

Maintenance Resurfacing Project Technical Scope

February 27, 2024

452908-2: SR 5 from Woodland Ave. to Flagler County Line

State Road Numbers: 5
 Section Number: 79030-000
 County: Volusia
 Project Limits: Woodland Ave. to Flagler County Line
 Begin MP/End MP: 5.868 to 7.468 (Northbound) (Length 1.600 Mi)
 5.868 to 10.719 and 11.581 to 12.803 (Southbound) (Length 6.073 Mi)
 FM: 452908-2

1. Existing R/W Map Project Numbers:	60-A (7903 & 7301) (1938) MP 5.828 to MP 6.337 9903-201 (1947) MP 0.000 to MP 6.409 7903-175 (1955) MP 5.828 to MP 12.803	
2. Old Construction Project Numbers:	240554-1 (1986) MP 7.300 to MP 12.800; Resurfacing 240956-1 (1996) MP 5.868 to MP 12.803; Resurfacing 409168-1 (2003) MP 7.459 to MP 12.803; Resurfacing 419588-1 (2007) MP 5.868 to MP 12.803; Resurfacing 428689-1 (2013) MP 5.841 to MP 7.166; Resurfacing 4354154-1 (2015) MP 8.460 to MP 11.093; Landscaping 439700-1 (2017) MP 5.650 to MP 8.460; Landscaping 439136-1 (2020) MP 5.868 to MP 12.803; Resurfacing	
3. Additional R/W required?	No	
4. Level of Community Awareness Plan:	CAP Level 1	
5. Agreements required?	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes
	<input type="checkbox"/> Yes, including Local Funds.	
6. Are there any bridges within the limits?	790118 MP 6.506 to MP 6.511 790119 MP 6.949 to MP 6.955 790185 MP 8.002 to MP 8.069 (Southbound) 790186 MP 8.002 to MP 8.069 (Northbound) 790083 MP 11.099 to MP 11.115 (I-95 Northbound Overpass) 790082 MP 11.120 to MP 11.137 (I-95 Southbound Overpass)	
7. Are there any RR Crossings within the project limits or in the vicinity?	No	
8. Are there any Airports within 10 nautical miles?	Flagler Executive Airport (FIN) Ormond Beach Municipal Airport (OMN) Dan Rice Airstrip Daytona Beach International Airport (DAB)	
9. Storm Water Management jurisdiction:	SJRWMD	
10. Is the Project within CCCL (<i>Coastal Construction Control Line</i>)?	No	
11. Existing Utilities per Sunshine One Call:	AT&T Corp AT&T/Distribution City of Ormond Beach Charter Communications Cogent - Fiber Florida Power & Light – Subaqueous Florida Power & Light – Volusia Metro Fibernet Teco Peoples Gas – Gas Daytona Uniti Fiber LLC	
12. Any special MOT concerns?	Yes, pedestrian detours.	
13. Any construction concerns?	No	

Maintenance Resurfacing Project Technical Scope

14. Posted/Design Speed Limits (mph):	<u>Facility</u>	<u>Design</u>	<u>Posted</u>	<u>Target</u>
	SR 5	40 (5.868–5.924)	40 (3.228-6.070)	40
			45 (6.070-6.450)	45
	60 (5.868-12.803)		55 (6.450-10.725)	55
			45 (10.725-11.545)	45
			55 (11.545-11.800)	55
		60 (11.800-12.803)	60	
15. Design Criteria and Highway System:	SHS, FDM, RRR			
	<u>Facility</u>	<u>Context Classification</u>		
	SR 5 (5.868-6.410)	C4		
	SR 5 (6.410-12.803)	C3C		
16. Lump Sum or Pay Item?	Pay Item			
17. Proposed Design Schedule:	18-24 Months			

Agreements Required:

None.

Project Location Map:



The Engineer is responsible for verifying all items in the proposed scope and shall review the project for conformance with all applicable criteria and standards.

Intent and Nature of Project:

The purpose of this project is milling and resurfacing to restore the functional condition of the pavement along SR 5 from Woodland Ave. to the Flagler County Line. This maintenance resurfacing project also includes reconstruction curb ramps to be ADA compliant and signing & pavement markings.

Project Description:

- Project is located on SR 5/US 1 (Ridgewood Ave./Younge St.) from the intersection of Woodland Ave. to approximately 70 feet north of Dix Ave. and continues north to the Flagler County Line for the southbound direction of travel only. Project limits pass through City of Ormond Beach, and unincorporated Volusia County.
- SR 5 is classified as an urban principal arterial with Access Classification 03 (MP 5.864 to MP 12.803).
- SR 5A (Nova Rd.) at SR 5 is classified as an urban principal arterial with Access Classification 05.
- SR 9 (I-95) at SR 5 is classified as a limited access urban principal arterial interstate with Access Classification 01.
- Volusia County Fire Rescue Station #13 located on Southland Rd. east of SR 5.
- There are no active projects within the vicinity of this project.
- The following tentative projects have been identified within the vicinity of this project:
 - 448786-1 (LAP Bike Path/Trail on US 1 from Airport Blvd to Broadway Ave MP 8.464 – MP 12.803)
 - 419772-2 (Interchange – Add lanes on I-95 Interchange at SR 5/US 1)
 - 450644-1 (Resurfacing on SR 5A (Nova Rd) from Flomich Ave to SR 5/US 1 with an anticipated letting date of 1/28/2026)

Typical Sections:

- Per field review and as-built plans, the project includes two (2) typical sections. No changes to the typical sections are being proposed.
 - MP 5.868 to MP 5.990; 4-lane urban divided highway with a 40-foot grass median, two 12-foot travel lanes with 8-foot (2-foot paved) inside shoulders and 10-foot (5-foot paved) outside shoulders in each direction.
 - MP 5.990 to MP 12.803; 4-lane urban divided highway with a 40-foot depressed grass median, two 12-foot travel lanes with 8-foot (2-foot paved) inside shoulders and 10-foot (5-foot paved) outside shoulders in each direction. Southbound travel lanes consist of a 2-inch asphalt overlay on top of existing rigid concrete pavement.

Roadway Scope Items:

- A Pavement Condition Assessment will be completed by FDOT prior to design. Existing pavement was observed to be in good to fair condition. Three (3) pavement designs have been assumed for estimating purposes: 1) Mill and resurfacing travel lanes 2) Mill and Resurfacing paved shoulders 3) Mill and resurface asphalt overlay of rigid concrete pavement (southbound direction only).
 - Special pavement details may be required for asphalt overlays for the following bridges and approach slabs:
 - 790185 MP 8.002 to MP 8.069 (Southbound)
 - 790186 MP 8.002 to MP 8.069 (Northbound)
- Cross slope correction is not part of this project.

Drainage Scope Items:

- No work proposed.

Utility Scope Items:

- Utility coordination will be required to determine if any necessary adjustments are required to avoid conflicts with the proposed construction.
- Adjust all valve covers, utility pull boxes, and utility manholes to be flush with proposed ramps and roadway pavement as necessary to complete the proposed improvements.

Multimodal Scope Items:

- A traffic control plan should be provided to maintain connectivity within the corridor in the event of lane closures/detours during milling and resurfacing operations for Transit, Bicycle, and Pedestrian facilities.

Transit:

- There are 3 Votran bus routes (routes 3A, 3B, & 3C) that operate within the project limits. Coordinate with Elizabeth Suchsland (386) 756-7496 Ext. 4127; esuchsland@volusia.org to avoid disruptions during construction.

Bicycle facilities:

- Marked bicycle lanes exist within the project limits between MP 0.668 to MP 6.235 Wilmette Ave are to be maintained.

Pedestrian facilities:

- Reconstruct curb ramps in place that do not comply with ADA criteria and ensure all ramps have DWS.

Permitting Scope Items:

- Coordinate with FDOT, submitting a permit determination letter to the Environmental Permits Office, Attention District Five Permits Coordinator, for review and concurrence during the design process, considering the below descriptions of work and conditions.
 - 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.

Environmental Scope Items:

- Complete an environmental assessment by a qualified environmental professional:
 - A protected species assessment is required for the project. The level of assessment should be commensurate with the scope of work. The assessment should focus on species applicable to the project area with consideration given to consultation areas, habitats, and known occurrence data.
 - Forested wetlands occur immediately adjacent to both sides of the Right of Way intermittently throughout the project corridor and the project also crosses the Tomoka River and associated estuarine wetlands. None of these resources are to be impacted.
 - A contamination assessment is required for the project. The level of documentation required will be dependent on the contamination sites in the area, scope of work proposed, and previous assessments conducted. Coordinate with the District Contamination Impact Coordinator to determine project needs.
- A Cultural Resources Assessment is required and is to be conducted by Cultural Resources Professionals as outlined in 36 CFR Part 61 and set forth in the Professional Qualifications Standards section of the Secretary of the Interior's Standard and Guidelines for Archaeology and Historic Preservation.

Structural Scope Items:

- No work proposed.

Traffic Operations (Includes Signing, Signals, ITS) Scope Items:

Signing and Pavement Markings

- Signing and Pavement Marking shall be completed for the proposed improvements. The Engineer will prepare the Inventory all signing within the project limits including evaluation for compliance with FDOT Specifications, FDM, Standard Plans, MUTCD, FHWA, etc. criteria and shall coordinate with the District Design Office for any changes to existing signs. Any existing signs or pavement markings that conflict with the proposed signs or pavement markings or non-compliant signs or pavement markings shall be addressed in the plans.
 - Provide auditory vibratory treatment from MP 11.545 to MP 12.803.

Maintenance Resurfacing Project Technical Scope

Signals (ITS)

- Replace existing traffic signal detection disturbed by milling and resurfacing operations.
- Replace existing traffic detection loops affected by milling operations for the existing Traffic Monitoring Sites at MP 7.489 and MP 10.253, and remove Traffic Monitoring Sites at MP 6.594 and MP 12.784.

Intelligent Transportation Systems (ITS)

- All projects that involve ITS or Signalization, need to go through the FDOT Procedure 750-040-003 Systems Engineering Risk Assessment Checklist to determine if it is a high-risk project, as per 23 CFR 940. If the project is deemed high risk, the Engineer is to develop the Systems Engineering documents that will be needed for the project. The Engineer is responsible to produce all regulatory Systems Engineering (SE) analysis items in 23 CFR 940.11.
- Engineer to complete the ITS Certification.
- The additional past ITS scoping considerations reference document can be found here:
[https://www.cflsmartroads.com/projects/technical_docs.html#\(Designers\)](https://www.cflsmartroads.com/projects/technical_docs.html#(Designers))

Lighting Scope Items:

- No work proposed.

Landscaping Scope Items:

- No work proposed.

Survey Scope Items:

- Obtain Design Survey, collecting data for the areas and locations of proposed work. Total survey area will be determined by the Engineer based on the limits of disturbance.
 - Survey locations in relation to the State Plan Coordinate System.
 - Locate utilities as Quality Level C "QL C" and surface features including valve covers, meter boxes, manholes, etc. within the areas of proposed work.
 - Include items identified by the environmental assessment.

Right of Way and Mapping Scope Items:

- No work proposed.

Geotechnical Scope Items:

- FDOT to perform Pavement Coring Report and provide ESAL calculation and Resilient Modulus values.

Design Documentation:

- POP projects are exempt from Design Variation and Exception documentation other than for ADA curb ramp requirements. If compliance with ADA curb ramp requirements is determined to be technically infeasible within the POP limitations, a Design Variation will be required per FDM 222.2.2.