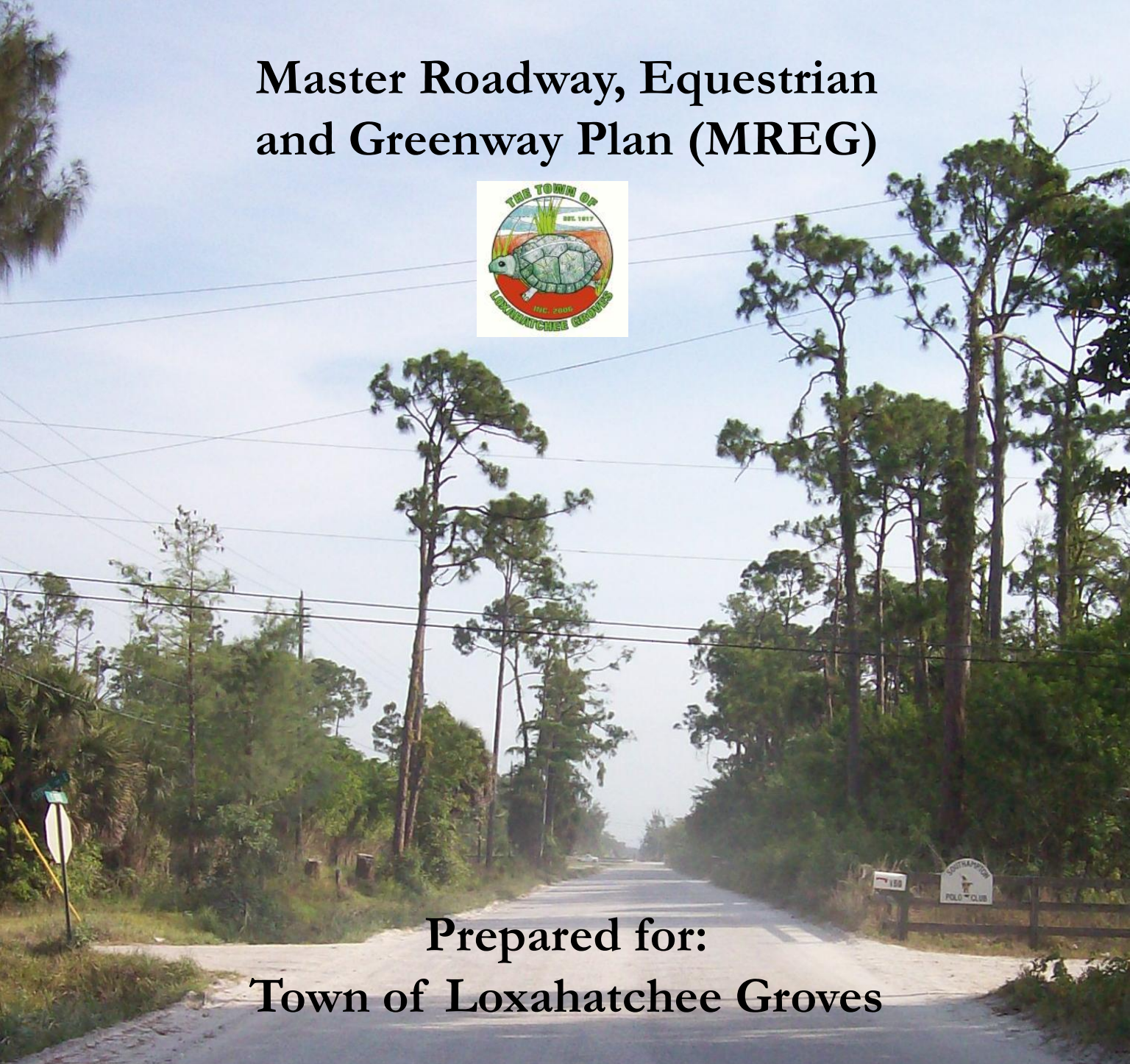
Master Roadway, Equestrian and Greenway Plan (MREG)



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Town of Loxahatchee Groves

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1.0 INTRODUCTION

Calvin, Giordano & Associates, Inc. was commissioned by the Town of Loxahatchee Groves to develop a Master Roadway, Equestrian and Greenway Plan (MREG) to evaluate traffic operational characteristics of the existing and future transportation network in the Town and identify opportunities for equestrian trails and greenways.

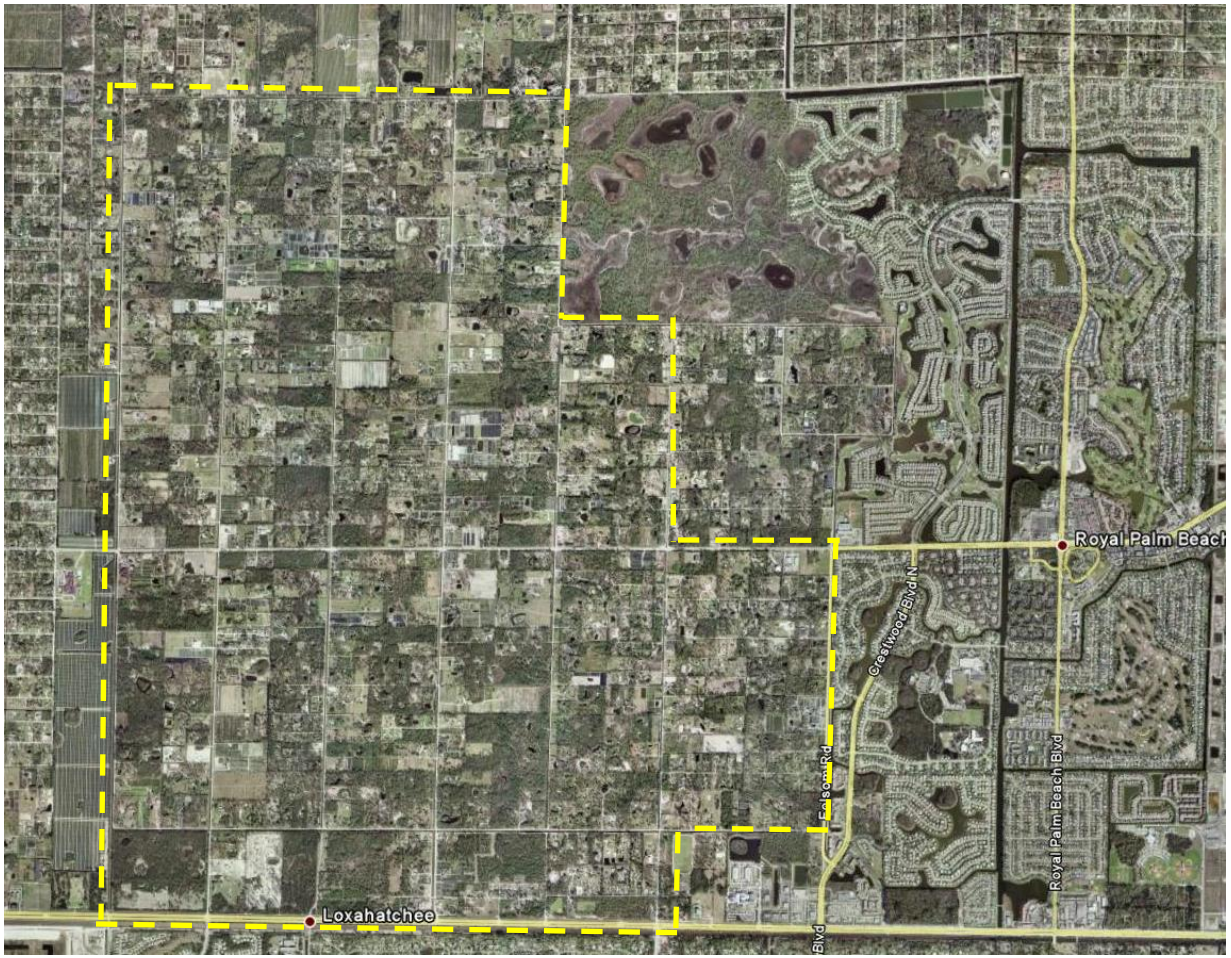
The Town of Loxahatchee Groves is a rural, residential and agricultural community encompassing approximately 12.5 square miles in Palm Beach County. Adjacent communities include the Village of Wellington to the south, the Village of Royal Palm Beach to the east, and areas of unincorporated Palm Beach County known as "The Acreage" to the north and west.

The Town is located within the Loxahatchee Groves Water Control District (LGWCD), a special district created in 1917 which maintains the roadways within the Town limits. In Year 2006, the LGWCD commissioned a report entitled the *LGWCD Districtwide Paving Analysis Report* (Erdman Anthony of Florida, Inc., October, 2006). The paving analysis report considered roadway surface treatment alternatives and typical cross section alternatives for roadways throughout the Town. A review of the findings of the paving analysis report was conducted and the recommendations of the report have been incorporated in the MREG, where appropriate.

The scope of the MREG includes traffic volume data collection, traffic operational analyses of 36 primary intersections for existing and future conditions, recommendations for traffic operational improvements, and identification of opportunities for equestrian trails and greenways. Where appropriate, the MREG incorporates historical research and current roadway practices of the LGWCD. Study boundaries are depicted in **Figure 1**.

FIGURE 1
Master Roadway, Equestrian and Greenways Plan

Study Area Location Map



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Study Area Boundary

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2.0 TRAFFIC OPERATIONAL ANALYSIS

2.1 Existing Roadway Network

2.1.1 Roadway Functional Classifications

In general, roadways are classified based on the purpose they serve, the speed of travel they accommodate, and adjacent access and mobility needs. The four functional classification groups common to rural and urban roadways are Major Arterials, Minor Arterials, Collectors and Local streets. Rural or urban designation is based primarily on population and the Town of Loxahatchee Groves falls under the Urban Area Boundary of Palm Beach County. Descriptions of roadway functional classifications applicable to the Town are described as follows:

Major Arterial Road

This roadway provides service primarily through high speed and high volume traffic. Major Arterials usually provide service that is relatively continuous and for longer trip lengths. Typical principal arterials include interstates, freeways, and other limited access facilities. **SR-80/Southern Boulevard**, a four-lane divided facility with 12' wide lanes, is classified as Major Arterial in the study.

Collector Road

This roadway provides both land access and traffic circulation between arterials and local roads for moderate trip length at moderate speeds. A collector street system transitions vehicular traffic from local streets onto the arterial system. **Okeechobee Boulevard**, a two-lane undivided roadway, is classified as County Collector within the Town limits.

Local Road

This roadway permits direct access to abutting property and connections to a higher order roadway such as a collector or arterial. A local road provides service for low traffic volumes and short average trip lengths or minimal through traffic movements. **The primary letter roads (A Road, B Road, C Road, D Road, E Road and F Road)** in the study area are classified as Local roads.

2.1.2 Roadway Characteristics

Most of the roadways within the Town are unpaved dirt roadways consistent with a rural lifestyle. Some exceptions to this include SR-80/Southern Boulevard and Okeechobee Boulevard, which are primary east-west roadways. The primary north-south roadways within the Town include A Road, B Road, C Road, D Road, E Road and F Road. These roadways are referred to as "The Letter Roads" in this report.

2.1.3 SR-80/Southern Boulevard Corridor

SR-80/Southern Boulevard is a designated Strategic Intermodal System (SIS) facility and part of the Florida Intrastate Highway System (FIHS). SR-80/Southern Boulevard is an east-west State highway that connects western Palm Beach County to eastern Palm Beach County. Within the Town, SR-80/Southern Boulevard consists of a four-lane divided highway with a 220-foot right-of-way and a posted speed limit of 50 mph. District IV of the Florida Department of Transportation (FDOT) has classified SR-80/Southern Boulevard as Access Class 3. The adopted Level of Service for SR-80/Southern Boulevard is D. There are currently only two traffic signals within the study area, which are located at the intersections of SR-80/Southern Boulevard & B Road and SR 80/Southern Boulevard & F Road. Intersection spacing between the two signals is approximately 2 miles. Minor approach Stop-control is provided at all the remaining intersections along SR-80/Southern Boulevard within the study area.

2.1.4 Okeechobee Boulevard

Okeechobee Boulevard is an east-west, County thoroughfare classified as a County Collector. Within the Town, Okeechobee Boulevard is a two-lane roadway with a 120-foot right-of-way and a posted speed limit of 45 mph. All intersections on Okeechobee Boulevard within the Town operate with Stop-control on the minor approaches. Okeechobee Boulevard is classified as a CRALLS facility from E Road to Seminole Pratt Whitney Road only for the Florida Research Park build out extension from 2014 to 2021.

2.1.5 Unpaved Local Roads

The primary north-south roadways in the Town; A Road, B Road, C Road, D Road, E Road and F Road (The Letter Roads), are all unpaved dirt roadways with the exception of F Road. The Loxahatchee Groves Water Control District has installed a surface treatment on F Road consisting of Open Graded Emulsion Mix (OGEM). The *LGWCD Districtwide Paving Analysis Report* (Erdman Anthony of Florida, Inc., October, 2006) concluded that OGEM provides a low-cost and low maintenance alternative to typical asphalt pavement. Traffic mitigation measures consisting of speed tables have been installed on F Road in an effort to ensure compliance with posted speed limits and discourage cut-through traffic.

The Letter Roads have an identified right-of-way of 60 feet and a speed limit of 30 mph. In general, The Letter Roads are adjacent to open drainage canals contained within the 60-foot prescribed right-of-way. Acceptable Level of Service standards have not been established for unpaved dirt roads on either a national or regional level.

2.2 Data Collection

2.2.1 Existing Traffic Volumes

To establish a baseline for the traffic operational analysis element of the MREG, traffic volume data were collected at significant intersections and corridor locations throughout the Town. Four-hour turning movement counts encompassing morning and evening peak-hours were conducted at studied intersections and twenty-four hour traffic counts were conducted on studied corridors. The counts were conducted in November and December of 2008 and complete printouts are included in Appendix A.

In addition to traffic data collected in association with the MREG, data collected in conjunction with the ongoing SR 80 Access Control Plan were incorporated for analysis purposes. These data sets were collected in April and May of 2008 and are also included in Appendix A.

Four-Hour Turning Movement Counts

Turning movement counts were collected on a typical weekday (Tuesday through Thursday) during the AM and PM peak hours at the following 36 locations:

1. B Road and SR-80
2. B Road and Collecting Canal Road
3. C Road and SR-80
4. C Road and Tangerine Drive
5. C Road and Collecting Canal Road
6. D Road and SR-80
7. D Road and Tangerine Drive
8. West D Road and Tangerine Drive
9. D Road and 6th Court North Road
10. D Road and Collecting Canal Road
11. Loxahatchee Avenue and SR-80
12. Loxahatchee Avenue and Tangerine Drive
13. Loxahatchee Avenue and Citrus Drive

14. E Road and SR-80
15. E Road and East Citrus Drive
16. E Road and Tangerine Drive
17. E Road and Citrus Drive
18. E Road and 6th Court North Road
19. E Road and Collecting Canal Road
20. F Road and SR-80
21. F Road and East Citrus Drive
22. F Road and 6th Court North Road
23. F Road and Collecting Canal Road
24. A Road and Okeechobee Boulevard
25. B Road and Okeechobee Boulevard
26. C Road and Okeechobee Boulevard
27. D Road and Okeechobee Boulevard
28. E Road and Okeechobee Boulevard
29. F Road and Okeechobee Boulevard
30. A Road and North Road
31. B Road and North Road
32. C Road and North Road
33. D Road and North Road
34. North Road and 140th Avenue
35. E Road and North Road
36. F Road and North Road

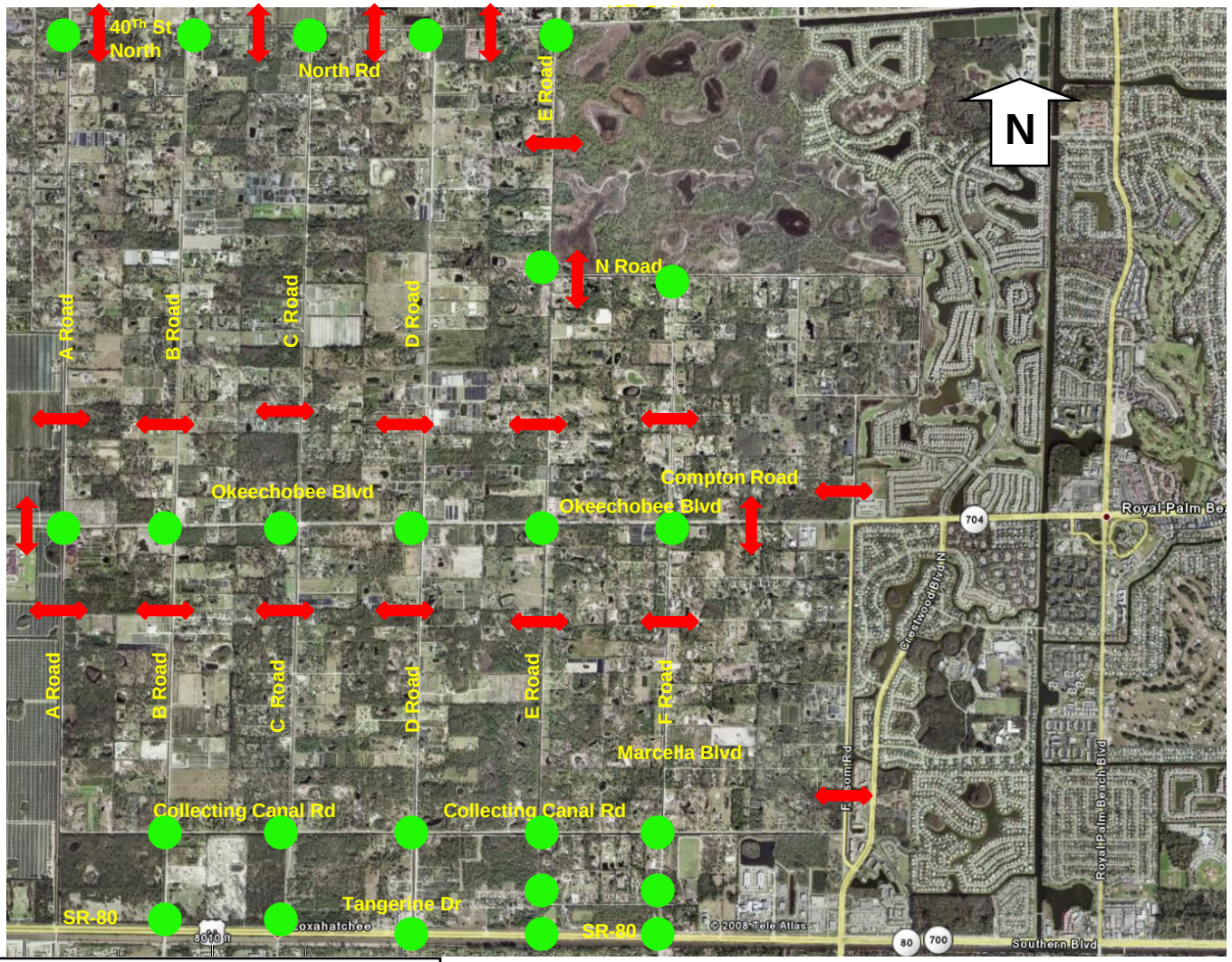
24-Hour Bi-Directional Approach Counts

In addition to turning movement counts, 24-hour bi-directional counts were also collected for the following twenty-two locations on December 11, 2008:

1. A Road, south of Okeechobee Boulevard
2. B Road, south of Okeechobee Boulevard
3. C Road, south of Okeechobee Boulevard
4. D Road, south of Okeechobee Boulevard
5. E Road, south of Okeechobee Boulevard
6. F Road, south of Okeechobee Boulevard
7. A Road, north of Okeechobee Boulevard
8. B Road, north of Okeechobee Boulevard
9. C Road, north of Okeechobee Boulevard
10. D Road, north of Okeechobee Boulevard
11. E Road, north of Okeechobee Boulevard
12. F Road,, north of Okeechobee Boulevard
13. Okeechobee Boulevard, east of F Road
14. Okeechobee Boulevard, west of A Road
15. N Road between E Road and F Road
16. E Road between N Road and North Road
17. North Road between A Road and B Road
18. North Road between B Road and C Road
19. North Road between C Road and D Road
20. North Road between D Road and 140th Avenue
21. Folsom Road between Marcella Blvd and Collecting Canal Road
22. Folsom Road between Okeechobee Boulevard and Compton Road

Figure 2 graphically depicts all the data collection locations and complete printouts of all traffic counts are included in **Appendix A**.

FIGURE 2
Master Roadway, Equestrian and Greenway Plan
Locations of Traffic Counts



Legend

- Peak Hr TMC Locations
- 24-Hr Bi-Directional Count Locations (for illustration purpose, not the exact location of counts)

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2.2.2 Review of Paving Analyses Report & Comparison of ADT

Average daily traffic (ADT) volumes collected in association with the *LGWCD Districtwide Paving Analysis Report* (Erdman Anthony of Florida, Inc., October, 2006) were reviewed for comparison with ADT volumes collected in 2008 in association with the MREG. The Districtwide Paving Analysis included ADT volumes both north and south of Okeechobee Boulevard on the following roadways: A Road, B Road, C Road, D Road, E Road, F Road and Folsom Road. The results of the comparison are illustrated in **Figure 3** and in **Tables 1A** and **1B**, and are graphically depicted in charts illustrated in **Figure 4**. As indicated, ADT volumes increased from Year 2006 to Year 2008 on the following roadway segments:

South of Okeechobee Boulevard:

- A Road
- B Road
- C Road
- F Road
- Folsom Road

North of Okeechobee Boulevard

- A Road
- B Road
- C Road
- D Road

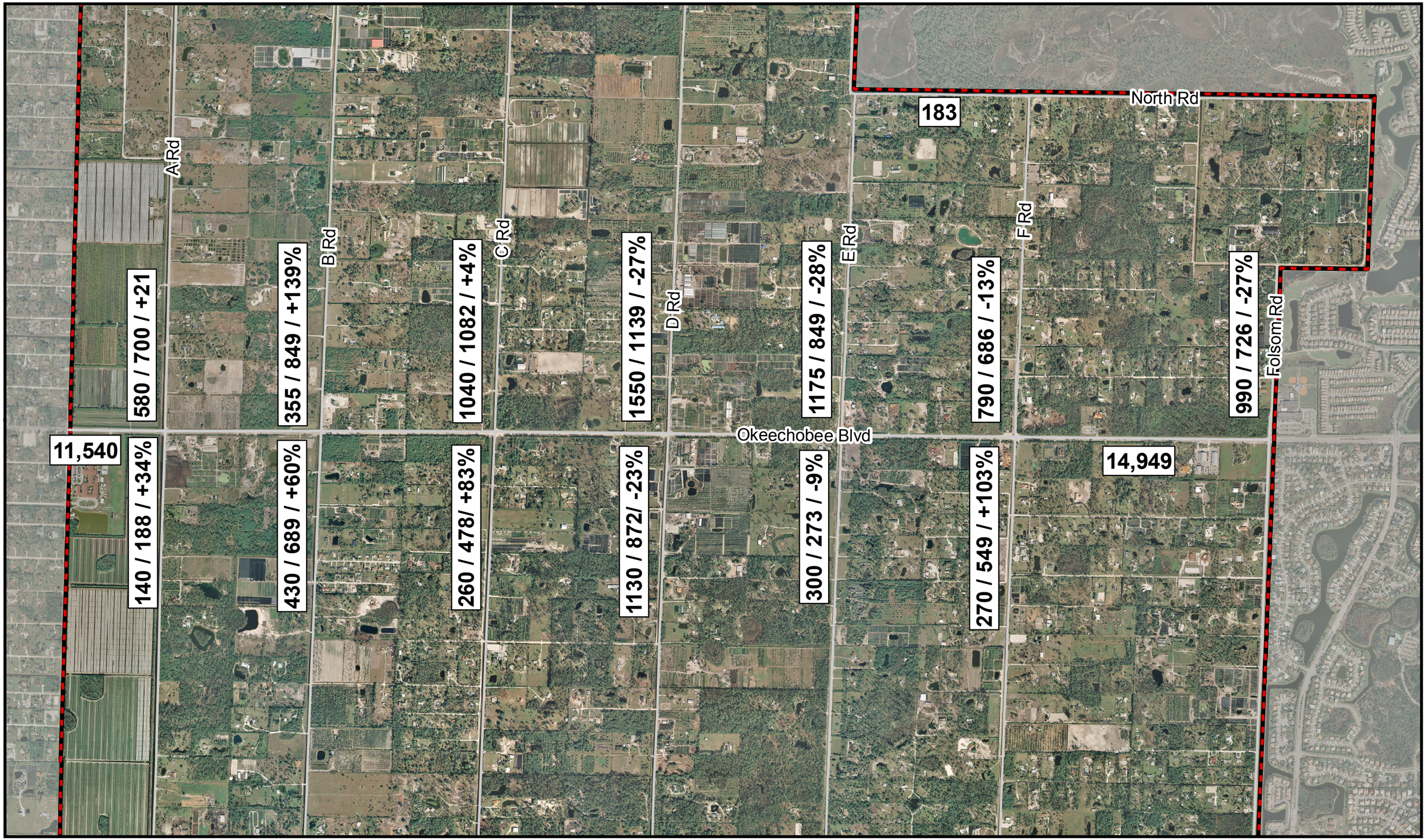
ADT volumes decreased from Year 2006 to Year 2008 on the following roadway segments:

South of Okeechobee Boulevard:

- D Road
- E Road

North of Okeechobee Boulevard

- D Road
- E Road
- F Road
- Folsom Road



Loxahatchee Groves
24 Hour Roadway Volumes

260 / 478/ +83% = 2006 Volume / 2008 Volume / % Difference

183 = 2008 Volume

0.5 Miles

N

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GIS Produced and maintained by the CGA Geographic Information Systems Services

Table 1A
ADT Comparison Table (2006 ADT VS 2008 ADT)
ADT Collected South of Okeechobee Blvd

Roadway	From	To	ADT[1]	CGA ADT[2]	% Increase/decrease
A Road	Collecting Canal Rd	Okeechobee Rd	140	188	34%
B Road	Collecting Canal Rd	Okeechobee Rd	430	689	60%
C Road	Collecting Canal Rd	Okeechobee Rd	260	478	84%
D Road	Collecting Canal Rd	Okeechobee Rd	1130	872	-23%
E Road	Collecting Canal Rd	Okeechobee Rd	300	273	-9%
F Road	Collecting Canal Rd	Okeechobee Rd	270	549	103%

Note:

1) The ADT were directly taken from the Districtwide Paving Analysis Report, 2006 prepared by Erdman & Anthony of Florida, Inc.

2) The ADT volumes were based on twenty-four hour traffic counts performed on December 11, 2008.

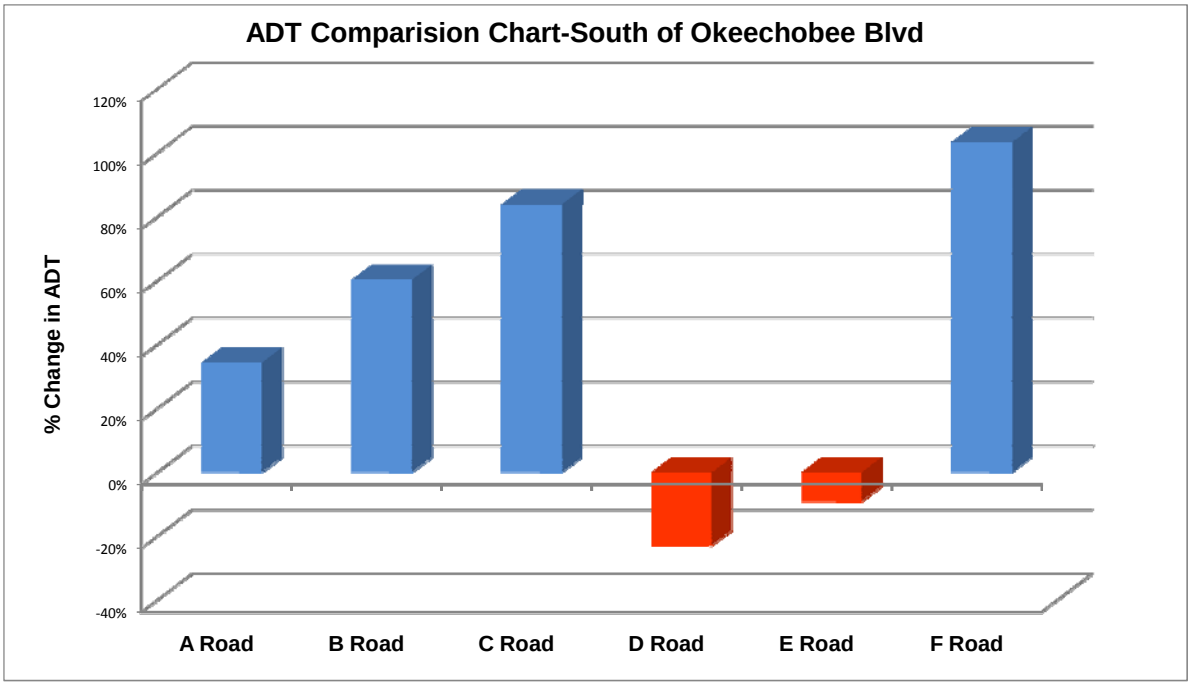
Table 1B
ADT Comparison Table (2006 ADT VS 2008 ADT)
ADT Collected North of Okeechobee Blvd

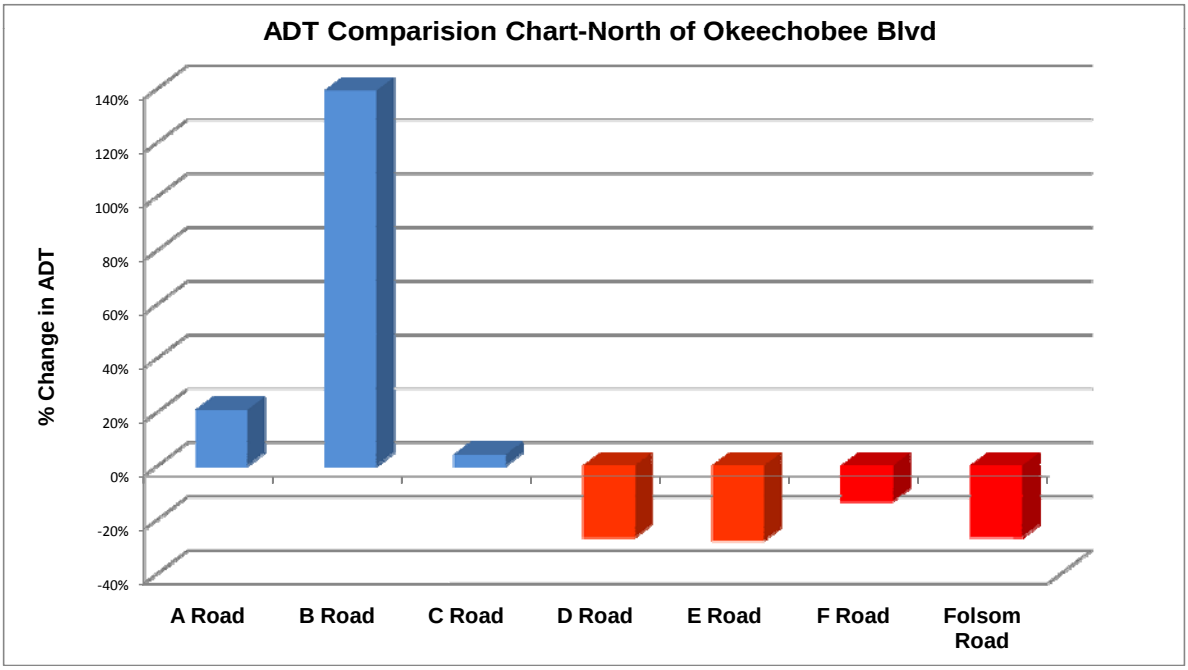
Roadway	From	To	ADT[1]	CGA ADT[2]	% Increase/decrease
A Road	Okeechobee Rd	North Rd	580	700	21%
B Road	Okeechobee Rd	North Rd	355	849	139%
C Road	Okeechobee Rd	North Rd	1040	1082	4%
D Road	Okeechobee Rd	North Rd	1550	1139	-27%
E Road	Okeechobee Rd	North Rd	1175	849	-28%
F Road	Okeechobee Rd	North Rd	790	686	-13%
Folsom Road	Okeechobee Rd	North Rd	990	726	-27%

Note:

1) The ADT were directly taken from the Districtwide Paving Analysis Report, 2006 prepared by Erdman & Anthony of Florida, Inc.

2) The ADT volumes were based on twenty-four hour traffic counts performed on December 11, 2008.


ADT Comparision Chart-South of Okeechobee Blvd
% Change in ADT
120%
100%
80%
60%
40%
20%
0%
-20%
-40%
A Road
B Road
C Road
D Road
E Road
F Road


ADT Comparision Chart-North of Okeechobee Blvd
% Change in ADT
140%
120%
100%
80%
60%
40%
20%
0%
-20%
-40%
A Road
B Road
C Road
D Road
E Road
F Road
Folsom Road

2.2.3 Traffic Growth Patterns: Cut-Through Traffic

The changes in ADT volumes tracked between the 2006 data set and the 2008 data set indicate substantial increases on B Road, C Road and F Road south of Okeechobee Boulevard (60%, 83% and 103%, respectively). It is highly unlikely and unrealistic to conclude this level of growth was attributable to the development of vacant land or the reconfiguration of existing land uses within the Town. It is more reasonable to conclude that these roadway segments were increasingly utilized as alternative routes between SR 80 and Okeechobee Boulevard by non-residents. This trend is known as cut-through traffic and is addressed in further detail in this report.

However, due to the limited number of data sets compared (One data set collected in Year 2006 and one data set collected in Year 2008), caution should be exercised when drawing conclusions regarding global traffic patterns. It is recommended that the Town continue monitoring traffic volumes on local roads to identify emerging trends and aid in future traffic analyses.

2.3 Safety Analysis

2.3.1 Speed Studies-Okeechobee Boulevard

In an MREG public workshop conducted in September 2008, Town residents expressed concerns regarding speeding on Okeechobee Boulevard and the difficulty of entering the high speed traffic stream on the roadway. A speed analysis was performed on Okeechobee Boulevard west of F Road to determine the extent of speed limit compliance on the roadway. The current posted speed limit on the subject roadway segment is 45 mph.

Speed data, collected on September, 26, 2007, was obtained from Palm Beach County Traffic Engineering Division. The results of an analysis of the data are summarized in **Table 2**. Analysis of the dataset showed that the 85th percentile speed on Okeechobee Boulevard was 54 mph, which is a 20% increase over the posted speed limit. The analysis also showed that 65.7% of vehicles on the roadway were driving at a higher speed than 45 mph.

2.3.2 Crash Data

To evaluate the existing conditions and to identify safety issues within the study area, available vehicular crash data were evaluated. Raw crash data compiled from January 2006 through May 2008 were obtained from Palm Beach County Traffic Division and are provided in **Appendix B** and summarized in **Figure 5**. The crash dataset was incorporated in traffic signal warrant analyses, as discussed in a subsequent section of this report.

TABLE 2

Speed Study Summary

Master Roadway Plan for the Town of Loxahatchee Groves

Location: Okeechobee Boulevard, West of F Road
Direction: East-West
Posted Speed Limit: 45 MPH

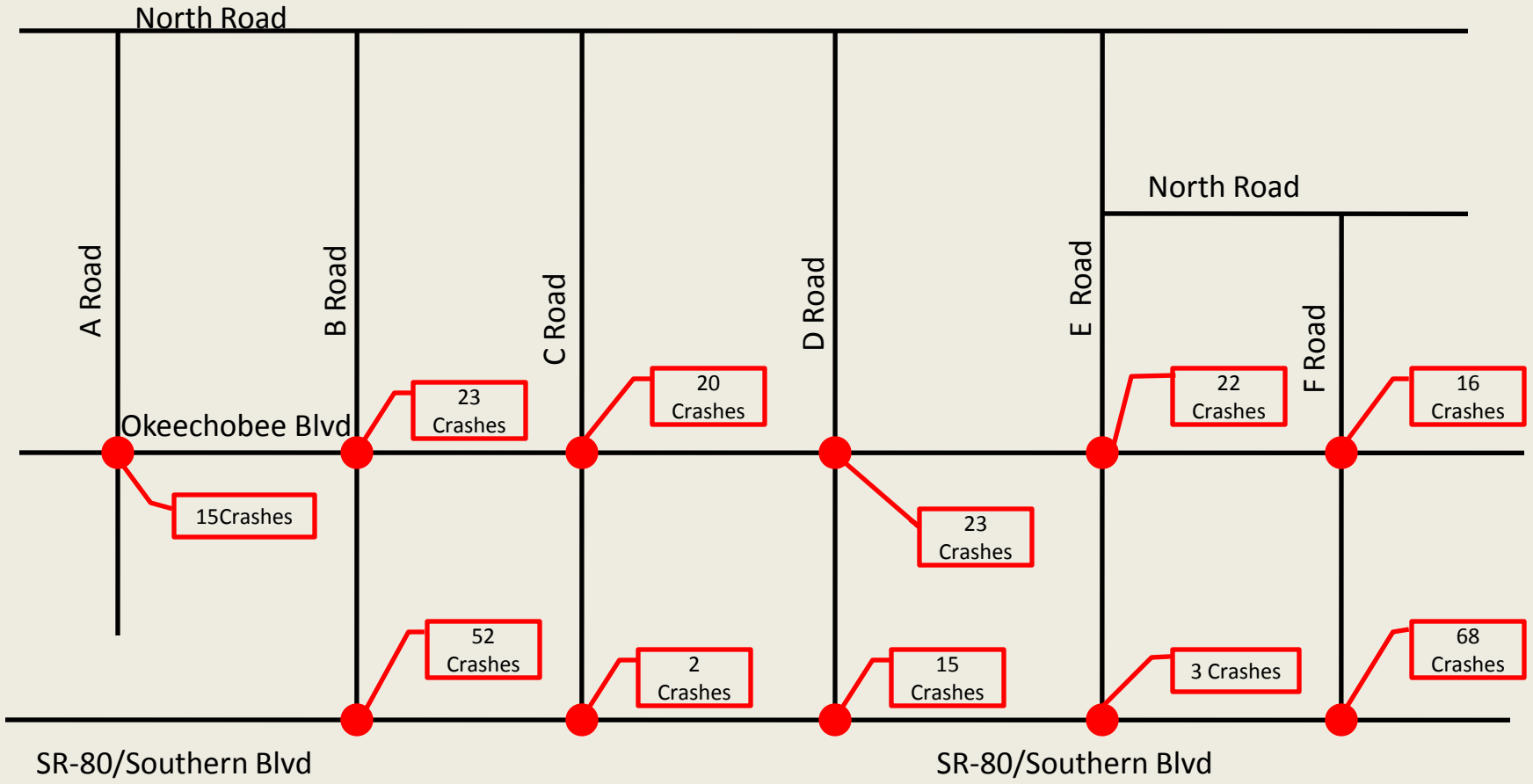
Date:	Wednesday, September 26, 2007														**Total**
Speed	0-15	16-20	21-25	26-30	31-35	36-40	41-45	46-50	51-55	56-60	61-65	66-70	71-75	76-9999	
Vehicles	166	32	53	84	285	835	2,884	4,406	2,796	640	132	38	27	282	12,660

Source: Palm Beach County (PBC) Traffic Division

Statistics

15th percentile	41 MPH
50th percentile	42 MPH
85th percentile	54 MPH
95th percentile	59 MPH
Mean Speed	
Number of vehicles > 45 MPH	8321
Percent of vehicles > 45 MPH	65.70%

FIGURE 5
Master Roadway, Equestrian and Greenway Plan
Intersection Crash Diagram



Legend
Intersection

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2.4 Existing Conditions (Year 2008) Operational Analyses

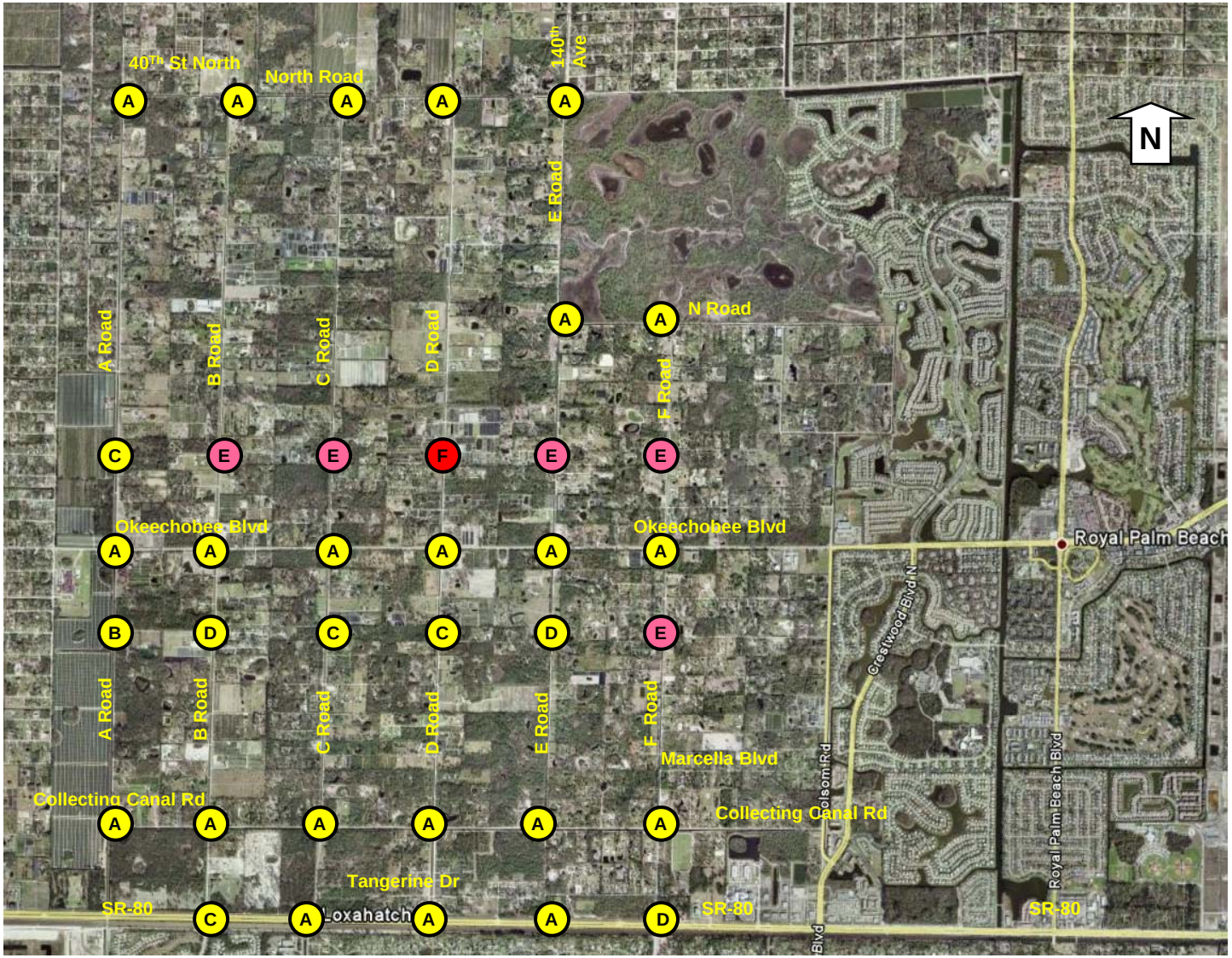
To determine the traffic operational conditions of existing intersections, the existing roadway network was modeled utilizing the analysis software packages SYNCHRO 7.0 and SimTraffic. Traffic operational analyses were performed for thirty-six intersections within the aforementioned study area limits.

Results of the analyses indicate that all studied intersections are currently operating within acceptable Levels of Service when considering overall intersection performance. However, minor approaches on intersections of The Letter Roads with Okeechobee Boulevard were shown to operate below acceptable Levels of Service. In particular, the north approaches on B Road, C Road, D Road, E Road and F Road and south approach on F Road were shown to experience substantial vehicle delay, particularly during the evening peak-hour. It is important to note that overall intersection performance is a weighted average of the delay experienced by each vehicle entering an analyzed intersection. Since the volume of traffic on the minor street approaches (The Letter Roads) is relatively low, the delay experienced by these drivers does not heavily influence the overall intersection performance. Thus substantial delay can be experienced by most if not all drivers on the minor street approach and the intersection can still reflect an acceptable overall Level of Service performance. This is the case for the analyzed intersections on Okeechobee Boulevard.

The arterial analyses of SR-80/Southern Boulevard under existing conditions revealed that the corridor in both the eastbound and westbound direction will be operating well above the adopted Level of Service standards. The results of the arterial analysis are summarized in **Table 3**.

The Levels of Service under existing conditions for intersections within study area are depicted in **Figure 6** and complete printouts are included in **Appendix C.**

Figure 6
Master Roadway, Equestrian and Greenway Plan
Existing 2008 Conditions-Intersection LOS



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A — Intersection/Approach LOS

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TABLE 3

Existing 2008 -PM Peak Hour Arterial Analysis

Arterial Level of Service: EB SR-80

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
B Rd/Binks Forest Dr	I	55	49.4	19.1	68.5	0.75	39.7	B
F Rd/Big Blue Trace	I	55	131.1	22.6	153.7	2.00	46.9	A
Total	**I**		**180.5**	**41.7**	**222.2**	**2.75**	**44.6**	**A**

Arterial Level of Service: WB SR-81

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
F Rd/Big Blue Trace	I	55	35.5	9.4	44.9	0.46	36.5	B
B Rd/Binks Forest Dr	I	55	131.1	10.9	142	2.00	50.7	A
Total	**I**		**166.6**	**20.3**	**186.9**	**2.46**	**47.3**	**A**

2.5 Traffic Signal Warrant Analyses

During the PM peak-hour, it was observed that heavy delays were experienced on the minor street approaches of intersections of The Letter Roads with Okeechobee Boulevard. To address this condition, a traffic signal warrant analysis was performed for the intersections of Okeechobee Boulevard with B Road and with F Road. These intersections were selected due in part to significant traffic volumes on both corridors, to provide acceptable gaps in traffic at intersections between these locations, and due to the fact that signalized intersections are currently provided at the intersections of SR 80/Southern Boulevard with each of these corridors.

The signal warrant analyses were performed in accordance with standards set forth in Section 4C of the Manual on Uniform Traffic Control Devices, 2003 Edition (MUTCD). The signal warrant analyses and applicable MUTCD tables and figures are included in **Appendix D**. Applicable warrants are described below.

Warrant 1, Eight-Hour Vehicular Volume - Warrant 1 is satisfied when either Condition A or Condition B is satisfied. If neither Condition is satisfied, then the combination of Conditions A and B can be considered. Condition A is satisfied when the major and minor street volumes equal or exceed the limits given in the 100 percent or 70 percent columns in MUTCD Table 4C-1 *Condition A-Minimum Vehicular Volume*. Condition B is satisfied when the major and minor street volumes equal or exceed the limits given in the 100 percent or 70 percent columns in Table 4C-1 *Condition B-Interruption of Continuous Traffic*. Since the posted speed limit on Okeechobee Boulevard is 45 miles per hour, which exceeds 40 miles per hour, the minimum volume thresholds identified in the 70 percent columns are used as the basis for this analysis, per MUTCD 2003 guidelines.

Warrant 2, Four-Hour Vehicular Volume - Warrant 2 is considered satisfied when traffic volumes during four hours of an average day for the major street (total of both approaches) and the corresponding volume on the higher-volume

minor street exceed minimum thresholds as defined in Figure 4C-2 of the MUTCD.

Warrant 3, Peak-Hour Vehicular Volume - Warrant 3 is considered satisfied when traffic volumes recorded during one hour (any four consecutive 15-minute periods) for the major street (total of both approaches) and the corresponding volume on the higher-volume minor street (one direction only) exceed the minimum volume thresholds identified in Figure 4C-4 of the MUTCD.

2.5.1 Signal Warrant Analysis: Okeechobee Boulevard at B Road & F Road

Based on intersection characteristics, traffic signal warrants for 70% criteria were evaluated for the intersections of Okeechobee Boulevard with B Road and F Road. Twenty-four hour traffic counts were used to evaluate the signal warrants, and copies of the volume counts are included in **Appendix A.** The speed analysis conducted earlier was used to find the average weekday and weekend 85th percentile speeds on Okeechobee Boulevard, in order to establish applicable volume limits for each signal warrant. Crash data at the intersections of Okeechobee Boulevard with F Road and B Road within the last three years (01/01/06-5/31/08) were also incorporated into the analyses. Based on the analyses, no warrants are currently met for signalization of either intersection. Monitoring of intersection conditions is recommended to determine if signalization warrants are met in the future.

2.6 Programmed Cost Feasible Roadway Projects

In the Palm Beach County Metropolitan Planning Organization's (MPO) 2030 Long Range Transportation Plan (LRTP), SR-80/Southern Boulevard is planned to be widened from 4 lanes to 6 lanes and Okeechobee Boulevard is planned to widen from 2 lanes to 4 lanes. Also, FDOT has a PD&E study for the widening of SR-80/Southern Boulevard programmed in their five year work program for 2011.

Bicycle and pedestrian improvements are also planned along Okeechobee Boulevard in the MPO Long Range Transportation Plan.

In the adopted 2030 Cost Feasible Plan, an east-west Palm Tran Bus Grid System is proposed on Okeechobee Boulevard and SR-80/Southern Boulevard. Also, north south routes are proposed on Folsom Road and Seminole Pratt Whitney Road.

2.7 Development of Future Traffic Volumes

2.7.1 Background Traffic Growth

According to the *Palm Beach County Traffic Division Historic Growth Table*, roadways in the vicinity of the study area including Folsom Road, Crestwood Boulevard, Forest Hills Boulevard, Orange Boulevard, Persimmon Boulevard, Seminole Pratt Whitney Road and SR-7 experienced a negative growth rate. Okeechobee Boulevard from Seminole Pratt Whitney Road to Royal Palm Beach Boulevard experienced a negative growth rate as well. However, traffic volumes collected in association with the MREG indicated instances of significant growth within the Town. Therefore, to ensure a conservative analysis, a 1.0% area wide compound annual growth rate was applied from 2008 to 2013and a 0.5% linear growth rate was applied from 2013 to 2030 to determine the background turning movement volumes for analyzed Town roadways north of Collecting Canal Road.

The growth rates obtained from the *Palm Beach County Traffic Division Historic Growth Table* are included in **Appendix E** and listed in **Table 4A**.

The traffic forecasting methodology used for each studied roadway segment south of Collecting Canal Road was chosen after reviewing applicable forecast methodologies. The forecast methodologies reviewed include the following:

- Regression analysis of 7 years of the most recent historical daily traffic volumes from Palm Beach County.
- Regression analysis of 7 years of the most recent historical daily traffic volumes from Palm Beach County along with the Palm Beach County MPO 2030 model volumes without the E Road extension.
- Growth between the validation year 2000 and the 2030 Palm Beach County MPO model without the E Road extension.
- Zonal analysis of adjacent TAZ employment data from the validation year 2000 and the 2030 Palm Beach County Model.

The regression analyses of the historical Annual Average Daily Traffic (AADT) alone and the historical AADT combined with the 2030 Palm Beach County MPO model volumes without the E Road extension were completed using the "Traffic Trends" spreadsheet for SR-80/Southern Boulevard, Big Blue Trace and Binks Forest Drive. A linear, exponential, and decaying exponential trend line was fit to the data, and the trend analysis printouts for each traffic monitoring site are provided in **Appendix E**.

Future 2030 background volumes south of Collecting Canal Road were calculated employing the preferred growth rate as compound growth rate for each roadway from 2008 to 2030. The growth rate methodology table provided in **Table 4B** details the reasoning behind the selection of each traffic forecasting methodology.

Table 4A
Historic Growth Rate Table

Roadway	From	To	Historic GR
Southern Blvd	Seminole Pratt Whitney	Binks Forest Dr/B Rd	-8.37
	Binks Forest Dr/B Rd	Big Blue Trace/F Rd	-4.2
	Big Blue Trace/F Rd	Forest Hill/Crestwood Blvd	-2.46%
Okeechobee Blvd	Seminole Pratt Whitney	140th Ave	-3.39%
	140th Ave	Crestwood Blvd	-3.62%
	Crestwood Blvd	Royal Palm Blvd	-3.52%
Folsom Blvd	Crestwood Blvd	Okeechobee Blvd	-0.11%
Crestwood Blvd	Southern Blvd	Folsom Rd	-3.00%
	Folsom Rd	Okeechobee Blvd	-3.37%
	Okeechobee Blvd	Royal Palm Blvd	-2.37%
Seminole Pratt Whitney	Southern Blvd	Okeechobee Blvd	-8.83%
	Okeechobee Blvd	Sycamore Dr E	-5.80%
Royal Palm Beach Blvd	Southern Blvd	Okeechobee Blvd	1.35%
	Okeechobee Blvd	RPB North limits	-3.51%
Forest Hill Blvd	Southern Blvd	Wellington Trace	-2.08%
Big Blue Trace	Wellington Trace	Southern Blvd	1.37%
Coconut Blvd	Persimmon Blvd	Orange Blvd	-7.77%
	Orange Blvd	Temple Blvd	-6.70%
Northlake Blvd	Seminole Pratt Whitney	Coconut Blvd	-1.71%
Orange Blvd	140th Ave N	Coconut Blvd	-5.30%
	Cocounut Blvd	Royal Palm Blvd	-6.35

TABLE 4B
Growth Rate Comparison Table
Southern Boulevard Traffic Forecast

Florida Department of Transportation District IV - Systems Planning

Location	METHOD 1 Historic Trend Analysis	METHOD 2 Historic+2030	METHOD 3 2000 - 2030 FSUTMS Forecasts			METHOD 4 2000 - 2030 FSUTMS TAZ Data	Recommended Growth Rate	Notes
			2000	2030	Compd Growth			
Southern Blvd east of F Rd	1.11% LGR	1.1% CGR	32,147	58,100	1.99%		1.00%	A growth rate of 1% was utilized since committed development along SR 80 is available.
Southern Blvd b/w B Rd and F Rd	2.84% CGR	0.95% CGR	18,832	38,967	2.45%		1.00%	
Southern Blvd b/w Seminole Pratt Whitney Rd and B Rd	3.53% CGR	1.44% CGR	19,988	44,350	2.69%		1.00%	
Binks Forest S. of Southern Blvd	0.41% CGR	1.41% CGR	7,257	14,574	2.35%		1.50%	Good Correlation between historical and model conditions.
Big Blue Trace S. of Southern Blvd	0.39% CGR	2.68% CGR	16,393	21,791	0.95%		1.00%	The 2008 data from PBC shows an AADT of 11,000. PBC 2030 model volume is unrealistically high.
D Rd N. of Southern Blvd			1,080	1,475	1.04%		1.50%	Utilized same growth rate as all roadways within Loxahatchee Groves.
Ousley Farms Rd S. of SR 80						0.15% CGR	0.50%	Minimum growth rate utilized.
All roadways within Loxahatchee Groves						1.59% CGR	1.50%	Averaged population TAZ data for all centroids within study limits north of SR 80.

2.7.2 Approved Committed Development

The Palm Beach County Traffic Performance database was utilized to determine committed development trips within the study area. Future committed developments within the Town of Loxahatchee Groves along SR-80 include the following:

- Loxahatchee Retail, between C Road and D Road.
- Southern Crossing MUPD, between E Road and D Road.
- Groves Medical Plaza, west of F Road.

Other committed developments located outside the Town of Loxahatchee Groves but within the vicinity of study area include the following:

- Crestwood Middle School Expansion
- Binks Forest Residential
- Wellington Elementary School
- Everglades Farm Equipment
- Highland Dunes
- Cypress Key
- Southern Palm Crossing
- Palms West Hospital
- Taheri

Details of the approved committed developments are provided in **Appendix E**.

2.7.3 Maximum Future Development and Projected Land use

2.7.3.1 Vacant Parcel Trips

To account for trips associated with the possible development of currently undeveloped parcels, a trip generation analysis was performed using Palm Beach County Trip Generation Rates and Equations for vacant parcels within the Town of Loxahatchee Groves. The resultant trips were assigned onto the surrounding roadway network and included in future turning movements to determine future total traffic volumes.

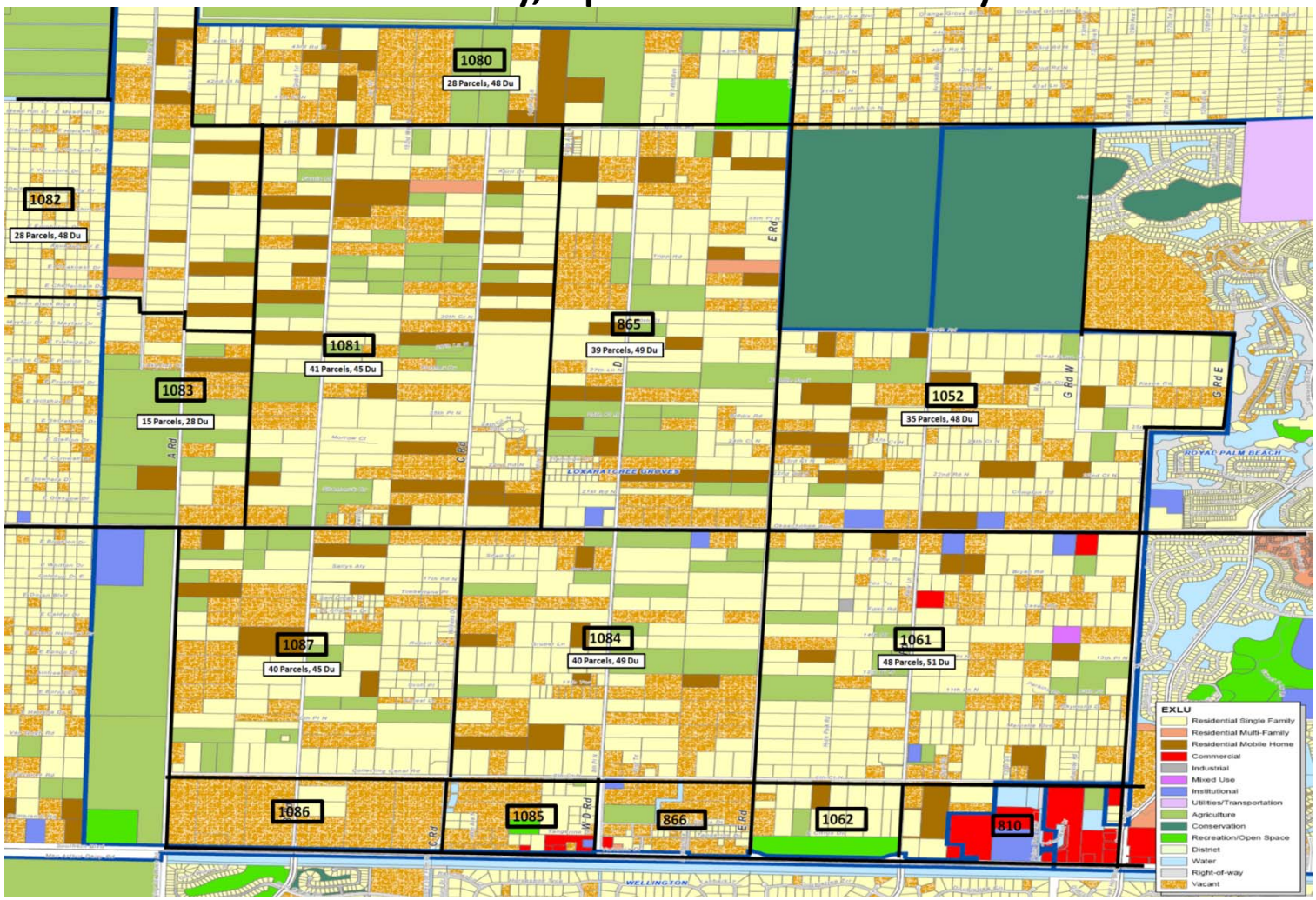
Traffic Analysis Zone (TAZ) and vacant parcel information is included in **Figure 7** and **Appendix E** and a trip generation analysis is provided in **Table 5**.

2.7.4 Year 2030 Traffic Volume Projections

Year 2030 total traffic volumes include the sum of existing 2008 traffic volumes, future background traffic volumes, Palm Beach County approved committed traffic volumes, vacant parcels trips, and traffic volumes from potential commercial developments along SR-80/Southern Boulevard. Year 2030 turning movement volumes are reflected in the Year 2030 Synchro analyses contained in **Appendix C**.

FIGURE 7

Master Roadway, Equestrian and Greenway Plan



Legend

1250 **Traffic Analysis Zone**

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TABLE 5
Vacant Parcel Trip Generation Table

TAZ 1087

Landuse	ITE Code	Unit	Allowable Max Density	Daily Rate Equation	Daily Trips	Pass-by	AM			PM		
							Total	In	Out	Total	In	Out
Single Family	210	Dwelling Unit	45	10	450	0%	41	10	31	52	33	19

TAZ 1084

Landuse	ITE Code	Unit	Intensity	Daily Rate Equation	Daily Trips	Pass-by	AM			PM		
							Total	In	Out	Total	In	Out
Single Family	210	Dwelling Unit	49	10	490	0%	44	11	33	56	36	21

TAZ 1061

Landuse	ITE Code	Unit	Intensity	Daily Rate Equation	Daily Trips	Pass-by	AM			PM		
							Total	In	Out	Total	In	Out
Single Family	210	Dwelling Unit	51	10	510	0%	45	11	34	58	37	22

TAZ 1081

Landuse	ITE Code	Unit	Intensity	Daily Rate Equation	Daily Trips	Pass-by	AM			PM		
							Total	In	Out	Total	In	Out
Single Family	210	Dwelling Unit	45	10	450	0%	41	10	31	52	33	19

TAZ 865

Landuse	ITE Code	Unit	Intensity	Daily Rate Equation	Daily Trips	Pass-by	AM			PM		
							Total	In	Out	Total	In	Out
Single Family	210	Dwelling Unit	49	10	490	0%	44	11	33	56	36	21

TAZ 1052

Landuse	ITE Code	Unit	Intensity	Daily Rate Equation	Daily Trips	Pass-by	AM			PM		
							Total	In	Out	Total	In	Out
Single Family	210	Dwelling Unit	48	10	480	0%	43	11	32	55	35	20

TAZ 1083

Landuse	ITE Code	Unit	Intensity	Daily Rate Equation	Daily Trips	Pass-by	AM			PM		
							Total	In	Out	Total	In	Out
Single Family	210	Dwelling Unit	45	10	450	0%	41	10	31	52	33	19

TAZ 1082

Landuse	ITE Code	Unit	Intensity	Daily Rate Equation	Daily Trips	Pass-by	AM			PM		
							Total	In	Out	Total	In	Out
Single Family	210	Dwelling Unit	48	10	480	0%	43	11	32	55	35	20

TAZ 1080

Landuse	ITE Code	Unit	Intensity	Daily Rate Equation	Daily Trips	Pass-by	AM			PM		
							Total	In	Out	Total	In	Out
Single Family	210	Dwelling Unit	48	10	480	0%	43	11	32	55	35	20

Note:
1) Palm Beach County Trip Generation Rates & Equations.
AM
T = 0.7 (X) + 9.43
25/75
PM
Ln (T) = 0.90 Ln (X) + 0.53
63/37

2.8 Future Conditions Scenarios

Three alternate scenarios for future traffic conditions were considered and analyzed. They are as follows:

1) Alternative 1-No Build Scenario
2) Alternative 2-Proposed Roundabouts on Okeechobee Boulevard
3) Alternative 3-Proposed Signals on Okeechobee Boulevard

2.8.1 Okeechobee Intersection Control – Roundabouts or Traffic Signals

Existing and projected future traffic volumes at intersections of The Letter Roads with Okeechobee Boulevard are relatively low and therefore intersection control will not likely be warranted on all Letter Road intersections. However, providing intersection control at two strategic intersections such as B Road and F Road can dramatically improve the operational characteristics of all Letter Road intersections on Okeechobee Boulevard. Providing intersection control at B Road and F Road will result in gaps in the overall traffic stream at all intersections between B Road and F Road. Gaps in the traffic stream result when traffic is stopped or significantly slowed at the two controlled intersections. These gaps will allow minor street traffic at C Road, D Road and E Road to enter the traffic stream on Okeechobee Boulevard or cross Okeechobee Boulevard more effectively and will reduce the minor street delay identified in operational analyses. Therefore, intersection control was analyzed for the intersections of Okeechobee Boulevard with B Road and F Road.

2.8.2 Operational Analysis for Alternative 1-No Build Scenario

Alternative 1 serves as the baseline alternative. This alternative takes into consideration the future planned roadway improvements and future volumes based on existing plus committed network, background volumes, undeveloped vacant parcel trips and proposed commercial developments along SR-80/Southern Boulevard. All the intersections in the study area were analyzed using Trafficware's SYNCHRO 7.0 and SimTraffic software for Alternative 1-No Build conditions during the PM peak hour. The analyses illustrated that all the analyzed

intersections on Tangerine Drive, Collecting Canal Road, 6th Court North Road, Citrus Drive and North Road will be operating at LOS A with minimal delays. All the intersections on Okeechobee Boulevard except Okeechobee Boulevard at B Road will be operating at or above LOS B. However, most of the minor approaches on Okeechobee Boulevard will experience heavy delays and are expected to operate below acceptable Level of Service standards. The analyses demonstrated that all the intersections on SR-80/Southern Boulevard except SR-80/Southern Boulevard at Loxahatchee Avenue will be operating below acceptable Level of Service standards. However, the arterial analyses of the corridor revealed that the SR-80/Southern Boulevard corridor, both in the eastbound and westbound directions, will be operating well above the adopted Level of Service standards. The results of the arterial analysis are summarized in **Table 6**.

The Levels of Service for all analyzed intersections in the study area for No Build Conditions are depicted in **Figure 8**. The results of the Synchro analyses for all thirty-six intersections are included in **Appendix C**.

TABLE 6

2030 Future Conditions-PM Peak Hour

Arterial Analyses

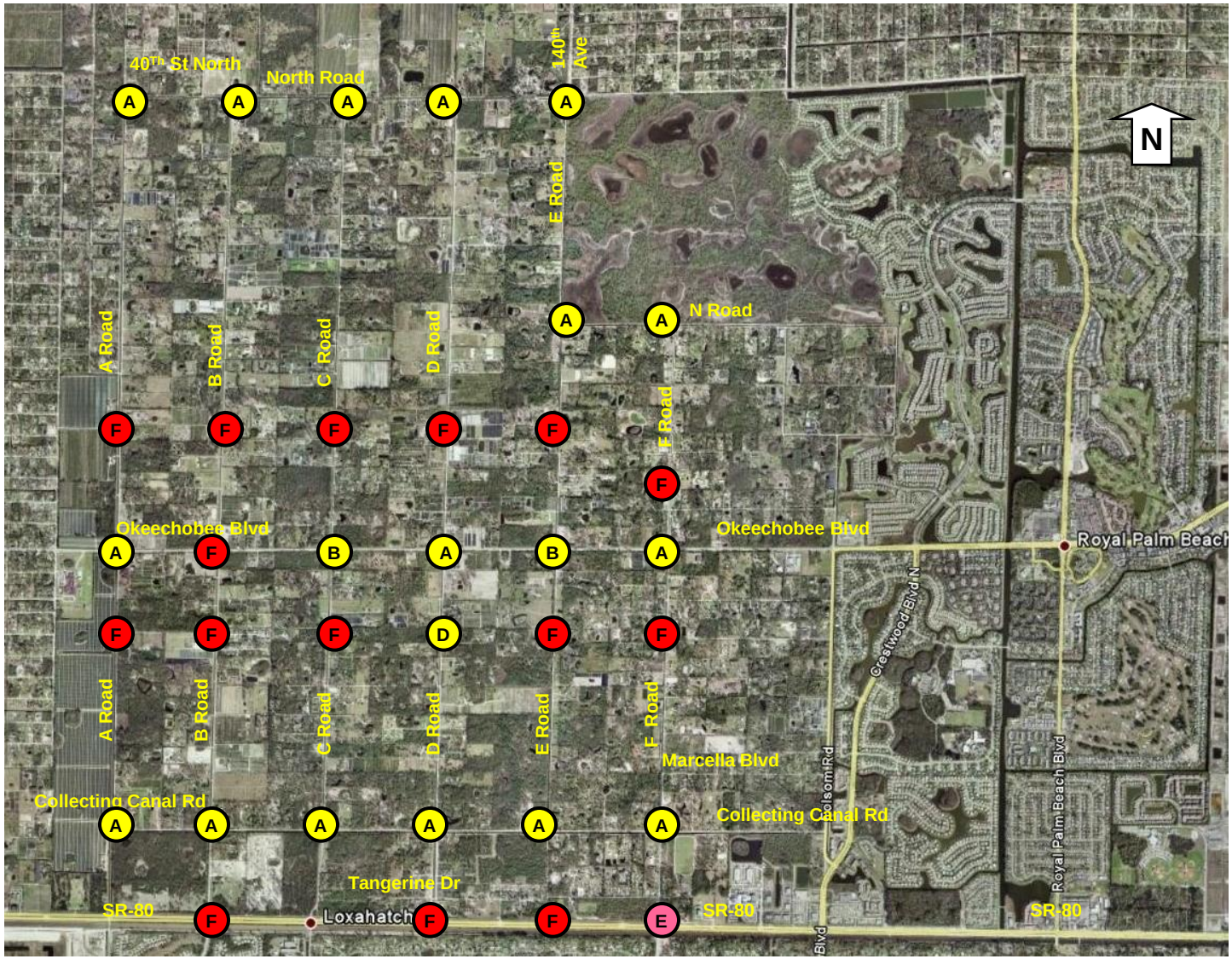
Arterial Level of Service: EB SR-80

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
B Rd/Binks Forest Dr	I	55	49.4	98.0	147.4	0.75	18.4	E
F Rd/Big Blue Trace	I	55	131.1	79.2	210.3	2.00	34.3	B
Total	**I**		**180.5**	**177.2**	**357.7**	**2.75**	**27.7**	**C**

Arterial Level of Service: WB SR-80

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
F Rd/Big Blue Trace	I	55	35.5	27.4	62.9	0.46	26.1	D
B Rd/Binks Forest Dr	I	55	131.1	24.6	155.7	2.00	46.3	A
Total	**I**		**166.6**	**52.0**	**218.6**	**2.46**	**40.5**	**B**

Figure 8
Master Roadway, Equestrian and Greenways Plan
Future 2030 Conditions-Intersection LOS



LEGEND

A — Intersection/Approach LOS

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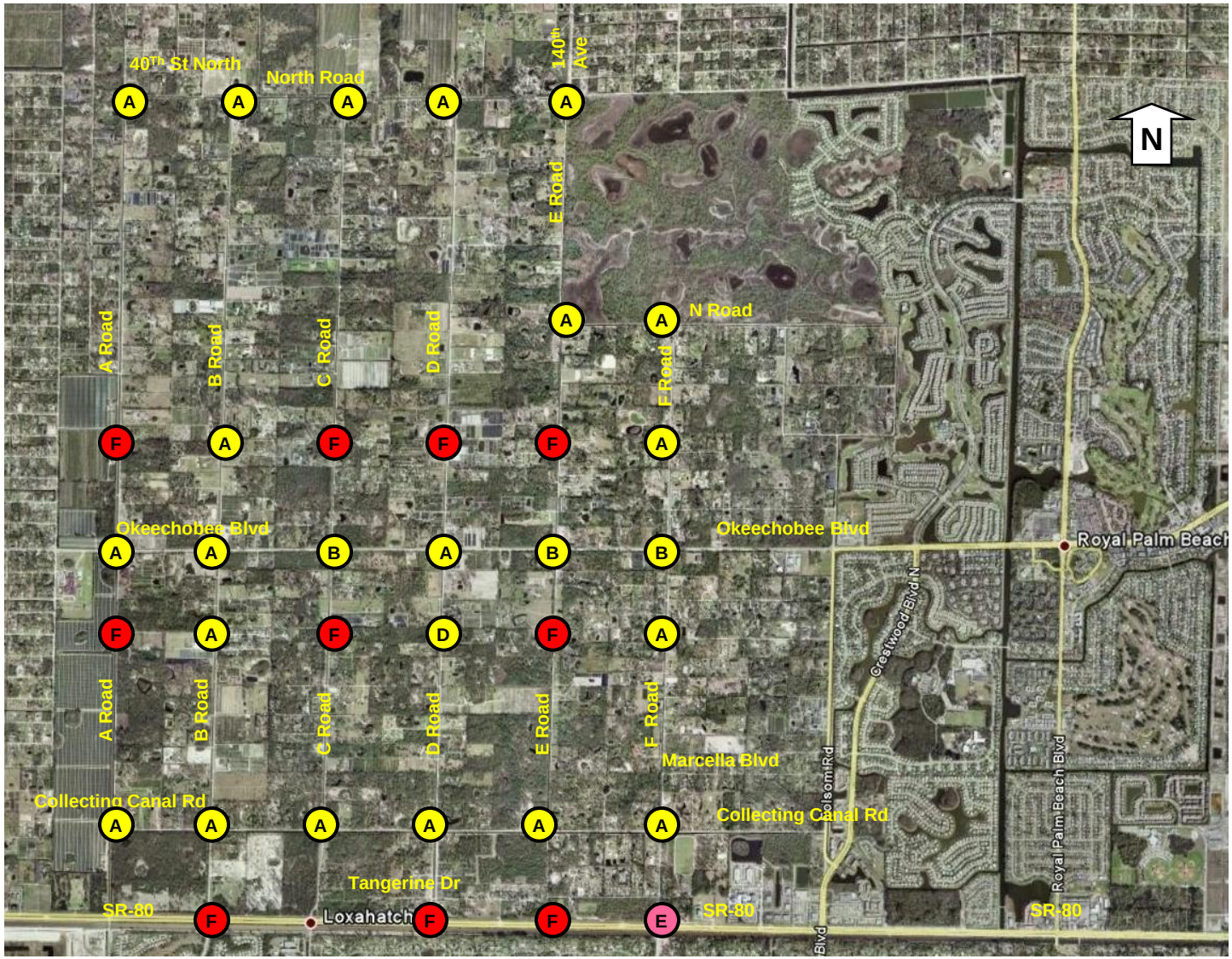
2.8.3 Alternative 2-Proposed Roundabouts on Okeechobee Boulevard

Existing condition and Future No-Build condition traffic analyses indicated that Okeechobee Boulevard intersections are expected to operate within acceptable Levels of Service for each overall intersection. However, individual approaches were shown to experience significant delay, particularly on side street approaches north and south of Okeechobee Boulevard. To address this problem, Alternative 2 proposes two roundabouts on Okeechobee Boulevard, one roundabout on Okeechobee Boulevard at B Road, and a second roundabout on Okeechobee Boulevard at F Road. These intersections were selected due in part to the significant growth in traffic volumes illustrated on both roadway segments south of Okeechobee Boulevard. It is apparent from the traffic count data that non-resident cut-through traffic is significant on both of these roadway segments and subsequently, at the intersection of these segments with Okeechobee Boulevard. The roundabout analysis for these two intersections was performed using Rodel software. Results of the analyses indicate that a roundabout at Okeechobee Boulevard and B Road will operate at LOS A with an average delay of 8.3 seconds per vehicle and the roundabout at Okeechobee Boulevard and F Road will operate at LOS B with an average delay of 13.2 per vehicle.

The levels of service for all the intersections in the study area for future 2030 proposed conditions are depicted in **Figure 9**. The Rodel analyses are included in **Appendix C**.

Figure 9
Master Roadway, Equestrian and Greenways Plan
Future 2030 Analyses with Improvements (Roundabouts)



LEGEND

A — Intersection/Approach LOS

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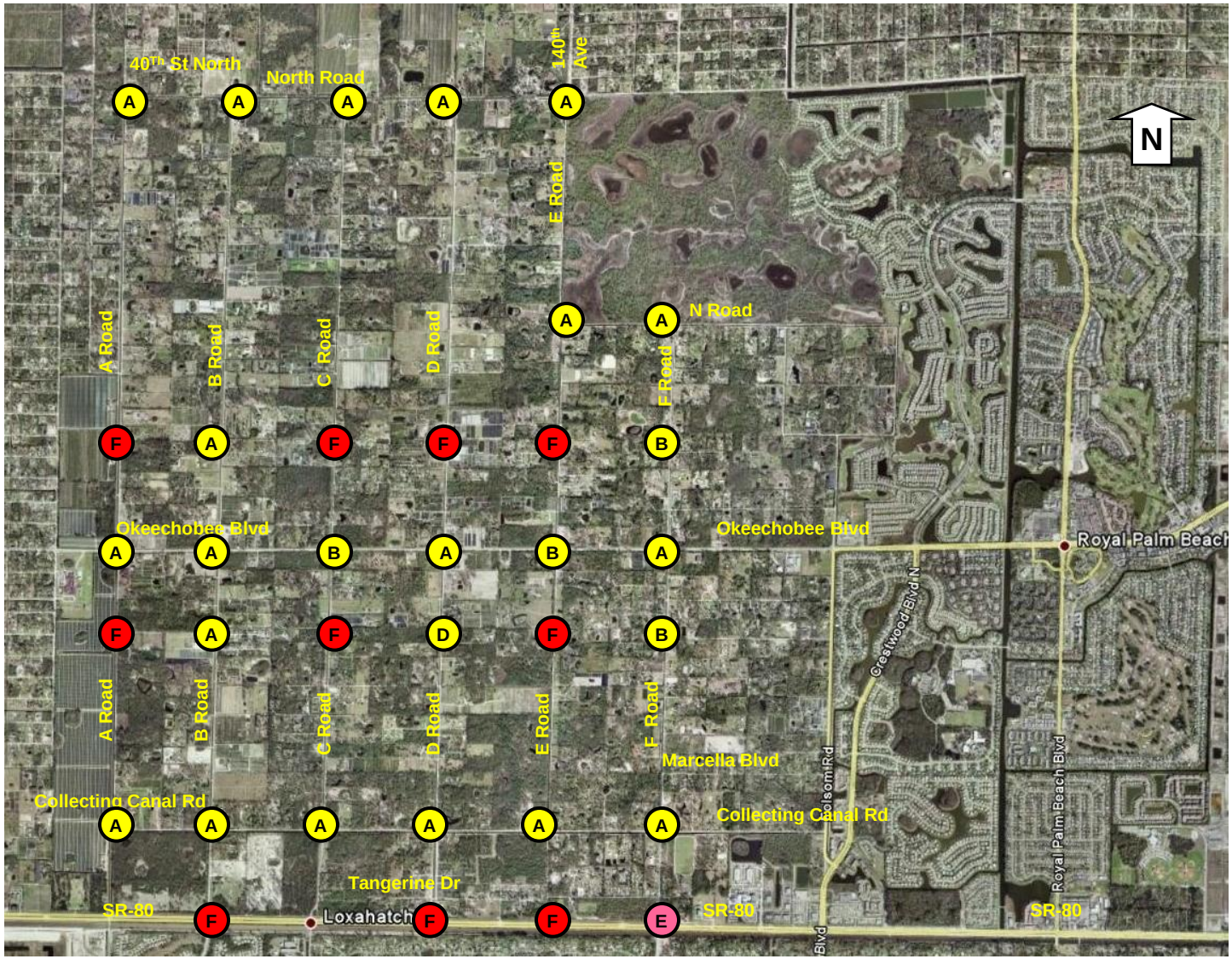
2.8.4 Alternative 3-Proposed Signals on Okeechobee Boulevard

Existing condition and Year 2030 No Build condition analyses revealed that although most intersections on Okeechobee Boulevard were expected to operate within adopted level of service standards, traffic on minor street approaches will experience significant delays due to lack of adequate gaps. To improve the overall operations of the corridor and provide adequate gaps in the traffic stream, Alternative 3 proposes two traffic signals on Okeechobee Boulevard, one signal at the intersection with B Road and a second signal at the intersection with F Road.

The signalized intersections were analyzed utilizing Synchro 7 software and the results of the analyses are illustrated in **Figure 10**. As indicated, the signalized intersections are expected to operate at Level of Service B or better. Complete printouts of the analyses are included in **Appendix C**.

Figure 10
Master Roadway, Equestrian and Greenway Plan
Future 2030 Analyses with Improvements (Signals)



LEGEND

A — Intersection/Approach LOS

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2.9 Roadway Typical Cross-Sections

The existing unpaved roadway cross-sections on The Letter Roads are not compliant with design standards set forth in the *Manual of Minimum Uniform Standards for Design, Construction and Maintenance for Streets and Highways* (also known as the Florida Green Book), Edition 2007. The Green Book provides minimum dimensions for typical roadway cross-sections. **Figure 11** illustrates the existing unpaved roadway cross-sections on The Letter Roads.

The *LGWCD Districtwide Paving Analysis Report* (Erdman Anthony of Florida, Inc., October, 2006) included four alternatives for roadway typical cross-sections with required right-of-way widths ranging from 102.5 feet to 133 feet and the preferred alternative was entitled "Preferred Grant Typical Section" with a proposed ROW width of 111 feet. All four of the proposed alternatives are summarized in **Table 7**. The minimum width roadway typical cross-section identified in the LGWCD Districtwide Paving Analysis Report is illustrated in **Figure 12**.

2.9.1 LGWCD Roadway Surface Treatment

The *LGWCD Districtwide Paving Analysis Report* (Erdman Anthony of Florida, Inc., October, 2006), discussed the costs and benefits of the following three roadway surfacing alternatives: Standard pavement (asphalt), open graded emulsion mix (OGEM), and unpaved or dirt surfaces. The LGWCD has since proceeded with a roadway surface treatment program that includes application of OGEM on roadway segments where a majority of adjacent and affected residents vote in favor of roadway improvements. To date, OGEM has been installed on F Road north and south of Okeechobee Boulevard. In addition, the LGWCD has installed speed tables and additional warning and regulatory signage on F Road. An illustration of a typical roadway cross section of OGEM surface treatment on The Letter Roads is shown in **Figure 13**.

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Figure 11 - Existing Unpaved Conditions; Letter Roads

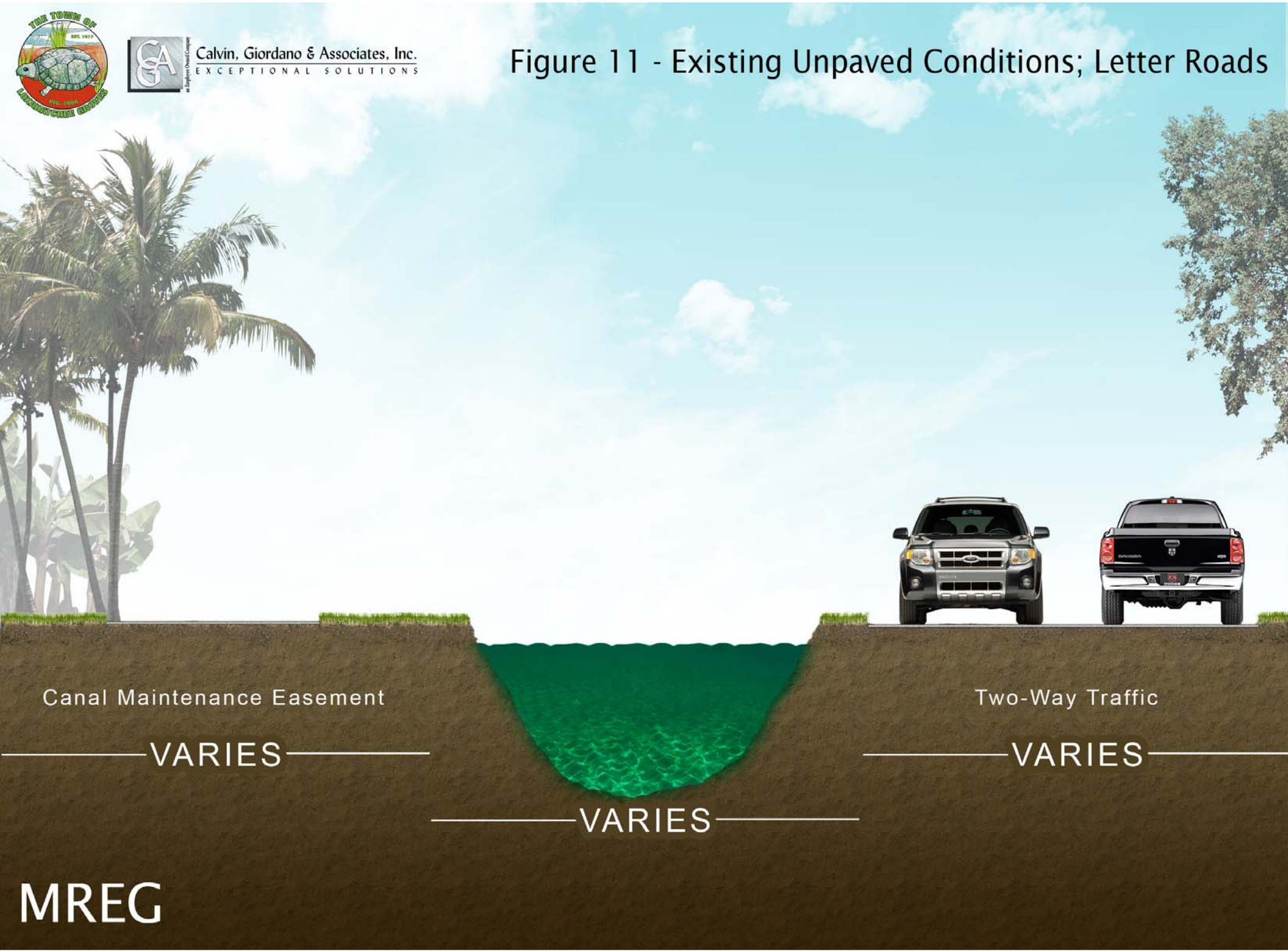

Table 7
Typical Sections
Districtwide Paving Analysis Report

Design Elements	Minimum Width Typical Section[1] (ft)	Typical Section-All Amenities[2] (ft)	Preferred Typical Section [3](ft)	Preferred Grant Typical Section [4](ft)
Canal Maintenance Rd	20	20	20	
Canal Maintenance Rd/Equestrain Trail				20
Canal Rd	41	41	41	41
Canal Buffer	5	5	5	5
Equestrian Path		12		
Curb & gutter	4.5	4.5	2	2
Maintenance Strip		2.5	3	3
Asphalt Path			8.2	8
Travel Lane	12	12	12	12
Grass Swale		8	8	8
buffer	2	2		
Sidewalk	6			
Shared Use Path		12		
Total	**102.5**	**133**	**111.2**	**111**

Note:
1) The information is directly taken from Exhibit 1-*Districtwide Paving Analysis Report* prepared by Erdman & Anthony of Florida, Inc.
2) The information is directly taken from Exhibit 2-*Districtwide Paving Analysis Report* prepared by Erdman & Anthony of Florida, Inc.
3) The information is directly taken from Exhibit 3-*Districtwide Paving Analysis Report* prepared by Erdman & Anthony of Florida, Inc.
3) The information is directly taken from Exhibit 9-*Districtwide Paving Analysis Report* prepared by Erdman & Anthony of Florida, Inc.

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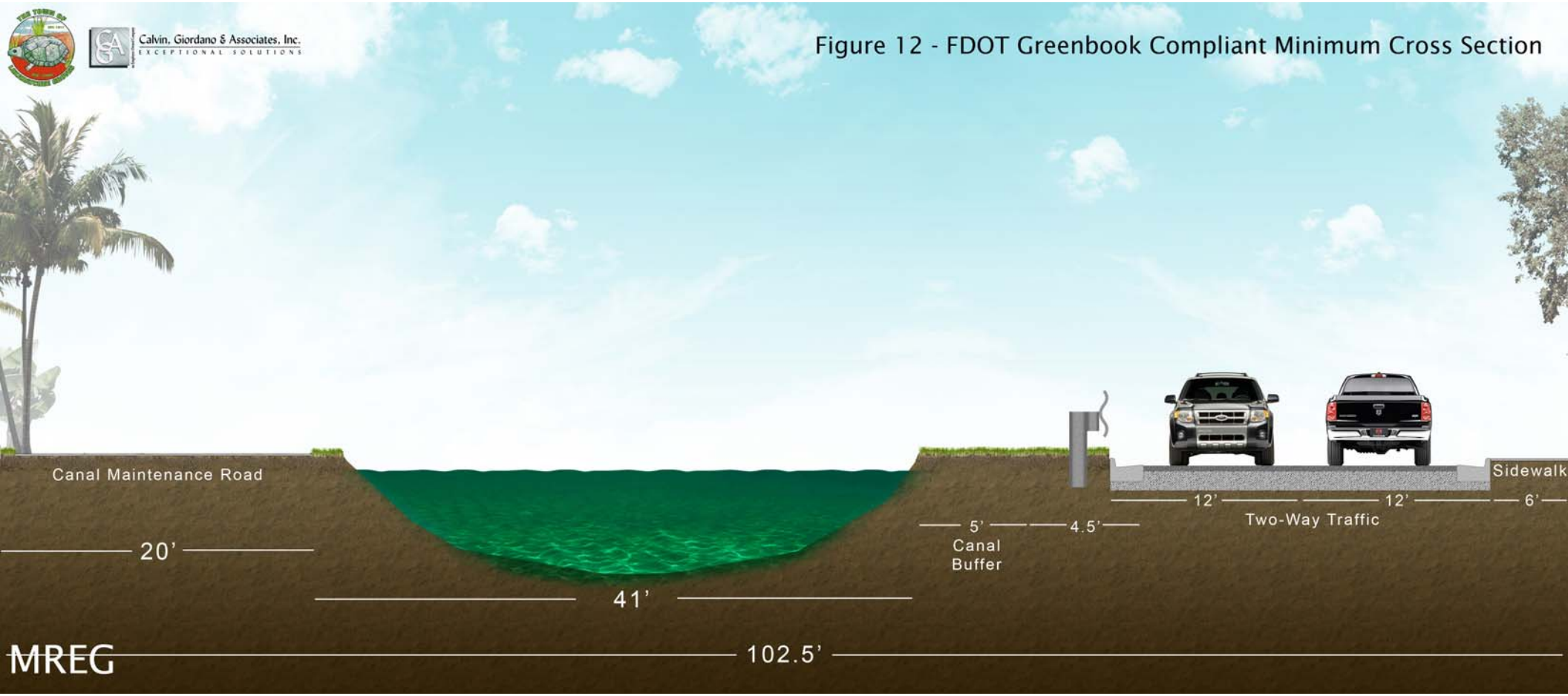
EXCEPTIONAL SOLUTIONS

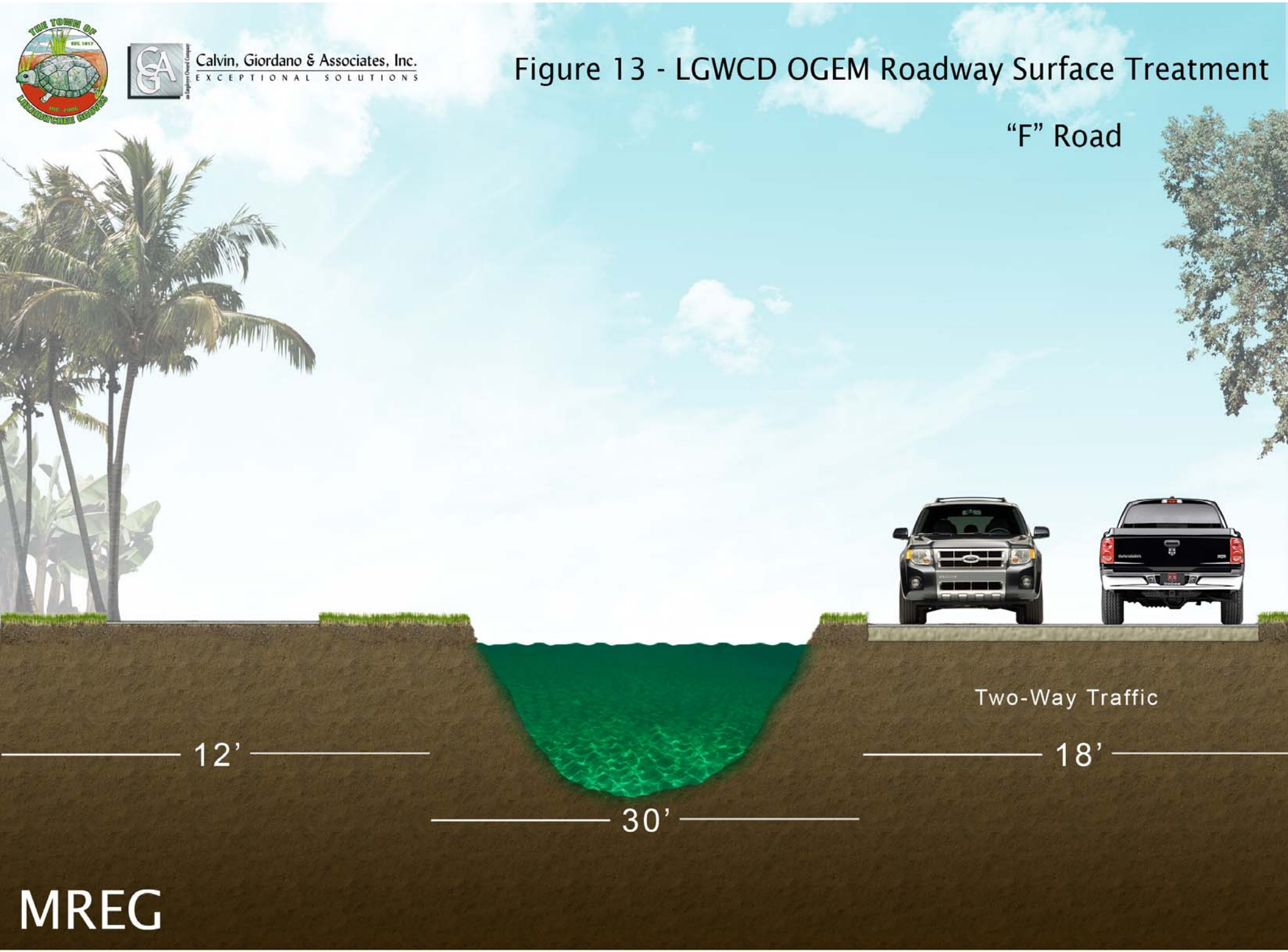
Figure 12 - FDOT Greenbook Compliant Minimum Cross Section



Calvin, Giordano & Associates, Inc.
EXCEPTIONAL SOLUTIONS

Figure 13 - LGWCD OGEM Roadway Surface Treatment

"F" Road



MREG

2.9.2 Right-of-Way Information

Limited available right-of-way information, such as that contained in the LGWCD Paving Analysis Report, indicates that existing roadways may have migrated significantly beyond existing prescribed right-of-way limits. As a result, the acquisition of additional right-of-way may be required even to simply maintain the existing roadway cross-sections. Acquiring accurate roadway survey data is critical in evaluating possible roadway widening options and it is therefore recommended that the Town work to obtain updated survey data for The Letter Roads before evaluating roadway widening options. The LGWCD maintains roadway survey data for The Letter Roads, however the database may need to be supplemented with more frequent roadway cross sections taken at 50-foot or 100-foot intervals to identify any roadway migration.

3.0 Equestrian Trails and Greenways

Throughout the Visioning process associated with the development of the Comprehensive Plan, as well as in public workshops held in association with the development of the MREG, residents have consistently identified a strong desire for a comprehensive equestrian trail and greenway network within the Town. Existing facilities are limited to an equestrian trail/greenway along the canal maintenance easement (west of the canal) on F Road and an equestrian trail within the Loxahatchee Groves Park.

The Town lies within the Palm Beach County Northeast Everglades Natural Area (NENA) boundary. Palm Beach County recently revised the trail maps for NENA and the revised maps include a proposed greenway trail along North Road within the Town of Loxahatchee Groves, providing access to Royal Palm Beach Pines Natural Area. Several greenways have been established within the Royal Palm Beach Pines Natural Area as well as within the Pond Cypress Natural Area.

Florida Statutes define a greenway as a linear open space established along either a natural corridor, such as a riverfront, stream valley, or ridge-line, or over land along a railroad right-of-way converted to recreational use, a canal, a scenic road, or other route; any natural or landscaped course for pedestrian or bicycle passage; an open space connector linking parks, nature reserves, cultural features, or historic sites with each other and populated areas; or a local strip or linear park designated as a parkway or greenbelt.

The Town of Loxahatchee groves has a unique opportunity to develop a comprehensive network of greenways throughout the Town due to the availability of canal maintenance easements on The Letter Roads. These canal maintenance easements vary in width, but generally provide a width of approximately twelve feet. The incorporation of equestrian trails within a typical cross-section of The Letter Roads is illustrated in **Figure 14**.

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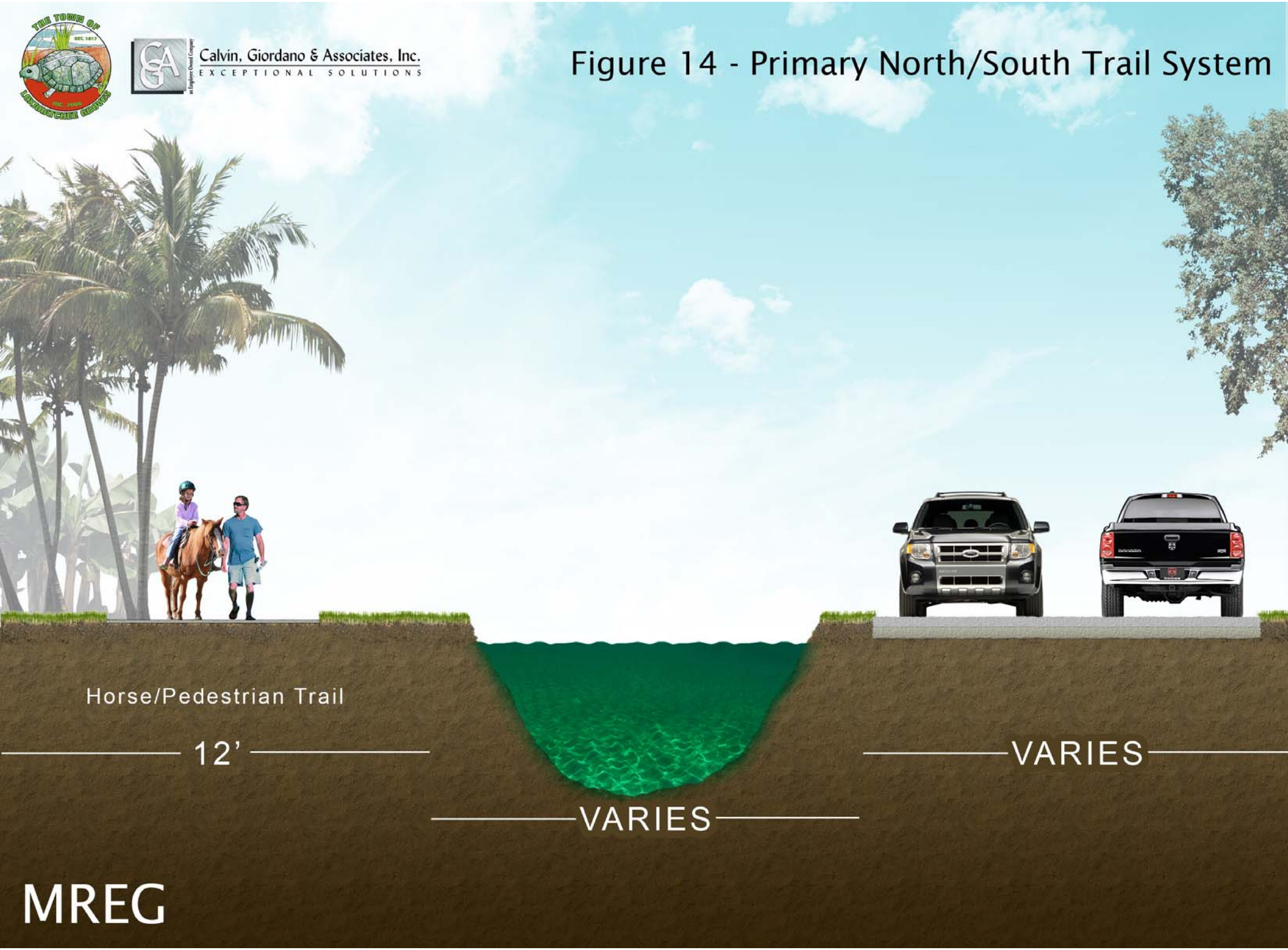
Figure 14 - Primary North/South Trail System



MREG

The establishment of dedicated equestrian trails and greenways on all Letter Roads will provide direct access to a trail network for a substantial portion of Town residents. It is recommend, however, that only trails located on B Road and F Road allow for crossing Okeechobee Boulevard to coincide with the intersection control recommended in this report. This will ensure that trail crossings of Okeechobee Boulevard occur where vehicular traffic is either already forced to come to a complete stop, in the case of intersection signalization, or where vehicular traffic speeds are substantially reduced, in the case of a roundabout.

While the canal maintenance easements provide exceptional opportunities for direct access to equestrian trails from residences, this also poses the problem of pets and livestock randomly entering the trail system and startling the horses. For this reason, it is recommended that the Town work with homeowners adjacent to the canal maintenance easements to install adequate fencing.

It is recommended that equestrian trails and greenways are pursued along 6th Court North to provide direct access to the Loxahatchee Groves Park as well as east/west connectivity to trails established on The Letter Roads. However, this corridor has physical constraints such as limited canal crossings. For this reason, it is recommended that the Town work to include trail easements on future commercial developments adjacent to SR 80/Southern Boulevard. This will help to provide east/west trail connectivity as well. It is recommended that equestrian trails and greenways are pursued along North Road to provide direct access to the Royal Palm Beach Pines Natural Area as well as east/west connectivity to trails established on The Letter Roads.

The proposed equestrian trail and greenway network is illustrated in **Figures 15** and **16**. The proposed network will connect to the Royal Palm Beach Pines Natural Area to the northeast and the Loxahatchee Groves Park to the south. The proposed network will provide a well-connected equestrian trail and greenway system to meet the needs of the community.

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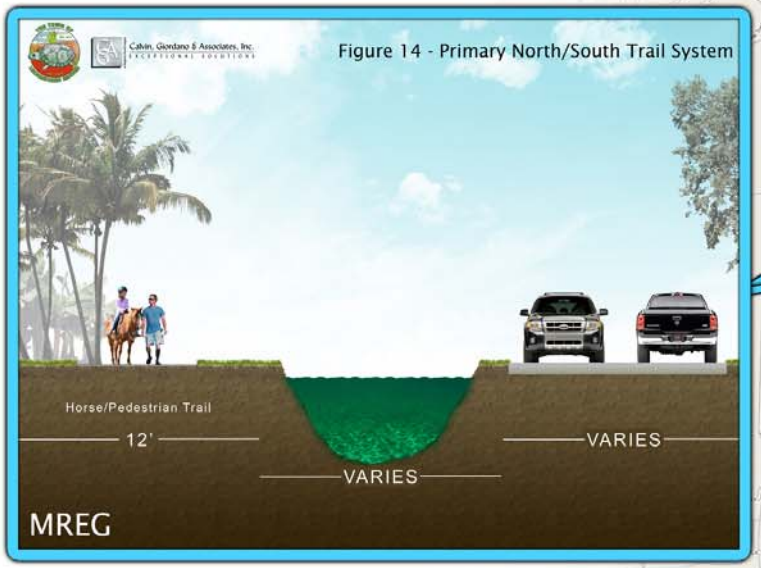
Figure 15 - Primary North/South Trail System



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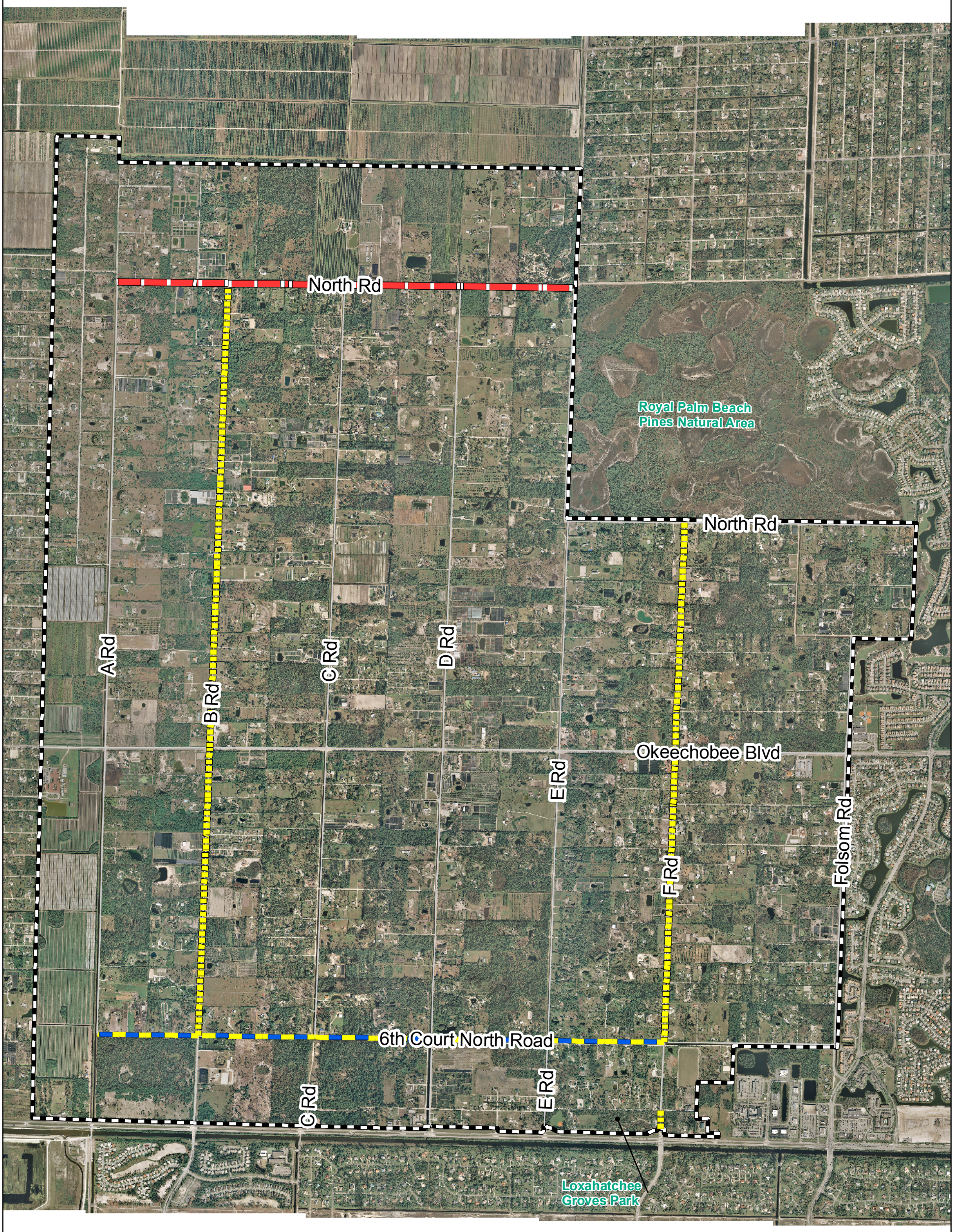

Loxahatchee Groves
Equestrian Trails and Greenways

Legend

Equestrian and Greenways

- Northern East-West Trail
- Southern East-West Trail
- Primary North-South Trail

0.5 Miles

N

Calvin, Giordano & Associates, Inc.

GIS Produced and maintained by the CGA Geographic Information Systems Services

Figure 16

4.0 RECOMMENDATIONS

4.1 Equestrian Trails and Greenways

- **Establish equestrian trails and greenways within the existing canal maintenance easements on all Letter Roads**.
- **Pursue north/south Town-wide trail connectivity along B Road and F Road by pursuing trail crossings of Okeechobee Boulevard at B Road and F Road**. Trail crossings of roadways are safer at or near controlled intersections. It is recommended in this report that full intersection control be pursued at the intersections of Okeechobee Boulevard with B Road and F Road. Therefore, trail crossings at these particular intersections are recommended as well.
- **Pursue east/west Town-wide trail connectivity along 6th Court North and North Road**.
- **Pursue equestrian trail/greenway easements within future commercial developments along SR 80/Southern Boulevard**. Due to physical constraints along 6th Court North, such as limited canal crossings, it is recommended that the Town work to include trail easements on future commercial developments adjacent to SR 80/Southern Boulevard. This will help to provide east/west trail connectivity.
- **Pursue equestrian trail/greenway easements to provide connectivity between the Loxahatchee Groves Park and the existing trail on F Road**.
- **Pursue funding options and coordinate with the Palm Beach County Greenway Program and Office of Greenway and Trail (OGT)-Department of Environmental Protection (DEP) for greenway designations and improvements.**
- **Work with homeowners adjacent to canal maintenance easements on The Letter Roads to install adequate fencing**. This will help to prevent

pets and livestock from randomly entering the equestrian trails and startling the horses.

- **Work with the LGWCD in developing trail design documents**. Design documents for the proposed trail system will likely include right-of-way and easement identification, trail cross-sections, signage, and surface treatments.

4.2 Roadways

- **Provide intersection control (roundabout or traffic signal) at Okeechobee Boulevard/B Road and Okeechobee Boulevard/F Road**. Providing intersection control at B Road and F Road will result in gaps in the overall traffic stream on Okeechobee Boulevard and will dramatically reduce delay on The Letter Roads at each of the intersections between B Road and F Road. Signalization of these intersections is recommended when MUTCD Warrants are met, or installation of roundabouts is recommended if roundabout warrants are met. It is recommended that the Town commission a roundabout warrant analysis for these intersections.
- **Obtain additional existing roadway survey data on The Letter Roads**. Understanding the actual existing right-of-way limitations on these primary corridors is critical before significant roadway improvements are considered.
- **Install roadway surface treatment on B Road in accordance with LGWCD standards or install asphalt pavement in accordance with Florida Greenbook Standards**. A hard roadway surface such as OGEM or asphalt pavement will be required on this roadway before intersection control can be installed.
- **At the discretion of the Town, allow OGEM surface treatment, asphalt pavement or unpaved roadways**. The MREG has identified the need to install either OGEM surface treatment or asphalt pavement on B Road in order to address traffic operational issues. No other traffic

operational issues were identified that would either require or prohibit the installation of roadway surface improvements.

- **Work with Palm Beach County to reduce speeding on Okeechobee Boulevard**. Installation of intersection control, as recommended above, will have the added benefit of dramatically reducing speeding on Okeechobee Boulevard. In the interim, it is recommended that the Town work with the County to address the speeding problem identified in this report.
- **Work with the Florida Department of Transportation to address traffic operational deficiencies at SR 80/Southern Boulevard intersections**. Coordination efforts will include the completion of the access control plan commissioned by the Town.
- **Improve the capacity and efficiency of B Road and F Road to ease the burden of cut-through as well as general traffic**. A comparison of traffic count data collected in Year 2006 with traffic count data collected in Year 2008 indicates an increase in traffic volumes on several corridors. While many factors may have lead to the increase in traffic, it is likely that some of the increase is attributable to cut-through traffic. MREG findings recommend improving the B Road and F Road corridors to coincide with existing traffic signals on SR 80 Southern Boulevard. Improving the efficiency and capacity of these corridors should help to ease the burden of traffic in general throughout the Town.
- **Establish and maintain a semi-annual traffic count program**
  Historical 24-hour Average Daily Traffic volume data for roadways throughout the Town are limited yet critical in determining global traffic patterns. It is recommended that the Town work with the LGWCD in collecting ADT volumes and maintaining a database of the traffic counts to track changes in motorist behavior and identify the need for roadway improvements.