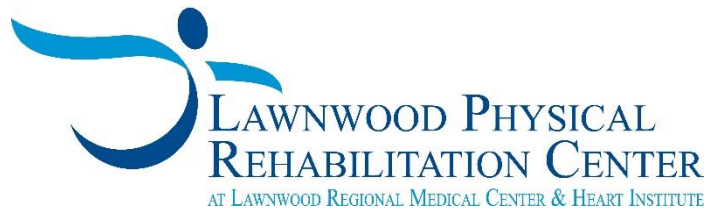


# Lawnwood Physical Rehabilitation Center Addition

## Traffic Impact Study

City of Fort Pierce  
St. Lucie County, Florida

Prepared For:



Prepared By:  
Littlejohn Project No. 20150322  
Dated: May 2015

# PROFESSIONAL ENGINEER CERTIFICATE

---

I hereby certify that I am a registered professional engineer in the State of Florida, practicing with Littlejohn Engineering Associates, Inc., a corporation authorized to operate as a Professional Engineering business, License No. 28050, by the State of Florida Department of Professional Regulation, Board of Professional Engineers, and that I have approved the Traffic Impact Study for the Lawnwood Physical Rehabilitation Center Addition, dated May 2015.

PROJECT: Lawnwood Physical Rehabilitation Center Addition

LOCATION: City of Ft. Pierce, St. Lucie County, Florida

CLIENT: Lawnwood Physical Rehabilitation Center

I acknowledge that the procedures and references used to develop the results contained in this report are standard to the professional practice of transportation engineering as applied through professional judgment and experience.

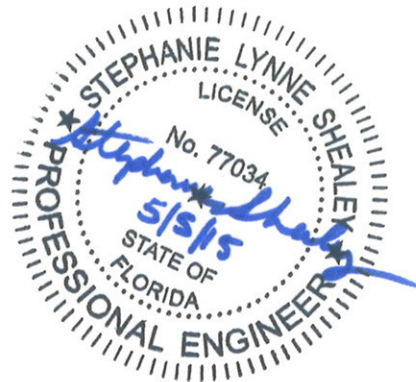
SIGNATURE: *Stephanie Shealey*

NAME: Stephanie Shealey

P.E.

NUMBER: 77034

DATE: May 5, 2015



# TRAFFIC IMPACT STUDY

Lawnwood Physical Rehabilitation Center Addition

City of Ft. Pierce, Florida

Prepared for:

Lawnwood Physical Rehabilitation Center

Prepared by:

Littlejohn Engineering Associates, Inc.  
1615 Edgewater Drive, Suite 180  
Orlando, Florida 32804

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# Traffic Impact Study Lawnwood Pavilion Rehabilitation Center Addition

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Appendix C – Peak Season Factor Category Report
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## 1.0 Introduction

This traffic impact study has been prepared to evaluate the impacts to the roadway network and intersections that may result from the proposed addition to the Lawnwood Pavilion Rehabilitation Center in Ft. Pierce, Florida. The Lawnwood Pavilion is located at 1860 N Lawnwood Circle in the City of Ft. Pierce, north of the Lawnwood Regional Medical Center, as shown on **Figure 1.1**. The Lawnwood Pavilion currently contains a total of 58 beds, with an additional 16 beds proposed as part of the project. The addition will be constructed in a single phase, with build-out (for the purposes of this study) assumed to be 2020.

The study was prepared according to the guidelines in the St. Lucie TPO Standardized Traffic Impact Studies (TIS) Methodology and Procedures, dated January 23, 2014.

### 1.1 Project Site

There are two separate parking lots provided for the Pavilion, one with access to 21<sup>st</sup> Street, north of Kaufman Avenue and one with access to Lawnwood Circle. As there are no changes proposed to the parking lot on the west side of the building, and there is no connectivity proposed between the two parking lots, it is assumed that the trips utilizing the parking lot on the west side of the building will remain constant, with any increase in project trips due to the proposed development occurring in the southern parking lot (with access to Lawnwood Circle). Thus, the study will be focused on the access to Lawnwood Circle and the connections from Lawnwood Circle onto the regional roadway network.

### 1.2 Proposed Project

The proposed addition to the Lawnwood Pavilion Rehab Center will add 16 beds to the existing 58 bed hospital facility, as shown in **Figure 1.2**. Using the rates shown in the 9<sup>th</sup> Edition of the *ITE Trip Generation Manual*, with Land Use Code 610 (Hospital), the proposed addition is expected to generate a total of 207 daily trips, or 23 PM peak hour trips, as shown in **Table 1.1**. Due to the hospital land use, internal capture and passer-by capture was not included in the analysis.

**Table 1.1 – Trip Generation**

Land Use	ITE Code	Intensity	Daily Trip Ends	PM Peak Period				
				Total	In		Out	
					%	Trips	%	Trips
Hospital	610	16 Beds	207	23	33%	7	67%	16

Source: ITE Trip Generation Manual, 9<sup>th</sup> Edition

# Traffic Impact Study Lawnwood Pavilion Rehabilitation Center Addition

Figure I.1 – Location Map



G:\Projects\2014\20140055\dwg\Sketch\20140055\_C3.1\_LAY-OPT 2 Feb 25, 2014 - 1:55pm theath

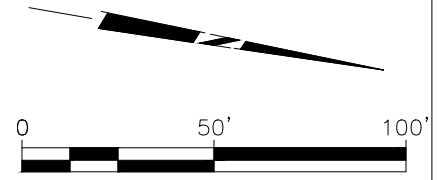
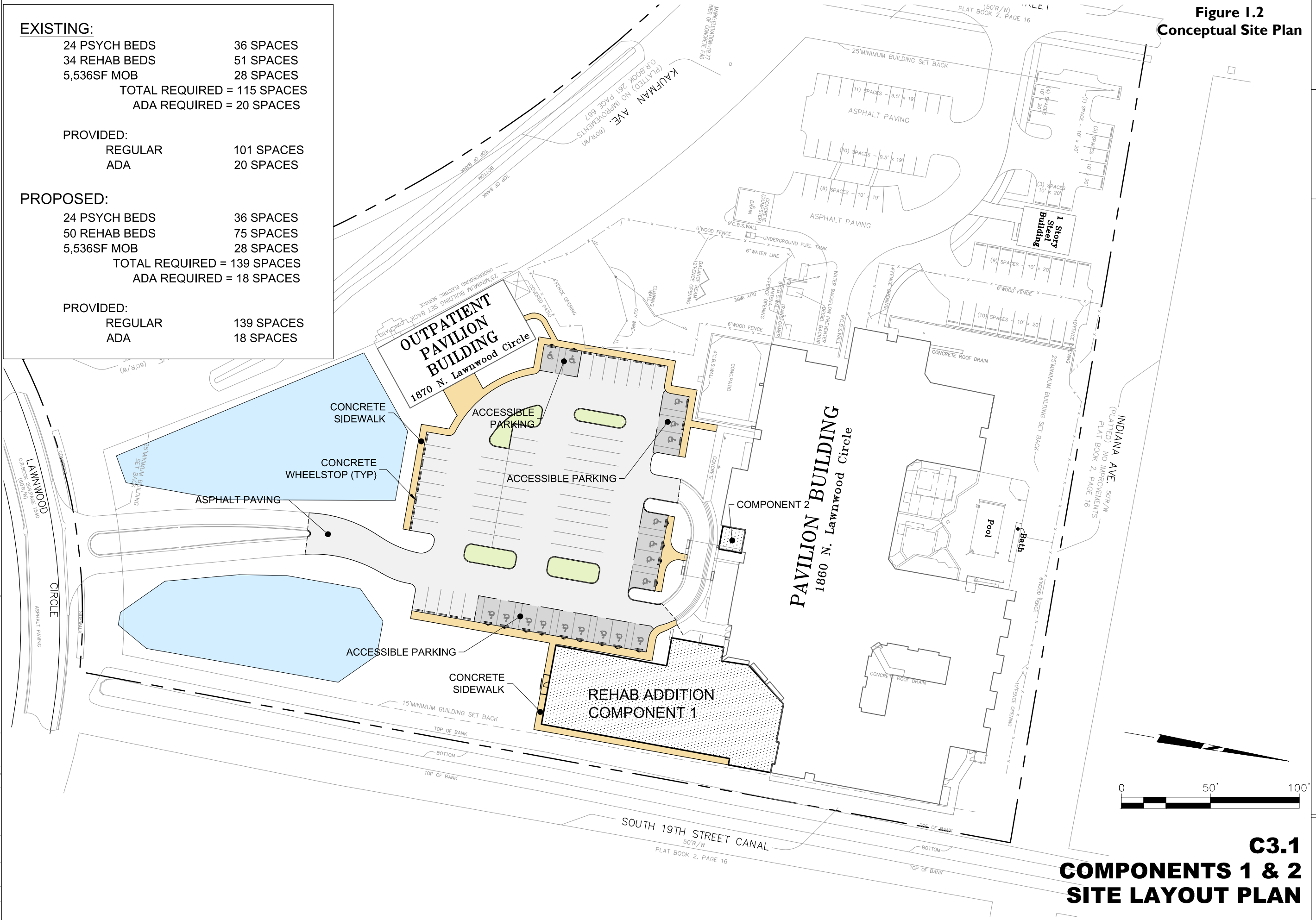
<b>EXISTING:</b>	
24 PSYCH BEDS	36 SPACES
34 REHAB BEDS	51 SPACES
5,536SF MOB	28 SPACES
TOTAL REQUIRED = 115 SPACES	
ADA REQUIRED = 20 SPACES	
<b>PROVIDED:</b>	
REGULAR	101 SPACES
ADA	20 SPACES
<b>PROPOSED:</b>	
24 PSYCH BEDS	36 SPACES
50 REHAB BEDS	75 SPACES
5,536SF MOB	28 SPACES
TOTAL REQUIRED = 139 SPACES	
ADA REQUIRED = 18 SPACES	
<b>PROVIDED:</b>	
REGULAR	139 SPACES
ADA	18 SPACES

**Figure I.2  
Conceptual Site Plan**

**FINAL  
DEVELOPMENT  
PACKAGE**

February 26, 2014

**LAWNWOOD MEDICAL CENTER  
REHAB EXPANSION  
FORT PIERCE, FLORIDA**



**C3.1  
COMPONENTS 1 & 2  
SITE LAYOUT PLAN**

## 2.0 Study Area Determination

### 2.1 Project Distribution

The Greater Treasure Coast Regional Planning Model was utilized to determine the distribution of project trips to the regional roadway network. For purposes of distribution, Nebraska Avenue was added to the regional model as a 4-lane roadway, and the project site was added as a separate TAZ from the surrounding development, with a single connection to Nebraska Avenue. Although just the new project trips will be analyzed, the full build-out of the Lawnwood Pavilion (existing + proposed beds) was used in the TAZ to provide a more accurate trip generation for the individual TAZ representing the entire Pavilion. The resulting model distribution is included in **Appendix A**.

### 2.2 Project Significance

The project traffic assignment generated by the regional planning model was used to determine the significance of traffic from the total build-out of the Lawnwood Pavilion on the roadways surrounding the project site which are included in the St. Lucie TPO Traffic Counts and Level of Service Report (Fall 2014). The appropriate two-way peak-hour service volume capacity was determined for each segment, and compared with trip generation for a 74-bed facility (105 PM peak hour trips) distributed onto the roadway network in order to determine the significance of project trips on the roadway. The results are shown in **Table 2.1**.

**Table 2.1 – Project Trip Significance**

Roadway	Segment	# of Lanes	LOS Std.	Two-Way Peak-Hour Service Capacity	Distribution	Project Trips	Project Significance
Lawnwood Cir	Nebraska Ave to Project Site	2	D	1,330	100%	105	7.9%
Nebraska Ave	25th St to Lawnwood Cir	4	D	2,920	61%	64	2.2%
	Lawnwood Cir to 13th St	4	D	2,920	39%	41	1.4%
13th St	Virginia Ave to Nebraska Ave	2	D	1,170	6%	6	0.5%
	Nebraska Ave to Georgia Ave	2	D	1,260	23%	24	1.9%
25th St	Virginia Ave to Nebraska Ave	4	D	3,580	26%	27	0.8%
	Nebraska Ave to Okeechobee Rd	4	D	3,580	30%	31	0.9%

### 2.3 Study Area Determination

Per the TIS Methodology and Procedures, the study area required to be analyzed in the Traffic Impact Study include the roadway segments and intersections which meet one of five criteria.

- I. Any road segment to which development traffic makes its connection to the Major Road Network, provided that the development traffic consumes one percent or more of the existing or committed two-way peak-hour service capacity

2. Major Road Segment on which the two-way peak-hour project traffic consumes 5 (five) percent or more of the existing or committed two-way peak-hour service capacity
3. Site driveway connections to public roads
4. Intersections of local/non-major roads (that provide access to the development) with the Major Road Network
5. Major intersections that are a part of the impacted roadways

The segment of Lawnwood Circle meets the first criteria, connecting the project site to the major roadway network with trips from the Pavilion consuming 14% of the two-way service volume capacity of the roadway. There are no roadway segments within the study area that meet the second criteria, as the trips from the Pavilion do not exceed more than 5.0% of the two-way peak-hour service capacity on any roadway segment outside of Lawnwood Circle. Per the third criteria, the intersection of Lawnwood Circle and the project site access will be analyzed. For the fourth criteria, the intersection of Lawnwood Circle and Nebraska Avenue will be analyzed, as this intersection is where project trips first enter the major road network. There are no additional intersections required per the fifth criteria, as the only impacted roadway in the analysis is N Lawnwood Circle.

Based on the criteria, the required study area per the TIS Methodology and Procedures includes the following roadway segment and two intersections:

- N Lawnwood Circle from Nebraska Avenue to the Project Site
- N Lawnwood Circle @ Site Driveway
- Nebraska Avenue @ N Lawnwood Circle (western intersection)

While not a required part of the study network per the guidelines in the TIS Methodology and Procedures, roadway analysis will also be shown for the roadway segments in the St. Lucie TPO Traffic Counts and Level of Service Report which fall within ½ mile (by travel distance) of the project site for informational purposes.

## **3.0 Data Collection**

### **3.1 Roadway Data**

The base roadway data for the roadways included within this study were determined from the 2013 Florida Transportation Information DVD (for roadway classification) as well as the Ft. Pierce Code of Ordinances (for the LOS Standard), and is shown in **Table 3.1**.

Historical AADT data was collected for the roadway segments in the St. Lucie Transportation Planning Organization database in order to determine the historic growth rate for the roadway segments in the surrounding network. This data was collected from the counts published 2008-2014 by the St. Lucie Transportation Planning Organization. A trend analysis was completed for each of the roadway segments, using linear regression, exponential regression, and decaying exponential regression, and choosing the regression method with the highest R<sup>2</sup> value (measure of how well the data fits the regression method). The resulting historic growth rates for the roadway segments included in the analysis are shown in **Table 3.2**.

# Traffic Impact Study

## Lawnwood Pavilion Rehabilitation Center Addition

**Table 3.1 – Roadway Information.**

Roadway	Roadway Classification	Maintenance Jurisdiction	Area Type	Posted Speed	LOS Standard
Lawnwood Cir	Local	City	Urban	25	D
Nebraska Ave	Collector	City	Urban	25	D
13th St	Collector	City	Urban	25	D
25th St	Principal Arterial – Other	FDOT	Urban	40	D

Source: 2013 Florida Transportation Information DVD; Ft. Pierce Code of Ordinances; Littlejohn

**Table 3.2 – Historic Growth Rates**

Roadway	Segment	AADT (2008)	AADT (2009)	AADT (2011)	AADT (2012)	AADT (2013)	AADT (2014)	Trend R <sup>2</sup>	Growth Rate
Nebraska Ave	25th St to 13th St	n/a	n/a	4,100	4,100	4,100	3,800	75%	-3.6%
13th St	Virginia Ave to Georgia Ave	7,224	7,502	6,700	7,149	6,600	6,937	37%	-1.4%
25th St	Virginia Ave to Okeechobee Rd	21,821	18,096	n/a	22,404	22,264	21,603	19%	1.7%

Source: St. Lucie Transportation Planning Organization Counts, 2008-2014

Due to the segments of Nebraska Avenue and 13<sup>th</sup> Street having a negative growth rate, and the low R<sup>2</sup> value for 25<sup>th</sup> Street, an annual growth rate of 1% will be used to grow the turning movement counts and AADT in the analysis for the roadways and intersections.

### 3.2 Intersection Data

Per the study area determination in the St. Lucie TPO TIS Methodology and Procedures, data was collected for two (2) existing intersections to conduct an evaluation for the intersections included in the study area. Turning movement counts for each of the following intersections were collected for the period from 4:00pm to 6:00pm on April 28, 2015. The turning movement counts are included in **Appendix B**.

- Lawnwood Circle @ Site Driveway
- Nebraska Avenue @ Lawnwood Circle (west intersection)

Before any analysis was conducted, the turning movement counts were adjusted based on the Peak Season Factor Category Report using a factor of 0.98 (a copy of this report is included in **Appendix C**). The seasonally adjusted turning movement volumes are shown on **Figure 3.1**.

The existing turning movement counts were then grown by 1% per year to the analysis build-out year (2020). Project trips were distributed to the roadway network based on the distribution of the existing trips in and out of the existing Lawnwood Pavilion and added to the projected background traffic, as shown in **Figure 3.2**.

# Traffic Impact Study Lawnwood Pavilion Rehabilitation Center Addition

Figure 3.1 – Existing Turning Movement Counts



Traffic Impact Study  
Lawnwood Pavilion Rehabilitation Center Addition

Figure 3.2 – Build-Out Turning Movement Counts



## 4.0 Analysis

### 4.1 Roadway Analysis

The existing AADT, k-factor, and d-factor for the roadways in the study area was compiled from the St. Lucie TPO Traffic Count Data Management System (peak-hour peak-direction volumes for Lawnwood Circle determined from traffic counts). For each segment, the k-factor and d-factor was calculated and the peak direction determined from count data from 2014. The [FDOT Quality/Level of Service Handbook \(2012\)](#), Generalized Peak Hour Directional Volumes for Florida's Urbanized Areas (Table 7), was applied to determine the existing level of service for each roadway. The existing (2014) traffic volumes indicate that all roadways included in the study area operate at an acceptable level of service, as shown in [Table 4.1](#).

**Table 4.1 – Existing Roadway Analysis (2014)**

Roadway	Segment	# of Lanes	LOS Std.	Peak Dir.	Service Volume @ Standard	AADT (2014)	Peak Hr./ Peak Dir. Volume	Committed Trips	Total Volume	LOS
Lawnwood Cir	Nebraska Ave to Project Site	2	D	SB	750	-	75	0	75	C
Nebraska Ave	25th St to 13th St	4	D	WB	1,630	3,800	231	46	277	C
13th St	Virginia Ave to Nebraska Ave	2	D	NB	640	6,937	599	7	606	D
	Nebraska Ave to Georgia Ave	2	D	NB	714	6,937	320	162	482	D
25th St	Virginia Ave to Nebraska Ave	4	D	NB	2,000	21,603	1,064	0	1,064	C
	Nebraska Ave to Okeechobee Rd	4	D	NB	2,000	21,603	1,340	8	1,348	C

Source: St. Lucie Transportation Planning Organization Traffic Counts and Level of Service Report Fall 2014; FDOT Q/LOS Handbook; Littlejohn

Background growth was applied to the combination of existing volumes and committed trips shown in the St. Lucie TPO Traffic Counts and LOS Report to determine the future background volume for each segment. The projected project trips were also added onto each segment. The projected background growth causes the segment of 13<sup>th</sup> Street from Virginia Avenue to Nebraska Avenue to surpass the Level of Service (LOS) standard for the roadway by three (3) vehicles. However, due the low distribution assigned to this segment in the regional model and the low trip generation for the proposed addition, no peak-hour peak-direction trips were assigned to this segment, and thus the projected background deficiency has no impact on the concurrency of the proposed addition. As shown in [Table 4.2](#), all segments in which project trips are present are projected to have sufficient capacity for both the increase in background trips and the additional trips projected for the proposed addition.

# Traffic Impact Study

## Lawnwood Pavilion Rehabilitation Center Addition

**Table 4.2 – Build-Out Roadway Analysis (2020)**

Roadway	Segment	Service Volume @ Standard	AADT (2020)	Background		Build-Out			
				Volume	LOS	Project Distribution	Project Trips	Total Volume	LOS
Lawnwood Cir	Nebraska Ave to Project Site	750	-	79	C	100%	16	95	C
Nebraska Ave	25th St to Lawnwood Cir	1,630	4,034	294	C	61%	10	304	C
	Lawnwood Cir to 13th St	1,630	4,034	294	C	39%	6	300	C
13th St	Virginia Ave to Nebraska Ave	640	7,364	643	F	6%	0	643	F
	Nebraska Ave to Georgia Ave	714	7,364	512	D	23%	4	516	D
25th St	Virginia Ave to Nebraska Ave	2,000	22,932	1,129	C	26%	2	1,131	C
	Nebraska Ave to Okeechobee Rd	2,000	22,932	1,431	C	30%	5	1,436	C

Source: St. Lucie Transportation Planning Organization Traffic Counts and Level of Service Report Fall 2014; FDOT Q/LOS Handbook; Littlejohn

### 4.2 Intersection Analysis

Each of the existing study intersections were evaluated with the existing geometrics using the Highway Capacity Software (HCS 2010). The details of the intersection analysis results are shown in **Table 4.3** and copies of the HCS analysis printouts are included in **Appendix D**. As shown in the analysis, the study area intersections all operate at an acceptable level of service in all condition, with no mitigation necessary in the background or build-out scenarios. The addition of project trips to the study area intersections increase delays by no more than 0.2 seconds on any approach.

**Table 4.3 – Intersection Level of Service**

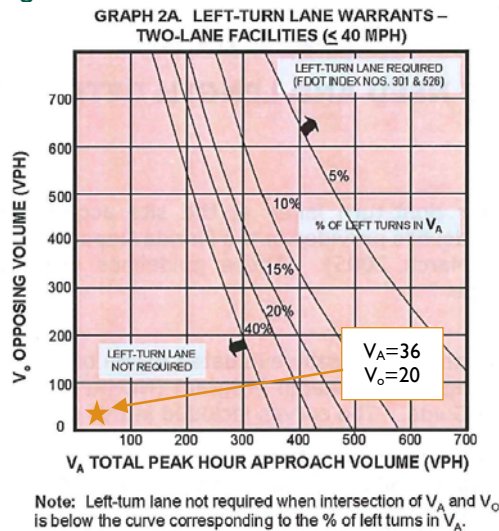
Intersection	Stop Control	Intersection Conditions	Approach			
			EB	WB	NB	SB
<b>Existing Scenario (2015)</b>						
Lawnwood Cir @ Site Driveway	TWSC	LOS	A	-	-	A
		Delay (sec/veh)	7.3	-	-	8.7
Nebraska Ave @ Lawnwood Circle	TWSC	LOS	A	A	B	A
		Delay (sec/veh)	7.4	7.4	10.4	9.2
<b>Background Scenario (2020)</b>						
Lawnwood Cir @ Site Driveway	TWSC	LOS	A	-	-	A
		Delay (sec/veh)	7.3	-	-	8.7
Nebraska Ave @ Lawnwood Circle	TWSC	LOS	A	A	B	A
		Delay (sec/veh)	7.4	7.4	10.5	9.3
<b>Future Scenario (2020)</b>						
Lawnwood Cir @ Site Driveway	TWSC	LOS	A	-	-	A
		Delay (sec/veh)	7.3	-	-	8.9
Nebraska Ave @ Lawnwood Circle	TWSC	LOS	A	A	B	A
		Delay (sec/veh)	7.5	7.4	10.6	9.4

Source: Littlejohn Engineering Associates

### 4.3 Turn Lane Analysis

The need for turn lanes into the project site was evaluated using the FDOT Driveway Handbook (2008) for right-turn lanes and National Cooperative Highway Research Program (NCHRP) Report 279 for left-turn lanes. At the project site, there are only 2 right-turns into the site projected based on the existing distribution of project trips into and out of the site, which does not meet the guideline of 125 vehicles per the Driveway Handbook. Approximately 50% of the approach volume is left-turns into the project site; however, with an approach volume of 36 vehicles, and an opposing volume of 20 vehicles, the volumes are substantially below the curves in NCHRP Report 279 for requiring a left-turn lane, as shown in **Figure 4.1**.

**Figure 4.1 – Left-Turn Lane Warrant**



Based on the criteria from the FDOT Driveway Handbook and NCHRP Report 279, neither an exclusive right-turn lane nor left-turn lane are needed for the project access.

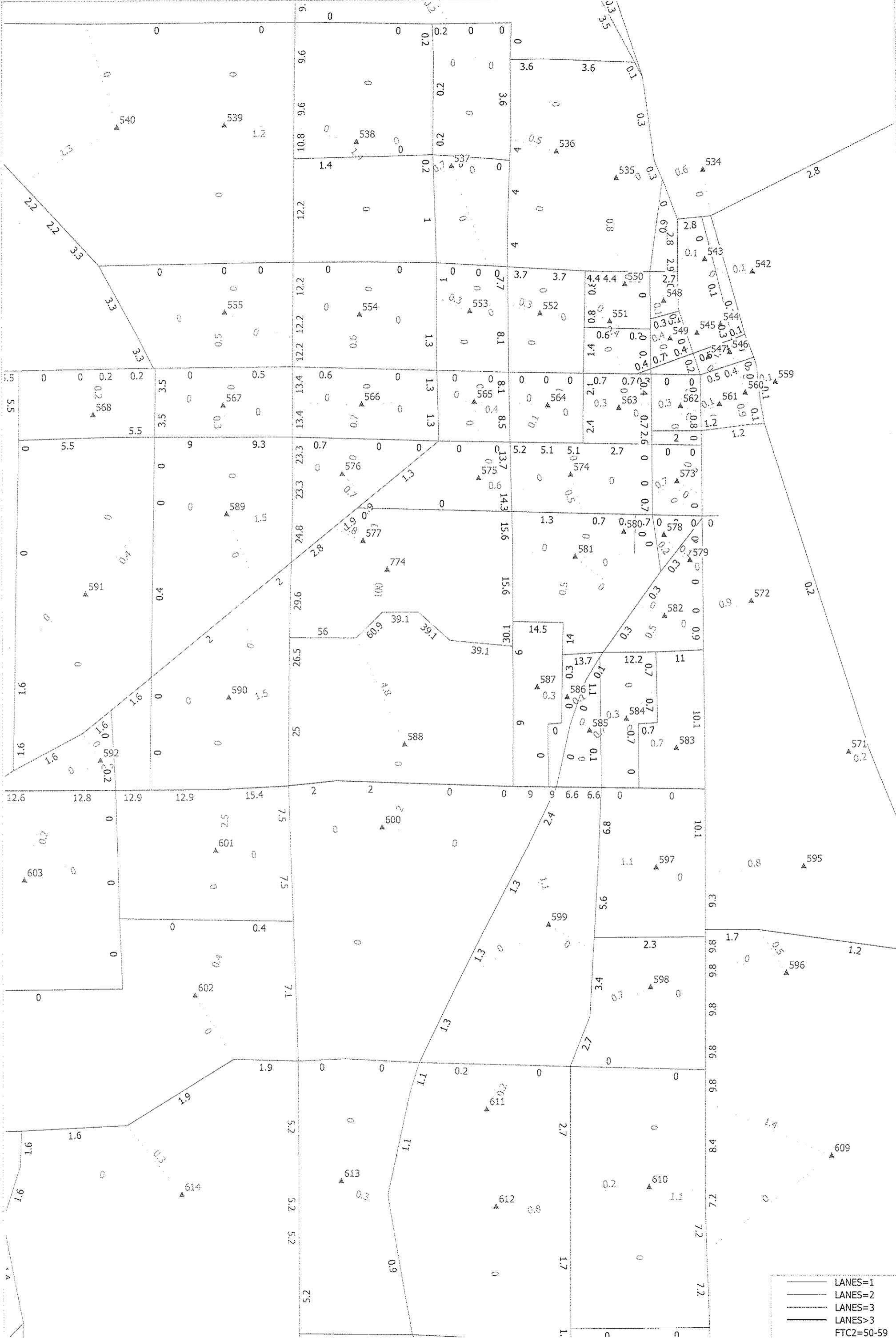
### 5.0 Findings and Recommendations

Based on the analysis presented within this study report, the proposed addition to the Lawnwood Pavilion will not have a significant impact on the roadway network. Intersection operations at the project site access and at the primary connection from the project site to the major roadway network are projected to operate at LOS A or B for all approaches in all of the scenarios analyzed, with no more than a 0.2 seconds of delay per vehicle change between any two scenarios. The roadways surrounding the project site are projected to have sufficient capacity to incorporate the project trips assigned to each segment using the regional planning model. While the segment of 13<sup>th</sup> Street from Virginia Avenue to Nebraska Avenue is projected to exceed the service volume capacity with the addition of background growth (by 3 vehicles, or 0.5% of the service volume capacity), this segment was included for informational purposes only (not required by the study area guidance in the TIS Methodology and Procedures), and is not projected to have any volume from the new development due to the combination of a low model distribution assigned to this segment and low trip generation for the proposed addition. Thus, the project has no responsibility for any projected deficiencies on this segment.

## ***Appendix A***

# ***Treasure Coast Regional Planning Model Distribution***

Lawnwood RMC  
Project Distribution



## ***Appendix B***

### ***Turning Movement Counts***



# Accurate Traffic Counts, Inc.

798 Executive Drive, Suite A  
Oviedo, Florida 32765

*info@accuratetraffic.com*

Counter: 5707  
Counted by: Nino  
Weather: Clear  
Location: 1806 Lawnwood Cir at Medical Cn

File Name : Lawnwood Circle at Lawnwood Regional Medical Center  
Site Code : 00005707  
Start Date : 4/28/2015  
Page No : 1

### Groups Printed- General Traffic - Truck Traffic - Turn Traffic

Start Time	Lawnwood Regional Medical Center Southbound				Lawnwood Circle Westbound				Northbound				Lawnwood Circle Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
16:00	2	0	5	7	0	3	0	3	0	0	0	0	3	3	0	6	16
16:15	1	0	6	7	0	6	0	6	0	0	0	0	3	9	0	12	25
16:30	5	0	7	12	0	6	0	6	0	0	0	0	3	5	0	8	26
16:45	0	0	2	2	0	4	1	5	0	0	0	0	1	1	0	2	9
<b>Total</b>	<b>8</b>	<b>0</b>	<b>20</b>	<b>28</b>	<b>0</b>	<b>19</b>	<b>1</b>	<b>20</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>18</b>	<b>0</b>	<b>28</b>	<b>76</b>
17:00	0	0	4	4	0	1	1	2	0	0	0	0	2	4	0	6	12
17:15	1	0	4	5	0	6	0	6	0	0	0	0	3	9	0	12	23
17:30	0	0	1	1	0	4	0	4	0	0	0	0	4	6	0	10	15
17:45	4	0	1	5	0	3	0	3	0	0	0	0	1	1	0	2	10
<b>Total</b>	<b>5</b>	<b>0</b>	<b>10</b>	<b>15</b>	<b>0</b>	<b>14</b>	<b>1</b>	<b>15</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>20</b>	<b>0</b>	<b>30</b>	<b>60</b>
<b>Grand Total</b>	<b>13</b>	<b>0</b>	<b>30</b>	<b>43</b>	<b>0</b>	<b>33</b>	<b>2</b>	<b>35</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>20</b>	<b>38</b>	<b>0</b>	<b>58</b>	<b>136</b>
Apprch %	30.2	0	69.8		0	94.3	5.7		0	0	0		34.5	65.5	0		
Total %	9.6	0	22.1	31.6	0	24.3	1.5	25.7	0	0	0	0	14.7	27.9	0	42.6	
General Traffic	13	0	29	42	0	32	2	34	0	0	0	0	20	37	0	57	133
% General Traffic																	
Truck Traffic	0	0	1	1	0	1	0	1	0	0	0	0	0	1	0	1	3
% Truck Traffic	0	0	3.3	2.3	0	3	0	2.9	0	0	0	0	0	2.6	0	1.7	2.2
U-Turn Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% U-Turn Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Start Time	Lawnwood Regional Medical Center Southbound				Lawnwood Circle Westbound				Northbound				Lawnwood Circle Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	

Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1  
Peak Hour for Entire Intersection Begins at 16:00

16:00	2	0	5	7	0	3	0	3	0	0	0	0	3	3	0	6	16
16:15	1	0	6	7	0	6	0	6	0	0	0	0	3	9	0	12	25
16:30	5	0	7	12	0	6	0	6	0	0	0	0	3	5	0	8	26
16:45	0	0	2	2	0	4	1	5	0	0	0	0	1	1	0	2	9
<b>Total Volume</b>	<b>8</b>	<b>0</b>	<b>20</b>	<b>28</b>	<b>0</b>	<b>19</b>	<b>1</b>	<b>20</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>18</b>	<b>0</b>	<b>28</b>	<b>76</b>
<b>% App. Total</b>	<b>28.6</b>	<b>0</b>	<b>71.4</b>		<b>0</b>	<b>95</b>	<b>5</b>		<b>0</b>	<b>0</b>	<b>0</b>		<b>35.7</b>	<b>64.3</b>	<b>0</b>		
PHF	.400	.000	.714	.583	.000	.792	.250	.833	.000	.000	.000	.000	.833	.500	.000	.583	.731



# Accurate Traffic Counts, Inc.

798 Executive Drive, Suite A  
 Oviedo, Florida 32765

*info@accuratetraffic.com*

Counter: 5707  
 Counted by: Nino  
 Weather: Clear  
 Location: 1806 Lawnwood Cir at Medical Cn

File Name : Lawnwood Circle at Lawnwood Regional Medical Center  
 Site Code : 00005707  
 Start Date : 4/28/2015  
 Page No : 1

### Groups Printed- Truck Traffic

Start Time	Lawnwood Regional Medical Center Southbound				Lawnwood Circle Westbound				Northbound				Lawnwood Circle Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
16:00	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
16:15	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
*** BREAK ***																		
Total	0	0	1	1	0	1	0	1	0	0	0	0	0	1	0	0	1	3
*** BREAK ***																		
Grand Total	0	0	1	1	0	1	0	1	0	0	0	0	0	1	0	0	1	3
Apprch %	0	0	100		0	100	0		0	0	0		0	100	0			
Total %	0	0	33.3	33.3	0	33.3	0	33.3	0	0	0	0	0	33.3	0	33.3		



# Accurate Traffic Counts, Inc.

798 Executive Drive, Suite A  
 Oviedo, Florida 32765  
*info@accuratetraffic.com*

Counter: 1897  
 Counted by: Ramón  
 Weather: Clear  
 Location: Lawnwood Cir at Nebraska Av

File Name : Lawnwood Circle at Nebraska Ave  
 Site Code : 00001897  
 Start Date : 4/28/2015  
 Page No : 1

### Groups Printed- General Traffic - Truck Traffic - Turn Traffic

Start Time	N Lawnwood Circle Southbound				Nebraska Ave Westbound				S Lawnwood Circle Northbound				Nebraska Ave Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
16:00	6	0	19	25	2	12	4	18	5	2	3	10	5	26	6	37	90
16:15	2	1	16	19	2	16	2	20	5	1	1	7	9	26	0	35	81
16:30	3	1	15	19	2	15	2	19	6	0	0	6	6	23	2	31	75
16:45	2	1	9	12	0	9	1	10	5	0	0	5	3	13	0	16	43
<b>Total</b>	<b>13</b>	<b>3</b>	<b>59</b>	<b>75</b>	<b>6</b>	<b>52</b>	<b>9</b>	<b>67</b>	<b>21</b>	<b>3</b>	<b>4</b>	<b>28</b>	<b>23</b>	<b>88</b>	<b>8</b>	<b>119</b>	<b>289</b>
17:00	3	1	12	16	1	15	1	17	2	1	0	3	6	20	2	28	64
17:15	2	0	19	21	0	23	3	26	4	0	1	5	9	25	4	38	90
17:30	0	0	13	13	1	7	3	11	5	1	1	7	6	31	1	38	69
17:45	2	0	13	15	0	20	0	20	6	0	1	7	2	17	3	22	64
<b>Total</b>	<b>7</b>	<b>1</b>	<b>57</b>	<b>65</b>	<b>2</b>	<b>65</b>	<b>7</b>	<b>74</b>	<b>17</b>	<b>2</b>	<b>3</b>	<b>22</b>	<b>23</b>	<b>93</b>	<b>10</b>	<b>126</b>	<b>287</b>
Grand Total	20	4	116	140	8	117	16	141	38	5	7	50	46	181	18	245	576
Apprch %	14.3	2.9	82.9		5.7	83	11.3		76	10	14		18.8	73.9	7.3		
Total %	3.5	0.7	20.1	24.3	1.4	20.3	2.8	24.5	6.6	0.9	1.2	8.7	8	31.4	3.1	42.5	
General Traffic	19	4	115	138	4	114	16	134	38	4	7	49	44	180	17	241	562
% General Traffic																	
Truck Traffic	1	0	1	2	0	3	0	3	0	1	0	1	1	1	1	3	9
% Truck Traffic	5	0	0.9	1.4	0	2.6	0	2.1	0	20	0	2	2.2	0.6	5.6	1.2	1.6
U-Turn Traffic	0	0	0	0	4	0	0	4	0	0	0	0	1	0	0	1	5
% U-Turn Traffic	0	0	0	0	50	0	0	2.8	0	0	0	0	2.2	0	0	0.4	0.9

Start Time	N Lawnwood Circle Southbound				Nebraska Ave Westbound				S Lawnwood Circle Northbound				Nebraska Ave Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
16:00	6	0	19	25	2	12	4	18	5	2	3	10	5	26	6	37	90
16:15	2	1	16	19	2	16	2	20	5	1	1	7	9	26	0	35	81
16:30	3	1	15	19	2	15	2	19	6	0	0	6	6	23	2	31	75
16:45	2	1	9	12	0	9	1	10	5	0	0	5	3	13	0	16	43
<b>Total Volume</b>	<b>13</b>	<b>3</b>	<b>59</b>	<b>75</b>	<b>6</b>	<b>52</b>	<b>9</b>	<b>67</b>	<b>21</b>	<b>3</b>	<b>4</b>	<b>28</b>	<b>23</b>	<b>88</b>	<b>8</b>	<b>119</b>	<b>289</b>
% App. Total	17.3	4	78.7		9	77.6	13.4		75	10.7	14.3		19.3	73.9	6.7		
PHF	.542	.750	.776	.750	.750	.813	.563	.838	.875	.375	.333	.700	.639	.846	.333	.804	.803

Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 16:00



# Accurate Traffic Counts, Inc.

798 Executive Drive, Suite A  
 Oviedo, Florida 32765  
*info@accuratetraffic.com*

Counter: 1897  
 Counted by: Ramón  
 Weather: Clear  
 Location: Lawnwood Cir at Nebraska Av

File Name : Lawnwood Circle at Nebraska Ave  
 Site Code : 00001897  
 Start Date : 4/28/2015  
 Page No : 1

### Groups Printed- Truck Traffic

Start Time	N Lawnwood Circle Southbound				Nebraska Ave Westbound				S Lawnwood Circle Northbound				Nebraska Ave Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
16:00	0	0	1	1	0	1	0	1	0	0	0	0	0	0	1	1	1	3
16:15	1	0	0	1	0	1	0	1	0	1	0	1	0	0	0	0	0	3
16:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	1
*** BREAK ***																		
Total	1	0	1	2	0	2	0	2	0	1	0	1	1	0	1	2	7	7
17:00	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
*** BREAK ***																		
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1
*** BREAK ***																		
Total	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2	2
Grand Total	1	0	1	2	0	3	0	3	0	1	0	1	1	1	1	3	9	9
Apprch %	50	0	50		0	100	0		0	100	0		33.3	33.3	33.3			
Total %	11.1	0	11.1	22.2	0	33.3	0	33.3	0	11.1	0	11.1	11.1	11.1	11.1	33.3		

## ***Appendix C***

### ***Peak Season Factor Category Report***

2013 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL  
 CATEGORY: 9400 EAST-A1A TO US1

WEEK	DATES	SF	MOCF: 0.89 PSCF
1	01/01/2013 - 01/05/2013	1.02	1.15
2	01/06/2013 - 01/12/2013	0.98	1.10
3	01/13/2013 - 01/19/2013	0.94	1.06
* 4	01/20/2013 - 01/26/2013	0.93	1.04
* 5	01/27/2013 - 02/02/2013	0.91	1.02
* 6	02/03/2013 - 02/09/2013	0.90	1.01
* 7	02/10/2013 - 02/16/2013	0.88	0.99
* 8	02/17/2013 - 02/23/2013	0.87	0.98
* 9	02/24/2013 - 03/02/2013	0.86	0.97
*10	03/03/2013 - 03/09/2013	0.86	0.97
*11	03/10/2013 - 03/16/2013	0.86	0.97
*12	03/17/2013 - 03/23/2013	0.86	0.97
*13	03/24/2013 - 03/30/2013	0.87	0.98
*14	03/31/2013 - 04/06/2013	0.89	1.00
*15	04/07/2013 - 04/13/2013	0.90	1.01
*16	04/14/2013 - 04/20/2013	0.92	1.03
17	04/21/2013 - 04/27/2013	0.95	1.07
18	04/28/2013 - 05/04/2013	0.98	1.10
19	05/05/2013 - 05/11/2013	1.01	1.13
20	05/12/2013 - 05/18/2013	1.04	1.17
21	05/19/2013 - 05/25/2013	1.05	1.18
22	05/26/2013 - 06/01/2013	1.06	1.19
23	06/02/2013 - 06/08/2013	1.07	1.20
24	06/09/2013 - 06/15/2013	1.08	1.21
25	06/16/2013 - 06/22/2013	1.10	1.24
26	06/23/2013 - 06/29/2013	1.10	1.24
27	06/30/2013 - 07/06/2013	1.10	1.24
28	07/07/2013 - 07/13/2013	1.10	1.24
29	07/14/2013 - 07/20/2013	1.11	1.25
30	07/21/2013 - 07/27/2013	1.11	1.25
31	07/28/2013 - 08/03/2013	1.11	1.25
32	08/04/2013 - 08/10/2013	1.10	1.24
33	08/11/2013 - 08/17/2013	1.10	1.24
34	08/18/2013 - 08/24/2013	1.10	1.24
35	08/25/2013 - 08/31/2013	1.11	1.25
36	09/01/2013 - 09/07/2013	1.12	1.26
37	09/08/2013 - 09/14/2013	1.12	1.26
38	09/15/2013 - 09/21/2013	1.13	1.27
39	09/22/2013 - 09/28/2013	1.11	1.25
40	09/29/2013 - 10/05/2013	1.09	1.22
41	10/06/2013 - 10/12/2013	1.07	1.20
42	10/13/2013 - 10/19/2013	1.06	1.19
43	10/20/2013 - 10/26/2013	1.05	1.18
44	10/27/2013 - 11/02/2013	1.05	1.18
45	11/03/2013 - 11/09/2013	1.04	1.17
46	11/10/2013 - 11/16/2013	1.04	1.17
47	11/17/2013 - 11/23/2013	1.04	1.17
48	11/24/2013 - 11/30/2013	1.03	1.16
49	12/01/2013 - 12/07/2013	1.03	1.16
50	12/08/2013 - 12/14/2013	1.02	1.15
51	12/15/2013 - 12/21/2013	1.02	1.15
52	12/22/2013 - 12/28/2013	0.98	1.10
53	12/29/2013 - 12/31/2013	0.94	1.06

\* PEAK SEASON

18-FEB-2014 08:46:30

830UPD

4\_9400\_PKSEASON.TXT

## ***Appendix D***

### ***HCS Analysis Printouts***

TWO-WAY STOP CONTROL SUMMARY								
<b>General Information</b>				<b>Site Information</b>				
Analyst	SLS			Intersection	1			
Agency/Co.	Littlejohn			Jurisdiction	Ft. Pierce			
Date Performed	4/30/2015			Analysis Year	2015			
Analysis Time Period	PM Peak							
Project Description 20150322 - Lawnwood Pavilion Rehab Addition								
East/West Street: Lawnwood Cir				North/South Street: Site Access				
Intersection Orientation: East-West				Study Period (hrs): 0.25				
<b>Vehicle Volumes and Adjustments</b>								
<b>Major Street</b>	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	10	18			19	1		
Peak-Hour Factor, PHF	0.73	0.73	1.00	1.00	0.73	0.73		
Hourly Flow Rate, HFR (veh/h)	13	24	0	0	26	1		
Percent Heavy Vehicles	0	--	--	0	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration	LT			TR				
Upstream Signal		0			0			
<b>Minor Street</b>	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)				8		20		
Peak-Hour Factor, PHF	1.00	1.00	1.00	0.73	1.00	0.73		
Hourly Flow Rate, HFR (veh/h)	0	0	0	10	0	27		
Percent Heavy Vehicles	0	0	0	0	0			
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	0	0	0	0	0		
Configuration				LR				
<b>Delay, Queue Length, and Level of Service</b>								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT					LR		
v (veh/h)	13					37		
C (m) (veh/h)	1600					1017		
v/c	0.01					0.04		
95% queue length	0.02					0.11		
Control Delay (s/veh)	7.3					8.7		
LOS	A					A		
Approach Delay (s/veh)	--	--				8.7		
Approach LOS	--	--				A		

TWO-WAY STOP CONTROL SUMMARY								
<b>General Information</b>				<b>Site Information</b>				
Analyst	SLS			Intersection	2			
Agency/Co.	Littlejohn			Jurisdiction	Ft. Pierce			
Date Performed	4/30/2015			Analysis Year	2015			
Analysis Time Period	PM Peak							
Project Description 20150322 - Lawnwood Pavilion Rehab Addition								
East/West Street: Nebraska Ave				North/South Street: Lawnwood Cir				
Intersection Orientation: East-West				Study Period (hrs): 0.25				
<b>Vehicle Volumes and Adjustments</b>								
<b>Major Street</b>	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	23	86	8	6	51	9		
Peak-Hour Factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80		
Hourly Flow Rate, HFR (veh/h)	28	107	9	7	63	11		
Percent Heavy Vehicles	4	--	--	0	--	--		
Median Type	Raised curb							
RT Channelized			0			0		
Lanes	1	2	0	1	2	0		
Configuration	L	T	TR	L	T	TR		
Upstream Signal		0			0			
<b>Minor Street</b>	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	21	3	4	13	3	58		
Peak-Hour Factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80		
Hourly Flow Rate, HFR (veh/h)	26	3	4	16	3	72		
Percent Heavy Vehicles	0	33	0	8	0	2		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration		LTR			LTR			
<b>Delay, Queue Length, and Level of Service</b>								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L	L	LTR			LTR		
v (veh/h)	28	7	33			91		
C (m) (veh/h)	1509	1485	699			942		
v/c	0.02	0.00	0.05			0.10		
95% queue length	0.06	0.01	0.15			0.32		
Control Delay (s/veh)	7.4	7.4	10.4			9.2		
LOS	A	A	B			A		
Approach Delay (s/veh)	--	--	10.4			9.2		
Approach LOS	--	--	B			A		

TWO-WAY STOP CONTROL SUMMARY								
General Information			Site Information					
Analyst	SLS		Intersection	1				
Agency/Co.	Littlejohn		Jurisdiction	Ft. Pierce				
Date Performed	4/30/2015		Analysis Year	2015				
Analysis Time Period	PM Peak							
Project Description 20150322 - Lawnwood Pavilion Rehab Addition								
East/West Street: Lawnwood Cir			North/South Street: Site Access					
Intersection Orientation: East-West			Study Period (hrs): 0.25					
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	11	19			20	1		
Peak-Hour Factor, PHF	0.73	0.73	1.00	1.00	0.73	0.73		
Hourly Flow Rate, HFR (veh/h)	15	26	0	0	27	1		
Percent Heavy Vehicles	0	--	--	0	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration	LT					TR		
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)				8		21		
Peak-Hour Factor, PHF	1.00	1.00	1.00	0.73	1.00	0.73		
Hourly Flow Rate, HFR (veh/h)	0	0	0	10	0	28		
Percent Heavy Vehicles	0	0	0	0	0	5		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	0	0	0	0	0		
Configuration				LR				
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT					LR		
v (veh/h)	15					38		
C (m) (veh/h)	1599					1003		
v/c	0.01					0.04		
95% queue length	0.03					0.12		
Control Delay (s/veh)	7.3					8.7		
LOS	A					A		
Approach Delay (s/veh)	--	--				8.7		
Approach LOS	--	--				A		

TWO-WAY STOP CONTROL SUMMARY							
General Information				Site Information			
Analyst	SLS			Intersection	2		
Agency/Co.	Littlejohn			Jurisdiction	Ft. Pierce		
Date Performed	4/30/2015			Analysis Year	2015		
Analysis Time Period	PM Peak						
Project Description 20150322 - Lawnwood Pavilion Rehab Addition							
East/West Street: Nebraska Ave				North/South Street: Lawnwood Cir			
Intersection Orientation: East-West				Study Period (hrs): 0.25			
Vehicle Volumes and Adjustments							
Major Street	Eastbound			Westbound			
Movement	1	2	3	4	5	6	
	L	T	R	L	T	R	
Volume (veh/h)	24	90	8	6	54	9	
Peak-Hour Factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	
Hourly Flow Rate, HFR (veh/h)	29	112	9	7	67	11	
Percent Heavy Vehicles	4	--	--	0	--	--	
Median Type	Raised curb						
RT Channelized			0			0	
Lanes	1	2	0	1	2	0	
Configuration	L	T	TR	L	T	TR	
Upstream Signal		0			0		
Minor Street	Northbound			Southbound			
Movement	7	8	9	10	11	12	
	L	T	R	L	T	R	
Volume (veh/h)	22	3	4	14	3	61	
Peak-Hour Factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	
Hourly Flow Rate, HFR (veh/h)	27	3	4	17	3	76	
Percent Heavy Vehicles	0	33	0	8	0	2	
Percent Grade (%)	0			0			
Flared Approach		N			N		
Storage		0			0		
RT Channelized			0			0	
Lanes	0	1	0	0	1	0	
Configuration		LTR			LTR		
Delay, Queue Length, and Level of Service							
Approach	Eastbound	Westbound	Northbound			Southbound	
Movement	1	4	7	8	9	10	11
Lane Configuration	L	L	LTR			LTR	
v (veh/h)	29	7	34			96	
C (m) (veh/h)	1504	1479	690			938	
v/c	0.02	0.00	0.05			0.10	
95% queue length	0.06	0.01	0.16			0.34	
Control Delay (s/veh)	7.4	7.4	10.5			9.3	
LOS	A	A	B			A	
Approach Delay (s/veh)	--	--	10.5			9.3	
Approach LOS	--	--	B			A	

TWO-WAY STOP CONTROL SUMMARY								
General Information			Site Information					
Analyst	SLS		Intersection	1				
Agency/Co.	Littlejohn		Jurisdiction	Ft. Pierce				
Date Performed	4/30/2015		Analysis Year	2015				
Analysis Time Period	PM Peak							
Project Description 20150322 - Lawnwood Pavilion Rehab Addition								
East/West Street: Lawnwood Cir			North/South Street: Site Access					
Intersection Orientation: East-West			Study Period (hrs): 0.25					
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	17	19			20	2		
Peak-Hour Factor, PHF	0.73	0.73	1.00	1.00	0.73	0.73		
Hourly Flow Rate, HFR (veh/h)	23	26	0	0	27	2		
Percent Heavy Vehicles	0	--	--	0	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration	LT					TR		
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)				12		33		
Peak-Hour Factor, PHF	1.00	1.00	1.00	0.73	1.00	0.73		
Hourly Flow Rate, HFR (veh/h)	0	0	0	16	0	45		
Percent Heavy Vehicles	0	0	0	0	0	5		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	0	0	0	0	0		
Configuration				LR				
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT					LR		
v (veh/h)	23					61		
C (m) (veh/h)	1597					996		
v/c	0.01					0.06		
95% queue length	0.04					0.20		
Control Delay (s/veh)	7.3					8.9		
LOS	A					A		
Approach Delay (s/veh)	--	--				8.9		
Approach LOS	--	--				A		

TWO-WAY STOP CONTROL SUMMARY							
General Information				Site Information			
Analyst	SLS			Intersection	2-Build-Out		
Agency/Co.	Littlejohn			Jurisdiction	Ft. Pierce		
Date Performed	4/30/2015			Analysis Year	2020		
Analysis Time Period	PM Peak						
Project Description 20150322 - Lawnwood Pavilion Rehab Addition							
East/West Street: Nebraska Ave				North/South Street: Lawnwood Cir			
Intersection Orientation: East-West				Study Period (hrs): 0.25			
Vehicle Volumes and Adjustments							
Major Street	Eastbound			Westbound			
Movement	1	2	3	4	5	6	
	L	T	R	L	T	R	
Volume (veh/h)	27	90	8	6	54	11	
Peak-Hour Factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	
Hourly Flow Rate, HFR (veh/h)	33	112	9	7	67	13	
Percent Heavy Vehicles	4	--	--	0	--	--	
Median Type	Raised curb						
RT Channelized			0			0	
Lanes	1	2	0	1	2	0	
Configuration	L	T	TR	L	T	TR	
Upstream Signal		0			0		
Minor Street	Northbound			Southbound			
Movement	7	8	9	10	11	12	
	L	T	R	L	T	R	
Volume (veh/h)	22	4	4	16	3	71	
Peak-Hour Factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	
Hourly Flow Rate, HFR (veh/h)	27	4	4	19	3	88	
Percent Heavy Vehicles	0	33	0	8	0	2	
Percent Grade (%)	0			0			
Flared Approach		N			N		
Storage		0			0		
RT Channelized			0			0	
Lanes	0	1	0	0	1	0	
Configuration		LTR			LTR		
Delay, Queue Length, and Level of Service							
Approach	Eastbound	Westbound	Northbound			Southbound	
Movement	1	4	7	8	9	10	11
Lane Configuration	L	L	LTR			LTR	
v (veh/h)	33	7	35			110	
C (m) (veh/h)	1501	1479	674			937	
v/c	0.02	0.00	0.05			0.12	
95% queue length	0.07	0.01	0.16			0.40	
Control Delay (s/veh)	7.5	7.4	10.6			9.4	
LOS	A	A	B			A	
Approach Delay (s/veh)	--	--	10.6			9.4	
Approach LOS	--	--	B			A	