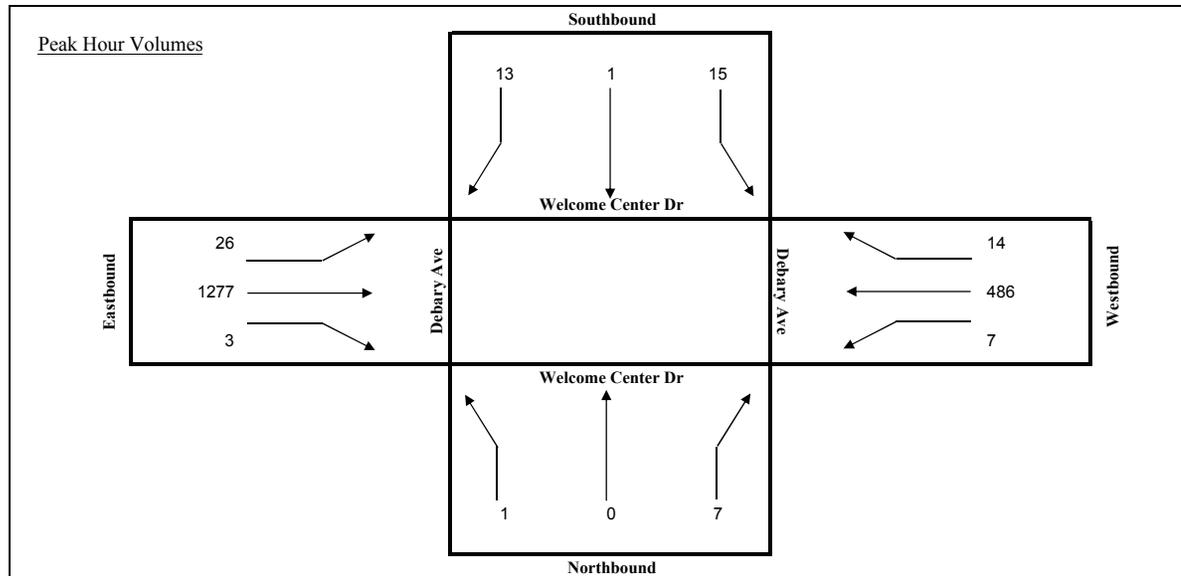
Intersection (N/S): Welcome Center Dr

Intersection (E/W): Debary Ave

Date: 5/7/2015

Start	End	Welcome Center Dr			Welcome Center Dr			Debary Ave			Debary Ave			TOTAL
		NB			SB			EB			WB			
		L	T	R	L	T	R	L	T	R	L	T	R	
4:00 PM	4:15 PM	1	0	2	2	0	3	2	250	0	1	116	1	378
4:15 PM	4:30 PM	0	0	1	3	1	5	5	287	2	2	101	2	409
4:30 PM	4:45 PM	1	0	0	2	0	2	6	260	0	0	103	5	379
4:45 PM	5:00 PM	2	0	3	4	0	6	3	235	4	3	116	3	379
5:00 PM	5:15 PM	0	0	0	5	1	3	8	302	0	0	107	7	433
5:15 PM	5:30 PM	0	0	2	3	0	1	5	351	1	1	130	2	496
5:30 PM	5:45 PM	1	0	2	5	0	3	6	343	1	4	121	2	488
5:45 PM	6:00 PM	0	0	3	2	0	6	7	281	1	2	128	3	433

Total for:	4:00 PM	5:00 PM	4	0	6	11	1	16	16	1032	6	6	436	11	1545
Total for:	5:00 PM	6:00 PM	1	0	7	15	1	13	26	1277	3	7	486	14	1850
Total Peak Hour:	5:00 PM	6:00 PM	1	0	7	15	1	13	26	1277	3	7	486	14	1850
Overall PHF:	0.93														

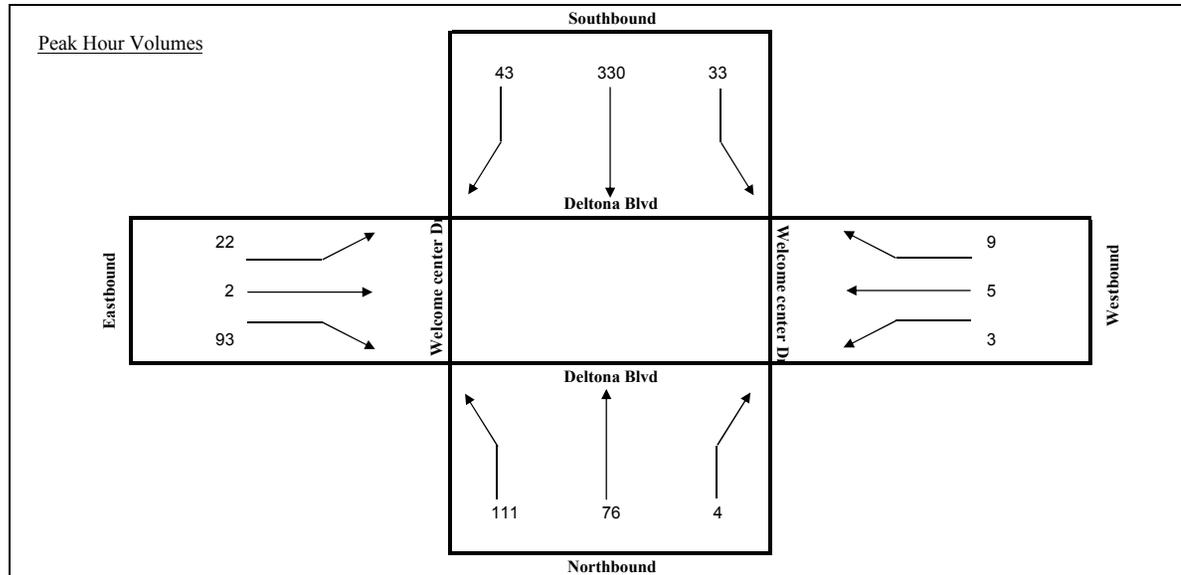


TURNING MOVEMENT COUNT ANALYSIS
AUTOS & TRUCKS

Intersection (N/S): Deltona Blvd
Intersection (E/W): Welcome center Dr
Date: 5/7/2015

Start	End	Deltona Blvd			Deltona Blvd			Welcome center Dr			Welcome center Dr			TOTAL
		L	T	R	L	T	R	L	T	R	L	T	R	
7:00 AM	7:15 AM	15	18	1	3	85	7	1	1	20	3	1	1	156
7:15 AM	7:30 AM	24	21	0	8	90	8	2	0	27	0	0	0	180
7:30 AM	7:45 AM	33	18	2	7	81	10	7	0	24	2	2	2	188
7:45 AM	8:00 AM	29	16	2	7	75	14	7	2	24	1	3	7	187
8:00 AM	8:15 AM	25	21	0	11	84	11	6	0	18	0	0	0	176
8:15 AM	8:30 AM	28	12	1	8	70	15	5	0	30	1	2	2	174
8:30 AM	8:45 AM	18	15	0	3	59	9	7	1	22	2	1	3	140
8:45 AM	9:00 AM	20	14	1	5	73	10	2	0	17	2	3	1	148

Total for:	7:00 AM	8:00 AM	101	73	5	25	331	39	17	3	95	6	6	10	711
Total for:	8:00 AM	9:00 AM	91	62	2	27	286	45	20	1	87	5	6	6	638
Tota Peak Hour:	7:15 AM	8:15 AM	111	76	4	33	330	43	22	2	93	3	5	9	731
Overall PHF:	0.97														

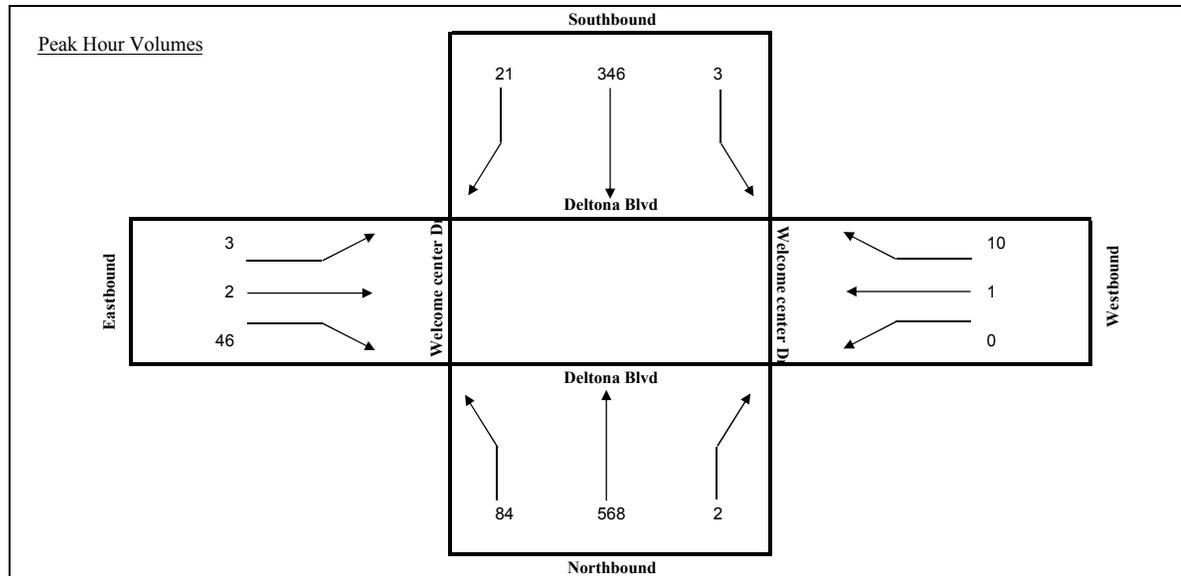


TURNING MOVEMENT COUNT ANALYSIS
AUTOS & TRUCKS

Intersection (N/S): Deltona Blvd
Intersection (E/W): Welcome center Dr
Date: 5/7/2015

Start	End	Deltona Blvd			Deltona Blvd			Welcome center Dr			Welcome center Dr			TOTAL
		L	T	R	L	T	R	L	T	R	L	T	R	
4:00 PM	4:15 PM	10	91	1	0	65	2	1	0	5	0	2	1	178
4:15 PM	4:30 PM	15	119	0	0	72	5	0	1	9	0	0	2	223
4:30 PM	4:45 PM	20	126	2	1	86	7	2	0	11	0	1	1	257
4:45 PM	5:00 PM	22	142	0	0	97	6	0	1	10	0	0	0	278
5:00 PM	5:15 PM	24	122	1	1	86	7	2	0	15	0	1	6	265
5:15 PM	5:30 PM	18	150	0	0	88	3	1	0	12	0	0	3	275
5:30 PM	5:45 PM	20	154	1	2	75	5	0	1	9	0	0	1	268
5:45 PM	6:00 PM	21	103	0	0	74	4	1	0	12	0	1	3	219

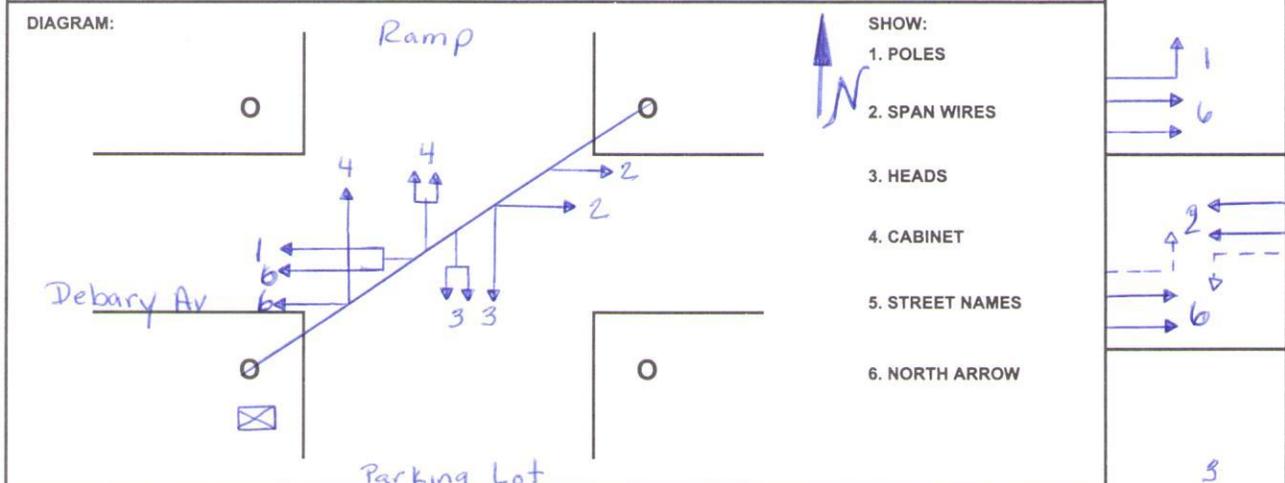
Total for:	4:00 PM	5:00 PM	67	478	3	1	320	20	3	2	35	0	3	4	936
Total for:	5:00 PM	6:00 PM	83	529	2	3	323	19	4	1	48	0	2	13	1027
Tota Peak Hour:	4:45 PM	5:45 PM	84	568	2	3	346	21	3	2	46	0	1	10	1086
Overall PHF:	0.98														



COUNTY OF VOLUSIA TRAFFIC SIGNAL MAINTENANCE INVENTORY SHEET

LOCATION: Debarry Ave @ I-4 EB Ramp ISOLATED: _____ NAME: _____ DATE: _____
 SIGNAL #: #188 CO-ORD: X NAME: _____ DATE: _____
DLT NAME: _____ DATE: _____

MASTER INFORMATION: MOVEMENT CHART:
 CLOSED LOOP: MASTER LOC #: _____ PHONE #: _____ CENTRAL PX: _____
 LOCAL LOC #: _____ LOCAL PX: _____



PH	MOVE	INT	EXT	CLR	RED	MAX1	MAX2	WALK	FDW	RECALL	DET. FUNC	FLASH
1	1/0	5	3	4	2	15					NL	
2/0	2/0	15	4	4	2	30				min	L	Y
3	3	5	3	4	2	15					NL	R
4	4	6	4	4	2	30					NL	R

MAX 2				GENERAL INFORMATION			
T.O.D.				CONTROLLER TYPE	PHASES	3000 E	50 0 PED
DAY OF WEEK:				PROM NUMBER	8216A 3.7.3		
				CABINET TYPE	V 02/1997		
MAX 3				MAX 2 CLOCK/TBC MOD			
PH	LIMIT	ADJ	UP	DOWN	Fiber		
				CONDITION OF OVERHEAD			
				Good			
				OVERHEAD STREET NAMES			
				YES _____ NO <u>X</u>			
				ILLUMINATED STREET NAMES			
				YES <u>X</u> NO _____			
				PRE-EMPTION			
				YES _____ NO <u>X</u>			
				TYPE			

LEDS: RED 8 N S E W RED ARROW _____ N S E W
 AMBER 8 N S E W AMBER ARROW 3 N S E W
 GREEN 8 N S E W GREEN ARROW 3 N S E W
 PED 0 NE SE NW SW All LED

BLANK OUT: N S E W 0

REMARKS:

COUNTY OF VOLUSIA TRAFFIC SIGNAL TIMING SHEET

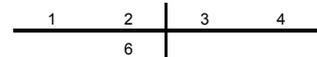
LOCATION: Debary Ave/Dirksen Dr & I-4 EB Ramp
Deltona ISOLATED: DATE: 3/27/2015
SIGNAL #: 188 CO-ORD: Design By: M. Tobin
System #: 6

Controller Timing Chart

PHASE	1	2	3	4	5	6	7	8	
DIRECTION	EBL	WB	NB	SB	-	EB	-	-	
TURN TYPE	PERM/PROT	-	SPLIT LEAD	SPLIT LAG	-	-	-	-	
MIN GREEN	5	12	5	6		12			
EXTENSION	3	3	3	4		3			
CLEARANCE	4.0	5.0	3.5	4.0		4.0			
ALL RED	2.5	2.0	2.5	2.5		2.0			
WALK	-	-	-	-		-			
FDW	-	-	-	-		-			
MAX 1	15	30	15	30		30			
MAX 2	-	-	-	-		-			
MAX 3	30	-	-	-		-			
ADJUST	10	-	-	-		-			
RECALL	-	MIN	-	-		MIN			
DETECTOR	NON-LOCK	LOCK	NON-LOCK	LOCK		LOCK			
FLASH	-	YELLOW	RED	RED		YELLOW			
SET	2	-	-	-		-			
CLEAR	2	-	-	-		-			
BASE DAY	1	2	3	4	5	6	7		
MON #1	TIME	00:01-06:00	06:00-09:00	09:00-14:00	14:00-19:00	19:00-00:00			Crosswalk Length
	PLAN	FREE	C301S1	C101S1	C201S1	FREE			
TUES#1	TIME	00:01-06:00	06:00-09:00	09:00-14:00	14:00-19:00	19:00-00:00			-
	PLAN	FREE	C301S1	C101S1	C201S1	FREE			
WED #1	TIME	00:01-06:00	06:00-09:00	09:00-14:00	14:00-19:00	19:00-00:00			P4
	PLAN	FREE	C301S1	C101S1	C201S1	FREE			
THU #1	TIME	00:01-06:00	06:00-09:00	09:00-14:00	14:00-19:00	19:00-00:00			-
	PLAN	FREE	C301S1	C101S1	C201S1	FREE			
FRI #1	TIME	00:01-06:00	06:00-09:00	09:00-14:00	14:00-19:00	19:00-00:00			P6
	PLAN	FREE	C301S1	C101S1	C201S1	FREE			
SAT #2	TIME	00:01-09:00	09:00-18:00	18:00-00:00					-
	PLAN	FREE	C101S1	FREE					
SUN #3	TIME	00:01-09:00	09:00-18:00	18:00-00:00					P8
	PLAN	FREE	C101S1	FREE					
CONTROLLER TYPE		CONDITION OF OVERHEAD			New		PROM NUMBER		-
3000E		OVERHEAD STREET NAMES			NO				
PHASES:	8Φ	ILLUMINATED STREET NAMES			YES		8216A 3.7.3		SIGNAL OWNER ⁴
CABINET TYPE	V	PRE-EMPTION			NO		IP ADDRESS		County
CABINET DATE	02/1997	PRE-EMPTION TYPE			N/A		10.77.8.34		LED YES

REMARKS:

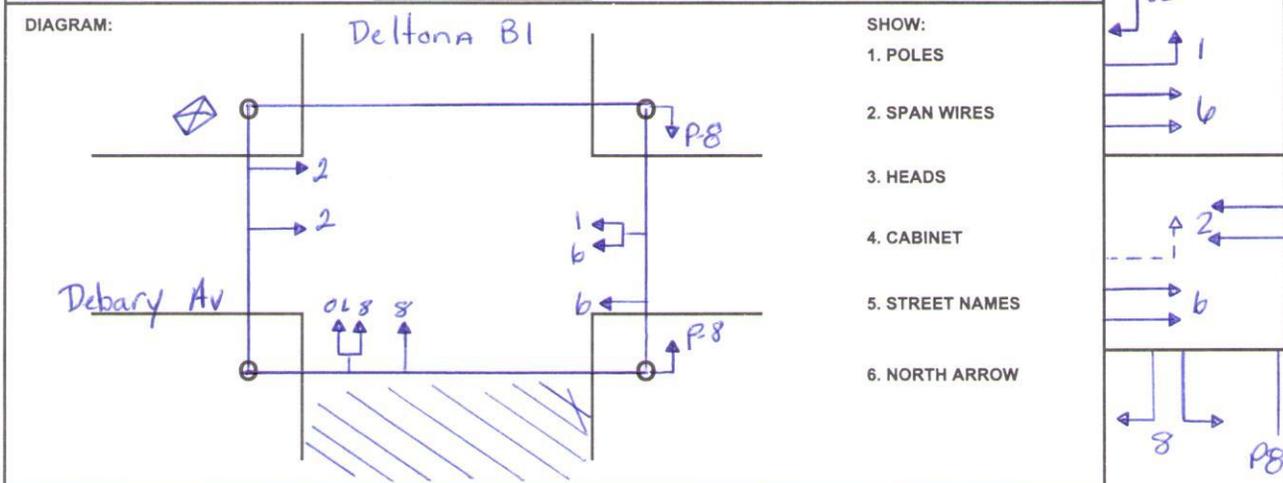
Omit Phase 1 when Phase 2 is On



COUNTY OF VOLUSIA TRAFFIC SIGNAL MAINTENANCE INVENTORY SHEET

LOCATION: Debary Av @ Deltona Bl ISOLATED: _____ NAME: _____ DATE: _____
 SIGNAL #: 258 DLT CO-ORD: X NAME: _____ DATE: _____
 NAME: _____ DATE: _____

MASTER INFORMATION: CLOSED LOOP: MASTER LOC #: _____ PHONE #: _____ CENTRAL PX: _____ MOVEMENT CHART: _____
 LOCAL LOC #: _____ LOCAL PX: _____



PH	MOVE	INT	EXT	CLR	RED	MAX1	MAX2	WALK	FDW	RECALL	DET. FUNC	FLASH
1	1/6	7	4	4	2	25					NL	
2/6	2/6	15	4	4	2	35				MIN	L	Y
8	8	10	4	4	2	25		7	24		NL	R

MAX 2					MAX 3		GENERAL INFORMATION	
T.O.D.					CONTROLLER TYPE	PHASES	40 1-OLA 89 3000E 1 PED	
DAY OF WEEK:					PROM NUMBER	8216A 3.7.3		
					CABINET TYPE	V 09/2008		
					MAX 2 CLOCK/TBC MOD	Fiber		
PH	LIMIT	ADJ	UP	DOWN	CONDITION OF OVERHEAD	Good		
					OVERHEAD STREET NAMES	YES _____ NO <u>X</u>		
					ILLUMINATED STREET NAMES	YES <u>X</u> NO _____		
					PRE-EMPTION	YES _____ NO <u>X</u>		
					TYPE			

LEDS: RED 6 N S E W RED ARROW _____ N S E W _____
 AMBER 6 N S E W AMBER ARROW 2 N S E W _____
 GREEN 6 N S E W GREEN ARROW 2 N S E W _____
 PED 2 NE SE NW SW ALL LED

BLANK OUT: N S E W 6

REMARKS:

COUNTY OF VOLUSIA TRAFFIC SIGNAL TIMING SHEET

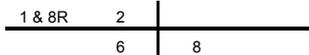
LOCATION: Debary Avenue & Deltona Blvd
Deltona **ISOLATED:** **DATE:** 1/15/2015
SIGNAL #: 258 **CO-ORD:** **X** **Design By:** M. Tobin
System #: 6

Controller Timing Chart

PHASE	1	2	3	4	5	6	7	8	
DIRECTION	EBL	WB	-	-	-	EB	-	SB	
TURN TYPE	PERM/PROT	-	-	-	-	-	-	-	
MIN GREEN	5	11				11		5	
EXTENSION	4	4				4		4	
CLEARANCE	4.5	4.5				4.5		3.5	
ALL RED	3.5	3.5				3.5		3.5	
WALK	-	-				-		7	
FDW	-	-				-		24	
MAX 1	20	35				35		20	
MAX 2						-		-	
MAX 3	-	-				-		-	
ADJUST	-	-				-		-	
RECALL	-	MIN				MIN		-	
DETECTOR	NON-LOCK	LOCK				LOCK		NON-LOCK	
FLASH	-	YELLOW				YELLOW		RED	
SET	-	-				-		-	
CLEAR	-	-				-		-	
BASE DAY	1	2	3	4	5	6	7	Crosswalk Length	
MON #1	TIME	00:01-06:00	06:00-09:00	09:00-14:00	14:00-19:00	19:00-00:00			P2
	PLAN	FREE	C301S1	C101S1	C201S1	FREE			
TUES#1	TIME	00:01-06:00	06:00-09:00	09:00-14:00	14:00-19:00	19:00-00:00			-
	PLAN	FREE	C301S1	C101S1	C201S1	FREE			
WED #1	TIME	00:01-06:00	06:00-09:00	09:00-14:00	14:00-19:00	19:00-00:00			P4
	PLAN	FREE	C301S1	C101S1	C201S1	FREE			
THU #1	TIME	00:01-06:00	06:00-09:00	09:00-14:00	14:00-19:00	19:00-00:00			-
	PLAN	FREE	C301S1	C101S1	C201S1	FREE			
FRI #1	TIME	00:01-06:00	06:00-09:00	09:00-14:00	14:00-19:00	19:00-00:00			P6
	PLAN	FREE	C301S1	C101S1	C201S1	FREE			
SAT #2	TIME	00:01-09:00	09:00-18:00	18:00-00:00					-
	PLAN	FREE	C101S1	FREE					
SUN #3	TIME	00:01-09:00	09:00-18:00	18:00-00:00					P8
	PLAN	FREE	C101S1	FREE					
CONTROLLER TYPE		CONDITION OF OVERHEAD			New - 2010		PROM NUMBER		
3000E		OVERHEAD STREET NAMES			NO				84
PHASES:	8Φ	ILLUMINATED STREET NAMES			YES		8216A 3.7.3		SIGNAL OWNER⁴
CABINET TYPE	V	PRE-EMPTION			NO		IP ADDRESS		County
CABINET DATE	09/2008	PRE-EMPTION TYPE			N/A		10.77.8.35		LED -

REMARKS:

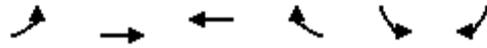
No Uturn on EB Left.



Appendix E
Intersection Analysis Worksheets

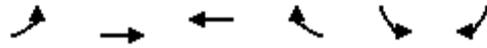
Existing AM

HCM 2010 Signalized Intersection Summary
 7: DeBary Ave & I4 NB Ramp



Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Volume (veh/h)	128	376	1631	198	249	36		
Number	7	4	8	18	1	16		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1881	1881	1881	1900	1881	1881		
Adj Flow Rate, veh/h	135	396	1717	0	262	38		
Adj No. of Lanes	1	2	2	0	2	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	1	1	1	1	1	1		
Cap, veh/h	407	2848	2357	0	424	195		
Arrive On Green	0.10	0.80	1.00	0.00	0.12	0.12		
Sat Flow, veh/h	1792	3668	3762	0	3476	1599		
Grp Volume(v), veh/h	135	396	1717	0	262	38		
Grp Sat Flow(s),veh/h/ln	1792	1787	1787	0	1738	1599		
Q Serve(g_s), s	3.0	4.0	0.0	0.0	11.5	3.4		
Cycle Q Clear(g_c), s	3.0	4.0	0.0	0.0	11.5	3.4		
Prop In Lane	1.00			0.00	1.00	1.00		
Lane Grp Cap(c), veh/h	407	2848	2357	0	424	195		
V/C Ratio(X)	0.33	0.14	0.73	0.00	0.62	0.19		
Avail Cap(c_a), veh/h	407	2848	2357	0	424	195		
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00		
Uniform Delay (d), s/veh	4.7	3.7	0.0	0.0	66.7	63.2		
Incr Delay (d2), s/veh	2.2	0.1	2.0	0.0	6.6	2.2		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	1.7	2.0	0.7	0.0	5.9	3.3		
LnGrp Delay(d),s/veh	6.8	3.8	2.0	0.0	73.4	65.4		
LnGrp LOS	A	A	A		E	E		
Approach Vol, veh/h		531	1717		300			
Approach Delay, s/veh		4.6	2.0		72.3			
Approach LOS		A	A		E			
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				134.0		26.0	22.0	112.0
Change Period (Y+Rc), s				6.5		6.5	6.5	6.5
Max Green Setting (Gmax), s				127.5		19.5	15.5	105.5
Max Q Clear Time (g_c+I1), s				6.0		13.5	5.0	2.0
Green Ext Time (p_c), s				32.9		0.5	0.2	32.1
Intersection Summary								
HCM 2010 Ctrl Delay			10.8					
HCM 2010 LOS			B					

HCM 2010 Signalized Intersection Summary 3: DeBary Ave & Deltona Blvd



Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Volume (veh/h)	150	482	1442	28	18	415		
Number	7	4	8	18	1	16		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1881	1881	1881	1900	1881	1881		
Adj Flow Rate, veh/h	158	507	1518	29	19	304		
Adj No. of Lanes	1	2	2	0	1	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	1	1	1	1	1	1		
Cap, veh/h	263	2357	1693	32	465	415		
Arrive On Green	0.29	1.00	0.47	0.47	0.26	0.26		
Sat Flow, veh/h	1792	3668	3682	68	1792	1599		
Grp Volume(v), veh/h	158	507	755	792	19	304		
Grp Sat Flow(s),veh/h/ln	1792	1787	1787	1869	1792	1599		
Q Serve(g_s), s	12.1	0.0	61.9	62.1	1.3	27.8		
Cycle Q Clear(g_c), s	12.1	0.0	61.9	62.1	1.3	27.8		
Prop In Lane	1.00			0.04	1.00	1.00		
Lane Grp Cap(c), veh/h	263	2357	843	882	465	415		
V/C Ratio(X)	0.60	0.22	0.90	0.90	0.04	0.73		
Avail Cap(c_a), veh/h	263	2357	843	882	465	415		
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	52.5	0.0	38.6	38.7	44.4	54.2		
Incr Delay (d2), s/veh	9.8	0.2	14.1	13.8	0.2	10.9		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	6.7	0.1	33.7	35.3	0.6	24.7		
LnGrp Delay(d),s/veh	62.2	0.2	52.7	52.5	44.5	65.1		
LnGrp LOS	E	A	D	D	D	E		
Approach Vol, veh/h		665	1547		323			
Approach Delay, s/veh		14.9	52.6		63.9			
Approach LOS		B	D		E			
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				112.0		48.0	30.0	82.0
Change Period (Y+Rc), s				6.5		6.5	6.5	6.5
Max Green Setting (Gmax), s				105.5		41.5	23.5	75.5
Max Q Clear Time (g_c+I1), s				2.0		29.8	14.1	64.1
Green Ext Time (p_c), s				26.0		0.9	0.3	8.6
Intersection Summary								
HCM 2010 Ctrl Delay			44.2					
HCM 2010 LOS			D					

HCM 2010 TWSC
 5: DeBary Ave & Welcome Center

Intersection												
Int Delay, s/veh	0.5											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	17	485	0	1	1427	13	13	2	6	2	0	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	300	-	-	0	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	18	511	0	1	1502	14	14	2	6	2	0	15

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1516	0	0	511	0	0	1299	2064	255	1803	2057	758
Stage 1	-	-	-	-	-	-	546	546	-	1511	1511	-
Stage 2	-	-	-	-	-	-	753	1518	-	292	546	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.52	6.52	6.92	7.52	6.52	6.92
Critical Hdwy Stg 1	-	-	-	-	-	-	6.52	5.52	-	6.52	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.52	5.52	-	6.52	5.52	-
Follow-up Hdwy	2.21	-	-	2.21	-	-	3.51	4.01	3.31	3.51	4.01	3.31
Pot Cap-1 Maneuver	442	-	-	1057	-	-	120	55	747	50	55	352
Stage 1	-	-	-	-	-	-	492	519	-	127	183	-
Stage 2	-	-	-	-	-	-	370	182	-	695	519	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	442	-	-	1057	-	-	111	53	747	47	53	352
Mov Cap-2 Maneuver	-	-	-	-	-	-	228	129	-	104	140	-
Stage 1	-	-	-	-	-	-	472	498	-	122	183	-
Stage 2	-	-	-	-	-	-	354	182	-	658	498	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0	20.1	18.8
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	261	442	-	-	1057	-	-	104	352
HCM Lane V/C Ratio	0.085	0.04	-	-	0.001	-	-	0.02	0.042
HCM Control Delay (s)	20.1	13.5	-	-	8.4	-	-	40.3	15.7
HCM Lane LOS	C	B	-	-	A	-	-	E	C
HCM 95th %tile Q(veh)	0.3	0.1	-	-	0	-	-	0.1	0.1

HCM 2010 TWSC
 10: Deltona Blvd & Welcome Center

Intersection												
Int Delay, s/veh	3.9											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	22	2	93	3	5	9	111	76	4	33	330	43
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	0	-	-	0	100	-	0	0	-	150
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	23	2	98	3	5	9	117	80	4	35	347	45

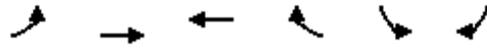
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	733	731	347	732	731	80	347	0	0	80	0	0
Stage 1	417	417	-	314	314	-	-	-	-	-	-	-
Stage 2	316	314	-	418	417	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	338	350	698	338	350	983	1218	-	-	1524	-	-
Stage 1	615	593	-	699	658	-	-	-	-	-	-	-
Stage 2	697	658	-	614	593	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	301	309	698	263	309	983	1218	-	-	1524	-	-
Mov Cap-2 Maneuver	301	309	-	263	309	-	-	-	-	-	-	-
Stage 1	556	579	-	632	595	-	-	-	-	-	-	-
Stage 2	618	595	-	514	579	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.4	13	4.8	0.6
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1218	-	-	302	698	290	983	1524	-	-
HCM Lane V/C Ratio	0.096	-	-	0.084	0.14	0.029	0.01	0.023	-	-
HCM Control Delay (s)	8.3	-	-	18	11	17.8	8.7	7.4	-	-
HCM Lane LOS	A	-	-	C	B	C	A	A	-	-
HCM 95th %tile Q(veh)	0.3	-	-	0.3	0.5	0.1	0	0.1	-	-

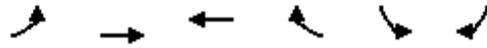
Projected AM

HCM 2010 Signalized Intersection Summary
 7: DeBary Ave & I4 NB Ramp



Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Volume (veh/h)	131	395	1678	206	264	37		
Number	7	4	8	18	1	16		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1881	1881	1881	1900	1881	1881		
Adj Flow Rate, veh/h	138	416	1766	0	278	39		
Adj No. of Lanes	1	2	2	0	2	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	1	1	1	1	1	1		
Cap, veh/h	398	2848	2357	0	424	195		
Arrive On Green	0.10	0.80	1.00	0.00	0.12	0.12		
Sat Flow, veh/h	1792	3668	3762	0	3476	1599		
Grp Volume(v), veh/h	138	416	1766	0	278	39		
Grp Sat Flow(s),veh/h/ln	1792	1787	1787	0	1738	1599		
Q Serve(g_s), s	3.1	4.3	0.0	0.0	12.2	3.5		
Cycle Q Clear(g_c), s	3.1	4.3	0.0	0.0	12.2	3.5		
Prop In Lane	1.00			0.00	1.00	1.00		
Lane Grp Cap(c), veh/h	398	2848	2357	0	424	195		
V/C Ratio(X)	0.35	0.15	0.75	0.00	0.66	0.20		
Avail Cap(c_a), veh/h	398	2848	2357	0	424	195		
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00		
Uniform Delay (d), s/veh	4.7	3.7	0.0	0.0	67.1	63.2		
Incr Delay (d2), s/veh	2.4	0.1	2.2	0.0	7.7	2.3		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	1.8	2.1	0.7	0.0	6.3	3.4		
LnGrp Delay(d),s/veh	7.0	3.8	2.2	0.0	74.8	65.5		
LnGrp LOS	A	A	A		E	E		
Approach Vol, veh/h		554	1766		317			
Approach Delay, s/veh		4.6	2.2		73.6			
Approach LOS		A	A		E			
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				134.0		26.0	22.0	112.0
Change Period (Y+Rc), s				6.5		6.5	6.5	6.5
Max Green Setting (Gmax), s				127.5		19.5	15.5	105.5
Max Q Clear Time (g_c+I1), s				6.3		14.2	5.1	2.0
Green Ext Time (p_c), s				35.7		0.5	0.2	34.7
Intersection Summary								
HCM 2010 Ctrl Delay			11.3					
HCM 2010 LOS			B					

HCM 2010 Signalized Intersection Summary 3: DeBary Ave & Deltona Blvd



Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Volume (veh/h)	167	496	1493	29	18	419		
Number	7	4	8	18	1	16		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1881	1881	1881	1900	1881	1881		
Adj Flow Rate, veh/h	176	522	1572	31	19	308		
Adj No. of Lanes	1	2	2	0	1	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	1	1	1	1	1	1		
Cap, veh/h	263	2357	1692	33	465	415		
Arrive On Green	0.29	1.00	0.47	0.47	0.26	0.26		
Sat Flow, veh/h	1792	3668	3679	71	1792	1599		
Grp Volume(v), veh/h	176	522	782	821	19	308		
Grp Sat Flow(s),veh/h/ln	1792	1787	1787	1869	1792	1599		
Q Serve(g_s), s	13.8	0.0	65.8	66.1	1.3	28.3		
Cycle Q Clear(g_c), s	13.8	0.0	65.8	66.1	1.3	28.3		
Prop In Lane	1.00			0.04	1.00	1.00		
Lane Grp Cap(c), veh/h	263	2357	843	882	465	415		
V/C Ratio(X)	0.67	0.22	0.93	0.93	0.04	0.74		
Avail Cap(c_a), veh/h	263	2357	843	882	465	415		
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	53.1	0.0	39.7	39.8	44.4	54.4		
Incr Delay (d2), s/veh	12.7	0.2	17.8	17.5	0.2	11.4		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	7.8	0.1	36.5	38.2	0.6	25.1		
LnGrp Delay(d),s/veh	65.8	0.2	57.4	57.3	44.5	65.8		
LnGrp LOS	E	A	E	E	D	E		
Approach Vol, veh/h		698	1603		327			
Approach Delay, s/veh		16.8	57.4		64.5			
Approach LOS		B	E		E			
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				112.0		48.0	30.0	82.0
Change Period (Y+Rc), s				6.5		6.5	6.5	6.5
Max Green Setting (Gmax), s				105.5		41.5	23.5	75.5
Max Q Clear Time (g_c+I1), s				2.0		30.3	15.8	68.1
Green Ext Time (p_c), s				28.4		0.9	0.3	6.1
Intersection Summary								
HCM 2010 Ctrl Delay			47.5					
HCM 2010 LOS			D					

HCM 2010 TWSC
 5: DeBary Ave & Welcome Center

Intersection												
Int Delay, s/veh	1.5											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	37	479	0	1	1464	17	13	2	6	30	0	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	300	-	-	0	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	39	504	0	1	1541	18	14	2	6	32	0	15

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1559	0	0	504	0	0	1355	2143	252	1883	2134	779
Stage 1	-	-	-	-	-	-	582	582	-	1552	1552	-
Stage 2	-	-	-	-	-	-	773	1561	-	331	582	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.52	6.52	6.92	7.52	6.52	6.92
Critical Hdwy Stg 1	-	-	-	-	-	-	6.52	5.52	-	6.52	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.52	5.52	-	6.52	5.52	-
Follow-up Hdwy	2.21	-	-	2.21	-	-	3.51	4.01	3.31	3.51	4.01	3.31
Pot Cap-1 Maneuver	425	-	-	1064	-	-	109	49	751	44	49	341
Stage 1	-	-	-	-	-	-	468	500	-	120	175	-
Stage 2	-	-	-	-	-	-	360	173	-	659	500	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	425	-	-	1064	-	-	97	44	751	40	44	341
Mov Cap-2 Maneuver	-	-	-	-	-	-	205	108	-	92	131	-
Stage 1	-	-	-	-	-	-	425	454	-	109	175	-
Stage 2	-	-	-	-	-	-	344	173	-	591	454	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1	0	22	48.3
HCM LOS			C	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	234	425	-	-	1064	-	-	92	341
HCM Lane V/C Ratio	0.094	0.092	-	-	0.001	-	-	0.343	0.043
HCM Control Delay (s)	22	14.3	-	-	8.4	-	-	63.3	16
HCM Lane LOS	C	B	-	-	A	-	-	F	C
HCM 95th %tile Q(veh)	0.3	0.3	-	-	0	-	-	1.3	0.1

HCM 2010 TWSC
 10: Deltona Blvd & Welcome Center

Intersection												
Int Delay, s/veh	3.9											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	22	2	95	3	5	9	113	88	4	48	333	44
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	0	-	-	0	100	-	0	0	-	150
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	23	2	100	3	5	9	119	93	4	51	351	46

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	785	783	351	784	783	93	351	0	0	93	0	0
Stage 1	452	452	-	331	331	-	-	-	-	-	-	-
Stage 2	333	331	-	453	452	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	311	327	695	312	327	967	1213	-	-	1508	-	-
Stage 1	589	572	-	684	647	-	-	-	-	-	-	-
Stage 2	683	647	-	588	572	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	274	285	695	239	285	967	1213	-	-	1508	-	-
Mov Cap-2 Maneuver	274	285	-	239	285	-	-	-	-	-	-	-
Stage 1	531	553	-	617	584	-	-	-	-	-	-	-
Stage 2	604	584	-	485	553	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.7	13.6	4.6	0.8
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1213	-	-	275	695	266	967	1508	-	-
HCM Lane V/C Ratio	0.098	-	-	0.092	0.144	0.032	0.01	0.034	-	-
HCM Control Delay (s)	8.3	-	-	19.4	11	19	8.8	7.5	-	-
HCM Lane LOS	A	-	-	C	B	C	A	A	-	-
HCM 95th %tile Q(veh)	0.3	-	-	0.3	0.5	0.1	0	0.1	-	-

HCM 2010 TWSC
13: Deltona Blvd & Dvwy

Intersection

Int Delay, s/veh 0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	0	22	183	26	0	431
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	0	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	0	23	193	27	0	454

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	647	193	0 0 193 0
Stage 1	193	-	- - - -
Stage 2	454	-	- - - -
Critical Hdwy	6.41	6.21	- - 4.11 -
Critical Hdwy Stg 1	5.41	-	- - - -
Critical Hdwy Stg 2	5.41	-	- - - -
Follow-up Hdwy	3.509	3.309	- - 2.209 -
Pot Cap-1 Maneuver	437	851	- - 1386 -
Stage 1	842	-	- - - -
Stage 2	642	-	- - - -
Platoon blocked, %			- - -
Mov Cap-1 Maneuver	437	851	- - 1386 -
Mov Cap-2 Maneuver	437	-	- - - -
Stage 1	842	-	- - - -
Stage 2	642	-	- - - -

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

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	851	1386	-
HCM Lane V/C Ratio	-	-	0.027	-	-
HCM Control Delay (s)	-	-	9.3	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

HCM 2010 TWSC
 15: DeBary Ave & Dvwy

Intersection

Int Delay, s/veh 0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	0	512	1434	57	0	71
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	0	539	1509	60	0	75

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	1569	0	1808
Stage 1	-	-	1539
Stage 2	-	-	269
Critical Hdwy	4.12	-	6.82
Critical Hdwy Stg 1	-	-	5.82
Critical Hdwy Stg 2	-	-	5.82
Follow-up Hdwy	2.21	-	3.51
Pot Cap-1 Maneuver	421	-	71
Stage 1	-	-	165
Stage 2	-	-	755
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	421	-	71
Mov Cap-2 Maneuver	-	-	71
Stage 1	-	-	165
Stage 2	-	-	755

Approach	EB	WB	SB
HCM Control Delay, s	0	0	18.6
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	421	-	-	-	338
HCM Lane V/C Ratio	-	-	-	-	0.221
HCM Control Delay (s)	0	-	-	-	18.6
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.8

HCM 2010 TWSC
 17: Welcome Center & Dvwy

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	0	28	24	33	16	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	0	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	0	29	25	35	17	15

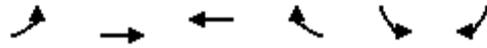
Major/Minor	Minor2	Major1		Major2
Conflicting Flow All	109	24	32	0
Stage 1	24	-	-	-
Stage 2	85	-	-	-
Critical Hdwy	6.41	6.21	4.11	-
Critical Hdwy Stg 1	5.41	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-
Follow-up Hdwy	3.509	3.309	2.209	-
Pot Cap-1 Maneuver	891	1055	1587	-
Stage 1	1001	-	-	-
Stage 2	941	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	877	1055	1587	-
Mov Cap-2 Maneuver	877	-	-	-
Stage 1	1001	-	-	-
Stage 2	926	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.5	3.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1587	-	-	1055	-	-
HCM Lane V/C Ratio	0.016	-	-	0.028	-	-
HCM Control Delay (s)	7.3	-	0	8.5	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	-	-

Existing PM

HCM 2010 Signalized Intersection Summary
 7: DeBary Ave & I4 NB Ramp



Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Volume (veh/h)	121	678	603	117	1022	87		
Number	7	4	8	18	1	16		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1881	1881	1881	1900	1881	1881		
Adj Flow Rate, veh/h	127	714	635	0	1076	92		
Adj No. of Lanes	1	2	2	0	2	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	1	1	1	1	1	1		
Cap, veh/h	494	1911	1041	0	1224	563		
Arrive On Green	0.19	0.53	0.10	0.00	0.35	0.35		
Sat Flow, veh/h	1792	3668	3762	0	3476	1599		
Grp Volume(v), veh/h	127	714	635	0	1076	92		
Grp Sat Flow(s),veh/h/ln	1792	1787	1787	0	1738	1599		
Q Serve(g_s), s	4.4	13.4	19.6	0.0	33.4	4.5		
Cycle Q Clear(g_c), s	4.4	13.4	19.6	0.0	33.4	4.5		
Prop In Lane	1.00			0.00	1.00	1.00		
Lane Grp Cap(c), veh/h	494	1911	1041	0	1224	563		
V/C Ratio(X)	0.26	0.37	0.61	0.00	0.88	0.16		
Avail Cap(c_a), veh/h	494	1911	1041	0	1224	563		
HCM Platoon Ratio	1.00	1.00	0.33	0.33	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00		
Uniform Delay (d), s/veh	18.2	15.6	45.7	0.0	35.0	25.6		
Incr Delay (d2), s/veh	1.3	0.6	2.7	0.0	9.1	0.6		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	2.3	6.7	10.1	0.0	17.5	4.9		
LnGrp Delay(d),s/veh	19.4	16.1	48.4	0.0	44.1	26.2		
LnGrp LOS	B	B	D		D	C		
Approach Vol, veh/h		841	635		1168			
Approach Delay, s/veh		16.6	48.4		42.7			
Approach LOS		B	D		D			
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				68.0		47.0	28.0	40.0
Change Period (Y+Rc), s				6.5		6.5	6.5	6.5
Max Green Setting (Gmax), s				61.5		40.5	21.5	33.5
Max Q Clear Time (g_c+I1), s				15.4		35.4	6.4	21.6
Green Ext Time (p_c), s				11.2		2.3	0.2	6.3
Intersection Summary								
HCM 2010 Ctrl Delay			35.8					
HCM 2010 LOS			D					

HCM 2010 Signalized Intersection Summary

3: DeBary Ave & Deltona Blvd



Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Volume (veh/h)	489	1207	444	43	51	291		
Number	7	4	8	18	1	16		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1881	1881	1881	1900	1881	1881		
Adj Flow Rate, veh/h	515	1271	467	45	54	209		
Adj No. of Lanes	1	2	2	0	1	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	1	1	1	1	1	1		
Cap, veh/h	724	2533	817	78	319	285		
Arrive On Green	0.81	1.00	0.25	0.25	0.18	0.18		
Sat Flow, veh/h	1792	3668	3390	316	1792	1599		
Grp Volume(v), veh/h	515	1271	252	260	54	209		
Grp Sat Flow(s),veh/h/ln	1792	1787	1787	1825	1792	1599		
Q Serve(g_s), s	14.9	0.0	14.2	14.3	2.9	14.2		
Cycle Q Clear(g_c), s	14.9	0.0	14.2	14.3	2.9	14.2		
Prop In Lane	1.00			0.17	1.00	1.00		
Lane Grp Cap(c), veh/h	724	2533	443	452	319	285		
V/C Ratio(X)	0.71	0.50	0.57	0.57	0.17	0.73		
Avail Cap(c_a), veh/h	724	2533	443	452	319	285		
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	8.0	0.0	37.9	37.9	40.0	44.7		
Incr Delay (d2), s/veh	5.8	0.7	5.2	5.2	1.1	15.4		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	8.2	0.3	7.7	7.9	1.6	13.3		
LnGrp Delay(d),s/veh	13.8	0.7	43.1	43.1	41.2	60.1		
LnGrp LOS	B	A	D	D	D	E		
Approach Vol, veh/h		1786	512		263			
Approach Delay, s/veh		4.5	43.1		56.2			
Approach LOS		A	D		E			
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				88.0		27.0	53.0	35.0
Change Period (Y+Rc), s				6.5		6.5	6.5	6.5
Max Green Setting (Gmax), s				81.5		20.5	46.5	28.5
Max Q Clear Time (g_c+I1), s				2.0		16.2	16.9	16.3
Green Ext Time (p_c), s				19.1		0.3	1.6	8.2
Intersection Summary								
HCM 2010 Ctrl Delay			17.5					
HCM 2010 LOS			B					

HCM 2010 TWSC
 5: DeBary Ave & Welcome Center

Intersection												
Int Delay, s/veh	0.5											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	26	1277	3	7	486	14	1	0	7	15	1	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	300	-	-	0	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	27	1344	3	7	512	15	1	0	7	16	1	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	526	0	0	1347	0	0	1672	1942	674	1261	1936	263
Stage 1	-	-	-	-	-	-	1401	1401	-	534	534	-
Stage 2	-	-	-	-	-	-	271	541	-	727	1402	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.52	6.52	6.92	7.52	6.52	6.92
Critical Hdwy Stg 1	-	-	-	-	-	-	6.52	5.52	-	6.52	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.52	5.52	-	6.52	5.52	-
Follow-up Hdwy	2.21	-	-	2.21	-	-	3.51	4.01	3.31	3.51	4.01	3.31
Pot Cap-1 Maneuver	1044	-	-	512	-	-	63	65	399	128	66	739
Stage 1	-	-	-	-	-	-	149	207	-	500	525	-
Stage 2	-	-	-	-	-	-	714	521	-	384	207	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1044	-	-	512	-	-	60	62	399	122	63	739
Mov Cap-2 Maneuver	-	-	-	-	-	-	123	153	-	243	151	-
Stage 1	-	-	-	-	-	-	145	202	-	487	518	-
Stage 2	-	-	-	-	-	-	690	514	-	367	202	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.2	16.9	16.4
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	312	1044	-	-	512	-	-	234	739
HCM Lane V/C Ratio	0.027	0.026	-	-	0.014	-	-	0.072	0.019
HCM Control Delay (s)	16.9	8.5	-	-	12.1	-	-	21.6	10
HCM Lane LOS	C	A	-	-	B	-	-	C	B
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-	-	0.2	0.1

HCM 2010 TWSC
 10: Deltona Blvd & Welcome Center

Intersection												
Int Delay, s/veh	1.4											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	3	2	46	0	1	10	84	568	2	3	346	21
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	0	-	-	0	100	-	0	0	-	150
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	3	2	48	0	1	11	88	598	2	3	364	22

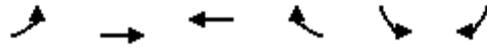
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1146	1146	364	1147	1146	598	364	0	0	598	0	0
Stage 1	371	371	-	775	775	-	-	-	-	-	-	-
Stage 2	775	775	-	372	371	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	177	200	683	177	200	504	1200	-	-	984	-	-
Stage 1	651	621	-	392	409	-	-	-	-	-	-	-
Stage 2	392	409	-	651	621	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	163	185	683	154	185	504	1200	-	-	984	-	-
Mov Cap-2 Maneuver	163	185	-	154	185	-	-	-	-	-	-	-
Stage 1	603	619	-	363	379	-	-	-	-	-	-	-
Stage 2	355	379	-	601	619	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.3	13.4	1.1	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1200	-	-	171	683	185	504	984	-	-
HCM Lane V/C Ratio	0.074	-	-	0.031	0.071	0.006	0.021	0.003	-	-
HCM Control Delay (s)	8.2	-	-	26.7	10.7	24.6	12.3	8.7	-	-
HCM Lane LOS	A	-	-	D	B	C	B	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.1	0.2	0	0.1	0	-	-

Projected PM

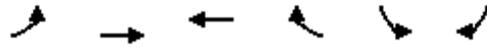
HCM 2010 Signalized Intersection Summary
 7: DeBary Ave & I4 NB Ramp



Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Volume (veh/h)	123	710	633	124	1055	89		
Number	7	4	8	18	1	16		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1881	1881	1881	1900	1881	1881		
Adj Flow Rate, veh/h	129	747	666	0	1111	94		
Adj No. of Lanes	1	2	2	0	2	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	1	1	1	1	1	1		
Cap, veh/h	484	1911	1041	0	1224	563		
Arrive On Green	0.19	0.53	0.10	0.00	0.35	0.35		
Sat Flow, veh/h	1792	3668	3762	0	3476	1599		
Grp Volume(v), veh/h	129	747	666	0	1111	94		
Grp Sat Flow(s),veh/h/ln	1792	1787	1787	0	1738	1599		
Q Serve(g_s), s	4.5	14.1	20.6	0.0	35.0	4.7		
Cycle Q Clear(g_c), s	4.5	14.1	20.6	0.0	35.0	4.7		
Prop In Lane	1.00			0.00	1.00	1.00		
Lane Grp Cap(c), veh/h	484	1911	1041	0	1224	563		
V/C Ratio(X)	0.27	0.39	0.64	0.00	0.91	0.17		
Avail Cap(c_a), veh/h	484	1911	1041	0	1224	563		
HCM Platoon Ratio	1.00	1.00	0.33	0.33	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00		
Uniform Delay (d), s/veh	18.4	15.7	46.2	0.0	35.5	25.6		
Incr Delay (d2), s/veh	1.3	0.6	3.0	0.0	11.4	0.6		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	2.4	7.1	10.7	0.0	18.7	5.0		
LnGrp Delay(d),s/veh	19.8	16.3	49.2	0.0	46.8	26.3		
LnGrp LOS	B	B	D		D	C		
Approach Vol, veh/h		876	666		1205			
Approach Delay, s/veh		16.8	49.2		45.2			
Approach LOS		B	D		D			
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				68.0		47.0	28.0	40.0
Change Period (Y+Rc), s				6.5		6.5	6.5	6.5
Max Green Setting (Gmax), s				61.5		40.5	21.5	33.5
Max Q Clear Time (g_c+I1), s				16.1		37.0	6.5	22.6
Green Ext Time (p_c), s				11.9		1.8	0.2	6.2
Intersection Summary								
HCM 2010 Ctrl Delay			37.1					
HCM 2010 LOS			D					

HCM 2010 Signalized Intersection Summary

3: DeBary Ave & Deltona Blvd



Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Volume (veh/h)	517	1236	481	44	52	292		
Number	7	4	8	18	1	16		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1881	1881	1881	1900	1881	1881		
Adj Flow Rate, veh/h	544	1301	506	46	55	210		
Adj No. of Lanes	1	2	2	0	1	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	1	1	1	1	1	1		
Cap, veh/h	724	2533	821	74	319	285		
Arrive On Green	0.81	1.00	0.25	0.25	0.18	0.18		
Sat Flow, veh/h	1792	3668	3409	300	1792	1599		
Grp Volume(v), veh/h	544	1301	272	280	55	210		
Grp Sat Flow(s),veh/h/ln	1792	1787	1787	1828	1792	1599		
Q Serve(g_s), s	17.0	0.0	15.5	15.6	3.0	14.3		
Cycle Q Clear(g_c), s	17.0	0.0	15.5	15.6	3.0	14.3		
Prop In Lane	1.00			0.16	1.00	1.00		
Lane Grp Cap(c), veh/h	724	2533	443	453	319	285		
V/C Ratio(X)	0.75	0.51	0.61	0.62	0.17	0.74		
Avail Cap(c_a), veh/h	724	2533	443	453	319	285		
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	8.2	0.0	38.4	38.4	40.1	44.7		
Incr Delay (d2), s/veh	7.0	0.7	6.3	6.2	1.2	15.6		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	9.1	0.3	8.4	8.6	1.6	13.4		
LnGrp Delay(d),s/veh	15.2	0.7	44.6	44.6	41.2	60.3		
LnGrp LOS	B	A	D	D	D	E		
Approach Vol, veh/h		1845	552		265			
Approach Delay, s/veh		5.0	44.6		56.4			
Approach LOS		A	D		E			
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				88.0		27.0	53.0	35.0
Change Period (Y+Rc), s				6.5		6.5	6.5	6.5
Max Green Setting (Gmax), s				81.5		20.5	46.5	28.5
Max Q Clear Time (g_c+I1), s				2.0		16.3	19.0	17.6
Green Ext Time (p_c), s				20.5		0.3	1.7	7.7
Intersection Summary								
HCM 2010 Ctrl Delay			18.3					
HCM 2010 LOS			B					

HCM 2010 TWSC
 5: DeBary Ave & Welcome Center

Intersection												
Int Delay, s/veh	1.5											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	72	1263	3	7	496	19	1	0	7	60	1	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	300	-	-	0	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	76	1329	3	7	522	20	1	0	7	63	1	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	542	0	0	1333	0	0	1759	2040	666	1363	2031	271
Stage 1	-	-	-	-	-	-	1483	1483	-	547	547	-
Stage 2	-	-	-	-	-	-	276	557	-	816	1484	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.52	6.52	6.92	7.52	6.52	6.92
Critical Hdwy Stg 1	-	-	-	-	-	-	6.52	5.52	-	6.52	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.52	5.52	-	6.52	5.52	-
Follow-up Hdwy	2.21	-	-	2.21	-	-	3.51	4.01	3.31	3.51	4.01	3.31
Pot Cap-1 Maneuver	1030	-	-	519	-	-	54	57	404	108	57	730
Stage 1	-	-	-	-	-	-	132	189	-	491	518	-
Stage 2	-	-	-	-	-	-	710	513	-	339	189	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1030	-	-	519	-	-	49	52	404	99	52	730
Mov Cap-2 Maneuver	-	-	-	-	-	-	104	132	-	208	132	-
Stage 1	-	-	-	-	-	-	122	175	-	455	511	-
Stage 2	-	-	-	-	-	-	686	506	-	308	175	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.2	17.5	26.7
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	297	1030	-	-	519	-	-	206	730
HCM Lane V/C Ratio	0.028	0.074	-	-	0.014	-	-	0.312	0.019
HCM Control Delay (s)	17.5	8.8	-	-	12	-	-	30.2	10
HCM Lane LOS	C	A	-	-	B	-	-	D	B
HCM 95th %tile Q(veh)	0.1	0.2	-	-	0	-	-	1.3	0.1

HCM 2010 TWSC
 10: Deltona Blvd & Welcome Center

Intersection												
Int Delay, s/veh	1.5											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	3	2	47	0	1	10	86	592	2	21	348	21
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	0	-	-	0	100	-	0	0	-	150
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	3	2	49	0	1	11	91	623	2	22	366	22

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1216	1215	366	1216	1215	623	366	0	0	623	0	0
Stage 1	411	411	-	804	804	-	-	-	-	-	-	-
Stage 2	805	804	-	412	411	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	159	182	681	159	182	488	1198	-	-	963	-	-
Stage 1	620	597	-	378	397	-	-	-	-	-	-	-
Stage 2	378	397	-	619	597	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	143	164	681	135	164	488	1198	-	-	963	-	-
Mov Cap-2 Maneuver	143	164	-	135	164	-	-	-	-	-	-	-
Stage 1	573	583	-	349	367	-	-	-	-	-	-	-
Stage 2	341	367	-	559	583	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.5	13.8	1	0.5
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1198	-	-	151	681	164	488	963	-	-
HCM Lane V/C Ratio	0.076	-	-	0.035	0.073	0.006	0.022	0.023	-	-
HCM Control Delay (s)	8.2	-	-	29.7	10.7	27.1	12.5	8.8	-	-
HCM Lane LOS	A	-	-	D	B	D	B	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.1	0.2	0	0.1	0.1	-	-

HCM 2010 TWSC
 13: Deltona Blvd & Dvwy

Intersection

Int Delay, s/veh 0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	0	28	652	33	0	395
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	0	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	0	29	686	35	0	416

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1102	686	0
Stage 1	686	-	-
Stage 2	416	-	-
Critical Hdwy	6.41	6.21	4.11
Critical Hdwy Stg 1	5.41	-	-
Critical Hdwy Stg 2	5.41	-	-
Follow-up Hdwy	3.509	3.309	2.209
Pot Cap-1 Maneuver	235	449	912
Stage 1	502	-	-
Stage 2	668	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	235	449	912
Mov Cap-2 Maneuver	235	-	-
Stage 1	502	-	-
Stage 2	668	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.6	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	449	912	-
HCM Lane V/C Ratio	-	-	0.066	-	-
HCM Control Delay (s)	-	-	13.6	0	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0	-

HCM 2010 TWSC
15: DeBary Ave & Dvwy

Intersection

Int Delay, s/veh 0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	0	1332	470	50	0	68
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	0	1402	495	53	0	72

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	547	0	1222
Stage 1	-	-	521
Stage 2	-	-	701
Critical Hdwy	4.12	-	6.82
Critical Hdwy Stg 1	-	-	5.82
Critical Hdwy Stg 2	-	-	5.82
Follow-up Hdwy	2.21	-	3.51
Pot Cap-1 Maneuver	1025	-	173
Stage 1	-	-	563
Stage 2	-	-	456
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1025	-	173
Mov Cap-2 Maneuver	-	-	173
Stage 1	-	-	563
Stage 2	-	-	456

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1025	-	-	-	727
HCM Lane V/C Ratio	-	-	-	-	0.098
HCM Control Delay (s)	0	-	-	-	10.5
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.3

HCM 2010 TWSC
 17: Welcome Center & Dvwy

Intersection

Int Delay, s/veh 4.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	0	55	50	41	30	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	0	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	0	58	53	43	32	19

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	189	41	51	0	-	0
Stage 1	41	-	-	-	-	-
Stage 2	148	-	-	-	-	-
Critical Hdwy	6.41	6.21	4.11	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	2.209	-	-	-
Pot Cap-1 Maneuver	802	1033	1562	-	-	-
Stage 1	984	-	-	-	-	-
Stage 2	882	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	775	1033	1562	-	-	-
Mov Cap-2 Maneuver	775	-	-	-	-	-
Stage 1	984	-	-	-	-	-
Stage 2	852	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.7	4.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1562	-	-	1033	-	-
HCM Lane V/C Ratio	0.034	-	-	0.056	-	-
HCM Control Delay (s)	7.4	-	0	8.7	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	-	-

ORDINANCE NO. 14-2015

AN ORDINANCE OF THE CITY OF DELTONA, FLORIDA, AMENDING THE DELTONA WELCOME CENTER BUSINESS PLANNED UNIT DEVELOPMENT AGREEMENT FOR THE FOLLOWING PARCELS: LOT 2 AND 3, DELTONA WELCOME CENTER, MAP BOOK 45, PAGES 17 AND 37, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA, TOTALING APPROXIMATELY ±1.98 ACRES; AND PROVIDING FOR CONFLICTS, SEVERABILITY, AND FOR AN EFFECTIVE DATE.

WHEREAS, the City has received an application to amend the February 23, 2003 Deltona Welcome Center Business Planned Unit (BPUD) Development Agreement by removing the text “(maximum of one lot)” that limits the list of permitted principal uses within the BPUD; and

Amending the Development Agreement access provisions to allow for two right-in/right-out driveway cuts, one to Debary Avenue and the other Deltona Boulevard shown on the revised Master Development Plan (sheet 3).

WHEREAS, the City of Deltona, Florida, and its Land Planning Agency have complied with the requirements of Municipal Home Rule Powers Act, sections 166.011 et seq., Florida Statutes, in considering the proposed BPUD amendment; and

WHEREAS, after said public hearing, the City Commission of the City of Deltona, Florida, has determined that the Deltona Welcome Center BPUD will be amended to increase the number of access points and remove the text “(maximum of one lot)” from the permitted principal uses to allow more than one convenience store with fuel pumps within the Deltona Welcome Center BPUD, and has further determined that said zoning action is consistent with the Comprehensive Plan of the City of Deltona, Florida.

BE IT ORDAINED BY THE CITY COMMISSION OF THE CITY OF DELTONA, FLORIDA:

SECTION 1. The Deltona Welcome Center BPUD located in the City of Deltona, Florida, is hereby amended to remove the text “(maximum of one lot)” for a convenience store with fuel pumps from the permitted principal uses and allow one right-in/right-out access from Deltona Boulevard to lots 3&4 and allow one access point for right-in/right-out to DeBary Avenue for the following property:

Parcel# 01-19-30-08-00-0020 and 01-19-30-10-00-0030, lots 2 and 3, Deltona Welcome Center, map book 45, pages 17 and 37, of the public records of Volusia County, Florida

SECTION 2. This Ordinance is adopted in conformity with and pursuant to the Comprehensive Plan of the City of Deltona, the local government Planning and Land Development Act, Sections 163.161 et. Seq., Florida Statutes, and the Municipal Home Rule Powers Act, Sections 166.011 et. seq., Florida Statutes.

SECTION 3. CONFLICTS. All Ordinances or parts of Ordinances insofar as they are inconsistent or in conflict with the provisions of this Ordinance are hereby repealed to the extent of any conflict.

SECTION 4. CODIFICATION. The provisions of this Ordinance shall be codified as and become and be made a part of the Code of Ordinances of the City of Deltona. The sections of this Ordinance may be renumbered or relettered to accomplish such intention.

SECTION 5. SEVERABILITY. In the event that any portion or section of this Ordinance is determined to be invalid, illegal or unconstitutional by a court of competent jurisdiction, such decision shall in no manner affect the remaining portions or sections of this Ordinance which shall remain in full force and effect.

SECTION 6. EFFECTIVE DATE. This Ordinance shall take effect immediately upon its final passage and adoption.

PASSED AND ADOPTED THIS ____ DAY OF _____, 2015.

FIRST READING: _____

ADVERTISED: _____

SECOND READING: _____

JOHN C. MASIARCZYK SR., MAYOR

ATTEST:

JOYCE RAFTERY, CITY CLERK

Approved as to form and legality for use
and reliance by the City of Deltona, Florida

GRETCHEN R. H. VOSE, CITY ATTORNEY

JOYCE RAFTERY, CITY CLERK

Approved as to form and legality for use
and reliance by the City of Deltona, Florida

GRETCHEN R. H. VOSE, CITY ATTORNEY



Staff Report

To: Planning and Zoning Board
From: Chris Bowley, AICP, Director of Planning and Development Services
Date: August 7, 2015
Re: Project No. RZ15-004

A. Summary of Application:

Applicant: Newkirk Engineering
1370 North U.S. 1
Suite 204
Ormond Beach, FL 32174

Request: The City has received an application to amend the official zoning from R1-AA to Mixed Use Planned Unit Development (MPUD) for a portion of the Deltona Activity Center.

Tax Parcel No.: 18-18-31-00-0031, 18-18-31-00-0032, 18-18-31-00-0037

Property Acreage: ± 9.28 Acres

Property Location: 2306 N. Normandy Boulevard

Legal Description: The south half (1/2) of the north half (1/2) government lot 4, of section 18, township 18 south, range 31 east, Volusia County, Florida, less the right-of-way of interstate highway no. 4, less the right-of-way of Normandy Boulevard, and less the following: begin at the point of intersection of the north line of the Florida Power and Light Company right-of-way easement with the east right-of-way line of interstate highway no. 4, as shown on the plat of Deltona Lakes unit 4, recorded in plat book 25, on page 124, public records of Volusia County, Florida; thence run north 15 degrees 23 minutes 47 seconds east, along said right-of-way line, 685.10 feet; thence departing

said right-of-way line run north 89 degrees 41 minutes 43 seconds east, 326.22 feet; thence south 00 degrees 13 minutes 28 seconds east, 660.25 feet to the aforementioned north line of that Florida Power and Light Company right-of-way easement, thence south 89 degrees, 46 minutes, 32 seconds west along said line 510.70 feet to the point of beginning as recorded in the public records of Volusia County, Florida

Existing Zoning: R1-AA

B. Background: The City has received an application to amend the official zoning map from R1-AA to Mixed Use Planned Unit Development (MPUD) for a +/- 9.23 acre area of the Deltona Activity Center. The property is situated on the west side of N. Normandy Blvd. approximately 200 feet north of the intersection of N. Normandy Blvd. and Firwood Dr. The applicant is planning a two lot subdivision; Lot 1, totaling approximately 5.4 acres, would be used for a 102 room, 114 bed assisted living facility (ALF); and approximately 3.8 acre Lot 2 would be used for self-storage mini warehouses.

C. Support Information

Public Facilities:

- a. Potable Water: to be supplied by Volusia County Water Resources and Utilities.
- b. Sanitary Sewer: to be supplied by Volusia County Water Resources and Utilities.
- c. Fire Protection: Deltona Fire Station 65
- d. Law Enforcement: Volusia County Sheriff's Office (VCSO)
- e. Electricity: Duke Energy

D. Matters for Consideration:

Section 110-1101, Code of City Ordinances, states that the City shall consider the following matters when reviewing applications for amendments to the Official Zoning Map:

1. Whether it is consistent with all adopted elements of the Comprehensive Plan.

Rezoning activity is required to be consistent with the Comprehensive Plan. The proposed rezoning to MPUD has been analyzed with regard to the Comprehensive Plan. Applicable provisions of the Comprehensive Pan are illustrated and relevance discussed below:

Policy FLU2-1.7

Future development within the Activity Center shall require rezoning to a Planned Unit Development (PUD) or amendment to an existing PUD. Provided, however, that any development of an existing parcel that is 0.5 acres or less in size and which is permissible by the existing zoning classification assigned the parcel shall not require rezoning to PUD if the existing zoning classification is consistent with the Activity Center Plan future land use designation.

9J-5.006(3)(c)(1,2)

The property is located within the Deltona Activity Center. The above policy requires that most developments within the Activity Center be processed as a Planned Unit Development. Consistent with this policy, the property is proposed to be rezoned to Mixed Use Planned Unit Development (MPUD).

OBJECTIVE FLU2-1

Achieve an integrated and well-planned mixture of urban land uses within The Deltona Activity Center that encourages the creation of an employment center.

9J-5.006(3)(b)(10)

The above provision establishes the essential purpose and intent of the Activity Center. Existing land uses and land use entitlements granted within the Activity Center include retail, entertainment, service, medical, office, etc. allowances. The proposed MPUD includes an assisted living facility (ALF) and a mini warehouse. The MPUD represents a mixture of uses on a unified development parcel. In addition, the MPUD will complement existing and planned uses for the Activity Center at large.

Policy FLU2-1.13

Individual developments within the Activity Center shall be designed consistent with the City of Deltona's Urban Design Pattern Book and Urban Design Master Plan as it may be updated from time to time to provide visual compatibility and functional continuity with other adjacent developments within the Activity Center. 9J-5.006(3)(b)(2)

Even though the two documents (Urban Design Pattern Book and the Urban Design Master Plan) are advisory in nature, some of the elements illustrated in these documents can be applied to the project. In addition, the spirit and intent of these documents has been incorporated into other Activity Center rezoning Development Agreements. Therefore, the application of these documents where reasonable and practical would be consistent with this policy.

Policy FLU2-1.14

New development (including redevelopment) should, at a minimum, be required to: provide for a unified appearance by utilizing such mechanisms as sign control (i.e. number, height, and display area), landscape screening/buffering requirements (i.e. width and composition), underground utilities (including electric), and building setbacks and height requirements;

- use shared parking, access and loading facilities, as practical, in an effort to reduce impervious surfaces;*
- promote pedestrian, bicycle vehicular (including mass transit) and non-vehicular movement throughout the Activity Center;*
- provide a network of unifying open spaces (said open spaces shall be in, or predominately in, a natural state) which promote linkage with other adjoining developments;*
- cluster in order to protect listed species and their habitat;*
- use common frontage/service roads;*
- use shared or joint facilities such as stormwater, bus stops, and utility easements.*

Aesthetics and the quality of the built environment are of importance to the City. While some of the points of this policy are not really applicable to the subject MPUD application, the theme of this policy involves a unified architectural appearance and appropriate landscaping. These architectural and landscaping elements are contained within the MPUD Development Agreement.

Policy FLU1-8.4

Group homes, community residential living facilities, nursing homes and boarding houses exceeding seven unrelated residents shall be encouraged in commercial land use designations as long as it is compatible with the character of the surrounding residential area. 9J-5.006(3)(c)(2)

The Activity Center is an area that is earmarked for various future land uses including commercial, office and industrial. Further, the Activity Center planning concept does recognize residential as an appropriate component. In the case of the MPUD request, a use with a residential element is proposed – assisted living facility (ALF). The ALF for the purposes of the above policy is considered a residential living facility. Such living facilities are encouraged in commercial areas as per the above policy. Therefore, the ALF aspect of the requested MPUD would advance the policies of the Activity Center.

Policy FLU1-1.1

Development consistent with the Future Land Use Map shall not occur until services and facilities have been determined to be available concurrent with the impacts of the proposed development.

And

Policy FLU1-1.8

Sites for development shall be accessible to the following essential public facilities and services at the levels of service adopted in this Comprehensive Plan: fire services, transportation, potable water, an appropriate wastewater treatment facility, solid waste and stormwater management.

9J-5.006(3)(c)(3)

The above two policies address a cornerstone of the City planning program – concurrency regarding the adequacy of public utilities and services. Based on research by City staff there is adequate concurrency capacity to support the demand on public services created by the MPUD project. Concurrency is discussed in detail elsewhere within this report.

2. Its impact upon the environment or natural resources.

The property is vacant and undeveloped. The property is densely vegetated with an over story of sand pines. Other vegetation includes various scrub oak species and palmetto. The soils are sandy and well drained. There are no wetlands on site and none of the property is located within the 100 year floodplain. Finally, the property may provide habitat for listed wildlife including gopher tortoises and scrub jays. However, the dense and high profile nature of the vegetation is not conducive scrub jay habitat. Gopher tortoises may be on site but the dense nature of the site vegetation would preclude a high tortoise per acre population. As part of the site plan review process the property will be surveyed for both scrub jays and gopher tortoises.

3. Its impact upon the economy of any affected area.

The Activity Center has for many years been viewed by the City as an opportunity for economic growth and diversification. Slowly but surely, notwithstanding platting and other challenges, the Activity Center is starting to evolve from a nearly vacant landscape to an area that shows early signs of economic synergy. There are retail and service uses (gas station/convenience store and theater) established in the Activity Center. In another section of the Activity Center, medical uses are slated to dominate a 130 tract recently approved as a Business Planned Unit Development. The assisted living facility and mini warehouse uses planned for the subject MPUD represent a logical evolution of Activity Center growth. ALF facilities represent job opportunities in the medical field ranging from entry level care givers to well-paid medical staff members. While a mini warehouse use is not a significant job creator, it has a relatively low impact on public utilities and services.

4. Notwithstanding the provisions of Article XIV of the Land Development Code, Ordinance No. 92-25 [Chapter 86, Code of Ordinances] as it may be amended from time to time, its impact upon necessary governmental services, such as schools, sewage disposal, potable water, drainage, fire and police protection, solid waste or transportation systems.

- a. **Schools:** The MPUD does not generate pupil yield and will not have any negative impact on local schools
- b. **Sewage Disposal:** Wastewater will be treated by Volusia County Water Resources and Utilities.
- c. **Potable Water:** Potable water will be supplied by Volusia County Water Resources and Utilities.
- d. **Drainage:** All drainage will be treated by an onsite stormwater system and will require approval by the City prior to issuance of a Development Order. The stormwater system will be the responsibility of the property owner's association to maintain.
- e. **Transportation Systems:** According to the applicant submitted traffic impact analysis, the project will generate 539 daily trips on the City thoroughfare roadway network. The most impacted thoroughfare roadway is the segment of North Normandy Blvd. between Graves Av. and Saxon Blvd. This segment features both two and four lane designs. N. Normandy Blvd. between Firwood Dr. and Saxon Blvd. is a four lane facility and the segment from Firwood Dr. to Graves Av. is two lanes. . However, regardless of the design differences, N. Normandy Blvd. from Graves Av. to Saxon Blvd. is operating at a level of service "C". The LOS "C" operating status of the subject segment of N. Normandy was determined utilizing City of Deltona 2015 traffic counts.

The City level of service threshold for City thoroughfares is "E". LOS "E" implies that there will be some traffic congestion. However, LOS "E" basically represents the maximum use of a facility without the roadway being congested to a point where traffic does not flow. In the case of the MPUD project, there is ample traffic capacity to support the proposed uses without causing City deleterious impacts to the local City thoroughfare network.

5. Any changes in circumstances or conditions affecting the area.

None.

6. Any mistakes in the original classification.

No known mistakes.

7. Its effect upon the public health, welfare, safety, or morals.

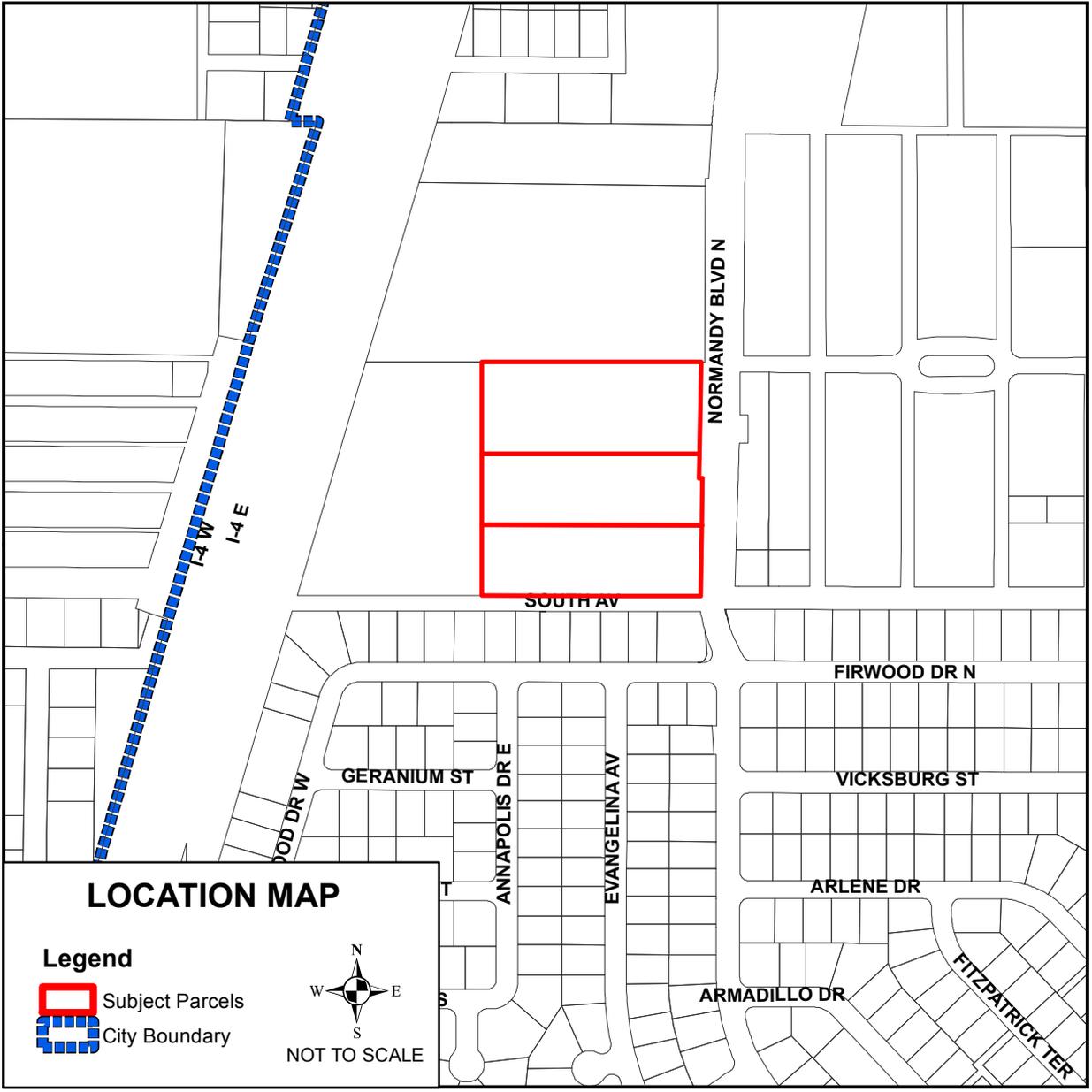
The +/-9.23 acres is located in the southwestern corner of the Activity Center and is located in the vicinity of established single-family neighborhoods. However, there is ample separation between the proposed use and existing neighborhoods via a 50 foot wide power line easement and on planned on-site setbacks and buffers. In addition, the inherent nature of the proposed uses – ALF and mini warehouse – pose insignificant land use conflicts, including traffic and sensory impacts, with nearby residential areas. Therefore, development of this site should not have any negative impacts on the health safety or welfare of the City or its residents.

The proposed Mixed Use Planned Unit Development (MPUD) is associated with the written Development Agreement (DA) that represents a set of development standards and conditions for the subject property. Such standards include setbacks, lot sizes, land uses, aesthetic considerations, infrastructure improvements, signage, parking, landscaping etc. Staff has reviewed the subject MPUD Development Agreement and has provided revisions to the DA. The revisions are presented in an underline and strike-through format. The revisions include design requirements and architectural guidelines. To implement these DA provisions, color elevations will be presented to the City for review as part of the administrative site plan review process. According to the City Land Development Code, residential elements of Planned Unit Developments, such as Lot 1, are required to afford 25% common open space that is accessible to the residents. Therefore, 25% of Lot 1 will need to be recognized as common open space. The common open space will be illustrated on MPUD master development plan. Other changes include modifications to dimensional requirements and allowed land uses.

CONCLUSION/STAFF RECOMMENDATION:

The Activity Center for many years has been the subject of extensive planning and study by various local governments, including Deltona. The basic premise of the Activity Center has always been the promotion of economic advancement represented by aesthetically appropriate, high value development. The subject MPUD, with the staff changes to the

Development Agreement, comports with the long standing vision of the City of Deltona regarding the Activity Center. Therefore, staff recommends approval of Ordinance 15-2015, incorporating the staff recommended changes to the Development Agreement, amending the official zoning map for parcels 18-18-31-00-0031, 18-18-31-00-0032, and 18-18-31-00-0037 from RI-AA to MPUD.



LOCATION MAP

Legend

-  Subject Parcels
-  City Boundary



NOT TO SCALE



NORMANDY BLVD N

SOUTH AV

AERIAL PHOTO

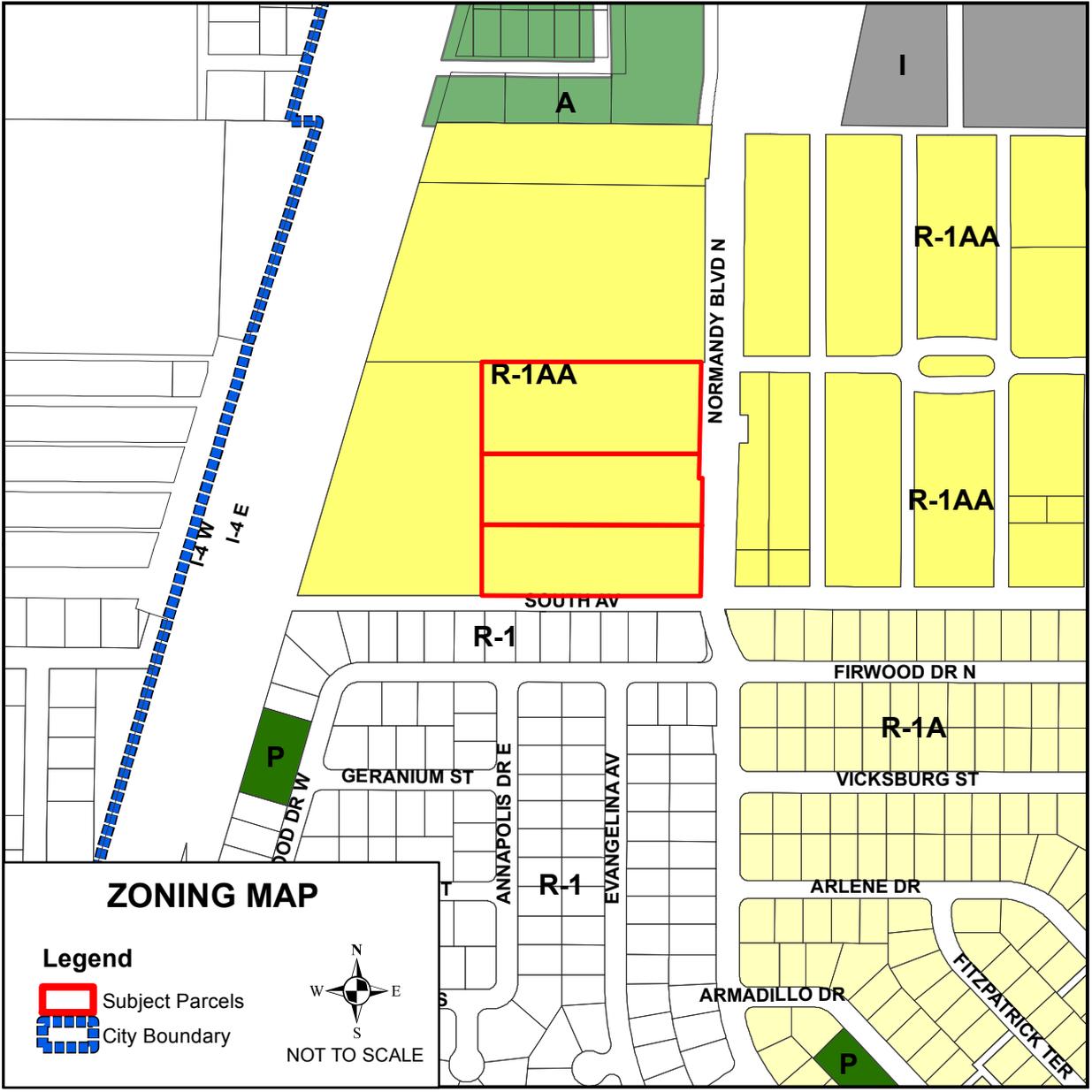
Legend

-  Subject Parcels
-  City Boundary



NOT TO SCALE





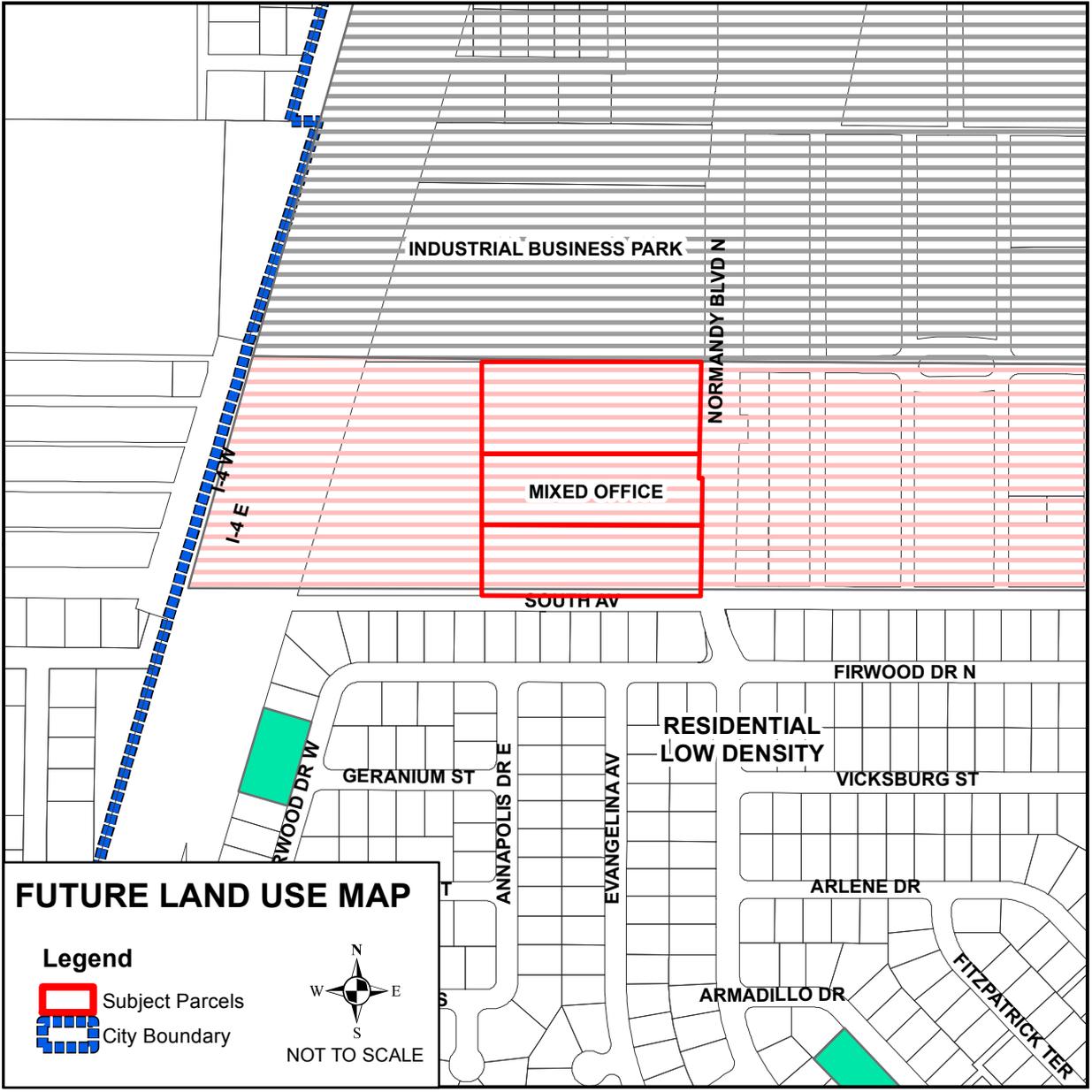
ZONING MAP

Legend

-  Subject Parcels
-  City Boundary



NOT TO SCALE



INDUSTRIAL BUSINESS PARK

NORMANDY BLVD N

MIXED OFFICE

SOUTH AV

FIRWOOD DR N

RESIDENTIAL
LOW DENSITY

GERANIUM ST

ANNAPOLIS DRE

EVANGELINA AV

VICKSBURG ST

ARLENE DR

ARMADILLO DR

FITZPATRICK TER

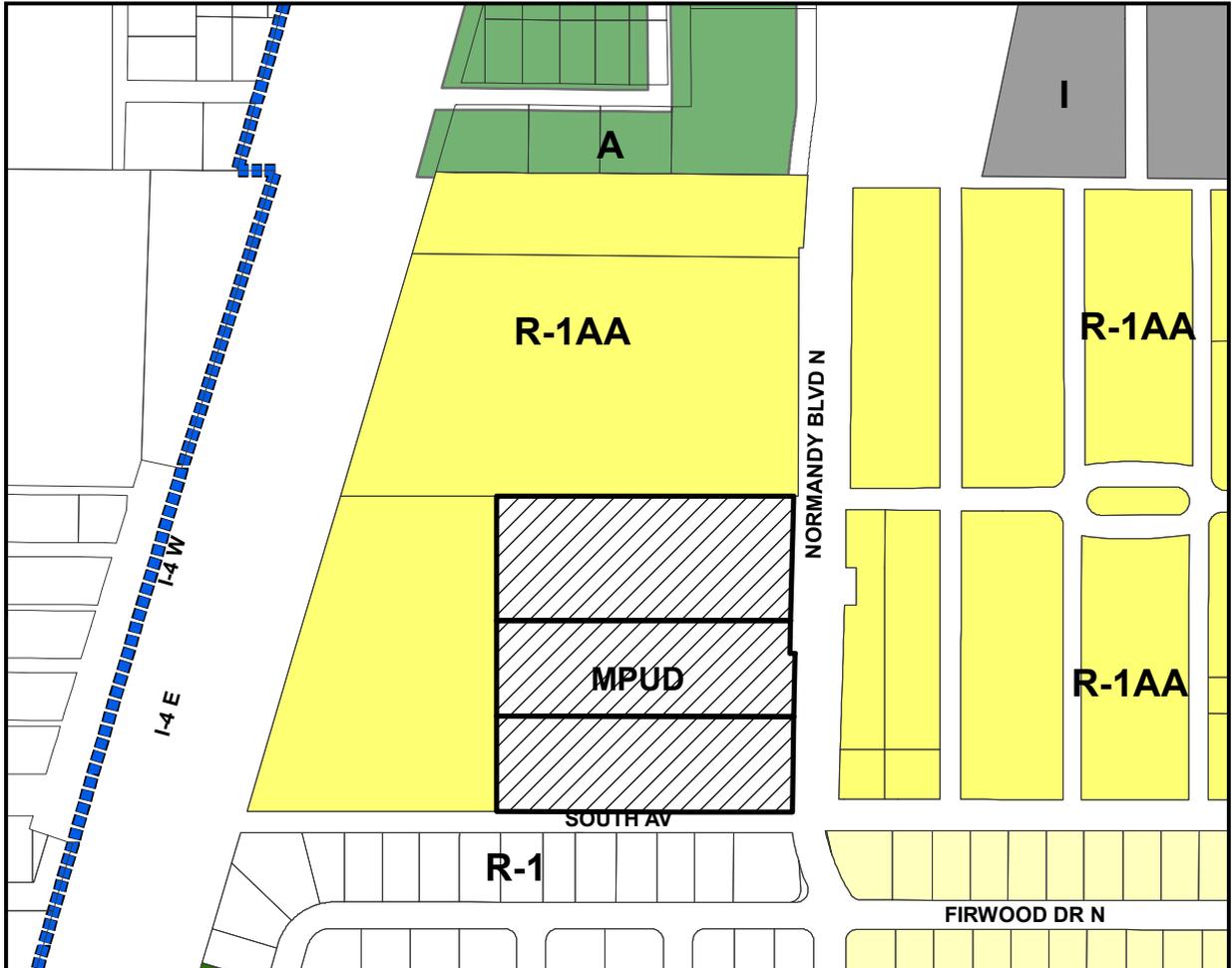
FUTURE LAND USE MAP

Legend

-  Subject Parcels
-  City Boundary



NOT TO SCALE



PROPOSED ZONING

Legend

-  Mixed Planned Unit Development
-  Subject Parcels
-  City Boundary



NOT TO SCALE

R-1

EVANGELINA AV

NORMANDY BLVD N

FIRWOOD DR N

VICKSBURG ST

ARLENE DR

R-1AA

MPUD

SOUTH AV

R-1

R-1AA

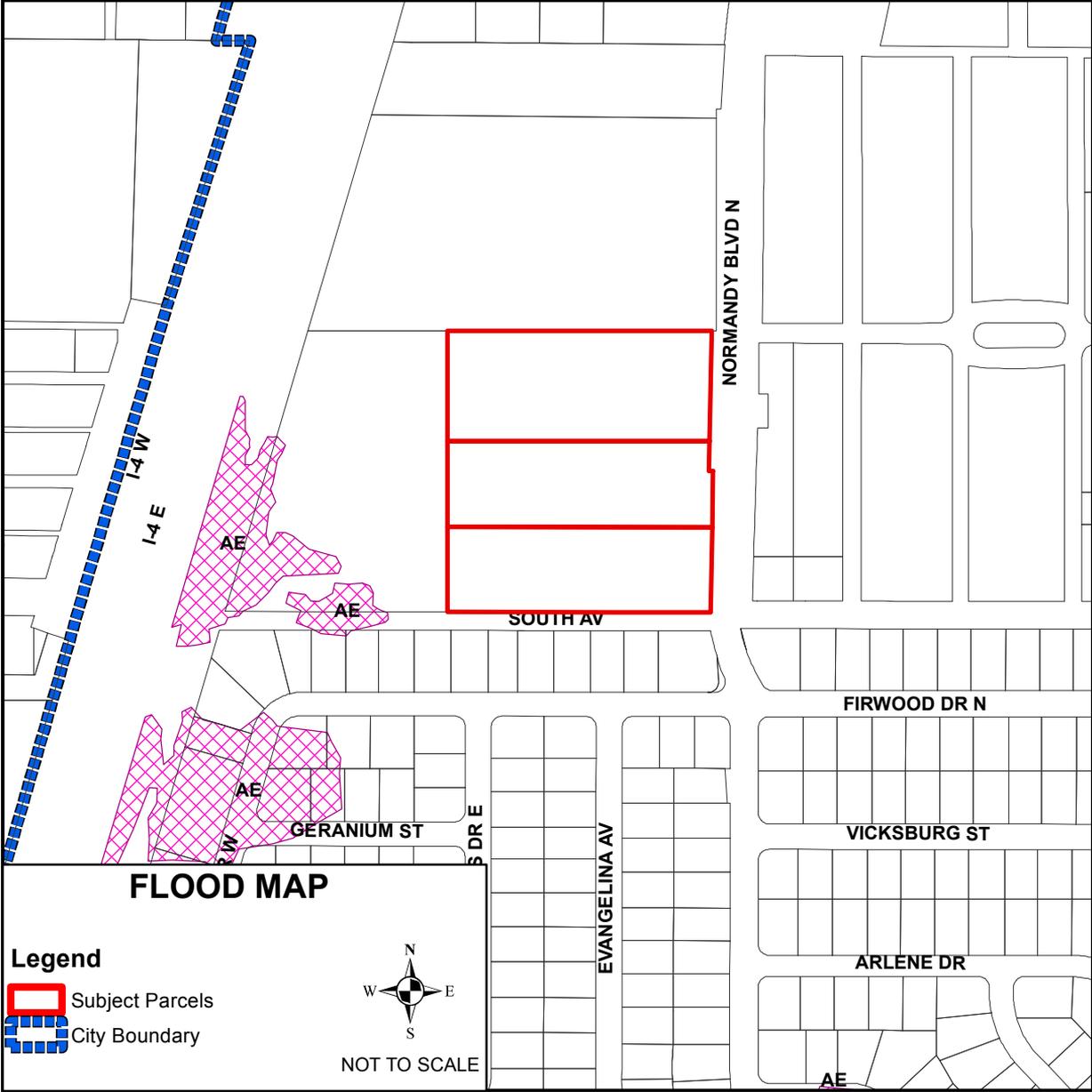
R-1AA

R-1A

A

I

I-4 W
I-4 E





NEWKIRK ENGINEERING, INC.
Civil Engineering – Land Development – CEI
 1370 North US Highway 1, Suite 204
 Ormond Beach, FL 32174
 (386) 290-7599
Harry@Newkirk-Engineering.com

June 30, 2015

Mr. Chris Bowley, Director
 Department of Planning & Development Services
 City of Deltona
 2345 Providence Boulevard
 Deltona, FL 32725

RE: 2306 NORMANDY PLAT (GOLD CHOICE ALF)
2306 NORTH NORMANDY BOULEVARD

Dear Mr. Bowley:

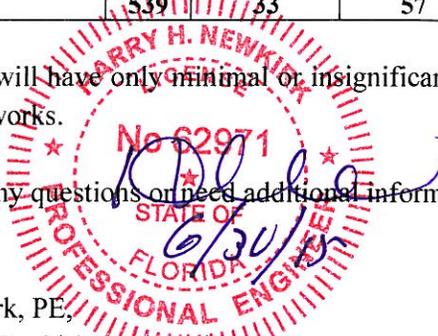
The proposed project consists of an Assisted Living Facility of 45,327 square foot and 90,902 square feet of mini warehouse storage. Site access for the assisted living facility will be provided by two (2) full access driveways and the mini warehouse facility will have one full access driveway on North Normandy Boulevard. The following is trip generation rates for this project:

Description / ITE Code	Units	ITE Vehicle Trip Generation Rates							
		(peak hours are for peak hour of adjacent streets)							
		Weekday	AM	PM	Pass-By	AM In	AM Out	PM In	PM Out
Mini Warehouse (151)	KSF ²	2.5	0.15	0.26	0	59%	41%	51%	49%
Assisted Living (254)	Occ. Beds	2.74	0.17	0.29	0	73%	27%	52%	48%

Description / ITE Code	Total Generated Trips			Total Distribution of Generated Trips					
	Daily	AM Hour	PM Hour	AM In	AM Out	Pass-By	PM In	PM Out	Pass-By
Mini Warehouse (151)	227	14	24	8	6	0	12	12	0
Assisted Living (254)	312	19	33	14	5	0	17	16	0
Total	539	33	57	22	11	0	29	28	0

This project will have only minimal or insignificant traffic impact onto the North Normandy Boulevard and surrounding roadway networks.

If you have any questions or need additional information, please feel free to call.



Harry Newkirk, PE,
 President of Newkirk Engineering,
 Florida License No. 62971

**THIS INSTRUMENT PREPARED BY
AND AFTER RECORDING RETURN TO:**

Gretchen R. H. Vose, Esq.
City Attorney
City of Deltona
2345 Providence Boulevard
Deltona, Florida 32725

<p>For Recording Purposes Only</p> <p>Signature of Notary</p>

Exhibit "A" to Ordinance No. 15-004

DEVELOPMENT AGREEMENT

for the project known as 2306 Normandy Mixed Use Planned Unit Development (MPUD) located at 2306 North Normandy Boulevard, Deltona, Florida 32725 (hereinafter referred to as the "Subject Property").

THIS DEVELOPMENT AGREEMENT (hereinafter referred to as the "Agreement") is entered into and made as of the ___ day of _____, 201__, by and between the CITY OF DELTONA, a Florida municipal corporation, with a mailing address of 2345 Providence Boulevard, Deltona, Florida 32725, (hereinafter referred to as the "City"), and 2306 Normandy, LLC, (hereinafter referred to as the "Owner or Owner/Developer"), and the Developer has an executed Notarized Owner Authorization from the Owner/Developer).

WITNESSETH

WHEREAS, the Owner warrants that it holds legal title to the lands located in Volusia County, Florida, and within the corporate limits of the City of Deltona, said lands being more particularly described in Exhibit "B", Legal Description for the Subject Property, attached hereto and by this reference made a part hereof; and that the

holders of any and all liens and encumbrances affecting such property will subordinate their interests to this Agreement; and

WHEREAS, the Owner/Developer has clear title of the Subject Property and intends to develop such property as an assisted living facility and a mini warehouse facility.

WHEREAS, the Owner/Developer or Developer desires to facilitate the orderly development of the Subject Property in compliance with the laws and regulations of the City and of other governmental authorities, and the Owner/Developer or Developer desires to ensure that its development is compatible with other properties in the area and planned traffic patterns; and

WHEREAS, the development permitted or proposed under this Development Agreement is consistent with the City's Comprehensive Plan, concurrency management system, and all land development regulations and this Agreement does not replace, supersede, or grant variances to those regulations; and

WHEREAS, it is the purpose of this Agreement to clearly set forth the understanding and agreement of the parties concerning the matters contained herein; and

WHEREAS, the Owner/Developer and/or Developer have sought the City's approval to develop the Subject Property, and the City approved Ordinance No. _____, through rezoning the Subject Property to a form of Mixed Use Planned Unit Development (MPUD), as defined under the City's Land Development Code on _____. The MPUD shall consist of this Agreement as the Written Agreement of the MPUD and an Exhibit "C", Master Development Plan (MDP), attached hereto and by this reference made a part hereof as the Preliminary Plan, subject to the covenants, restrictions, and easements offered by the Owner/Developer or Developer and contained herein, (hereinafter the "Master Development Plan"). Where more detailed criteria for City required submittals exceed the criteria required for a Master Development Plan, the more detailed criteria applies.

NOW THEREFORE, in consideration of the mutual covenants and agreements contained herein, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereto agree as follows:

1. **Recitals and Definitions.** The recitals herein contained are true and correct and are incorporated herein by reference. All capitalized terms not otherwise defined herein shall be as defined or described in the City's Land Development Code as it may be amended from time to time, unless otherwise indicated.

2. **Ownership.** The legal and equitable owners of the Subject Property are: 2306 Normandy LLC.

3. **Title Opinion/Certification.** The Owner/Developer will provide to the City, in advance of the City's execution and recordation of this Agreement, a title opinion from a licensed attorney in the state of Florida, or a certification by an abstractor or title company authorized to do business in the state of Florida, verifying marketable title to the Subject Property to be in the name of the Owner/Developer and any and all liens, mortgages, and other encumbrances that are either satisfied or not satisfied or released of record.

4. **Subordination/Joinder.** Unless otherwise agreed to by the City and if applicable, all liens, mortgages, and other encumbrances that ~~is~~ are not satisfied or released of record, must be subordinated to the terms of this Agreement or the Lienholder join in this Agreement. It shall be the responsibility of the Owner/Developer and/or Developer to promptly obtain the said subordination or joinder, in form and substance that is acceptable to the City Attorney, prior to the execution and recordation of this Agreement.

5. **Duration.** The duration of this Agreement is binding and runs with the land in perpetuity, unless amended.

6. **Development of the Subject Property.** Development of the Subject Property shall be subject to performance standards listed in this Agreement. Where a land use listed below differs from a defined use in the City of Deltona's Code of Ordinances, the use listed in this Agreement shall prevail.

A. Comprehensive Plan Policies specific to this Subject Property.

B. Permitted principal uses allowable on the Subject Property:

1. Assisted living facility
2. Nursing home and nursing home facility
3. Medical offices and clinics ancillary to the assisted living facility/nursing home.
4. General offices subordinate and ancillary to the assisted living facility/mini-warehouse.
5. Mini-warehouse: Lot 2 only
6. ~~Retail sales and service~~
7. Essential Public Utilities
8. Exempt Excavations

C. Prohibited principal uses, if any:

1. ~~Adult entertainment~~ All other uses prohibited.

2. ~~Automobile service stations~~

- D. ~~Proposed minimum density/minimum intensity: none (in number of dwelling units per acre) or minimum intensity (measured in floor area ratio): 2 units per acre, FAR = 0.10~~
- E. ~~Proposed maximum density/intensity: Lot 1 – FAR 0.20; Lot 2 - FAR 0.55. (in number of dwelling units per acre) or maximum intensity (measured in floor area ratio), if any: 20 units per acre, FAR = 0.50~~
- F. ~~Impervious surface ratio is not to exceed 70% of the gross square footage of Lot 1 and 70% of the gross square footage of Lot 2. for the Subject Property.~~
- G. ~~Maximum lot coverage 35% on Lot 1 and 35% on Lot 2 (in %) (dry retention systems can be used towards open space): 40~~
- H. ~~Minimum Landscaping and bufferyards shall comply with Section 110-808 as it may be amended from time to time. requirements are per the City's Land Development Code. Stormwater management facilities shall not be placed within bufferyards.~~
- I. ~~Maximum number of lots: 2~~
- I. ~~Minimum lot size area (in acreage or square footage): 40,000 Lot 1 – 235,877 square feet; Lot 2 – 168,577 square feet or approved as per Final Plat application FP 15-003.~~
- J. ~~Minimum lot width/street frontage: (in feet): 100 The lot width and frontage shall be maintained consistent with Final Plat FP 15-003.~~
- K. ~~Minimum yard setbacks:~~
1. ~~Front yard: 25 35 ft, Lot 1 and Lot 2~~
 2. ~~Side yard: 5 10 ft, Lot 1 and Lot 2~~
 3. ~~Street side yard: 15 ft~~
 4. ~~Rear yard: 10 ft, Lot 1 and Lot 2~~
- ~~Side yard may be reduced to zero foot where adjacent with proposed building with zero foot setback.~~
- L. ~~Maximum building height (in feet): 35 ft~~
- M. ~~The mini warehouse use on Lot 2 shall comply with applicable sections of Chapter 110-814(h), or equivalent, as it may be amended from time to time.~~

- N. Parking requirements shall meet the provisions of Sections. 110-828 and 110-829 of the City's Land Development Code as it may be amended from time to time.
- O. All Signage shall comply with the provisions of Chapter 102 of the City Land Development Code as it may be amended from time to time.
- P. Required lighting standards per the City's Land Development Code shall be included on a separate Illumination Plan to be provided at the time of site plan submittal.
- Q. Architectural controls and development on the Subject Property shall follow a common architectural theme as listed in this Agreement by harmoniously coordinating the general appearance of all buildings and accessory structures, and to the extent practicable, be designed consistent with the City of Deltona's Urban Design Pattern Book and Urban Design Master Plan, as it may be amended from time to time. The intent is to provide visual compatibility and functional continuity with adjacent developments within the Activity Center. For the purposes herein, general appearance includes, but is not limited to, exterior wall finishes, construction materials, roof styles, slopes, architectural details and ornamentation. The following general requirements shall apply to development on the Subject Property:
- a. All structures shall complement one another and shall convey a sense of quality and permanence.
 - b. Exterior walls facing public rights-of-way shall be constructed of finished materials such as stucco, natural brick or stone, finished concrete, wood, or concrete fiberboard, or other similar material on all sides.
 - c. The architectural elements of amenities, accessory structures and signage shall be consistent.
 - d. All service areas and mechanical equipment visible from public rights-of-way (ground or roof) including but not limited to, air conditioning condensers, heating units, electric meters, satellite dishes, irrigation pumps, ice machine dispensers, vending machines, and other mechanicals, shall be screened using architectural features consistent with the structure, or landscaping of sufficient density and maturity at planting to provide opaque screening.
 - e. Loading docks shall be located away from the street and screened from public view.
 - f. Metal buildings shall comply with Sec. 110-814(i) as it may be amended from time to time.

~~All of the above guidelines, controls and variations shall be defined by a Homeowners Association or Property Owners Association, as defined within this Agreement.~~

Architectural elevations, depicted in color, shall be submitted with a Final Site Plan application for each lot and the Development Review Committee (DRC) shall determine compliance before issuing a Development Order.

- R. Utility provision and dedication: The Owner/Developer or Developer shall connect to ~~the City of Deltona's central utility systems, when available, or to Volusia County's central utility systems, where applicable,~~ at their sole cost and expense. Utility fees shall be paid to ~~Deltona Water or Volusia County, respectively,~~ before any building permit is issued. Central utility systems are to be designed, permitted, and constructed to ~~the respective service provider~~ specifications and dedicated to the respective service provider upon final inspection, clearance, and acceptance by the service provider.
- S. Stormwater and environmental: ~~Per parcel stormwater systems or master~~ The stormwater system shall be owned and maintained by an established Homeowners Association or Property Owners Association in private ownership and shall not be dedicated to or become the responsibility of the City of Deltona. All environmental permitting, mitigation, and/or soil and erosion control for the property shall conform to all federal, state, and local permits/requirements, shall be the sole responsibility of the owner/developer. Homeowners Association or Property Owners Association, and The stormwater management system shall be maintained in good condition/standing with the applicable permitting authorities. Best Management Practices and conformance to National Pollutant Discharge Elimination System (NPDES) criteria are required.
- T. Transportation, site access, and traffic devices: The Owner/Developer or Developer is responsible for all transportation improvements within the Subject Property and any off-site transportation requirements, as a result of the proposed development, for site function, that maintains or improves the level of service for area roadways, and ensures the public health, safety, and welfare for the community. All permits shall be obtained from appropriate permitting agencies prior to development and the City shall determine the appropriate level of service per the City Comprehensive Plan and current traffic counts. Each lot will be granted one direct access to North Normandy Blvd. Another access to North Normandy Blvd. will be improved by the Owner/Developer that coincides with an ingress and egress easement utilized by the City of Deltona to access nearby City utility infrastructure. All access points shall be designed, including with appropriate storage, consistent with the City Land Development Code.
- U. Open Space: There is a residential element of the MPUD that includes a living facility which is proposed for Lot 1. Therefore, at least 25% of Lot 1

shall be incorporated into common open space accessible to the residents. The common open space may include but not be limited to a central courtyard and the retention area could be incorporated into an exercise trail, outside dining amenity etc. The common open space shall be depicted on the Final Site Plan for Lot 1.

7. **Public Facilities/Land Dedication.** ~~Facilities or tracts that either are or shall become public facilities/tracts that will serve the development and/or are on the Subject Property are, as follows: The applicable dedication of facilities or land will be addressed through the City Plat process.~~

8. **Development Permits/Fees.** The Owner/Developer or Developer is responsible for obtaining, permitting, and the payment of all fees for facilities and services to ~~ensure for~~ facilitate development of the Subject Property. Any site permits shall be kept current with the respective permitting agency and shall ensure the protection of the public health, safety, and welfare of the community and the development. All impact fees are applicable and no impact fee credits shall be awarded through this Agreement. ~~unless a cessation exists through a City moratorium that is Citywide.~~ Proportionate fair share site improvements shall not be used in lieu of impact fees.

9. **Obligations.** Should the Owner/Developer or Developer fail to undertake and complete its obligations as described in this Agreement to the City's specifications, then the City shall give the Owner/Developer or Developer thirty (30) days written notice to commence and ninety (90) days to complete said required obligation. If the Owner/Developer or Developer fails to complete the obligations within the ninety (90) day period, then the City, without further notice to the Owner/Developer or Developer, or its successors in interest, may, without prejudice to any other rights or remedies it may have, place liens and take enforcement action on the Subject Property. A lien of such assessments shall be superior to all others, and all existing lienholders and mortgagees, by their execution of the subordination or joinder documents, agree to subordinate their liens or mortgages to the City's said liens or assessments. Notice to the Owner/Developer or Developer and its successors in interest shall be deemed to have been given upon the mailing of notice to the address or addresses set forth in Paragraph (23) hereof.

10. **Site Plan/Plat Approval.** The Master Development Plan (Exhibit "C") shall not replace, supersede, or absolve the Owner/Developer or Developer from approvals for any site plan, preliminary plat, and/or final plat and respective regulations. Where more detailed criteria for City required submittals exceed the criteria required for a Master Development Plan, the more detailed criteria applies.

11. **Indemnification.** The Owner/Developer or Developer shall indemnify and

hold the City harmless from any and against all claims, demands, disputes, damages, costs, expenses, (to include attorneys' fees whether or not litigation is necessary and if necessary, both at trial and on appeal), incurred by the City as a result, directly or indirectly, of the use or development of the Subject Property, except those claims or liabilities caused by or arising from the negligence or intentional acts of the City, or its employees or agents. It is specifically understood that the City is not guaranteeing the appropriateness, efficiency, quality or legality of the use or development of the Subject Property, including but not limited to, drainage or water/sewer plans, fire safety, or quality of construction, whether or not inspected, approved, or permitted by the City.

12. **Compliance.** The Owner/Developer or Developer agrees that it, and their successors and assigns, will abide by the provisions of this Agreement, the City's Comprehensive Plan and the City's Code of Ordinances, including but not limited to, the site plan regulations of the City as amended from time to time, which are incorporated herein by reference and such subsequent amendments hereto as may be applicable. Further, all required improvements, including landscaping, shall be continuously maintained by the Owner/Developer or Developer, or their successors and assigns, in accordance with the City's Code of Ordinances. The City may, without prejudice to any other legal or equitable right or remedy it may have, withhold permits, Certificates of Occupancy or plan/plat approvals to the Subject Property, should the Owner/Developer or Developer fail to comply with the terms of this Agreement. In the event of a conflict between this Development Agreement and the City's Land Development Code, the more restrictive regulations shall govern the development of the Subject Property.

13. **Obligations for Improvements.** Any surface improvement as described and required hereunder included, but not limited to such as signalization, walls, stormwater management facilities, medians, and utilities, or any other surface improvement shall be performed, prior to the issuance of the first Certificate of Occupancy on that portion of the Subject Property that the surface improvement(s) relates or is otherwise scheduled in this Agreement. Should the Owner/Developer or Developer fail to undertake and complete its obligations as described in this Agreement and to the City's specifications, then the City shall give the Owner/Developer or Developer thirty (30) days written notice to commence and ninety (90) days to complete said required obligation at the sole expense of the Owner/Developer or Developer. If the Owner/Developer or Developer fails to complete the obligations within the ninety (90) day period, then the City, without further notice to the Owner/Developer or Developer and their successors and assigns in interest, may but shall not be required to, perform such obligations at the expense of the Owner/Developer or Developer or their successors and assigns in interest, without prejudice to any other rights or remedies the City may have under this Agreement. Further, the City is hereby authorized to immediately recover the actual and verified cost of completing the obligations required under this Agreement and any legal fees from the Owner/Developer or Developer in an action at law for damages, as well as record a lien against the

Subject Property in that amount. The lien of such assessments shall be superior to all others, and all existing lienholders and mortgagees, by their execution of the subordination or joinder documents, agree to subordinate their liens or mortgages to the City's said liens or assessments. Notice to the Owner/Developer or Developer and their successors and assigns in interest shall be deemed to have been given upon the mailing of notice as provided in paragraph (24) of this Agreement.

14. **Concurrency and Vested Rights.** The Owner/Developer or Developer acknowledges and agrees that prior to the issuance of any development orders for the Property, the Owner/Developer or Developer must have received and be in the possession of a valid unexpired certificate of capacity/concurrency management system approval consistent with the City's Land Development Code. The capacity certificate/approval consistent with Chapter 86 of the City Land Development Code, verifies the availability of infrastructure and service capacity sufficient to permit the proposed development of the Subject Property without causing a reduction in the levels of service adopted in the City's Comprehensive Plan. The certificate of capacity/approval shall be effective for a term, as defined in the City's Code of Ordinances. Neither this Agreement nor the approved Master Development Plan shall create or result in a vested right or rights to develop the Subject Property, as cited in Section 86-34 of the City's Land Development Code.

15. **Environmental and Tree Preservation.** The Owner/Developer or Developer is responsible to obtain all site related permits and approval prior to any development activity on or for the Subject Property. Before development is commenced (i.e. before any work or clearing is done on the property) the permit holder must have acquired the required State or Federal permits. This may involve mitigation for habitat of threatened or endangered flora and fauna or for species identified for proportion (i.e. tree preservation). This Agreement does not vest or exempt the Owner/Developer or Developer from any permitting and mitigation obligations needed to develop a Subject Property. Irrigation shall comply with the requirements of the utility servicing the project and applicable permitting agencies with appropriate irrigation methods utilized. Owner/Developer or Developer shall install appropriate reuse irrigation lines/infrastructure, including stub-outs, throughout the project as development occurs. Upon reclaimed water lines being available (extended along the frontage of the property), with sufficient capacity to service the development, Owner/Developer or Developer shall connect to the reclaimed water source and irrigation by other means other than reclaimed water shall be discontinued.

16. **Homeowners Association or Property Owners Association.** The charter and by-laws of any Homeowners Association ("HOA") or Property Owners Association ("POA") for the Subject Property and any deed restrictions related thereto shall be furnished to the City for approval by the City Attorney prior to the recording thereof in the Public Records of Volusia County, Florida. Such recording shall take

place before a Certificate of Occupancy is issued for the first development project on land covered by this Agreement. The HOA or POA shall at a minimum be responsible for maintaining the common open space, any common utility systems, such as for irrigation and site lighting, and project signage. The Owner/Developer or Developer shall be responsible for establishing the HOA or POA and recording said information in the Public Records of Volusia County, Florida. The City is not responsible for the enforcement of any agreements or deed restrictions entered into between property owners or occupiers of the Subject Property. If maintenance for the Subject Property is not maintained following issuance of a Certificate of Occupancy, the City has Code Enforcement services.

17. **Enforcement.** Both parties may seek specific performance of this Agreement and/or bring an action for damages in a court within Volusia County, Florida, if this Agreement is breached by either party. In the event that enforcement of this Agreement by the City becomes necessary, and the City is successful in such enforcement, the Owner/Developer or Developer shall be responsible for the payment of all of the City's costs and expenses, including attorney fees, whether or not litigation is necessary and, if necessary, both at trial and on appeal. Such costs, expenses and fees shall also be a lien upon the Subject Property superior to all others. Should this Agreement require the payment of any monies to the City, the recording of this Agreement shall constitute a lien upon the Subject Property for said monies, until said are paid, in addition to such other obligations as this Agreement may impose upon the Subject Property and the Owner/Developer or Developer. Interest on unpaid overdue sums shall accrue at the rate of the lesser of eighteen percent (18%) compounded annually or at the maximum rate allowed by law.

18. **Utility Easements.** For any easement not established on a plat for the Subject Property, the Owner/Developer or Developer shall provide to the City such easements and other legal documentation, in form mutually acceptable to the City Attorney and the Owner/Developer or Developer, as the City may deem reasonably necessary or appropriate for the installation and maintenance of the utility and other services, including but not limited to, sanitary sewer, potable water, and reclaimed water services, electric, cable, gas, fire protection and telecommunications.

19. **Periodic Review.** The City reserves the right to review the Subject Property subject in relation to this Agreement periodically to determine if there has been demonstrated good faith compliance with the terms of this Agreement. If the City finds that on the basis of substantial competent evidence that there has been a failure to comply with the terms of this Agreement, the City may not issue development orders or permits until compliance with this Agreement has been established.

20. **Notices.** Where notice is herein required to be given, it shall be by

certified mail return receipt requested, hand delivery or nationally recognized courier, such as Federal Express or UPS. E-mail delivery of documents shall not replace or be in lieu of the aforementioned process. Said notice shall be sent to the following, as applicable:

OWNER/DEVELOPER'S OR DEVELOPER'S REPRESENTATIVES:

[INSERT NAMES AND ADDRESSES]

CITY'S REPRESENTATIVES:

City Manager
City of Deltona
2345 Providence Boulevard
Deltona, Florida 32725

With copy to:

Director
Planning & Development Services
City of Deltona
2345 Providence Boulevard
Deltona, Florida 32725

Should any party identified above change, it shall be said party's obligation to notify the remaining parties of the change in a fashion as is required for notices herein. It shall be the Owner/Developer's or Developer obligation to identify its lender(s) to all parties in a fashion as is required for notices herein.

21. **Compliance with the Law.** The failure of this Agreement to address a particular permit, condition, term, or restriction shall not relieve the Owner/Developer or Developer of the Subject Property from the necessity of complying with the law governing said permitting requirements, conditions, terms, or restrictions.

22. **Captions.** The captions used herein are for convenience only and shall not be relied upon in construing this Agreement.

23. **Binding Effect.** This Agreement shall run with the land, shall be binding upon and inure to the benefit of the Owner/Developer or Developer and their successors and assigns in interest, and the City and their successor and assigns in interest. This Agreement shall become effective upon its execution and recordation with the Public Records of Volusia County, Florida. This Agreement does not, and is not intended to, prevent or impede the City from exercising its legislative authority as the same may affect the Subject Property.

24. **Subsequently Enacted State or Federal Law.** If either state or federal law is enacted after the effective date of this Agreement that is applicable to and precludes the parties' compliance with the terms of this Agreement, this Agreement and correlating zoning amendment shall be modified or revoked, as is necessary, to comply with the relevant state or federal law.

25. **Severability.** If any part of this Development Agreement is found invalid or unenforceable in any court, such invalidity or unenforceability shall not affect the other parts of this Development Agreement, if the rights and obligations of the parties contained herein are not materially prejudiced and if the intentions of the parties can be affected. To that end, this Development Agreement is declared severable.

26. **Covenant Running with the Land.** This Agreement shall run with the Subject Property and inure to and be for the benefit of the parties hereto and their respective successors and assigns and any person, firm, corporation, or entity who may become the successor in interest to the Subject Property or any portion thereof.

27. **Recordation of Agreement.** The parties hereto agree that an executed original of this Agreement shall be recorded by the City, at the Owner/Developer's expense, in the Public Records of Volusia County, Florida.

28. **Applicable Law/Venue.** This Agreement and the provisions contained herein shall be construed, controlled, and interpreted according to the laws of the State of Florida. Venue of any litigation relating to this Agreement shall be in the courts of Volusia County, Florida.

29. **Time of the Essence.** Time is hereby declared of the essence to the lawful performance of the duties and obligations contained in this Agreement. The Owner/Developer or Developer shall execute this Agreement within ten (10) business days of City Commission adoption of Ordinance No. _____; and agrees to pay the cost of recording this document in the Public Records of Volusia County, Florida. Failure to execute this Agreement within ten (10) business days of this ordinance adoption may result in the City not issuing development orders or permits until execution and recordation of this Agreement has occurred.

30. **Agreement; Amendment.** This Agreement constitutes the entire agreement between the parties, and supersedes all previous discussions, understandings and agreements, with respect to the subject matter hereof; provided, however, that it is agreed that this Agreement is supplemental to the City's Comprehensive Plan and does not in any way rescind or modify any provisions of the City's Comprehensive Plan. Amendments to and waivers of the provisions of this Agreement shall be made by the parties only in writing by formal amendment.

31. **Effective Date.** The Effective Date of this Agreement shall be the day this Agreement is recorded in the Public Records of Volusia County, Florida.

IN WITNESS WHEREOF, the Owner, the Developer and the City have executed this Agreement.

Signature of Witness # 1

Print or type name

Signature of Witness #2

Print or type name

OWNER/DEVELOPER

By:

Signature

Print or type name

As:

Print or type

ATTEST:

Signature

Print or Type Name

As:

Mailing Address: _____

STATE OF FLORIDA
COUNTY OF _____

The foregoing instrument was acknowledged before me this _____ day _____ of _____, 201____, by _____, and _____, of _____, who is/are personally known to me or who has/have produced _____ as identification and who did not (did) take an oath.

Signature of Notary

(NOTARY SEAL)

Print or type name

CITY OF DELTONA:

By: _____

Date: _____

ATTEST:

Date: _____

Mailing Address:
City of Deltona
2345 Providence Boulevard
Deltona, Florida 32725

STATE OF FLORIDA
COUNTY OF _____

The foregoing instrument was acknowledged before me this _day _____ of _____, 201__, by _____, and _____, who are personally known to me and acknowledge executing the same freely and voluntarily under authority vested in them by the City of Deltona.

Signature of Notary

(NOTARY SEAL)

Print or type name

Approved as to form and legality for use and reliance by the City of Deltona, Florida

Gretchen R. H. Vose
City Attorney

ORDINANCE NO. 15-2015

AN ORDINANCE OF THE CITY OF DELTONA, FLORIDA, AMENDING THE OFFICIAL ZONING MAP PURSUANT TO CHAPTER 110, SECTION 1101 OF THE CITY CODE OF ORDINANCES FOR PROPERTY TOTALING APPROXIMATELY ±9.28 ACRES LOCATED NORTH OF FIRWOOD DRIVE ON NORTH NORMANDY BOULEVARD IN THE DELTONA ACTIVITY CENTER FROM R1-AA TO MIXED USE PLANNED UNIT DEVELOPMENT; AND PROVIDING FOR CONFLICTS, CODIFICATION, SEVERABILITY, AND EFFECTIVE DATE.

WHEREAS, the City has received an application to amend the zoning for a 9.28+/- acre portion of area known as the Deltona Activity Center from R1-AA to Mixed Use Planned Unit Development (MPUD); and

WHEREAS, the City of Deltona, Florida, and its Land Planning Agency have complied with the requirements of Municipal Home Rule Powers Act, sections 166.011 et seq., Florida Statutes, in considering the proposed MPUD amendment; and

WHEREAS, after said public hearing, the City Commission of the City of Deltona, Florida, has determined that the MPUD zoning is consistent with the Comprehensive Plan of the City of Deltona, Florida.

BE IT ORDAINED BY THE CITY COMMISSION OF THE CITY OF DELTONA, FLORIDA:

SECTION 1. Located in the City of Deltona, Florida, The Gold Choice zoning is hereby amended from R1-AA Single family Residential to MPUD for the following property: the south half (1/2) of the north half (1/2) government lot 4, of section 18, township 18 south, range 31 east, Volusia County, Florida, less the right-of-way of interstate highway no. 4, less the right-of-way of Normandy Boulevard, and less the following: begin at the point of intersection of the north line of the Florida Power and Light Company right-of-way easement with the east right-of-way line of interstate highway no. 4, as shown on the plat of Deltona Lakes unit 4, recorded in plat book 25, on page 124, public records of Volusia County, Florida; thence run north 15 degrees 23 minutes 47 seconds east, along said right-of-way line, 685.10 feet; thence departing said right-of-way line run north 89 degrees 41 minutes 43 seconds east, 326.22 feet; thence south 00 degrees 13 minutes 28 seconds east, 660.25 feet to the aforementioned north line of that Florida Power and Light Company right-of-way easement, thence south 89 degrees, 46 minutes, 32 seconds west along

said line 510.70 feet to the point of beginning as recorded in the public records of Volusia County, Florida.

SECTION 2. This Ordinance is adopted in conformity with and pursuant to the Comprehensive Plan of the City of Deltona, the Local Government Planning and Land Development Act, Sections 163.161 et. Seq., Florida Statutes, and the Municipal Home Rule Powers Act, Sections 166.011 et. seq., Florida Statutes.

SECTION 3. CONFLICTS. All Ordinances or parts of Ordinances insofar as they are inconsistent or in conflict with the provisions of this Ordinance are hereby repealed to the extent of any conflict.

SECTION 4. CODIFICATION. The provisions of this Ordinance shall be codified as and become and be made a part of the Code of Ordinances of the City of Deltona. The sections of this Ordinance may be renumbered or relettered to accomplish such intention.

SECTION 5. SEVERABILITY. In the event that any portion or section of this Ordinance is determined to be invalid, illegal or unconstitutional by a court of competent jurisdiction, such decision shall in no manner affect the remaining portions or sections of this Ordinance which shall remain in full force and effect.

SECTION 6. EFFECTIVE DATE. This Ordinance shall take effect immediately upon its final passage and adoption.

PASSED AND ADOPTED THIS ____ DAY OF _____, 2015.

FIRST READING: _____

ADVERTISED: _____

SECOND READING: _____

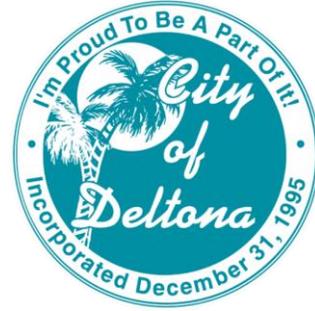
JOHN C. MASIARCZYK SR., MAYOR

ATTEST:

JOYCE RAFTERY, CITY CLERK

Approved as to form and legality for use
and reliance by the City of Deltona, Florida

GRETCHEN R. H. VOSE, CITY ATTORNEY



Memorandum

To: Planning and Zoning Board

From: Scott McGrath

Date: August 6, 2015

Re: Project No. Ordinance No. 01-2015, RM-2 Multifamily Zoning Text Amendment

I. SUMMARY OF APPLICATION:

Applicant: City of Deltona

Request: Amend the RM-2 High Density zoning district language to correct the unit counts to match the Comprehensive Plan.

Background: City staff has noticed two scrivener's errors in the RM-2 zoning district text. One of these errors renders the district unusable in its current form, the other is perfunctory. The RM-2 should allow for 12-20 units per acre consistent with High Density Residential land use category that also allows 12-20 units per acre. However, the existing zoning language calls for the RM-2 to be located in the Medium Density Residential land use category which only allows for 6-12 units per acre.

Sec. 110-311. - RM-2, Multiple Family Residential Dwelling District.

Purposed and intent. The purpose of this zoning district is to allow single-family detached patio homes, duplex dwellings, and multiple-family dwellings consistent with the development standards and density requirements of the Medium Density Residential Future Land Use Category.

To correct this misalignment, the Medium Density Residential text should be changed to High Density Residential as shown below:

Purpose and intent. The purpose of this zoning district is to allow single-family detached patio homes, duplex dwellings, and multiple-family dwellings consistent with the development standards and density requirements of the High Density Residential Future Land Use Category.

- II. CONCLUSION/STAFF RECOMMENDATION:** Staff recommends approval of the attached Ordinance number 16-2015, amending the RM-2 Multifamily zoning district.

ORDINANCE NO. 16-2015

AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF DELTONA, FLORIDA, BY AMENDING AND REVISING THE PROVISIONS OF CHAPTER 110 SECTION 311, RM-2 MULTIPLE FAMILY RESIDENTIAL DWELLING DISTRICT, OF THE CITY OF DELTONA CODE OF ORDINANCES; AND PROVIDING FOR CONFLICTS, CODIFICATION, SEVERABILITY, AND EFFECTIVE DATE.

WHEREAS, the City of Deltona adopted Chapter 110-311, RM-2 Multiple Family Residential Dwelling district as amended via Ordinance No. 06-2013 on June 17, 2013; and

WHEREAS, Section 110-311(a) of Chapter 110 has inconsistent terminology that make the RM-2 zoning district unusable in its current state, City staff has determined that revisions to Section 110-311(a) are warranted; and

WHEREAS, the City of Deltona, Florida, and its Land Planning Agency have complied with the requirements of Municipal Home Rule Powers Act, sections 166.011 et seq., Florida Statutes, in considering the proposed textual amendment; and

BE IT ORDAINED BY THE CITY COMMISSION OF THE CITY OF DELTONA, FLORIDA:

SECTION 1. The foregoing “Whereas” clauses are true and correct and are hereby ratified and confirmed by the City Commission.

SECTION 2. the following changes to the Section110-311(a) text remedy the compatibility issue:

Purposed and intent. The purpose of this zoning district is to allow single-family detached patio homes, duplex dwellings, and multiple-family dwellings consistent with the development standards and density requirements of the ~~Medium~~ High Density Residential Future Land Use Category.

SECTION 3. CONFLICTS. All Ordinances or parts of Ordinances insofar as they are inconsistent or in conflict with the provisions of this Ordinance are hereby repealed to the extent of any conflict.

SECTION 4. CODIFICATION. The provisions of this Ordinance shall be codified as and become and be made a part of the Code of Ordinances of the City of Deltona. The sections of this Ordinance may be renumbered or relettered to accomplish such intention.

SECTION 5. SEVERABILITY. In the event that any portion or section of this Ordinance is determined to be invalid, illegal or unconstitutional by a court of competent jurisdiction, such decision shall in no manner affect the remaining portions or sections of this Ordinance which shall remain in full force and effect.

SECTION 6. EFFECTIVE DATE. This Ordinance shall take effect immediately upon its final passage and adoption.

PASSED AND ADOPTED THIS _____ DAY OF _____, 2015.

FIRST READING: _____

ADVERTISED: _____

SECOND READING: _____

JOHN C. MASIARCZYK SR., MAYOR

ATTEST:

JOYCE RAFTERY, CITY CLERK

Approved as to form and legality for use
and reliance by the City of Deltona, Florida

GRETCHEN R. H. VOSE, CITY ATTORNEY