

February 2024



Florida Department of Transportation – District One

Technical Scope and LRE

**Technical Scope, Scope Analysis for Social and Environmental
Issues, and Long Range Estimate (LRE) for**

FPID 450726-1-52-01

SR 45 (US 41) from N. of Pondella Road to N. of SR 78

Lee County, Florida



Candidate Project RRR Scope

February 2, 2024

To: Lavenia Toole, PE
 From: Felicia Pannell, PE

RE: SR 45 (US 41) from N. of Pondella Road to N. of SR 78 TECHNICAL SCOPE

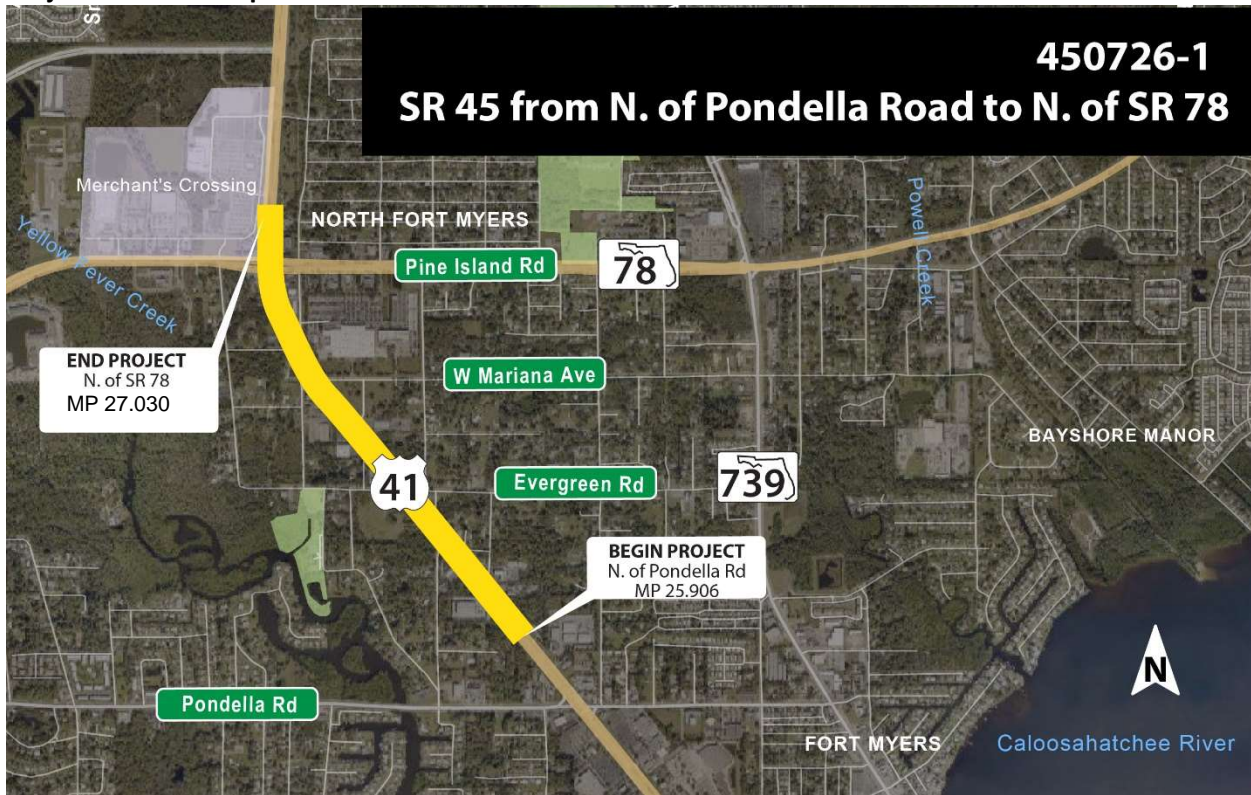
State Road Number: SR 45 (US 41)
 Section Number: 12010-000
 County: Lee County
 Project Limits: SR 45 (US 41) from N. of Pondella Road to N. of SR 78
 Begin MP/End MP: 25.906 to 27.030
 Project Length: 1.124 miles
 FPID No.: 450726-1
 Work Mix: 0012 (Resurfacing)

1. Existing R/W Map Project Numbers:	12010-2121 (1959); 200 feet
2. Old Construction Project Numbers:	425127-1_FY12_MP24.931_MP26.939_SW and Bus Landings 429895-1_FY15_MP26.958_MP27.259_SW 195536-2_FY07_MP 24.620_MP26.922_RRR 415589-1_FY06_MP25.378_MP25.689_Med_Improvements 45363-1_FY21_MP20.290_MP26.976_ITS
3. Proposed projects within the same limits (such as safety, sidewalk or drainage projects):	452622-1_FY28_MP 4.610_MP25.906_RRR 453106-1_FY28_MP26.949_MP27.448_Safety
4. Adjacent Projects:	452622-1_FY28_MP 4.610_MP25.906_RRR
5. Additional R/W Required?	No
6. Level of Community Awareness Plan:	Level 1
7. Are there any bridges within the limits?	No
8. Are there any RR Crossings within the project limits or in the vicinity?	No
9. Are there any Airports within 5-miles?	No
10. Storm Water Management Jurisdiction:	South Florida Water Management District
11. AADT:	33,500 AADT (2020); 24 Hour T = 5.8%
12. Are there any old houses or buildings adjacent to the project?	No
13. Number of Existing Utilities:	8 Utilities: CenturyLink – Fiber, Telephone; City of Cape Coral– Sewer, Re-use Lines, Water; Comcast – CATV; Crown Castle –Electric, Fiber; FGUA – Reclaimed Water, Wastewater; Hotwire Communicators – CATV, Fiber, Telephone; Lee County – Irrigation, Street Lights, Communication Lines, Electric, Fiber, Reclaimed Water, Wastewater, Water; Teco – Gas;

14. Any Special MOT concerns?	No
15. Any Construction concerns?	No
16. Posted/Design Speed Limits:	Design Speed = 60 MPH Posted Speed = 55 MPH Target Speed = 55 MPH
17. SIS Facility?/Context Classification:	No / C3C – Suburban Commercial

The purpose of candidate project scope is to support the development of a long-range estimate (LRE) within the 5-year work program. There are a significant amount of planning assumptions made in order to develop and process the LRE. The district design project manager and engineer are responsible for verifying all items in the scope and shall review the project for conformance with all applicable criteria and standards. The Design Project Manager shall be notified of any proposed deviations from the scope. The Design Project Manager shall coordinate the proposed deviations with the scoping team and the District Roadway Design Engineer for approval.

Project Location Map:



Intent and Nature of Project:

This is a Resurfacing, Restoration, and Rehabilitation (RRR) project that is intended to extend the service life of the existing roadway. This project was identified as a result of deficient pavement conditions noted in the 2022 Pavement Condition Survey. Additional improvement to this roadway shall adhere to the standards set forth in the 2024 FDOT Design Manual (FDM).

Project Abstract

Milling and resurfacing on SR 45 (US 41) from N of Pondella Rd to N of SR 78.

Project Description:

- This is a RRR project. Mill and resurface existing roadway mainline, turn lanes, shoulders, driveways, and side street connections. Other improvements include replacing existing guardrail/end treatments, updating the signing, and providing updates to the SR 78 signal such as separating the pedestrian features, replacing the backplates, and updating the detection per maintaining agency. Safety is funding improvements that include providing a bi-directional median opening with lighting at Evergreen Rd., providing at bi-directional median opening at Judd Rd., providing high emphasis crosswalks at four (4) of the non-signalized intersection, and proving lighting at the SR 78 signal. This segment of roadway is on the high crash list and listed as a Top 20 Safety project. An RSA was completed on 09/13/22 and most of the recommendations inside our project limits have been included in this project. The improvements that are not included have been agreed upon with the Safety Office. Safety will be funding the improvements included in the RSA and located in Sequences 4 through 8 of the LRE. These median opening changes will require a public meeting be held during the design phase.
- The existing typical section on SR 45 (US 41) features a 4-lane divided rural highway consisting of 12-ft travel lanes, an inverted grassed median that is predominantly 40-ft wide, 10-ft outside shoulders in which 4-ft is paved, and predominately 5-foot-sidewalk along both sides of the roadway except near SR 78 where it widens to 8.5-ft.
- The existing right of way (ROW) for this section of SR 45 is predominantly 100-foot left and right from the roadway centerline of construction.
- At the Target and Context Meeting held on June 14, 2022, the target speed was set to equal the posted speed and no changes were made to the lane configuration.
- The existing posted speed appears to be 55 miles per hour (mph) and based on the as-builts, the design speed is 60-mph within this segment. The approved context classification for this roadway is C3C (suburban commercial) with a target speed of 55 mph.
- This project is a Goes-With to FPID 453106-1 that will be handled by a districtwide contract and a potential Goes-With to FPID 452622-1.

Project limits:

SR 45 (US 41) from N. of Pondella Road to N. of SR 78 (Pine Island Road) Begin the SR 45 project approximately 1,188 feet north of the SR 45/Pondella Road intersection at the pavement joint (MP 25.906) to the apparent pavement joint approximately 428 feet north of the SR 45/SR 78 intersection at the pavement joint (MP 27.030).



Begin Project MP 25.906 (NB Pavement Looking NB)



Begin Project MP 25.906 (SB Pavement Looking SB)



End Project MP 27.030 (NB Pavement Looking NB)



End Project MP 27.030 (SB Pavement Looking SB)

Roadway Scope Items:

- The Florida Department of Transportation (FDOT) 2024 Florida Design Manual (FDM), FDOT FY 2024-25 Standard Plans for Road and Bridge Construction (Standard Plans), as well as the 2024 Flexible Pavement Design Manual (FPDM) was used to develop this scope report.
- The existing roadway components include vehicular and bicyclist elements. Pedestrian, bicycle, and transit elements, if any, will be itemized under multi-modal transportation scope items.
- A Pavement Condition Assessment had not been completed by FDOT at the time of this report. From visual assessment the pavement appears to be fair to poor condition based on available information. It is recommended that flexible pavement be used for rehabilitation.
- The FDOT is to perform the Pavement Coring Report and provide ESAL calculations as well as Resilient Modulus values for further analysis. The project designer will prepare the Pavement Design Package per FPDM. Any pavement design used in this scope evaluates old as-built information and is used for budget purposes only.
- For the purposes of the Long-Range Estimate (LRE) SR 45 is a milling & resurfacing project with RRR elements included that begins approximately 1,188 feet north of the SR 45/Pondella Road intersection at the pavement joint (MP 25.906) to the apparent pavement joint approximately 428 feet north of the SR 45/SR 78 intersection (MP 27.030).
- This proposed SR 45 RRR project segment with the current four (4) lane rural typical section was resurfaced within the limits under Financial Project ID 195536-2-52-01 in 2007. Within the proposed project limits, based on the as-builts and from visual inspection, the existing cross slopes along the tangent segments appear to be adequate and consistently 0.02 for the through and turn lanes towards the outside roadside swales. The cross slopes are to be re-evaluated during the plans preparation period to determine if cross slope corrections will be required.

Mainline Milling and Resurfacing:

- For budget purposes, the LRE assumes the existing mainline thru lanes, turn lanes, and median openings be milled 3¾" and resurfaced with 3" SP 12.5 (Traffic C, PG 76-22) and ¾" FC-5 (Traffic C, PG 76-22).

Shoulder and Side Street Milling and Resurfacing:

- Within this segment of roadway, paved 4-ft outside paved shoulders exist on both sides of SR 45 (US 41). For budget purposes, the LRE assumes the paved shoulders be milled 2 ¼" and resurfaced with 1 ½" SP 12.5 (Traffic C, PG 76-22) and ¾" FC-5 (Traffic C, PG 76-22).
- There are eleven (11) existing asphalt side streets within the project limits. For budget purposes, the LRE assumes side street be milled at 1 ½" and resurfaced with 1 ½" SP-12.5 (Traffic C, PG 76-22). In accordance with the FDM, Chapter 214 criteria, and the Standard Plans, Index 330-001, it is recommended that side streets be resurfaced to the back of the furthest return or existing pavement joint, whichever is greater.

Keyholes Widening:

- Due to budget constraints, there are no keyholes being proposed in this project. A design variation will be required. There are existing right turn lanes (RTLs) within the project limits that currently do not have keyholes:
 - Brown Road (northbound)
 - Pineapple Road (southbound)
 - Brown Road (southbound) (has bus stop near beginning of RT turn lane)
 - Evergreen Road (southbound)
 - Betmar Road (southbound)
 - Countertops And More entrance (southbound)
 - SR 78 (Pine Island Rd) (northbound)
- Goes With Safety Project FPID 453106-1 (US 41 from N. of SR 78 to Diplomat Parkway Safety Improvements) will provide keyholes at the SB RTL at SR 78, the NB RTL at Access Rd., and the NB and SB RTLs at Stockton St. Additional improvements include an 8-ft sidewalk on the west side of SR 45 (US 41), advance pedestrian crosswalk signage, updating pedestrian signals, new 4-section signal heads at Stockton St., and conventional lighting on the east and west sides of SR 45 (US 41) within the project limits. A variation will be required if it is decided not to construct the keyholes as part of this safety project.

Superelevated Curves:

- There is one (1) horizontal curves within the SR 45 (US 41) alignment, based on the very limited as-built geometric information available and desktop reviews. These curves are to be evaluated for compliance with Sections 210.9 of the FDM.

Curve No.	DS	PC MP	PT MP	Degree of Curvature/ Deflection Angle	Radius (ft)	SE (e)	FDM SE (e)
1 (Listed on SLD)	60	26.645	27.051	2°00'00" △ =42°53'49" (RT)	2864.79	0.055	0.055

- The existing design curve data above indicates that the curve is within the acceptable e-factor and no correction or design variation will be required.

Roadway Guardrail:

- There is existing guardrail within the project limits that should be evaluated during the design phase for replacement. Installation of new thrie-beam & W-beam guardrail, end anchorage assemblies, and bridge anchorage assemblies should comply with the current Standard Plans, Index(s) 536-001 and 536-002. For budget purposes, the LRE assumes all guardrail be replaced. Listed below are the locations and approximate lengths of guardrail with applicable anchorages:
 - The first location is along the Southbound front slope about 431 feet south of the SR 78 intersection and appears to be shielding some type of above-ground gas valve or apparatus. The gas valve is approximately 32 feet from the outside SB travel lane edge of travel and the face of guardrail is about 27 feet from the edge of travel and is about 14 feet long.
 - The second location is north of the SR 78 Intersection. Existing guardrail is located along the NB and SB lanes. There is approximately 840 feet of guardrail in which 200 feet extend past our project limits. The entire runs of guardrail on both sides should be evaluated for replacement and noted that this work will be past the end project limits of milling and resurfacing (MP 27.030).

Curb and Gutter/Concrete Separators:

- For budget purposes, the LRE does not contain any contingency budget for curb and gutter or concrete separators be repaired/replaced. If the engineer finds any of these that need to be repaired, they will need to coordinate with the District Design Engineer for approval.
- There are several full median opening locations that have Type E C&G or Type F C&G along the periphery of the noses and along the limits of the left turn lanes. There are two short sections of 4-foot concrete separator within the proposed project limits for the directional median opening at Brown Road/W. Mariana Avenue. For any damaged curb and gutter along the periphery of the grassed medians and the 4-foot concrete separators, reconstruct in accordance with the current Standard Plans, Index 520-001 and 520-020.

Mailboxes:

- There are no mailboxes within the project limits.

Pedestrian/Bicycle Railing:

- For budget purposes, the LRE does not contain any contingency budget for railing be repaired/replaced. If the engineer finds any of these that need to be repaired, they will need to coordinate with the District Design Engineer for approval.
- Within the proposed project limits there are several locations that have handrail at the sidewalk for drop-offs. They appear to be in good condition. Evaluate the existing railing during the design to determine if it needs to be replaced. If needed and after approval, replace with Pedestrian/Bicycle (alum) (42" Type I) and evaluate the need for additional Pedestrian/Bicycle railing at drop-off locations. This railing is to be constructed in accordance with the current Standard Plans, Index 515-062.

Access Management:

- None of the existing turnouts and median openings within the project limits have been recommended to be modified or reconstructed except at SR 45 (US 41) at Evergreen Rd and Judd Rd.
 - Safety has requested that the dual directional median opening be constructed at Evergreen Rd and close the median opening at Betmar Blvd (east) and one be constructed at Judd Rd. Please contact the District Safety Office during the design phase for more detail. These median opening changes will require a public meeting to be held during the design phase and will be constructed using the safety funds shown in the LRE.
- There is one unpaved driveway (north of the Dynamic Message Sign, southbound side) within the proposed project limits. Safety is proposing that this driveway be closed. This location will need some embankment, sod, and delineators.
- There are two existing southbound entrance acceleration tapers from Evergreen Road and Brown Road on the west side of SR 45. The tapers do not appear to impact the pedestrian crossing location for Evergreen or Brown Road and can remain if desired.

Turnout Milling and Resurfacing:

- There are eighteen (18) existing asphalt driveway turnouts that should be evaluated for resurfacing. For budget purposes, the LRE assumes the asphalt driveways be milled at 1½" and resurfaced with 1½" SP 12.5 (Traffic C, PG 76-22). It is recommended that all asphalt driveways be resurfaced to the back of the furthest return or existing pavement joint, whichever is greater. Follow minimum and maximum width recommendations as outlined in the FDM, Section 114 and the Standard Plans, Index 330-001. The LRE also assumes 20% turnout replacement if needed.

Turnout Replacement:

- For budget purposes, the LRE does not contain any contingency budget for driveway turnouts to be replaced. If the engineer finds any of these that need to be repaired, they will need to coordinate with the District Design Engineer for approval.
- There are no concrete driveway turnouts within the project limits.

Multi-Modal transportation Scope Items:

- For budget purposes, the LRE does not contain any contingency budget for ramps to be replaced. If the engineer finds any of these ramps to not be ADA compliant, they will need to be constructed in accordance with the Americans with Disabilities Act (ADA), Chapter 222 of the FDM, and Standard Plans Index 522-003.
- For budget purposes, the LRE includes all detectable warning surfaces be replaced.
- There are continuous and connected 5-ft sidewalks on both sides of SR 45 throughout the project limits that are to remain. Replace/repair damaged sidewalk as needed and design in accordance with the with the Americans with Disabilities Act (ADA), Chapter 222 of the FDM, and Standard Plans Index 522-001. For budget purposes, the LRE does not contain any contingency budget for sidewalk be repaired/replaced. If the engineer finds any sidewalk that need to be repaired, they will need to coordinate with the District Design Engineer for approval and reconstruct at 6-ft.
- There are existing 4-ft paved shoulders that can be used for bicycle facilities but will not be marked as designated bicycle lanes due to the high speed.
- There are 8 existing bus stops (3 northbound, 5 southbound) within the proposed SR 45 project limits that currently have boarding and alignment pads constructed as part of FPID 425127-1. It is recommended the designer coordinate features of the existing condition as well as any potential upgrades with the FDOT District 1 Transit Office and with the public transit agency (LeeTran).

Design Variation/Exception:

- A Design Variation will be needed for the existing Type F C&G at some median locations where this exists per Section 210.5.1 of the FDM.
- A Design Variation will be needed for no lateral offsets to the median C&G per Section 210.5.1 of the FDM.
- A Design Variation will be needed for not providing keyholes per Section 223.2.1.3 of the FDM.
- A Design Variation will be needed for a Design Speed > 55 MPH on a corridor with a C3 Context Classification per Table 201.5.1 of the FDM.

Drainage Scope Items:

The existing drainage consists of an open system with ditch conveyance of roadway runoff. The project generally consists of milling and resurfacing and placing keyholes in right turn lanes. Where applicable, sidewalk ADA issues will be corrected. There are locations where the front slope of road embankment will need reshaping. Roadway ditches are utilized for conveyance, minor adjustments to the front slope will have insignificant impact. There are no apparent drainage issues, however, include a rainy day visit to determine drainage facilities are functioning correctly. It was noted during the field visit that there are a few SD MESs that need to be replaced. Minor drainage work will be needed to convert the full median openings at Judd Road (east) to a dual directional median opening.

- MP 26.54 RT – MES repairs needed.



- All drainage structure end treatment is outside the clear zone for the entire project, no pipe extensions anticipated.



Permitting/Environmental Scope Items:

- Coordinate with FDOT for determination of Environmental Permits for review and concurrence during the design process, considering the below descriptions of work and conditions;
 - Conduct an on-site environmental assessment including wetland delineation.
 - Records indicate that rare species or suitable habitat may exist within or near the project limits. For additional information please see the attached Scope Analysis for Social and Environment Issues.
- This project is anticipated to exceed one acre of soil disturbing activities and will require NPDES coverage under the FDEP Generic Permit for Stormwater Discharge from Large and Small Construction Activities.

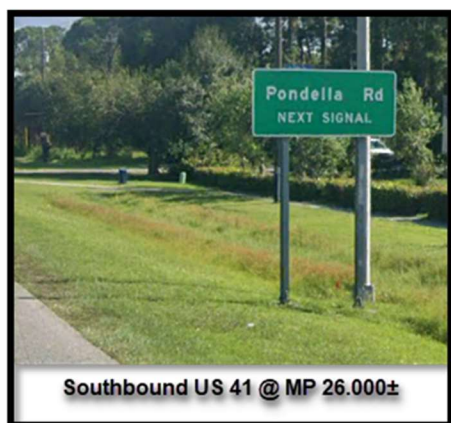
- This project is anticipated to be exempt from WMD permitting under FAC 62-330.051 (4)(c), as it is limited to pavement resurfacing and safety modifications. A permit exemption request will be needed.

Utility Scope Items:

- Utility coordination will be required to determine if adjustments are necessary to ensure there are no conflicts with the proposed construction.
- SUE is needed for this project.

Signing Scope Items:

- All existing signing should be evaluated for possible replacement to ensure signs meet current design criteria for size, placement, and reflectivity.
- Ensure that STOP, YIELD, and ONE WAY signing at all median openings with turn lanes meet current design criteria shown in the FDM, Chapter 230, Exhibit 230-11 and in the Standard Plans, Index 700-109.
- Add DO NOT ENTER (R5-1) and WRONG WAY (R5-1a) signs with retroreflective strips at intersections where required per current FDM Chapter 230, Sect. 230.4.
- Safety has requested TURNING VEHICLES YIELD TO PEDESTRIAN (R10-15) signs be installed at the signalized intersections of Pondella Road and SR 78. The EOR/designer should contact Traffic Operations to determine if these markings should be used at the locations listed.
- The stop sign at the unpaved driveway (north of the Dynamic Message Sign, southbound side) will need to be removed if the driveway is closed.
- Evaluate if the stop bar at the Northern Tool + Equipment driveway, across from Judd Road (east), can be constructed closer to the crosswalk, since the current location appears to be outside of the right-of-way.
- There are two two-post advance street name signs within the project on approaches to signalized intersections. The first is on southbound US 41 approaching Pondella Rd. at MP 26.000± (the intersection is outside the project limits). The second is on northbound US 41 approaching SR 78 at MP 26.810±. Both signs are too close to the intersections, and neither meet current design criteria for advance street name signs. Replace both signs further in advance of each intersection.



Southbound US 41 @ MP 26.000±



Northbound US 41 @ MP 26.810±

- In addition to the advance street name signs, there are two other two-post guide signs within the project. The first is a destination guide sign on northbound US 41 at MP 26.890±. The sign is located well within the length of the dual northbound-to-westbound left-turn lanes, too close to provide adequate notice to drivers in the through lanes to safely change lanes. Evaluate condition of this sign with regard to condition and reflective. Replace or relocate as needed further in

advance of the intersection. Recommend replacing or relocating the existing sign to the location the advance street name sign for this approach currently occupies.



The second sign is a destination/mileage sign for southbound US 41 just south of SR 78. This sign currently shows only two destinations with mileage. Per Section 2.25 of the Traffic Engineering Manual, three destinations are required. Replace this sign incorporating current design criteria. Recommend adding **Naples 40** as the center destination on the new assembly.



- There are three overhead static sign panels within the project. These are lane use and route marker sign panels mounted on a span wire attached to two steel poles. Evaluate condition of the signs and replace if required. If replaced, an ancillary structural evaluation should be requested from the District Structures office to ensure the existing poles may be reused. If the poles fail the evaluation, they should be replaced.



Pavement Marking Scope Items:

- Restripe roadway per current Standard Plans and MUTCD.
- Due to the higher speed limit of 55 MPH for this project, Audible and Vibratory Treatment (AVT) is required. Use sinusoidal rumble striping for AVT.
- Where required, add Wrong-Way Arrow pavement markings at intersections as currently shown in FDM Chapter 230, Sect. 230.4.3.
- Where required, add yellow guidelines for left turn lanes from side streets at signalized intersections as currently shown in FDM Chapter 230, Exhibit 230-8.
- Replace crosswalk markings at signalized intersection(s) with special emphasis markings (preformed thermoplastic).
 - These markings will include the intersection of US 41 at Pondella Rd per Safety request. Pondella Rd. is outside the milling limits but are within the construction limits. Estimate has been included for removal of existing crosswalk markings there and installation of new special emphasis markings.
- Replace crosswalks at non-signalized crossings with standard thermoplastic.
 - Per Safety request, high-emphasis crosswalks are being provided at the non-signalized intersections of Mariana Avenue, Brown Road, and at Judd Road (both sides). The EOR/designer should contact Traffic Operations to determine if these markings should be used at the locations listed.
- Evaluate if the stop bar at the Northern Tool + Equipment driveway, across from Judd Road (east), can be constructed closer to the crosswalk, since the current location appears to be outside of the right-of-way.
- Due to the speed through this area, bike lane markings are not recommended. However, replace any of these markings on SR 78 with preformed thermoplastic if milling/resurfacing impacts the existing ones.
- Use standard thermoplastic for all other markings.

Object Marker and Delineator Scope Items:

- Evaluate condition of all existing object markers (Type 1 and 2) with regard to condition and reflectivity. Replace if needed.
- Replace existing yellow/green delineators in median noses with yellow/yellow ones as shown in Index 711-001-1 of the Standard Plans.
- Evaluate the need for delineators at the unpaved driveway that is being closed on the west side of US 41 across from Betmar Boulevard.

Signalization Scope Items:

Signal scoping items and recommendations are limited to the following:

- Required improvements listed within section 114 of the FDM and RDB 22-01.
- Items specifically recommended by District Safety that advance safety countermeasures.
- Upgrades of existing vehicle detection methods based on current Maintaining Agency requirements.
- Approved replacement of existing signal structures. Signal structures displaying characteristics that lead to a high probability of replacement.
- Approved requests from District TSM&O for ITS related improvements or additions.

Existing traffic signal related features not meeting this criteria will not be included in the scope.

All traffic signal related recommendations listed within this scope shall follow the latest design guidelines as outlined in the FDM, Standard Plans, MUTCD, TEM, MUTS, District One's Maintaining Agency requirements guidelines and Structures Design Manual.

The following signalized intersection fall within the limits of this project:

Signal location 1:

SR 45 (N Cleveland Ave)
at SR 78 (Pine Island Rd)
MP: 26.949
Signal ID: 301

The signal at the intersection of Pondella Rd will be included in potential Goes With RR Project FPID 452622-1. The Design PM should reference Goes With FPID 453106-1 to verify that the following improvements at SR 78 (Pine Island Rd) are needed.

Signal Location 1:

SR 45 (N Cleveland Ave) at SR 78 (Pine Island Rd)

District Safety Recommendations:

- Replace existing backplates with flexible retroreflective backplates.
- Provide multiple point detection zones for dilemma zone. Replace existing stop bar video detection system with microwave radar per Maintaining Agency's preference.
- Provide ADA compliant pedestrian facilities. Ensure pedestrian signalization features include visible and audible confirmation indications and detector locations are physically separated.
- Consider implementing Leading Pedestrian Intervals (LPI) for the pedestrian activity at the intersection of US 41 and SR 78 (Pine Island Road).

District TSM&O Recommendations:

- Evaluate intersection timing plan(s) and operations for the implementation of Lead Pedestrian Intervals (LPI).

Additional Scoping Recommendations:

- Provide new pedestrian assemblies with separated detectors.

Photo, Signal Location 1:



Lighting Scope Items:

Lighting scoping items and recommendations are limited to the following criteria:

- For new or fully reconstructed signalized intersections that fall within roadway context classifications C3 through C6, lighting shall be provided.
- Existing signalized intersections that have been identified by District Safety as having a history of nighttime pedestrian crashes.
- Corridor or sections of corridor that have been identified by District Safety as having a history of nighttime crashes.
- New or existing mid-block pedestrian crossings.

The location listed below have been identified as meeting this criteria:

Intersection Location 1:

SR 45 (N. Cleveland Ave.)
at SR 78 (Pine Island Rd.)

The location listed below has been identified by the District Safety Office as needing lighting:

Intersection Location 2:

SR 45 (N. Cleveland Ave.)
at Evergreen Rd.

The lighting at the intersection of Pondella Rd will be included in potential Goes With RR Project FPID 452622-1. The Design PM should reference Goes With FPID 453106-1 to verify that the following improvements at location 1 are needed.

Existing lighting features:

- SR 78 (Pine Island Rd.) includes some lighting within intersection using HPS luminaires attached to signal structures, no additional lighting for intersection approaches. Current lighting infrastructure does not provide adequate pedestrian level lighting.
- Currently there is no lighting at the Evergreen intersection.

District Safety recommended countermeasures:

- At intersection location 1, retrofit existing HPS luminaires to LED if not included in Goes With FPID 453106-1.
- At intersection locations 1 and 2 within the functional limits of the intersection, add standard aluminum poles with LED luminaires for intersection approaches and pedestrian level lighting.

Scoping items and recommendations:

- During design, existing and proposed intersection lighting should be assessed with a complete lighting analysis to ensure minimum vertical and horizontal illumination values are met. Utilize lighting design criteria based on the latest FDOT FDM and Standard Specifications. Per RDM 16-02 and Standard Spec 992, LED light fixtures shall be used.
- Coordinate with signal design any potential shared facilities (i.e., directional bores, luminaire support structures, and power service poles).
- Recommend replacing other agency owned street lighting or shared use lighting with FDOT standard light poles. Coordinate the replacement of other agency owned street lighting with the UAO and Maintaining Agency.
- Coordinate power source location and requirements with UAO.
- Coordinate lighting maintenance agreement with the District Maintenance Office and the Maintaining Agency.

- Coordinate light fixture types with Maintaining Agency. Only light fixtures that appear on the Departments approved product list are allowed.
- Analyze any existing light fixtures that could potentially be utilized and ascertain candidacy for reuse, relocation or upgrade.
- Overhead utility lines are present within the corridor. Coordination with District Utilities and UAO will be necessary. Utilization of conflict light poles may be required.

Geotechnical Scope Items:

- Geotechnical exploration is not anticipated but may be needed if any widening is approved by the District Design Engineer.

Structural Scope Items:

- Per section 261.7 of the FDM, an Ancillary Structures Report shall be provided for all existing overhead and cantilever signs, signal, HMLP lighting and ITS support structures within the project limits.
- Per FDM 260.9, an engineering analysis and report is required to evaluate the structural and functional adequacy of the existing bridge. Coordinate with the District Structures Office to determine the scope of the engineering analysis and report.
- MP 26.223 - Box Culvert 1-8'x5'x75' CBC: Single cell (median to west opening) 8'x5'x75' reinforced concrete box culvert carrying SR 45 (US 41) southbound over an unnamed ditch 0.030 miles south of the intersection of SR 45 and Betmar Blvd. As-built plans are not available in the project folder.
- MP 26.225 - Box Culvert 1-8'x5'x84' CBC: Single cell (median to east opening) 8'x5'x84' reinforced concrete box culvert carrying SR 45 (US 41) northbound over an unnamed ditch 0.028 miles south of the intersection of SR 45 and Betmar Blvd. As-built plans are not available in the project folder.

Right-of-Way Scope Items:

- ROW impacts are not expected on this project.

Survey Required:

- Obtain 3D survey prior to beginning design.

Scope Analysis for Social and Environmental Issues

500-foot Project Buffer Area

FPID No:	450726-1	County:	Lee	City:	Bonita Springs
Project Limits:	SR 45 from north of Pondella Road to north of SR 78				
Section:	12010-000	Length of Project:	1.127		
Begin Milepost:	25.903	End Milepost:	27.030		
Scope:	Resurfacing, Restoration, and Rehabilitation (RRR)				
Review Date:	5/1/2022 – B. Feagle	Anticipated NEPA COA:	Type 1 CE		

Elements with Potential Cost/Schedule Impacts

- Permits may be necessary based on the final scope/design plans developed.
- Cultural/historical evaluation and State Historic Preservation Officer (SHPO) coordination will be necessary.
- Project activities must not adversely impact (fill) floodplain storage.
- Should the project include in-water work or modifications to culverts, drains, inlets, and pipes that are accessible to manatees, the *Standard Manatee Conditions for In-Water Activities* must be followed.
- Level 1 evaluation of potential contamination facilities may be needed in conjunction with project plans development; Level 2 testing may also be required.

Social and Economic

Land Use

- The five major land uses within the project buffer area include commercial and services, roads and highways, fixed single-family units (less than two dwellings), hardwood – coniferous mixed, and retail sales and services.
- No impacts to land use are anticipated as the proposed work is expected to occur within the existing right-of-way.

Social

- The project buffer area has 110 households with a population of 258 people.
- The median household income is \$36,932 with 18.99% of the population below poverty level. The median household income of the project area is significantly lower than the median household income for Lee County (\$59,608).
- The minority population makes up 30.62% of the total population of the area with 56 people claiming a “Hispanic or Latino of Any Race” ethnicity. There is a claimed limited English proficiency (LEP) population of seven people (2.98%).
- Housing within the project buffer area consist of single-family units (61%), multi-family units (35%), and mobile homes (4%) that are owner-occupied (46%), renter-occupied (30%), and vacant (24%).
- The social resources that exist within the project buffer area include the North Fort Myers Church of God and All Souls Episcopal Church.
- No impacts to social/community resources are anticipated as the proposed work is expected to occur within the existing right-of-way.
- Standard Specifications will require maintenance of access to adjacent properties.

- Various buried underground and overhead electric utilities present within/adjacent to the project (utility relocations are possible pending scope development).

Relocation Potential

- Residential land use consists of 27.11 acres of fixed single-family units (less than two dwellings) and 5.7 acres of fixed single-family units (two to five dwellings) within the project buffer area. Commercial and services account for 43.42 acres of the project buffer area.
- No impacts to residential or commercial properties are anticipated as the proposed work is expected to occur within the existing right-of-way.

Farmlands

- The project buffer area contains no farmlands.

Aesthetic Effects

- The project buffer area contains no aesthetic effects.

Economic

- One Development of Regional Impact (DRI) and six Planned Unit Developments (PUD) exist within the project buffer area.
- No impacts to economic resources are anticipated as the proposed work is expected to occur within the existing right-of-way.

Mobility

- The project buffer area contains 22 bus transit routes.
- No impacts to mobility resources are anticipated as the proposed work is expected to occur within the existing right-of-way.

Cultural

Historic and Archaeological Sites (note: these are the results of a basic screening)

- No project-specific Cultural Resource Assessment Survey (CRAS) has been completed.
- The project buffer area contains a Florida Master Site File (FMSF) historic standing structure, 1701 San Bernardino Street (Site ID# LL01211), which has not been evaluated by SHPO.
- Four FMSF Field Survey Project Boundaries conducted between 1990 and 2001 are located within the project buffer area.
- The project buffer area includes 20 structures built before 1970.
- Although the proposed project will occur within the generally disturbed right-of-way, cultural/historical evaluation and SHPO coordination will be necessary to address the existing historical/cultural resources, any areas outside of the existing right-of-way (if applicable), and other possible resources not able to be identified in the desktop review.
- No impacts to historic and archaeological sites are anticipated as the proposed work is expected to occur within the existing right-of-way.

Recreational and Protected Lands

- The project buffer area contains no recreational and protected lands.

Natural

Wetlands and Surface Waters

- The project buffer area contains palustrine (freshwater forested/shrub wetland), riverine, and palustrine (freshwater emergent wetland) National Wetland Inventory Areas.
- No impacts to wetlands and surface waters are anticipated as the proposed work is expected to occur within the existing right-of-way.

Water Resources

- The project buffer area contains a basin management action plan (BMAP), three Environmental Protection Agency (EPA) established total maximum daily loads (TMDL), one FDEP water quality data monitoring station, one FDEP STORET station, five FDEP waters not attaining standards (WNAS), three super act wells, two verified impaired Florida waters, two waterbodies with verified nutrient or dissolved oxygen impairment, and two waterbodies.
- The project buffer area includes interaction with the surficial aquifer system and discharge/less than 1 area of the Floridian Aquifer.
- No impacts to water resources are anticipated as the proposed work is expected to occur within the existing right-of-way.

Floodplains

- The entire project buffer area (100%) is located within the 100-year floodplain.
- Project activities must not adversely impact (fill) floodplain storage.

Protected Species and Habitat

- The project is located within the US Fish and Wildlife Service (USFWS) consultation areas for the American crocodile, Florida bonneted bat, west Indian manatee, red cockaded woodpecker, Florida scrub-jay, and southwest plants.
- The Caloosahatchee River is designated as a manatee protection slow speed zone and is designated as west Indian manatee critical habitat. Should the project include in-water work or modifications to culverts, drains, inlets, and pipes that are accessible to manatees, the *Standard Manatee Conditions for In-Water Activities* must be followed.
- The Caloosahatchee River is designated as critical habitat for the smalltooth sawfish. No in-water work is expected; therefore, no impacts are anticipated.
- The project is located within the 18.6-mile core foraging area (CFA) for two wood stork colonies (Caloosahatchee East and Caloosahatchee West). No wetland impacts are anticipated.
- The project is located within the consultation area for the Florida bonneted bat. Use of the Florida bonneted bat species determination key will be required to determine whether there is *no effect* or *may affect, not likely to adversely affect – programmatic* (MANLAA-P). Consultation with USFWS or acoustic/roosting surveys are not anticipated.
- The project is located within the Caloosahatchee to Lee Coast Ecosystem Management Area (EMA).
- The project is located within the frequent black bear range.
- The desktop review identified no potential habitat for the American crocodile, red cockaded woodpecker or scrub-jay. Surveys for these species are not expected at this time.
- Species review is not anticipated with the current scope development; however, coordination efforts may be necessary.
- Adverse impacts to listed/protected species are not anticipated.

Coastal and Marine

- The project buffer area contains no coastal and marine resources.

Physical

Noise

- The project buffer area contains no noise resources.

Air Quality

- This portion of Lee County has not been designated as nonattainment or maintenance for ozone, carbon monoxide (CO), particulate matter (PM), or any of the National Ambient Air Quality Standards (NAAQS) in accordance with the Clean Air Act.

Contamination

- The project buffer area contains three biomedical waste facilities, one FDEP Environmental Restoration Integrated Cleanup (ERIC) site, one National Pollutant Discharge Elimination System (NPDES) stormwater facilities and activities, one FDEP off site contamination notice, six hazardous waste facilities, one NPDES stormwater permit, 17 onsite sewage facilities, eight petroleum contamination monitoring sites, four solid waste facilities, nine storage tank contamination monitoring (STCM) sites, four super act risk sources, 11 NPDES, and five EPA Resource Conservation and Recovery Act (RCRA) regulated facilities.
- Level 1 evaluation of potential contamination facilities may be needed in conjunction with project plans development; Level 2 testing may also be required.

Infrastructure

- The project buffer area contains an electric power transmission line.
- No impacts to infrastructure are anticipated as the proposed work is expected to occur within the existing right-of-way.

Navigation

- The project buffer area contains no navigation resources.

Special Designations

- The project buffer area contains no special designation resources.

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: 450726-1-52-01

Letting Date: 07/2027

Description: SR 45 (US 41) FROM N OF PONDELLA RD TO N OF SR 78

District: 01

County: 12 LEE

Market Area: 10

Units: English

Contract Class: 1 Lump Sum Project: N

Design/Build: N

Project Length: 1.110 MI

Project Manager: NEM-MS-4P

Version 14-P Project Grand Total

\$4,771,758.46

Description: 4P - Copy V13 01-29-24 (Sequences updated from TRM) Percentages 0/0/0

Sequence: 1 MIS - Miscellaneous Construction

Net Length:

1.110 MI

5,861 LF

Description: POP Items

ROADWAY COMPONENT

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
327-70-6	MILLING EXIST ASPH PAVT,1 1/2" AVG DEPTH Comment: 1 1/2" Side Streets and Driveways	8,651.00	SY	\$4.46	\$38,583.46
327-70-11	MILLING EXIST ASPH PAVT,2 1/4" AVG DEPTH Comment: 2 1/4" Outside Shoulders	3,961.00	SY	\$5.99	\$23,726.39
327-70-20	MILLING EXIST ASPH PAVT,3 3/4" AVG DEPTH Comment: 3 3/4" Mainline and Aux	52,175.56	SY	\$4.34	\$226,441.93
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22 Comment: 1 1/2" of Driveways, Side Streets, and Outside Shoulders and 3" of Mainline and Aux 3" of Mainline and Aux	9,649.47	TN	\$173.04	\$1,669,744.29
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76- 22 Comment: .75" of Outside Shoulder, Mainline and Aux	2,245.47	TN	\$220.76	\$495,709.96
546-72-3	GROUND-IN RUMBLE STRIPS, 8" SIN	1.71	GM	\$1,830.99	\$3,130.99
706-1-3	RAISED PAVMT MARK, TYPE B	1,140.00	EA	\$4.42	\$5,038.80
710-11-190	PAINTED PAVT MARK,STD,WHITE, ISLA NOSE	20.00	SF	\$2.74	\$54.80
710-11-290	PAINTED PAVT MARK,STD,YELLOW,ISLAND NOSE	410.00	SF	\$3.23	\$1,324.30
710-90	PAINTED PAVEMENT MARKINGS, FINAL SURFACE	1.00	LS	\$21,896.39	\$21,896.39
711-11-123	THERMOPLASTIC, STD, WHITE, SOLID, 12"	3,210.00	LF	\$3.59	\$11,523.90
711-11-124	THERMOPLASTIC, STD, WHITE, SOLID, 18"	445.00	LF	\$4.86	\$2,162.70
711-11-125	THERMOPLASTIC, STD, WHITE, SOLID, 24"	474.00	LF	\$5.69	\$2,697.06
711-11-141	THERMOPLASTIC, STD, WHITE, DOT GUIDE, 6"	1.09	GM	\$2,523.16	\$2,750.24
711-11-170	THERMOPLASTIC, STD, WHITE, ARROW	90.00	EA	\$77.65	\$6,988.50

711-11-224	THERMOPLASTIC, STD, YELLOW, SOLID, 18"	125.00 LF	\$5.02	\$627.50
711-11-241	THERMOPLASTIC, STD, YELLOW, DOT / GUIDE, 6"	0.39 GM	\$2,480.78	\$967.50
711-14-123	THERMOPLASTIC, PREFORM, WHITE, SOLID, 12"	1,140.00 LF	\$7.82	\$8,914.80
711-14-125	THERMOPLASTIC, PREFORM, WHITE, SOLID, 24"	960.00 LF	\$14.52	\$13,939.20
711-14-160	THERMOPLASTIC, PREFORMED, WHITE, MESSAGE	2.00 EA	\$267.00	\$534.00
711-14-170	THERMOPLASTIC, PREFORMED, WHITE, ARROW	2.00 EA	\$114.71	\$229.42
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	3.32 GM	\$5,913.06	\$19,631.36
711-15-102	THERMOPLASTIC, STD-OP, WHITE, SOLID, 8"	0.18 GM	\$9,194.33	\$1,654.98
711-15-131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"	2.13 GM	\$1,906.85	\$4,061.59
711-15-201	THERMOPLASTIC, STD-OP, YELLOW, SOLID, 6"	1.95 GM	\$6,132.71	\$11,958.78
Roadway Component Total				\$2,574,292.84

SHOULDER COMPONENT

User Input Data

Description		Value			
X-Items					
Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	11,901.00	LF	\$2.67	\$31,775.67
104-15	SOIL TRACKING PREVENTION DEVICE	2.00	EA	\$3,204.44	\$6,408.88
107-1	LITTER REMOVAL	13.93	AC	\$42.96	\$598.43
107-2	MOWING	13.93	AC	\$69.01	\$961.31
527-2	DETECTABLE WARNINGS	480.00	SF	\$32.65	\$15,672.00
570-1-2	PERFORMANCE TURF, SOD	7,053.40	SY	\$5.60	\$39,499.04
Shoulder Component Total					\$94,915.33

Sequence 1 Total **\$2,669,208.17**

Sequence: 2 MIS - Miscellaneous Construction

Net Length: 1.110 MI
5,861 LF

Description: RRR Items removed from POP

ROADWAY COMPONENT

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.06 AC	\$50,451.90	\$3,027.11
339-1	MISCELLANEOUS ASPHALT PAVEMENT	31.31 TN	\$392.72	\$12,296.06
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	854.00 LF	\$29.64	\$25,312.56
536-73	GUARDRAIL REMOVAL	854.00 LF	\$2.31	\$1,972.74
536-85-20	GUARDRAIL END TREAT-TRAILING ANCHORAGE	3.00 EA	\$1,760.02	\$5,280.06
536-85-24	GUARDRAIL END TREATMENT-PARA APP TERM	3.00 EA	\$3,597.04	\$10,791.12
Roadway Component Total				\$58,679.65

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	32.00 SY	\$5.60	\$179.20

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
430-984-123	MITERED END SECT, OPTIONAL RD, 15" SD	4.00 EA	\$1,478.84	\$5,915.36
Drainage Component Total				\$6,094.56

SIGNING COMPONENT

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	88.00 AS	\$489.21	\$43,050.48
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	38.00 AS	\$1,559.10	\$59,245.80
700-1-13	SINGLE POST SIGN, F&I GM, 21-30 SF	1.00 AS	\$2,604.60	\$2,604.60
700-1-50	SINGLE POST SIGN, RELOCATE	1.00 AS	\$296.00	\$296.00
700-1-60	SINGLE POST SIGN, REMOVE	86.00 AS	\$37.27	\$3,205.22
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	4.00 AS	\$6,294.75	\$25,179.00
700-2-60	MULTI- POST SIGN, REMOVE	4.00 AS	\$886.81	\$3,547.24
700-3-202	SIGN PANEL, F&I OM, 12-20 SF	3.00 EA	\$1,455.54	\$4,366.62
700-3-603	SIGN PANEL, REMOVE, 21-30 SF	3.00 EA	\$234.60	\$703.80
700-13-15	RETROREFLECTIVE SIGN STRIP-F&I, 5'	37.00 EA	\$113.06	\$4,183.22
705-10-1	OBJECT MARKER, TYPE 1	6.00 EA	\$195.19	\$1,171.14
705-10-2	OBJECT MARKER, TYPE 2	14.00 EA	\$174.47	\$2,442.58
705-11-1	DELINEATOR, FLEXIBLE TUBULAR	26.00 EA	\$94.65	\$2,460.90
Signing Component Total				\$152,456.60

Sequence 2 Total

\$217,230.81

Sequence: 3 MIS - Miscellaneous Construction

Net Length: 1.110 MI
5,861 LF

Description: Signal RRR Items

SIGNALIZATIONS COMPONENT

Signalization 2

Description	Value
Type	Miscellaneous
Multiplier	1
Description	SR 45 (N Cleveland Ave) At SR 78 (Pine Island Rd) If not Included in FPID 453106-1

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
611-2-1	ITSFM LOCATION DOCUMENTATION- INTERS	1.00	EA	\$1,550.25	\$1,550.25
630-2-11	CONDUIT, F& I, OPEN TRENCH	100.00	LF	\$15.84	\$1,584.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	550.00	LF	\$35.23	\$19,376.50
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00	PI	\$11,141.98	\$11,141.98
632-7-6	SIGNAL CABLE, REMOVE- INTERSECTION	1.00	PI	\$803.20	\$803.20
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	14.00	EA	\$1,053.71	\$14,751.94
646-1-11	ALUMINUM SIGNALS POLE, PEDESTAL	6.00	EA	\$2,997.53	\$17,985.18
646-1-60	ALUMINUM SIGNALS POLE, REMOVE	3.00	EA	\$423.86	\$1,271.58
650-2-109	VEHIC SIGNAL AUX, REP/RETR F&I, FLEX BAC	10.00	EA	\$561.58	\$5,615.80
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	6.00	AS	\$833.32	\$4,999.92
660-3-11	VEHICLE DETECTION SYSTEM- MICRO,F&I, CAB	1.00	EA	\$9,474.68	\$9,474.68
660-3-12	VEHICLE DETECTION SYSTEM- MICRO,F&I, ABO	8.00	EA	\$10,639.38	\$85,115.04
660-4-60	VEHICLE DETECTION SYSTEM- VIDEO, REMOVE	4.00	EA	\$163.15	\$652.60
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	8.00	EA	\$355.54	\$2,844.32
665-1-60	PEDESTRIAN DETECTOR, REMOVE	2.00	EA	\$68.92	\$137.84
671-2-40	TRAFFIC CONTROLLER, MODIFY	1.00	EA	\$2,828.09	\$2,828.09
Signalizations Component Total					\$180,132.92

Sequence 3 Total

\$180,132.92

Sequence: 4 MIS - Miscellaneous Construction

Net Length: 1.110 MI
5,861 LF

Description: Safety Request - Bi-directional median opening at Evergreen Rd (High Priority) - 52-02

ROADWAY COMPONENT

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.19 AC	\$50,451.90	\$60,037.76
110-4-10	REMOVAL OF EXIST CONC	52.00 SY	\$38.31	\$1,992.12
120-1	REGULAR EXCAVATION	1,915.00 CY	\$33.52	\$64,190.80
120-6	EMBANKMENT	1,915.00 CY	\$33.17	\$63,520.55
160-4	TYPE B STABILIZATION	4,254.00 SY	\$14.87	\$63,256.98
285-709	OPTIONAL BASE,BASE GROUP 09	3,036.00 SY	\$32.65	\$99,125.40
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	667.92 TN	\$173.04	\$115,576.88
	Comment: 4"			
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76- 22	121.44 TN	\$220.76	\$26,809.09
520-5-11	TRAF SEP CONC-TYPE I, 4' WIDE	44.00 LF	\$64.97	\$2,858.68
570-1-2	PERFORMANCE TURF, SOD	2,496.00 SY	\$5.60	\$13,977.60
706-1-3	RAISED PAVMT MARK, TYPE B	76.00 EA	\$4.42	\$335.92
710-11-190	PAINTED PAVT MARK,STD,WHITE, ISLA NOSE	12.40 SF	\$2.74	\$33.98
711-11-124	THERMOPLASTIC, STD, WHITE, SOLID, 18"	646.00 LF	\$4.86	\$3,139.56
711-11-141	THERMOPLASTIC, STD, WHITE, DOT GUIDE, 6"	0.06 GM	\$2,523.16	\$151.39
711-11-170	THERMOPLASTIC, STD, WHITE, ARROW	10.00 EA	\$77.65	\$776.50
711-11-241	THERMOPLASTIC,STD,YELLOW,DOT / GUIDE, 6"	0.01 GM	\$2,480.78	\$24.81
711-15-102	THERMOPLASTIC, STD-OP, WHITE, SOLID, 8"	0.29 GM	\$9,194.33	\$2,666.36
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.51 GM	\$6,132.71	\$3,127.68
Roadway Component Total				\$521,602.06

SHOULDER COMPONENT

User Input Data

Description Value

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
520-1-7	CONCRETE CURB & GUTTER, TYPE E	405.00 LF	\$40.07	\$16,228.35
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	89.00 SY	\$89.87	\$7,998.43
Shoulder Component Total				\$24,226.78

SIGNING COMPONENT

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	6.00	AS	\$489.21	\$2,935.26
705-11-1	DELINEATOR, FLEXIBLE TUBULAR	6.00	EA	\$94.65	\$567.90
Signing Component Total					\$3,503.16
<hr/>					
Sequence 4 Total					\$549,332.00
<hr/>					

Sequence: 5 MIS - Miscellaneous Construction

Net Length: 1,110 MI
5,861 LF

Description: Safety Request - Add standard aluminum poles with LED luminaires at Evergreen Road- 52-02

SIGNALIZATIONS COMPONENT

Signalization 3

Description	Value
Type	Miscellaneous
Multiplier	1
Description	For Lighting

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
641-2-12	PREST CNC POLE,F&I,TYP P-II SRV POLE Comment: lighting	1.00	EA	\$2,423.39	\$2,423.39
Signalizations Component Total					\$2,423.39

LIGHTING COMPONENT

Conventional Lighting Subcomponent

Description	Value
Spacing	MAX

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	300.00	LF	\$15.84	\$4,752.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	400.00	LF	\$35.23	\$14,092.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	8.00	EA	\$1,053.71	\$8,429.68
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00	AS	\$4,559.58	\$4,559.58
639-2-1	ELECTRICAL SERVICE WIRE, F&I	100.00	LF	\$10.54	\$1,054.00
715-1-12	LIGHTING CONDUCTORS, F&I, INSUL,NO.8-6	2,580.00	LF	\$2.37	\$6,114.60
715-7-11	LOAD CENTER, F&I, SECONDARY VOLTAGE	1.00	EA	\$23,098.00	\$23,098.00
715-61-442	LIGHT POLE CMPLT,STD,F&I, 45'MH,12'ARM L	4.00	EA	\$10,703.69	\$42,814.76
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	4.00	EA	\$722.26	\$2,889.04
Lighting Component Total					\$107,803.66

Sequence 5 Total \$110,227.05

Sequence: 6 MIS - Miscellaneous Construction

Net Length: 1,110 MI
5,861 LF

Description: Safety Request - Bi-directional median opening at Judd Rd (east) (Medium Priority)- 52-02

ROADWAY COMPONENT

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.19 AC	\$50,451.90	\$60,037.76
110-4-10	REMOVAL OF EXIST CONC	52.00 SY	\$38.31	\$1,992.12
120-1	REGULAR EXCAVATION	1,915.00 CY	\$33.52	\$64,190.80
120-6	EMBANKMENT	1,915.00 CY	\$33.17	\$63,520.55
160-4	TYPE B STABILIZATION	4,254.00 SY	\$14.87	\$63,256.98
285-709	OPTIONAL BASE,BASE GROUP 09	3,036.00 SY	\$32.65	\$99,125.40
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	667.92 TN	\$173.04	\$115,576.88
	Comment: 4"			
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76- 22	121.44 TN	\$220.76	\$26,809.09
520-5-11	TRAF SEP CONC-TYPE I, 4' WIDE	44.00 LF	\$64.97	\$2,858.68
570-1-2	PERFORMANCE TURF, SOD	2,496.00 SY	\$5.60	\$13,977.60
706-1-3	RAISED PAVMT MARK, TYPE B	76.00 EA	\$4.42	\$335.92
710-11-190	PAINTED PAVT MARK,STD,WHITE, ISLA NOSE	12.40 SF	\$2.74	\$33.98
711-11-124	THERMOPLASTIC, STD, WHITE, SOLID, 18"	646.00 LF	\$4.86	\$3,139.56
711-11-141	THERMOPLASTIC, STD, WHITE, DOT GUIDE, 6"	0.06 GM	\$2,523.16	\$151.39
711-11-170	THERMOPLASTIC, STD, WHITE, ARROW	10.00 EA	\$77.65	\$776.50
711-11-241	THERMOPLASTIC,STD,YELLOW,DOT / GUIDE, 6"	0.01 GM	\$2,480.78	\$24.81
711-15-102	THERMOPLASTIC, STD-OP, WHITE, SOLID, 8"	0.29 GM	\$9,194.33	\$2,666.36
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.51 GM	\$6,132.71	\$3,127.68
Roadway Component Total				\$521,602.06

SHOULDER COMPONENT

User Input Data

Description Value

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
520-1-7	CONCRETE CURB & GUTTER, TYPE E	405.00 LF	\$40.07	\$16,228.35
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	89.00 SY	\$89.87	\$7,998.43
Shoulder Component Total				\$24,226.78

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-175-115	PIPE CULV, OPT MATL, ROUND, 15"S/CD	32.00	LF	\$489.76	\$15,672.32

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
425-1-524	INLETS, DT BOT, TYPE C, J BOT, >10'	2.00	EA	\$13,848.40	\$27,696.80

Drainage Component Total \$43,369.12

SIGNING COMPONENT

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	6.00	AS	\$489.21	\$2,935.26
705-11-1	DELINEATOR, FLEXIBLE TUBULAR	6.00	EA	\$94.65	\$567.90

Signing Component Total \$3,503.16

Sequence 6 Total \$592,701.12

Sequence: 7 MIS - Miscellaneous Construction

Net Length: 1.110 MI
5,861 LF

Description: Safety Request - Marking at Pondella, R10-15 signs at Pondella and SR 78, and High Emphasis on some sidestreets- 52-02

ROADWAY COMPONENT

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
711-14-123	THERMOPLASTIC, PREFORM, WHITE, SOLID,12"	754.00 LF	\$7.82	\$5,896.28
711-14-125	THERMOPLASTIC, PREFORM, WHITE, SOLID,24"	1,320.00 LF	\$14.52	\$19,166.40
	Comment: 600 LF for Pondella and remaining for some side streets			
711-17-1	THERMOPLASTIC, REMOVE	780.00 SF	\$2.44	\$1,903.20
	Roadway Component Total			\$26,965.88

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	8.00 AS	\$489.21	\$3,913.68
	Signing Component Total			\$3,913.68

Sequence 7 Total \$30,879.56

Sequence: 8 MIS - Miscellaneous Construction

Net Length: 1.110 MI
5,861 LF

Description: Safety Request - Add standard aluminum poles with LED luminaires for pedestrian level lighting
SR 78 signal.- 52-02

SIGNALIZATIONS COMPONENT

Signalization 3

Description	Value
Type	Miscellaneous
Multiplier	1
Description	For Lighting

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
641-2-12	PREST CNC POLE,F&I,TYP P-II SRV POLE Comment: lighting	1.00	EA	\$2,423.39	\$2,423.39
Signalizations Component Total					\$2,423.39

LIGHTING COMPONENT

Conventional Lighting Subcomponent

Description	Value
Spacing	MAX

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,530.00	LF	\$15.84	\$24,235.20
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	900.00	LF	\$35.23	\$31,707.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	28.00	EA	\$1,053.71	\$29,503.88
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00	AS	\$4,559.58	\$4,559.58
639-2-1	ELECTRICAL SERVICE WIRE, F&I	100.00	LF	\$10.54	\$1,054.00
715-1-12	LIGHTING CONDUCTORS, F&I, INSUL,NO.8-6	8,922.00	LF	\$2.37	\$21,145.14
715-7-11	LOAD CENTER, F&I, SECONDARY VOLTAGE	1.00	EA	\$23,098.00	\$23,098.00
715-21-2	LIGHTING REPAIRS AND RETROFITS, LED RETR	4.00	EA	\$1,450.41	\$5,801.64
715-61-442	LIGHT POLE CMPLT,STD,F&I, 45'MH,12'ARM L	20.00	EA	\$10,703.69	\$214,073.80
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	20.00	EA	\$722.26	\$14,445.20
Lighting Component Total					\$369,623.44

Sequence 8 Total

\$372,046.83

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: 450726-1-52-01

Letting Date: 07/2027

Description: SR 45 (US 41) FROM N OF PONDELLA RD TO N OF SR 78

District: 01 **County:** 12 LEE **Market Area:** 10 **Units:** English

Contract Class: 1 **Lump Sum Project:** N **Design/Build:** N **Project Length:** 1.110 MI

Project Manager: NEM-MS-4P

Version 14-P Project Grand Total **\$4,771,758.46**

Description: 4P - Copy V13 01-29-24 (Sequences updated from TRM) Percentages 0/0/0

Resurfacing Lane Mile Cost **\$0.00**

Project Sequences Subtotal **\$4,721,758.46**

102-1	Maintenance of Traffic	0.00 %	\$0.00
101-1	Mobilization	0.00 %	\$0.00

Project Sequences Total **\$4,721,758.46**

Project Unknowns	0.00 %	\$0.00
Design/Build	0.00 %	\$0.00

Non-Bid Components:

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
999-25	INITIAL CONTINGENCY AMOUNT (DO NOT BID)		LS	\$50,000.00	\$50,000.00

Project Non-Bid Subtotal **\$50,000.00**

Version 14-P Project Grand Total **\$4,771,758.46**