

SIGNALIZED INTERSECTION LIGHTING MEMO

For
SR 80 from N. of Captain Hendry Dr. to W. of Forrey Dr.
Section 07010000
M.P. 8.273 to MP 10.390
LaBelle, Hendry County

Prepared for:

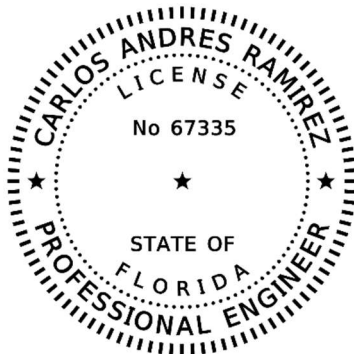
FLORIDA DEPARTMENT OF TRANSPORTATION
DISTRICT 1 TRAFFIC OPERATIONS
801 North Broadway Avenue
Bartow, Florida 33830



Financial Project Identification Number: 447878-1-52-01

Prepared by:
Garrett Engineering Group, Inc.
120 10th Avenue North
Saint Petersburg, Florida 33701

June 2025



This item has been digitally signed and sealed by

On the date adjacent to the seal

Printed copies of this document are not considered signed and sealed
and the signature must be verified on any electronic copies

Schedule											
Symbol	Label	Image	QTY	Manufacturer	Catalog	Description	Number Lamps	LLF	Total Output	Input Power	Polar Plot
• • •	Exist (Based on Field Review)		2	American Electric Lighting	ATB0 P305 R3 3K	Autobahn Small P305 Package Roadway Type III 3000K	1	1	20069	145	 Max: 14494cd
◻ • •	Existing HPS FPL (Based on Field Review)		1	GE LIGHTING SOLUTIONS www.gelightingsolutions.com	M2RC25S____GMC3	M-250R2 CUTOFF	1	1	28000	305	 Max: 11656cd
• • •	NAV3 193W with 15' Arm		2	COOPER LIGHTING SOLUTIONS - LUMARK (FORMERLY EATON)	NAV-SA6A-740-U-T3	NAVION ROADWAY AND AREA LUMINAIRE (6) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS	96	1	28197	193	 Max: 17622cd
• • •	NAV4W 193 Utility with 16' Arm		2	COOPER LIGHTING SOLUTIONS - LUMARK (FORMERLY EATON)	NAV-SA6A-740-U-T4W	NAVION ROADWAY AND AREA LUMINAIRE (6) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS	96	1	27882	193	 Max: 18700cd
• • •	NAV4W 193W with 15' Arm		1	COOPER LIGHTING SOLUTIONS - LUMARK (FORMERLY EATON)	NAV-SA6A-740-U-T4W	NAVION ROADWAY AND AREA LUMINAIRE (6) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS	96	1	27882	193	 Max: 18700cd
• • •	Possible FPL upgrade		1	American Electric Lighting	ATB2 P604 R4 3K	Autobahn Large P604 Package Roadway Type IV 300K CCT	1	1	32448	264	 Max: 22510cd

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
EBR	+	1.2 fc	1.6 fc	0.6 fc	2.7:1	2.0:1
EBT	+	2.9 fc	3.1 fc	2.6 fc	1.2:1	1.1:1
MLK Intersection	+	3.8 fc	5.2 fc	1.8 fc	2.9:1	2.1:1
NBL	+	2.3 fc	2.8 fc	1.8 fc	1.6:1	1.3:1
NBR	+	1.8 fc	2.9 fc	0.7 fc	4.1:1	2.6:1
NBT	+	1.3 fc	1.6 fc	1.0 fc	1.6:1	1.3:1
SBL	+	2.3 fc	2.5 fc	1.8 fc	1.4:1	1.3:1
SBR	+	1.4 fc	2.4 fc	0.6 fc	4.0:1	2.3:1
SBT	+	2.0 fc	2.6 fc	1.1 fc	2.4:1	1.8:1
WBL	+	2.4 fc	2.5 fc	2.1 fc	1.2:1	1.1:1
WBR	+	2.1 fc	2.5 fc	1.3 fc	1.9:1	1.6:1
WBT	+	2.2 fc	2.3 fc	2.0 fc	1.2:1	1.1:1
EBL	+	3.4 fc	3.4 fc	3.3 fc	1.0:1	1.0:1

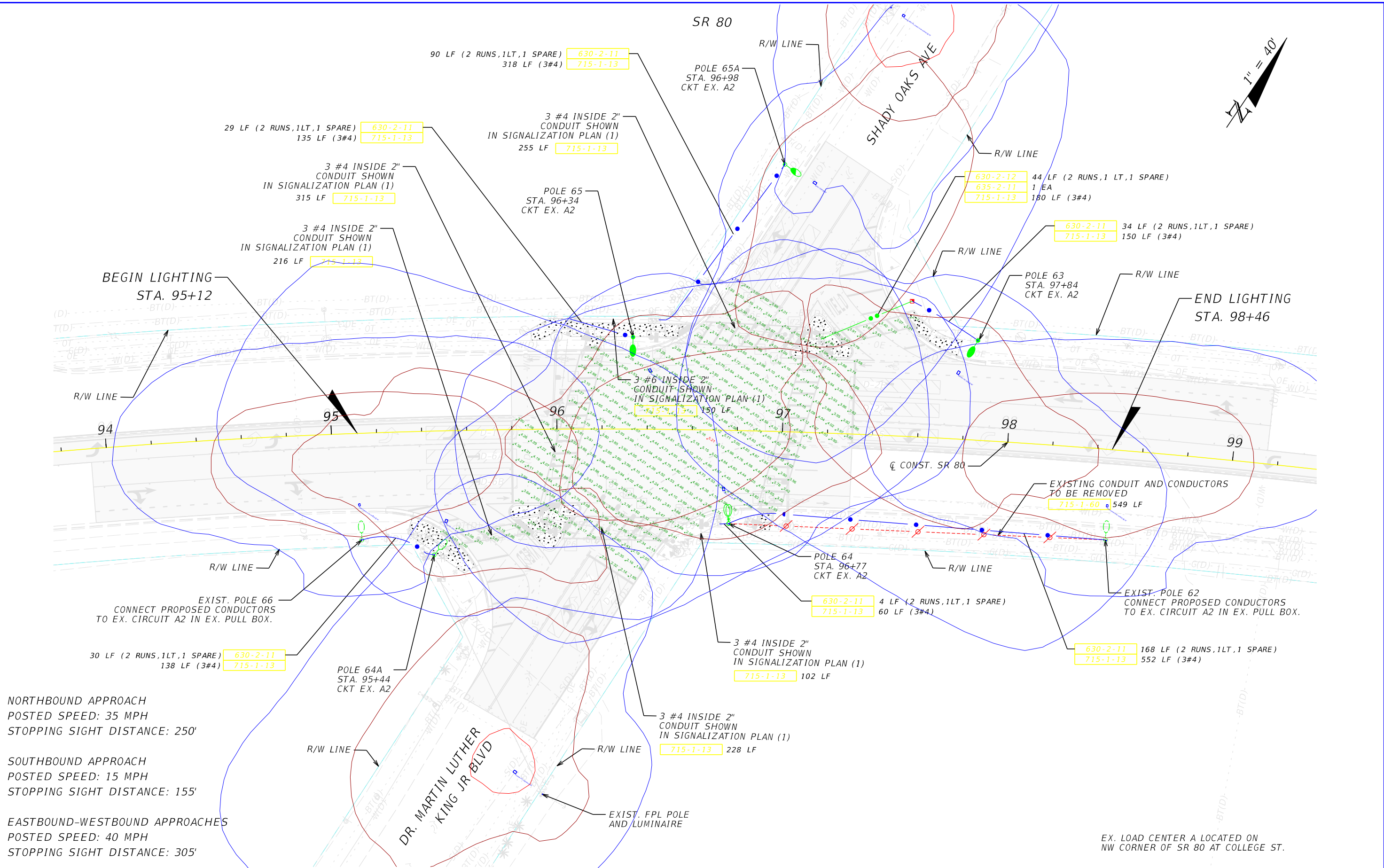


FPID 447878-1-52-01 SR 80 at Dr. Martin Luther King Jr. Blvd
Intersection Lighting Analysis

Designer
CAR
Date
06/06/2025
Scale
Not to Scale
Drawing No.

Summary

6/6/2025 12:10:28 PM G2
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LDK\g2



NORTHBOUND APPROACH
POSTED SPEED: 35 MPH
STOPPING SIGHT DISTANCE: 250'

SOUTHBOUND APPROACH
POSTED SPEED: 15 MPH
STOPPING SIGHT DISTANCE: 155'

EASTBOUND-WESTBOUND APPROACHES
POSTED SPEED: 40 MPH
STOPPING SIGHT DISTANCE: 305'

EX. LOAD CENTER A LOCATED ON
NW CORNER OF SR 80 AT COLLEGE ST.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ENGINEER OF RECORD	
CARLOS ANDRES RAMIREZ, P.E. LICENSE NUMBER: 67335 GARRETT ENGINEERING GROUP, INC. 120 10TH AVENUE NORTH SAINT PETERSBURG, FL 33701	

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 80	HENDRY	447878-1-52-01

HORIZONTAL ANALYSIS	

SHEET NO.

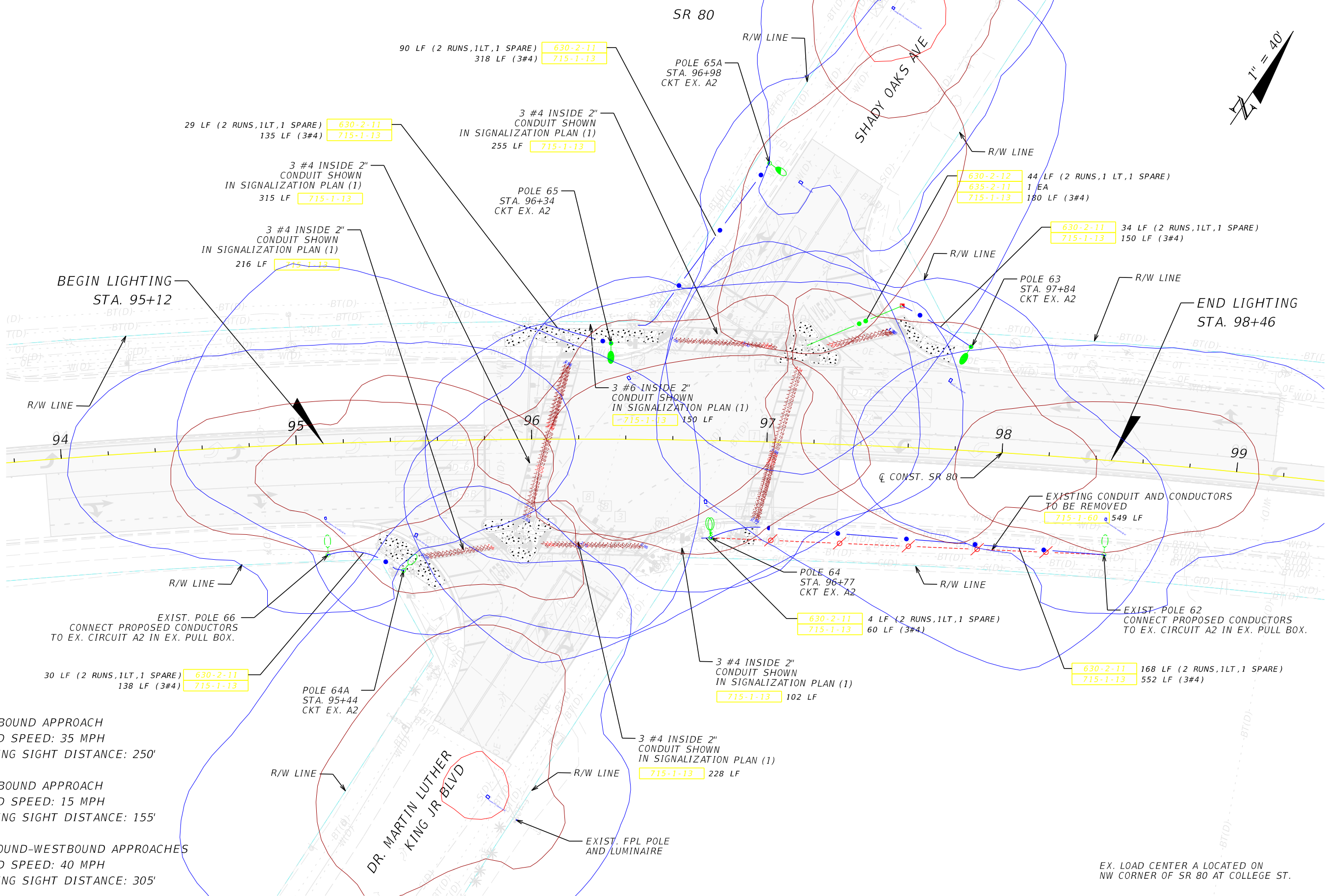
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6/6/2025 12:14:06 PM G2
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LDK\kgm

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STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 80	HENDRY	447878-1-52-01

VERTICAL ANALYSIS	

SHEET NO.

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DESIGN MEMO

LIGHTING VOLTAGE DROP CALCULATIONS

The existing 480V lighting system along this corridor was designed and installed with State Project No. 07010-3523. The circuit being used for the intersection lighting on SR 80 at Dr. Martin Luther King Jr. Blvd. is existing circuit A2, which was originally designed for 16, 400W lights. This was increased to 24 lights during construction due to overhead conflicts for a total load of 4,608 KVa. The lights have currently been retrofitted to 250W LED fixtures, for a total reduced load of 2,880 KVa.

This project is removing one of the 250W LED lights and adding five 200W LED lights for the intersection lighting at the proposed SR 80 and Shady Oaks Ave signal for a total load of 3,240 KVa. This is lower than the original load and will not impact the existing breakers and wiring.

CORRESPONDENCE

Carlos Ramirez

From: Carlos Ramirez
Sent: Thursday, June 5, 2025 2:18 PM
To: 'Shane Parker'
Cc: 'Steven McCormick'; Hussein Assaf
Subject: RE: FPID 447878-1-52-01 SR 80 from N of Captain Hendry Dr to W of Forrey Dr. ; Phase II Hard Copy

Shane,

We had a question about the lighting as well. The as-builts show 8 lights on the north side being moved to the south side. I am assuming all the lights on the south side are on the same circuit (A2 from the as-builts), but wanted to confirm.

Thanks!
Carlos



Carlos Andres Ramirez, PE, PTOE
Vice President/ Project Manager
Garrett Engineering Group, Inc, A Certified DBE Firm
Proudly Serving Florida for 15 Years
120 10th Avenue, North | Saint Petersburg, FL 33701
813.786.0691 (M) | cramirez@garretteg.com

From: Carlos Ramirez
Sent: Tuesday, June 3, 2025 5:02 PM
To: Shane Parker <sparker@hendryfla.net>
Cc: Steven McCormick <smccormick@hendryfla.net>; Hussein Assaf <hassaf@garretteg.com>
Subject: RE: FPID 447878-1-52-01 SR 80 from N of Captain Hendry Dr to W of Forrey Dr. ; Phase II Hard Copy

Good Afternoon, Shane,

We are getting ready to submit our Phase IIRs on this project. The City of Labelle, has told us this signal will be maintained by the County.

We wanted to make sure we had the latest and greatest County preferences to include on this signal. If you have any proprietary products we need to include, we will need a letter from the County specifying the equipment and the APL number associated with it. This will be needed so we can prepare the Proprietary Product Certification. See attached PPC form we prepared with the City of Sarasota's preferences.

See attached signal plans.

Please feel free to contact me with any questions you may have.

Thanks!



Carlos Andres Ramirez, PE, PTOE

Vice President/ Project Manager

Garrett Engineering Group, Inc, A Certified DBE Firm

Proudly Serving Florida for 15 Years

120 10th Avenue, North | Saint Petersburg, FL 33701

813.786.0691 (M) | cramirez@garretteg.com

From: Shane Parker <sparker@hendryfla.net>

Sent: Friday, January 26, 2024 1:54 PM

To: Kris Karanxha <Kris@fteinc.net>

Cc: Patterson, Ryan L <RyanL.Patterson@dot.state.fl.us>; Carlos Ramirez <cramirez@garretteg.com>; Gary Ng <Gary@fteinc.net>; Steven McCormick <smccormick@hendryfla.net>

Subject: Re: FPID 447878-1-52-01 SR 80 from N of Captain Hendry Dr to W of Forrey Dr. ; Phase II Hard Copy

Kris:

Thank you sir. I will be on the look out for the plans.

Have a good weekend.

Thanks,

R. Shane Parker, P.E.

Hendry County Public Works Director

[P.O. Box 1607](#)

[99 East Cowboy Way](#)

[LaBelle, FL 33975](#)

[\(863\)675-5222](#) (office)

[\(863\)674-2941](#) (fax)

sparker@hendryfla.net

Sent from my iPad

On Jan 26, 2024, at 1:51 PM, Kris Karanxha <Kris@fteinc.net> wrote:

Good afternoon Shane,

I wanted to let you know we mailed you a physical copy of the Phase II Plan set of the above referenced plans and it should arrive to your P.O. Box by the end of the day Tuesday, the 30th. Let me know if you don't receive it or if there is anything else we can help you with.

Thank you,

Kris Karanxha, P.E.

Design Engineer



Certified DBE | MBE Firm

11458 N 53rd Street | Tampa, FL 33617

o 813.989.0729, Ext. 120

kris@fteinc.net | www.fteinc.net

Florida | Chipley, Punta Gorda, Tampa, Tallahassee | Georgia | Kansas | Missouri

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