#### Candidate Project Technical Pavement Only Project (POP) Memo

To: Lavenia Toole, PE February 9, 2024

From: Felicia Pannell, PE

RE: SR 25 (US 27) From N. of Ponce De Leon Blvd. to N. of Lake Isis Ave. TECHNICAL POP Memo

State Road Number: SR 25
Section Number: 09030-000
County: Highlands County

Project Limits: SR 25 (US 27) From N. of Ponce De Leon Blvd to N. of Lake Isis Ave

Begin MP/End MP: 11.612 to 15.286

Exceptions: Set from concrete intersection project 434986-1

NB: MP 13.988 to MP 14.283 SB: MP 14.180 to MP 14.472

Project Length: 3.674 miles FPID No.: 451270-1

Work Mix: 0012 (Resurfacing)

1. Existing R/W Map Project Numbers:	09030-2529; Varies from 100-244 feet	
2. Old Construction Project Numbers:	434986-1 (2018) Rigid Intersection Improv MP 13.988-14.472 194510-1 (2001) Lanes and Rehab MP 11.536- 13.453 408469-1 (2004) Add Lanes MP 14.224-15.228 194485-1 (2011) Add Lanes and Rehab MP 15.286-18.038 194470-1 (1995) Lighting MP 14.483-15.817 413306-1 (2003) Traffic Control Devices MP 12.446-14.414 194372-1 (1986) Reconstruction MP 0.000-MP 18.041 194424-1 (1986) RRR MP 8.474-MP 14.224 194355-1 (1996) RRR MP 13.100-MP 13.300	
<ul><li>3. Proposed projects within the same limits (such as safety, sidewalk or drainage projects):</li><li>4. Adjacent Projects:</li></ul>	Potential Goes with projects: 452621-1 (2027) POP MP 6.811-11.612 451361-1 (2027) Safety MP 14.091-14.311 (Main St) 451362-1 (2027) Safety MP 8.320-8.595 (Seabring Parkway/Schumaker Rd) 425225-1 (2011) RRR MP 6.811-11.560	
	194485-1 (2011) Add Lanes Rehab MP 15.286- 18.038 434986-1 (2018) Rigid Pavt MP 13.988- MP14.472 452621-1 (2027) POP MP 6.811-11.612	
5. Additional R/W Required?	No	
6. Level of Community Awareness Plan:	Level 1	

7. Are there any bridges within the limits?  8. Are there any RR Crossings within the project limits or in the vicinity?  9. Are there any Airports within 5-miles?  10. Storm Water Management Jurisdiction:  11. AADT:  12. Number of Existing Utilities:  13. Posted/Design Speed Limits:  13. Posted/Design Speed Limits:  14. SIS Facility?/Context Classification:  15. Resilient Modulus:  Yes; 090054 and 090028 (MP 13.168 to MP 13.191)  No  No  No  Yes; Avon Park Executive Airport  Southwest Florida WMD  34,200 AADT (2023); Truck %= 12.9  7 Utilities: Centurlink – Fiber, Telephone; City of Avon Park – Sewer, Water; Comcast – CATV; Duke – Electric; Highlands – Traffic Signals; Sun n lakes – Drainage, Sewer, Water; TECO – Gas  Design Speed:  50 mph MP 11.612-13.286, 45 mph MP 13.286-15.286  Posted Speed: 55 mph MP 11.612-13.327, 45 mph MP 13.327-15.286  14. SIS Facility?/Context Classification:  Yes / C3C – Suburban  MP 11.560 to MP 12.442 - 16,000 psi MP 12.442 to MP 15.286 – 21,000 psi		
8. Are there any RR Crossings within the project limits or in the vicinity?  9. Are there any Airports within 5-miles?  10. Storm Water Management Jurisdiction:  11. AADT:  12. Number of Existing Utilities:  13. Posted/Design Speed Limits:  14. SIS Facility?/Context Classification:  15. Resilient Modulus:  No  Yes; Avon Park Executive Airport  Yes Pack Executive Airport  Yes; Avon Park Executive Airport  Yes; A	7. Are there any bridges within the limits?	Yes; 090054 and 090028 (MP 13.168 to MP
project limits or in the vicinity?  9. Are there any Airports within 5-miles?  10. Storm Water Management Jurisdiction:  11. AADT:  12. Number of Existing Utilities:  13. Posted/Design Speed Limits:  14. SIS Facility?/Context Classification:  15. Resilient Modulus:  Psouthwest Florida WMD  34,200 AADT (2023); Truck %= 12.9  7 Utilities: Centurlink – Fiber, Telephone; City of Avon Park – Sewer, Water; Comcast – CATV; Duke – Electric; Highlands – Traffic Signals; Sun n lakes – Drainage, Sewer, Water; TECO – Gas  Design Speed:  50 mph MP 11.612-13.286, 45 mph MP 13.286-15.286  Posted Speed: 55 mph MP 11.612-13.327, 45 mph MP 13.327-15.286		13.191)
9. Are there any Airports within 5-miles? 10. Storm Water Management Jurisdiction: 11. AADT: 12. Number of Existing Utilities: 13. Posted/Design Speed Limits: 14. SIS Facility?/Context Classification: 15. Resilient Modulus:  16. Storm Water Management Jurisdiction: Southwest Florida WMD 34,200 AADT (2023); Truck %= 12.9  7. Utilities: Centurlink – Fiber, Telephone; City of Avon Park – Sewer, Water; Comcast – CATV; Duke – Electric; Highlands – Traffic Signals; Sun n lakes – Drainage, Sewer, Water; TECO – Gas 13. Posted/Design Speed Limits: Design Speed: 50 mph MP 11.612-13.286, 45 mph MP 13.286-15.286 Posted Speed: 55 mph MP 11.612-13.327, 45 mph MP 13.327-15.286  14. SIS Facility?/Context Classification: MP 11.560 to MP 12.442 - 16,000 psi	8. Are there any RR Crossings within the	No
10. Storm Water Management Jurisdiction:  11. AADT:  34,200 AADT (2023); Truck %= 12.9  12. Number of Existing Utilities:  7 Utilities: Centurlink – Fiber, Telephone; City of Avon Park – Sewer, Water; Comcast – CATV; Duke – Electric; Highlands – Traffic Signals; Sun n lakes – Drainage, Sewer, Water; TECO – Gas  13. Posted/Design Speed Limits:  Design Speed:  50 mph MP 11.612-13.286, 45 mph MP 13.286-15.286 Posted Speed: 55 mph MP 11.612-13.327, 45 mph MP 13.327-15.286  14. SIS Facility?/Context Classification: Yes / C3C – Suburban  15. Resilient Modulus:  MP 11.560 to MP 12.442 - 16,000 psi	project limits or in the vicinity?	
11. AADT:  12. Number of Existing Utilities:  7. Utilities: Centurlink – Fiber, Telephone; City of Avon Park – Sewer, Water; Comcast – CATV; Duke – Electric; Highlands – Traffic Signals; Sun n lakes – Drainage, Sewer, Water; TECO – Gas  13. Posted/Design Speed Limits:  Design Speed: 50 mph MP 11.612-13.286, 45 mph MP 13.286-15.286 Posted Speed: 55 mph MP 11.612-13.327, 45 mph MP 13.327-15.286  14. SIS Facility?/Context Classification: Yes / C3C – Suburban  15. Resilient Modulus:  MP 11.560 to MP 12.442 - 16,000 psi	9. Are there any Airports within 5-miles?	Yes; Avon Park Executive Airport
12. Number of Existing Utilities:  7 Utilities: Centurlink – Fiber, Telephone; City of Avon Park – Sewer, Water; Comcast – CATV; Duke – Electric; Highlands – Traffic Signals; Sun n lakes – Drainage, Sewer, Water; TECO – Gas  13. Posted/Design Speed Limits:  Design Speed: 50 mph MP 11.612-13.286, 45 mph MP 13.286-15.286 Posted Speed: 55 mph MP 11.612-13.327, 45 mph MP 13.327-15.286  14. SIS Facility?/Context Classification: Yes / C3C – Suburban 15. Resilient Modulus:  MP 11.560 to MP 12.442 - 16,000 psi	10. Storm Water Management Jurisdiction:	Southwest Florida WMD
of Avon Park – Sewer, Water; Comcast – CATV; Duke – Electric; Highlands – Traffic Signals; Sun n lakes – Drainage, Sewer, Water; TECO – Gas  13. Posted/Design Speed Limits:  Design Speed: 50 mph MP 11.612-13.286, 45 mph MP 13.286-15.286 Posted Speed: 55 mph MP 11.612-13.327, 45 mph MP 13.327-15.286  14. SIS Facility?/Context Classification: Yes / C3C – Suburban  15. Resilient Modulus:  MP 11.560 to MP 12.442 - 16,000 psi	11. AADT:	34,200 AADT (2023); Truck %= 12.9
Duke – Electric; Highlands – Traffic Signals; Sun n lakes – Drainage, Sewer, Water; TECO – Gas  13. Posted/Design Speed Limits:  Design Speed: 50 mph MP 11.612-13.286, 45 mph MP 13.286-15.286 Posted Speed: 55 mph MP 11.612-13.327, 45 mph MP 13.327-15.286  14. SIS Facility?/Context Classification: Yes / C3C – Suburban  15. Resilient Modulus:  MP 11.560 to MP 12.442 - 16,000 psi	12. Number of Existing Utilities:	7 Utilities: Centurlink – Fiber, Telephone; City
n lakes – Drainage, Sewer, Water; TECO – Gas  13. Posted/Design Speed Limits:  Design Speed: 50 mph MP 11.612-13.286, 45 mph MP 13.286-15.286 Posted Speed: 55 mph MP 11.612-13.327, 45 mph MP 13.327-15.286  14. SIS Facility?/Context Classification: Yes / C3C – Suburban 15. Resilient Modulus:  MP 11.560 to MP 12.442 - 16,000 psi		of Avon Park – Sewer, Water; Comcast – CATV;
13. Posted/Design Speed Limits:  Design Speed: 50 mph MP 11.612-13.286, 45 mph MP 13.286-15.286 Posted Speed: 55 mph MP 11.612-13.327, 45 mph MP 13.327-15.286  14. SIS Facility?/Context Classification: Yes / C3C – Suburban 15. Resilient Modulus:  MP 11.560 to MP 12.442 - 16,000 psi		Duke – Electric; Highlands – Traffic Signals; Sun
50 mph MP 11.612-13.286, 45 mph MP 13.286-15.286 Posted Speed: 55 mph MP 11.612-13.327, 45 mph MP 13.327-15.286 14. SIS Facility?/Context Classification: Yes / C3C – Suburban 15. Resilient Modulus: MP 11.560 to MP 12.442 - 16,000 psi		n lakes – Drainage, Sewer, Water; TECO – Gas
45 mph MP 13.286-15.286 Posted Speed: 55 mph MP 11.612-13.327, 45 mph MP 13.327-15.286  14. SIS Facility?/Context Classification: Yes / C3C – Suburban  15. Resilient Modulus: MP 11.560 to MP 12.442 - 16,000 psi	13. Posted/Design Speed Limits:	Design Speed:
Posted Speed: 55 mph MP 11.612-13.327, 45 mph MP 13.327-15.286  14. SIS Facility?/Context Classification: Yes / C3C – Suburban  15. Resilient Modulus: MP 11.560 to MP 12.442 - 16,000 psi		50 mph MP 11.612-13.286,
55 mph MP 11.612-13.327, 45 mph MP 13.327-15.286 14. SIS Facility?/Context Classification: Yes / C3C – Suburban 15. Resilient Modulus: MP 11.560 to MP 12.442 - 16,000 psi		45 mph MP 13.286-15.286
45 mph MP 13.327-15.286  14. SIS Facility?/Context Classification: Yes / C3C – Suburban  15. Resilient Modulus: MP 11.560 to MP 12.442 - 16,000 psi		Posted Speed:
14. SIS Facility?/Context Classification: Yes / C3C – Suburban 15. Resilient Modulus: MP 11.560 to MP 12.442 - 16,000 psi		55 mph MP 11.612-13.327,
15. Resilient Modulus: MP 11.560 to MP 12.442 - 16,000 psi		45 mph MP 13.327-15.286
·	14. SIS Facility?/Context Classification:	Yes / C3C – Suburban
MP 12.442 to MP 15.286 – 21,000 psi	15. Resilient Modulus:	MP 11.560 to MP 12.442 - 16,000 psi
		MP 12.442 to MP 15.286 – 21,000 psi

## **Project Location Map:**



#### **Typical Section Discussion:**

- Potential Goes-with 452621-1 (RRR) (FY 27) and the two safety projects 451361-1 (Safety) (FY 27) and 451362-1 (Safety).
  - 451361-1: The safety project at SR 64/SR 17 for signalization and lighting (from MP 14.091 to 14.311)
  - 451362-1: There is an adjacent safety project which abuts to the southern limit of this project starting at MP 8.474. The adjacent project is currently planned as a "goes with" for this project.
- The context and target speed meetings were held on September 16, 2022. The target speed was set to match the posted speed at 55 and 45 mph.
- Typical section discussion:
  - This section of SR 25 (US 27) is on the Strategic Intermodal System (SIS) and is classified as an urban principal arterial.
  - MP 11.612 to MP 13.286: six (6) 12-ft wide travel lanes with 30-ft median with type F curb and gutter and 10 ft outside shoulders (5-ft paved). There are no sidewalks in this section.
     The ROW is 200-ft min.
  - MP 13.286 to MP 15.286: six (6) 11-ft wide travel lanes with 17-ft median with type E curb and gutter and type F curb and cutter along the outside of each side of the roadway.
     There are 5-8-ft sidewalks on both sides. The ROW is 100-ft min.
- District Construction has provided the following comment in the technical scope review for design to be aware:
  - This project is located within the Lake Wales Ridge in a xeric habitat. The concern is the well- drained white and yellow quartzite sands have no organic matter that Bahia sod is easily established in. Maybe a top-soil layer MSP can be used to make the sod establishment more successful.

#### **Pavement Design Assumptions for LRE:**

• Design will need to prepare the pavement design for this project. Any pavement design used in this estimate is for budget purposes only.

#### Mainline, Turn Lanes and Shoulder Milling and Resurfacing:

- For budget purposes, the LRE assumes recommended pavement design:
  - The existing pavement should be milled 3" and resurfaced with 1 ½" Type SP-12.5 (Traffic C, PG 76-22) and 1 ½" FC-12.5 (Traffic C, PG-76-22).
  - $\circ$  The existing paved shoulders should be milled 1 ½" and resurfaced with 1 ½" FC-12.5 (Traffic C, PG 76-22).

#### **Side Street Milling and Resurfacing:**

• For budget purposes, the LRE assume the side streets are to be milled to 1½" depth and resurfaced with 1½" FC-12.5 (Traffic C, PG 76-22). In accordance with the FDM and Standard Plans, it is recommended that all side streets be resurfaced to the back of the farthest return, right of way, or existing pavement joint, whichever is greater.

Date: 2/9/2024 2:07:14 PM

# FDOT Long Range Estimating System - Production R3: Project Details by Sequence Report

Project: 451270-1-52-01 Letting Date: 07/2026

 $\textbf{Description:} \ \mathsf{SR} \ \mathsf{25} \ (\mathsf{US} \ \mathsf{27}) \ \mathsf{FROM} \ \mathsf{N} \ \mathsf{OF} \ \mathsf{PONCE} \ \mathsf{DE} \ \mathsf{LEON} \ \mathsf{BLVD} \ \mathsf{TO} \ \mathsf{N} \ \mathsf{OF} \ \mathsf{LAKE} \ \mathsf{ISIS} \ \mathsf{AVE}$ 

District: 01 County: 09 HIGHLANDS Market Area: 09 Units: English

Contract Class: 1 Lump Sum Project: N Design/Build: N Project Length: 3.726 Ml

Project Manager: NEM-AEB-AAA

#### Version 12-P Project Grand Total

\$7,418,604.43

Net Length:

Description: QC 4P - Copy V11 2/07/24 POP Seq 1 (Percentages 5/5/5) From TRM meeting

Sequence: 1 MIS - Miscellaneous Construction

3.726 MI 19,673 LF

Description: POP Items (Loops)

#### **ROADWAY COMPONENT**

ROADWAY COMPONENT				
X-Items				
Pay item	Description	Quantity Unit	Unit Price	Extended Amount
327-70-4	MILLING EXIST ASPH PAVT, 3" AVG DEPTH	174,820.00 SY	\$3.28	\$573,409.60
327-70-6	MILLING EXIST ASPH PAVT,1 1/2" AVG DEPTH	16,353.00 SY	\$5.23	\$85,526.19
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	14,734.45 TN	\$173.14	\$2,551,122.67
337-7-83	ASPH CONC FC,TRAFFIC C,FC- 12.5,PG 76-22	15,613.50 TN	\$176.72	\$2,759,217.72
527-2	DETECTABLE WARNINGS	79.11 SF	\$40.41	\$3,196.84
546-72-3	GROUND-IN RUMBLE STRIPS, 8" SIN	1.66 GM	\$2,083.78	\$3,459.07
570-1-2	PERFORMANCE TURF, SOD	1,301.22 SY	\$6.42	\$8,353.83
710-11-190	PAINTED PAVT MARK,STD,WHITE, ISLA NOSE	400.00 SF	\$3.18	\$1,272.00
710-11-290	PAINTED PAVT MARK,STD,YELLOW,ISLAND NOSE	650.00 SF	\$3.57	\$2,320.50
710-90	PAINTED PAVEMENT MARKINGS, FINAL SURFACE	1.00 LS	\$47,704.29	\$47,704.29
711-11-123	THERMOPLASTIC, STD, WHITE, SOLID, 12"	6,800.00 LF	\$3.86	\$26,248.00
711-11-124	THERMOPLASTIC, STD, WHITE, SOLID, 18"	560.00 LF	\$4.75	\$2,660.00
711-11-125	THERMOPLASTIC, STD, WHITE, SOLID, 24"	1,495.00 LF	\$5.97	\$8,925.15
711-11-141	THERMOPLASTIC, STD, WHITE, DOT GUIDE, 6"	1.45 GM	\$3,562.57	\$5,165.73
711-11-170	THERMOPLASTIC, STD, WHITE, ARROW	335.00 EA	\$66.41	\$22,247.35
711-11-224	THERMOPLASTIC, STD, YELLOW, SOLID, 18"	100.00 LF	\$4.87	\$487.00
711-11-241	THERMOPLASTIC,STD,YELLOW,DOT / GUIDE, 6"	0.65 GM	\$2,803.31	\$1,822.15
711-14-125	THERMOPLASTIC, PREFORM, WHITE, SOLID,24"	1,780.00 LF	\$15.59	\$27,750.20
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	6.34 GM	\$5,050.01	\$32,017.06

711-16-102	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 8"	0.37 GM	\$7,040.63	\$2,605.03
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	14.60 GM	\$1,900.30	\$27,744.38
711-16-201	THERMOPLASTIC, STD- OTH,YELLOW, SOLID, 6"	8.13 GM	\$5,210.59	\$42,362.10
713-103-101	PERMANENT TAPE, WHITE, SOLID, 6" CONC BR	0.05 GM	\$33,695.54	\$1,684.78
713-103-131	PERMANENT TAPE, WHITE,SKIP/D,6" FOR CONC	0.10 GM	\$11,105.76	\$1,110.58
713-103-201	PERMANENT TAPE, YELLOW,SOLID,6" CONC BR	0.05 GM	\$34,900.00	\$1,745.00
713-103-331	PERMANENT TAPE, BLACK,SKIP/D,6" FOR CONC	0.10 GM	\$10,520.32	\$1,052.03
	Roadway Component Total			\$6,241,209.25

#### SHOULDER COMPONENT

**User Input Data** 

**Description** Value

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
102-71-16	TEMPORARY BARRIER, F&I, FREE STAND	582.91 LF	\$40.30	\$23,491.27
104-15	SOIL TRACKING PREVENTION DEVICE	2.00 EA	\$2,576.76	\$5,153.52
107-1	LITTER REMOVAL	101.00 AC	\$58.42	\$5,900.42
107-2	MOWING	51.00 AC	\$93.02	\$4,744.02
	Shoulder Component Total			\$39,289.23

#### SIGNALIZATIONS COMPONENT

Signalization 1

**Description** Value Type Miscellaneous Multiplier SR 25 (US 98 / US 27) at W. Description College Dr.

X-Items

Pay item **Quantity Unit Unit Price Extended Amount** Description 6.00 AS 660-2-102 LOOP ASSEMBLY, F&I, TYPE B \$1,006.26 \$6,037.56 660-2-106 LOOP ASSEMBLY, F&I, TYPE F 6.00 AS \$1,347.40 \$8,084.40

Signalization 2

**Description** Value Type Miscellaneous Multiplier SR 25 (US 98 / US 27) at Hal Description

McRea St.

X-Items

Pay item Description **Quantity Unit Unit Price Extended Amount** 660-2-102 LOOP ASSEMBLY, F&I, TYPE B 6.00 AS \$1,006.26 \$6,037.56 660-2-106 LOOP ASSEMBLY, F&I, TYPE F 5.00 AS \$1,347.40 \$6,737.00

Signalization 3

DescriptionValueTypeMiscellaneousMultiplier1DescriptionSR 25 (US 98 / US 27) at W.

Description SR 25 (0.5 Morrill St.

X-Items

 Pay item
 Description
 Quantity Unit
 Unit Price
 Extended Amount

 660-2-102
 LOOP ASSEMBLY, F&I, TYPE B
 6.00 AS
 \$1,006.26
 \$6,037.56

 660-2-106
 LOOP ASSEMBLY, F&I, TYPE F
 5.00 AS
 \$1,347.40
 \$6,737.00

Signalization 5

DescriptionValueTypeMiscellaneousMultiplier1DescriptionSR 25 (US 98 / US 27) at Lake

Isis Ave.

X-Items

 Pay item
 Description
 Quantity Unit
 Unit Price
 Extended Amount

 660-2-102
 LOOP ASSEMBLY, F&I, TYPE B
 18.00 AS
 \$1,006.26
 \$18,112.68

 660-2-106
 LOOP ASSEMBLY, F&I, TYPE F
 5.00 AS
 \$1,347.40
 \$6,737.00

 Signalizations Component Total
 \$64,520.76

**Sequence 1 Total** \$6,345,019.24

Date: 2/9/2024 2:07:14 PM

# FDOT Long Range Estimating System - Production

## **R3: Project Details by Sequence Report**

**Project:** 451270-1-52-01 **Letting Date:** 07/2026

 $\textbf{Description:} \ \mathsf{SR} \ \mathsf{25} \ (\mathsf{US} \ \mathsf{27}) \ \mathsf{FROM} \ \mathsf{N} \ \mathsf{OF} \ \mathsf{PONCE} \ \mathsf{DE} \ \mathsf{LEON} \ \mathsf{BLVD} \ \mathsf{TO} \ \mathsf{N} \ \mathsf{OF} \ \mathsf{LAKE} \ \mathsf{ISIS} \ \mathsf{AVE}$ 

District: 01 County: 09 HIGHLANDS Market Area: 09 Units: English

Contract Class: 1 Lump Sum Project: N Design/Build: N Project Length: 3.726 MI

Project Manager: NEM-AEB-AAA

**Version 12-P Project Grand Total** 

**Version 12-P Project Grand Total** 

\$7,418,604.43

\$7,418,604.43

Description: QC 4P - Copy V11 2/07/24 POP Seq 1 (Percentages 5/5/5) From TRM meeting

Resurfacing	g Lane Mile Cost		\$0.00
Project Seq	uences Subtotal		\$6,345,019.24
102-1	Maintenance of Traffic	5.00 %	\$317,250.96
101-1	Mobilization	5.00 %	\$333,113.51
Project Seq	uences Total		\$6,995,383.71
Project Unkr	nowns	5.00 %	\$349,769.19
Design/Build		0.00 %	\$0.00
Non-Bid Co	mponents:		
Pay item	Description	Quantity Unit Unit Pri	ce Extended Amount
999-25	INITIAL CONTINGENCY AMOUNT (DO NOT BID)	LS \$73,451.	53 \$73,451.53
<b>Project Non</b>	-Bid Subtotal		\$73,451.53