I-595 RFP Volume II - Technical Requirements

Division II, Section 4, Operations & Maintenance 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

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OPERATIONS AND MAINTENANCE REQUIREMENTS

1. GENERAL OBLIGATIONS

The goal of the Department is to ensure that the I-595 mainline, SR 84, ramps, and a new Express Lanes system in the I-595 median (the "Project") are managed, maintained and operated in a manner that is consistent with and satisfactory to the Department. From the date of NTP-2 and for the duration of the Term, the Concessionaire will operate and maintain the Project within the applicable Operation & Maintenance (O&M) Limits, including (i) the existing I-595 mainline, SR-84 and associated roadway infrastructure, and (ii) the Project's capital improvements as detailed in Volume III – Additional Mandatory Standards - Exhibits 4.1 and 4.2 (with the exception of the Express Lanes toll system equipment). In addition, the Concessionaire will be responsible for carrying out the maintenance of all physical elements of the Project facility and ultimately handing back the facility in a manner that is compliant with the Handback Requirements set forth in the Contract Documents.

The Concessionaire shall establish a self-monitoring program with sufficient levels of properly trained personnel, off-site facilities, storage areas, fleet vehicles, Emergency Response, computer hardware and software, tools, Intelligent Transportation System (ITS), Toll Operations coordination and maintenance, Customer Relations Unit, and other items as required to operate and maintain a safe and reliable roadway system with the main objectives to maximize public safety, reliability and roadway availability. The Concessionaire shall coordinate, plan and perform the O&M Work required under the Contract Documents in a manner that will provide safe conditions for the maintenance staff and the traveling public using the Project, while minimizing traffic disruptions. Payments owed to the Concessionaire will be subject to adjustments depending upon the Concessionaire's level of performance as described in the Appendix 3 and Appendix 6 of the Concession Agreement.

The scope of the O&M Work to be completed by the Concessionaire shall include, but not be limited to the following:

a. Providing for the maintenance and operations of all the existing assets and ITS devices within the O&M Limits during the Construction Period;

b. Providing for the maintenance and operations of the Project's assets and ITS devices within the O&M Limits during the Operating Period;

c. Providing for the Renewal Work of the Project's assets and ITS devices;

d. Providing for the handback of the Project assets; and

e. Providing first responder incident/emergency response and emergency repair.

The Project (with the exception of the Express Lanes, which will have hours of operation as set forth in Section 4.3.1.1.3) shall be available 24 hours per day, seven days per week, and every day of the year. The Concessionaire shall provide the appropriate staff levels for these hours of operation and shall be available to assume these responsibilities from the date of NTP 2.

1.1 Governing Documents

The Concessionaire shall be responsible for compliance with the Department's Manuals and Guidelines as referenced in Division II, Section 2.A – Governing Regulations and the maintenance procedures, manuals, guides, and handbooks as revised from time to time. A list of these maintenance procedures, manuals, guides, and handbooks can be obtained from the Maintenance Office Website on the Internet at http://www.dot.state.fl.us/statemaintenanceoffice/AMContractDocuments.htm or its successor. A list of the ITS Standard Operating Guidelines, procedures, manuals, guides, and handbooks can be obtained from the Internet at http://SmartSunguide.com or its successor.

1.2 ITS Reference Documents

The following ITS reference documents can be found in Reference Documents. These documents are provided for reference only and to present the Concessionaire with information of the ITS operations and maintenance procedures employed by FDOT District 4:

a. FDOT D4 Rapid Incident Scene Clearance (RISC) - Scope of Services

b. FDOT D4 Severe Incident Response Vehicle (SIRV) Service Contract - Scope of Services

c. FDOT D4 Road Ranger Service Patrol - Standard Operating Guideline

d. FDOT D4 Road Ranger Service Patrol - Scope of Services

e. FDOT D4 Intelligent Transportation Systems (ITS) Maintenance Management Contract - Scope of Services

f. Florida DOT District 4 ITS Performance Measures

g. Southeast Florida Regional TMC Operations Committee Standard Operating Guidelines

1.3 Performance Measures

1.3.1 Noncompliance Point System Relationship

The Concessionaire will be required to maintain the assets within the O&M Limits to the minimum requirements specified in the Contract Documents and to comply with the contractual obligations set forth in the Contract Documents. A failure to do so constitutes a Noncompliance and as such can trigger Noncompliance Points, as well as monetary damages under the system set forth in the Concession Agreement. The minimum requirements identified in Tables 4.1, 4.2 and 4.3 shall be assigned Noncompliance Points as set forth in Appendix 5 of the Concession Agreement.

1.3.2 Construction O&M Violations and Construction Availability Faults

Construction O&M Violations and Construction Availability Faults result from the failure to meet the minimum requirements set forth in Table 4.1 within the applicable cure period (if any) for the O&M Limits during the Construction Period identified in Volume III – Additional Mandatory Standards - Exhibit 4.1.

1.3.3 O&M Violation

O&M Violations result from the failure to meet the minimum requirements set forth in Table 4.2 within the applicable cure period (if any) for the O&M Limits during the Operating Period identified in Volume III – Additional Mandatory Standards - Exhibit 4.2.

1.3.4 Availability Faults

Availability Faults result in the failure to meet the minimum performance requirements set forth in Table 4.3 within the applicable cure period (if any) for the O&M Limits during the Operating Period set forth in Volume III – Additional Mandatory Standards - Exhibit 4.2.

1.4 Operations & Maintenance Plan

The Concessionaire shall develop a preliminary Operations & Maintenance (O&M) Plan which shall include the Operations and Maintenance Manuals for the O&M Work associated with the Construction and Operating Periods of the Project and shall be submitted 90 days prior to NTP 2. A final O&M Plan for the Construction Period shall be submitted to the Department for review and approval not less than 30 days from NTP 2 and shall detail the Concessionaire's approach to the O&M Work during the

Construction Period. At least 120 days prior to the anticipated date of Substantial Completion, the Concessionaire shall submit, for review and comment, a final O&M Plan for the Operating Period. The O&M Plan for the Construction Period and the Operating Period shall include at minimum the following:

a. A staff organizational chart and staffing plan for the O&M Work;

b. Description of the Concessionaire's approach to safety and security for the O&M Work

c. The Concessionaire's self-monitoring processes, including a list of the procedures to be used to monitor compliance with minimum performance criteria;

d. Description of the Concessionaire's approach to Routine Maintenance and non-routine maintenance services;

e. Bridge inspection scheduled maintenance and bridge inspection maintenance plan;

f. Method to monitor all activities associated with the Routine Maintenance and non-routine maintenance services, Renewal Work, ITMS, ITS and incident/emergency response requirements as detailed in Tables 4.1, 4.2 and 4.3

g. Method of tracking and reporting Noncompliance Points, Construction Violations, O&M Violations, Availability Faults, Construction Closures and Closures, including Permitted Closures and Permitted Construction Closures;

h. Description of the Concessionaire's approach to response and remediation efforts associated with fuel spills or other contamination causing events;

i. Description of the Concessionaire's approach and assumptions for the Renewal Work and equipment replacement, including life cycles;

j. Description of the Concessionaire's approach to the staffing and operation of the Customer Relations Staff (does not include SunPass Customer support);

k. Standard Operating Guidelines for the I-595 ITS System;

l. Description of the Concessionaire's approach and coordination of the O&M Work for existing assets and ITS devices, ITMS assets and ITS devices and new assets and ITS devices;

m. Description of the Concessionaire's approach and coordination of the O&M Work for the Toll Collection System;

n. Description of the Concessionaire's approach to the Renewal Work and the Renewal Work Schedule;

o. Description of the Concessionaire's approach to meeting the monthly Maintenance Rating Program (MRP) rating requirements;

p. Description of the Concessionaire's approach to support the Department in the permit coordination and inspection process;

q. Description of the Concessionaire's approach to emergency response, incident response, Rapid Incident Scene Clearance (RISC) Program and Severe Incident Response Vehicle (SIRV) Program ;

r. A list of the facilities, including any off-site storage or maintenance facilities, that will be used by the Concessionaire;

s. A list of vehicles, tools, incident response and major equipment furnished by the Concessionaire to support the O&M Work;

t. A list of facilities, computers, software and other major assets/items to support the O&M Work;

u. A list of spare equipment and the related inventory levels;

v. Copies of all as-built drawings that detail the elements of the O&M Work to be provided and the physical limits or boundaries of the Work.

1.4.1 Operations & Maintenance Manuals

1.4.1.1 Operations Manuals

The Concessionaire shall develop as part of the O&M Plan, a detailed Operations Manual based on the O&M Work required for the Project. This Operations Manual shall be submitted to meet the requirements set forth in the Contract Documents and shall include information regarding the procedures for the (i) operations during the Construction Period and (ii) operations during the Operating Period.

The Concessionaire shall be responsible for compliance with the Department's SMART SunGuide Transportation Management Center Standard Operating Guidelines (SOG) and the FDOT DMS Messaging Policy (http://www2.dot.state.fl.us/proceduraldocuments/procedures/bin/000750015.pdf or successor) and for making them a part of the O&M Manual for the I-595 ITMS and ITS Operations.

The Operations Manual shall be updated annually, or more frequently as necessary to indicate changes to operating protocols, agreements and interactions with other entities, and to indicate the revised operating requirements for equipment. The updated manuals shall be submitted for review and comment by the Department.

The Operations Manual shall be complete and include, at a minimum, the following requirements:

a. Overview description of all facilities, systems and equipment to be operated by the Concessionaire;

b. Description of the staffing plan, including all positions, work locations, and work hours, required to operate the Project;

c. Description of the staff qualifications for each staff position;

d. Description of staff training plan and certification process;

e. A contact list of the various entities and agencies that the operations staff will require coordination with, including their contact information (contact person, address, e-mail address, telephone numbers, website address);

f. Operating protocols, agreements and interactions with other entities such as the Department, Florida's Turnpike Enterprise, Broward County, municipalities, police, fire and any other similar Governmental Entities.

g. A list of operations procedures, including a schedule of routine operations tasks and the required frequency;

h. Safety Plan;

i. Quality Management System / Quality Assurance System;

j. Copies of all operations forms, checklists, Construction Violation and O&M Violation logs, Noncompliance logs related to the performance of the O&M Work, Availability Faults detection logs and Closures and Construction Closures logs, including Permitted Closures and Permitted Construction Closures;

k. Express Lanes Operation – To describe in detail the procedures, methods and protocols for opening, closing and maintaining the Express Lanes system;

l. Control Room Management – To establish regulations governing the performance of duties by TMC operations personnel within the control room in order to create a professional atmosphere and to support the overall mission of the TMC;

m. Event Evaluation – To provide an overview and establish procedures for handling personal injury or public safety concerns;

n. Detection and Monitoring – To provide an overview and to establish policies and procedures for the detection and monitoring of traffic events;

o. Event Management – To provide an overview of the steps taken when managing traffic incidents in support of the overall mission of the TMC;

p. External Communication Systems – To establish procedures for external communication system messaging resulting in improved dissemination of information and safety;

q. Failures and Maintenance – To establish guidelines and procedures for handling system failures and to ensure that all failures are properly documented, reported and dispatched for repair in support of the overall mission of the TMC;

r. Fuel spills and other contamination causing events – To provide an approach to staff qualifications, equipment availability, response and cleanup as a result of fuel spills or other contamination causing events.

s. Traffic Incident Management (TIM) Plan – To provide a guideline for the efficient, coordinated and consistent management of TIM resources.

t. The Rapid Incident Scene Clearance (RISC) Program – To provide an overview and establish procedures for the RISC Program to assist the TMC operations with traffic and incident management to reduce traffic congestion and delays caused by vehicle collisions and material spills.

u. The Severe Incident Respond Vehicle (SIRV) – To provide an overview and establish procedures for the SIRV services to assist the TMC operations with traffic and incident management to reduce traffic congestion and delays caused by vehicle collisions and material spills.

v. The Road Ranger Service Plan – To provide an overview and establish procedures for the Road Ranger services to assist the TMC operations with traffic and incident management to reduce traffic congestion and delays caused by vehicle collisions and material spills.

1.4.1.2 Maintenance Manual

The Concessionaire shall develop as part of the O&M Plan, a detailed Maintenance Manual based on the O&M Work required for the Project. This Maintenance Manual shall be submitted to meet the requirements set forth in the Contract Documents and shall include information regarding the maintenance procedures for the (i) maintenance during the Construction Period and (ii) maintenance during the Operating Period.

The Maintenance Manual shall include a detailed asset management plan that includes the following elements: preventative and routine maintenance services for roadway assets and ITS devices, computerized maintenance management system for roadway assets, SunGuide^{SM} Maintenance and Inventory Management System for ITS devices, maintenance records, condition assessments, staffing plans procedures, and schedules.

The Maintenance Manual shall be used by the Concessionaire's maintenance staff and shall be updated annually, or more frequently as necessary, to indicate the maintenance requirements for the assets, equipment and systems as they are revised, upgraded and/or replaced.

The Maintenance Manual shall be complete and include the following minimum requirements:

a. Overview description of all roadway assets and ITS devices within the O&M Limits, including facilities, systems and equipment to be maintained by the Concessionaire;

b. A logical system breakdown of all roadway assets and ITS devices within the O&M Limits, including facilities equipment and systems and the levels of maintenance to be provided by the Concessionaire's staff;

c. Description of the staffing plan (including all positions, work locations, and work hours) and related workshop, maintenance garages, major equipment, vehicles, storage facilities, etc., as necessary to support the roadway assets and ITS devices maintenance program;

d. Description of the staff qualifications for each staff position;

e. List of the Project's major systems and equipment manufacturers/vendors, including their contact information (contact person, address, telephone numbers, website address and e-mail address);

f. List of Contractors used to perform any roadway asset and ITS device maintenance services and the identification of the services expected to be provided;

g. A list of preventative and routine maintenance procedures for all roadway assets, landscaping areas and ITS devices;

h. Roadway assets and ITS devices routine and preventative maintenance schedule indicating the tasks and the required frequency;

i. A list of unplanned but anticipated maintenance services for all roadway assets and ITS devices;

j. Diagnostic procedures for equipment and systems;

k. Detailed preventative maintenance procedures for all roadway assets and ITS devices;

l. Detailed reactive maintenance procedures all roadway assets and ITS devices;

m. Spare parts inventory procedures for all roadway assets and ITS devices;

n. Repair procedures for repairs that are anticipated;

o. Systems and equipment manufacturer's O&M manuals;

p. Software manuals;

q. Wiring diagrams, schematic drawings, logic block diagrams, etc.;

r. Assembly and disassembly drawings clearly identifying the components;

s. Copies of all inspection forms, checklists, etc.;

t. A summary listing of all maintenance tasks for all roadway assets and ITS devices categorized by system/discipline.

Standard service manuals for commercially available equipment and products shall be acceptable only if the equipment provided is standard off-the-shelf equipment without any custom features or functions. Custom equipment and systems shall have custom O&M manuals that include detailed information that addresses the custom features of the equipment provided and shall include drawings. The non-applicable portions of standard manuals shall be neatly encircled and cross hatched to clearly indicate that these sections are not applicable.

1.4.2 Quality Management Requirements

The Concessionaire shall develop a comprehensive O&M Quality Management System (O&M-QMS) which shall fully comply with the requirements of the Contract Documents, with the primary function of establishing the Concessionaire's self-monitoring process and to monitor the performance of the Concessionaire's O&M Work. The O&M-QMS shall be submitted with the O&M Plan for review and comment by the Department. The O&M-QMS shall provide the means to evaluate Concessionaire's level of performance with respect to the minimum performance requirements as detailed in Tables 4.1 and 4.2. The O&M-QMS shall also assemble the necessary operations and maintenance information to compare it to the minimum performance requirements so the Department can ultimately determine the Noncompliance Points imposed on the Concessionaire.

The Concessionaire shall also develop a detailed quality assurance system for validating the information, accuracy, and results of the O&M-QMS. The system shall include procedures to validate the data, times, dates, other information and calculations that are the basis of the Availability Payment, Construction Violations, Construction Availability Faults, O&M Violations, Availability Faults, Closures, Construction Closures and Noncompliance Points. The Concessionaire shall prepare O&M Quality Management System reports that identify the results of the O&M Quality Management System.

1.4.3 Transition Plan

As part of the O&M Plan, the Concessionaire shall present a transition plan and submit it for approval to the Department. The transition plan shall detail how the Concessionaire will work with the current maintenance contracts and ITS service providers to ensure a seamless transfer of maintenance services and ensure a continuous (24 hours per day, seven days per week, and every day of the year) system operation and functionality of all components of the Project.

1.4.4 Disaster Recovery Plan

The Concessionaire shall create, maintain and update, as needed, a comprehensive Disaster Recovery Plan for both TMC facilities and related ITS infrastructure. The Disaster Recovery Plan will detail how the various organizational units within the Concessionaire intend to perform their responsibilities in the event of a disaster. The objective of the Disaster Recovery Plan is to provide a documented, cost-effective method for responding to a disaster that may degrade the performance of the I-595 ITS infrastructure.

1.5 Maintenance Responsibilities During Construction

The Concessionaire shall conduct the O&M Work on the Project for the Construction Period regardless if the section is under construction or not. While maintenance responsibilities are limited within a construction zone, they will not cease. The Concessionaire shall include in their O&M Plan a detailed description of the maintenance work within a construction area. Table 4.1A includes the assets that shall be maintained by the Concessionaire and the minimum performance requirements applicable during the Construction Period.

Further, the Concessionaire is required to respond to any incident, emergency or event with the appropriate qualified staff, equipment and support personnel such as Road Ranger Service Patrol, SIRV & RISC service required to meet the minimum performance requirement as detailed in Table 4.1B and correct a failure to meet such minimum performance requirements within the required cure period.

1.6 Monthly Reports

The monthly report shall identify all of the activities associated with O&M Work for the month, the actual maintenance performed for the period, and confirmation that the Concessionaire performed all O&M Work in compliance with the Contract Documents.

The Concessionaire shall have the monthly reports in electronic format available for submittal to the Department upon request, and shall contain at minimum the following information:

a. A summary of the Planned Maintenance activities for the upcoming month;

b. A summary of the maintenance performed and completed for the month;

c. A summary of the Planned Maintenance that was not completed for the month, including the reasons for the incompletion of the Planned Maintenance and a summary of deferred days for each deferred item;

d. Summary of the maintenance activities performed for the month beyond the Planned Maintenance activities for that month;

e. Detailed results of all Planned Maintenance and other maintenance work that was performed during the month;

f. Summary of results from the monthly MRP program;

g. Summary of landscape maintenance activities

h. Summary of inspected bridges including detailing the bridge repairs and associated maintenance activities.

i. Summary of Noncompliance Points assessed including details of each assessment;

j. Summary of Construction Violations, Construction Availability Faults, O&M Violations and Availability Faults, including details of each occurrence;

k. Summary of Closures, Construction Closures, Permitted Closures and Permitted Construction Closures for the past month including details describing the location and duration;

l. A summary of the status of the Project for the month identifying all Closures, Construction Closures, and explaining as applicable for each Construction Closure whether it is a Permitted Construction Closure, and for each Closure whether it is an Unavailability Event or a Permitted Closures;

m. Details on all instances of Construction Violations, Construction Availability Faults, O&M Violations and Availability Faults, describing at a minimum: the commencement time, duration, and details regarding the cure of such Construction Violations, Construction Availability Faults, O&M Violations and Availability Faults;

n. Operator event log data including all operator actions and event details for traffic and systems events, security incidents, weather incidents, and the details of the Concessionaire's incident response including response time data, response records, etc.

o. The Concessionaire's Incident Response logs including a time based report of all actions and activities performed by the Concessionaire;

p. Customer Relations Unit activities, including complaints, complaint tracking data, customer service rating data, and the details of the Concessionaire's response (does not include SunPass customer support);

q. Detailed results of all inspections, assessments and testing activities, including the related procedures, forms, etc.;

r. Updates to RCI information;

s. Monthly ITS performance reports

t. Summary of all ITS device activities:

a. System availability reports /summary
b. Preventative maintenance plan and progress
c. Device location
d. Date and time of failure
e. Description of failure or issues and impacts
f. Report of failure source
g. Technician responding
h. Arrival time at device location
i. Site conditions noted (i.e. weather, accident, fire, etc).
j. Actions taken (successful or otherwise)
k. Date and time of resolution
l. Spare parts used: type, model, serial and control number
m. Photo documentation (digital only)
n. Replaced parts: type, model, serial and control number
o. Action for replaced parts (i.e. in-house repair, return to factory)
p. General notes
q. Mean Time Between Failure (MTBF)
r. Mean Time Between Repair (MTBR)

1.7 Department's Audit and Access to Records

The Department will perform periodic audits of the Concessionaire's O&M records to verify that the O&M Work meets the minimum performance requirements specified within Tables 4.1, 4.2 and 4.3. Furthermore, the Concessionaire shall provide access to the Department upon request, all personnel files, records, logs, data, database and any other information related to the O&M Plan, such that the Department can verify that all of the requirements of this Section are performed appropriately. The Concessionaire shall maintain accurate, updated files that are accessible for this purpose.

1.7.1 FDOT Inspection and Testing

The Department, at the Department's discretion, will perform periodic inspections and testing of the Concessionaire's O&M Work to verify the O&M Work meets the minimum performance requirements specified in Tables 4.1, 4.2 and 4.3. The Department will proceed in accordance with Section 7.6 of the Concession Agreement and exercise any other rights and remedies under the Contract Documents if the minimum performance requirements are not met.

1.8 Meetings

The Concessionaire shall have monthly meetings with Department's representatives to discuss the O&M Work. The items to be discussed shall include, but not be limited to: maintenance activities of the previous month, Planned Maintenance for the next month, future lane closures, incidents/emergencies, SunGuide incident management coordination, calculation of the adjustments to the Availability Payments, assessment of Noncompliance Points, Construction Violations, Construction Availability Faults, O&M

Violations, Availability Faults, Closures, Construction Closures and any other pertinent information related to the O&M Work. The Department may request a meeting at any time to discuss O&M Work-related issues, accidents, etc.

The Concessionaire shall be required to actively participate in Traffic Incident Management (TIM) team meetings, Road Ranger meetings, ITS Coalition meetings, and Southeast Florida Regional TMC Operations committee (SEFRTOC) meetings, and others as directed by the Department, for Broward County and regional levels, and provide assistance, information, and expertise as needed. The Concessionaire shall conduct incident debriefings to review lessons learned and best practices. These incident debriefings shall be summarized at subsequent TIM and SEFRTOC meetings.

The Concessionaire shall be required to attend Quarterly meetings with the District's Traffic Operations Department. The purpose of these meetings will be to review any safety and traffic operations issues or requests on the Project.

1.9 Safety

The Concessionaire shall conduct the O&M Work in accordance with all applicable safety laws. The O&M Work will involve work that could endanger the traveling public and the Concessionaire's personnel; therefore the Concessionaire shall perform all O&M Work with the impetus to maximize the safety of the public and the Concessionaire's employees. The Concessionaire shall develop a Safety Plan that includes staff training, safety procedures and protocols to address the hazardous conditions associated with the O&M Work. The safety plan shall be an integral part of the O&M Plan and shall be included in the O&M Manual.

a. The Concessionaire is responsible for ensuring that all equipment used shall be maintained in a safe and efficient manner in accordance with all State, Local and Federal laws, safety organizations, regulations and guidelines pertaining to providing the required services.

b. The Concessionaire shall follow all safety requirements outlined in the National Electric Safety Code (NESC), the Occupational Safety and Health Administration (OSHA), and any Standards or practices for safe installation or maintenance of required equipment per the Contract Documents.

c. The Concessionaire is responsible for any injury to person(s) or damage to property (ies) that occur in performing any of the maintenance services under the Project. The Concessionaire shall notify the Department immediately after any injury incurred by person(s) working on the Project.

d. The Concessionaire shall be responsible for ensuring all future devices, installed during the Project term are properly registered with Sunshine One-call.

e. The Concessionaire is solely responsible for the safety of all its personnel and shall be solely responsible for maintaining the safety required and providing safety equipment and procedures for the protection of employees and the public throughout the area(s) of the applicable O&M Limits.

f. If any deficiency may cause harm to life, property or violate any rules or regulations such as, but not limited to, American With Disabilities Act (A.D.A), Occupational Safety and Health Administration (OSHA) or otherwise contained herein, the Department may take any immediate corrective actions required, and the Concessionaire shall be responsible for the burden of any of these direct and any associated and/or indirect costs, in accordance with the Contract Documents.

1.10 Staffing

The Concessionaire shall identify a primary maintenance staff to be dedicated to the Project and shall maintain adequate support staff with appropriate skill levels, to respond to all of the Project's O&M requirements, at all times, for the full duration of the Term.

The Concessionaire shall maintain updated staff records and shall provide the Department access to these staff records upon request.

1.10.1 Staff Conduct and Grooming

The Concessionaire's O&M staff shall exercise good sound judgment in carrying out their duties and conduct themselves in such a manner that will reflect favorably upon the Department. FDOT also reserves the right to require removal of any employee from the Project who cannot perform the duties or damages the reputation of FDOT. In general the Concessionaire staff will:

a. Wear clean and neat uniforms.

b. Be required to wear a picture ID.

c. Be well groomed. Be courteous at all times.

1.10.2 Traffic Management Center (TMC) Staffing

The Concessionaire shall not hire individuals with a felony conviction record. A criminal history record check shall be conducted by an approved FDOT agency for each employee before being hired. The Concessionaire may be requested by the Department to perform periodic criminal record checks on all TMC staff or as a minimum every year. Each of the Concessionaire's staff assigned to the TMC must pass a Florida Department of Law Enforcement (FDLE) and Federal Bureau of Investigation (FBI) background check. The FDLE and FBI background check shall be updated for each person on an annual basis.

The Concessionaire shall provide proof, by a licensed medical practitioner or technician that all TMC staff is drug free in accordance with Section 112.0455, Florida Statutes prior to beginning operations. The Concessionaire shall submit the proof described above for its staff every six months thereafter.

1.10.3 Maintenance of Traffic Supervisor

The Concessionaire shall have on its staff, individuals that are certified in accordance with the FDOT Standard Specifications for Road and Bridge Construction as a Worksite Traffic Supervisor that will be responsible to respond to an incident or lane closure event throughout the duration of the Term.

1.11 Contaminated Materials/Fuel Spills

The Concessionaire shall be required to respond to any Contaminated Material or fuel spill event on the Project beginning at NTP 2 through the remainder of the Term. The Concessionaire shall provide all qualified staff and equipment necessary to manage all cleanup operations and any monitoring of the affected area in accordance with Local, County, State, or Federal government laws, rules, regulations and ordinances. The Concessionaire shall be required to manage an initial assessment of the affected area and provide the Department with a recommendation on how to proceed within 24 hours of the discovery or event. The Concessionaire shall further develop a comprehensive plan for the long-term cleanup and monitoring of any contaminated materials as needed. Upon the Concessionaire and the Department agreeing on the long-term plan and a completion schedule, the Concessionaire shall be responsible for any and all remediation, monitoring and/or related responsibilities related to the event. All remediation and monitoring of the materials will remain the responsibility of the Concessionaire 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 Local, County, State, or Federal agency. Tables 4.1 and 4.2 detail the minimum performance requirements for Contaminated Materials or fuel spill events.

In accordance with Division II, Section 3.F.4, to prevent the rare potential for spread of contamination into the offsite golf course pond systems from the roadway drainage system during or after catastrophic spills or similar events, the Concessionaire shall close and maintain any water control devices or gates that are installed at or directly adjacent to all discharge points into the offsite golf course pond systems.
General Inspections

1.12 General Inspections

The Concessionaire shall carry out general inspections and continuous monitoring of the Project in accordance with the O&M Plan. The Concessionaire shall use the results of general inspections to develop and update the Renewal Work Schedule, to maintain asset conditions and service levels, and to develop programs of maintenance and Renewal Work to minimize the effect of O&M Work on Users.

1.13 Department O&M Monitoring

1.13.1 Review of Annual O&M Work

In accordance with Section 6.2.2 of the Concession Agreement, the Department will review with the Concessionaire any potential impacts to the O&M Work as a result of five possible occurrences:

a. A change to statewide maintenance programs or practices.

b. A change to any of the policies, procedures, standards, manuals, handbooks, guides, specifications, or any other State, Local, or Federal documents used to monitor the performance of the O&M Work.

c. Increased maintenance due to the construction of roadways, structures, and facilities that were not included in the Department's Work Program at the time of execution of the Concession Agreement.

d. Increased maintenance due to the transfer of ownership to the Department of non-state roadways, structures, and facilities within the O&M Limits.

e. Additional requirements as a result of Traffic Operational improvements.

1.13.2 Flexible Pavement/Friction Course Monitoring

The Department may conduct a routine annual pavement condition survey in accordance with the Department's Flexible Pavement Conditions Handbook. This routine annual pavement condition survey will serve as a quality control check of the Concessionaire in order to ensure that the Concessionaire is consistently monitoring the pavement condition in accordance with the Contract Documents. The Department may conduct additional pavement condition surveys at any time.

The Concessionaire shall adhere to the requirements as detailed in Division II, Section 6 of the Technical Requirements.

1.13.3 Rigid Pavement Monitoring

The Department may conduct a routine annual pavement condition survey in accordance with the Department's Rigid Pavement Conditions Handbook. This routine annual pavement condition survey will serve as a quality control check of the Concessionaire in order to ensure that the Concessionaire is consistently monitoring the pavement condition in accordance with the Contract Documents. The Department may conduct additional pavement condition surveys at any time.

The Concessionaire shall adhere to the requirements as detailed in Division II, Section 6 of the Technical Requirements.

2. MAINTENANCE REQUIREMENTS

2.1 ROADWAY MAINTENANCE REQUIREMENTS

2.1.1 Roadway Maintenance During The Construction Period

The Concessionaire shall be responsible for maintaining the assets within the O&M Limits identified in Volume III – Additional Mandatory Standards - Exhibit 4.1 including all maintenance of traffic transitions and tapers approaching the Project with the main objective of maintaining a safe and reliable roadway system. The Concessionaire shall be responsible for providing all preventative and routine maintenance activities, incident/emergency response and maintenance of the existing roadway assets and the maintenance of the Interim Traffic Management System (ITMS) assets as detailed in Table 4.1 from the date of NTP 2 until commencement of the Operating Period.

The Concessionaire shall provide and maintain properly trained staff to perform the continuous, routine and periodic maintenance activities required for the duration of the Construction Period. The Concessionaire's staff shall be available 24 hours per day, seven days per week, and every day of the year to respond as necessary to support the maintenance requirements during the Construction Period.

For scheduled road closures associated with Routine Maintenance operations, the Concessionaire shall coordinate these lane closures and maintenance activities with the Department a minimum of two weeks in advance of the planned activities as Planned Maintenance in accordance with Appendix 3 of the Concession Agreement. The Concessionaire shall notify the Department, the Florida Turnpike Enterprise and other agencies when closing any travel lanes for unplanned lane closures when the circumstances arise.

For scheduled lane closures associated with the Construction Work, the Concessionaire will be required to adhere to Division II, Section 3.

The Concessionaire shall review all existing Landscape Agreements and Maintenance Memoranda of Agreements (MMOA) with the adjacent municipalities along the Project (see Volume III – Additional Mandatory Standards) and shall comply with the requirements that are currently being required of the Department.

2.1.1.1 O&M Work and O&M Limits

The Concessionaire's O&M Work responsibilities for the Construction Period are detailed in Table 4.1 and the Construction Period O&M Limits are shown in Volume III – Additional Mandatory Standards – Exhibit 4.1.

1. Area 1 is generally defined as the area within I-75/I-595 Interchange ("Begin Project" limits) to SW 136th Avenue (western abutment bridge joint of the bridges over SW 136th Avenue {Bridge No. 860383 & Bridge No. 860384}). O&M Work within Area 1 shall include the following:
   a. O&M requirements under Table 4.1A with exception to the following activities:
      - Mowing
      - Turf management
      - Litter removal
      - Road & Bridge Sweeping
      - Reworking shoulders, slopes and roadside ditches
      - Roadway lighting
   b. O&M Requirements under Table 4.1B (Construction Availability Faults)

2. Area 2 is generally defined as the area from SW 136th Avenue (western abutment bridge joint (including the expansion joint) for the bridge over the 136th Avenue {Bridge No. 860383 & Bridge No. 860384} to the western abutment bridge joint of the Pond Apple Slough {Bridge No. 860427 (westbound) and to the I-95 southbound off ramp gore area. O&M Work within Area 2 shall include:

   a. O&M Requirements under Table 4.1A

   b. O&M Requirements under Table 4.1B

   c. Areas disturbed by maintenance of traffic and construction operations at intersecting streets;

   d. ITS devices which are placed outside of the O&M Limits, the Concessionaire shall be responsible for these ITS devices and the maintenance of the infrastructure to operate these ITS devices.

   e. All areas and interchanges within the Project Right-of-way lines including all maintenance of traffic transitions and tapers;

   f. All signal interconnect cable

   g. All maintenance responsibilities to the NNRC as required by Permit;

   h. All areas within the SFWMD Right-of-way;

   i. All bridge crossings over the NNRC;

   j. All areas within the Florida's Turnpike Enterprise right-of-way from north of Griffin Road to Peter's Road;

   k. All areas within the SR 7/US 441 interchange including SR 7/ US 441, all ramps and bridges from the southern limits of the limited access right-of-way line to the northern limits of the limited access right-of-way line;

   l. Pavement and bridge deck from the western abutment bridge joint of the Pond Apple Slough {Bridge No. 860428} to the I-95 southbound off ramp gore area.

2.1.2 Roadway Maintenance During the Operating Period

The Concessionaire shall be responsible for maintaining the Element Categories within the Operating O&M Limits identified in Volume III – Additional Mandatory Standards - Exhibit 4.2 with the main objective of providing a safe and reliable roadway system. The Concessionaire shall be responsible for maintenance of the Element Categories as detailed in Table 4.2 and Table 4.3 from the date of the commencement of the Operating Period.

The Concessionaire shall provide and maintain properly trained staff to perform the continuous, routine and periodic maintenance activities required for the duration of the Operating Period. The Concessionaire's staff shall be available 24 hours per day, seven days per week, and every day of the year to respond as necessary to support the maintenance requirements for the Operating Period.

For scheduled road closures associated with Routine Maintenance operations, the Concessionaire shall coordinate these lane closures and maintenance activities with the Department a minimum of two weeks in advance of the planned activities as Planned Maintenance in accordance with Appendix 6 of the Concession Agreement. The Concessionaire shall notify the Department, the Florida Turnpike Enterprise and other agencies when closing any travel lanes for unplanned lane closures when the circumstances arise.

2.1.2.1 O&M Work and O&M Limits

The Concessionaire's O&M Work responsibilities for the Operating Period are detailed in Tables 4.2 and 4.3 and the Operating Period O&M Limits are shown in Volume III – Additional Mandatory Standards – Exhibit 4.2.

1. Area 1 is generally defined as the area within I-75/I-595 Interchange ("Begin Project" limits) to SW 136th Avenue (from the western abutment bridge joint of the bridges over SW 136th Avenue {Bridge No. 860383 & Bridge No. 860384}). O&M Work within Area 1 shall include the following:
   a. Requirements under Tables 4.2 and 4.3 with exception to the following activities:
      - Mowing
      - Turf management
      - Roadway lighting
2. Area 2 is generally defined as the area from SW 136th Avenue (western abutment bridge joint (including the bridge joint) for the bridge over the 136th Avenue {Bridge No. 860383 & Bridge No. 860384} to the western abutment bridge joint of the Pond Apple Slough {Bridge No. 860427 & Bridge No. 860428}). O&M Work within Area 2 shall include:
   a. Requirements under Tables 4.2 and 4.3
   b. All maintenance responsibilities to the NNRC as required by Permit;
   c. All areas within the Florida's Turnpike Enterprise right-of-way with the exception of the mainline from north of Griffin Road to Peter's Road;
   d. All areas within the SR 7/US 441 interchange including SR 7/ US 441, all ramps and bridges from the southern limits of the limited access right-of-way line to the northern limits of the limited access right-of-way line;
   e. All sound barrier walls
   f. ITS devices which are placed outside of the O&M Limits, the Concessionaire shall be responsible for these ITS devices and the maintenance of the infrastructure to operate these ITS devices.
   g. All signal interconnect cable

2.1.3 Maintenance Plans & Schedules

2.1.3.1 Minimum Maintenance Tasks

The minimum maintenance tasks are shown in Tables 4.1, 4.2 and 4.3 and shall be performed by the Concessionaire at the minimum specified frequencies to meet the minimum performance requirements, in accordance with the Contract Documents or as per the frequency specified in the Concessionaire's O&M Plan. To accommodate the Concessionaire's ability to utilize design innovation, the Concessionaire's Final Design and equipment provided may be used as the basis for the Concessionaire to prepare and propose revisions to Tables 4.1, 4.2 and 4.3 for the Department's review and approval.

2.1.3.2 Planned Maintenance Work

The Concessionaire shall prepare a Planned Maintenance Schedule on a monthly and annual basis in accordance with the requirements set forth in Section 4 of Division II and in accordance with Appendix 3 and Appendix 6 of the Concession Agreement. The monthly Planned Maintenance Schedules are for O&M Work that is planned for the upcoming month. The monthly Planned Maintenance Schedules shall describe, for each section within the O&M Limits, all of the scheduled maintenance tasks or activities for the given period. These schedules shall include the dates, times and durations of each task.

2.1.3.3 Renewal Work

Renewal Work means maintenance, repair, reconstruction, rehabilitation, restoration, renewal or replacement of any Element of a type which is not normally included as an annually recurring cost in highway maintenance and repair budgets, that require a significant amount of time to accomplish and therefore must be coordinated, scheduled and planned well in advance of the work effort.

During each year of the Operating Period, the Concessionaire shall prepare a five year Renewal Work Plan that identifies the Concessionaire's plan for repairing, replacing, or renovating the assets that do not meet the minimum performance requirements. The Concessionaire shall diligently perform Renewal Work as and when necessary to maintain compliance with such performance measures and standards. The Concessionaire shall perform Renewal Work according to the Contract Documents. The Concessionaire shall use the Renewal Work Schedule, as updated from time to time, as a guide for scheduling and performing Renewal Work.

Not later than 90 Days after the end of each Calendar Year, The Concessionaire shall deliver to the Department a written report of the Renewal Work performed including any as-built drawings in the immediately preceding Calendar Year. The report shall describe by location, the type of work performed for each Element listed on the Renewal Work Schedule and any other component, including the dates of commencement and completion and the cost (for both the specific task and for all Renewal Work performed during the Calendar Year).

2.1.3.4 Renewal Work Schedule

The Concessionaire shall prepare and submit annually to the Department for its review and comment a Renewal Work Schedule for the next five Calendar Years. The Renewal Work Schedule shall set forth, by Element, (a) the estimated Useful Life, (b) the estimated Residual Life, (c) a brief description of the type of Renewal Work anticipated to be performed at the end of the Element's Residual Life, (d) the estimated cost of such Renewal Work, (e) the total estimated cost of Renewal Work in each of the years Renewal Work is anticipated to be performed under the Renewal Work Schedule and (f) a schedule of anticipated closures and work windows for the performance of the Renewal Work covered by the Renewal Work Schedule during the upcoming five Calendar Years and in accordance with Appendix 6 of the Agreement.

2.2 BRIDGE INSPECTIONS

The Concessionaire shall be responsible for conducting bridge inspections during the Construction and Operating Periods on all the system bridges within the O&M limits as detailed in Volume III – Additional Mandatory Standards - Exhibits 4.1 & 4.2 in accordance with the Florida Administrative Code (F.A.C.), and shall request Department approval for all Bridge Inspection Team Leaders, Bridge Inspection Supervisors, and the approving Professional Engineer a minimum of 60 days before initiating the bridge inspections. Any changes in such personnel must be approved by the Department.

Inspect all State owned bridges as detailed above according to the frequencies and criteria required by the Code of Federal Regulations, the F.A.C., the Department's Bridge and Other Structures Inspection Reporting Procedure 850-010-030 or successor, the Department's Bridge Underwater Operations Procedure 850-010-011 or successor, the Department's Bridge Operations and Maintenance Manual, and other applicable Contract Documents. Create inspection reports using the Department's Bridge Management System. The Concessionaire shall furnish the Department an original signed and sealed bridge inspection report and a color copy within 60 days after completion of each inspection. Inspection reports shall be created according to the Department's Bridge Maintenance Inventory System (BMIS); and shall be recorded in Pontis software. The Concessionaire shall be responsible for data entry.

As a part of bridge inspection duties, the Concessionaire shall determine if a review of the current load rating capacity is warranted for each inspection. If warranted, perform revised bridge load rating analyses.

The Concessionaire shall immediately notify the Department verbally if field observations reveal deficiencies sufficiently critical to warrant immediate and substantial traffic restriction or closing of the bridge. Confirm the verbal notification with a written notification within 4 hours.

The Concessionaire shall maintain all bridge records at all times in preparation for audit reviews. Ensure bridge inspectors attend appropriate bridge inspection training as provided by the Department. The Department will provide District-specific Quality Control checklists/criteria to the Concessionaire. The Department will perform quality assurance reviews using these checklists by inspecting bridges that have been previously inspected by the Concessionaire and by reviewing the inspection records for conformity with the Department's findings.

2.3 BRIDGE MAINTENANCE

As detailed in the FDOT's Bridge and Other Structure Inspection Reporting Procedure No. 850-010-030, bridge maintenance tasks are divided into maintenance activities as described in the Department's Maintenance Cost Handbook. The Concessionaire shall perform routine/preventative bridge maintenance, minor bridge maintenance and repair, major repairs including collision damage repair, defined as follows:

a. Routine/Preventative Maintenance: The preservation and upkeep of a structure, including all its appurtenances, in its original condition (or as subsequently improved) insofar as practical. Preventative maintenance includes any activity intended to maintain an existing condition or to prevent deterioration. Examples include but are not limited to: cleaning, lubrication, spot painting, dirt and debris removal, and application of protective systems. Routine/Preventative Maintenance work shall be completed in accordance with Tables 4.1 and 4.2.

b. Urgent Repair: The restoration of a structure, including all its appurtenances, to its original condition (or as subsequently improved) insofar as practical. Minor repairs include any activity intended to correct the effects of minor material deterioration by restoring the damaged member. Minor repairs are generally defined as repairs to bridge elements that are structurally sound (i.e., no loss of strength), but may have minor section loss, cracking, spalling, or scour. These conditions will have "fair", "satisfactory", or "good" condition ratings. Minor repairs are un-anticipated routine maintenance work as identified by the Concessionaire's bridge inspectors. Minor Maintenance and repair work require that the Concessionaire complete the work in accordance with Tables 4.1 and 4.2. Examples include but are not limited to localized material restoration of: deck expansion joints and joint systems, deck surfaces, sidewalks, drainage systems, bridge railing systems, superstructure members and bearing devices, substructure members, waterway channels, approach slabs, anchorages, all fender system components, and structural crack injection and matrix loss restoration.

c. Emergency Repairs: The restoration of a structure, including all its appurtenances, to its original condition (or as subsequently improved) insofar as practical. Major repairs include any activity intended to correct deteriorated members. Conditions requiring major repairs include loss of section, deterioration, spalling, or scour that affect the strength of the member. Engineering analysis is often performed to determine the extent of the lost strength. These conditions will have "poor", "serious", or worse condition ratings for primary structural members. Periodic Maintenance and Major Repair needs are to be identified by the Concessionaire's bridge inspectors and will require that the Concessionaire accomplish the

necessary remedial work in accordance with Tables 4.1 and 4.2. Examples include but are not limited to localized or full material restoration of:

- deck expansion joints and joint systems,
- deck surfaces, sidewalks,
- drainage systems,
- bridge railing systems,
- superstructure members and bearing devices,
- substructure members,
- waterway channels,
- approach slabs, anchorages,
- all fender system components,
- concrete restoration requiring reinforcement splicing,
- structural crack injection and matrix loss restoration, or
- metal fabrication to restore the integrity of or to replace structural elements.

d. Rehabilitation: The improvement or betterment of a structure, including all its appurtenances, to a condition meeting or exceeding current design standards, insofar as practical shall be considered Renewal Work.

e. Bridge Painting: The Concessionaire shall maintain all paint systems on structures to a minimum "Condition State" of no more than 50% in condition state 2 or better (per FDOT Bridge Inspectors Field Guide Structural Elements). Spot painting is only acceptable for active corrosion areas as a preventive measure. For aesthetic reasons, the paint system shall always be of uniform color and appearance.

The Department may periodically perform quality assurance reviews by inspecting bridge repairs and maintenance activities recently completed by the Concessionaire. In addition, the Department may perform field reviews of completed work orders for quality and completeness of the repair. All bridge records shall be made available to the Department for review at any time during the Term.

The Concessionaire will conduct work order review meetings with the Department. Bridge work orders for deficiencies that were noted in the inspection report as needing repair, shall be issued through the Department's Work Order System and completed by the Concessionaire. The Concessionaire shall also be responsible for closing all work orders in BMIS after the work is completed.

2.4 LANDSCAPE MAINTENANCE REQUIREMENTS

2.4.1 General Maintenance Requirements and Recommendations

As part of the Maintenance Manual, the Concessionaire shall develop a landscape plan detailing maintenance practices to allow the plant material to thrive in a safe and vigorous manner while fulfilling their intended purpose and conserving our natural resources. Plantings and all other landscape improvements shall be maintained to avoid potential roadway hazards and to provide required clear visibility, accessibility, clearance, and setbacks as set forth in the Contract Documents.

2.4.1.1 Watering Requirements:

Watering is a critical concern for not only the maintenance of healthy plant material but also for observing water conservation practices. The amount of water to apply at any one time varies with the

weather, drainage conditions and water holding capacity of the soil. For plant materials that have been established, it is imperative that any mandated water restrictions be fully conformed to. Proper watering techniques should provide even and thorough water dispersal to wet the entire root zone, but not saturate the soil or over-spray onto travel lanes.

2.4.1.2 Integrated Plant Management:

An assessment of each planting area's soil is recommended to periodically determine the nutrient levels needed to sustain healthy, vigorous plant growth. Palms, shrubs, trees and turf areas shall be fertilized in such a manner and frequency to ensure that the plant material remains healthy and vigorously growing. The Concessionaire shall incorporate this integrated plant management program in the Maintenance Manual to ensure healthy plants, which are free of disease and pests.

2.4.1.3 Mulching:

The Concessionaire shall mulch planting beds in such a manner as to: prevent weed growth; retain moisture to the plants; protect against soil erosion and nutrient loss; maintain a more uniform soil temperature; and improve the appearance of the planting beds. Avoid mulch mounded up on the trunks of trees, palms, and the base of shrubs to encourage air movement in this area that aids in lowering disease susceptibility. Cypress mulch shall not be used on this Project.

2.4.1.4 Pruning

All pruning, and the associated safety criteria, shall be performed according to American National Standard Institute ANSI A300 standards and in compliance with Broward County ordinances and shall be supervised by an International Society of Arboriculture (ISA) Certified Arborist. Pruning shall be carried out with the health and natural growth of plant materials in mind, and to specific pruning heights maintaining clear visibility for motorists, and vertical clearance for pedestrian, bicyclist, and truck traffic where applicable. Visibility windows must be maintained free of view obstructions and all trees and palms (with particular attention to fronds and fruit) maintained to prevent potential roadway and pedestrian hazards. The specific pruning heights are determined by understanding the designer's intent when selecting and placing the plants. The intended mature maintained height and spread of plants should be noted on the planting plans. The understory plant materials selected for use within the restricted planting areas (Limits of Clear Sight) of the medians are to be maintained at a height in compliance with Contract Documents.

2.4.1.5 Staking and Guying:

All staking materials, except for replacements, are to be removed within one year of planting. Any subsequent staking and guying activities by the Concessionaire must adhere to the Contract Documents. The Concessionaire shall closely monitor staking and guying attachment materials so that they are securely fastened to avoid potential roadway hazards.

2.4.1.6 Weeding/Herbicide

All planting areas shall be maintained as weed free as practicable enlisting integrated pest management practices in areas specified on the plans and by maintaining proper mulch levels. Extreme care is recommended if using a chemical herbicide to avoid overspray onto plant materials. Any damage resulting from overspray is the Concessionaire's responsibility to replace any of the damaged plantings.

2.4.1.7 Plant Replacement

Plant replacement shall be the same species and specification as detailed in Volume II, Division II and Section 3.V (landscaping requirements). Only plants graded Florida #1 or better, per the *Florida Department of Agriculture and Consumers Services, Grades and Standards for Nursery Plants* will be permitted on the Project.

2.4.1.8 Landscape Reporting

The Concessionaire shall detail in the Monthly Report, the activities provided for the above areas of maintenance and provide a summary that includes the following:

1. soil moisture testing
2. soil pH and nutrient level testing
3. fertilizer application schedule
4. pruning schedule
5. stake and guy inspection and removal schedule
6. weeding schedule
7. all Material Safety Data Sheets for any chemical herbicides or pesticides used
8. materials information for other products such as mulch and stake and guy equipment
9. documentation of any plant replacements

2.5 ITS MAINTENANCE SERVICES

The Concessionaire shall ensure a continuous (24 hours per day, seven days per week, and every day of the year) system operation and functionality of all ITS devices hereafter known as the System. This System will consist of all existing ITS devices, ITMS ITS devices, and the permanent ITS deployment, including but not limited to a fiber optic communication network subsystem, a Reversible Express Lanes Access Control subsystem, an Emergency Access Gates (EAG) subsystem, a Closed Circuit Television (CCTV) camera traffic monitoring subsystem, a Dynamic Message Sign (DMS) subsystem, Changeable Message Sign (CMS) subsystem, a Highway Advisory Radio (HAR) subsystem, a Microwave Vehicle Detection Station (MVDS) subsystem, and an Electronic Toll Collection (ETC) subsystem including all ancillary components within the I-595 project corridor.

The Concessionaire shall ensure a continuous (24 hours per day, seven days per week, and every day of the year) system operation and functionality of all components of the System. The Concessionaire shall be responsible for maintaining the System within the O&M Limits identified in Volume III – Additional Mandatory Standards - Exhibits 4.1 and 4.2, for the Construction and Operating Periods respectively. If any ITS devices are placed outside of the O&M Limits, the Concessionaire shall be responsible for these ITS devices and the maintenance of the infrastructure to operate these ITS devices.

For scheduled road closures associated with Routine Maintenance operations, the Concessionaire shall coordinate these lane closures and maintenance activities with the Department a minimum of two weeks in advance of the planned activities. The Concessionaire shall notify the Department, the Florida Turnpike Enterprise and other agencies when closing any travel lanes for unplanned lane closures when the circumstances arise.

The Concessionaire will be evaluated at a minimum on a monthly based on a system uptime matrix. The Concessionaire will provide all system support, routine and periodic maintenance, and failed or destroyed component replacement.

The Concessionaire's staff shall be available 24 hours per day, seven days per week, and every day of the year for the duration of the Term to respond to emergency repair and/or replacement work, including but not limited to hurricane warning situations.

The Concessionaire shall maintain at all times staffing levels required to ensure the Project's Maintenance requirements are met. A minimum of one (1) staff member assigned by the Concessionaire shall be fully

certified by the manufacturer on the deployed device model, qualified and trained to handle all System requirements for the duration of the Construction and Operating Periods.

Throughout the Construction and Operating Periods the Department will conduct reviews of the various phases of the Concessionaire's operation. The Concessionaire shall cooperate and assist the Department throughout this review process.

2.5.1 General Maintenance Services

The scope of the Maintenance Services during the Construction and Operating Periods shall include, but not be limited to the following:

a. Transition Plan

b. Inventory Control Documentation

c. Device Documentation Management

d. Diagnostics and Troubleshooting Work

e. Technical Systems Support

f. Routine and Periodic Maintenance

g. Device Installations and Calibration

h. Repairs and Parts Replacement

i. Emergency Response Repair

j. Software and Firmware Revision Maintenance

k. Electrical Work: Inspection, Repairs, New Installation, and Grounding

l. Fiber Optic Work: Inspection, Repairs, New Installation, Fusion Splicing, Terminations, OTDR / Fiber Testing

m. Conduit Work: Repair, Replacement, Installation, Directional Boring

n. Generators: Storage, Placement, Maintenance, Re-fueling

o. Data and Communications Cabling

p. Asset Management System Maintenance

q. As-built Revision Maintenance in CAD

r. All necessary vehicles to perform all services as required.

2.5.2 Standard Operating Guidelines (SOG)

The Concessionaire shall be responsible for developing Standard Operating Guidelines (SOG) for the ITS system and submitting it for approval to the Department no later than 60 days before the date of NTP 2. The SOG shall establish guidelines and procedures for matters of the Concessionaire's responsibilities and to create an atmosphere conducive to achieve teamwork, accuracy, consistency, and professionalism among the Concessionaire's staff, TMC Operations staff and Department's staff. At a minimum, the SOG will be reviewed every six months after the initial review, comments and edits will be submitted to the Department for review and approval.

2.5.3 Equipment Control

All equipment and component parts that are furnished shall be new, unused and shall meet all requirements of this Project. All parts shall be of high quality workmanship and no part or attachment shall be applied contrary to the manufacturer's recommendations or standard practice.

2.5.3.1 Replacement Parts

The Concessionaire shall provide replacement parts as needed for the maintenance of the ITS System. The replacement part shall be the latest compatible technology, equal to or better in function and quality to the existing system component or equipment. The Concessionaire shall be responsible for inventory control of all replacement equipment.

2.5.3.2 Equipment and Parts Inventory

The Concessionaire shall maintain and have readily available an up to date inventory of all Project's roadway assets and ITS equipment and/or parts. The inventory shall contain, but not be limited to, at a minimum:

a. Manufacturer,

b. Model number,

c. Descriptive name,

d. Manufacturer serial number,

e. Current location and condition (new, used or damaged).

f. If it's a spare

g. The site where it belongs to and type of site (CCTV, DMS, etc), if applicable

h. Location of site, if applicable

i. Date of purchase

j. Date of repair

k. Date when scrapped

l. Warranty status if applicable

2.5.4 Approved Products and Design

The Concessionaire shall follow the Department's Standard Specifications for Road and Bridge Construction. The Concessionaire shall review the Department's Approved Products List (APL) and Qualified Products List (QPL) and adhere to these whenever furnishing applicable items for this Project. The only exception to this is when the Concessionaire receives written consent from the Department.

2.5.5 SunGuide Maintenance and Inventory Management System

The Department is currently developing a SunGuide compliant Maintenance and Inventory Management System (MIMS) for all ITS devices, under a separate contract. This software module will facilitate the tracking of maintenance activities and parts inventory in near real time and, provide representative reports for maintenance activities and inventory management. It is expected that this SunGuide[sm] software module will be utilized for the management of I-595 ITS equipment maintenance and inventory.

The Concessionaire shall use the MIMS to facilitate, coordinate and record all preventative and emergency maintenance services, and to manage the inventory of all ITS device/hardware. All data as

required to generate complete Maintenance and Part Inventory Related Reports shall be recorded precisely and in real-time to ensure accurate data for auditing and report generation.

The MIMS ITS equipment (preventative) maintenance service entries and parts inventory shall be fully configured, populated and utilized 90 days after NTP 2; these shall be maintained for the duration of the Term.

2.5.6 Status Reports

The Concessionaire shall provide a summary of all work performed by the Concessionaire and the status of that work over a month period, as described in Section 4.1.6.

This summary shall also document and certify that all work has been completed in accordance with Manufacturer's specifications and any routine and/or preventative maintenance has been carried out as per Manufacturer's recommendations. This summary shall include an assessment by the Concessionaire of equipment failures and their causes such as design/construction errors, age of component, environmental problems, and lightening/surge/power inadequacies etc.

2.5.7 Device Monitoring and Availability

The Concessionaire shall be responsible for the operation and maintenance of the Department's HP Open View Network Node Management (NNM) software to manage the existing field ITS device network. The Concessionaire shall configure the NNM to communicate with ITS field network devices via SNMP, allowing field devices to be auto-discovered, monitored and controlled. The HP Openview NNM determines and displays physical and logical connectivity in networks, as well as information pertaining to protocols running over the network. The Concessionaire shall expand the Openview with additional network nodes licenses should the growth of the ITS field network devices warrants so.

The Concessionaire shall be responsible for developing an availability matrix and submitting it as part of the monthly reports. The matrix shall include all device systems and subsystems for all existing ITS devices, ITMS and the permanent ITS deployments, including but not limited to Express Lanes Access Control Components, Network Communications, CCTV Cameras, MVDS, CMS and DMS, etc.

The Concessionaire's ITS operation procedures shall indicate the operational status of each ITS device and shall create an event to indicate when each device is inoperable and an event to indicate when each ITS element has returned to service. The system event log and timeline for this system shall be included in the reports. This matrix shall be included with the monthly report and as a stand alone annual report documenting the total downtime and percentage available (i.e. 99.99%) for that year per device with a weighted average for the total equipment percentage reported. Downtime related to incidents or natural disasters shall be recorded separately from all other System failures.

2.5.8 Diagnostic and Troubleshooting Work

Upon the observation or a notification of a malfunction or problem with the I-595 ITS, it is the Concessionaire's responsibility to dispatch qualified personnel to provide diagnostic and troubleshooting services as required, to identify the problem and, if possible, perform minor repairs to fix the problem while at the site.

The Concessionaire shall conduct the minor repair that is needed during the Concessionaire's diagnostic work. Minor repairs include, but are not limited to, replacement of any spare parts in the current spare parts inventory, reset of electric, electronic or electromechanical devices, reset of the device or PC/PLC controllers, reset programs, replace missing screws or clamps, loose connection of any wires, cables, or harnesses, replacement of fuses and/or circuit breakers.

It is the responsibility of the Concessionaire to service equipment and repair system components to a 100% functional status.

2.5.9 Preventative and Responsive Maintenance Services

The Concessionaire shall provide preventative and responsive maintenance services as described in Section 4.4.9 and shall meet the defined response time, where applicable.

2.5.10 Repairs, Parts and Materials

The Concessionaire shall repair or replace damaged, missing or malfunctioning equipment in order to maintain the system operation and functionality.

2.5.11 Network and Utility Services

The Concessionaire shall be required to deploy, operate and maintain a Geographic Information System (GIS) and relational database based fiber optic network management software such as OSP Insight or similar. The Concessionaire shall be responsible for populating the database and update promptly the latest detailed information about Concessionaire's fiber optic network.

The Concessionaire shall have the necessary equipment and personnel capable of performing various types of fiber optic repair needed in the field including, but not limited to: mid-span fusion fiber splicing, fiber trunk splicing, OTDR testing, fiber enclosure /fiber distribution panel installations, and terminations. The Concessionaire shall have the capability to install both open trench and directional bored conduit for new installation and replacement of damaged conduit.

2.5.12 Emergency Power for ITS Devices

The Concessionaire shall be responsible for placement, security, maintenance, and re-fueling of mobile generators and stationary generators to maintain emergency power to the ITS Devices. These generators shall be maintained by the Concessionaire according to the manufacturer's operating manual.

2.5.13 Disaster Reporting

The Concessionaire shall be responsible for providing a detailed damage report after the occurrence of a disaster, natural or otherwise. This report shall include an individual site analysis with the following information, but not limited to:

a. Device Location
b. Date and time of visit
c. Description of failure or issue and system impacts
d. Site conditions noted i.e. submerged, structure down, no power
e. Photo documentation (digital only)
f. Damaged parts list: type, model, serial and control number
g. Needed parts list
h. Repair cost breakdown
i. General notes
j. Schedule of repair duration

The damage report by the Concessionaire shall be per site and include all devices connected to the cabinet location. This work shall be coordinated with the Concessionaire and the Department to establish time frames for these reports to be delivered to the Department depending on the severity of the disaster.

2.5.14 Existing Communication Link

The Concessionaire shall be responsible for protecting the existing communication link between Hub-3 (as described in the ITS Deployment Requirements) and ITS devices along the Sawgrass Expressway as well the Turnpike Sawgrass backbone fiber. If this communication link is damaged by the Concessionaire, it is the responsibility of the Concessionaire to repair or replace the damaged communications equipment (fiber optic cable, conduit, pull boxes, splice cabinets, hubs, etc.) within four hours. Damaged fiber optic cable may be temporarily fusion spliced within the four-hour period to temporarily restore communications; however, any damaged fiber optic cable will be replaced from termination point to termination point with the same type of cable within 90 days.

2.5.15 ITS Performance Requirements

The Concessionaire shall be responsible for the monitoring and availability of the Project's systems 24 hours per day, seven days per week, every day of the year, and shall aim to maintain the highest system availability. Performance indicators are detailed in Tables 4.1, 4.2 and 4.3.

2.6 ITS MAINTENANCE SERVICE DESCRIPTIONS

The Concessionaire shall provide the following ITS maintenance services as part of the overall I-595 infrastructure maintenance program. The various types of services, and defined response time, where applicable, are:

ITS Maintenance Service Type	Response Time	Cure Period
Emergency	Ten minutes during normal business hours; One hours outside normal business hours	As Per Table 4.1A or 4.2 (as applicable)
Urgent	30 minutes during normal business hours; two hours outside normal business hours	As Per Table 4.1A or 4.2 (as applicable)
Priority	24 Hours	As Per Table 4.1A or 4.2 (as applicable)
Preventative and Routine	As scheduled	As Per Table 4.1A or 4.2 (as applicable)

The response time is defined as the time allowed to the Concessionaire in order to mobilize its personnel, equipment, tools, parts, and materials to the work site.

The Concessionaire shall notify the TMC when the maintenance actions have been completed and describe any resulting operational restrictions.

2.6.1 Emergency Maintenance Response – 10 Minutes (Business Hours) / 1 Hour (Non-Business Hours) Response

Emergency maintenance response will be required 24 hours per day, seven days per week, every day of the year when a device or component of the device, results in the complete failure to critical operational elements of the I-595 ITS or any system infrastructure item that is in a condition that is unsafe and/or may present a life threatening condition. Typical emergency maintenance response will be required for, but not be limited to:

- EXPRESS LANES Access Control System Components (Access Control Unit, Warning Gate, Barrier Gate, LCS, CMS and/or CCTV camera monitoring the EXPRESS LANES access) failure
- EAG
- System-wide communication outage
- Structural failure or potential structure failure due to incident or weather damage
- CMS/DMS message being stuck on a sign
- Fiber cuts, electrical risks, or potential fire risks

The Concessionaire's maintenance staff shall arrive at the work site within 10 minutes during normal business hours, and within one hour outside of normal business hours, once the Emergency Maintenance related system failure is reported by the TMC to the Concessionaire's maintenance staff.

Immediately upon arrival at the site, the Concessionaire shall update the TMC of the status and estimated time required for repairs. If the repair time will exceed two hours, the Concessionaire shall notify the TMC immediately and begin preparation of a contingency plan. A work-around should be considered if it would not negatively impact any part of the I-595 operations. The Concessionaire shall notify the TMC when the maintenance actions have been completed and describe any resulting operational restrictions.

2.6.2 Urgent Maintenance Response – Thirty Minutes (Business Hours) / Two Hour (Non-Business Hours) Response

Urgent maintenance response will be required 24 hours per day, seven days per week, and every day of the year when any system component results in multiple devices being down or unusable concurrently, or creates the potential for a system-wide outage.

The Concessionaire's maintenance staff shall arrive at the work site within thirty minutes during normal business hours, and within two hours outside of normal business hours, once the Urgent Maintenance related system failure is reported by the TMC to the Concessionaire's maintenance staff.

Immediately upon arrival at the site, the Concessionaire shall update the TMC of the status and estimated time required for repairs. If the repair time will exceed four hours, the Concessionaire shall notify the TMC immediately and begin preparation of a contingency plan. A work-around should be considered if it would not negatively impact any part of the I-595 operations. The Concessionaire shall notify the TMC when the maintenance actions have been completed and describe any resulting operational restrictions.

2.6.3 Priority Maintenance Work – 24-Hour Response

This type of work will be required when a device or component of the device, has failed and must be repaired in order for the I-595 ITS to function as expected. The Concessionaire's maintenance staff shall arrive at the work site within 24 hours once the Priority Work related system failure is reported by the TMC to the Concessionaire's maintenance staff.

Shortly after arrival at the site, the Concessionaire shall update the TMC of the status and estimated time required for repairs. If the repair time will exceed 24 hours, the Concessionaire shall notify the TMC immediately and begin preparation of a contingency plan. A work-around should be considered if it would not negatively impact any part of the Project. The Concessionaire shall notify the TMC when the maintenance actions have been completed and describe any resulting operational restrictions.

2.6.4 Preventative and Routine Maintenance Work

The Concessionaire shall perform all preventative and routine maintenance services within the periodic intervals as recommended and specified by the equipment manufacturer, and based on the equipment's operating condition over the duration of the Term (i.e. Access Control System Components, CCTV Cameras, DMS components, CMS components, Vehicle Detection Systems, Communications Devices, Encoders, Controllers, and any future System Renewals, etc.).

Preventative maintenance services shall consist of the Concessionaire performing necessary daily, weekly, bi-weekly, monthly, semi-annual and annual inspections, electrical and mechanical tests and repairs of the device sites to maintain the ITS system operable on a 24 hours per day, seven days per week, every day of the year basis for the duration of the Term.

The Concessionaire, in cooperation with the Department, will provide a standard preventative maintenance plan schedule/checklist of the items to be checked or changed on the I-595 ITS Project. Such plans shall be updated periodically to reflect any future System Renewals during the term of this Contract. A sample preventative maintenance plan schedule/checklist is provided below.

SUNGUIDE

FDOT District IV Preventive Maintenance Check List

Project:ITS Maintenance Services Contract

Device Type: DMS

Device ID:_____

Device Location:_____

Name of Technician:_____

Date:_____

SAMPLE

Type of Preventive Maintenance Performed:	Annual	Semi-annual	Monthly

Codes: W= Working, G=Good, NW=Not Working, P=Problem, R=Repaired

DMS Housing			
No.	**Activity Description**	**Code**	**Comments**
1	Visually Check for Physical Damage		
2	Test Electronic components		
3	Check and/ or replace light bulbs if required		
4	Inspect cables and conectors		
5	Clean and Dust inside of housing		
6	Check and lubricate access door		

Raceways (Conduit and Pull Boxes)			
No.	**Activity Description**	**Code**	**Comments**
1	Inspect All Conduit for Proper Mounting		
2	Inspect All Conduit for Environmental Damage		
3	Check for Broken & Damaged Pull Boxes		

DMS Cabinets			
No.	**Activity Description**	**Code**	**Comments**
1	Inspect Conduit and Base Seals		
2	Check Fan and Thermostat Operation		
3	Lubricate Doors and Locks		
4	Inspect Cabinet Lights		
5	Inspect and Test UPS Batteries		
6	Replace Door Filters If Required		
7	Vacuum and Dust Cabinets		
8	Inspect Lighting System		
9	Test Grounding		
10	Apply Pest control		

Fiber Optic and Communications Equipment			
No.	**Activity Description**	**Code**	**Comments**
1	Check All Com. Equipment for Proper Operation		
2	Check Fiber and Copper Cable Connections		
3	Inspect Equipment for Environmental Damage		
4	Check Output of TX (if required)		
5	Tune Modulator Demodulator (if required)		
6	Clean and Dust Equipment		

It is the Concessionaire's responsibility to keep the Project maintained. Power and communications service runs must be kept cleared for easy recognition of the pull boxes and easy access to the service run. Dirt, plants, weeds, etc. must be removed from pull box covers. The areas surrounding the controller cabinet's utility service poles, camera/device poles, and sign structures must be mowed/trimmed and free of insects (i.e., ants, bees, etc.). The interior of the controller cabinets and the DMS/CMS signs must be free of excess dust, dirt, debris, cobwebs, etc. The exterior of the signs must be washed quarterly. This service shall be performed in conjunction with the monthly PM.

The Concessionaire shall ensure that the fiber optic cable plant markers are in place and that they are in good condition. This service will be provided each month as part of the preventive maintenance, for each marker, for the entire Project. If a need arises for the Concessionaire to purchase replacement cable plant markers, these markers shall be similar to the existing markers and the Concessionaire shall ensure that the same markings are used to identify the cable route.

2.7 TOLL COLLECTION SYSTEM

2.7.1 Concessionaire's Responsibility

The Concessionaire shall coordinate the operations of the Toll Collection System with the Department and the Florida's Turnpike Enterprise (FTE) and is responsible for the maintenance of the following toll collection elements:

a. Gantry structure, including the equipment arms and lift maintenance;

b. Toll equipment building;

c. Generators to power the toll equipment building;

d. HVAC Units for the toll equipment building;

e. Fiber lateral from the mainline trunk to the gantry building;

f. Electrical service to the tolling infrastructure;

g. Telephone service to the toll equipment building; and

h. Concrete pavement at the gantry location

The Concessionaire shall incorporate these toll collection elements in the ITS Maintenance Manual as detailed in Section 4.2.3.1.

2.7.2 FTE's Responsibility

FTE will be responsible for the maintenance of:

a. The fiber from the equipment on the gantry to the patch panel within the toll equipment building

b. Toll equipment that is located on the gantry and within the toll equipment building;

c. The rack mounted UPS that is located within the toll equipment building; and

d. Vehicle Detection Loops

3. OPERATIONS REQUIREMENTS

The Concessionaire shall be responsible to operate the Project with the main objectives of maximizing safety, reliability and roadway availability. The Concessionaire shall be responsible for operating the Project and other items within the applicable O&M Limits as specified in Tables 4.1, 4.2 and 4.3.

Concessionaire shall provide and maintain the appropriate number of properly trained operations staff to perform the operating duties specified herein and the activities identified in Tables 4.1, 4.2 and 4.3.

3.1 ITS Operations

The Concessionaire will collect data to be used to generate monthly, quarterly and yearly data collections and performance measures reports, commencing from the opening of the new I-595 facilities to the general public. The performance measures reported will be the accountability assessment of the Concessionaire's overall performance.

The Concessionaire shall establish a Transportation Management Center (TMC) for I-595 ITS operations. The Department will provide the Concessionaire with two rooms, approximately 530 Square Feet in total, within the Department's SMART SunGuide TMC, located at 2300 W Commercial Blvd, Fort Lauderdale, FL 33309. The Concessionaire shall adhere to all current and existing agreements, SOGs, and JPAs between the Department and Broward County; specifically the Broward County Traffic Engineering Division. Additional details for the TMC are detailed in Section 1.4 of Division II, Section 3, Attachment 1 - ITS Deployment Requirements.

The Concessionaire shall provide the Department with real-time access to any and all data and video located on the I-595 corridor, SR 84 and the Express Lanes. The Department shall have the right to disseminate any and all data and video collected by ITS devices located on the Project.

The Concessionaire shall understand that the ITS operation requirements specified in this document are based on the initial ITS system deployments. Due to the prospect of the continuous technology evolution, the Department will likely adopt the new ITS standards and the substantial revisions of existing ITS standards during the Term. If any time the Department revises and/or adopts new ITS standards, the Concessionaire shall update, upgrade, replace or change the ITS devices and infrastructures, as necessary and provide the Department with a schedule on the implementation of these upgrades, to comply with the Department's new or revised ITS Standards.

The Concessionaire shall utilize the same software as the Department for the collection, storage and dissemination of information about incidents on the freeway networks. At this time the Department uses SunGuide[SM] software as the primary means of collecting, storing and disseminating information about incidents on the freeway networks. If at any time the Department updates, upgrades or changes the software used for these purposes the Concessionaire shall do the same. The Department will be providing the Concessionaire the SunGuide[SM] software for use on the Project. Additional details for the software are included in Division II, Section 3, Attachment 1 - ITS Deployment Requirements.

The Concessionaire shall be responsible for procuring, installing, configuring, operating, maintaining and supporting its own (a separate) SunGuide[SM] Software installation, including all hardware required by that SunGuide[SM] Software installation, within the TMC. The SunGuide[SM] Software will be made available for use by the Concessionaire at no cost and annual maintenance fees will be paid for by the Department.

The Concessionaire shall utilize a similar or identical set of outcome and output performance measures for ITS operations where the results shall be equal or better than that of Department in any category during the same period. The Department currently publishes the ITS outcome and output performance measures on a weekly, monthly, quarterly and yearly basis. The reports can be found at SMART SunGuide TMC web site http://SmartSunguide.com. These performance measure reports are a sample of the current output measures used by the Department and should not be considered all inclusive because additional measures shall be used to evaluate the performance of operations staff. Any existing or future performance measures available in the software may be used by the Department to evaluate the performance of the Concessionaire. The Concessionaire's I-595 ITS Operations Performance Measures Report shall be generated and constructed based on the Concessionaire's ITS operation procedures and information collected through the SunGuide[SM] Software.

The Concessionaire shall assume the responsibilities of the existing ITS operations within the I-595 project from the date of NTP 2. The ITS operations include, but are not limited to, the Concessionaire's TMC operations, the Road Ranger Service Patrols, the Severe Incident Response Vehicles (SIRV) and the Broward County Freeway Traffic Incident Management Team.

3.1.1 Traffic Management Center Operations

3.1.1.1 TMC Control Room Personnel

The Concessionaire shall ensure TMC control room personnel are fully qualified and trained as per the SMART SunGuide SOG to perform their duties. TMC control room personnel shall possess and demonstrate, at a minimum, the following knowledge, skills and abilities:

a. In-depth knowledge of Express Lanes operation procedures, and associated hardware and software

b. General understanding of the TMC services and organizational structure

c. Practical understanding of the TMC computer systems and applications

d. Ability to gather, prioritize, and process regional traffic, construction, and special event information from a variety of simultaneous sources

e. Ability to communicate effectively via writing, radio and telephone

f. Good understanding of TIM, Hazmat clean-up and heavy equipment used during TIM activities

g. Strong familiarity of DMS, HAR and CCTV device infrastructure

h. Maintain a professional demeanor and appearance at all times

The Concessionaire shall ensure that all levels of TMC control room staff are trained and certified in a method consistent with the existing training and certification program developed and in use at the Department's SMART SunGuide TMC. The Concessionaire shall ensure that staff is provided on-going training as needed; at a minimum, TMC control room personnel and Service Patrol staff shall be required to attend semi-annual joint TMC Operator/Road Ranger training provided by the Department.

3.1.1.2 Criminal Record Check and Drug Testing

A criminal history record check shall be conducted by the State's FDLE & FBI and shall be provided by the Concessionaire to the Department for each employee (operator) before employment starts on this Project.

Individuals with criminal records shall not be hired.

The Department may perform periodic criminal record checks on employees and operators at minimum every six months.

3.1.1.3 Compliance with Section 112.0455, Florida Statues.

The Concessionaire shall provide proof, by a licensed medical practitioner or technician, that all operators are drug free in accordance with Section 112.0455, Florida Statutes prior to beginning operations.

The Concessionaire shall submit the proof described above for its operators every six months thereafter.

3.1.1.4 TMC Control Room Hours of Operation

The Concessionaire shall provide at least two operators on duty at all times (24 hours per day, seven days per week, every day of the year) in the TMC. The Concessionaire shall provide additional operators on

duty in the TMC during peak travel times (rush hours) and at any time during Express Lanes switching operations.

At a minimum the Concessionaire shall ensure that the Express Lanes will be open for eastbound traffic during the morning rush hour and open for westbound traffic during the afternoon rush hours. The Department will determine when the express lanes will be open to traffic and the Concessionaire shall have the necessary staff on board to respond accordingly. The Concessionaire shall conduct a manual "drive-through" on the express lanes every time the reversible lane changes direction to ensure the safe express lane switching operations. The Concessionaire, in coordination with the Department, shall develop the final detailed procedures and schedule for opening, closing and maintaining the Express Lanes system as part of the I-595 ITS Operations SOG.

Express Lane Hours of operation are currently defined from Monday to Friday 4:00 AM to 1:00 PM in the eastbound direction and 2:00 PM to 2:00 AM in the westbound direction. On the weekends, the Express Lanes will operate from 4:00 AM Saturday morning to 2:00 AM Monday morning in the eastbound direction only. Rush Hours are currently defined as the hours from 6:00 am to 9:00 am in the morning and 4:00 pm to 7:00 pm in the afternoon. The definition of Express Lane Hours and Rush Hours shall be subject to change by the Department during the Term.

3.2 Data and Video Sharing

The Concessionaire shall provide to the Department in real time all data collected as well as all live streaming video. Real time shall be defined as the transmission of data and video by the Concessionaire to the Department within one second of collection by the Concessionaire.

The Department currently shares real-time data and live video feeds with several outside agencies under two programs: the Inter-Agency Video Distribution System (iVDS) and SMART viewer. The Concessionaire shall participate in and provide data and live video feeds for all data and video sharing programs authorized by the Department.

The Concessionaire shall not record video obtained through the use of ITS cameras without prior written permission from the Department. The Concessionaire shall comply with the FDOT CCTV Agreement Procedure No. 750-040-005 or successor.

The Concessionaire shall not provide data or live video feeds to any person, organization or entity without prior written permission from the Department.

3.2.1 IVDS

The iVDS distributes live motion CCTV camera video feeds from District 4 using the existing Internet. The iVDS converts the source of the high bandwidth video images (MPEG-2) to an industry standard "MPEG-4" format allowing high quality viewing through existing Internet connections. The iVDS solution requires authorized users to sign into a secure website, which enables them to select a specific CCTV feed or a tour of CCTV feeds. Emergency response agencies such as 911 centers; police, fire and ambulance stations; TMCs; airports and transit authorities can benefit from the live images before or during an incident along the freeways. The Concessionaire shall provide, free of cost, live motion CCTV camera feeds compatible with the iVDS program (and any future similar programs) participant authorized by the Department.

3.2.2 Smart Viewer

SMART Viewer is a software application to view real-time, detailed information about traffic incidents, disabled vehicles, or crashes. The application provides a full list of traffic events in District 4. Events are hyperlinked to detail screens, providing time stamps, chronology, emergency responders, and other incident clearance information. SMART Viewer runs off of the SunGuide^{SM} traffic incident management

database, which powers real-time updates. The Concessionaire shall provide to the Department, free of cost, all real-time data required to operate and manage the SMART Viewer application and future similar programs.

3.3 Open Roads Policy

The Concessionaire shall comply with the State of Florida "Open Roads Policy", (see Reference Documents) an agreement between the Florida Highway Patrol (FHP) and the FDOT on an open roads policy to provide traffic control within 30 minutes after arrival to the scene, expedite the removal of vehicles, cargo, and debris from roadways on the State Highway System to restore, in an URGENT MANNER, the safe and orderly flow of traffic following a motor vehicle crash or incident on Florida's roadways.

3.4 Traffic Incident Management

TIM is the planned and coordinated program to detect, respond to, and clear traffic incidents, thereby restoring traffic capacity as safely and as quickly as possible. The Concessionaire shall be responsible for the TIM from beginning at NTP 2 through the remainder of the Term. This coordinated process involves a number of public and private sector partners, including the following agencies and services:

a. Law Enforcement

b. Fire Rescue

c. Emergency Medical Services

d. Hazardous Material Contractors

e. Towing and Recovery

f. Transportation

g. Traffic Information Media

h. Emergency Management

The Concessionaire shall install accident investigation signs on off-ramps, install 511 signage, Move Over Signs, Call *FHP for Road Ranger signs to facilitate the traffic incident management activities within the O&M Limits.

3.4.1 Rapid Incident Scene Clearance (RISC) Program

Consistent with the Open Roads Policy, the Concessionaire shall provide a Rapid Incident Scene Clearance (RISC) Program in order to significantly reduce the time it takes to clear major accidents and incidents.

The objective of the RISC program is to make sure that the Concessionaire has the available resources to respond to the Department's and FHP's requests for vehicle recovery and clearance services. The Concessionaire acknowledges that time is of the essence and shall, at minimum, arrive with two Recovery Wreckers and a Recovery Support Vehicle as per the RISC – Scope of Services detailed in the Reference Documents with required equipment, and materials as needed, and with all necessary traffic control devices within one hour from initial response. The need for additional trucks and heavy equipment should be jointly determined at the incident scene by FHP and the Concessionaire's representatives. The need for additional trucks and heavy equipment shall not increase the time required by the Concessionaire to perform services.

3.4.1.1 Recovery Vehicle Requirements

The Concessionaire shall be capable of mobilizing a recovery vehicle and the necessary equipment with the minimum capacity, size and number to clear and remove rollovers, jackknifed tractor trailers, lost loads, fire, cargo spill or any other incident or event that cause the closure of lanes on the Project. The Concessionaire should review the referenced "RISC - Scope of Services" provided in the Reference Documents which detail the minimum capacity, size and number of recovery vehicles that are currently being used by the Department.

3.4.1.2 RISC Minimum Requirements

The Concessionaire's RISC Contractor shall be available to provide these services 24 hours a day, seven days a week, every day of the year and is required to submit documentary proof showing previous experience and knowledge in working with heavy duty towing and recovery efforts and shall be proficient and trained in:

a. Heavy Duty Wrecker Operations

b. Ultra Heavy Wrecker and Recovery Practices

c. Hazardous Material Awareness

d. Traffic Incident Management Practices including:

    1. Incident Scene Traffic Safety

    2. The Florida "Open Roads" policy

    3. The Florida "Guidelines for the Mitigation of Accidental Discharges of Motor Vehicle Fluids (non-cargo)

    4. Incident Scene Traffic Control in accordance with the Manual on Uniform Traffic Control Devices (MUTCD).

3.4.2 Severe Incident Response Vehicle Program

The Concessionaire shall provide a Severe Incident Response Vehicle (SIRV) service for the Project. SIRV is to act as the incident response coordinator and report real time incident conditions to the Department's Public Information Office when conditions warrant. The SIRV assists responding agencies, coordinates Maintenance of Traffic (MOT) activities of the Road Rangers, and provides liaison between the Concessionaire, other agencies and FDOT resources. Other SIRV duties shall include documenting response and clearance times, participating in TIM meetings, and facilitating post-incident analysis meetings.

The Concessionaire shall furnish all personnel, supervision, expertise, vehicles, equipment, materials, parts, licenses, training, supplies and incidentals necessary to provide a SIRV Program and to assist the Department to adhere to the Florida "Open Roads" Policy by reducing incident durations, increasing scene safety and improving incident coordination. The Department has included, as referenced in Reference Documents the current District Four SIRV Program Scope of Services and Standard Operating Guidelines (SOG). The Concessionaire should as part of the O&M Plan, develop SOG that meet the guidelines of District 4's current SIRV Standard Operating Guidelines. The SOG should establish the Knowledge, Skills and Abilities (KSA) requirements for the SIRV staff. The SOG should establish guidelines and procedures for matters of the SIRV Operations Staff responsibilities and to create an atmosphere conducive to achieve teamwork, accuracy, consistency, and professionalism among SIRV staff, Transportation Management Center (TMC) Operations Staff, and Road Ranger Operators. At a minimum, the SOG will be reviewed every six months after the initial approval, comments and edits will

be submitted to the Department's Project Manager for review and approval. This review shall be submitted as part of the project progress report for the month that it occurs.

The Concessionaire shall make resources available for all activities described herein for providing services during a hurricane evacuation or other emergencies or to assist Florida Highway Patrol (FHP) during certain maintenance of traffic requests or as directed by the Department. This shall also include having the necessary equipment to deal with minor fuel spills.

The Concessionaire shall request in writing to the Department any additional markings or logos to be placed on the SIRV vehicles, uniforms or any other property used by the SIRV program. If the Concessionaire does not receive approval, no additional markings or logos will be displayed. Additionally, the required logos and markings required will not be altered, changed or removed without approval in writing by the Department.

3.4.2.1 SIRV Staffing

The Concessionaire shall provide adequate staff and SIRV operators to carry out the tasks and duties required for the SIRV program. All SIRV Operators shall be experienced with traffic incident management. It is recommended that the SIRV operators have previous law enforcement or fire rescue background.

All SIRV operators shall be available to the Department twenty-four hours a day, seven days a week, every day of the year through a reliable, toll free or local area code phone number. This person shall be thoroughly knowledgeable and experienced in relation to the aspects of the SIRV program.

3.4.2.2 SIRV Staffing Certifications and/or Licenses

The Concessionaire shall be responsible for ensuring that the SIRV Operators are trained and qualified, prior to the start of their service, with the following certifications or licenses, but not limited to:

a. NIMS Incident Management and Command

b. Advanced Maintenance of Traffic (MOT)

c. Incident Documentation and report writing

d. Emergency Vehicle Operation

e. First Responder

f. Basic Haz-Mat

3.4.2.3 SIRV Vehicle Requirements

3.4.2.3.1 Minimum Number of SIRV Vehicles Required

Assuring vehicle availability during the Term is the responsibility of the Concessionaire. A minimum of one SIRV vehicle for the duration of the Term shall be provided. In the case of multiple incidents/events, the Concessionaire shall be required to provide additional equipped vehicles, e.g. Road Ranger Vehicles, to cover these additional incident/events at all times during the Term.

3.4.2.3.2 Minimum SIRV Vehicle Specifications

Reference Documents detail the "District 4 - SIRV Standard Scope of Services" and "Standard Operating Guidelines" for vehicle specifications. This document is a Reference Document and it should be used as a guideline by the Concessionaire to develop the SOG for the Project.

The vehicles shall be kept neat and clean, and shall be maintained in conformance with the requirements of the Motor Vehicle Code, applicable Florida Statutes, Rules of the Department of Highway Safety and Motor Vehicles and Broward County Ordinances.

3.4.2.3.3 SIRV Vehicle Inspections

All SIRV vehicles and their associated equipment, accessories and parts shall be subject to periodic inspection by the Department for unsafe or poorly maintained vehicles, or for improperly equipped vehicles. At the sole discretion, the Department may order such vehicle(s) removed from service.

3.4.2.3.4 SIRV Vehicle Markings, Logo and Color Requirements

All SIRV Service Vehicles shall be painted white.

3.4.2.3.5 Service Patrol Vehicle Logos

All Service Patrol Vehicles shall only have the identification markings listed below on areas designated by the Department:

a. 11-inch diameter FDOT logo.

b. 8.5 inch x 9.5-inch SunGuide logo.

c. 24-inch diameter FDOT Severe Incident Response Team logo applied to both doors and the rear.

d. The letters "FDOT" and "SIRV" applied in blue reflective lettering on the roof of the service body large enough to be seen by overhead aircraft.

e. The letters "SEVERE INCIDENT RESPONSE VEHICLE FDOT District IV" on left, right and back sides of the service body.

The Department shall approve the design of all identification markings.

All identification markings shall be maintained in a clean and readable condition throughout this Contract.

3.4.2.3.6 SIRV Vehicle Tools/Accessories

Reference Documents detail District 4 - SIRV Standard Scope of Services and SOG for vehicle tools and accessories. This document is a Reference Document and it should be used as a guideline by the Concessionaire to develop the SOG for the Project.

3.4.2.4 SIRV Data Collection

SIRV operator shall maintain "Severe Incident Response Vehicle Team Incident Report" which shall be completed and submitted to the Department within 24 hours after the incident was cleared. The incident Report shall reflect but not limited to the following data:

a. The month, day and year

b. SIRV Operator name and truck number.

c. The time when the SIRV Operator was notified of a given incident

d. The time SIRV Vehicle starts in-route to the incident scene.

e. If a decision was made not to respond, the name of the decision maker and reasons.

f. The time of arrival of the SIRV Vehicle at a given incident.

g. The time of departure of the SIRV Vehicle from the scene of a given incident.

h. Lane Closure time, by each lane

i. Lane Open time, by each lane

j. The nature of each incident, such as debris removal, stalled vehicle, crash, etc.

k. Incident duration reduction time in minutes and why.

l. Lane closure reduction time in minutes and why. The time reduction shall include reductions per lane, number of lanes, and total minutes.

m. Agency time saving in minutes and why, and list the name of each agency benefited and time savings.

n. List the equipment and quantity used by SIRV

o. Where applicable, the following information regarding on scene contacts shall be recorded.

1. FHP
2. FHP incident commander
3. FHP incident Case Number
4. Investigation Trooper
5. Number of troopers on scene
6. Duties of troopers
7. Other law enforcement assistance
8. Fire Rescue
9. Road Rangers
10. Medical Examiners Office
11. Tow Company
12. Environmental clean up agency
13. FDOT Maintenance
14. Other Pertinent Information or comments.

3.4.2.5 SIRV Training Certifications, Safety Rules and General Regulations

Reference Documents detail the District 4 - SIRV Standard Scope of Services and SOG for training certifications, safety rules and general regulations. This document is a Reference Document and it should be used by the Concessionaire to develop the SOG for the Project.

3.4.2.6 SIRV Media Relations

The main contact for media will be the FDOT District 4 Media relations Specialist located at 3400 W. Commercial Blvd. Fort Lauderdale, telephone 954-777-4901. Any time the SIRV responds to an incident the Media Relations Specialist will be notified as follows:

a. After arriving on a scene the SIRV Staff will complete the scene set up procedures.

b. The SIRV Staff will then contact the Media Relations Specialist and provide any requested information as available.

c. The Media Relations Specialist will be notified as soon as practical if there are any significant changes to a scene.

d. The SIRV Staff will notify the Media Relations Specialist when a scene is cleared.

It is understood that SIRV staff may interact with the media while on the scene of an incident. Media contact will be confined to specific FDOT operational questions as follows:

a. Location, time and type of incident

b. Closure information

c. Impact upon traffic

d. Other information pertinent to traffic conditions

At no time will the SIRV Staff offer the media an opinion on the cause of an incident, supply tag numbers or detailed descriptions of vehicles involved in an incident. SIRV Staff will not discuss information gathered from other agencies on a scene. Media questions pertaining to incident investigations and rescue efforts will be forwarded to the agencies performing such activities.

Any media requests for an interview when not on an incident scene will be forwarded to the Department.

3.4.2.7 SIRV Communications

Reference Documents detail the District 4 - SIRV Standard Scope of Services and SOG for vehicle communication. This document is a Reference Document and it should be used by the Concessionaire to develop the SOG for the Project.

3.5 Road Rangers Program

The Concessionaire shall provide Road Ranger service for the Project. The Road Ranger service shall be free of charge to the public. The purpose of the Road Ranger program is to patrol I-595, clearing disabled vehicles from travel lanes, ramps and shoulders, changing flat tires, jump-starting batteries and removing minor non-hazardous spills and debris from the highway and assisting the Florida Highway Patrol during incidents. Road Ranger vehicles shall conform to statewide standards in services provided, paint scheme, markings and equipment load-out.

The Concessionaire shall be responsible for developing a set of Standard Operating Guidelines (SOG) for the Road Ranger service and submit it as part of the O&M Plan detailed in Section 4.1.4. The current FDOT District Four's SOG and FDOT Road Ranger Program Procedure No. 750-030-015 is attached as a Reference Document and should be used by the Concessionaire to develop the Road Ranger SOG for the Project.

3.5.1 Services to Be Provided by the Concessionaire

The Concessionaire shall furnish all personnel, supervision, expertise, vehicles, equipment, materials, parts, licenses, supplies and incidentals necessary to provide the Road Ranger Patrol services described herein.

The Concessionaire shall also be responsible for providing immediate first hand information on incidents involving incidents, fatalities, hazardous spills, etc. to the Transportation Management Center. In addition, when directed by the Department, the Concessionaire shall be required to provide this type of information to other government agencies, private companies or individuals.

3.5.1.1 Concessionaire's Road Ranger Project Manager

The Concessionaire shall identify a Project Manager to be responsible for the Road Ranger service. This person shall be thoroughly knowledgeable and experienced in relation to all the aspects of the services required herein, and shall have the administrative authority to deal with any situation in relation to the personnel and service patrol operation. This person shall be available to the Department 24 hours a day, seven days a week through a reliable, toll free or local area code phone number. .

3.5.1.2 Road Ranger Patrol Beats

Road Ranger service vehicle operators should follow the guidelines set forth in the District 4 Road Ranger SOG pertaining to the use of shoulder lanes and use of vehicles outside of the Project.

3.5.1.3 Florida Highway Patrol Towing Service Rotation System

If a motorist does not request a specified towing service, repair facility, or individuals to assist them, the Road Ranger vehicle operator shall contact the TMC to request that towing service be provided through the FHP towing service rotation system.

3.5.1.4 Disposal of Debris

Disposing of debris gathered during the patrolling rounds and generated during incidents, shall be disposed of by the Concessionaire. Use appropriate containers to store materials collected from travel lanes or at the incident sites during clean up. Operators shall not dispose of collected material at any roadside and shall only dispose of the collected material at official collection sites.

3.5.1.5 Miscellaneous Services

The Concessionaire shall make resources available for all activities described herein for providing services during a hurricane evacuation or other emergencies or to assist the Department or FHP during certain maintenance of traffic requests or as directed by the Department.

3.5.1.6 Minimum Number of Road Ranger Patrol Vehicles Required

Assuring vehicle availability for the Project is the responsibility of the Concessionaire. The Concessionaire shall provide the appropriate number of Road Ranger service necessary to patrol the Project on 30 minute cycles.

3.5.1.7 Road Ranger Patrol Vehicle Inspections

All Road Ranger vehicles and their associated equipment, accessories and parts shall be subject to periodic inspection by the Department for unsafe or poorly maintained vehicles, or for improperly equipped vehicles. At the sole discretion, the Department may order such vehicle(s) removed from service.

3.5.1.8 Road Ranger Patrol Vehicle Markings, Logo and Color Requirements

All Road Ranger vehicle markings shall be consistent with other Road Ranger vehicles in District 4. The Department shall review and approve the design of all identification markings. The Concessionaire should adhere to the District 4 Road Ranger SOG which is provided in the Reference Documents.

3.5.2 Road Ranger Patrol Vehicle and Equipment Requirements

District 4 Road Ranger SOG which is provided in the Reference Documents should be used by the Concessionaire to develop the Road Ranger Patrol vehicle and equipment requirements should be included the Road Ranger SOG for the Project.

3.5.3 Communications Equipment Requirements

District 4 Road Ranger SOG which is provided in the Reference Documents should be used by the Concessionaire to develop the Road Ranger Patrol vehicle communications and equipment should be included the Road Ranger SOG for the Project.

3.5.3.1 Automatic Vehicle Location System and Road Ranger Mobile Software

a. The Concessionaire shall install, operate, and maintain a Tablet PC mounted in each vehicle to support the Automatic Vehicle Location (AVL) system and the Road Ranger Mobile Application (RRMA) to be provided by the Department.

b. The Concessionaire shall mount the Tablet PCs in a fixed bracket in each vehicle with a power connection and any necessary antennae to improve the wireless data connection and GPS reception.

c. All GPS receivers must capture location packets for the AVL system 99% of the time. Defective GPS receivers shall be replaced promptly.

d. The Concessionaire shall purchase Tablet PCs with GPS capability and wireless data connectivity to the TMC for each vehicle, including backup vehicles. The Road Ranger SOG for the Project should detail the Tablet PC specifications.

e. The Concessionaire shall pay all costs related to the hardware and software in the vehicles, including but not limited to equipment costs, installation, software licenses, and network services (described in the next section).

f. The Concessionaire shall upgrade the hardware and network systems on a three year cycle, and all upgrades will support new specifications for mobile software system enhancements as provided by the Department.

g. The Concessionaire's staff (Project Manager and Road Ranger Patrol Vehicle Operators) shall complete training provided for the RRMA system and demonstrate competence and ability to operate the RRMA system.

h. The Concessionaire shall be responsible for protecting the system components installed in the vehicles.

i. The data generated by the AVL and RRMA systems shall be recorded and stored for a minimum of seven years. Real-time AVL data will be provided to the Department as well as access to historical AVL data for reporting, analysis, and auditing purposes.

3.5.3.2 Wireless Data Service

Each Road Ranger Patrol vehicle, including back-up vehicles, shall be equipped with a wireless data connection to support data communication with software systems at the TMC, including the AVL and Road Ranger Mobile software. The wireless connection shall support secure communications directly to the TMC without exposing data through the internet (using VPN or similar tunneling software over the internet). The wireless service must assign static IP addresses to devices so that connections can be initiated from software running at the TMC. The wireless solution must provide 98% coverage of the roadway area with 99.9% uptime, with a minimum data bandwidth transmission rate of 1 Megabits per second to each device.

3.5.4 Road Ranger Patrol Vehicle Operators Duties and Responsibilities

The Road Ranger SOG for the Project should detail the Patrol Operators' duties and responsibilities, and how all regulations and safety rules outlined in the referenced District 4 Road Ranger SOG will be followed. The Road Ranger SOG for the Project should detail the requirements pertaining to Service Patrol Operator resumes, police and driver's license checks. It is the Concessionaire's responsibility to ensure the Road Ranger Operators are sufficiently qualified and trained before performing their duties and responsibilities.

If a particular Road Ranger Patrol Operator, in the opinion of the Department, has behaved inappropriately based on any of the requirements, regulations, rules, or guidelines set forth in the Road Ranger SOG, the Department reserves the right to restrict the Operator from performing the duties and responsibilities of a Road Ranger Patrol Operator, and also from interfacing with any external partner,

agency, media, or member of the general public within the scope of this project, for a period of time to be determined at the Department's discretion with no upper limit.

3.5.5 Inspection of Road Ranger Vehicles by the Department.

All Road Ranger Patrol vehicles and their associated equipment, accessories and parts shall be subject to periodic inspection by the Department for unsafe or poorly maintained vehicles, or for improperly equipped vehicles. At the sole discretion, the Department may order such vehicle(s) removed from service.

3.6 Emergency Access Gates

The Concessionaire will be required to test, inspect, and maintain the operation and communication at a minimum of five (5) EAG in the I-595 median that provide emergency responders with local access to the Express Lanes from the General Purpose Lanes. The Concessionaire shall also be required to maintain all communication necessary for the remote operation of the system from the TMC using SunGuide software as well as provide for the manual operation of the gates in the case of a communication and/or power failure. The testing, inspection and maintenance of the Emergency Access Gate system shall be conducted in accordance with the manufactures specifications and shall be subject to minimum performance requirements as detail in Tables 4.2 and 4.3.

3.7 ITS Performance Measures

Performance measures provide accountability to the public and enhance communication between the operators and users of the system. They can aid in setting policy, allocating resources, and reporting on results. At the statewide level, the Florida Transportation Commission (FTC) is charged with evaluating the performance, operational productivity, and fiscal management of the FDOT. The Department is charged with evaluating the performance of the Concessionaire throughout the Term. The Department will use Monthly, Quarterly and Annual Performance Measure Reports generated by the SunGuide^{SM} software to monitor the Concessionaire's performance. The I-595 ITS Performance Measures shall conform to the detailed definitions, outcome measures, output measures, data requirements and reporting formats that are specified in current edition of "*ITS Performance Measures for Florida DOT D4*" document, as well as the Statewide ITS Performance Measures. This document and current Performance Reports can be downloaded at http://SmartSunguide.com.

3.8 Emergency Response Plan

The Department categorizes Emergency Management into two classifications, Governor Declared Emergencies and Other Emergencies. For Governor Declared Emergencies, perform pre-event preparation and provide initial response post-event to protect the traveling public from grievous hazards created by the event. For Other Emergencies, perform all aspects of responding to the incident/event, including pre-event preparation, post-event initial response, and post-event cleanup and repair. The Concessionaire shall develop an Emergency Response Plan to address both of these emergency classifications and shall perform at minimum the following activities:

a. Develop a complete up-to-date list of equipment resources and staging locations of all stockpiled materials and their locations.

b. In preparation for high winds, rains, and other impending elements, secure all existing worksites associated with the Work.

c. Lower all high mast lights within the projected path of a hurricane where wind speeds are projected to be a category two or higher at the location of high mast lights, or as otherwise directed by the Department. Lower lights to within ten feet of the ground. If the lowered position of lights places them at risk of adjacent tree damage, place lights as low as possible while avoiding tree damage risk.

The Concessionaire shall be responsible for the raising of all lowered high mast lights after the emergency has been lifted.

d. For all Emergency Management activities, the Department reserves the right to take control of the incident and/or perform recovery work with its own or other contracted forces when the Department determines it is in the Department's best interest to do so.

3.8.1 Specific Concessionaire Responsibilities For Governor Declared Emergencies

Governor Declared Emergencies are incidents/events that prompt the Governor of Florida to declare a State of Emergency in response to the incident/event. Governor Declared Emergencies will most commonly be major hurricanes and other natural disasters, but can include smaller natural disasters/events/storms, marine collisions with bridges and/or bridge fender systems, and incidents/events resulting from human interactions.

If directed by the Department, perform the following Pre-Event activities.

- Lowering of the high mast lights within the projected path of a hurricane where wind speeds are projected to be a category two or higher;
- Supplement Road Ranger Patrols and provide fuel assistance to stranded motorists.

Perform the following Post-Event activities:

a. Search roadways covered by the Contract Documents for grievous hazards (roadway washouts/cave-ins, downed electrical lines, non-traversable bridges, etc.). This may include clearing some debris from the roadway in order to access these hazardous areas. Minimal clearing required to access hazardous areas will not be considered first-push roadway clearing.

b. Immediately respond to perform traffic control, set up safety devices, and layout established or improvised detour routes in order to protect the traveling public from grievous hazards created by the incident/event. When detour routes are required due to an incident/event occurring within the O&M Limits, manage and maintain the entire detour route, even if the route extends onto roadways outside of the O&M Limits. Coordinate all detours with the District Maintenance Office and other agencies.

c. Notify the Department's designated contact person immediately upon occurrence of all major incidents/events and immediately upon road closure for all roadway closures exceeding one hour. Notify the Department again upon roadway reopening.

d. Inspect, perform any minor repairs, and raise all high mast lighting back to their original position as directed by the Department.

3.8.2 Specific Concessionaire Responsibilities for Other Emergencies

Other Emergencies are incidents/events that do not prompt the Governor of Florida to declare a State of Emergency in response to the incident/event. Other Emergencies will most commonly be traffic crashes, guardrail hits, severe potholes, debris within travel lanes, attenuator hits, roadway shoulder wash-outs, roadway cave-ins, marine collisions with bridges and/or bridge fender systems and downed light poles but can include natural disasters/events/storms and incidents/events resulting from human interactions.

Respond and deploy resources according to the goals established in the Open Roads Policy and as detailed in this Section. Arrive on-site, prepared to take necessary action with necessary manpower and emergency response equipment. Relieve Law Enforcement personnel of traffic control functions within

ten minutes of arriving onsite. Concessionaire shall be respond in accordance with the Rapid Incident Scene Recovery (RISC) Program as outlined in this Section.

3.9 Interagency Participation

The Concessionaire shall participate in, and adhere to all guidelines set forth by interagency organizations as directed by the Department, including but not limited to the following:

3.9.1 Traffic Incident Management Team Meetings

The Concessionaire shall participate in both TIM meetings and Road Ranger meetings for Broward County and regional levels, and provide assistance, information, and expertise to the TIM Teams as needed. The Concessionaire shall conduct incident debriefings to review lessons learned and best practices. These incident debriefings shall be summarized at subsequent TIM meetings.

3.9.2 ITS Coalition and South East Florida Regional TMC Operations Committee (SEFRTOC)

The Concessionaire shall become an active member of both the ITS Coalition and SEFRTOC. SEFRTOC was formed in 2003 by the South Florida Regional ITS Coalition, an organization that brings together municipal, county and regional state agencies to ensure compatible implementation and operation of ITS throughout the region. The mission of SEFRTOC is to facilitate regional mobility in South East Florida.

3.10 Traffic Operations

The District's Traffic Engineering and Operations Department will be responsible for evaluating and reviewing safety and operations issues on the Project. The Concessionaire will be required to conduct awareness meetings with Traffic Operations staff every 3 months (quarterly) to review any safety or operations issues on the Project, unless otherwise prompted by urgent traffic operations issues. If a traffic operations improvement is required, it shall be reviewed and conducted as detailed in Section 4.6.2.2 of the Concession Agreement. The Concessionaire may be required to conduct traffic safety studies, review crash data annually, identify crash patterns, and develop and implement necessary countermeasures.

At a minimum the Concessionaire shall coordinate with the District Traffic Operations Department on traffic operations issues such as:

a. Speed limit changes to the ramps within the Project
b. Signing and pavement markings improvements
c. Regulatory, Overhead and Ground mounted signs
d. Signs - Logo program (motorist services)
e. Interchange modifications
f. Request to experiment with new products
g. Special event approval / coordination
h. Safety studies
i. Fatal crash report – provide a copy to the District's Safety Office

The Concessionaire shall request approval from the District Traffic Operations Department for revisions and modifications to:

a. Speed limit changes on the mainline
b. Modification to any interchanges within the Project

3.11 Utility Coordination

The Concessionaire shall be responsible for coordinating and meeting with all utility owners having overhead or underground facilities in proximity with the Concessionaire installations. The Concessionaire shall become a member of Sunshine State One-Call of Florida, Inc. to facilitate in the prevention of damage to I-595 underground facilities. The Concessionaire shall be responsible for locating these facilities which include fiber optic and roadway lighting conduit. The Concessionaire shall also be responsible for determining and performing any needed sub-surface utility engineering (SUE) work.

3.12 Fire Suppression System

The Concessionaire shall provide for the periodic testing of the fire suppression system to service the Express Lanes as set forth in Division II, Section 3. In accordance with the Florida Fire Prevention Code and National Fire Protection Association (NFPA) 14, the Concessionaire shall be responsible for the initial testing and pressurizing of the system before it becomes operational. Additionally, in accordance with NFPA 24 the Concessionaire shall be required to pressure test the system every 5 years.

3.13 Customer Relations Staff

The Concessionaire shall provide a Customer Relations staff that distributes information regarding the operation of and general information on the Project to the general public. The Concessionaire shall not be responsible for SunPass customer support. The Customer Relations staff shall maintain a telephone line dedicated to handling incoming calls and distributing information to callers, maintain a customer service rating program, maintain a complaint tracking system, and including a corrective action program. The Customer Relations staff shall handle complaints and requests from the general public, Department, FTE, SunPass Operations, TMS and other Governmental Entities that are received via telephone, email or in person. The Concessionaire shall report safety related complaints to the Department within one day. Other complaints shall be reported and documented in the Concessionaire's monthly Operations Report. The Concessionaire shall respond to valid complaints or requests to the extent that the complaints or requests cover issues addressed within this Division II, Section 4. The Concessionaire shall convey any requests for services that are beyond those detailed in this Section to the Department for further direction. The monthly Operations Report shall identify the time and date of the complaint, the nature of the complaint, location of the complaint, identification and contact information of the individual making the complaint, and the date that the complaint response was issued and the completion date of any work or services performed to resolve the complaint. Tables 4.1 and 4.2 detail the minimum performance requirements for response and resolution to these complaints. As part of the O&M Plan, the Concessionaire shall submit a detailed approach to the management and operations of the Customer Relations staff.

3.14 Permits Coordination and Inspection

The Concessionaire shall inspect all construction activities resulting from approved permits issued by the Department within the O&M Limits. In the O&M Plan, the Concessionaire shall include a Permit Coordination and Inspection Plan which details the coordination and inspection process of permits approved by the Department. The Concessionaire shall demonstrate knowledge and understanding of the F.A.C. Rules and provide the necessary personnel to provide permit inspection for the following permits including, but not limited to:

a. 14-20 Bus Stops, Shelters, and Benches

b. 14-40 Highway Beautification and Landscape Management

c. 14-43 Regulation of Encroachments Over State Rights of Way

d. 14-46 Utilities Installation or Adjustment

e. 14-63 Building Moving Permit Regulations

f. 14-65 Temporary Closing and Special Use of State Roads

g. 14-86 Drainage Connections

h. 14-96 State Highway System Connection Permits

i. 14-97 State Highway System Access Management Classification System and Standards

j. General Use Permits

The Concessionaire shall coordinate with the Department, any Permitted Closures that are required as part of this permit work. The Concessionaire shall maintain inspection records for all activities related to the inspections of permit work assigned by the Department. These inspection records shall be included in the Monthly Maintenance Report. The Concessionaire shall also obtain access to the Department's Permit Information Tracking System (PITS) and shall update the permit inspection information and close out permits.

3.15 Roadway Characteristics Inventory (RCI)

The Concessionaire shall obtain access to the Department's Maintenance Roadway Characteristic Inventory (RCI) and shall update the RCI when changes occur to any roadway characteristic within the Project. Verify and update each RCI characteristic periodically as directed by the Maintenance Roadway Characteristics Inventory Manual. Maintain updated coding sheets in the Concessionaire's files and provide a copy to the Department.

3.16 Maintenance Management System (MMS)

The Concessionaire shall be responsible for providing the Department with the necessary data for the Department's update to Maintenance Management System (MMS). This shall be accomplished in accordance with the procedures for reporting maintenance contract production in the most current issue of the MMS User's Manual as referenced by the ***Maintenance Management System, Procedure No. 325-010-001***.

4. MINIMUM REQUIREMENTS SUBJECT TO CONSTRUCTION O&M VIOLATIONS (CONSTRUCTION PERIOD)

Construction O&M Violations are instances in which the performance of systems, equipment, and/or personnel is below the minimum requirements specified herein during the Construction Period. The description of each performance category set forth in Table 4.1A will include (i) required tasks, (ii) minimum performance requirement and (iii) the related cure period (if any). The Concessionaire shall develop and detail in the O&M Plans the approach to be used in order to achieve and meet the minimum performance requirements as detailed in Table 4.1A.

The Concessionaire shall bear the responsibility for operating and maintaining the Project during the Construction Period in a safe manner at all times regardless of these minimum performance requirements. The Concessionaire's performance will be evaluated with respect to these minimum performance requirements specified herein, however, to acknowledge the Concessionaire's ability to utilize design innovation, there may be circumstances in which the Concessionaire's Final Design or other Project requirements impact the performance categories to be monitored or the minimum performance levels required. The Concessionaire, under these circumstances, shall submit the equivalent system and the proposed minimum performance level to the Department for review and approval.

4.1 Construction Availability Faults with Temporary Cures

Construction Availability Faults that have been rectified through the use of temporary repairs or other temporary means shall be subject to the minimum performance requirements set forth in Table 4.1A and deemed a Construction O&M Violation if not remedied within the applicable cure period. The Concessionaire shall develop procedures to track the rectification means of Construction Availability

Faults to identify the rectification means as temporary or permanent. Construction Availability Faults with temporary rectifications shall remain a Construction O&M Violation until the permanent rectification is completed. The Concessionaire shall submit copies of the completed tracking forms to the Department in the reports.

There is no cure period associated with a Construction Availability Faults that has been detected by the Department. The Concessionaire shall be subject to monetary deduction and Noncompliance Points in accordance with Contract Documents until this condition is permanently rectified.

4.2 Notification of Construction Availability Faults, Construction O&M Violations and Construction Closures

The Concessionaire shall, at a minimum, notify the Department of Construction Availability Faults, Construction O&M Violations, and Construction Closures, including unscheduled Construction Closures, within one hour of the event. There is no cure period for this fault. The Concessionaire's operations procedures shall include the process for the immediate notification to the Department of these events.

The Concessionaire shall include copies of the related information to confirm compliance with this requirement in the monthly reports.

5. MINIMUM REQUIREMENTS SUBJECT TO O&M VIOLATIONS (OPERATING PERIOD)

O&M Violations as set forth in Appendix 6 of the Concession Agreement are instances in which the performance of systems, equipment, and/or personnel is below the minimum requirements specified herein during the Operating Period. The description of each performance category set forth in Table 4.2 will include (i) required tasks, (ii) minimum performance requirements and (iii) the related cure period (if any).

The Concessionaire shall bear the responsibility for operating and maintaining the Project in a safe manner at all times regardless of these minimum performance requirements. The Concessionaire's performance will be evaluated with respect to these minimum performance requirements specified herein, however, to acknowledge the Concessionaire's ability to utilize design innovation, there may be circumstances in which the Concessionaire's Final Design or other Project requirements impact the performance categories to be monitored or the minimum performance levels required. The Concessionaire, under these circumstances, shall submit the equivalent system and the proposed minimum performance level to the Department for review and approval.

5.1 Routine Maintenance and Inspection Performance Measures

5.1.1 Maintenance Rating Program

The Maintenance Rating Program (MRP) will be the primary tool to be used by the Department to evaluate the overall quality and effectiveness of the Concessionaire's routine maintenance activities on the Project. MRP is a systematic and formal method of collecting data and establishing required levels of maintenance. The Concessionaire shall achieve and maintain a MRP rating, using the criteria detailed in the procedures, for all elements and characteristics in order to ensure a uniform and consistent level of maintenance at all times.

The Concessionaire shall be responsible for conducting a monthly MRP rating of the system in accordance with the MRP Handbook, using the random points that will be provided by the Department. As part of the monthly Maintenance Report, the Concessionaire shall report the results of the monthly MRP rating. The Concessionaire will be required to maintain the Project in order to achieve and maintain a minimum overall maintenance rating as required in the FDOT Procedure No. 850-000-015 - Roadway and Roadside Maintenance. These monthly ratings will be pooled into a single sample set and then rated on a quarterly basis. O&M Violation Classifications will be assessed quarterly on the basis of the pooled rating for failure to meet the MRP rating for the quarter as set forth in Table 4.2.

The Department will randomly generate locations to be rated by the Concessionaire on a monthly basis. The Concessionaire shall contract with an independent qualified firm who shall certify the accuracy of each MRP rating to the Department. The Department reserves the right to participate in such inspections.

5.1.2 Maintenance and Inspection Performance Requirements

The Concessionaire shall be required to perform and comply with additional maintenance and inspection requirements that are not part of MRP as set forth herein. The Concessionaire shall develop and detail in the O&M Plans the approach to be used in order to achieve and meet the minimum performance requirements as detailed in Table 4.2.

a. Flexible Pavement Conditions
   - Category 1 Pavement (As specified in Division II, Section 6)
   - Category 2 Pavement (As specified in Division II, Section 6)
   - Category 3 Pavement (As specified in Division II, Section 6)

b. Rigid Pavement Conditions
   - Category 1 Pavement (As specified in Division II, Section 6)
   - Category 2 Pavement (As specified in Division II, Section 6)

c. Guardrail Inspection & Maintenance

d. Attenuator Inspection & Maintenance

e. Sign Inspection & Maintenance

f. Drainage Systems

g. NPDES compliance, monitoring and reporting

h. Barrier Walls

i. Concrete Sidewalk

j. Toll Gantry Inspection & Maintenance

k. Toll Equipment Building Inspection & Maintenance

l. Emergency Access Gate inspection, maintenance and testing

m. Clear zone Obstructions

n. Lighting Inspection

o. Overlane Sign Inspection, Maintenance & Repair

p. High mast Lighting Inspection & Maintenance

q. Mast arm Inspection & Maintenance

r. Bridge Maintenance & Inspection (In accordance with Section 4.5.9 and 4.5.10 hereto)

s. Painting of Steel Structures

t. Graffiti

u. Pressure cleaning of concrete surfaces

v. Vegetation control on slopes and Concrete surfaces

w. Landscape Areas

x. Chemical Vegetation Control

y. Fertilizer

z. Sound Barrier Inspection & Maintenance

aa. Roadway Characteristic Inventory

bb. ITS Operations

cc. ITS Maintenance

5.2 Value Added Performance Turf

The Concessionaire shall adhere to the Value Added specification requirements as detailed in Division II, Section 6 of the Technical Requirements.

5.3 Value Added Asphalt Pavement Conditions

The Concessionaire shall adhere to the Value Added specification requirements as detailed in Division II, Section 6 of the Technical Requirements.

5.3.1 Value Added Asphalt Pavement Remedial Work

The Concessionaire will perform all Value Added remedial work as described in Division II, Section 6 of the Technical Requirements.

5.3.2 Value Added Asphalt Pavement Pot Hole Work

The Concessionaire will perform all Value Added Flexible Pavement Pot Hole work as described in Division II, Section 6 of the Technical Requirements.

5.3.3 Value Added Portland Cement Concrete Pavement Conditions

The Concessionaire shall adhere to the Value Added specification requirements as detailed in Division II, Section 6 of the Technical Requirements.

5.3.4 Value Added Portland Cement Concrete Pavement Remedial Work

The Concessionaire will perform all Value Added remedial work as described in Division II, Section 6 of the Technical Requirements.

5.4 Roadway Lighting System & Mapping

Highway lighting, for which the Concessionaire is responsible for maintaining, shall be uniformly maintained such that the lighting system adheres to the requirement set forth in the Contract Documents. Lighting outages shall not exceed 10% or two lights in a row for any lighting type (high mast, standard, navigational, under-deck, and sign) on the Project. Lighting outages shall be monitored, at a minimum, on a monthly basis. The Concessionaire will perform all Value Added remedial work as described in Division II, Section 6 of the Technical Requirements.

As part of the O&M Plan, the Concessionaire is required to develop a Lighting System Mapping. The Lighting System Mapping shall include at a minimum, a map of each field location (pole location, service point, load center, pull box, under-deck fixture location, navigational light fixture location, and lighted sign) and the marking/tagging of all poles and service points within the O&M Limits as updated from time-to-time based on Renewal Work or upgrades to the lighting system. This Lighting System Mapping shall include at minimum the location and numbers of all the load centers, circuits and all associated

lighting structures and all pull boxes. Each service point location must contain the load center number, type voltage, type phase, size of wire, number of lights, and breaker amps.

Identify bridges by Name and Bridge Number for proper identification of all under-deck and navigational lighting.

The Concessionaire will be responsible to coordinate FP&L service points for the system. Location of load center shall be accessible to the maintenance personnel. The Concessionaire is responsible to pay for electric service charges beginning at NTP 2.

5.5 Value Added Signals

The Concessionaire shall adhere to the Value Added specification requirements as detailed in Division II, Section 6 of the Technical Requirements.

5.6 Over-lane Sign Structure Inspection, Maintenance and Repair

Perform all regular and emergency over-lane sign structure inspections according to the Department's Bridge and Other Structures Inspection Reporting Procedure 850-010-030 or successor. Perform all necessary maintenance and repairs, including collision damage repair.

5.7 Mast Arm Structure Inspections, Maintenance and Repair

Perform all regular and emergency mast arm inspections according to the Department's Bridge and Other Structures Inspection Reporting Procedure 850-010-030 or successor. The Concessionaire will not be required to perform maintenance Work associated with the inspection of these structures. The Concessionaire shall document the inspections and provide Broward County Traffic Engineering Signal Division a copy of the inspection reports.

5.8 High Mast Light Pole Inspection, Maintenance, and Repair

Perform all regular and emergency High Mast Light Pole inspections according to the Department's Bridge and Other Structures Inspection Reporting Procedure 850-010-030 or successor. Perform all necessary maintenance and repairs, including collision damage repair.

5.8.1 Value Added Bridge Components

The Concessionaire shall adhere to the Value Added specification requirements as detailed in Division II, Section 6 of the Technical Requirements.

5.9 Mandatory Spares

The Concessionaire shall determine the spares required to meet its maintenance obligations under the Contract Documents. However, due to their nature and associated long lead time, the Concessionaire shall, at a minimum, store spare parts including, but not limited to, attenuator parts, guardrail panels, EAG parts, regulatory signs and equipment for the operation of the Express Lanes.

6. MINIMUM REQUIREMENTS SUBJECT TO AVAILABILITY FAULTS AND CONSTRUCTION AVAILABILITY FAULTS

Construction Availability Faults and Availability Faults result in the failure to meet the minimum performance requirements specified within Tables 4.1B and 4.3, respectively, within the applicable cure period (if any).

6.1 Incident / Emergency Response Performance Measures

The Concessionaire shall be responsible for the continual monitoring of the Project and shall respond to any incident/emergency event 24 hours per day, seven days per week, every day of the year when the incident/emergency event results in a condition that is unsafe and/or may present a life threatening

condition. These incidents/emergency events are most commonly related to, but are not limited to, vehicle crashes, roadway debris, guardrail hits, potholes, debris within travel lanes, attenuator hits, roadway shoulder wash-outs, roadway cave-ins, and downed light poles but can include natural disasters/events/storms , marine collisions with bridges and/or bridge fender systems, and incidents/events resulting from human interactions.

The Concessionaire shall be required to respond with Road Ranger Service, SIRV or any other response vehicle to any incident/emergency within 15 minutes of notification and be prepared to deploy all necessary resources to meet the goals established in the Open Roads Policy. The Concessionaire shall arrive on-site, prepared to take necessary action with necessary manpower and emergency response equipment. The Concessionaire shall be prepared to relieve Law Enforcement personnel (as necessary) of traffic control functions within fifteen minutes of arriving onsite.

The Concessionaire shall manage all aspects of traffic control related to a lane closure event, including coordination with jurisdictional agencies when incidents/emergencies spill over onto roadways outside the O&M Limits. When detour routes are required due to an incident/event occurring within the O&M Limits, the Concessionaire shall manage and maintain the entire detour route, even if the route extends onto roadways outside the O&M Limits. Notify the Department's designated contact person immediately upon occurrence of all major incidents/events and immediately upon road closure for all roadway closures exceeding one hour. Notify the Department again upon roadway reopening.

When an incident/emergency causes damage to any element within the O&M Limits, the Department authorizes the Concessionaire to pursue claims against any responsible third party for reimbursement of expenses incurred. Such authorization does not, and is not intended to, authorize the Concessionaire to seek reimbursement directly from FHWA for emergency repair work. Further, such authorization does not, and is not intended to authorize the Concessionaire to seek reimbursement for any Construction Violations, O&M Violations, Availability Faults, Construction Availability Faults or Closures that would result if the Concessionaire fails to respond to the incident/event in accordance with the Contract Documents.

6.2 Temporary Mitigation Performance Measures

Temporary Mitigation Performance Measures are requirements that allow the Concessionaire to temporarily mitigate a defect and ensure that the defect is safe for the roadway user. There are specific requirements associated with the time the Concessionaire has to provide the temporary mitigation to the defect as well as the required time to conduct the permanent repairs.

Table 4.1B and Table 4.3 establish a minimum performance requirement and a cure time for the temporary mitigation of a defect for each of the Element Categories.

6.2.1 Debris Removal

When there is debris within the O&M Limits, the Concessionaire shall use all available resources to remove the debris within the specified time frame as detailed in Tables 4.1B and 4.3. If the debris is too large to be removed within the specified time frame, the Concessionaire shall secure the area by use of an approved lane closure in accordance with FDOT Design Standards to secure the area until the debris can be removed and the roadway safely open to traffic. This Temporary Mitigation Performance Measure is the requirement for the removal of the debris from the roadway that cannot be removed as detailed in Tables 4.1B and 4.3.

6.2.2 Roadway Elements

When damage to a roadway element occurs, such as guardrail, attenuators, barrier wall failure, the Concessionaire shall use all available resources to provide a temporary mitigation to the defect within the

specified time frame as detailed in Tables 4.1B and 4.3. This Temporary Mitigation Performance Measure is the requirement for the Concessionaire to mitigate the defect and ensure that the defect is safe for the roadway user. This could include the use of traffic control systems such as barricades, drums, or other approved devices to secure the area until the defect can be restored to its original design condition.

6.2.3 Flexible Pavement - Pot holes

When a flexible pavement pot hole develops within the O&M Limits, the Concessionaire shall use all available resources to provide a temporary mitigation to the defect within the specified time frame as detailed in Tables 4.1B and 4.3. This Temporary Mitigation Performance Measure is the requirement for a temporary cold-patch material in order to open the roadway. If the pot hole is too large to be repaired with the cold-patch material, the Concessionaire shall secure the area by use of an approved lane closure in accordance with FDOT Design Standards and to mobilize the required qualified personnel and equipment in order to repair the pavement section to meet the specifications set forth in Division II, Section 6 of the Technical requirements

6.2.4 Signs

When damage to a single or multi-post sign assembly occurs, the Concessionaire shall use all available resources to provide a temporary mitigation to the defect within the specified time frame as detailed in Tables 4.1B and 4.3. This Temporary Mitigation Performance Measure shall consist of, at minimum, the removal of the damaged or down sign assembly, secure the damaged sign assembly by use of barricades, drums or other approved traffic warning devices. The Concessionaire shall maintain a spare inventory of Regulatory sign assemblies such as “Stop”,” "Yield," "Do Not Enter," "One Way" and/or "Wrong Way" signs. These sign panels shall re-installed within the specified time frame as detailed in Tables 4.1B and 4.3.

6.2.5 Highway Lighting

When damage to the Highway Lighting system occurs, the Concessionaire shall use all available resources to provide a temporary mitigation to the defect within the specified time frame as detailed in Tables 4.1B and 4.3. This Temporary Mitigation Performance Measure shall consist of, at minimum, the removal the damaged or down light pole, secure the area damaged by use of barricades, drums or other approved traffic warning device and safely secure the lighting wires feeding the lights, test the lighting circuit to assure that the entire roadway lighting within that circuit is operational.

6.2.6 Bridge Damage/Element Failure

When damage to a bridge or an element failure occurs, the Concessionaire shall use all available resources to provide a temporary mitigation to the defect within the specified time frame as detailed in Tables 4.1B and 4.3. This Temporary Mitigation Performance Measure shall consist of, at minimum; securing the area damaged by use of barricades, drums or other approved traffic warning device and safely conducting the repairs on the structure within the specified time frame. Damage to the bridge includes:

a. Critical damage to main structural members which endangers public safety.

b. Cracks in Fracture Critical Members.

c. Unstable Foundations.

d. Vertical or horizontal displacement of the structure which endangers structural stability

e. Loose expansion joints which may damage passing vehicles.

The Concessionaire shall also provide a certified Bridge Inspector to inspect and evaluate the damage to the structure.

6.2.7 Toll Collection Interruption

The Concessionaire shall meet and perform all requirements under the Contract Documents to enable the uninterrupted collection of tolls when any of the Express Lanes is open to traffic.

6.2.8 Toll Gantry Damage

When damage to the toll gantry occurs, the Concessionaire shall use all available resources to provide a temporary mitigation to the defect within the specified time frame as detailed in Table 4.3. This Temporary Mitigation Performance Measure shall consist of, at minimum; securing the area damaged by use of barricades, drums or other approved traffic warning device and safely repairing the critical damage on the structure within the specified time frame. Damage to the toll gantry includes:

a. Critical damage to main structural members which endangers public safety.

b. Cracks in Fracture Critical Members.

c. Unstable Foundations.

d. Vertical or horizontal displacement of the structure which endangers structural stability

e. Loose toll equipment arms which may damage passing vehicles

6.2.9 Emergency Access Gates

When damage to the EAG occurs, the Concessionaire shall use all available resources to provide a temporary mitigation to the defect within the specified time frame as detailed in Table 4.3. This Temporary Mitigation Performance Measure shall consist of, at minimum; securing the area damaged by use of barricades, drums or other approved traffic warning device and safely repairing the critical damage on the structure within the specified time frame.

When the EAG does not open remotely, the Concessionaire shall use all available resources to mitigate the defect within the specified time frame as detailed in Table 4.3. This Temporary Mitigation Performance Measure shall consist of, at minimum; manually opening the Emergency Access Gate within the specified time frame.

6.2.10 Toll Equipment Building / ITS Hubs

When damage to the toll equipment building or to the ITS Hubs occurs, the Concessionaire shall use all available resources to provide a temporary mitigation to the defect within the specified time frame as detailed in Table 4.3. This Temporary Mitigation Performance Measure shall consist of, at minimum; securing the area damaged by use of barricades, drums or other approved traffic warning device, protecting the structure to the minimize damage from nature's elements, secure the structure from unwanted entry and safely conducting the repairs to the critical damage section of the structure within the specified time frame.

6.3 Availability Faults with Temporary Cures

Availability Faults that have been rectified through the use of temporary repairs or other temporary means shall be subject to the minimum performance requirements set forth in Table 4.2 and deemed O&M Violations if not remedied within the applicable cure period. The Concessionaire shall develop procedures to track the rectification means of Availability Faults to identify the rectification means as

temporary or permanent. Availability Faults with temporary rectifications shall remain an O&M Violation until the permanent rectification is completed. The Concessionaire shall submit copies of the completed tracking forms to the Department in the monthly reports

There is no cure period associated with an Availability Fault that has been detected by the Department. The Concessionaire shall be subject to monetary deductions and Noncompliance Points in accordance with the Contract Documents until this condition is permanently rectified.

6.4 Notification of Availability Faults, O&M Violations and Closures

The Concessionaire shall, at a minimum, notify the Department of an Availability Fault, O&M Violations, and Closures, including unscheduled Closures, within one hour of the event. There is no cure period for this fault. The Concessionaire's operations procedures shall include the process for the immediate notification to the Department of these events.

The Concessionaire shall include copies of the related information to confirm compliance with this requirement in the monthly reports.

TABLES

TABLE 4.1A - O&M REQUIREMENTS (CONSTRUCTION PERIOD)

TABLE 4.1B - CONSTRUCTION AVAILABILITY FAULTS

TABLE 4.1 A - O&M REQUIREMENTS (CONSTRUCTION PERIOD)					
Element Category	**Required Task**	**Minimum Performance Requirements**	**Construction Violation Classification**	**Cure Period**	**Interval of Recurrence**
Incident Response	Monitor the Project and be available to respond to incidents, emergencies and other events with qualified staff, equipment and all available necessary resources	Respond to and secure sites of incidents, emergencies, accidents and other events that result in a condition that is unsafe and/or may present a life threatening condition, such as but not limited to, fuel spills, debris, pavement failure (e.g. pot holes, etc.), flooding, guardrail failures, attenuator faults, and other Elements Categories as listed in this matrix.	D	15 minutes	Every 15 minutes
Fuel Spills/ Contamination	Inspection of the area impacted after fuel spill or other contamination event and manage the mitigation clean-up activities	Conduct a visual inspection of the affected area and provide written recommendation for remedial work to the Department.	A	24 Hours	Daily
		Develop a clean-up / monitoring plan for submittal and approval by the Department.	C	3 Days	Daily
		Manage mitigation and clean-up efforts. Implement monitoring plan.	C	10 Days	Daily
Mowing	Minimum of 10 Cycles per year (No more than one per month nor more then two months without a cycle)	Meet the requirements set forth in FDOT's "A Guide to Roadside Mowing Handbook" and Standard Maintenance Special Provisions – ME104-40	B	0	Weekly
Litter Removal	Minimum of 26 Cycles per year (A Litter Removal cycle shall be conducted no more than 6 hours prior to each mowing cycle)	Meet the requirements set forth in Standard Maintenance Special Provisions – ME110-30.	C	0	Daily
Road & Bridge Sweeping	Minimum of 12 Cycles per year (Once per month)	Meet the requirements set forth in Standard Maintenance Special Provisions – ME110-31.	C	0	Daily

TABLE 4.1 A - O&M REQUIREMENTS (CONSTRUCTION PERIOD)					
Element Category	**Required Task**	**Minimum Performance Requirements**	**Construction Violation Classification**	**Cure Period**	**Interval of Recurrence**
Reworking shoulders, slopes and roadside ditches	Continually monitor and maintain shoulders, slopes and roadside ditch areas	Meet the requirements set forth in Standard Maintenance Special Provisions – ME577.	D	3 Days	Daily
Flexible Pavement (All)	Inspection of Flexible Pavement after major damage such as fire, fuel spill or other incident/event	Conduct a visual inspection of the affected area and provide written recommendation for remedial work to the Department.	A	24 Hours	Daily
		Complete repairs set forth in the inspection and meet the requirements as detailed in Division II, Section 6 of the Technical Requirements.	C	3 Days	Daily
Raised Pavement Markers	Continually monitor and maintain raised pavement markers and replace as required	Meet the requirements set forth in the MRP Handbook and Standard Maintenance Special Provisions – ME706.	D	5 Days	Daily
Pavement Markings	Continually monitor and maintain pavement markings and replace as required	Meet the requirements set forth in the MRP Handbook.	C	10 Days	Daily
Pavement Symbols	Continually monitor and maintain pavement symbols and replace as required	Meet the requirements set forth in the MRP Handbook.	C	10 Days	Daily
Guardrail	Continually monitor and maintain guardrail	Meet the performance requirements set forth in FDOT Design Standards and Section 536 of the Standard Specifications for Road & Bridge Construction.	C	3 Days	Daily

TABLE 4.1 A - O&M REQUIREMENTS (CONSTRUCTION PERIOD)					
Element Category	**Required Task**	**Minimum Performance Requirements**	**Construction Violation Classification**	**Cure Period**	**Interval of Recurrence**
Attenuators	Continually monitor and maintain attenuators	Meet the performance requirements set forth in the current FDOT Standards and Section 544 of the Standard Specifications for Road & Bridge Construction.	C	24 Hours	Daily
Signs	Continually monitor and maintain single post, multi-post, and overhead signs	Meet the performance requirements set forth in the current FDOT Standards and Section 700 of the FDOT's Standard Specifications for Road & Bridge Construction.	B	5 Days	Daily
Drainage Systems	Continually monitor and maintain drainage system (including, but not limited to, side/cross drains, roadside ditches, inlets, conveyance pipes and miscellaneous drainage structures within the Project limits as well as any water control devices that outfall to the golf courses)	Meet the performance requirements set forth in the current FDOT Standards, Section 104 of the Standard Specifications for Road and Bridge Construction and the requirements set forth in the MRP Handbook.	B	7 Days	Daily
NPDES	Monitor NPDES Permits	Comply with NPDES Permit requirements, monitoring and reporting.	A	30 Days	Daily
Lighting	Continually monitor and maintain lighting	Meet the performance requirements set forth in the current FDOT Standards, Section ME715-50 (Highway Lighting System (Performance)), Chapter 7 of the Plans Preparation Manual and the manufacturer's specifications	C	2 Days	Daily

TABLE 4.1 A - O&M REQUIREMENTS (CONSTRUCTION PERIOD)					
Element Category	**Required Task**	**Minimum Performance Requirements**	**Construction Violation Classification**	**Cure Period**	**Interval of Recurrence**
		No highway light shall be inoperable for a period extending more than 5 days	C	1 Day	Daily
Bridges	Perform bridge inspections	Per Procedure 850-010-030 or successor.	A	0	Daily
	Input bridge inspections into the Department's Pontis System	Per Procedure 850-010-030 or successor.	B	10 Days	Daily
	Close out bridge work orders	Per Procedure 850-010-030 or successor.	B	5 Days	Daily
Bridge Maintenance	Perform repairs generated from bridge inspections	**Routine.** Complete repairs required to maintain an existing level of performance and to prevent additional deterioration or to extend the service life of the structure. Routine work orders shall be completed within 180 days of work order issuance.	B	180 Days	Every 10 Days
		Urgent. Complete repairs required to correct deficiencies or defects in order to protect the integrity of the structure or maintain a desired level of performance.	B	90 Days	Every 5 Days
		Emergency. Repairs must begin immediately to repair critical damage on the structure and to insure the safety of the traveling public. Work is initiated immediately and work shall be completed as soon as possible.	C	30 Days	Daily
Mast Arm Structure	Maintain mast arm structure at acceptable level of safety for the traveling public.	Meet the performance requirements set forth in the current FDOT Design Standards and the Standard Specification for Road & Bridge Construction, or as per Concessionaire's design criteria.	B	7 Days	Daily
	Perform mast arm	Per Procedure 850-010-030 or successor.	A	0	Daily

TABLE 4.1 A - O&M REQUIREMENTS (CONSTRUCTION PERIOD)					
Element Category	**Required Task**	**Minimum Performance Requirements**	**Construction Violation Classification**	**Cure Period**	**Interval of Recurrence**
	structure inspection	Complete report and forward inspection report to Broward County.	B	30 Days	Daily
Overlane Sign Structure	Maintain Overlane Sign Structures at acceptable level of safety for the traveling public.	Meet the performance requirements set forth in the current FDOT Design Standards and the Standard Specifications for Road & Bridge Construction, or as per Concessionaire's design criteria.	B	7 Days	Daily
	Perform overlane sign structure inspection	Per Procedure 850-010-030 or successor.	A	0	Daily
		Complete repairs identified in the inspection report.	B	30 Days	Daily
High Mast Light Poles	Maintain High mast Light Poles at acceptable level of safety for the traveling public.	Meet the performance requirements set forth in the FDOT Design Standards, Standard Specifications for Road & Bridge Construction, Chapter 7 of the Plans Preparation Manual, manufacture's specifications.	B	7 Days	Daily
	Perform overhead high mast light pole inspection	Per Procedure 850-010-030 or successor.	A	0	Daily
		Complete repairs identified in the inspection report.	B	30 Days	Daily
Fence	Maintain fence at acceptable level of safety for the traveling public.	Meet the performance requirements set forth in the current FDOT Standards, Section 550 of the Standard Specifications for Road & Bridge Construction, Standard Maintenance Special Provisions - ME550 and the requirements set forth in the MRP Handbook.	C	10 Days	Daily
Concrete sidewalk	Maintain sidewalk at acceptable level of safety for the traveling public.	Meet the performance requirements set forth in the current FDOT Standards, Section 520 & 522 of the Standard Specifications for Road & Bridge Construction, Standard Maintenance Special Provisions - ME522, manufacturer's specifications and the requirements set forth in the MRP Handbook.	C	7 Days	Daily

TABLE 4.1 A - O&M REQUIREMENTS (CONSTRUCTION PERIOD)					
Element Category	**Required Task**	**Minimum Performance Requirements**	**Construction Violation Classification**	**Cure Period**	**Interval of Recurrence**
Graffiti	Continually monitor and maintain assets free of graffiti	Graffiti to be removed, covered or painted over to match the color and the painted finish/Class 5 application finish of adjacent area.	C	1 day	Daily
ITS Operations	Monitor time required for roadway clearance	I-595 Lanes Quarterly Average Roadway Clearance Duration (in minutes) must be no more than that of FDOT District Four's ITS Performance Measures published monthly on http//SmartSunguide.com or its successor.	B	0	N/A
	Monitor time required for incident clearance	I-595 Lanes Quarterly Average Incident/Event Clearance Duration (in minutes) must be no more than of FDOT District Four's ITS Performance Measures published monthly on http//SmartSunguide.com or its successor.	B	0	N/A
Deliverables	Provide Monthly Maintenance reports in electronic format available for submittal to the Department by the 5th working day each month.	Produce and Monthly Maintenance Report identifying all of the Planned Maintenance activities for the month, the actual maintenance performed for the period, and confirmation that the Concessionaire performed all maintenance in compliance with the Contract Documents.	A	0	Daily
ITS Maintenance Services	Emergency Response	Respond to Emergency Maintenance Work during normal business hours.	A	10 Minutes	Every 15 minutes
		Respond to Emergency Maintenance Work during non-business hours.	A	1 Hour	Every 30 minutes
		Complete repairs for Emergency Maintenance Work during non-business hours.	A	2 hours	Every 1 Hour
	Urgent Response	Respond to an Urgent Maintenance Work during normal business hours.	A	30 Minutes	Every 30 minutes
		Respond to an Urgent Maintenance Work during non-business hours.	A	2 Hours	Every 1 Hour
		Complete repairs for an Urgent Maintenance Work.	A	4 hours	Every 1 Hour

TABLE 4.1 A - O&M REQUIREMENTS (CONSTRUCTION PERIOD)					
Element Category	**Required Task**	**Minimum Performance Requirements**	**Construction Violation Classification**	**Cure Period**	**Interval of Recurrence**
	Priority Maintenance Work	Respond to a Priority Maintenance Work.	A	24 Hours	Every 6 Hours
		Completing repairs for a Priority Maintenance Work.	A	24 hours	Every 6 Hours
	Conduct Preventive Maintenance (PM) Work and Routine Maintenance Work as per Concessionaire's O&M Plan	Conduct Preventative Maintenance Work and Routine Maintenance Work.	A	10 Days	Every 5 Days
Backbone Fiber Network	Maintain backbone fiber network without damage	Meet the performance requirements set forth in the current FDOT Standards, Section 783 of the Standard Specifications for Road & Bridge Construction and manufacturer's specifications or as per Concessionaire's design criteria.	C	4 Hours	Every 15 minutes
		Complete repairs in accordance with requirements set forth in the current FDOT Standards, Section 783 of the Standard Specifications for Road & Bridge Construction and manufacturer's specifications or as per Concessionaire's design criteria. Replace any damaged fiber optic cable from termination point to termination point with the same type of cable.	D	90 days	Weekly
	Protect the existing communication link between Hub-3 and ITS devices within the Project	Repair or replace the damaged communications equipment (fiber optic cable, conduit, pull boxes, splice cabinets, hubs, etc.).	B	4 Hours	Every 15 minutes
ITS Reliability	Continually monitor and maintain ITMS field devices system Performance Requirements for the Project.	Meet a quarterly ITMS System Reliability above 94%			
		If quarterly ITMS System Reliability falls between 91-94%.	B	0	N/A
		If quarterly ITMS System Reliability falls between 85-90%.	C	0	N/A

TABLE 4.1 A - O&M REQUIREMENTS (CONSTRUCTION PERIOD)					
Element Category	**Required Task**	**Minimum Performance Requirements**	**Construction Violation Classification**	**Cure Period**	**Interval of Recurrence**
		If quarterly ITMS System Reliability falls below 85%.	D	0	N/A
	Continually monitor and maintain ITS field devices system Performance Requirements for the Project.	Meet a quarterly ITS field device system performance above 97%			
		If quarterly ITS Field Devices System Reliability (i.e. Communications, DMS, HAR, CCTV, and VDS Subsystems) falls between 95-97%.	B	0	N/A
		If quarterly ITS Field Devices System Reliability (i.e. Communications, DMS, HAR, CCTV, and VDS Subsystems) falls between 91-94%.	C	0	N/A
		If quarterly ITS Field Devices System Reliability (i.e. Communications, DMS, HAR, CCTV, and VDS Subsystems) falls between 85-90%.	D	0	N/A
		If quarterly ITS Field Devices System Reliability (i.e. Communications, DMS, HAR, CCTV, and VDS Subsystems) falls below 85%.	E	0	N/A
	Continually monitor and maintain TMC IT subsystem reliability Performance Requirements for the Project.	Meet a quarterly TMC IT subsystem reliability performance above 99%			
		If quarterly TMC IT Subsystem System Reliability falls between 98-99%.	B	0	N/A
		If quarterly TMC IT Subsystem System Reliability between 95-97%.	C	0	N/A
		Meet a quarterly TMC IT Subsystem System Reliability falls between 92-94%.	D	0	N/A
		Meet a quarterly TMC IT Subsystem System Reliability falls below 92%.	E	0	N/A
	Continually monitor and maintain Express Lane Access Control Subsystem Performance Requirements for the Project	Meet a quarterly Express Lane Access Control Subsystem performance above 99%			
		If quarterly Express Lanes Access Control Subsystem System Reliability falls between 98-99%	B	0	N/A
		If quarterly Express Lanes Access Control Subsystem System Reliability falls between 95-97%	C	0	N/A
		If quarterly Express Lanes Access Control Subsystem System Reliability falls between 92-94%	D	0	N/A

TABLE 4.1 A - O&M REQUIREMENTS (CONSTRUCTION PERIOD)					
Element Category	**Required Task**	**Minimum Performance Requirements**	**Construction Violation Classification**	**Cure Period**	**Interval of Recurrence**
		Meet a quarterly Express Lanes Access Control Subsystem System Reliability falls below 92%	E	0	N/A
TMC Operations	Continually monitor the TMC Operations	Meet the performance requirements set forth in the SOG related to TMC Operators performing their duties.	C	0	N/A
		Meet the performance requirements set forth in the SOG related to TMC Operators being available for a shift in the control room as required in the scope of service.	C	0	N/A
	Maintain real-time data and video transfer to the Department	Provide real-time access to all video and data within project limits.	A	1 hour	Every 15 minutes
	Notify SMART SunGuide TMC of lane/road closures	Notify the SMART SunGuide TMC of lane/road closures in the O&M project limits within five minutes of confirmation.	A	5 Minutes	Every 5 Minutes
	Post DMS and HAR messages	Post DMS and HAR within three minutes of confirmed lane blockage/road closure	A	3 Minutes	Every 5 Minutes
	Populate 511 ATIS system	Send information to populate 511 ATIS system with lane blockage/road closure information within three minutes of confirmation	A	3 Minutes	Every 5 Minutes
	Maintain minimum CCTV camera detection rate	Meet a quarterly minimum CCTV camera detection rate of 30%	A	0	N/A
SIRV Operations	SIRV Operator must respond to an incident/emergency	SIRV is required to respond within fifteen minutes upon notification.	D	15 Minutes	Every 15 Minutes
	Must submit SIRV Team Incident Reports to the Department by the 5th working day each month.	Provide summary of SIRV related activities including but not limited to: number of events responded to, number of meetings attended, agency time savings, list of equipment used.	A	0	Daily

TABLE 4.1 A - O&M REQUIREMENTS (CONSTRUCTION PERIOD)					
Element Category	**Required Task**	**Minimum Performance Requirements**	**Construction Violation Classification**	**Cure Period**	**Interval of Recurrence**
Road Rangers Operations	Respond to a stranded motorist, incident, emergency or event, either on the shoulders or travel lanes on the Project	Road Ranger to respond within 15 minutes of notifications.	C	15 Minutes	Every 30 Minutes
	Maintain adequate Road Ranger trucks on the Project to provide the required coverage	Patrol of the Project on 30 minute beats/cycles.	B	0	N/A
	Maintain AVL / GPS / Tablet / wireless system	No malfunctioning AVL/GPS/Tablet/wireless system available and able to disseminate data.	A	10 Minutes	Every 30 Minutes
		No Service Patrol Operator found or accused of tampering, removing, disengaging, or disabling AVL or RRMA software.	B	0	N/A
	Maintain wireless data service	Wireless data service malfunctioning or below minimum required specifications.	A	0	Every 30 Minutes
	Use appropriate lights and sirens	No inappropriate sirens (e.g. flashing red and blue or lights similar to police).	B	0	N/A
	Service Patrol Operator must not be under the influence while on duty	No Service Patrol Operator found to be or accused of being under the influence of alcohol or any controlled substance or drug, except where prescribed by a physician while on duty.	A	0	N/A
	Service Patrol Operator must not accept payment for services	No Service Patrol Operator found to be or accused of accepting payment for services.	A	0	N/A
	Service Patrol Operator must not sleep while on duty	No Service Patrol Operator found to be or accused of sleeping while on duty.	A	0	N/A
	Customer Satisfaction Survey for Road Ranger Service	Meet a Customer Satisfaction Survey for Road Ranger Service above 95%			
		If Customer Satisfaction Survey falls between 90-95% of respondents satisfied with service	A	0	Per Quarter

TABLE 4.1 A - O&M REQUIREMENTS (CONSTRUCTION PERIOD)					
Element Category	**Required Task**	**Minimum Performance Requirements**	**Construction Violation Classification**	**Cure Period**	**Interval of Recurrence**
		If Customer Satisfaction Survey falls between 80-90% of respondents satisfied with service	B	0	Per Quarter
		If Customer Satisfaction Survey falls between 70-80% of respondents satisfied with service	C	0	Per Quarter
		If Customer Satisfaction Survey falls below 70% of respondents satisfied with service	D	0	Per Quarter

TABLE 4.1B – CONSTRUCTION AVAILABILITY FAULTS					
		Construction Violation Classification			
Asset	**Minimum Performance Requirements**	**Peak Hour**	**Non-Peak Hour**	**Cure Period**	**Interval of Recurrence**
Incident Response	Respond to and secure sites of incidents, emergencies, accidents, and other events that that result in a condition that is unsafe and/or may present a life threatening condition, such as but not limited to, fuel spills, debris, pavement failure (e.g. pot holes, etc.), flooding, guardrail failures, attenuator faults, and other Elements Categories as detailed in this matrix.	C	B	15 minutes	Hourly
Roadway Surface Debris	Conduct the removal and disposal of debris from travel lanes that would potentially cause a safety hazard to the traveling public, including but not limited to, large objects, dead animals and tires. Roadway surface debris on a given Segment shall meet the temporary mitigation performance requirements set forth in the Section 4.6.2.	C	B	10 Min	Hourly
	Debris too large to be removed within the above timeframe will require that the roadway be closed by use of lane closure in accordance with FDOT Standards.	C	B	2 hours	Hourly
Flexible Pavement Pot Holes or damage as a result of Construction Work	Pavement section to meet the requirements set forth in Division II, Section 6 of the Technical Requirement and meets the temporary mitigation performance requirements set forth in the Section 4.6.2.	B	B	60 Min	Hourly
Rigid Pavement Pot Holes	Pavement section to meet the requirements set forth in Division II, Section 6 of the Technical Requirements and meets the temporary mitigation performance requirements set forth in the Section 4.6.2.	C	C	60 Min	Hourly

TABLE 4.1B – CONSTRUCTION AVAILABILITY FAULTS					
		Construction Violation Classification			
Asset	**Minimum Performance Requirements**	**Peak Hour**	**Non-Peak Hour**	**Cure Period**	**Interval of Recurrence**
Flooding of a Lane	No portion of a lane can have more than 25% blocked by standing water that would potentially cause a safety hazard to the traveling public and affecting any given lane of the facility.	D	D	30 Min	Hourly
Guardrail	Guardrail on a given Segment to meet the temporary mitigation performance requirements set forth in the Section 4.6.2.	C	B	60 Min	Hourly
Attenuators	Impact Attenuators on a given Segment to meet the temporary mitigation performance requirements set forth in the Section 4.6.2.	C	B	60 Min	Hourly
Signs (single or multi-post)	Sign (single or multi-post) on a given Segment to meet the temporary mitigation performance requirements set forth in the Section 4.6.2.	B	A	30 Min	Hourly
Highway Lighting	Highway Lighting on a given Segment to meet the temporary mitigation performance requirements set forth in the Section 4.6.2.	C	B	30 Min	Hourly
Barrier Wall	Barrier wall on a given Segment to meet the temporary mitigation performance requirements set forth in the Section 4.6.2.	C	C	60 Min	Hourly
Bridge Hit/Element Failure	Bridge element on a given Segment to meet the temporary mitigation performance requirements set forth in the Section 4.6.2.	D	D	60 Min	Hourly
ITS Hub	ITS Hub on a given Segment to meet the temporary mitigation performance requirements set forth in the Section 4.6.2.	D	C	60 Min	Hourly

TABLE 4.1B – CONSTRUCTION AVAILABILITY FAULTS					
		Construction Violation Classification			
Asset	**Minimum Performance Requirements**	**Peak Hour**	**Non-Peak Hour**	**Cure Period**	**Interval of Recurrence**
Backbone Fiber Network	Fiber network on the Project shall be maintained free of damage.	E	E	4 hours	Hourly
Rapid Incident Scene Clearance	Respond to and provide the necessary equipment and personnel as set forth in the Section 4.3.4.1.	E	E	60 Min	Hourly

TABLE 4.2 - O&M REQUIREMENTS (OPERATING PERIOD)

TABLE 4.2 – O&M REQUIREMENTS (OPERATING PERIOD)					
Element Category	**Required Task**	**Minimum Performance Requirements**	**O&M Violation Classification**	**Cure Period**	**Interval of Recurrence**
Maintenance Rating Performance (MRP)	Conduct a monthly MRP cycle in accordance with the FDOT MRP Handbook.	Meet a minimum quarterly overall MRP rating as required in the FDOT Procedure No. 850-000-015 - Roadway and Roadside Maintenance	D	0	N/A
		Meet a minimum quarterly rating as required in the FDOT Procedure No. 850-000-015 - Roadway and Roadside Maintenance for individual elements.	C	0	N/A
		Meet a minimum quarterly rating as required in the FDOT Procedure No. 850-000-015 - Roadway and Roadside Maintenance for individual characteristics.	B	0	N/A
Flexible Pavement					
Category 1 Pavement (0 – 3 years after Substantial Completion)	Maintain Flexible Pavement at acceptable level of safety for traveling public.	Meet the performance requirements set forth in Division II, Section 6 of the Technical Requirements for the following:			
		Rutting to be maintained less than a depth of 0.25 inches.	B	90 Days	Every 5 days
		Ride to be maintained at RN greater then 3.5.	B	90 Days	Every 5 days
		Settlement/Depression maximum depth of 0.5 inches.	B	7 Days	Daily
		Cumulative length of cracking > 30 feet for Cracks > 0.125 inches in a $1/10^{th}$ miles lot	B	90 Days	Every 5 days
		Raveling and/or Delamination of the Friction Course as defined and determined by the Department in accordance with the examples displayed at www.dot.state.fl.us/specificationsoffice/pavement.htm or its successor.	C	90 Days	Every 5 days
		Pot holes and Slippage Area(s) cannot be greater than 0.5 square feet in area and 1.5 inches deep.	C	24 Hours	Hourly
		Bleeding as defined and determined by the Department in accordance with the examples displayed at www.dot.state.fl.us/specificationsoffice/pavement.htm or its successor.	B	90 Days	Every 5 days

TABLE 4.2 – O&M REQUIREMENTS (OPERATING PERIOD)					
Element Category	**Required Task**	**Minimum Performance Requirements**	**O&M Violation Classification**	**Cure Period**	**Interval of Recurrence**
Category 1 Pavement (Post 3 years after Substantial Completion)	Maintain Flexible Pavement at acceptable level of safety for traveling public.	Meet the performance requirements set forth in Division II, Section 6 of the Technical Requirements for the following:			
		Rutting to be maintained less than a depth of 0.375 inches	B	180 Days	Every 5 days
		Ride to be maintained at RN greater then 3.5.	B	180 Days	Every 5 days
		Settlement/Depression a maximum depth of 0.5 inches.	C	7 Days	Daily
		Cracking for a Pavement Condition rating above 7.0	B	180 Days	Every 5 days
		Raveling and/or Delamination of the Friction Course as defined and determined by the Department in accordance with the examples displayed at: www.dot.state.fl.us/specificationsoffice/pavement.htm or its successor.	B	180 Days	Every 5 days
		Pot holes and Slippage Area(s) cannot be greater than 0.5 square feet in area and 1.5 inches deep.	C	24 Hours	Hourly
Category 2 Pavement (0 – 3 years after Substantial Completion)	Maintain Flexible Pavement at acceptable level of safety for traveling public.	Meet the performance requirements set forth in accordance with Sections 337 & 338 as detailed in Division II, Section 6 of the Contract Documents requiring the following:			
		Rutting to be maintained less than a depth of 0.4 inches.	B	90 Days	Every 5 days
		Cracking for a Pavement Condition rating above 7.0	B	90 Days	Every 5 days
		Surface Deterioration as defined and determined by the Department in accordance with the examples displayed at www.dot.state.fl.us/specificationsoffice/pavement.htm or its successor.	B	90 Days	Every 5 days
		Pot holes and Slippage Area(s) cannot be greater than 0.5 square feet in area and 1.5 inches deep.	C	24 Hours	Hourly
		Settlement/Depression not to exceed a Depth $\geq$ 0.5 inches.	B	7 Days	Daily

TABLE 4.2 – O&M REQUIREMENTS (OPERATING PERIOD)					
Element Category	**Required Task**	**Minimum Performance Requirements**	**O&M Violation Classification**	**Cure Period**	**Interval of Recurrence**
Category 2 Pavement (Post 3 years after Substantial Completion)	Maintain Flexible Pavement at acceptable level of safety for the traveling public.	Meet the performance requirements set forth in Division II, Section 6 of the Technical Requirements for the following:			
		Rutting to be maintained less than a depth of 0.4 inches.	B	90 Days	Every 5 days
		Cracking for a Pavement Condition rating above 7.0	B	90 Days	Every 5 days
		Surface Deterioration as defined and determined by the Department in accordance with the examples displayed at www.dot.state.fl.us/specificationsoffice/pavement.htm or its successor.	B	90 Days	Every 5 days
		Pot holes and Slippage Area(s) cannot be greater than 0.5 square feet in area and 1.5 inches deep.	C	24 Hours	Hourly
		Settlement/Depression not to exceed a depth ≥ 0.5 inches.	B	7 Days	Daily
Category 3 Pavement (Operating Period)	Maintain Flexible Pavement at acceptable level of safety for the traveling public.	Meet the performance requirements set forth in accordance with Flexible Conditions Survey Handbook and Sections 337 & 338 as detailed in Division II, Section 6 of the Contract Documents requiring the following:			
		Cumulative length of cracking greater than 500 feet for Cracks greater than 0.125 inch	B	90 Days	Every 5 days
		Surface Deterioration as defined and determined by the Department in accordance with the examples displayed at www.dot.state.fl.us/specificationsoffice/pavement.htm or its successor.	B	90 Days	Every 5 days
		Settlement/Depression not to exceed a depth ≥ 0.5 inches.	C	7 Days	Daily
Flexible Pavement (Operating Period)	Inspection of Flexible Pavement after major damage such as fire, fuel spill or other incident/event	Conduct a visual inspection of the affected area and provide a recommendation for repairs to the Department	A	24 Hours	Daily
		Complete repairs identified in the inspection and meet the requirements as detailed in Division II, Section 6 of the Technical Requirements.	C	3 Days	Daily

TABLE 4.2 – O&M REQUIREMENTS (OPERATING PERIOD)					
Element Category	**Required Task**	**Minimum Performance Requirements**	**O&M Violation Classification**	**Cure Period**	**Interval of Recurrence**
Rigid Pavement					
Portland Cement Concrete Pavement (0 – 5 years after Substantial Completion)	Maintain Rigid Pavement at acceptable level of safety for the traveling public.	Meet the performance requirements set forth Division II, Section 6 of the Technical Requirements for the following:			
		Ride to be maintained at RN greater than 3.5	B	90 Days	Every 5 days
		Any lane mile with spalling that is greater than 1 inch in width and exceeds a total of 10 ft. cumulative spalling, or when any spalling of any length exceeds 3 inches in width	B	7 Days	Daily
		Rigid pavement Pot hole cannot be greater than 0.5 square feet in area and 1.5 inches deep.	C	24 Hours	Hourly
		Any rigid pavement slab is not cracked in more than three pieces	B	30 Days	Every 5 days
		Four Cracks in any Lane Mile with width exceeding 0.125 inches OR any Crack exceeding 0.188 inches.	B	90 Days	Every 5 days
Portland Cement Concrete Pavement (Post 5 years after Substantial Completion)	Maintain Rigid Pavement at acceptable level of safety for the traveling public.	Meet the performance requirements set forth Division II, Section 6 of the Technical Requirements for the following:			
		Pavement Condition rating above 7.0	B	90 Days	Every 5 days
		Ride to be maintained at RN greater than 3.5	B	90 Days	Every 5 days
		Any lane mile with spalling that is greater than 1 inch in width and exceeds a total of 10 ft. cumulative spalling, or when any spalling of any length exceeds 3 inches in width	B	7 Days	
		Rigid pavement Pot hole cannot be greater than 0.5 square feet in area and 1.5 inches deep.	C	24 Hours	Hourly
		Four Cracks in any Lane Mile with width exceeding 0.125 inches OR any Crack exceeding 0.188 inches.	B	90 Days	Every 5 days
		Any rigid pavement slab is not cracked in more than three pieces	B	30 Days	Every 5 days

TABLE 4.2 – O&M REQUIREMENTS (OPERATING PERIOD)					
Element Category	**Required Task**	**Minimum Performance Requirements**	**O&M Violation Classification**	**Cure Period**	**Interval of Recurrence**
Fuel Spills/ Contamination	Inspection of the area impacted after fuel spill or other contamination event and manage the mitigation clean-up activities	Conduct a visual inspection of the affected area and provide written recommendation for remedial work to the Department.	A	24 Hours	Daily
		Develop a clean-up / monitoring plan for submittal and approval by the Department.	C	3 Days	Daily
		Manage mitigation and clean-up efforts. Implement monitoring plan.	C	10 Days	Daily
Guardrail	Maintain guardrail at acceptable level of safety for the traveling public.	Meet the performance requirements set forth in FDOT Design Standards, Section 536 of the Standard Specifications for Road & Bridge Construction, Standard Maintenance Special Provisions - ME536 or as per the Concessionaire's design criteria.	B	3 Days	Daily
	Perform inspection of the guardrail system.	Complete the inspection in accordance with FDOT Procedure 850-050-003 or successor.	A	0	Daily
		Complete repairs identified in the inspection report	B	30 Days	Daily
Attenuators	Maintain attenuators at acceptable level of safety for the traveling public.	Meet the performance requirements set forth in the current FDOT Design Standards, Section 544 of the Standard Specifications for Road & Bridge Construction, Standard Maintenance Special Provisions - ME544, manufacturer's specifications or as per the Concessionaire's design criteria.	B	2 Days	Daily
	Perform inspection of the attenuator system.	Complete the inspection in accordance with FDOT Procedure 850-055-003 or successor.	A	0	Daily
		Complete repairs identified in the inspection report.	B	30 Days	Daily
Fence	Maintain fence at acceptable level of safety for the traveling public.	Meet the performance requirements set forth in the current FDOT Standards, Section 550 of the Standard Specifications for Road & Bridge Construction, Standard Maintenance Special Provisions - ME550 and the requirements set forth in the MRP Handbook.	C	10 Days	Daily

TABLE 4.2 – O&M REQUIREMENTS (OPERATING PERIOD)					
Element Category	**Required Task**	**Minimum Performance Requirements**	**O&M Violation Classification**	**Cure Period**	**Interval of Recurrence**
Signs	Maintain signs at acceptable level of safety for the traveling public.	Meet the performance requirements set forth in the current FDOT Design Standards, Section 700 of the FDOT's Standard Specifications for Road & Bridge Construction, Standard Maintenance Special Provisions - ME700, or as per the Concessionaire's design criteria.	B	5 Days	Daily
	Perform sign inspection.	Complete the inspection in accordance with FDOT Procedure 850-055-025 or successor.	A	0	Daily
		Complete repairs identified in the inspection report.	B	30 Days	Daily
Drainage Systems	Maintain drainage system at acceptable level of safety for the traveling public.	Meet the performance requirements set forth in the current FDOT Design Standards, Section 104 of the Standard Specifications for Road & Bridge Construction and the criteria set forth in the MRP Handbook.	B	7 Days	Daily
	Perform an annual inspection of the Drainage System.	Conduct an annual inspection of all drainage systems elements (side/cross drains, roadside ditches, inlets, and miscellaneous drainage structures within the Project limits as well as any water control devices that outfall to the golf courses) using the criteria set forth in the MRP Handbook.	A	0	Daily
		Complete repairs and correct deficiencies identified in the inspection report.	B	30 Days	Daily
NPDES	Monitor NPDES Permits	Comply with NPDES Permit requirements, monitoring and reporting.	A	30 Days	Daily
Concrete sidewalk Inspection	Maintain sidewalk at acceptable level of safety for the traveling public.	Meet the performance requirements set forth in the current FDOT Design Standards, Section 520 & 522 of the Standard Specification for Road & Bridge Construction, Standard Maintenance Special Provisions - ME522, manufacturer's specifications or per the	B	7 Days	Daily

TABLE 4.2 – O&M REQUIREMENTS (OPERATING PERIOD)					
Element Category	**Required Task**	**Minimum Performance Requirements**	**O&M Violation Classification**	**Cure Period**	**Interval of Recurrence**
		Concessionaire's design criteria.			
	Perform an annual Inspection of sidewalk.	Conduct an annual inspection in accordance with the criteria set forth in the MRP Handbook	A	0	Daily
		Complete repairs identified in the inspection	B	30 Days	Daily
Barrier Wall	Maintain barrier walls at acceptable level of safety for the traveling public.	Meet the performance requirements set forth in the current FDOT Design Standards, Section 521 of the Standard Specifications for Road & Bridge Construction, manufacturer's specifications or per the Concessionaire's design criteria.	B	7 Days	Daily
	Perform an annual Inspection of barrier wall.	Conduct an annual inspection of the barrier wall system.	A	0	Daily
		Complete repairs identified in the inspection report.	B	30 Days	Daily
Toll Gantry System Inspection	Maintain toll gantry at acceptable level of safety for the traveling public.	Meet the performance requirements per the Concessionaire's design criteria.	B	5 Days	Daily
	Inspection of toll gantry system.	Complete the inspection in accordance with FDOT Procedure 850-010-030 or successor.	A	0	Daily
		Complete repairs identified in the inspection report.	B	30 Days	Daily
Toll Equipment Building & ITS Hubs	Maintain toll equipment building at acceptable level of safety and operational at all times	Meet the performance requirements set forth in Section 785-5 of the Standard Specifications for Road & Bridge Construction or per the Concessionaire's design criteria.	B	7 Days	Daily
	Perform a annual inspection of the Toll Equipment Building and ITS Hubs	Inspect roof, wall, doors, lights to function as intended	A	0	Daily

TABLE 4.2 – O&M REQUIREMENTS (OPERATING PERIOD)					
Element Category	**Required Task**	**Minimum Performance Requirements**	**O&M Violation Classification**	**Cure Period**	**Interval of Recurrence**
		Complete repairs identified in the inspection report	B	30 Days	Daily
Clear Zone Obstructions	Maintain clear zone at acceptable level of safety for the traveling public.	Remove clear zone obstruction.	B	4 Hours	
Highway Lighting	Maintain highway lighting at acceptable level of safety for traveling public.	Complete repairs identified in the inspection and meet the requirements as detailed in Division II, Section 6 of the Technical Requirements	B	2 Days	Daily
	Perform an annual Inspection of Highway Lighting system	Conduct an annual inspection of the Highway Lighting System. Lighting system shall be free from defects and provide acceptable uniform lighting quality in accordance with the original design criteria or the Plans Preparation Manual.	A	0	Daily
		Complete repairs identified in the inspection report.	B	30 Days	Daily
	Perform a monthly visual inspection of the Highway lighting system	Conduct a monthly inspection. Meet the performance as set forth in Procedure 850-000-015 or successor and the MRP Handbook requiring that no more than a 10% outage and no more then two luminaries in a row are out.	C	2 Days	
		No highway light shall be inoperable for a period extending more than 5 days.	C	1 Day	Daily
		Restore Highway lights to function as intended.	B	5 Days	Daily
Navigation Lighting	Maintain Navigation Lights at acceptable level of safety.	Meet the performance requirements for the Navigation Lighting Specifications as detailed in Standard Maintenance Special Provisions - ME715-50	B	0	Daily
		Restore Navigation lights to function as intended	C	5 Days	Daily
Mast Arm Structure	Perform Mast Arm structure inspection	Complete the inspection in accordance with FDOT Procedure 850-010-030 or successor	A	0	Daily

TABLE 4.2 – O&M REQUIREMENTS (OPERATING PERIOD)					
Element Category	**Required Task**	**Minimum Performance Requirements**	**O&M Violation Classification**	**Cure Period**	**Interval of Recurrence**
		Complete report and forward inspection report to Broward County	B	30 Days	Daily
Overlane Sign Structure	Maintain Overlane Sign Structures at acceptable level of safety for traveling public.	Meet the performance requirements set forth in the current FDOT Design Standards and the Standard Specifications for Road & Bridge Construction, or as per the Concessionaire's design criteria.	B	7 Days	Daily
	Perform overlane sign structure inspection.	Complete the inspection in accordance with FDOT Procedure 850-010-030 or successor.	A	0	Daily
		Complete repairs identified in the inspection report.	B	30 Days	Daily
High Mast Light Poles	Maintain High mast Light Poles at acceptable level of safety for traveling public.	Meet the performance requirements set forth in the FDOT Design Standards, Standard Specifications for Road & Bridge Construction, Chapter 7 of the Plans Preparation Manual, manufacturer's specifications.	B	7 Days	Daily
	Perform high mast light pole inspection.	Complete the inspection in accordance with FDOT Procedure 850-010-030 or successor.	A	0	Daily
		Complete repairs identified in the inspection report.	B	30 Days	Daily
Bridges	Maintain (bridges) at acceptable level of safety for traveling public.	Meet the performance requirements set forth in the current FDOT Design Standards, the Standard Specification for Road & Bridge Construction, manufacture's specifications or as per the Concessionaire's design criteria.	B	5 Days	Daily
	Perform bridge inspections.	Complete the inspection in accordance with FDOT Procedure 850-010-030 or successor.	A	0	Daily
	Input bridge inspections into the Department's Pontis System	Per Procedure 850-010-030 or successor.	B	10 Days	Daily

TABLE 4.2 – O&M REQUIREMENTS (OPERATING PERIOD)					
Element Category	**Required Task**	**Minimum Performance Requirements**	**O&M Violation Classification**	**Cure Period**	**Interval of Recurrence**
	Close out bridge work orders	Per Procedure 850-010-030 or successor and completion of repairs	B	5 Days	Daily
	Perform QAR for Bridge Inspections	Bridge inspection QAR score must meet minimum allowed per Procedure 850-010-030 or successor	B	0	Daily
Bridge Maintenance	Perform repairs generated from bridge inspections	**Routine.** Complete repairs required to maintain an existing level of performance and to prevent additional deterioration or to extend the service life of the structure.	B	180 Days	Every 10 Days
		Urgent. Complete repairs required to correct deficiencies or defects in order to protect the integrity of the structure or maintain a desired level of performance.	C	90 Days	Every 5 Days
		Emergency. Repairs must begin immediately to repair critical damage on the structure and to insure the safety of the traveling public. Work is initiated immediately and work shall be completed as soon as possible.	E	30 Days	Daily
Painting Steel Structures	Continually monitor.	Maintain all paint systems on structures to a minimum "Condition State" of no more than 50% in condition state 2 or better (per FDOT Bridge Inspectors Field Guide Structural Elements). Spot painting is only acceptable for active corrosion areas as a preventive measure. For aesthetic reasons, the paint system shall always be of uniform color and appearance.	B	120 Days	Every 10 Days
Graffiti	Continually monitor and maintain assets free of graffiti	Graffiti to be removed, covered or painted over to match the color and the painted finish/Class 5 application finish of adjacent area.	B	1 day	Daily
Pressure Cleaning Concrete Surfaces	Continually monitor concrete walls, sound barrier walls, concrete slopes, retaining wall and sidewalks.	Concrete surfaces shall be kept free of stains and mildew.	B	60 Days	Every 10 days

TABLE 4.2 – O&M REQUIREMENTS (OPERATING PERIOD)					
Element Category	**Required Task**	**Minimum Performance Requirements**	**O&M Violation Classification**	**Cure Period**	**Interval of Recurrence**
Vegetation Control on Concrete Slopes and Concrete Surfaces	Continually monitor concrete walls, sound barrier walls, concrete slopes, retaining wall and sidewalks.	Concrete surfaces shall be kept free of vegetation. Vegetation shall not be allowed to grow between concrete joints on slopes, bridges, retaining walls, sidewalk or curb & gutter sections.	B	30 Days	Daily
Landscape Areas	Continually monitor Landscape Areas	Landscape areas are to be maintained to their originally constructed condition or as updated from time-to-time.	C	30 Days	Daily
Chemical Vegetation Control	Continually monitor roadside vegetation, areas under guardrail, joints on paved surfaces, aquatic vegetation and areas around retention ponds and canals	Meet the performance requirements set forth in the Section 580-33 Check for accuracy of the Standard Specifications for Road & Bridge Construction and the Standard Maintenance Special Provisions - ME715-50.	B	30 Days	Daily
Fertilizer	Perform Fertilizer application once per year to all sod areas.	Meet the performance requirement in FDOT Standard Specification 982 for the enhancement and the growth of healthy turf.	B	30 Days	Daily
Sound Barriers	Maintain Sound Barriers at acceptable level of safety for traveling public.	Meet the performance requirements set forth in the current FDOT Design Standards, Section 534 of the Standard Specifications for Road & Bridge Construction, or manufacturer's specifications	B	30 Days	Daily
	Maintain paint/coatings on Sound Barrier	Meet the performance requirements set forth in Volume 6, Chapter 2, Section 2.13 of the FDOT Structures Manual or its successor.	B	180 Days	Monthly

TABLE 4.2 – O&M REQUIREMENTS (OPERATING PERIOD)					
Element Category	**Required Task**	**Minimum Performance Requirements**	**O&M Violation Classification**	**Cure Period**	**Interval of Recurrence**
	Conduct annual inspections as per manufacturer's specifications	Meet the performance requirements set forth in Section 534 of the FDOT Standard Specifications for Road & Bridge Construction and as per manufacturer's specifications.	A	0	Daily
		Complete repairs identified in the inspection report.	B	30 Days	Daily
Roadway Characteristics Inventory	Implementation of RCI for the Project	Per RCI Manual	B	60 Days	Every 3 days
	New elements/features are entered into RCI	Meet the performance requirement set forth in the FDOT RCI Manual and Procedure 850-000-001 or successor.	B	30 Days	Daily
	100% of data is inventoried every 5 years.	Meet the performance requirement set forth in the FDOT RCI Manual and Procedure 850-000-001 or successor.	B	30 Days	Daily
Customer Service Staff	Respond in accordance with Contract Documents.	Contact Customer.	C	1 Day	Daily
		Respond to the Customer's request and provide written response to Department	C	10 Days	Daily
		Perform work requirements, if required by CA, in accordance with the CA.	C	30 Days	Every 7 days
ITS Operations	Monitor time required for roadway clearance	I-595 EXPRESS LANES Quarterly Average Roadway Clearance Duration (in minutes) must be no more than 90% of FDOT District Four's ITS Performance Measures published quarterly on www.smartsunguide.com	B	0	N/A
	Monitor time required for incident clearance	I-595 EXPRESS LANES Quarterly Average Incident/Event Clearance Duration (in minutes) must be no more than 90% of FDOT District Four's ITS Performance Measures published quarterly on www.smartsunguide.com	B	0	N/A

TABLE 4.2 – O&M REQUIREMENTS (OPERATING PERIOD)					
Element Category	**Required Task**	**Minimum Performance Requirements**	**O&M Violation Classification**	**Cure Period**	**Interval of Recurrence**
	Monitor time required for roadway clearance	I-595 General Purpose Lanes Quarterly Average Roadway Clearance Duration (in minutes) must be no more than that of FDOT District Four's ITS Performance Measures published monthly on www.smartsunguide.com	B	0	N/A
	Monitor time required for incident clearance	I-595 General Purpose Lanes Quarterly Average Incident/Event Clearance Duration (in minutes) must be no more than of FDOT District Four's ITS Performance Measures published monthly on www.smartsunguide.com	B	0	N/A
TMC Operations	Continually monitor of TMC Operations	TMC Operators must perform their duties as described as required herein	B	0	N/A
		TMC Operators must be available for a shift in the control room as required in the scope of service	B	0	N/A
Emergency Access Gates	Maintain EAG at acceptable level of safety for the traveling public.	Meet the performance requirements set forth in the manufactures specifications	D	2 Days	Daily
	Conduct monthly testing of the system	Perform a monthly testing of the system in accordance with manufactures procedures	B	1 Days	Daily
	Conduct a monthly inspection of the system	Perform monthly inspections in accordance with manufactures inspection procedures	B	3 Days	Daily
		Complete repairs identified in the inspection report	C	3 Days	Daily
Deliverables	Provide Monthly Maintenance reports in electronic format available for submittal to the Department by the 5th working day each month.	Maintain Monthly Maintenance Report identifying all of the Planned Maintenance activities for the month, the actual maintenance performed for the period, and confirmation that the Concessionaire performed all maintenance in compliance with the Contract Documents	A	0	Daily
ITS Maintenance Services	Emergency Response	Respond to Emergency Maintenance Work during normal business hours	A	10 Minutes	Every 15 minutes
		Respond to Emergency Maintenance Work during non-	A	1 Hour	Every 30 minutes

TABLE 4.2 – O&M REQUIREMENTS (OPERATING PERIOD)					
Element Category	**Required Task**	**Minimum Performance Requirements**	**O&M Violation Classification**	**Cure Period**	**Interval of Recurrence**
		business hours			
		Complete repairs for Emergency Maintenance Work during non-business hours	A	2 hours	Every 1 Hour
	Urgent Response	Respond to an Urgent Maintenance Work during normal business hours	A	30 Minutes	Every 30 minutes
		Respond to an Urgent Maintenance Work during non-business hours	A	2 Hours	Every 1 Hour
		Complete repairs for an Urgent Maintenance Work	A	4 hours	Every 1 Hour
	Priority Maintenance Work	Respond to a Priority Maintenance Work	A	24 Hours	Every 6 Hours
		Completing repairs for a Priority Maintenance Work	A	24 hours	Every 6 Hours
	Conduct Preventive Maintenance (PM) Work and Routine Maintenance Work as per the Concessionaire's O&M Plan	Conduct Preventative Maintenance Work and Routine Maintenance Work	A	10 Days	Every 5 Days
Backbone Fiber Network	Maintain backbone fiber network without damage	Meet the performance requirements set forth in the current FDOT Design Standards, Section 783 of the Standard Specification for Road & Bridge Construction and manufacturer's specifications or as per the Concessionaire's design criteria.	C	4	Every 15 minutes
		Complete repairs in accordance with requirements set forth in the current FDOT Design Standards, Section 783 of the Standard Specification for Road & Bridge Construction and manufacturer's specifications or as per the Concessionaire's design criteria. Replace any damaged fiber optic cable from termination point to termination point with the same type of cable	D	90 days	Weekly
	Protect the existing communication link between Hub-3 and	Repair or replace the damaged communications equipment (fiber optic cable, conduit, pull boxes, splice cabinets, hubs, etc.). Damaged fiber optic cable may be	B	4 hrs	Every 15 minutes

TABLE 4.2 – O&M REQUIREMENTS (OPERATING PERIOD)					
Element Category	**Required Task**	**Minimum Performance Requirements**	**O&M Violation Classification**	**Cure Period**	**Interval of Recurrence**
	ITS devices.	temporarily fusion spliced to temporarily restore communications			
ITS Reliability	Continually monitor and maintain TMS System Reliability for Project	Meet a quarterly TMS System Reliability above 94%			
		If quarterly ITMS System Reliability falls between 91-94%.	B	0	Per Quarter
		If quarterly TMS System Reliability falls between 85-90%.	C	0	Per Quarter
		If quarterly TMS System Reliability falls below 85%.	D	0	Per Quarter
	Continually monitor and maintain ITS field devices system Performance Requirements for the Project.	Meet a quarterly ITS field device system performance above 97%			
		If quarterly ITS Field Devices System Reliability (i.e. Communications, DMS, HAR, CCTV, and VDS Subsystems) falls between 95-97%.	B	0	Per Quarter
		If quarterly ITS Field Devices System Reliability (i.e. Communications, DMS, HAR, CCTV, and VDS Subsystems) falls between 91-94%.	C	0	Per Quarter
		If quarterly ITS Field Devices System Reliability (i.e. Communications, DMS, HAR, CCTV, and VDS Subsystems) falls between 85-90%.	D	0	Per Quarter
		If quarterly ITS Field Devices System Reliability (i.e. Communications, DMS, HAR, CCTV, and VDS Subsystems) falls below 85%.	E	0	Per Quarter
	Continually monitor and maintain TMC IT subsystem reliability Performance Requirements for the Project.	Meet a quarterly TMC IT subsystem reliability performance above 99%			
		If quarterly TMC IT Subsystem System Reliability falls between 98-99%.	B	0	Per Quarter
		If quarterly TMC IT Subsystem System Reliability between 95-97%.	C	0	Per Quarter
		Meet a quarterly TMC IT Subsystem System Reliability falls between 92-94%.	D	0	Per Quarter

TABLE 4.2 – O&M REQUIREMENTS (OPERATING PERIOD)					
Element Category	**Required Task**	**Minimum Performance Requirements**	**O&M Violation Classification**	**Cure Period**	**Interval of Recurrence**
		Meet a quarterly TMC IT Subsystem System Reliability falls below 92%.	E	0	Per Quarter
	Continually monitor and maintain Express Lane Access Control Subsystem Performance Requirements for the Project	Meet a quarterly Express Lane Access Control Subsystem performance above 99%			
		If quarterly Express Lanes Access Control Subsystem System Reliability falls between 98-99%	B	0	Per Quarter
		If quarterly Express Lanes Access Control Subsystem System Reliability falls between 95-97%	C	0	Per Quarter
		If quarterly Express Lanes Access Control Subsystem System Reliability falls between 92-94%	D	0	Per Quarter
		Meet a quarterly Express Lanes Access Control Subsystem System Reliability falls below 92%	E	0	Per Quarter
TMC Operations	Maintain real-time data and video transfer to the Department	Provide real-time access to all video and data within project limits.	A	1 hour	Every 15 minutes
	Notify SMART SunGuide TMC of lane/road closures	Notify the SMART SunGuide TMC of lane/road closures in the O&M project limits within five minutes of confirmation	A	5 Minutes	Every 5 Minutes
	Post DMS and HAR messages	Post DMS and HAR within three minutes of confirmed lane blockage/road closure	A	3 Minutes	Every 5 Minutes
	Populate 511 ATIS system	Send information to populate 511 ATIS system with lane blockage/road closure information within three minutes of confirmation	A	3 Minutes	Every 5 Minutes
	Maintain minimum CCTV camera detection rate	Meet a minimum CCTV camera detection rate of 30%	A	0	Per Quarter
TIM Operations	SIRV Operator must respond to an incident/emergency	SIRV is required to respond in 15 minutes upon notification	D	15 minutes	Every 15 minutes
	Must submit SIRV Team Incident Reports	Provide summary of SIRV related activities including but not limited to: number of events responded to, number of	A	0	Daily

TABLE 4.2 – O&M REQUIREMENTS (OPERATING PERIOD)					
Element Category	**Required Task**	**Minimum Performance Requirements**	**O&M Violation Classification**	**Cure Period**	**Interval of Recurrence**
	to the Department by the 5th working day each month.	meetings attended, agency time savings, list of equipment used.			
Road Rangers Operations	Respond to a stranded motorist, incident, emergency or event, either on the shoulders or travel lanes on the Project	Road Ranger to respond within 15 minutes of notifications	C	15 minutes	Every 30 minutes
	Maintain adequate Road Ranger trucks on the Project to provide the required coverage	Patrol of the Project on 30 minute beats/cycles	B	0	N/A
	Must maintain AVL / GPS / Tablet / wireless system	No malfunctioning AVL/GPS/Tablet/wireless system, unable to disseminate data or record location of active vehicle for longer than 10 minutes	A	10 minutes	Every 30 minutes
		No Service Patrol Operator found or accused of tampering, removing, disengaging, or disabling AVL or RRMA software	B		N/A
	Must maintain wireless data service	No Wireless data service malfunctioning or below minimum required specifications	A	0	Every 30 minutes
	Must use appropriate lights and sirens	No inappropriate sirens (e.g. flashing red and blue or lights similar to police)	B	0	Each
	Service Patrol Operator must not be under the influence of alcohol or any controlled substance or drug, except where prescribed by a physician while on duty	No Service Patrol Operator found to be or accused of being under the influence of alcohol or any controlled substance or drug, except where prescribed by a physician while on duty	A	0	Each

TABLE 4.2 – O&M REQUIREMENTS (OPERATING PERIOD)					
Element Category	**Required Task**	**Minimum Performance Requirements**	**O&M Violation Classification**	**Cure Period**	**Interval of Recurrence**
	Service Patrol Operator must not accept payment for services	No Service Patrol Operator found to be or accused of accepting payment for services	A	0	Each
	Service Patrol Operator must not sleep while on duty	No Service Patrol Operator found to be or accused of sleeping while on duty	A	0	Each
	Customer Satisfaction Survey for Road Ranger Service	Meet a Customer Satisfaction Survey for Road Ranger Service above 95%			
		If Customer Satisfaction Survey falls between 90-95% of respondents satisfied with service	A	0	Per Quarter
		If Customer Satisfaction Survey falls between 80-90% of respondents satisfied with service	B	0	Per Quarter
		If Customer Satisfaction Survey falls between 70-80% of respondents satisfied with service	C	0	Per Quarter
		If Customer Satisfaction Survey falls below 70% of respondents satisfied with service	D	0	Per Quarter

TABLE 4.3 - AVAILABILITY FAULTS

TABLE 4.3 – AVAILABILITY FAULTS				
Availability Faults	**Minimum Performance Requirements**	**Availability Classification**	**Cure Period**	**Interval of Recurrence**
Incident Response	Respond to and secure sites of incidents, emergencies, accidents, and other events that that result in a condition that is unsafe and/or may present a life threatening condition, such as but not limited to, fuel spills, debris, pavement failure (e.g. pot holes, etc.), flooding, guardrail failures, attenuator faults, and other Elements Categories as detailed in this matrix.	B	15 minutes	Hourly
Roadway Surface Debris	Conduct the removal and disposal of debris from travel lanes that would potential cause a safety hazard to the traveling public, including but not limited to, large objects, dead animals and tires. Roadway surface debris on a given Segment shall meet the temporary mitigation performance requirements set forth in Section 4.6.2.	C	30 Min	Hourly
	Debris too large to be removed within the above timeframe will require that the roadway be closed by use of lane closure in accordance with FDOT Design Standards.	C	2 hours	Hourly
Flexible Pavement Pot Holes	Pavement section to meet the requirements set forth in Division II, Section 6 of the Technical Requirements.	B	60 Min	Hourly
Rigid Pavement Pot Holes	Pavement section to meet the requirements set forth in Division II, Section 6 of the Technical Requirements.	B	60 Min	Hourly
Flooding of a Lane	No portion of a lane can have more than 25% blocked by standing water that would potential cause a safety hazard to the traveling public and affecting any given lane of the facility.	D	30 Min	Hourly

TABLE 4.3 – AVAILABILITY FAULTS				
Availability Faults	**Minimum Performance Requirements**	**Availability Classification**	**Cure Period**	**Interval of Recurrence**
Guardrail	Guardrail on a given Segment to meet the temporary mitigation performance requirements set forth in the Section 4.6.2.	B	60 Min	Hourly
Impact Attenuators	Impact Attenuators on a given Segment to meet the temporary mitigation performance requirements set forth in the Section 4.6.2.	B	60 Min	Hourly
Signs (single or multi-post)	Sign (single or multi-post) on a given Segment to meet the temporary mitigation performance requirements set forth in the Section 4.6.2.	B	30 Min	Hourly
Highway Lighting	Highway Lighting on a given Segment to meet the temporary mitigation performance requirements set forth in the Section 4.6.2.	C	30 Min	Hourly
Barrier Wall	Barrier wall on a given Segment to meet the temporary mitigation performance requirements set forth in the Section 4.6.2.	C	60 Min	Hourly
Bridge Hit/Element Failure	Bridge element on a given Segment to meet the temporary mitigation performance requirements set forth in the Section 4.6.2.	D	60 Min	Hourly
Toll Collection – Opening Year through December 2023	Concessionaire shall meet and perform all requirements under the Contract Documents, including this Section 4 of Division II, to enable the uninterrupted collection of tolls when any portion of the Express Lanes is open to traffic.	C	30 Min	Hourly
Toll Collection – January 2024 through December 2033	Concessionaire shall meet and perform all requirements under the Contract Documents, including this Section 4 of Division II, to enable the uninterrupted collection of tolls when any portion of the Express Lanes is open to traffic.	D	30 Min	Hourly

TABLE 4.3 – AVAILABILITY FAULTS				
Availability Faults	**Minimum Performance Requirements**	**Availability Classification**	**Cure Period**	**Interval of Recurrence**
Toll Collection – December 2034 through End of the Term	Concessionaire shall meet and perform all requirements under the Contract Documents, including this Section 4 of Division II, to enable the uninterrupted collection of tolls when any portion of the Express Lanes is open to traffic.	E	30 Min	Hourly
Toll Gantry	Toll Gantry on a given Segment to meet the temporary mitigation performance requirements set forth in the Section 4.6.2. This Availability Fault does not apply if a failure to meet the performance requirements herein interrupts collection of tolls on the Express Lanes, in which case it shall be deemed a Toll Collection Interruption Availability Fault	D	60 Min	Hourly
Emergency Access Gates	EAG on a given Segment to meet the temporary mitigation performance requirements set forth in the Section 4.6.2.	D	15 Min	Every 15 Minutes
Toll Equipment Building / ITS Hub	Toll equipment building / ITS Hub on a given Segment to meet the temporary mitigation performance requirements set forth in the Section 4.6.2. This Availability Fault does not apply if a failure to meet the performance requirements herein interrupts collection of tolls on the Express Lanes, in which case it shall be deemed a Toll Collection Interruption Availability Fault	C	60 Min	Hourly
Backbone Fiber Network	Fiber network on the Project shall be maintained free of damage and communication of toll collection equipment shall be maintained during the hours of operation of the Express Lanes. This Availability Fault does not apply if a failure to meet the performance requirements herein interrupts collection of tolls on the Express Lanes, in which case it shall be deemed a Toll Collection Interruption Availability Fault	E	4 Hours	Hourly

TABLE 4.3 – AVAILABILITY FAULTS				
Availability Faults	**Minimum Performance Requirements**	**Availability Classification**	**Cure Period**	**Interval of Recurrence**
Rapid Incident Scene Clearance	Respond to and provide the necessary equipment and personnel as set forth in the Section 4.3.4.1.	E	60 Min	Hourly
EXPRESS LANES Operation Mode Change	EXPRESS LANES open/close/switch direction not on time	E	10 Minutes	Every 15 Minutes