

I-595 RFP Volume II - Technical Requirements
Division II, Section 5 – Handback Requirements



Florida Department of Transportation
District 4

To Design, Build, Finance, Operate and Maintain
The I-595 Corridor Roadway Improvements Project

Final Version for Execution

Financial Project Number: 420809-3-52-01

Federal Aid Project Number(s): XXXX

Contract Number: E4J69

Table of Contents

HANDBACK REQUIREMENTS 3

1. INTRODUCTION 3

2. HANDBACK EVALUATION PLAN 3

3. TESTING & INSPECTION CRITERIA 4

4. HANDBACK RENEWAL WORK PLAN..... 4

 4.1 HAND-BACK REQUIREMENTS..... 5

5. TABLE 5.1 – HANDBACK REQUIREMENTS 6

HANDBACK REQUIREMENTS

1. Introduction

This section describes the criteria to be used for handback, or transfer of the operations and maintenance of the Project from the Concessionaire to the Department. The terms of this section are applicable at the termination of the Agreement as set forth in Section 6.9 of the Agreement.

The Concessionaire will guarantee that the Project will be handed back to the Department in a good and operable condition and all elements of the Project within the O&M Limits will comply with the Handback Requirements and in the desired maintenance condition. The Concessionaire shall develop a capital replacement plan for the equipment, systems, assets, etc., that are to be replaced, overhauled, refurbished, or rehabilitated over the Term. That plan will help ensure that the equipment, systems, assets, etc. remain safe, modern, and efficient to operate and maintain, and retain their asset value. The Concessionaire shall rehabilitate any asset that has reached the end of its design life, cannot be maintained to perform within the specified performance requirements, exhibits a measurably higher failure rate, or ceases to be economical to maintain due to excessive deterioration or obsolescence.

The approach at handback is for the Concessionaire and the Department to work jointly to agree on the capital investments that will have to be done before the expiration of the Term. For this purpose, it is proposed to provide as-built drawings of the Project opening and to carry out specific inspections during the last 5 years prior to the handback to guarantee that the initial functionalities are working at the desired level.

The Concessionaire shall handback all software special tools, special equipment for ITS spares part and assemblies that were purchased to support the O&M Work. The Concessionaire shall identify the assets and indicate those that are leased and those that were purchased to support the O&M Work scope. The Concessionaire shall provide maintenance training to Department personnel upon the completion of the Agreement so the Department personnel have a complete understanding of the maintenance program, plans, reports and activities related to the operation and maintenance of the Project.

The software, spares and assemblies shall be transferred to FDOT in a safe, fully functioning and operable condition that has been verified through demonstration testing conducted by the Concessionaire and witnessed by the Department or its designee. The detailed requirements of the demonstration testing are included herein.

2. Handback Evaluation Plan

The Concessionaire, in coordination with the Department, shall prepare a Handback Evaluation Plan that will be used to determine the condition, performance and residual life of the Project assets. The Handback Evaluation Plan shall be submitted to the Department at minimum of 60 months (5 years) prior to the expected end of the Term. The Handback Evaluation Plan shall identify the testing, evaluation, and calculation methods that are to be utilized during the condition assessment and the calculation of residual life of all Project assets. The Handback Evaluation Plan shall include all of the pertinent tests, inspections, processes and evaluations required to verify and demonstrate to the Department that all equipment and systems function as intended and meet the applicable codes and standards set forth in Section 2.1 of Division II of the Technical Requirements and meets the life remaining requirements as specified in this Table 5.1

The Handback Evaluation Plan submittal shall include the scope, test procedures, inspection procedures, processes, schedule of inspections and tests, and shall be reviewed and approved by the Department prior to commencement of any work by the Department or its designee. The Department shall provide a minimum of thirty (30) days advance notice to the Concessionaire prior to the commencement of any handback related tests or inspections conducted by the Department or its designee.

The Handback Evaluation Plan shall include an evaluation of the Project assets during each year remaining in the Operating Period, notwithstanding the handback joint inspections described in this section. After the preparation of the first Handback Evaluation Plan and prior to the commencement of each year remaining in the Operating Period, the Concessionaire upon consultation with the Department shall update the Handback Evaluation Plan as needed to reflect changes in conditions of the Project assets or evaluation methodology determined following an inspection of the Project assets by the Department or its designee.

3. Testing & Inspection Criteria

The Concessionaire shall prepare the necessary testing and inspection procedures to assess the condition and performance of all assets. The Concessionaire's detailed testing and inspection procedures shall be submitted to the Department for review and approval at least five years (60 months) prior to the expected end of the Term, and on each anniversary thereof. The test and inspection procedures shall indicate any particular reference standards, or other information used to support the testing, inspection and asset evaluation process.

The Concessionaire shall prepare residual life calculation methods for each asset and shall utilize applicable industry standards, manufacturer's life expectancy, equipment mean time between failures, equipment/asset histories, and other criteria listed in the Handback Evaluation Criteria column of the Table 5.1 to determine the condition, performance and the residual life for each asset.

The Concessionaire shall use Table 5.1 as a guideline for the assets, inspections and testing required, however the actual identification of the assets to be evaluated is dependent upon the Concessionaire's final design configuration and assets in place at the time of the evaluation. The Concessionaire shall develop an equivalent table based upon the Concessionaire's design configuration and assets in place at that time of the plan preparation.

4. Handback Renewal Work Plan

Five years (60 months) prior to the expected end of the Term, the Concessionaire shall prepare a five year renewal work plan that identifies the Concessionaire's plan for repairing, replacing, or renovating the assets in response to the results of the Testing and Inspection Criteria such that the assets comply with the specified life remaining at the end of the Term.

The Handback Renewal Work Plan shall include the summary of results of the initial inspection and include the estimated cost of the Handback Renewal Work. The Handback Renewal Work Plan shall include the Concessionaire's five year schedule for Handback Renewal Work, with the associated cost estimates. The Concessionaire's Handback Renewal Work Plan shall be financed in accordance with the requirements of Section 6.10 Handback Requirements Reserve Account of the Concession Agreement. The Concessionaire shall coordinate all aspects of the Handback Renewal Work Plan with the Department. Following each of the inspections of the Project assets by the Department as described in this Section, and in any case on a yearly basis following the evaluation to be done by the Concessionaire accordingly to the Handback Evaluation Plan, the Concessionaire shall update the Handback Renewal Work Plan and submit it to the Department until the plan is completed at the agreed upon termination

date. This plan shall also include any areas that are under remedial work due to a contamination or fuel spill. The Concessionaire will retain all remediation responsibility (and liability) until such time that the Concessionaire has received, and submitted to the Department, acceptable documentation indicating that the Concessionaire has complied with all directives and fulfilled and completed their remediation obligations as directed by the governing municipal entity, whether it be a Federal, State, County or Local government.

4.1 Handback Requirements

Table 5.1 details the assets, structures, systems and equipment which shall be evaluated at a minimum.

Performance and Measurement Table Baseline

Table 5.1 – Handback Requirements

TABLE 5.1 – HANDBACK REQUIREMENTS

Asset Description	Asset Sub System Description	Handback Evaluation Tasks	Handback Evaluation Criteria	Life Remaining at Handback (Years)
Pavement				
Asphalt Pavement	Pavement section within the O&M Limits (Operating Period)	<p>-Concessionaire shall provide a Pavement Coring Plan for FDOT approval and Concessionaire shall provide Pavement Cores with FDOT oversight</p> <p>-Mill and resurface Category 1 Pavement, Category 2 Pavement and Category 3 Pavement; shall be open to traffic a maximum of ten years (120 months) and a minimum of three years (36 months) prior to the end of the Operating Period</p> <p>-Asphalt Pavement Condition Survey no later than 180 calendar days before the end of the Operating Period</p> <p>-Completion of all remedial work.</p>	<p>-Section 338 of Vol. II Div II Section 6</p> <p>-Pavement shall be milled and resurfaced with a pavement design which is the greater of the following:</p> <ol style="list-style-type: none"> 1. Pavement design per the FDOT Asphalt Pavement Design manual (20 yr design life) based on pavement cores, Asphalt Pavement Condition Report, and projected traffic loadings as provided by FDOT 2. Category 1 Pavement and Category 2 Pavement: mill and resurface 2 inches minimum of existing HMA 	N/A
Rigid Pavement	Pavement section within the O&M Limits (Operating Period)	Inspection in accordance with FDOT Performance Based Specification 355 (Value Added Portland Cement Concrete Pavement & FDOT’s Rigid Pavement Design Manual, Rigid Pavement Condition Survey Handbook.	Perform rehabilitation of the pavement to obtain a Rigid Distress Rating of greater than 8.5; Rigid Ride Rating of greater than 7.5	N/A
Guardrail	Guardrail systems within the O&M Limits (Operating Period)	Complete the inspection in accordance with FDOT Procedure 850-050-003 or successor.	Completion of all deficiencies identified in the final inspection	8

TABLE 5.1 – HANDBACK REQUIREMENTS				
Asset Description	Asset Sub System Description	Handback Evaluation Tasks	Handback Evaluation Criteria	Life Remaining at Handback (Years)
Attenuators	Attenuator systems within the O&M Limits (Operating Period)	Complete the inspection in accordance with FDOT Procedure 850-055-003 or successor.	Completion of all deficiencies identified in the final inspection	8
Signs	Single-post, multi-post & overhead within the O&M Limits (Operating Period)	Complete the inspection in accordance with FDOT Procedure 850-055-025 or successor.	Completion of all deficiencies identified in the final inspection	7
		Conduct a Reflectivity test in accordance with MUTCD	Replace sign panels as required	7
Drainage Systems	Drainage systems elements (side/cross drains, roadside ditches, inlets, and miscellaneous drainage structures)	Conduct a video inspection of all drainage pipes and provide clean out and repairs	Completion of all deficiencies identified in the final video inspection	N/A
		Conduct inspection of all drainage systems elements (side/cross drains, roadside ditches, inlets, and miscellaneous drainage structures) using the criteria set forth in the MRP Handbook.		
Highway Lighting	Includes Roadway, under-deck, signing and high mast within the O&M Limits (Operating Period)	Replacement of all luminaries and ballasts	100% of lights are operational	5
High mast Light Poles	Structural within the O&M Limits (Operating Period)	Pending the results of the testing and inspection criteria, all High Mast Light Poles under the responsibility of the Concessionaire shall have an overall condition rating of six (6) or better. This condition rating is in accordance with procedure 850-010-030 (Bridge and Other Structures Inspection and Reporting) or its successor.	If any High Mast Light Poles under the responsibility of the Concessionaire are found to have an overall condition rating less than six (6), the Concessionaire shall be responsible for making any and all repairs necessary to improve the condition rating of the High Mast Light Pole(s) to a six (6) or better. All repairs shall be of a substantial and permanent nature.	15

TABLE 5.1 – HANDBACK REQUIREMENTS

Asset Description	Asset Sub System Description	Handback Evaluation Tasks	Handback Evaluation Criteria	Life Remaining at Handback (Years)
Over-lane Sign Structures/ Toll Gantry System	Structural within the O&M Limits (Operating Period)	Pending the results of the testing and inspection criteria, all Overlane Sign Structures and Toll Gantry System under the responsibility of the Concessionaire shall have an overall condition rating of six (6) or better. This condition rating is in accordance with procedure 850-010-030 (Bridge and Other Structures Inspection and Reporting) or its successor.	If any Overlane Sign Structures and Toll Gantry Systems under the responsibility of the Concessionaire are found to have an overall condition rating less than six (6), the Concessionaire shall be responsible for making any and all repairs necessary to improve the condition rating of the Overlane Sign Structure(s) and Toll Gantry System (s) to a six (6) or better. All repairs shall be of a substantial and permanent nature.	15
Bridges	Within the O&M Limits (Operating Period)	Pending the results of the testing and inspection criteria, each Bridge under the responsibility of the Concessionaire shall have an overall condition rating of six (6) or better. This condition rating is in accordance with the National Bridge Inspection Standards and procedure 850-010-030 (Bridge and Other Structures Inspection and Reporting) or its successor.	If any Bridge Structure under the responsibility of the Concessionaire is found to have an overall condition rating less than six (6), the Concessionaire shall be responsible for making any and all repairs necessary to improve the condition rating of the Bridge(s) to a six (6) or better. All repairs shall be of a substantial and permanent nature.	N/A
Sound Barriers	Within the O&M Limits (Operating Period)	Inspect the paint/coatings of the Sound Barriers under the responsibility of the Concessionaire, and meet the criteria established in Volume 6, Chapter 2, Section 2.13 of the FDOT Structures Manual or its successor	If Sound Barriers paint/coating are found to have a condition rating less those specified in Volume 6, Chapter 2, Section 2.13 of the FDOT Structures Manual or its successor, Concessionaire shall pressure wash and paint/recoat Sound Barriers.	N/A

TABLE 5.1 – HANDBACK REQUIREMENTS				
Asset Description	Asset Sub System Description	Handback Evaluation Tasks	Handback Evaluation Criteria	Life Remaining at Handback (Years)
ITS	Includes all ITS subsystems, communication and ancillary components of O&M	The Concessionaire shall purchase new hardware in the final year of the program and configure, test, deploy and deliver for handback. The Department will retain manufacturer warranties (minimum of 4-year warranty) on the hardware	99.99% of all ITS devices are operational	4
	Software programs	Concessionaire shall deliver the software programs update to the most recent version available from the vendor.	Software is licensed and available for Department use	N/A

