RRR Scoping Report

FM# 449738-1

SR 5 / US 1 / Overseas Highway

From West of Venetian Boulevard to North of Executive Bay Club
(90060000 MP 11.939-13.417)
Monroe County, Florida

Prepared for
Florida Department of Transportation District 6
Planning and Environmental Management Office
1000 NW 111th Avenue
Miami, Florida 33172

FDOT Project Manager: Md S Hossain, MS, PE
Contract C-354, Task Work Order 28
FPID: 449738-1-52-01

FINAL REPORT **June 2023**

ENGINEER'S CERTIFICATION

I, hereby certify that I am a registered professional engineer in the State of Florida, practicing with GOAL Associates Inc., a Florida Corporation under Section 471.023, Florida Statutes, to offer engineering services to the public through a Professional Engineer, duly licensed under Chapter 471, Florida Statutes, and by the State of Florida, Department of Professional Regulation, Board of Professional Engineers, and that I have prepared or approved the evaluation, findings, opinions, conclusions, or technical advice hereby reported for:

Project:	RRR Scoping Report for SR 5/US 1/Overseas Highway From west of Venetian Boulevard to north of Executive Bay Club FM# 449738-1-52-01| Roadway ID: 90060000 | MP 11.939 – 13.417
Location:	Monroe County, Florida
Client:	Florida Department of Transportation, District 6 Planning and Environmental Management Office 1000 NW 111th Avenue Miami, Florida 33172
FDOT Project Manager:	Md S Hossain, MS, PE.
Report Prepared by:	GOAL Associates, Inc. 14750 NW 77th Court, Suite 320 Miami Lakes, FL 33016 Contract No. C-A354, Task Work Order 28 Vendor No. F464649215

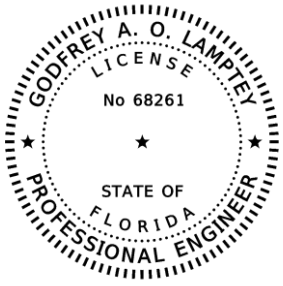
I acknowledge that the procedures and references used to develop the results contained in this report are standard to the professional practice of transportation engineering as applied through professional judgment and experience.

Signature: Godfrey Lamptey — Digitally signed by Godfrey Lamptey Date: 2023.06.19 16:47:20-04'00'

Name: Godfrey Lamptey, P.E., PTOE

License No.: 68261

Date: 06/07/2023



SUMMARY OF PROJECT SCOPE ELEMENTS

The following list is provided as a basis for the Scope of Services for the Design Phase.

Summary of Project Information

- Description: SR 5/US 1/Overseas Highways from west of Venetian Boulevard to north of Executive Bay Club
- County: Monroe
- Project Type: RRR (Work Mix 0012)
- Project Limits: 90060000 | MP 11.939 - 13.417
- Highway Systems: SHS
- Functional Classification: Urban Other Principal Arterial Other
  Context Classification: C3C – Suburban Commercial from west of Venetian Boulevard to Treasure Harbor Drive
  C3R – Suburban Residential from Treasure Harbor Drive north of Executive Bay Club
- Bridges: N/A
- Railroad Crossing: N/A
- Design Speed: 55 mph
- Posted Speed: 45 mph
- Target Speed: 40 mph

1 PURPOSE

- Major work mix includes: 0012, Resurfacing
- Major work groups include: 3.1 Minor Highway Design
- Minor work groups include: 4.1.1 - Miscellaneous Structures
  7.1 - Signing, Pavement Marking & Channelization
  7.2 - Lighting
  7.3 - Signalization
  8.2 - Design, Right of Way, Construction Surveying
  8.4 - Right of Way Mapping
  15.0 Landscape
- Known alternative construction contracting methods include: N/A

2.1 Project General and Roadway (Activities 3, 4, and 5)

Public Involvement: CAP Level 2 anticipated. The District Public Information Office (PIO) consultant is responsible for coordination of all public involvement activities during the Design Phase. The Designer is expected to attend a Public Information Meeting.

- Other Agency Meetings: Monroe County, Plantation Key
- Joint Project Agreements (JPAs): N/A
- Specification Package Preparation: Yes, Specifications Package required
- Value Engineering: N/A
- Risk Assessment Workshop: N/A
- Plan Type: Roadway Plans required (1:50 Scale - 12 sheets)
- Typical Section: 4 Typical Sections
- Pavement Design: 5 Pavement Design
  - Milling and Resurfacing (mainline)
  - Milling and Resurfacing (shoulder)
  - Mainline Widening
  - Shoulder Widening
  - Shared Use Path Reconstruction
- Pavement Type Selection Report(s): N/A
- Cross Slope: N/A
- Access Management Classification: Class 6
- Transit Route Features: N/A
- Major Intersections/Interchanges: No additional plan sheets required
- Roadway Alternative Analysis: N/A
- Level of Temporary Traffic Control Plans: Level I
- Temporary Lighting: N/A
- Temporary Signals: N/A
- Temporary Drainage: N/A
- Design Variations/Exceptions: 5-6* DV:
  - Design Variation for Lack of Pedestrian Facilities
  - Design Variation for Clear Sight Triangles
  - Design variation for shared use path width, separation, and horizontal clearance
  - Design Variation for Deceleration Length
  - Design Variation for Lateral Offset (mainline and shared use path)
  - Design Variation for Vertical Clearance

* Additional survey is required to determine compliance with criteria.

- Back of Sidewalk Profiles: N/A

2.2 Drainage (Activity 6)

The existing drainage pattern is recommended to remain. The Designer is responsible for coordinating with the District Maintenance Office to determine if any outstanding drainage maintenance issues should be addressed by this project.

2.3 Utilities Coordination (Activity 7) N/A

The project utility coordination is to be completed by the District Utilities Group and the Project Utility Coordinator consultant. Utility coordination tasks include processing of any JPA, Utility Work Schedules (UWS), and Utility Clear Letters. Eleven (11) Utility Agencies/Owners (UAOs) are identified within 0.25 mile of the project limits. No significant utility impacts are anticipated for this RRR Project. However, the designer should perform Subsurface Utility Exploration (SUE) tests to verify any utility conflicts within the project limits.

2.4 Environmental Permits, Compliances, and Clearances (Activity 8)

The project will occur within the State Highway System (SHS) right-of-way and is therefore exempt from local environmental permitting requirements pursuant to Section 335.02, Florida Statutes. The scope of work will also be limited to state ERP exempt activities as named in Section 62-330.051, FAC.

There are wetlands in the vicinity of the proposed work. A recent (recorded within the last 5 years) wetland line should be included in the plans. If a recent wetland line is not available, please coordinate with the FDOT environmental permits unit to arrange for a new wetland delineation. If impacts to wetlands are proposed, permits will be required from the USACE and SFWMD.

2.5 Structures (Activities 9 – 18) N/A

2.6 Signing and Pavement Markings (Activities 19 & 20)

Signing and Pavement Marking Plans are required (12 sheets at 1:50 Scale). Signing improvements include the upgrade of all substandard ground-mounted signs to meet current FDOT and MUTCD requirements. All pavement markings within the limits of milling and resurfacing shall be replaced to meet current FDOT Standard Plans for Road Construction.

2.7 Signalization (Activities 21 & 22)

There are no signalized intersections within the project limits.

2.8 Lighting (Activities 23 & 24)

There are lighting luminaires supported on bracket arms mounted on the transmission poles along the west side of the project corridor.

2.9 Landscape Architecture (Activities 25 & 26)

This project may require impacts to existing trees including trimming/relocation of trees/vegetation obstructing intersection sight triangles, or signals and signs visibility and ADA shared use path clearance. Tree disposition and relocation plans are required. Coordination with the District Maintenance Office to review if this maintenance falls under any existing maintenance agreement with Monroe County for landscaping will be required.

2.10 Survey (Activity 27)

Survey services to be provided by the District. The Designer will create the Project Control sheets from data extracted from the project survey and sign and seal the Project Control Sheets.

2.11 Photogrammetry (Activity 28) N/A

Aerial photography to be provided by the District.

2.12 Mapping (Activity 29) N/A

Right of Way Mapping services to be provided by the District.

2.13 Terrestrial Mobile LiDAR (Activity 30) N/A

2.14 Architecture (Activity 31) N/A

2.15 Noise Barriers (Activity 32) N/A

2.16 Intelligent Transportation Systems (Activities 33 & 34) N/A

2.17 Geotechnical (Activity 35) N/A

Geotechnical services to be provided by the District. Pavement core borings are being performed for the proposed pavement resurfacing. The Designer is responsible for including the Project geotechnical information in the Roadway Plans component set.

2.18 Project Schedule (as of 06/07/2023)

- PE Begins 07/07/2023
- Notice to Proceed 01/09/2024
- Production Date 07/24/2025
- Transmit PS&E Package 09/26/2025
- Letting Date 11/19/2025

2.19 Submittal Schedule (as of 06/07/2023)

- 60% Plans Submittal 07/17/2024
- 90% Plans Submittal 10/28/2024
- 100% Plans Submittal 03/28/2025
- Plans Completed Submittal 06/10/2025
- PS&E Submittal 08/28/2025

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF APPENDICES

LIST OF UNITS

mph	miles per hour
psi	pounds per square inch

LIST OF ABBREVIATIONS

AADT	Annual Average Daily Traffic
AASHTO	American Association of State Highway and Transportation Officials
ADA	Americans with Disabilities Act
ADAAG	ADA Accessibility Guidelines
CAP	Community Awareness Plan
DHW	Design High Water
DTPW	Department of Transportation and Public Works
EB	Eastbound
ETRM	Exfiltration Trench Reference Manual
ESAL	Equivalent Single Axle Load
FAST	Florida Analysis System for Targets
FAC	Florida Administrative Code
FC	Friction Course
FDOT	Florida Department of Transportation
FDM	FDOT Design Manual
FM	Financial Management (Number)
FPDM	Flexible Pavement Design Manual
FPID	Financial Project Identification Number
FWD	Falling-Weight Deflectometer
FY	Fiscal Year
HCL	High Crash List
JPA	Joint Project Agreement
LBR	Limerock Bearing Ratio
LRE	Long Range Estimate
LT	Left
MP	Milepost
MR	Resilient Modulus
MUTCD	Manual on Uniform Traffic Control Devices for Streets and Highways
NB	Northbound
NHS	National Highway System
NMSA	Non-Major State Action
NOAA	National Oceanic and Atmospheric Administration
PCS	Pavement Condition Survey
PECCDR	Pavement Evaluation Coring and Condition Data Report
PIF	Permit Involvement Form
PIO	Public Information Office
PLEMO	Planning and Environmental Management Office
POP	Pavement-Only Project
PROWAG	Public Right of Way Accessibility Guideline
RCI	Roadway Characteristics Inventory
RRR	Resurfacing, Restoration, and Rehabilitation
RT	Right
SB	Southbound
SHS	State Highway System
SIS	Strategic Intermodal System
SLD	Straight Line Diagram
SMO	State Materials Office
SN	Structural Number
T_{24}	Truck Factor (% Trucks)
TTC	Temporary Traffic Control (Plan)
TEM	Traffic Engineering Manual
UAM	Utility Accommodation Manual
UAO	Utility Agency/Owner
UWS	Utility Work Schedule
WB	Westbound

1.0 INTRODUCTION

GOAL Associates was retained by the Florida Department of Transportation (FDOT) District 6 Planning and Environmental Management Office (PLEMO) to prepare a RRR Scoping Report for Project FM 449738-1: A Resurfacing, Restoration, and Rehabilitation (RRR) Project along SR 5 /US 1/Overseas Highway, from west of Venetian Boulevard to north of Executive Bay Club. This Scoping Report is based on the requirements from the current edition of the FDOT Design Manual (FDM), Section 114, and the District 6 Design Handbook (revised May 2021). This project will be required to comply with the design criteria in the latest FDOT Design Manual (FDM); therefore, this Scoping Report considers the design criteria from the current edition of the FDM (dated January 2023). This Scoping Report documents the existing physical, operating, and safety conditions through office and field reviews. This Scoping Report also documents the design criteria, deficiencies, and recommended improvements to be addressed by the programmed RRR Project.

1.1 Project Purpose and Need

Project Purpose

The primary purpose of this RRR Project is to preserve and extend the service life of the existing pavement and to provide recommendations that enhance safety along the roadway segment for all transportation modes.

- Objective
  - Correct the deficient pavement conditions by milling and resurfacing.

- Justification
  - The project originated from the 2021 Pavement Condition Survey (PCS) Ratings, which identified the pavement within the project limits to be deficient (Ride and Crack).
  - The pavement age was the key primary factor for the origination of this project. The existing pavement within the project limits was resurfaced in 2008 and will be 18 years old by 2026 when this resurfacing project is funded for construction.
  - Field reviews confirmed that overall, the existing pavement is in poor condition with multiple locations presenting deterioration. These included cracking, patching, and raveling.

Additional Project Needs

The following additional project needs are identified to be addressed by this project:

- Evaluate sight distance obstructions.
- Upgrade all substandard ground-mounted signs and pavement markings.

- Upgrade bicycle facilities and provide new pedestrian facilities where feasible to comply with the Americans with Disabilities Act (ADA).
- Trim trees and shrubs to comply with clear sight triangle and ADA requirements.

1.2 Project Type Determination

This project does not qualify as a Maintenance Resurfacing/Pavement-Only Project (POP) because the segments within the project limits were identified on the District High Crash List (HCL). As such, the project is programmed as a RRR project and the scope of work shall meet the requirements of the FDM: Development and Processes, Section 114 Resurfacing, Restoration and Rehabilitation (RRR).

1.3 Project Location and Limits

The project is located in Monroe County, within Plantation Key. The project limit is along SR 5/US 1/Overseas Highway from west of Venetian Boulevard to north of Executive Bay Club (90060000 | MP 11.939 -13.417). The Project Location Map is shown in **Figure 1-1**.

Figure 1-1 Project Location Map

1.4 Adjacent Projects

Based on the data collection from the FDOT archives, the following programmed or previous projects were identified within or adjacent to the project limits. The as-built and design plans for the previous projects are attached in **Appendix E.**

Previous Projects

- FPID 405582-8-52-01 (FY 2003)
  - SR 5/US 1/Overseas on Plantation Key (MM 85.7 –MM 86.7)
- FPID 414649-1-52-01 (FY 2008)
  - SR 5/US 1/Overseas Highway from MM 86.80/South of East Ridge Road to MM 90/Poinciana Boulevard
- FPID 405646-1-52-01(FY 2003)
  - SR 5/US 1/Overseas on Plantation Key (MM 85.7 –MM 86.7)
- FPID 436532-1-52-01(FY 2020)
  - Bridge-Repair/Rehabilitation
- FPID 442040-1-52-01 (2020)
  - SR 5/US 1/Overseas Highway at Islamorada Founders Park
- FPID 444920-1-52-01 (2023)
  - SR 5/US 1 Florida Keys Connected Vehicles Pilot Project

Future Projects

- FPID 447810-1-52-01 (FY 2026)
  - SR 5/US 1/Overseas Highway from north of East Ridge Road to Royal Poinciana Boulevard

2.0 ASSESSMENT OF EXISTING CONDITIONS

The existing conditions were evaluated, and deficiencies identified through office and field reviews performed as part of the study.

2.1 Office Reviews

The office reviews included the review of documents provided by the District and data collection from other resources. Documents reviewed included the following:

- Aerial Photography, dated 2022
- Right of Way Maps
- Existing traffic volumes
- Straight Line Diagram (SLD)
- Roadway Characteristics Inventory (RCI)
- Identification of Utilities (Sunshine State One-Call of Florida)
- Pavement Condition Forecast, Resilient Modulus (MR) Recommendation Memos, and 18-kip Equivalent Single Axle Load (ESAL) Report
- As-Builts and Design Plans from previous projects

2.2 Field Reviews

A field review was conducted in February 2023 for this Scoping Report, based on the District 6 Field Review Checklists. Photos documenting these field reviews are included in the relevant sections of this report.

2.3 Design Controls

2.3.1 Highway Functional Classification

SR 5/US 1/Overseas Highway from west of Venetian Boulevard to north of Executive Bay Club is classified as an Urban Other Principal Arterial Other and is part of the State Highway System (SHS).

2.3.2 Context Classification

The Planning Office conducted a Project-level Context Classification (PLCC) review to re-evaluate at a more granular level the original systemwide Context Classification (CC) assignments. The PLCC for SR 5 / US 1 / Overseas Highway from west of Venetian Boulevard to Treasure Harbor Drive is C3C – Suburban Commercial, and C3R – Suburban Residential from Treasure Harbor Drive north of Executive Bay Club.

2.3.3 Design, Posted and Target Speeds

The existing design speed along the project corridor is 55 mph with a posted speed limit of 45 mph. A target speed evaluation was prepared by the District Planning Office and concluded that given the bicycle and pedestrian activity, crash history, the context classification, and guidance from the FDM and FDOT Context Classification Guide, a Target Speed of 40-mph is recommended for this RRR project.

2.3.4 Traffic Volume and Design Year

Traffic Volume

One traffic count station is located close to the project limits. The traffic volume data for the most current year (2021) is listed in **Table 2-1**.

Table 2-1 Existing Traffic Volume Characteristics (2021)

FDOT Count Station	Milepost	Location Description	AADT	K_{30}	D_{30}	Truck Factor (T_{24})
900101	11.467	1400' S of Snake Creek Bridge	22,500	9.00	53.1	16.7

Design Period

FDM Section 201.3 recommends a Design Period of 12 to 20 years for projects with milling. The Flexible Pavement Design Manual (FPDM) recommends a pavement Design Period of 15 to 20 years (Pavement Overlay with Milling, Non-Limited Access Facilities). A Design Period of 20 years is selected for this RRR Project. The Opening Year is 2026 and Design Year is 2046.

2.4 Existing Typical Sections

There are four typical sections along the project corridor as shown in **Figure 2-1 to Figure 2-4.** The existing typical sections consists of a two-lane roadway undivided roadway with one lane in each direction, and a painted median which serves as either a two-way left turn lane, merge lane or exclusive left turn lane two-way.

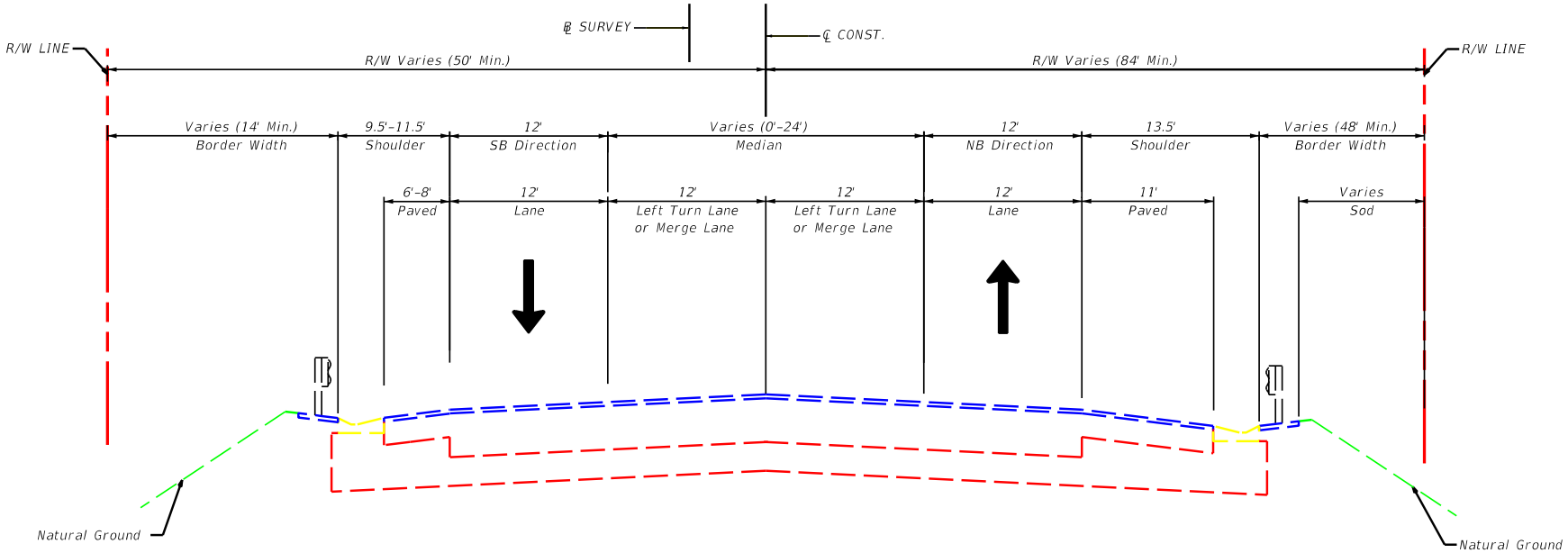


Figure 2-1 Existing Typical Section from Snake Creek Canal Bridge to W of Venetian Blvd

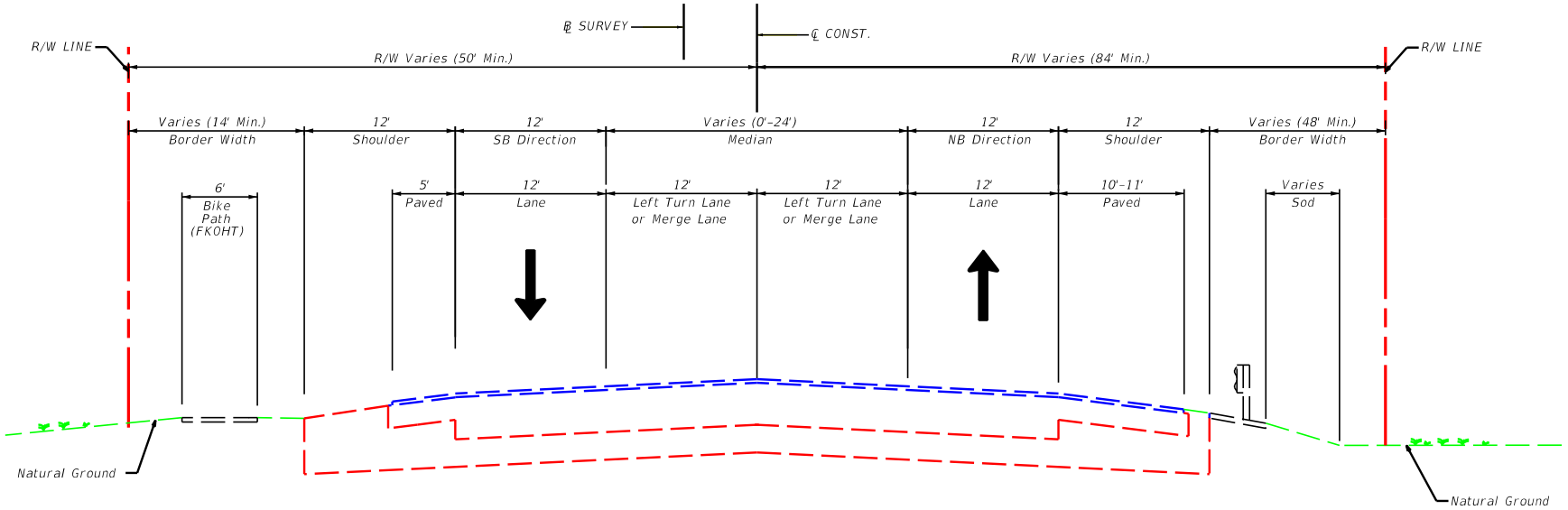


Figure 2-2 Existing Typical Section from W of Venetian Blvd. to E of Venetian Blvd

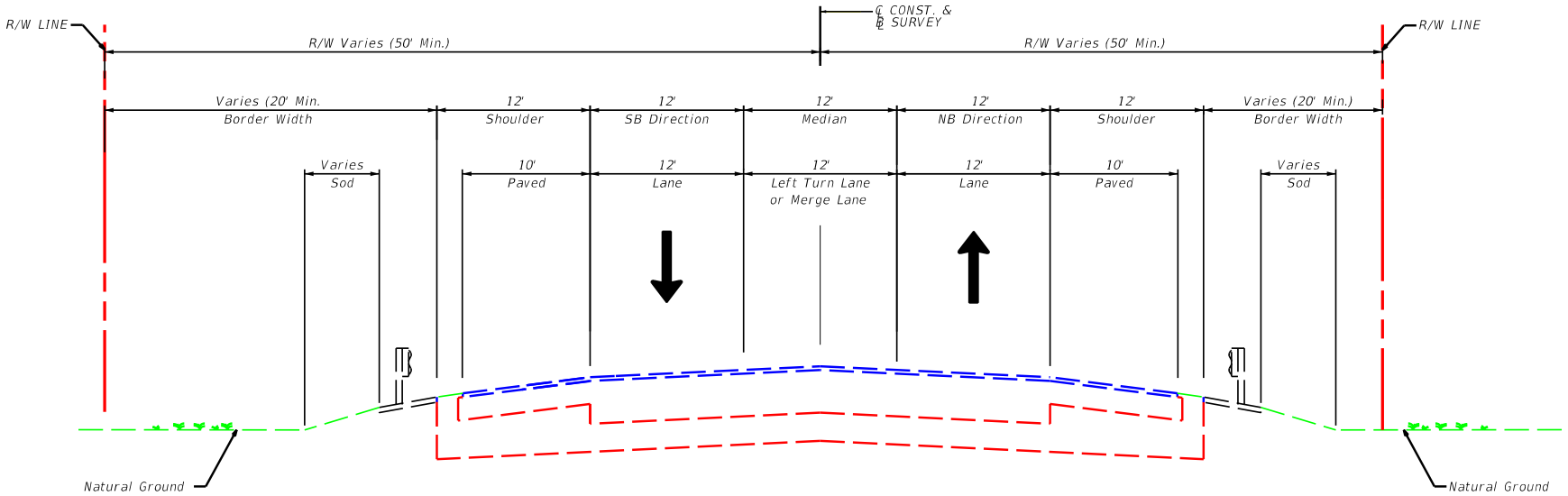


Figure 2-3 Existing Typical Section from E of Venetian Blvd to N of East Ridge Road

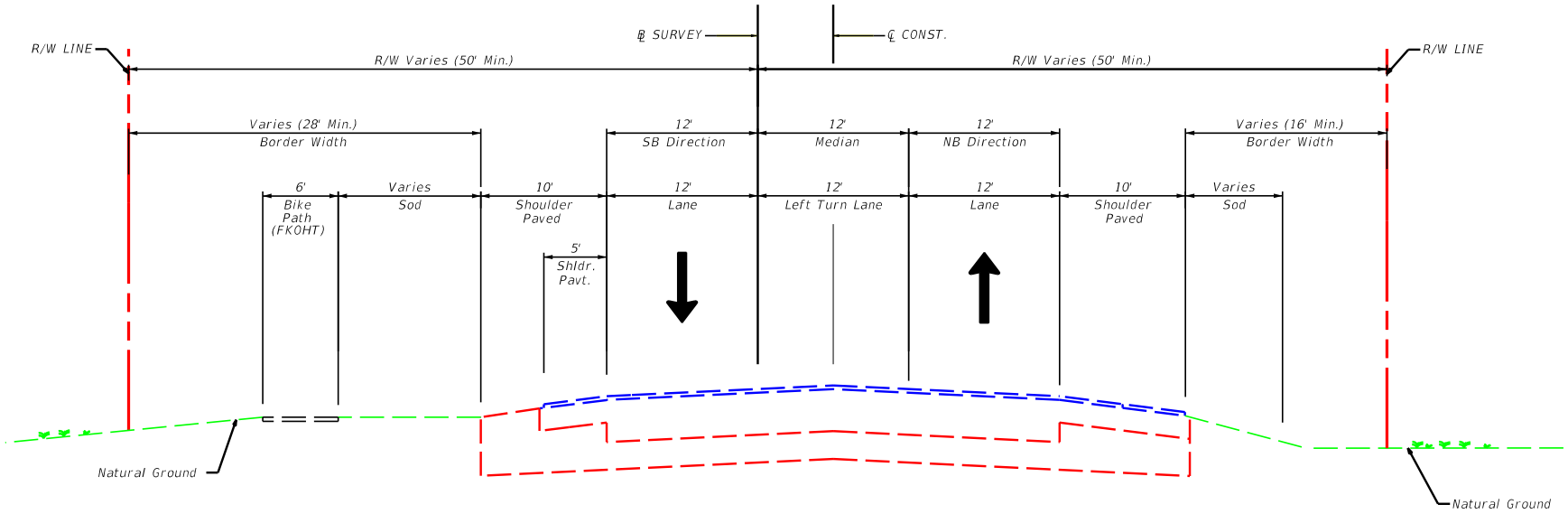


Figure 2-4 Existing Typical Section from N of East Ridge Road to N of Executive Bay Club

2.5 Existing Pavement

2.5.1 Pavement History

The existing pavement within the project segment was last resurfaced in 2008 by FPID 405582-8-52-01 which extended from west of Venetian Boulevard to north of Executive Bay Club. The pavement designs from the previous projects are listed below.

- Milling and Resurfacing (Mainline and Paved Shoulder)
  - Mill existing asphalt pavement (2")
  - Resurface with
    - Type SP Structural Course (1.5") (TLC)
    - Friction Course FC-5 (0.75") (Rubber)
- Roadway Widening (Mainline)
  - Optional Base Group 11
  - Type SP Structural Course (3") (TLC)
  - Friction Course FC-5 (0.75") (Rubber)
- New Shoulder Construction
  - Optional Base Group 4
  - Type SP Structural Course (1.5") (TLC)
  - Friction Course FC-5 (0.75") (Rubber)

2.5.2 Existing Pavement Conditions

Based on a visual inspection of the pavement during our field reviews, the existing pavement condition appears to be fair/poor with extensive cracking and rutting observed at several locations within the limits of the project as shown in **Figure 2-5.**

Figure 2-5 Existing Pavement Conditions

2.5.3 Pavement Condition Survey

Based on the 2021 Pavement Condition Survey (PCS) conducted in 2021, the existing pavement, as indicated by the crack rating, is considered fair/poor for the 45-mph posted speed limit on both sides of the roadway. The PCS rating from 2021 are listed in **Table 2-2.**

Table 2-2 Pavement Condition Ratings

Milepost Limits	Side (Direction)	2022 PCS Ratings (Conducted in 2021)		
		Crack	Ride	Rut
11.939 to 13.417	Both	4.5	7.6	9.0

2.5.4 Ground-Penetrating Radar

A Ground-Penetrating Radar (GPR) Test for this project was completed in November 2021; the results are summarized in **Table 2-3.** The GPR test results indicate the existing asphalt thickness varies from 2.79 to 10.2 inches, with an adjusted average of 4.10 inches on the left side of the roadway and from 2.95 to 13.93 inches with an adjusted average of 6.12 inches on the right side of the roadway. The GPR Results are shown in **Appendix D.**

Table 2-3 Summary of GPR Test Results						
Milepost Limits	Lane	Total Asphalt Thickness (inches)				Adjusted Average Pavement Thickness (inches)
		Minimum	Maximum	Average	Standard Deviation	
90060000 MP 11.939 - 13.417	L	2.79	10.2	5.88	1.12	4.10
	R	2.95	13.93	5.85	1.75	6.12
Overall		2.87	12.065	5.865	1.435	**5.56**

2.6 Analysis of Existing Deficiencies

2.6.1 Design Criteria

This Scoping Report analyzes the existing conditions for compliance with the design criteria from the current edition of the FDM (January 2023). Existing components reviewed include roadway, signing & pavement markings, lighting and signalization. It is the Designer's responsibility to implement the design criteria from the latest edition of the FDM and FDOT Standard Plans effective for this project (Letting Date November 2025). Other documents used for review of this RRR Project include the latest editions of the following manuals or guidelines:

- American Association of State Highway and Transportation Officials (AASHTO) A Policy on Geometric Design of Highways and Streets
- FDOT Utility Accommodation Manual (UAM)
- Americans with Disabilities Act (ADA) Standards for Accessible Design
- FDOT ADA Standards for Transportation Facilities (2006)
- AASHTO Roadside Design Guide (RSDG)
- FDOT District 6 Design Handbook
- FDOT Drainage Design Guidelines
- Americans with Disabilities Act Accessibility Guidelines (ADAAG)
- Public Right-of-Way Accessibility Guidelines (PROWAG)

2.6.2 Lanes

2.6.2.1 Lane Width

Based on a review of the plans from the resurfacing Project FPID 405582-8-52-01 (FY 2008), the existing travel lane widths are 12 feet wide throughout the project limits. The existing two-way left-turn lane as well as the auxiliary lanes and right turn lanes are also 12 feet wide. The existing roadway lanes provide the minimum 12 feet required for the context classification and design speed and are to remain.

2.6.2.2 Pavement Cross Slope

The existing pavement cross slopes will be documented by the Design Survey to be performed as part of the final Design Phase of this project. Based on a review of the plans from the most recent resurfacing project FPID 405582-8-52-01 (FY 2008), the existing pavement cross slopes along the project corridor were constructed with standard cross slopes. Analysis of the digital terrain model (DTM) to identify specific locations with substandard cross slopes is not included in this report. It is assumed the existing cross slopes may be substandard within the project limits.

Based on the Department's Practical Design Guidelines, minor cross slope correction should be eliminated from Resurfacing Projects, if the existing cross slopes are within the allowable ranges per FDM, Section 210.2.4.1, Table 210.2.3. The District Design Handbook states "cross slope correction should be included in the scope of work only when historical crash data can be directly attributed to the deficient cross slope and the cross-slope correction can be practically constructed without extreme constraints or impacts."

At the time of this report submittal, the District Traffic Operations Office has not identified a significant crash pattern directly related to substandard cross slopes within the project limits. The Designer is responsible for reviewing the most recent five-year crash data and coordinating with the District Traffic Operations Office to determine if there is a historical crash pattern directly attributed to the deficient cross slopes.

2.6.3 Median

The median width is not applicable to 2-lane rural sections.

2.6.4 Shoulders

The existing roadway typically has a 12 feet flush shoulder with 10-11 feet paved in the northbound direction and 5-10 feet paved in the southbound direction. The segment of the roadway approaching the Snake Creek Bridge has shoulder gutters on both sides of the roadway. Based on the FDM RRR criteria, the existing shoulder widths meet criteria and will be maintained.

2.6.5 Curbed Roadways

There are no curbs along the roadway.

2.6.6 Roadside Slopes

In general, there are no unshielded steep side slope conditions present within the project limits, except for the approach roadway adjacent to the Snake Creek Canal bridge which has steep

slopes shielded with guardrail. In addition, there is a small segment along the corridor where a barrier wall is present to shield the elevated ground level.

2.6.7 Border Width

The existing border width along the project limits is less than the minimum 40 feet requirement for this roadway context class and design speed. However, since this is a RRR project and right of way is limited, the existing minimum border width of 14 feet will be maintained since it meets the 8 feet absolute minimum border width requirement.

2.6.8 Horizontal Alignment

There are 3 horizontal curves located within the project limits based on the existing as-built plans. Per FDM Table 210.8.2, the existing horizontal curves meet the minimum radius requirements of 849 feet for a 55-mph roadway.

Table 2-4 Existing Horizontal Alignment

Curve No.	Design Speed (mph)	Length (ft)	Radius (ft)	Super-elevation (%)
1	55	997.21	12,500.00	NC
2	55	781.76	10,000.00	NC
3	55	693.495	2,864.937	4.8%

2.6.9 Superelevation

There are three horizontal curves located within the project limits. Two of the curves have normal crown superelevation, whereas the last curve has superelevation of 4.8%. All the curves provide the required superelevation for 55 mph design speed and are to remain. The designer should however check the cross slopes from the design survey to confirm the superelevation or provide any correction necessary.

2.6.10 Vertical Alignment

2.6.10.1 Grades

No vertical alignment information was found in the existing plans available.

2.6.10.2 Vertical Curvature

No vertical alignment information was found in the existing plans available.

2.6.10.3 Vertical Clearance

Overhead Mast Arms: There are no overhead signs within the project limits. However, there is an existing mast arm with vehicle sensors just north of North Drive for the adjacent weigh station. The exact vertical clearances of the mast-arm mounted vehicle detectors are unknown at this time and will be documented by the Design Survey to be performed as part of the final Design Phase of the project.

Utilities: Existing utility lines cross over the roadway at several locations within the project limits. The exact vertical clearances for the utilities are unknown at this time.

2.6.11 Sight Distance

2.6.11.1 Stopping Sight Distance

No vertical alignment information was found in the existing plans available for evaluation of the vertical stopping sight distance. For the horizontal curves, Curve #3 with radius of 693.495 feet requires a 44 feet horizontal sight line offset (HSO) to provide the required 495 feet stopping sight distance. Based on the field review, there are existing utility poles within the HSO. As such, a design variation for stopping sight distance will be required to maintain the existing utility poles. The other remaining horizontal curves meet standards.

2.6.11.2 Clear Sight Triangles

Clear sight triangles were evaluated at the intersections and driveways within the project limits. Based on field observations and an office review, obstructions to intersection sight distance were identified at a majority of intersections and driveways within the project limits as shown on the Roadway Plans. **Figure 2-6** shows examples of existing intersection sight distance issues.

Figure 2-6 Clear Sight obstructions at intersections

Based on field observations and an office review, sight triangle obstructions consist of trees and vegetation, utility poles and above ground utilities, signposts, fences, and parked vehicles in adjacent parking lots. At the time of this Scoping Report submittal, the District Traffic Operations Office has not documented any specific intersections where a significant crash history is directly related to the existing sight triangle obstructions. Where intersection sight distance obstructions are located within the right of way and are easily movable, the Designer should consider relocation of the obstruction. Any proposed tree relocation/removal should be coordinated with the District Landscape Architect. If relocation/removal of any obstructions is deemed unfeasible, a design variation for clear sight distance is required.

2.6.12 Intersections

This RRR Scoping Report does not include an evaluation of the existing intersections to determine if a Traffic Engineering Study is required.

2.6.13 Lane Tapers & Auxiliary Lanes

Exclusive single left-turn lanes are present within the project limits based on as-built plans and field reviews. The locations of the existing single left turn lanes present at various intersections within the project limits as shown in **Table 2-5.**

Table 2-5 Existing Turn Lane Length

Intersection	Turn Lane Direction	Total Length (ft)	Taper Length (ft)	Meets Minimum Deceleration Distance per FDM 212.6
Venetian Boulevard	NB Left	472	50	Yes
SB to Weight Station	SB left	270	50	No
Ragged Edge Resort	SB left	270	50	No
E Ridge Road/Monroe County Sheriff Headquarters	SB Left	245	50	No
Islamorada Chamber of Commerce	NB Left	195	50	No
Executive Bay Club	NB Left	250	50	No

Based on the existing plans, all the taper lengths meet the required 50 feet length. Deceleration lengths for the turn lanes were evaluated based on minimum criteria from FDM Section 212.6, Exhibit 212-1, and Exhibit 212-2. The minimum deceleration distance of 350 feet for the design speed of 55 mph is not met at most of the existing locations. At the time of this Scoping Report submittal, the District Traffic Operations Office has not documented any specific crash history

related to the turn lanes and deceleration lengths. A design variation for deceleration length will be required.

There are also several locations with exclusive right tun lanes at various intersections. There are 4 locations where the taper length exceeds the standard 50' required. It is recommended to restripe these areas to provide the standard 50' taper lengths.

The project corridor also includes median and outside acceleration lanes from various intersections and the adjacent weigh station. The existing merge tapers for the median acceleration lanes meet the FDM Exhibit 212-2 requirements for 55 mph. However, the merge taper for the outside acceleration lane from the weight station in the northbound direction does not meet this requirement. It is recommended to widen the pavement to extend the merge taper length to meet the requirements.

2.6.14 Driveways

Existing driveways typically consist of radial returns or are unpaved, dirt roads. No inactive driveways were encountered from our site visits. There were a multitude of instances in which the driveway, whether residential or commercial, was extensively deteriorated to the point that these locations exhibited loose asphaltic material and/or ponding issues. At the time of this Scoping Report submittal, no ADA complaints have been received concerning the FKOHT or driveway cross slope deficiencies within the project limits. It is recommended to provide or rehabilitate asphalt pavement to the right of way limits for the adjacent driveways within the project limits.

2.6.15 Drainage

The existing drainage system and its condition were reviewed in the field. Throughout the project limits, the existing drainage typically consisted of an open drainage system with roadside swales. **Figure 2-7** shows some pictures of this condition. Due to the recommended shared use path construction, regrading of the existing swales and/or additional drainage infrastructure may be required to account for the additional impervious area and swale storage loss.

Figure 2-7 Existing Drainage System

This Scoping Report does not include an evaluation of the hydraulic, safety and physical adequacies of the existing drainage system. This Scoping Report does not include an evaluation of the hydraulic, safety and physical adequacies of the existing drainage system. Since this is a RRR project, no changes in the existing drainage system are anticipated. However, the designer should regrade locations with identified ponding and relocate inlets were required.

2.6.16 Pedestrian, Bicyclists, and Transit Facilities

2.6.16.1 Bike Path/Shared Use Path

There is an existing bike path – the Florida Keys Overseas Heritage Trail (FKOHT) – located on the west side of the roadway within the project limits. The path width is 6 feet as indicated in the existing typical section. Locations of uneven and damaged asphalt were identified at some locations within the project limits. **Figure 2-8** shows some of the deficiencies encountered during the field review. Several pedestrians and bicyclists were observed using the existing trail.

The FDOT District 6 Planning Office completed a feasibility study to evaluate the FKOHT and recommended reconstruction of the existing trail to provide an 8-10 feet shared use path for the adjacent roadway segment which is also applicable to this roadway segment. This will require a design variation and approval from the Chief Planner approval for a trail width of less than twelve (12) feet since the FKOHT is a SUN Trail network per the FDM. The conceptual design plans for the reconstruction of the FKOHT from East Ridge Road to Executive Bay Club are shown in **Figure 3-5**.

Figure 2-8 Damaged or Uneven Bike Path

Based on the evaluation, there are locations along the shoulders where transmission poles cannot be avoided. The proposed design will meander the path around the transmission poles at these locations. A Design Variation for shared use path horizontal clearance will be required as well as the incorporation of additional striping and object markers to delineate the obstruction.

Where the minimum separation cannot be obtained, a Design Variation for the shared use path's separation from roadway would also be required. To mitigate the issue, consider the installation of a crash worthy barrier at the clear zone.

Given the narrow right of way and swales, the proposed shared use path would generally be located as close to the right of way line as possible while still providing the 4' horizontal clearance from edge of the path required per FDM. Due to limited vertical information, the side slopes must be verified to confirm that elevations at the right of way line can be matched or if additional mitigation is needed to address possible drop-off conditions.

A feasibility study and design plans for the installation of an overhead pedestrian walkway bridge over Overseas Highway within the City of Islamorada at the Founders Park (MM ±87) was completed in 2021 (FM 442040-1). However, due to lack of public support, the project was shelved. The FDOT Traffic Operations Office is evaluating at-grade crossing options at this location.

There are currently no pedestrian facilities along the segments with no shared use path. Per FDM 222.2.1, sidewalk is required on high speed curbed and flush shoulder roadways within C2T and C3R context classification where the demand for use is demonstrated. We observed pedestrians

using the existing FKOHT bike facility. As such, a design variation for lack of pedestrian facility is required for the segments without shared use path.

2.6.16.2 Curb Ramps and Detectable Warnings

There are no curb ramps and detectable warning surfaces within the project limits since there are no designated sidewalks. With the proposed shared use path, detectable warnings should be provided at all the intersections and commercial driveway crossings.

2.6.16.3 Crosswalks

Existing marked crosswalks are typically 10 feet wide located at 6 intersections for the bike lanes. Although there are no signalized intersections within the project corridor, the existing crosswalks will be upgraded to special emphasis crosswalks for the bike lanes and shared use path.

2.6.16.4 Bicycle Facilities

The project segment contains the Florida Keys Overseas Heritage Trails (FKOHT), a 6-foot-wide bike path on the west side and 5-foot buffered bike facility on the existing paved shoulder on the east side. There are numerous instances of cracked asphalt, missing asphalt and faded striping that warrant the milling and resurfacing of the bike path. We recommend reconstruction of the existing 6 feet bike facility to provide an 8-10 feet shared use path with 2 feet (minimum) wide graded area and maximum 1:6 slope adjacent to both sides of the path where feasible as per FDM 222.7. Due to right of way constraints, the 6-foot bike facility segment from begin project to north of Venetian Blvd will be resurfaced and maintained. The designer should coordinate with the DDE to provide green colored bicycle pavement markings at conflict locations.

2.6.16.5 Pedestrian Signals

There are no pedestrian signals within the project limits.

2.6.16.6 Transit Facilities

There are no transit facilities within the project limits.

2.6.17 At-grade Railroad Crossing

There are no railroad crossings within the project limits.

2.6.18 Lighting

There is lighting luminaires supported on bracket arms mounted on some of the transmission poles along the west side of the project corridor. In addition, the segment within the limits of the weigh station has conventional light poles with LED luminaires. At the time of this report submittal, the District Lighting Engineer has not documented specific lighting recommendations to be addressed by this RRR Project. However, it is recommended to evaluate the need for lighting along the remaining segment of the corridor including the proposed shared use path.

2.6.19 Signing and Pavement Markings

Existing signing includes ground-mounted signs within the swale along the project corridor. Faded, broken or substandard signs were observed within the project limits.

Based on field observations, the existing pavement markings are generally in fair/poor condition, with faded striping as well as raised reflective pavement markers and delineators that are missing or with low reflectivity. **Figure 2-9** illustrates examples of substandard signing and pavement markings within the project limits.

Figure 2-9 Existing Signs and Pavement Markings

An existing sign inventory is not included in this Scoping Report. A review of all existing signage with the Manual of Uniform Traffic Control Devices (MUTCD) and the FDOT Traffic Engineering Manual (TEM) criteria should be conducted at the Design Phase. Based on field observations, there are some existing signs within the project limits that are defaced/damaged, as well as signs that do not have a breakaway support and are not shielded by barrier or guardrail, and therefore do not comply with the latest standards. Most of the existing single-post signs along the roadside comply with the standard placement per Index 700-101. The District Traffic Operations Office has identified additional signage and pavement markings for safety-related countermeasures.

2.6.20 Signalization

There are no signalized intersections within the project limits.

2.6.21 Bridges Structures

There are no bridge structures within the project limits. The Snake Creek Cabal Bridge (Bridge #900077) is located adjacent to the project.

2.6.22 Roadside Safety

2.6.22.1 Lateral Offset & Control Zone

Light poles

There are light poles as well as power poles with attached luminaires along the project corridor. The existing light poles are ether shielded or provide the required lateral offset of 18 feet minimum from the travel lane or 8 feet from auxiliary lane.

Mast Arms

The existing mast-arm with vehicle sensor located just north of North Dr is shielded by guardrail and provides the required 5 feet minimum deflection distance.

Trees

All the existing trees along the corridor meet criteria for lateral offset of greater than 18 feet – the clear zone width – for the flush shoulder roadway.

Aboveground Utilities

There are several existing above ground utility poles within the project limits with lateral offsets outside the new construction clear zone.

Traffic Control Signs

All existing ground-mounted signs meet the minimum lateral offset requirements from the Standard Plans Index 700-101 and provide for the minimum 6 feet offset from the edge of the shoulder.

ITS Poles

There is an ITS pole north of Venetian Blvd. on the south side shielded by guardrail. The existing ITS pole does not provide the required deflection from the guardrail. A design variation for lateral offset is required for the existing conditions to remain.

2.6.22.2 Roadside Barriers

There are existing guardrails located on both sides of the roadway. The locations, conditions and recommendations are provided in the table below.

Table 2-6 Existing Guardrail Condition					
#	From	To	Side	Condition	Recommendation
1	74+00	79+60	LT	The existing guardrail is located behind the valley gutter. The guardrail, thrie beam connection and end anchorage are in good condition.	Maintain existing condition
2	74+00	83+00	RT	The existing guardrail is located behind paved shoulder. The guardrail and thrie beam connection are in good condition. End anchorage broken	Replace guardrail end anchorage
3	89+20	90+00	LT	The existing guardrail is located behind paved shoulder. The guardrail is in fair condition. However, end anchorages are substandard	Replace guardrail and end anchorages
4	94+80	99+40	RT	The existing guardrail is located behind paved shoulder. The guardrail, thrie beam connection and end anchorage are in good condition.	Maintain existing condition
5	99+00	107+80	LT	The existing guardrail is located behind paved shoulder. The guardrail and end anchorages are in good condition.	Maintain existing condition
5	119+80	127+80	LT	The existing guardrail is located behind paved shoulder. The guardrail and end anchorages are in good condition.	Maintain existing condition
5	144+00	146+20	RT	The existing guardrail is located behind paved shoulder. The guardrail and end anchorages are in good condition.	Maintain existing condition

There is also an existing barrier wall located along the south side between Sta 89+00 to 94+80. The existing barrier is offset adjacent to the paved shoulder in the northbound direction and 11-12 feet from the travel lanes. The crash cushion is in poor condition and is recommended to be replaced.

2.6.23 Ancillary Structures

Existing ancillary structures within the project limits include two mast arms, multi-post signs, and utility poles. The existing conditions are to remain.

2.6.24 Landscape

There are some existing trees on both sides of the roadway. The proposed reconstruction of the bike path to provide an 8-10 feet shared use path will impact some landscape along the corridor which will have to be restored. Provide Tree Disposition and Relocation plans and analyze the impacts to existing trees from the proposed construction activities. Provide tree protection fence

as necessary. Coordinate any impacts to existing landscape with the District Landscape Architect's office.

2.7 Operating Conditions

2.7.1 Access Management

SR 5/US 1/Overseas Highway is designated with an Access Management Class 6 within the project limits. The existing condition is an undivided roadway for the entire length of the project from Venetian Boulevard to north of Executive Bay Club. The existing conditions include 8 unsignalized intersections within the project limits. The existing condition is to remain.

2.7.2 Maintenance Concerns

At the time of this Scoping Report, the Marathon Maintenance Yard, staffed by Ferrovial Services, via the Asset Maintenance contract # E6M77 with the Department, has not documented any specific maintenance issues within the project limits to be addressed by this RRR Project. It is the Designer's responsibility to coordinate with the District Maintenance Office to determine if any additional outstanding maintenance issues within the project limits will be addressed or should be included in the scope of work for this RRR Project.

2.8 Safety Conditions

This Scoping Report does not include an assessment of the historical crash statistics by a qualified safety specialist. The District Traffic Operations Office provided a RRR Safety Review to identify significant crash locations, probable causes, suggested correction measures, or additional safety improvements to be included in the scope of work for this RRR Project. The safety report is included in **Appendix I**.

2.9 Environmental

An Environmental Resource Desktop Analysis (ERDA) was prepared by the District PLEMO environmental consultant and is included in **Appendix B**. A contamination impact review utilizing the FDOT District VI Contamination Screening Tool was performed for the project corridor. The Contamination Screening Tool contains Geographic Information System layers depicting contaminated sites identified by the Florida Department of Environmental Protection and Miami Dade County Department of Regulatory Economic Resources. Based on said review, a known contaminated site has been identified within a 500-ft radius of the project corridor. However, there are no drainage features, subsurface excavation, and/or dewatering in proximity of the known contaminated sites, therefore, no contamination impacts are anticipated. If drainage,

dewatering or other subsurface work is added to the project scope, additional evaluation for contamination impacts may be required.

A Permit Involvement Form (PIF) will have to be requested during the design phase. The PIF will facilitate with the identification of relevant environmental concerns within the project area including wetland and/or surface water impacts, threatened or endangered species and potential contamination as well environmental permits and plan notes requirements. The Designer shall coordinate with the Environmental Permits & NPDES Coordinator to determine if any environmental permits will be required for this project.

3.0 RECOMMENDED IMPROVEMENTS

To address the project purpose and need and the deficiencies identified, the design of this project should implement the following recommendations**.**

3.1 Roadway

- Mill and resurface the existing pavement.
- Widen existing pavement to extend the merge taper length from the weigh station in the northbound direction to meet the requirements.
- Correct any cross slope or superelevation deficiencies at the horizontal curve at the north end of the project limits.
- Provide keyhole lanes for the existing right turn lanes along the northbound direction and reconstruct the existing shoulder pavement to provide full depth pavement for the right turn lane.
- Adjust the existing storm drain manholes, utility manhole tops, and valves within the limits of milling & resurfacing or shared-use path reconstruction, as necessary and provide ADA compliant manhole and valve box covers.
- Regrade the existing roadway side slopes to meet standards and install pedestrian/bicycle railing along the proposed shared use path where applicable.
- Replace guardrail and anchorages as shown in the concept plans.
- Reconstruct driveway locations with pavement deterioration.
- Address drop offs due to vehicle off tracking at side street intersections.
- Repair/replace any damaged drainage inlet tops.

3.2 Pedestrian and Bicycle Facilities

- Reconstruct the existing 6 feet bike path to provide an 8-10 feet shared use path with 2 feet (minimum) wide graded area and maximum 1:6 slope adjacent to both sides of the path where feasible from East Ridge Road to Executive Bay Club.
- Provide detectable warnings at all the intersections and commercial driveway crossings of the shared use path. A short section of concrete that will accommodate detectable warming marking is required.
- Above ground installations such as poles, signs, mailboxes etc. should be removed outside 4-feet side shared use path horizontal clearance zone, where feasible.
- Provide green colored bicycle pavement markings at conflict locations.

3.3 Signing and Pavement Markings

- Upgrade all broken and substandard ground-mounted signs to comply with the latest editions of the FDOT Standard Plans, the FDOT Traffic Engineering Manual (TEM), and the Manual on Uniform Traffic Control Devices (MUTCD).
- Replace and upgrade all pavement markings to meet the latest FDOT Standard Plans for Road Construction.
- Provide 7 feet buffered bicycle lane keyholes at the exclusive right turn locations in the northbound direction.
- Replace all missing, faded and/or damaged signs within the project limits.
- Relocate existing signs outside of shared use path horizontal clear zone or provide at least 2 feet from the edge of the shared use path where right of way is constrained.
- Replace existing tubular delineators.

3.4 Lighting

- Perform lighting warrant analysis to determine the need for continuous lighting along the project corridor and provide adequate corridor and shared use path lighting if warranted.
- Replace pull boxes impacted by the reconstruction of shared-use path and/or pedestrian curb ramps.
- Relocate surface pull boxes outside of the shared use path where feasible.

3.5 Landscape

- Trim trees and shrubs to comply with clear sight triangle and shared use path clearance requirements where feasible. Location of the existing trees and shrubs must also comply with the proposed shared use path horizontal clear area requirements.
- Relocate existing trees impacted by proposed construction activities, as necessary.
- Restore any landscape damaged by the proposed reconstruction of the existing bike path to an 8-10 feet shared use path.
- Correct any steep side slope deficiencies adjacent to the proposed shared use path along the project corridor.

3.6 Safety Improvements

The District Traffic Operations Office provided a 3R Safety Review to identify significant crash locations, probable causes, suggested correction measures, or additional safety and non-safety improvements to be included in the scope of work for this RRR Project.

Segment-wide

Safety Improvements

- Coordinate with local law enforcement officials (Monroe Police Department) to increase existing efforts to enforce the posted speed limit during the non-peak hours to ensure compliance and mitigate the reported Rear End collisions which may have occurred due to excessive speed.
- Coordinate with the Department's Transportation Systems Management & Operation Unit (TSM&O), the traffic signal maintaining agency, to replace the missing "Signal Warning" with "Prepare to Stop When Flashing" flashing beacon sign assembly located on the southbound approach to the Snake Creek drawbridge.

Non-Safety Improvements

- Upgrade all existing crosswalk markings to special emphasis crosswalk markings.

Cluster 1 (MP 12.030 to MP 12.380)

Safety Improvements

- Install "Lane Ends" (W4-2L) signs for the northbound and southbound merge lane transitions located north and south of Venetian Boulevard to mitigate Rear End collisions occurring within the limits of the merge lane transitions.

Non-Safety Improvements: None

- Upgrade the auxiliary transition lane length for the northbound exclusive right-turn acceleration lane at the NB Off Weigh Station intersection based on the 45 MPH posted speed.

Cluster 2 (MP 12.896 MP 13.093)

Safety Improvements: None

Non-Safety Improvements:

- Upgrade the taper length for the northbound right-turn lane at the East Ridge Road intersection based on the 45 MPH posted speed.
- Reduce the length of the existing northbound left-turn lane at the East Ridge Road intersection (MP 13.079) to accommodate a northbound left-turn lane to service Gimpy Gulch Drive and the adjacent store (MP 12.97). Therefore, along SR 5 from south to north, the first northbound left-turn lane will service Gimpy Gulch Drive and the adjacent store, followed by a full median opening, then a painted median, and finally the second left-turn lane which will service the East Ridge Road intersection. This recommendation intends to

separate left-turning vehicles who intend to access Gimpy Gulch Drive and adjacent store from the SR 5 traffic stream and allow turning vehicles to perform the movement as a two-stage left-turn crossing maneuver. This is deemed feasible due to the light northbound left-turn vehicular demand observed at the East Ridge Road intersection.

3.7 Other Improvement Recommendations

An Environmental Resource Desktop Analysis (ERDA) was prepared by the District PLEMO Environmental Consultant, to be included as **Appendix B,** in the final report.

3.8 Design Exceptions and Variations

A review of AASHTO and FDOT Design Criteria for this RRR Project identified the following Design Variations required for this project.

- Design Variation for Lack of Pedestrian Facilities
- Design Variation for Clear Sight Triangles
- Design variation for shared use path width, separation, and horizontal clearance
- Design Variation for Deceleration Length
- Design Variation for Lateral Offset (mainline and shared use path)

At the Design Phase, an additional review is required to determine compliance for the following elements. The Designer is responsible for reviewing the Design Survey to determine if the existing conditions comply with the design criteria. A Design Variation may be required for the following elements:

- Design Variation for Vertical Clearance

3.9 Recommended Typical Sections

The existing cross sectional elements for the roadway typical section are recommended to remain the same as shown in **Figure 3-1** to **Figure 3-4.**

3.10 Concept Plans

Concept plans summarizing the existing deficiencies and recommended improvements are shown in **Figure 3-5.**

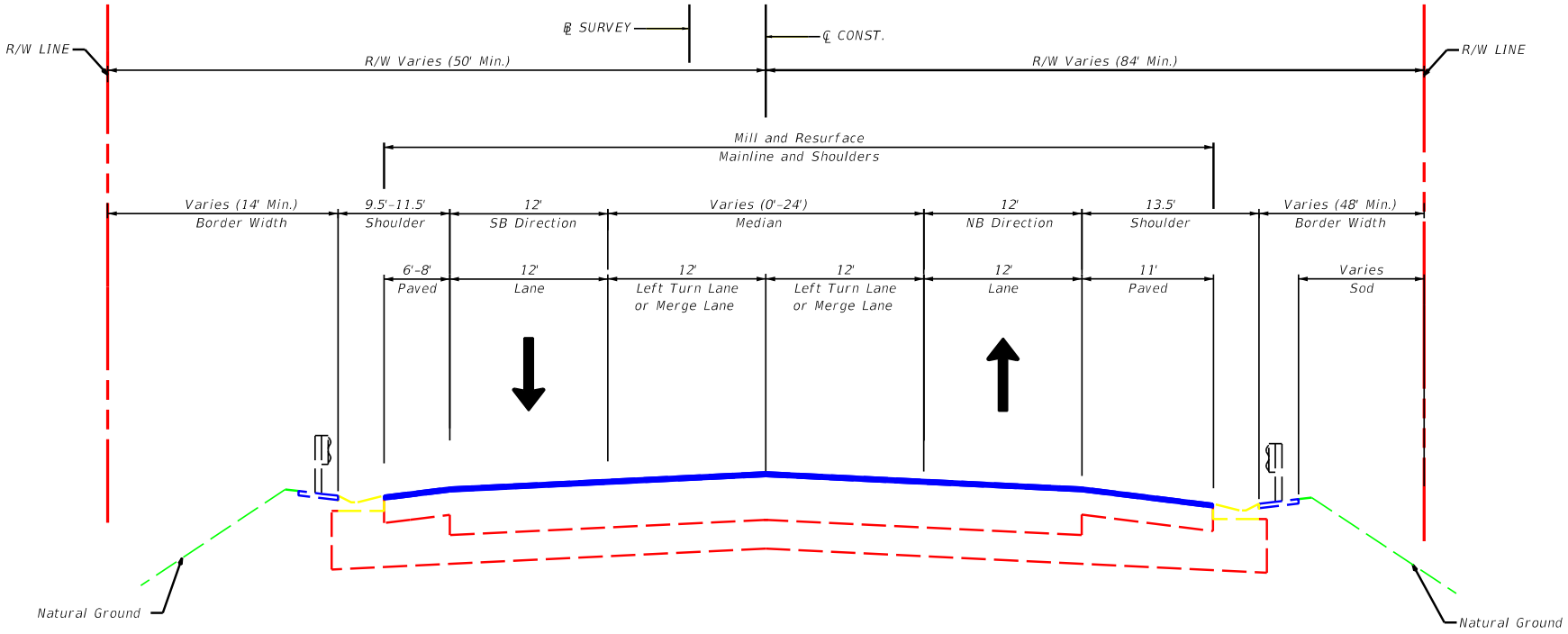


Figure 3-1 Recommended Typical Section: Snake Creek Bridge to W of Venetian Blvd.

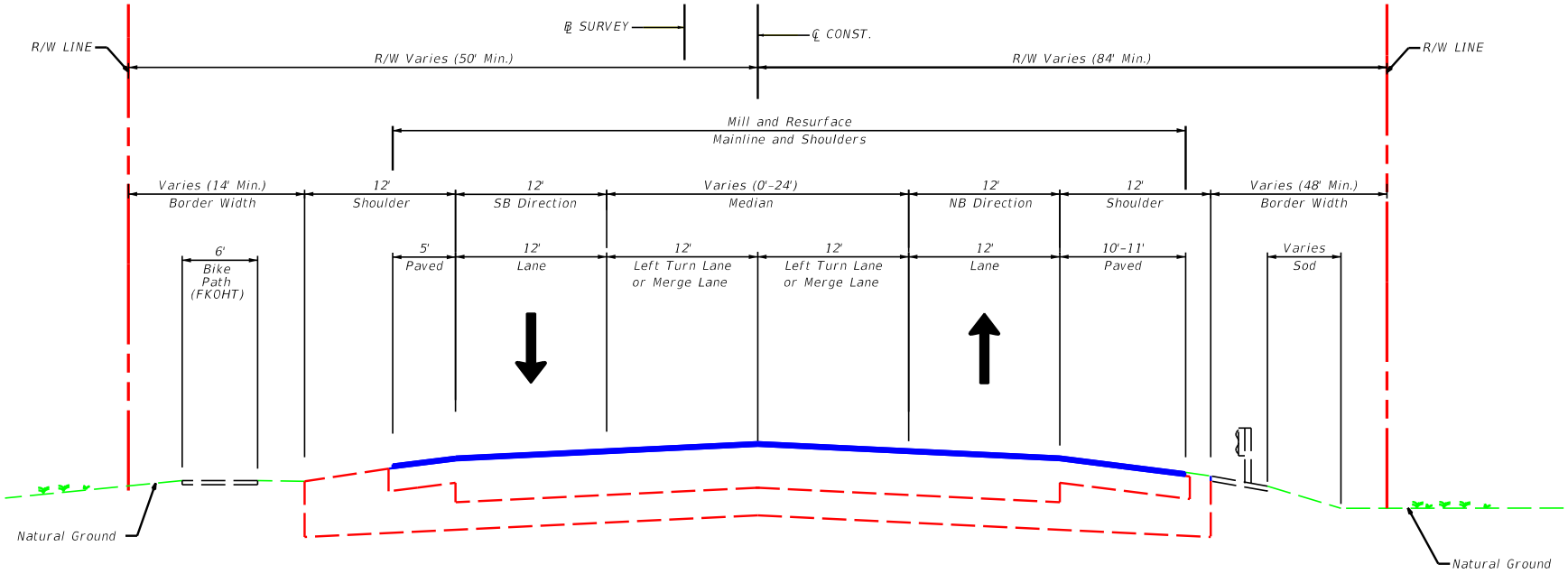


Figure 3-2 Recommended Typical Section: W of Venetian Blvd. to E of Venetian Blvd

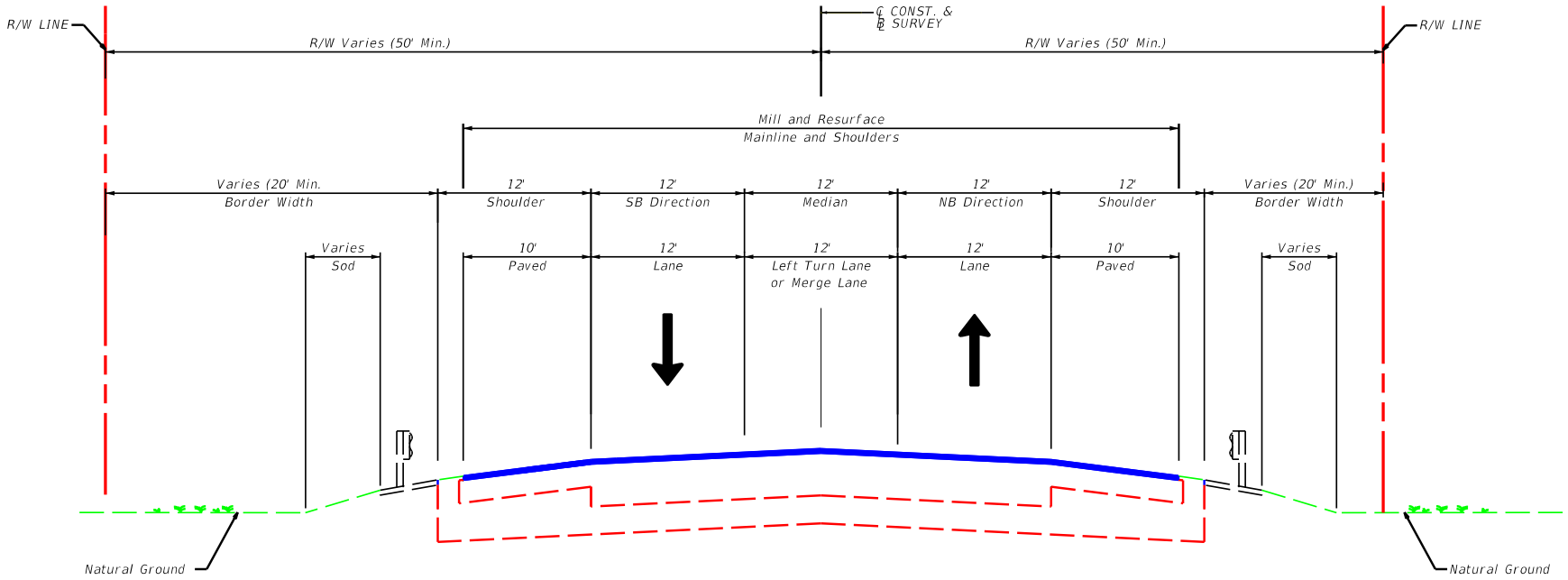


Figure 3-3 Recommended Typical Section: E of Venetian Blvd to N of East Ridge Road

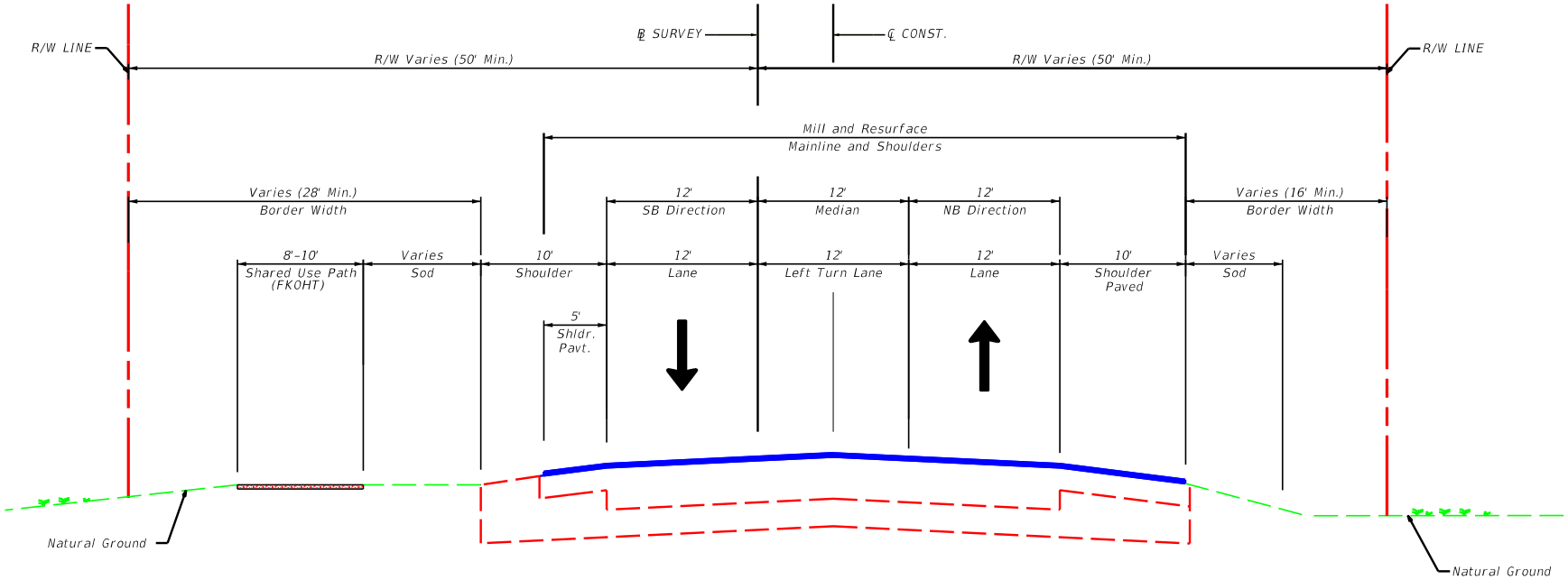
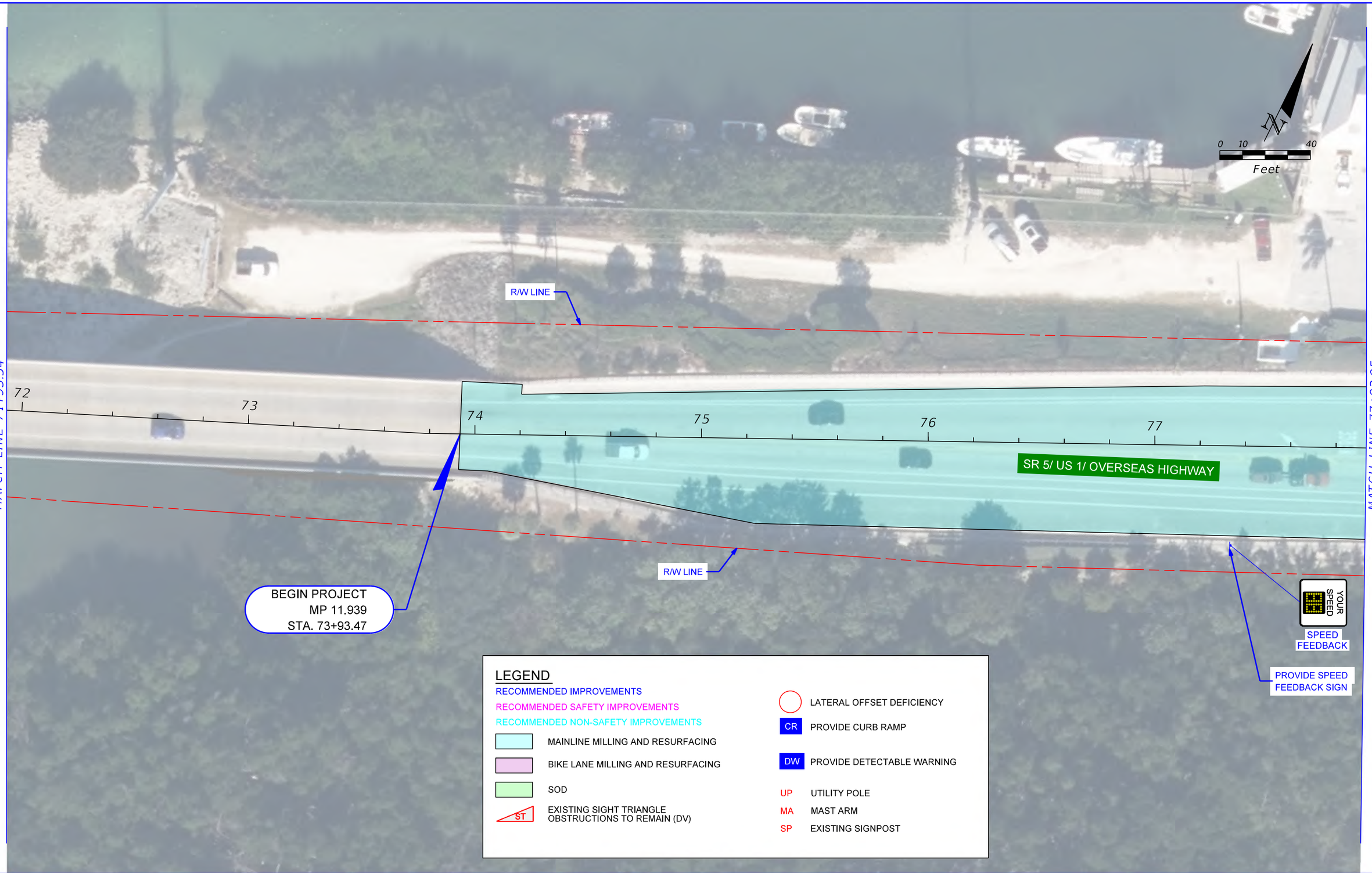


Figure 3-4 Recommended Typical Section: N of East Ridge Road to N of Executive Bay Club



FDOT DISTRICT 6
PLANNING AND ENVIRONMENTAL MANAGEMENT OFFICE
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MIAMI, FLORIDA 33172

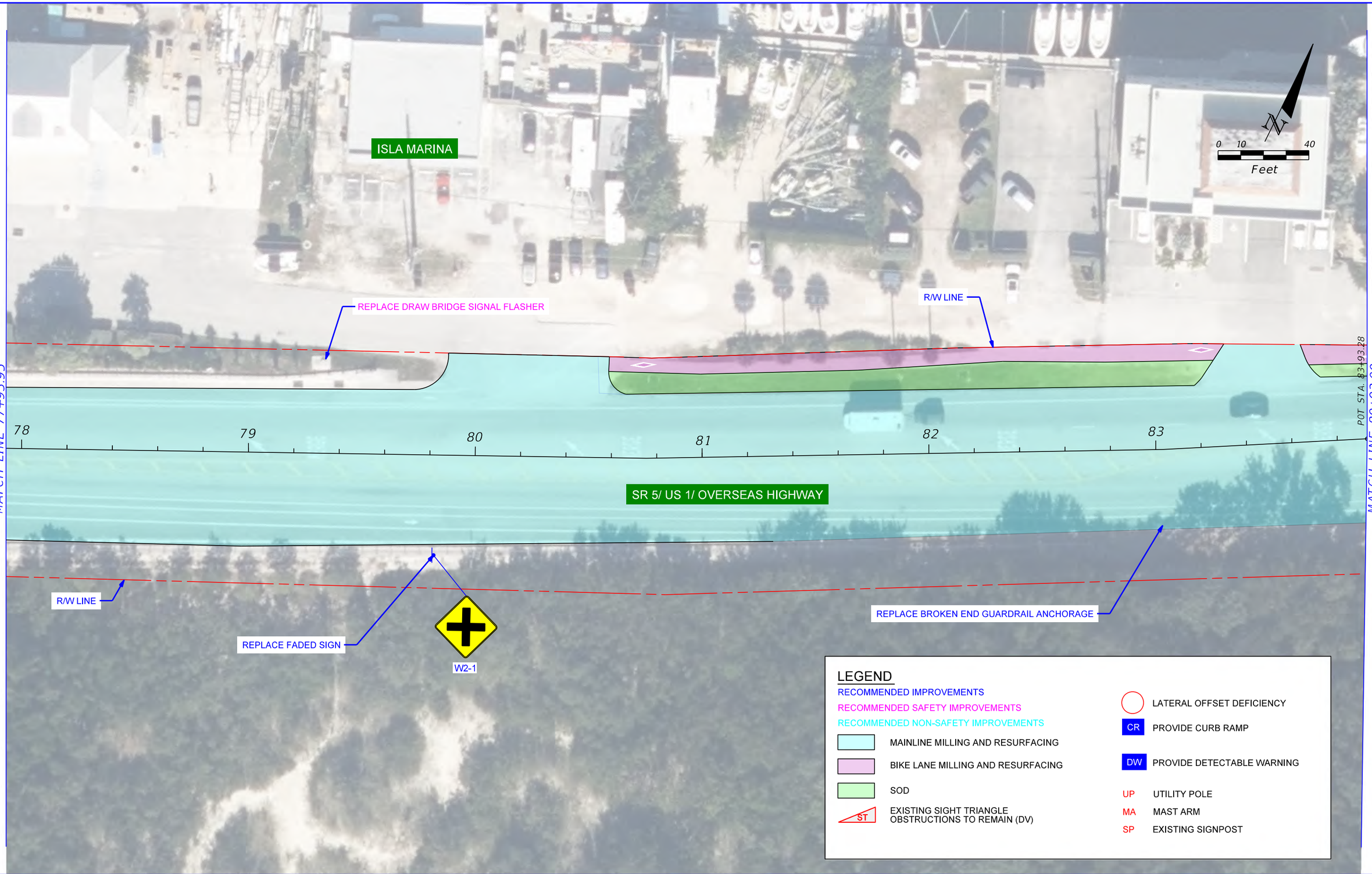
PAVEMENT RESTORATION ASSESSMENT REPORT FOR
SR 5/ US 1/ OVERSEAS HWY FROM WEST OF VENETIAN BLVD
TO NORTH OF EXECUTIVE BAY CLUB
(FM# 449738-1| ROADWAY ID: 9006000/ MP 11.939-13.417)
PLANTATION KEY

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 5	MONROE COUNTY	449738-1

FIGURE 3-5
DEFICIENCIES AND RECOMMENDATIONS

SHEET NO.
35



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1

PAVEMENT RESTORATION ASSESSMENT REPORT FOR
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DEPARTMENT OF TRANSPORTATION

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SR 5	MONROE COUNTY	449738-1

FIGURE 3-5
DEFICIENCIES AND RECOMMENDATIONS

SHEET NO.
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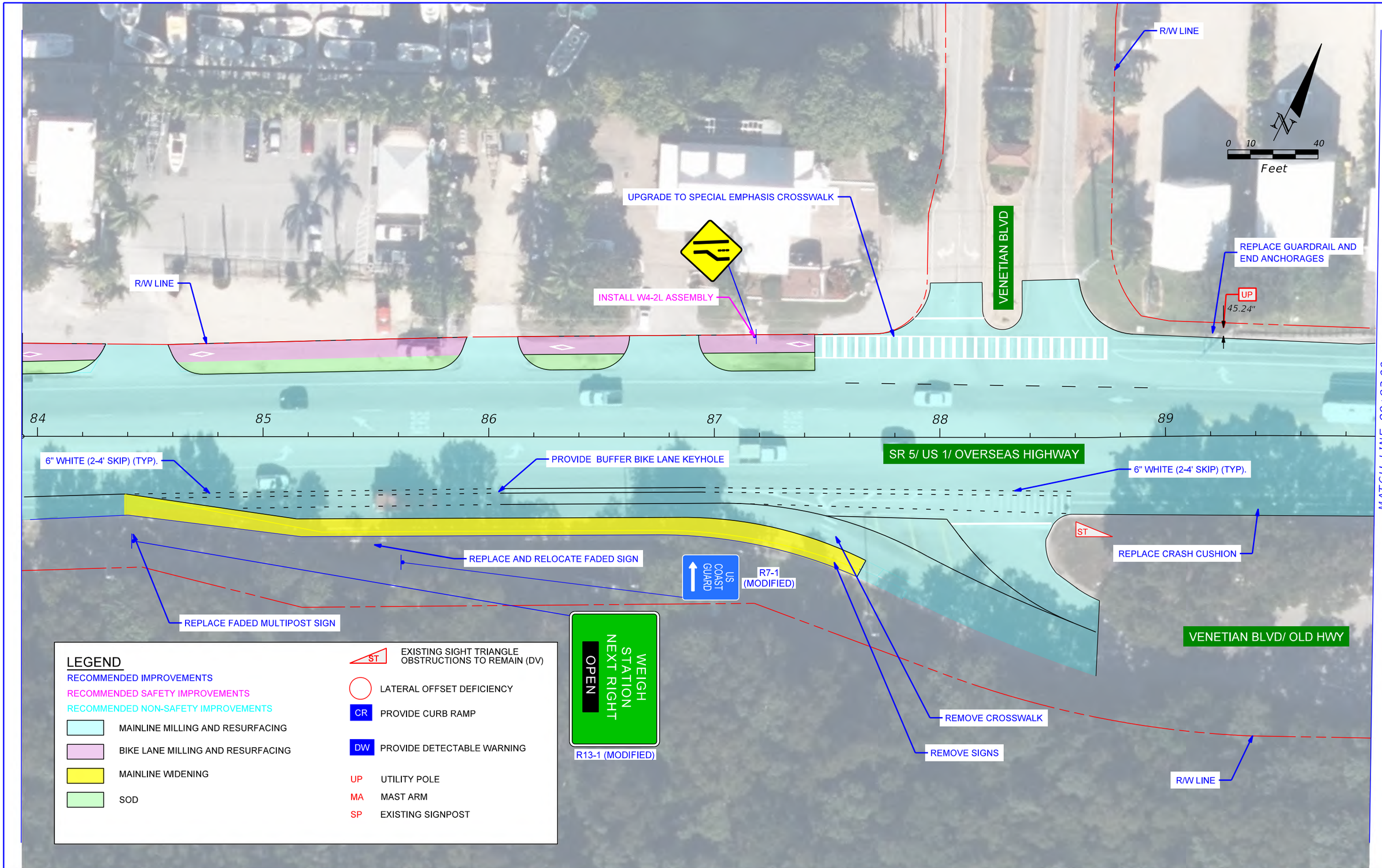

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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 5	MONROE COUNTY	449738-1

FIGURE 3-5
DEFICIENCIES AND RECOMMENDATIONS

SHEET NO. 37

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PAVEMENT RESTORATION ASSESSMENT REPORT FOR
SR 5/ US 1/ OVERSEAS HWY FROM WEST OF VENETIAN BLVD TO NORTH OF EXECUTIVE BAY CLUB
(FM# 449738-1/ ROADWAY ID: 9006000/ MP 11.939-13.417)
PLANTATION KEY

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 5	MONROE COUNTY	449738-1

FIGURE 3-5
DEFICIENCIES AND RECOMMENDATIONS

SHEET NO. 38

MATCH LINE 95+93.00

MATCH LINE 101+93.00

N

0 10 40

Feet

R/W LINE

96 97 98 99 100 101

SR 5/ US 1/ OVERSEAS HIGHWAY

47.4"

UP

VENETIAN BLVD/ OLD HWY

R/W LINE

LEGEND

RECOMMENDED IMPROVEMENTS

RECOMMENDED SAFETY IMPROVEMENTS

RECOMMENDED NON-SAFETY IMPROVEMENTS

MAINLINE MILLING AND RESURFACING

SOD

ST EXISTING SIGHT TRIANGLE OBSTRUCTIONS TO REMAIN (DV)

LATERAL OFFSET DEFICIENCY

CR PROVIDE CURB RAMP

DW PROVIDE DETECTABLE WARNING

UP UTILITY POLE

MA MAST ARM

SP EXISTING SIGNPOST

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1

PAVEMENT RESTORATION ASSESSMENT REPORT FOR
SR 5/ US 1/ OVERSEAS HWY FROM WEST OF VENETIAN BLVD TO NORTH OF EXECUTIVE BAY CLUB
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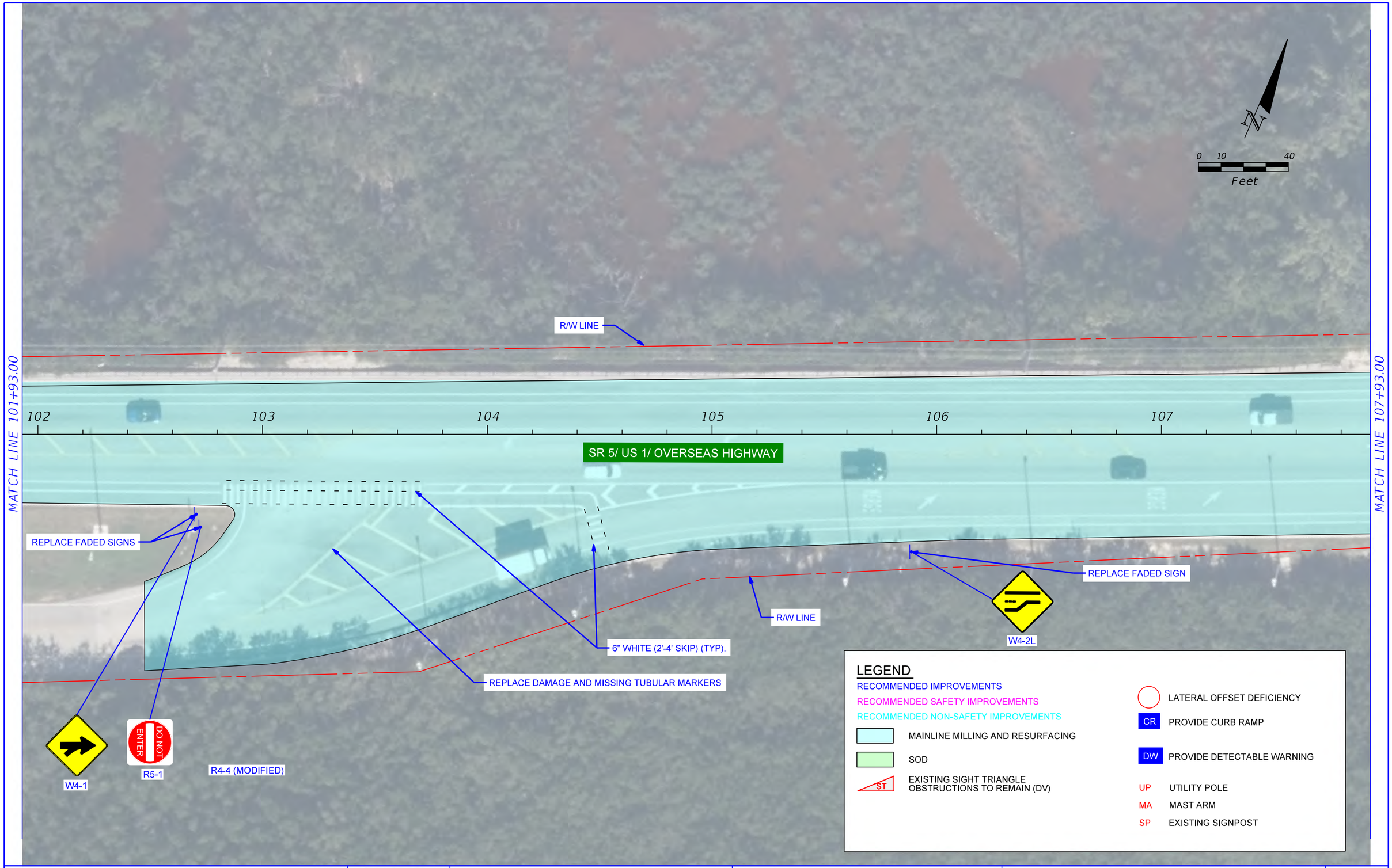
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 5	MONROE COUNTY	449738-1

FIGURE 3-5
DEFICIENCIES AND RECOMMENDATIONS

SHEET NO. 39



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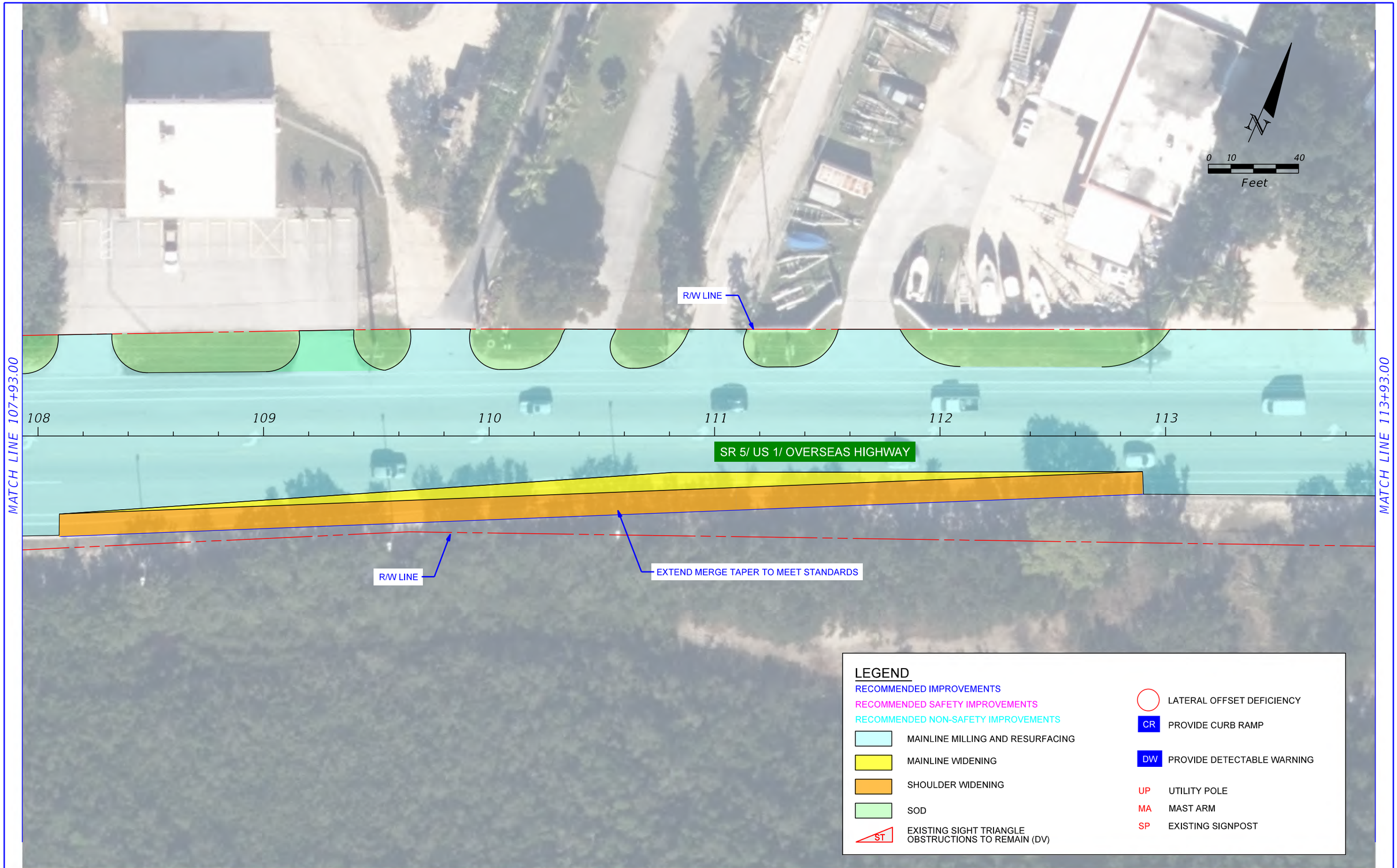
PLANTATION KEY

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 5	MONROE COUNTY	449738-1

FIGURE 3-5
DEFICIENCIES AND RECOMMENDATIONS

SHEET NO. 40



FDOT DISTRICT 6
PLANNING AND ENVIRONMENTAL MANAGEMENT OFFICE
1000 NW 111TH AVENUE
MIAMI, FLORIDA 33172

PAVEMENT RESTORATION ASSESSMENT REPORT FOR
SR 5/ US 1/ OVERSEAS HWY FROM WEST OF VENETIAN BLVD
TO NORTH OF EXECUTIVE BAY CLUB
(FM# 449738-1| ROADWAY ID: 9006000/ MP 11.939-13.417)
PLANTATION KEY

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 5	MONROE COUNTY	449738-1

FIGURE 3-5
DEFICIENCIES AND RECOMMENDATIONS

SHEET NO. 41

MATCH LINE 113+93.00

MATCH LINE 119+93.00

0 10 40
Feet

R/W LINE

114 115 116 117 118 119

SR 5/ US 1/ OVERSEAS HIGHWAY

R/W LINE

PROVIDE SPEED FEEDBACK SIGN

YOUR SPEED

SPEED FEEDBACK

LEGEND

RECOMMENDED IMPROVEMENTS

RECOMMENDED SAFETY IMPROVEMENTS

RECOMMENDED NON-SAFETY IMPROVEMENTS

MAINLINE MILLING AND RESURFACING

SOD

ST EXISTING SIGHT TRIANGLE OBSTRUCTIONS TO REMAIN (DV)

LATERAL OFFSET DEFICIENCY

CR PROVIDE CURB RAMP

DW PROVIDE DETECTABLE WARNING

UP UTILITY POLE

MA MAST ARM

SP EXISTING SIGNPOST

FDOT DISTRICT 6
PLANNING AND ENVIRONMENTAL MANAGEMENT OFFICE
1000 NW 111TH AVENUE
MIAMI, FLORIDA 33172

1

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DEPARTMENT OF TRANSPORTATION

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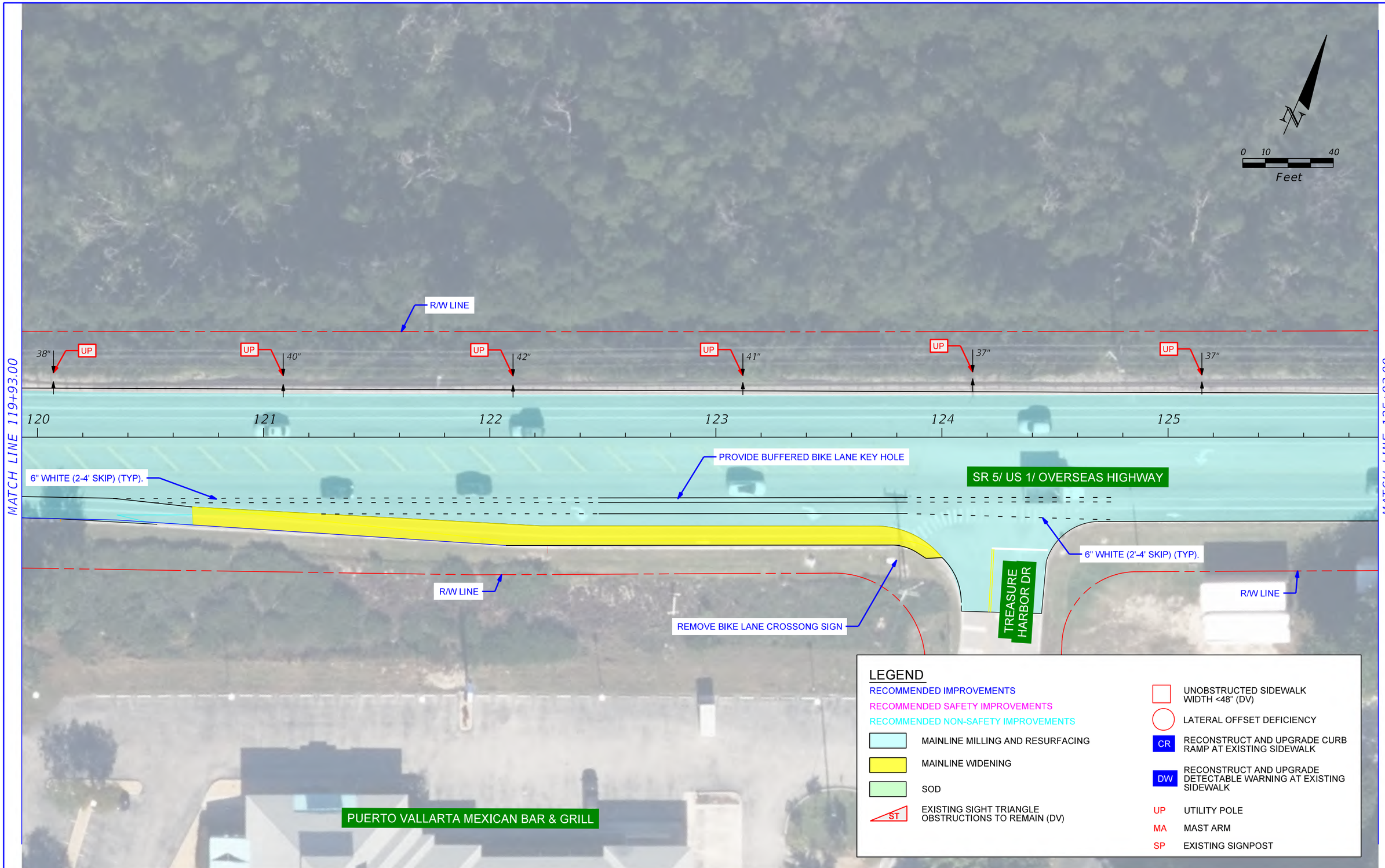
FIGURE 3-5
DEFICIENCIES AND RECOMMENDATIONS

SHEET NO. 42



FDOT DISTRICT 6
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1000 NW 111TH AVENUE
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1

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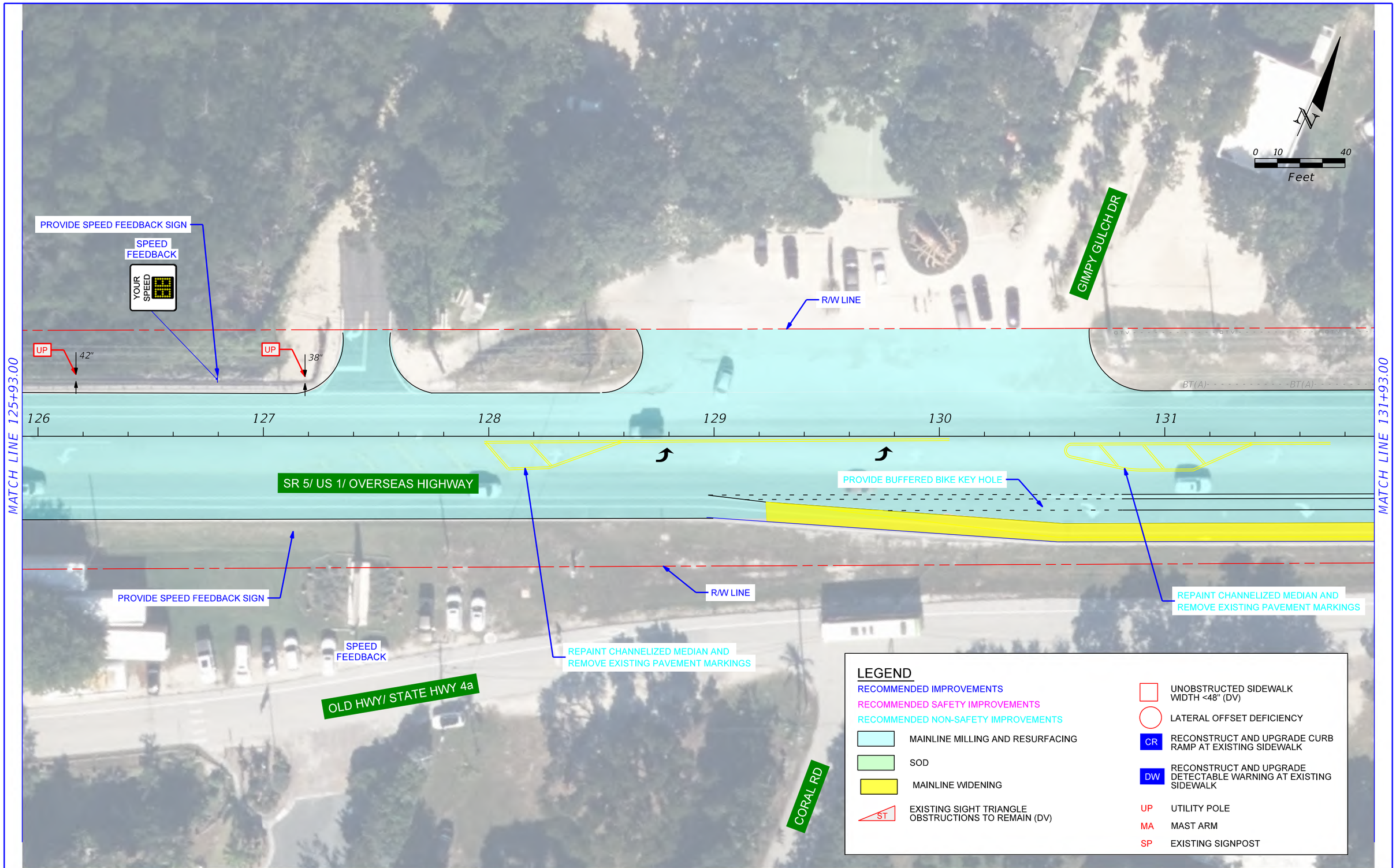
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 5	MONROE COUNTY	449738-1

FIGURE 3-5
DEFICIENCIES AND RECOMMENDATIONS

SHEET NO. 43



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1

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PLANTATION KEY

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 5	MONROE COUNTY	449738-1

FIGURE 3-5
DEFICIENCIES AND RECOMMENDATIONS

SHEET NO.
44

ISLAMORADA ADMINISTRATIVE CENTER

EAST RIDGE RD

R/W LINE

6" WHITE (2'-4' SKIP) (TYP).

DW

EXISTING TRANSMISSION POLE TO REMAIN

0 10 40
Feet

MATCH LINE 131+93.00

MATCH LINE 137+93.00

132 133 134 135 136 137

PROVIDE BUFFERED BIKE LANE KEY HOLE

SR 5/ US 1/ OVERSEAS HIGHWAY

REPLACE FADED SIGN

REMOVE LEFT TURN

REPLACE TILTED STOP SIGN

R/W LINE

OLD HWY/ STATE HWY 4a

LEGEND

RECOMMENDED IMPROVEMENTS

RECOMMENDED SAFETY IMPROVEMENTS

RECOMMENDED NON-SAFETY IMPROVEMENTS

- MAINLINE MILLING AND RESURFACING
- PROPOSED SHARED USED PATH
- SHARED USED PATH HORIZONTAL CLEARANCE
- MAINLINE WIDENING

- ST — EXISTING SIGHT TRIANGLE OBSTRUCTIONS TO REMAIN (DV)
- UNOBSTRUCTED SIDEWALK WIDTH <48" (DV)
- LATERAL OFFSET DEFICIENCY
- CR — RECONSTRUCT AND UPGRADE CURB RAMP AT EXISTING SIDEWALK
- DW — RECONSTRUCT AND UPGRADE DETECTABLE WARNING AT EXISTING SIDEWALK
- UP — UTILITY POLE
- MA — MAST ARM
- SP — EXISTING SIGNPOST

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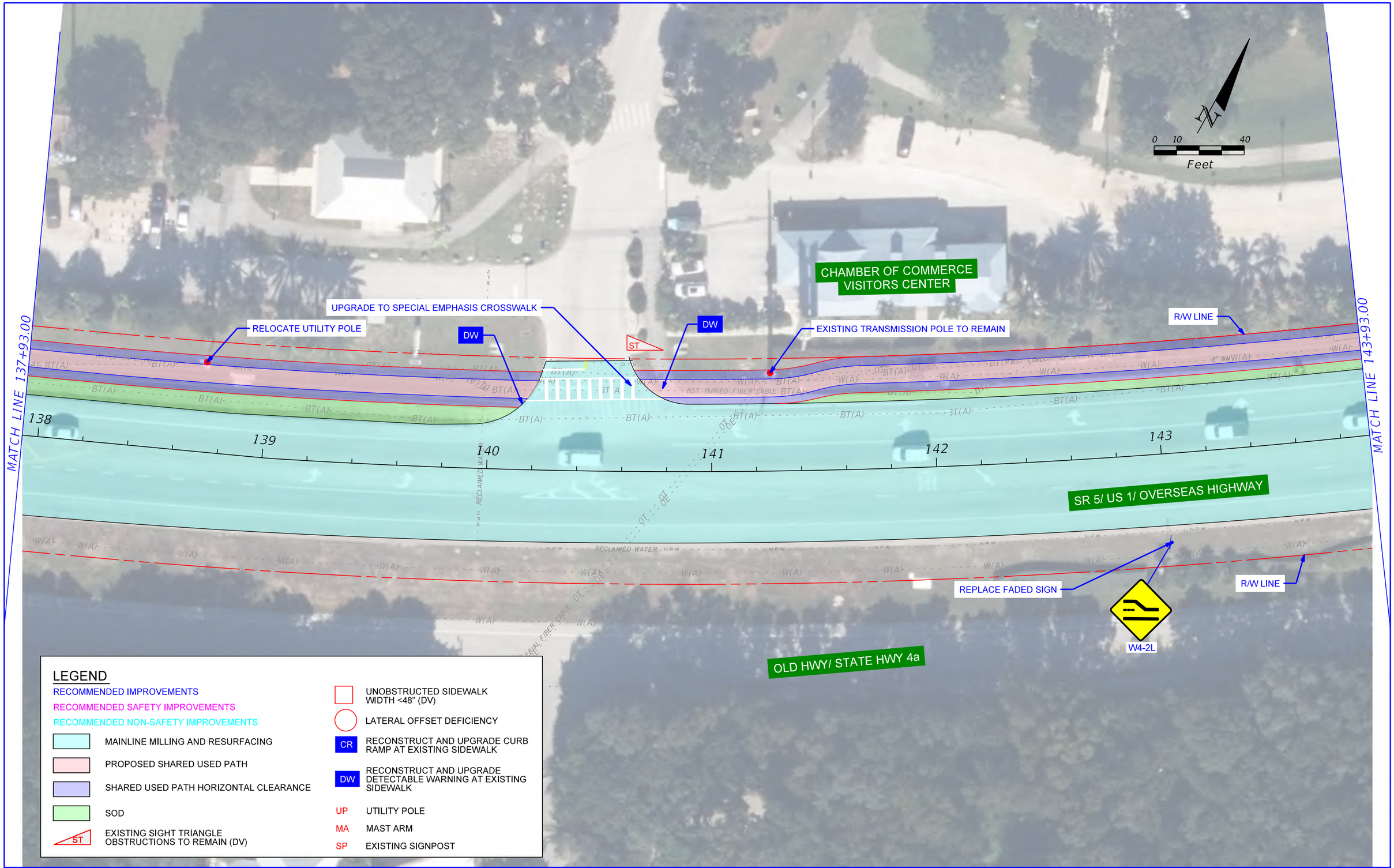
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 5	MONROE COUNTY	449738-1

FIGURE 3-5
DEFICIENCIES AND RECOMMENDATIONS

SHEET NO. 45



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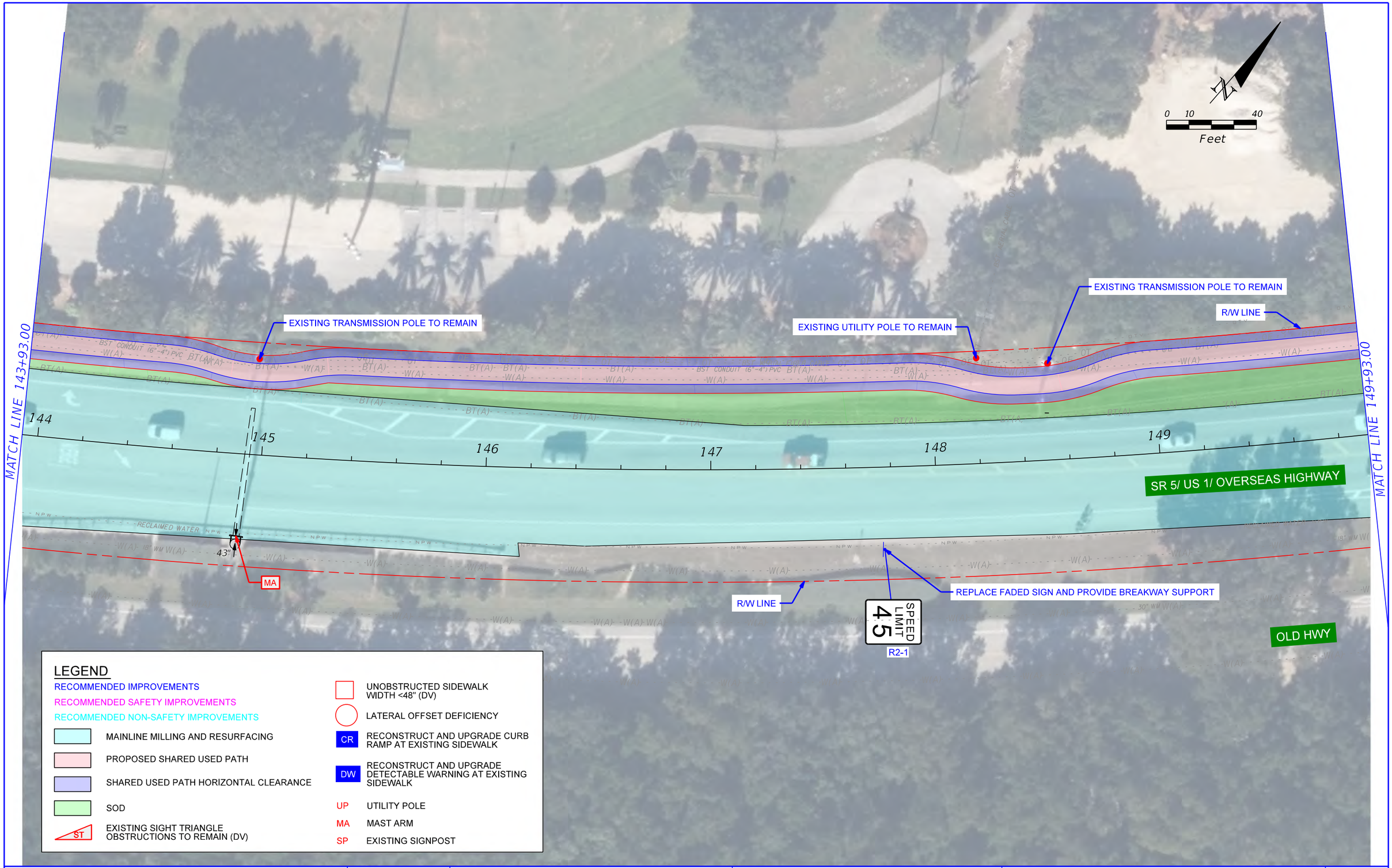
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 5	MONROE COUNTY	449738-1

FIGURE 3-5
DEFICIENCIES AND RECOMMENDATIONS

SHEET NO. 46



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MIAMI, FLORIDA 33172

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ROAD NO.	COUNTY	FINANCIAL PROJECT ID
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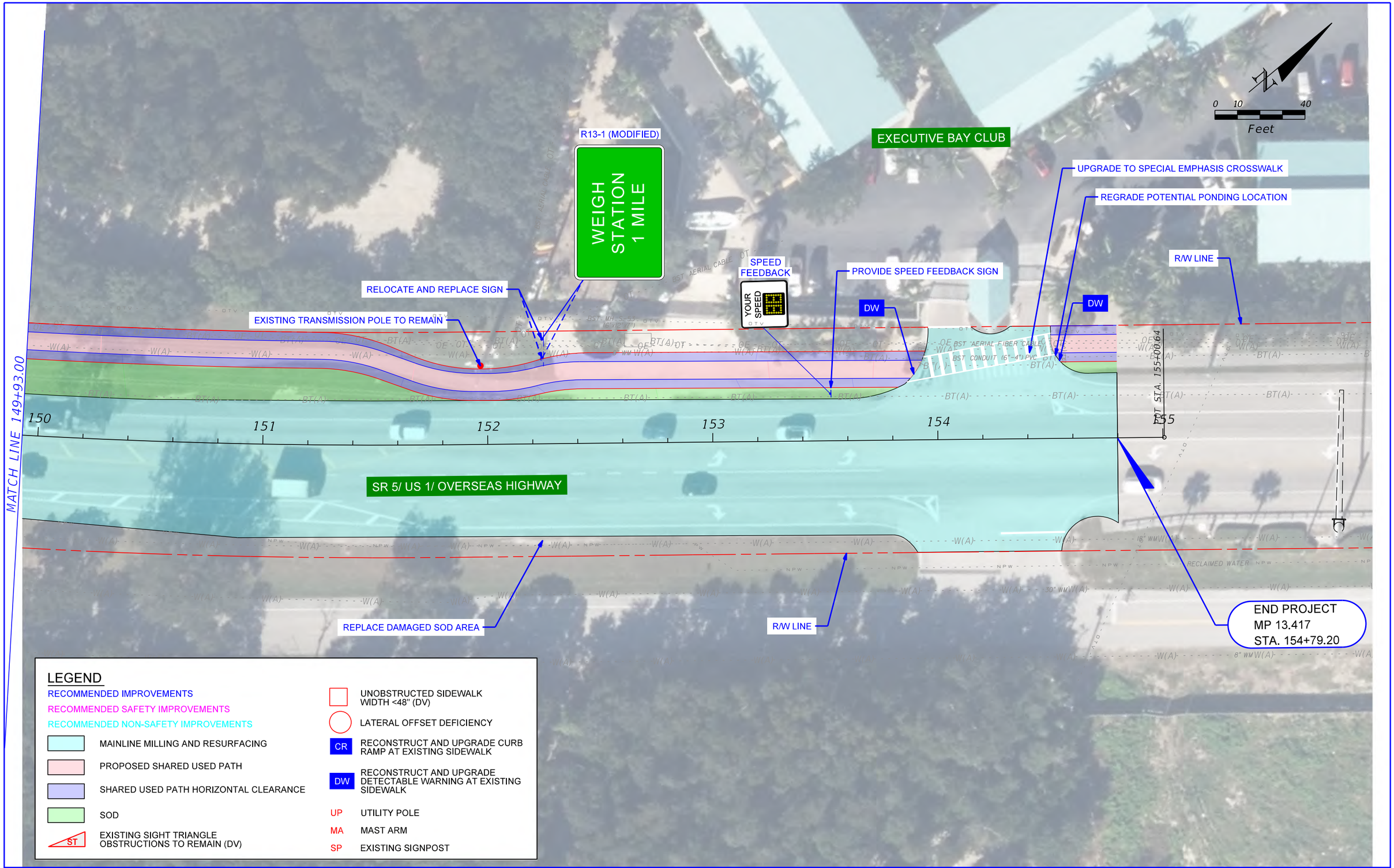
FIGURE 3-5
DEFICIENCIES AND RECOMMENDATIONS

SHEET NO. 47



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MIAMI, FLORIDA 33172

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ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 5	MONROE COUNTY	449738-1

FIGURE 3-5
DEFICIENCIES AND RECOMMENDATIONS

SHEET NO. 48

4.0 PRELIMINARY COST ESTIMATE

A preliminary construction cost estimate was developed for the recommended improvements listed in this Scoping Report using the FDOT Long Range Estimates (LRE) Program. The costs listed do not represent the estimated construction cost for FY 2025 or the project Work Program Budget. **Table 4-1** summarizes the cost of improvements recommended to be included in the scope of work for this RRR Project and funded by the Resurfacing Program. The detailed Long-Range Cost Estimate is included in **Appendix F**.

Table 4-1 Preliminary Construction Cost Estimate

Cost Component	Cost Estimate
Earthwork	$274,405.62
Roadway	$2,757,932.70
Shoulder	$601,656.21
Drainage	$19,632.64
Signing & Pavement Markings	$109,945.84
Lighting	$35,105.03
Sub-Total	**$3,798,678.04**
Maintenance Of Traffic	$379,867.80
Mobilization	$417,854.58
Initial Contingency	$50,000.0
Total	**$4,646,400.42**

List of Appendices