



June 18, 2012

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

Attention: Mr. Tim Keefe

Reference: Final Pavement Evaluation and Condition Data Report
SR 5 (US 1) from north of Oyster Place to CR 502 (Barnes Blvd.)
Brevard County, Florida
FPN 424887-1
Section No: 70200-000
Contract No.: C-9570

Dear Mr. Keefe:

Per your request, Elipsis Engineering & Consulting (EEC) has obtained pavement core and other relative information for the above referenced project. Our scope of services was conducted in accordance with your request for proposal dated April 25, 2012.

The pavement core data is presented on the attached Pavement Evaluation and Condition Data (PECD) Sheets 1 to 3. We have also included supplemental data sheets for the GPS locations and Cross-slope data for each core location, roadway core location photographs and core photographs.

To the best of our knowledge, the information presented in the attachments to this letter is accurate and represents the existing pavement conditions at the locations cored. The pavement cores have been retained in storage pending further instructions from FDOT regarding their disposal.

Please feel free to contact us with any concerns or requests for further information.

Sincerely,

Elipsis Engineering & Consulting, LLC

Certificate of Authorization No. 28455

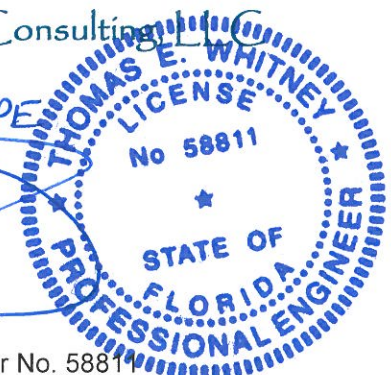
Thomas E. Whitney, PE

Principal Engineer

Signature Date: 6/18/12

STATE OF FLORIDA

Registered Professional Engineer No. 58811



Laying a new foundation for growth, one job at a time!

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

Project No.: 424887-1		Cored By: Elipsis Engineering		Date: 5/20/2012		Page No.: 1 of 3								
County: Brevard		Highway Sect. No: 70 020 000		From: North of Oyster Place		To: CR 502 (Barnes Blvd)								
Road No.: SR 5 (US 1)		Begin MP: 14.188		End MP: 16.109		Length: 1.921 miles								
Core No.	MP	Distance from left edge of lane (ft)	Lane	Wheel Path	Pavement Layer (in.)			Base	Crack	Pavt Cond.	Rut Depth (in)	Cross Slope (%)	Comments	
					FC-5	Type S	Type 1							Binder Course
1	16.063	7.0	L2					4.5	LR	9.5	-	-	F	old pavement present at coring plan location
2	16.055	2.0	OL					5.0	NB	-	-	-	F	old pavement present at coring plan location
3	15.927	8.0	L2	X		1.5	1.5	6.0	LR	8.0	-	-	F	Pop-out Raveling
4	15.927	2.0	OL					3.2	COQ	3.6	-	-	F	
5	15.322	3.0	L2	X				9.5	LR	7.5	B	SL	P	
6	15.322	2.0	OL					6.8	ABC	4.0	-	-	F	
7	15.097	3.0	LRTL	X				3.3	COQ	11.7	-	-	F	End of Left Curve; To Carver Rd
8	15.097	1.5	OL					4.1	LR	15.9	-	-	F	End of Left Curve; To Carver Rd
9	14.988	2.0	OL					6.2	ABC	4.0	-	-	F	
10	14.857	5.0	LRTL					3.9	COQ	12.1	-	-	F	To Ansin Rd
11	14.857	0.5	OL					3.8	COQ	10.7	-	-	F	To Ansin Rd
12	14.857	9.5	L2	X		1.0	1.0	6.7	LR	11.3	3.3	SL	P	To Ansin Rd
13	14.307	3.0	L2	X		2.0		7.0	LR	9.3	B	SL	P	
14	14.307	2.0	OL					6.8	ABC	4.0	-	-	F	
15	14.205	9.0	R2	X		1.0	1.0	5.4	LR	9.1	B	SL	P	Before "Roomscapes of Brevard"
16	14.250	7.5	RRTL					4.8	LR	11.1	-	-	F	To Robles Ln

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; B= 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.:		424887-1		Cored By:		Elipsis Engineering		Date:		5/20/2012		Page No.:		2 of 3			
County:		Brevard		Highway Sect. No.:		70 020 000		From:		North of Oyster Place		To:		CR 502 (Barnes Blvd)			
Road No.:		SR 5 (US 1)		Begin MP:		14.188		End MP:		16.109		Length:		1.921 miles			
Core No.	MP	Distance from left edge of lane (ft)	Lane	Wheel Path	Pavement Layer (in.)				Base		Crack	Pavt Cond.	Rut Depth (in)	Cross Slope (%)	Comments		
					Type S	Type I	Binder Course	Surface Treat.	ABC	Core Length (in)						Type	Thickness (in)
17	14.250	1.5	OR							LR	11.1				F		
18	14.355	8.5	RRTL	X						LR	9.3				F		To "Riverwalk: A Family Park".
19	14.355	0.5	OR							LR	10.9				F		To "Riverwalk: A Family Park"
20	14.462	6.0	RRTL							LR	11.3				F		To Rockledge Dr
21	14.462	0.5	OR							LR	11.5				F		To Rockledge Dr
22	14.695	9.0	R2	X			1.5			LR	10.1	B	Br	II	M		
23	14.695	2.5	OR							NB	-				P		
24	14.778	4.0	RRTL							LR	6.4				F		To "Goodwill"
25	14.778	1.5	OR							LR	12.4				F		To "Goodwill"
26	15.282	4.5	R2							LR	10.1	1.6	SL	I	L		
27	15.282	2.0	OR					4.0		ABC	4.0				F		possibly SAM from 3.5 to 7.0 on core
28	15.799	2.5	RRTL	X						LR	12.0				F		To McIver Ln
29	15.797	1.0	OR							LR	9.9				F		To McIver Ln
30	15.946	5.5	R2				0.5			LR	9.5				F		
31	15.946	2.0	OR							ABC	4.0				F		possible ABC from 4.3 to 7.0 on core
32	16.009	7.0	R2							LR	-				G		No Base depth Check

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; B|= 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.: 424887-1		Cored By: Elipsis Engineering		Date: 5/20/2012		Page No.: 3 of 3						
County: Brevard		Highway Sect. No: 70 020 000		From: North of Oyster Place		To: CR 502 (Barnes Blvd)						
Road No.: SR 5 (US 1)		Begin MP: 14.188		End MP: 16.109		Length: 1.921 miles						
Core No.	MP	Distance from left edge of lane (ft)	Lane	Wheel Path	Pavement Layer (in.)			Crack	Pavt Cond.	Rut Depth (in)	Cross Slope (%)	Comments
					Type S	Type I	Binder Course					
33	16.009	2.5	OR									No Base depth Check
34	15.868	4.0	L1		1.0	1.0						possible ABC from 6.6 to 7.5 on core
35	15.278	5.0	L1									Beginning of Left-Hand Turn/Overbuild
36	14.912	11.0	MXO									Overbuild
37	14.657	4.0	L1		0.5							Overbuild
38	14.636	10.0	MXO		2.0	2.0						Severe delamination - also possible ABC from 7.5 to 9.4 on core
39	14.532	5.5	LLTL									To Rockledge Dr
41	14.206	9.0	L1	X	1.0	2.0				4.8	Br	core #40 was omitted due to location discrepancy
42	14.747	1.5	R1									To Ansin Rd
43	14.747	5.0	RLTL									Right-Hand Curve
44	14.857	2.0	R1	X								Some delamination
45	15.279	7.0	R1									
46	15.437	4.5	MXO									
47	15.903	2.0	R1	X			0.5					core taken on new pavement - moved .035 miles north of coring plan location: No Base depth Check
48	16.103	8.0	L2	X		1.0						
49	16.103	2.0	OL									core taken on new pavement - moved .035 miles north of coring plan location: No Base depth Check

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; B= Block; Br= Branch
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 Base Types: LR= Limerock; COQ= Coquina; SC= Soil Cement; ABC= Asphalt Base; SAHM= Sand Asphalt Hot Mix; NB= No Base

Supplemental Data to PECD

(GPS Coordinates for Each Locations Cored)

SR 5

FIN: 424887-1

County: Brevard

Core #	GPS Coordinates
1	28° 17' 28.2876" N -80° 41' 55.5032" W
2	28° 17' 27.9885" N -80° 41' 55.445" W
3	28° 17' 21.59" N -80° 41' 52.8937" W
4	28° 17' 21.59" N -80° 41' 52.9556" W
5	28° 16' 51.14" N -80° 41' 43.2419" W
6	28° 16' 51.14" N -80° 41' 43.3031" W
7	28° 16' 40.18" N -80° 41' 39.7825" W
8	28° 16' 40.18" N -80° 41' 39.8235" W
9	28° 16' 34.479" N -80° 41' 37.391" W
10	28° 16' 28.29" N -80° 41' 34.8755" W
11	28° 16' 28.29" N -80° 41' 34.9272" W
12	28° 16' 28.29" N -80° 41' 34.8044" W
13	28° 16' 0.98" N -80° 41' 24.5074" W
14	28° 16' 0.98" N -80° 41' 24.6112" W
15	28° 15' 56.0895" N -80° 41' 21.7204" W
16	28° 15' 58.02" N -80° 41' 22.362" W
17	28° 15' 58.02" N -80° 41' 22.3118" W
18	28° 16' 3.77" N -80° 41' 24.5112" W
19	28° 16' 3.77" N -80° 41' 24.4259" W
20	28° 16' 8.9" N -80° 41' 26.4434" W

Core #	GPS Coordinates
21	28° 16' 8.9" N -80° 41' 26.4065" W
22	28° 16' 20.45" N -80° 41' 30.9044" W
23	28° 16' 20.45" N -80° 41' 30.8606" W
24	28° 16' 24.47" N -80° 41' 32.3742" W
25	28° 16' 24.47" N -80° 41' 32.3378" W
26	28° 16' 49.75" N -80° 41' 42.1262" W
27	28° 16' 49.75" N -80° 41' 42.0478" W
28	28° 17' 15.7" N -80° 41' 49.7313" W
29	28° 17' 15.7" N -80° 41' 49.7058" W
30	28° 17' 23.22" N -80° 41' 52.743" W
31	28° 17' 23.22" N -80° 41' 52.6812" W
32	28° 17' 26.09" N -80° 41' 53.8557" W
33	28° 17' 26.09" N -80° 41' 53.809" W
34	28° 17' 18.9225" N -80° 41' 51.7237" W
35	28° 16' 48.9545" N -80° 41' 42.5593" W
36	28° 16' 31.0446" N -80° 41' 35.5531" W
37	28° 16' 18.1103" N -80° 41' 30.8161" W
38	28° 16' 17.512" N -80° 41' 30.4172" W
39	28° 16' 12.3263" N -80° 41' 28.5641" W
40	N/A

Supplemental Data to PECD

(GPS Coordinates for Each Locations Cored)

SR 5

FIN: 424887-1

County: Brevard

Core #	GPS Coordinates
41	28° 15' 57.9136" N -80° 41' 23.2311" W
42	28° 15' 56.0103" N -80° 41' 21.865" W
43	28° 16' 23.05" N -80° 41' 32.1093" W
44	28° 16' 23.05" N -80° 41' 32.0701" W
45	28° 16' 49.5809" N -80° 41' 42.1506" W
46	28° 16' 57.4244" N -80° 41' 44.4002" W
47	28° 17' 20.6922" N -80° 41' 51.8994" W
48	28° 17' 30.32" N -80° 41' 56.3245" W
49	28° 17' 30.32" N -80° 41' 56.3659" W
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Core #	GPS Coordinates
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Supplemental Data to PECD
(Cross-Slope Data for Each Locations Cored)

Core #	MP	Lane	0 to 6 feet	6 to 12 feet
1	16.063	L2	1.8	1.3
2	16.055	OL	3.6	
3	15.927	L2	2.2	1.5
4	15.927	OL	4.5	
5	15.322	L2	2.5	1.4
6	15.322	OL	6.4	
7	15.097	LRTL	0.9	0.4
8	15.097	OL	0.2	
9	14.988	OL	1.6	
10	14.857	LRTL	2.2	1.8
11	14.857	OL	2.0	
12	14.857	L2	4.0	3.6
13	14.307	L2	1.9	2.1
14	14.307	OL	6.4	
15	14.205	R2	1.3	1.3
16	14.250	RRTL	2.3	2.4
17	14.250	OR	7.4	
18	14.355	RRTL	1.1	1.8
19	14.355	OR	4.2	
20	14.462	RRTL	2.4	2.6

Core #	MP	Lane	0 to 6 feet	6 to 12 feet
21	14.462	OR	5.2	
22	14.695	R2	2.9	3.3
23	14.695	OR	8.6	
24	14.778	RRTL	3.2	2.4
25	14.778	OR	9.4	
26	15.282	R2	3.1	3.4
27	15.282	OR	8.3	
28	15.799	RRTL	2.2	3.0
29	15.797	OR	3.7	
30	15.946	R2	2.0	2.2
31	15.946	OR	4.5	
32	16.009	R2	1.7	1.6
33	16.009	OR	8.6	
34	15.868	L1	2.3	1.7
35	15.278	L1	-4.5	-4.6
36	14.912	MXO	-5.9	-7.2
37	14.657	L1	1.4	1.0
38	14.636	MXO	-5.6	-4.7
39	14.532	LLTL	-3.3	-3.3
40	14.35	MXO		

Supplemental Data to PECD
(Cross-Slope Data for Each Locations Cored)

Core #	MP	Lane	0 to 6 feet	6 to 12 feet
41	14.206	L1	0.2	0.1
42	14.747	R1	-1.5	-1.8
43	14.747	RTL	-3.0	-1.7
44	14.857	R1	-2.3	-2.2
45	15.279	R1	2.8	2.5
46	15.437	MXO	-1.8	-3.0
47	15.903	R1	-1.6	-1.9
48	16.103	L2	2.5	2.2
49	16.103	OL	5.4	
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Core #	MP	Lane	0 to 6 feet	6 to 12 feet
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