


MEMORANDUM

FLORIDA DEPARTMENT OF TRANSPORTATION

DATE: July 11, 2013

TO: Kevin Moss, Consultant Project Manager (MS# 2-542)

FROM:  Timothy J. Keefe, District Rehabilitation Program Manager (MS# 519)

COPIES TO: M&R Project File

SUBJECT: FPN 240200-2; Wekiva Parkway #7A
SR 46 - - From East of Lake/Seminole County Line to East of Wayside Drive
Section #77030 - - From MP 0.239 to 3.144
Pavement Core Data

As requested, we have obtained pavement core samples and other relative pavement for the subject project. A review of the preliminary/conceptual plans for Wekiva Parkway #7A segment indicate the new roadway construction for the Wekiva Parkway follows or overlaps the existing SR 46 alignment for most of the project. The purpose of collecting pavement cores is to get a general idea of the various pavement compositions for reconstruction (full depth pavement removal) and for any milling/resurfacing to tie-in with existing pavement.

During pavement coring operations, the coring crew did not encounter any underlying Portland Cement Concrete (PCC) roadway slabs in this SR 46 segment within Seminole County. At the Longwood Markham Road intersection, thick asphalt cores (avg. 10.2" thick) were noted at the intersection widening strip as well as for the eastbound right turn lane to Longwood Markham Road. The presence of Asphalt Base Course (ABC – aka "black base") is what contributed to the thick asphalt cores obtained.

Please review the attached documents from Ardaman & Associates, Inc. for more information on the various pavement types on SR 46 and on CR 46A as well. If you have any questions concerning the contents of the PECD core sheets, please contact me by email at timothy.keefe@dot.state.fl.us or by phone at 1-386-490-8065.

Thank you.

Attachments: 1) PECD – core data sheets
 2) Core Photographs
 3) Core Locations Layout



Ardaman & Associates, Inc.

Geotechnical, Environmental and
Materials Consultants

July 9, 2013
File No. 13-5897

Florida Department of Transportation
1650 N. Kepler Road
DeLand, Florida 32724

Attention: Tim Keefe

Subject: Final Pavement Evaluation and Condition Data Report
SR 46 (Wekiva Parkway 7A) from Wekiva Park Drive to Orange Avenue
Seminole County, Florida
FPN: 240200-2
Section No: 77030
Contract No. C8S59

Dear Mr. Keefe:

As requested, we have obtained pavement core and other relative information for the subject project. Our scope of work was conducted in accordance with your request for proposal issued, May 23, 2013.

The pavement core data is presented on the attached Pavement Evaluation and Condition Data (PECD) Sheet and supplemental GPS data report. We have also included a core location plan presented as Figures 1-7 and photographs of the core samples. A CD disk containing digital copies of the Final PECD Report, Core Location Plan, PECD Excel file, KMZ file, and roadway and core photographs is also included. To the best of our knowledge, the information presented is accurate and represents the existing pavement conditions at the locations cored. The cores have been retained in storage awaiting instructions from FDOT concerning their disposal.

Please contact us if you have any questions or need any additional information.

Very truly yours,
ARDAMAN AND ASSOCIATES, INC.
Certificate of Authorization No. 5950



Jason M. Barker, P.E.
Senior Project Engineer
Florida License No. 65928

JMP/nfm
13-5897 FDOT Pavement Eval - Condition Report (2013 QC)

**State of Florida Department of Transportation
PAVEMENT EVALUATION AND CONDITION DATA SHEET**

Project No.: 240200-2		Cored By: Ardaman		Date: 6/12/2013		Page No.: 1 of 2											
County: Seminol		Highway Sect. No.: 77030		From: Wekiva Park Drive		To: Orange Ave.											
Road No.: SR 46 Wekiva Parkway		Begin MP: 0.239		End MP: 3.144		Length: 2.905 miles											
Core No.	MP	Distance from left edge of lane (ft.)	Lane	Wheel Path	Pavement Layers (in.)				Core Length (in.)	Crack			Rut Depth (in.)	Pavt Cond.	Cross Slope (%)	Comments	
					FC-9.5	SP-9.5	TYPES	TYPE1		Depth (in)	Type	Class					Extent
1	2.990	7.0	L1	---	1.5	1.2	2.0		4.7	LR	7.8			F	0.1	4.3	
2	2.826	10.5	L1	X	1.3	1.7	1.3		4.3	LR	8.5			F	0.1	2.2	
3	2.817	5.0	LLTL	---			4.3		4.3	LR	8.2			F	0.0	2.1	To The Rock Church
4	2.702	10.0	L1	X	1.4	1.4	1.9		4.7	LR	13.6			F	0.1	-5.0	
5	2.500	6.0	LR1L	---	1.1	0.4*	2.9		4.4	LR	12.9			F	0.1	-1.0	* FC-6, Core water stayed in Rut Area, To Vaughan Corp.
6	2.386	10.0	L1	X	1.5	1.3	2.5		5.3	LR	8.2			F	0.1	-1.9	
7	2.203	6.0	L1	---	1.0	1.5	1.5		4.0	LR	9.3			F	0.0	-1.7	
8	2.037	6.0	LLTL	---	0.9	0.8	2.5		4.2	LR	9.3			F	0.0	6.4	To Lake Markham Rd.
9	1.935	10.0	L1	X	1.2	1.8	2.9		5.9	LR	9.6	0.1	SL	F	0.1	8.0	
10	1.708	6.0	LLTL	---	1.2	1.0	0.9		3.1	LR	10.4			F	0.0	-7.3	To Bell Foresta Pl.
11	1.552	10.0	L1	X	1.0	1.2	1.8		4.0	LR	9.3			F	0.2	-7.1	
12	1.287	6.5	L1	---	1.0	1.2	1.4		3.6	LR	8.0	0.1	SL	F	0.1	-2.0	
13	1.163	6.5	LR1L	---	1.4		0.6	0.7	2.7	SC	12.3	1.0	BL	F	0.0	3.5	To Yankee Lake Rd.
14	0.820	10.5	L1	X	0.7	1.8	4.0		10.2	ABC	3.7			F	0.1	-1.0	
15	0.494	9.5	L1	X		0.8	2.6		3.4	SC	12.6	B	BL	P	0.0	3.4	
16	0.494	4.5	LLTL	---		0.9	2.9	0.8	4.6	LR	7.7	3.0	SL	P	0.2	2.6	To Ospery Hamnock Trail

Remarks: Crack Depth of "B" indicates full depth crack to the base. EOP = Edge of Pavement
Crack Extent: L= Light; M= Moderate; S= Severe **Pavement Condition:** G= Good; F= Fair; P= Poor **Crack Types:** A= Alligator; BL= Block; Br= Branch
SL= Single Longitudinal; **ST=** Single Transverse; **R=** Reflective; **J=** Joint; **OGFC=** Open-Graded FC Stress Crack
Base Types: LR= Limerock; COQ= Coquina; SC= Soil Cement; ABC= Asphalt Base; SAHM= Sand Asphalt Hot Mix; NB= No Base

**State of Florida Department of Transportation
PAVEMENT EVALUATION AND CONDITION DATA SHEET**

Project No.: 240200-2		Cored By: Ardaman		Date: 6/12/2013		Page No.: 2 of 2														
County: Seminol		Highway Sect. No: 77030		From: Wekiva Park Drive		To: Orange Ave.														
Road No.: SR 46 Wekiva Parkway		Begin MP: 0.239		End MP: 3.144		Length: 2.905 miles														
Core No.	MP	Distance from left edge of lane (ft.)	Lane	Wheel Path	Pavement Layers (in.)					Crack	Rut Depth (in)	Cross Slope (%)	Comments							
					FC-9.5	FC-5	SP-9.5	TYPE 5	TYPE 1					Core Length (in)	Type	Class	Extent			
17	0.383	9.5	RRTL	X		0.9	3.2			4.1	SC	9.9	B	BL	II	M	P	0.0	1.3	To Ospery Hammock Trail
18	0.515	10.5	R1	X		1.7	2.9			4.6	SC	10.4	B	BL	III	S	P	0.2	-1.7	
19	0.837	6.0	RL/L	---		1.3	1.3			3.6	LR	8.4					F	0.1	2.6	To Wekiva Park
20	0.841	6.0	RRTL	---			4.4			10.0	ABC	4.3					F	0.1	3.5	To Longwood Markham Rd.
21	0.920	10.0	R1	X			1.5			10.6	ABC	6.1					F	0.5	2.4	Core water stayed in Rut Area
22	1.334	6.0	R1	---		0.9	1.3			3.5	LR	8.5					F	0.1	3.3	
23	1.541	6.0	RRTL	---		3.8				4.8	LR	15.0					F	0.1	3.0	To Bell Foresta Pl.
24	1.724	10.5	R1	X						4.5	LR	16.0					F	0.5	5.9	
25	2.045	10.5	R1	X			1.2			6.3	LR	10.6					F	0.1	-6.0	
26	2.324	6.0	R1	---		1.1	1.6			4.1	LR	9.7					F	0.1	2.4	
27	2.466	10.0	R1	X		1.3	3.7			6.5	LR	6.5	B	SL	I	L	F	0.1	2.5	
28	2.528	7.0	RRTL	---			2.9			4.4	LR	11.9	B	SL	II	L	F	0.2	3.8	To Glade View Drive
29	2.550	9.0	RRTL	---			5.3			5.3	LR	14.5					F	0.0	3.7	Extra Core on Patched Area, To Glade View Drive
30	2.708	10.0	R1	X		1.8	1.4			4.5	LR	9.8	B	SL	II	L	F	0.0	6.6	
31	2.826	10.5	R1	X		1.3*	4.5			5.8	LR	11.7					F	0.3	0.4	FC-6*
32	3.071	5.0	R1	---		1.2	1.8			4.5	LR	10.8					F	0.1	2.4	

Remarks: Crack Depth of "B" indicates full depth crack to the base. EOP = Edge of Pavement
Crack Extent: L= Light; M= Moderate; S= Severe **Pavement Condition:** G= Good; F= Fair; P= Poor **Crack Types:** A= Alligator; B1= Block; Br= Branch
SL= Single Longitudinal; **ST=** Single Transverse; **R=** Reflective; **J=** Joint; **OGFC=** Open-Graded FC Stress Crack
Base Types: LR= Limerock; COQ= Coquina; SC= Soil Cement; ABC= Asphalt Base; SAHM= Sand Asphalt Hot Mix; NB= No Base

FPN: 240200-2
SECTION: 77030
SR 46 (Wekiva Pkwy #7A)
6-12-2013



CORE: 001
MP: 2.990
LANE: L1

FPN: 240200-2
SECTION: 77030
SR 46 (Wekiva Pkwy #7A)
6-12-2013



CORE: 002
MP: 2.826
LANE: L1

FPN: 240200-2
SECTION: 77030
SR 46 (Wekiva Pkwy #7A)
6-12-2013



CORE: 003
MP: 2.814
LANE: LLTL

FPN: 240200-2
SECTION: 77030
SR 46 (Wekiva Pkwy #7A)
6-12-2013



CORE: 004
MP: 2.702
LANE: L1

FPN: 240200-2
SECTION: 77030
SR 46 (Wekiva Pkwy #7A)
6-12-2013



CORE: 005
MP: 2.500
LANE: LRTL

FPN: 240200-2
SECTION: 77030
SR 46 (Wekiva Pkwy #7A)
6-12-2013



CORE: 006
MP: 2.386
LANE: L1

FPN: 240200-2
SECTION: 77030
SR 46 (Wekiva Pkwy #7A)
6-12-2013



CORE: 007
MP: 2.203
LANE: L1

FPN: 240200-2
SECTION: 77030
SR 46 (Wekiva Pkwy #7A)
6-12-2013



CORE: 008
MP: 2.037
LANE: LLTL

FPN: 240200-2
SECTION: 77030
SR 46 (Wekiva Pkwy #7A)
6-12-2013



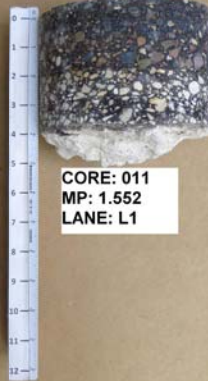
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MP: 1.935
LANE: L1

FPN: 240200-2
SECTION: 77030
SR 46 (Wekiva Pkwy #7A)
6-12-2013



CORE: 010
MP: 1.708
LANE: LLTL

FPN: 240200-2
SECTION: 77030
SR 46 (Wekiva Pkwy #7A)
6-12-2013



CORE: 011
MP: 1.552
LANE: L1

FPN: 240200-2
SECTION: 77030
SR 46 (Wekiva Pkwy #7A)
6-12-2013



CORE: 012
MP: 1.287
LANE: L1

FPN: 240200-2
SECTION: 77030
SR 46 (Wekiva Pkwy #7A)
6-12-2013



CORE: 013
MP: 1.163
LANE: LRTL

FPN: 240200-2
SECTION: 77030
SR 46 (Wekiva Pkwy #7A)
6-12-2013



CORE: 014
MP: 0.820
LANE: L1

FPN: 240200-2
SECTION: 77030
SR 46 (Wekiva Pkwy #7A)
6-12-2013



CORE: 015
MP: 0.494
LANE: L1

FPN: 240200-2
SECTION: 77030
SR 46 (Wekiva Pkwy #7A)
6-12-2013



CORE: 016
MP: 0.494
LANE: LLTL

FPN: 240200-2
SECTION: 77030
SR 46 (Wekiva Pkwy #7A)
6-12-2013



CORE: 017
MP: 0.383
LANE: RRTL

FPN: 240200-2
SECTION: 77030
SR 46 (Wekiva Pkwy #7A)
6-12-2013



CORE: 018
MP: 0.515
LANE: R1

FPN: 240200-2
SECTION: 77030
SR 46 (Wekiva Pkwy #7A)
6-12-2013



CORE: 019
MP: 0.837
LANE: RLTL

FPN: 240200-2
SECTION: 77030
SR 46 (Wekiva Pkwy #7A)
6-12-2013



CORE: 020
MP: 0.841
LANE: RRTL

FPN: 240200-2
SECTION: 77030
SR 46 (Wekiva Pkwy #7A)
6-12-2013



CORE: 021
MP: 0.920
LANE: R1

FPN: 240200-2
SECTION: 77030
SR 46 (Wekiva Pkwy #7A)
6-12-2013



CORE: 022
MP: 1.334
LANE: R1

FPN: 240200-2
SECTION: 77030
SR 46 (Wekiva Pkwy #7A)
6-12-2013



CORE: 023
MP: 1.541
LANE: RRTL

FPN: 240200-2
SECTION: 77030
SR 46 (Wekiva Pkwy #7A)
6-12-2013



CORE: 024
MP: 1.724
LANE: R1

FPN: 240200-2
SECTION: 77030
SR 46 (Wekiva Pkwy #7A)
6-12-2013



CORE: 025
MP: 2.045
LANE: R1

FPN: 240200-2
SECTION: 77030
SR 46 (Wekiva Pkwy #7A)
6-12-2013



CORE: 026
MP: 2.324
LANE: R1

FPN: 240200-2
SECTION: 77030
SR 46 (Wekiva Pkwy #7A)
6-12-2013



CORE: 027
MP: 2.466
LANE: R1

FPN: 240200-2
SECTION: 77030
SR 46 (Wekiva Pkwy #7A)
6-12-2013



CORE: 028
MP: 2.528
LANE: RRTL

FPN: 240200-2
SECTION: 77030
SR 46 (Wekiva Pkwy #7A)
6-12-2013



CORE: 029
MP: 2.550
LANE: RRTL

FPN: 240200-2
SECTION: 77030
SR 46 (Wekiva Pkwy #7A)
6-12-2013



CORE: 030
MP: 2.708
LANE: R1

FPN: 240200-2
SECTION: 77030
SR 46 (Wekiva Pkwy #7A)
6-12-2013

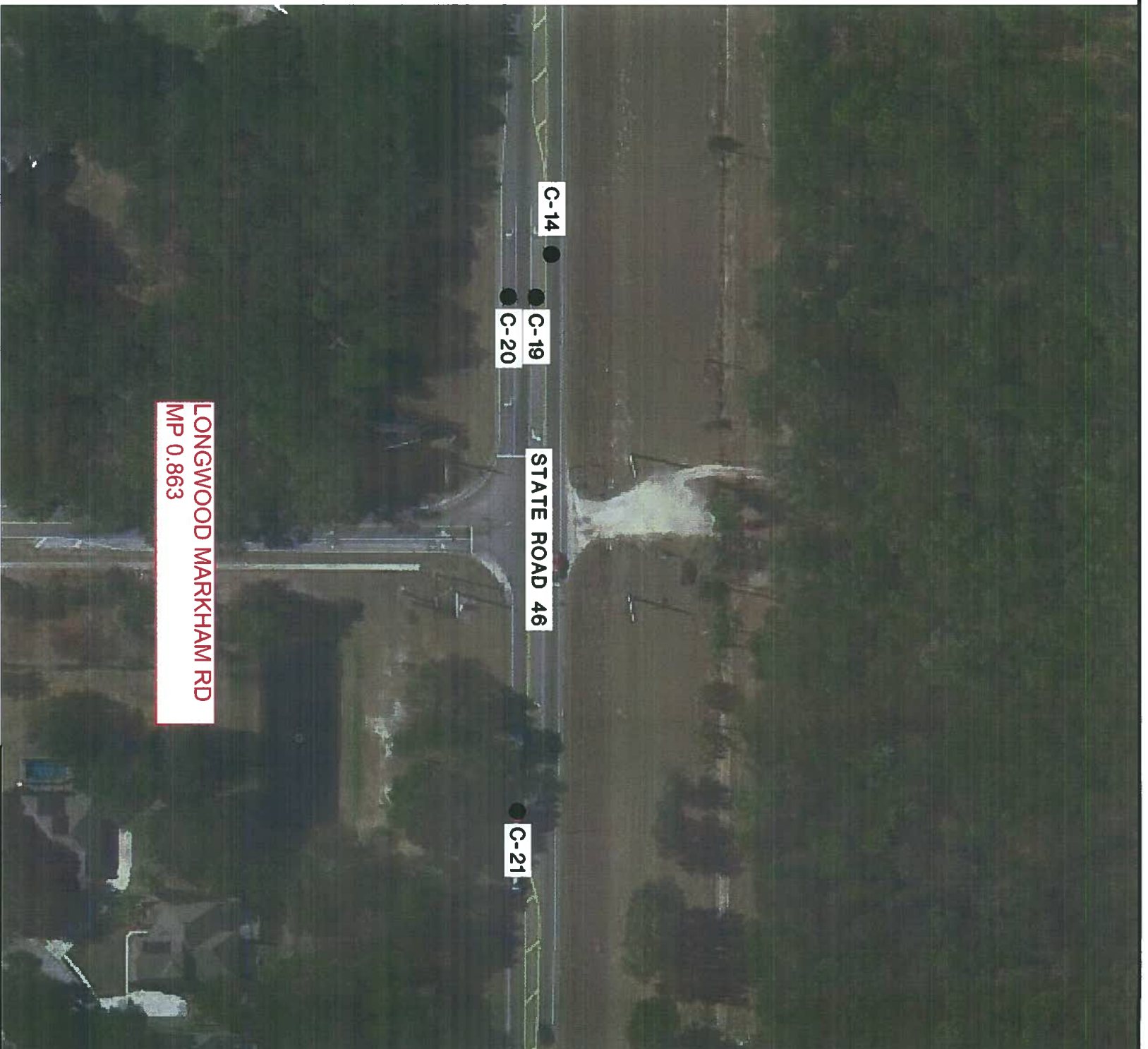


CORE: 031
MP: 2.826
LANE: R1

FPN: 240200-2
SECTION: 77030
SR 46 (Wekiva Pkwy #7A)
6-12-2013



CORE: 032
MP: 3.071
LANE: R1



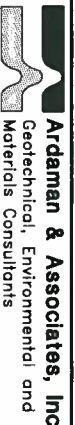
NOT TO SCALE

LEGEND

- C CORE LOCATION

NOTE: THE AERIAL FOR THE CORE LOCATION PLAN IS FROM FDOT, UNDATED.

CORE LOCATION PLAN



Ardaman & Associates, Inc.
Geotechnical, Environmental and
Materials Consultants

FPN: 240200-2
SECTION: 77030
S.R. 46 (WEKIVA PARKWAY #7A)
SEMINOLE COUNTY, FLORIDA

DRAWN BY: CD	CHECKED BY:	DATE: 07/09/13	FIGURE: 1
FILE NO. 13-5897	APPROVED BY:		



YANKEE LAKE RD
MP 1.137

STATE ROAD 46

C-13

ROSS LAKE LANE
MP 1.196

C-12



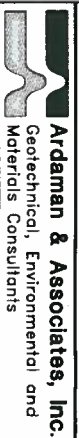
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LEGEND

- C CORE LOCATION

NOTE: THE AERIAL FOR THE CORE LOCATION PLAN IS FROM FDOT, UNDATED.

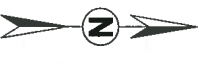
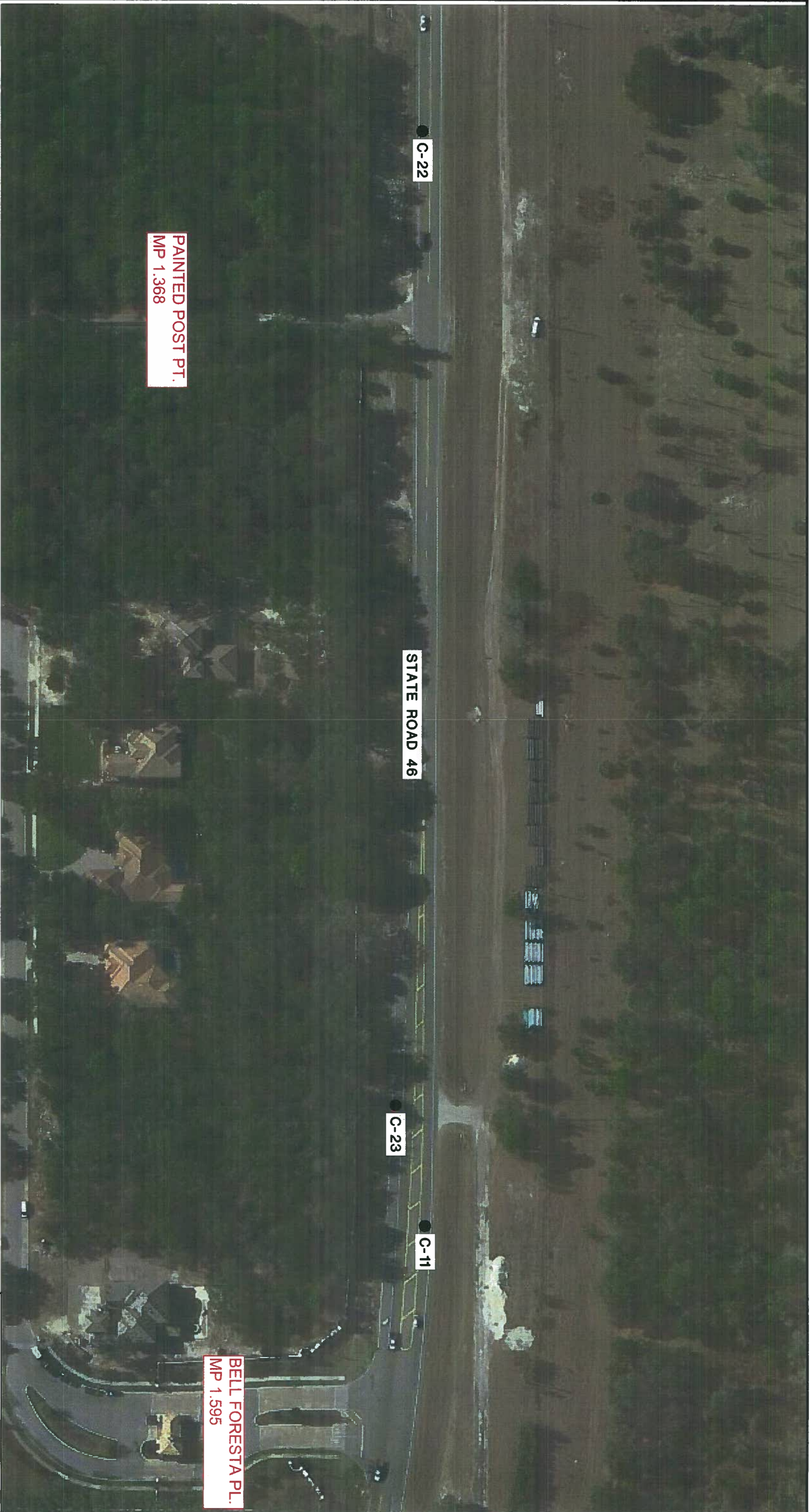
CORE LOCATION PLAN



FPN: 240200-2

SECTION: 77030
S.R. 46 (WEKIVA PARKWAY #7A)
SEMINOLE COUNTY, FLORIDA

DRAWN BY: CD	CHECKED BY:	DATE: 07/09/13
FILE NO. 13-5897	APPROVED BY:	FIGURE: 2



NOT TO SCALE

LEGEND

- C CORE LOCATION
- NOTE: THE AERIAL FOR THE CORE LOCATION PLAN IS FROM FDOT, UNDATED.

CORE LOCATION PLAN



FPN: 240200-2
 SECTION: 77030
 S.R. 46 (WEKIVA PARKWAY #7A)
 SEMINOLE COUNTY, FLORIDA

BELL FORESTA PL.
 MP 1.595

PAINTED POST PT.
 MP 1.368

STATE ROAD 46

C-22

C-23

C-11

DRAWN BY: CD	CHECKED BY:	DATE: 07/09/13	FIGURE: 3
FILE NO. 13-5897	APPROVED BY:		



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LEGEND

- C CORE LOCATION

NOTE: THE AERIAL FOR THE CORE LOCATION PLAN IS FROM FDOT, UNDATED.

CORE LOCATION PLAN



FPN: 240200-2

SECTION: 77030
S.R. 46 (WEKIVA PARKWAY #7A)
SEMINOLE COUNTY, FLORIDA

DRAWN BY: CD	CHECKED BY:	DATE: 07/09/13	FIGURE: 4
FILE NO: 13-5897	APPROVED BY:		



LAKE MARKHAM RD.
MP 1.958

MAUREEEN DR.
MP 2.138

C-9

C-8

C-25

STATE ROAD 46

C-7

LEGEND

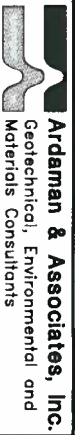
● C CORE LOCATION

NOTE: THE AERIAL FOR THE CORE LOCATION PLAN IS FROM FDOT, UNDATED.

NOT TO SCALE



CORE LOCATION PLAN



Ardaman & Associates, Inc.
Geotechnical, Environmental and
Materials Consultants
FPN: 240200-2
SECTION: 77030
S.R. 46 (WEKIVA PARKWAY #7A)
SEMINOLE COUNTY, FLORIDA

DRAWN BY: CD	CHECKED BY:	DATE: 07/09/13	FIGURE: 5
FILE NO: 13-6897	APPROVED BY:		



GLADE RD.
MP 2.269

C-26

C-6

STATE ROAD 46

C-27

C-5

C-28

GLADE VIEW DR.
----->>>



NOT TO SCALE

LEGEND

- C CORE LOCATION

NOTE: THE AERIAL FOR THE CORE LOCATION PLAN IS FROM FDOT, UNDATED.

CORE LOCATION PLAN



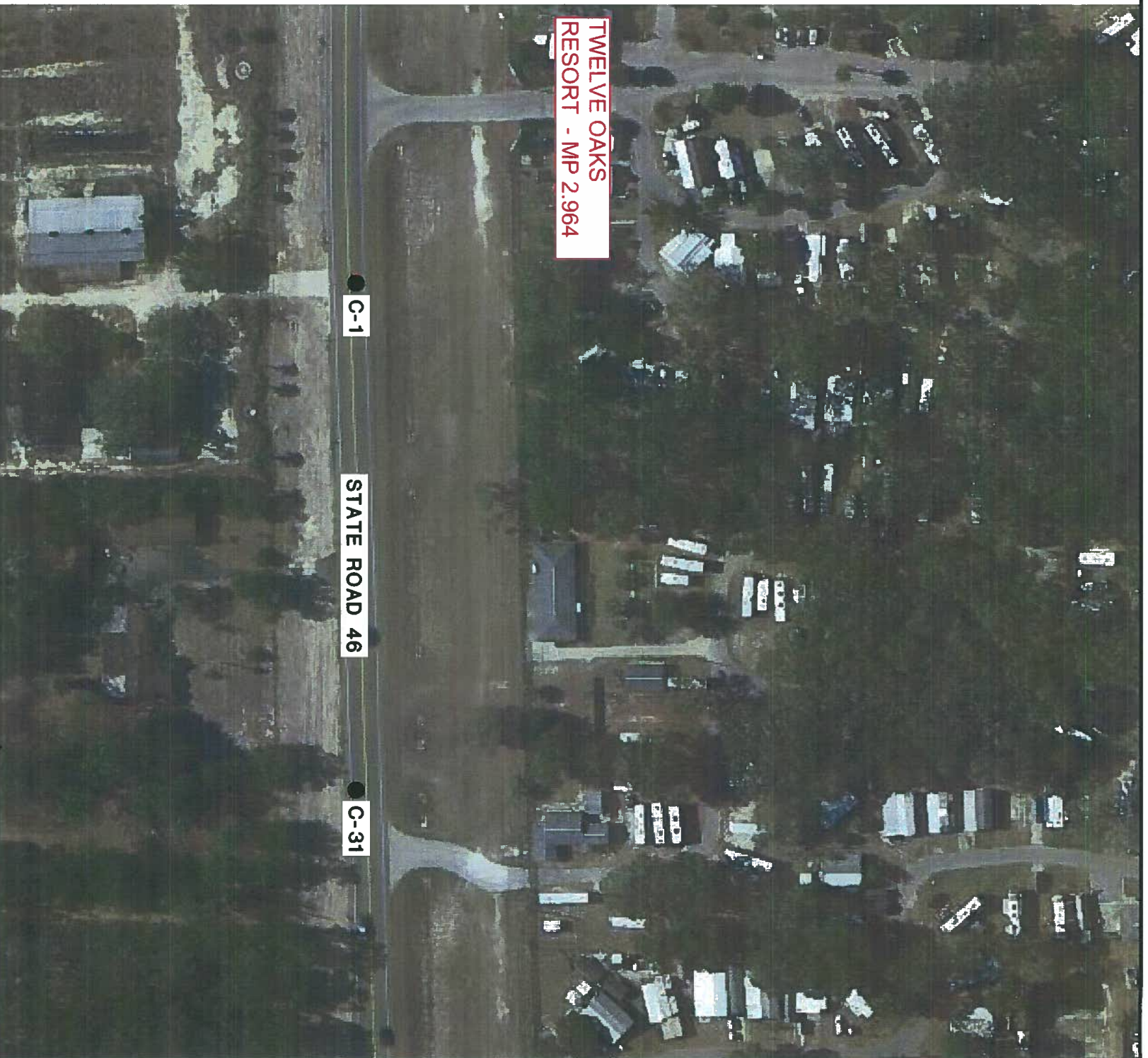
Ardaman & Associates, Inc.
Geotechnical, Environmental and
Materials Consultants

FPN: 240200-2

SECTION: 77030

S.R. 46 (WEKIVA PARKWAY #7A)
SEMINOLE COUNTY, FLORIDA

DRAWN BY: CD	CHECKED BY:	DATE: 07/09/13
FILE NO. 13-5897	APPROVED BY:	FIGURE: 6



LEGEND

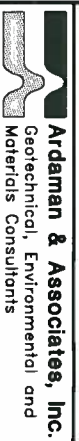
- C CORE LOCATION

NOTE: THE AERIAL FOR THE CORE LOCATION PLAN IS FROM FDOT, UNDATED.



NOT TO SCALE

CORE LOCATION PLAN



FPN: 240200-2

SECTION: 77030
S.R. 46 (WEKIVA PARKWAY #7A)
SEMINOLE COUNTY, FLORIDA

DRAWN BY: CD	CHECKED BY:	DATE: 07/09/13
FILE NO: 13-6887	APPROVED BY:	FIGURE: 7