

**Exhibit**  
**Scope of Services for Signal System Maintenance During Construction for The  
Deployment and Installation of City of Miami Beach ITS Devices on  
Existing County Infrastructure**

**City of Miami Beach**  
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Project Number: 2319039  
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**City of Miami Beach ITS Design, Operation and Maintenance, and Parking Services**

**Description**

To provide temporary oversight and Maintenance Services as described below for Miami Dade County Signal System Mast-Arms for the City of Miami Beach ("City") under a Time and Material (T&M) Reimbursement agreement between TransCore ("the DBOM Firm") and the City of Miami Beach. As a condition stipulated in the Memorandum of Understanding (MOU) between the City and Miami Dade County (MDC), the City may install Intelligent Transportation System (ITS) devices on MDC's mast-arms. These ITS devices include wireless antennas, Closed Circuit Cameras (CCTV), Microwave Vehicle Detection (MVDS), and British Thermal Unit (BTU) Enclosures. Installation of devices shall only occur on mast arms monitored by the Miami Beach ITS Design Build Operations and Maintenance (DBOM) firm, reflected in Design Review (DR) number 2021010592, as reviewed and approved by MDC. Monitoring by the DBOM firm shall commence at the start of construction and conclude when the permits are closed. During monitoring, City Staff or TS&S Operations staff will be contacted first, depending on which entity initially identifies the issue to respond to any maintenance Trouble Reports at signal intersections. Responsibilities of the ITS Contractor in responding to and closing Work Orders assigned by MDC through the Trouble Report are described below within this Scope of Work (SOW) document.

**1) Pre-Installation and Photo Inventory Assessment**

- I. Prior to starting work at any intersections, TransCore will develop a photo inventory of the entire intersection. If the County provides a pre-construction checklist, it can be completed as well. This inventory, along with field notes and checklist will be submitted to MDC and the City for acknowledgment of the initial condition of the signal intersection. The initial information will include notes describing the working condition of the intersection, as well as, the condition of the lights, cabinet, internal components of the cabinet, mast-arm condition, pull box conditions and any other MDC component related to the signal which is visible for inspection at each site.

**2) Daily Notifications**

TransCore has not been provided MDC's ticket response protocol at this time, however, below is the method we believe is used by MDC for responding and closing Work Orders.

- I. TransCore will notify MDC, the City as well as Kimley-Horn and Associates, Inc. (KHA) of any scheduled work at an intersection listed in the MOU prior to work commencing. TransCore's method for communication will be through email as follows:
  - i. MDC Point of contact email to be provided to TransCore:  
[TSS.CONSTRUCTION.WORK@miamidade.gov](mailto:TSS.CONSTRUCTION.WORK@miamidade.gov)
  - ii. Miami Beach: [JoseGonzalez@miamibeachfl.gov](mailto:JoseGonzalez@miamibeachfl.gov)
  - iii. KHA: [jonathan.ford@kimley-horn.com](mailto:jonathan.ford@kimley-horn.com) and [eli.perez@kimley-horn.com](mailto:eli.perez@kimley-horn.com)
  - iv. Gannet: [ebourgeois@gfnet.com](mailto:ebourgeois@gfnet.com)

Additional emails may be added or substituted after this agreement is executed.

### **3) Miami Beach ITS Components to be Installed at Mast-Arms**

- I. Minimal work will be performed within the MDC Signal Control Cabinet. This work will only include the introduction of a Circuit Breaker (CB) that will connect to the Main Breaker Florida Power and Light (FP&L) feed to the Cabinet. The new breaker will protect the signal control cabinet if a surge occurs from the ITS device only the newly installed ITS CB will trip. This ensures the signal control cabinet will remain in power during an ITS device issue.
- II. Installation of CCTV, MVDS, Wireless Equipment and BTU will be installed on the mast-arm in accordance with the approved RFC plans (DR#2021010592) already reviewed and approved by MDC on November 12, 2021.
- III. All equipment within the cabinet and on the Mast-Arm will be clearly labeled, identifying each component in that identifies the City as the owner. Label will be an adhesive-type label that will permanently affix to the equipment. Label information will include:
  - i. Contact information of DBOM Firm's Maintenance Provider
  - ii. Device Name
  - iii. Miami Beach Asset Number
  - iv. IP address if applicable

### **4) Maintenance, Trouble Reports, and Work Order Responsibilities**

From the start of installation, services provided by TransCore shall be responsible for responding to only the Maintenance Trouble Reports referenced in the MOU or approved MDC design permit. This will only be for those intersections used to install ITS devices for the City of Miami Beach, as shown in the ITS RFC Plans. The maintenance service timeline shall be from the start of installation until all work is complete and MDC approves intersections turned back to Miami Dade. The outline below identifies how a Work Order will be responded to and closed for each Trouble Report.

- I. It is our understanding that the County's standard practice includes the creation of a work order and/or trouble report in the EAM system, which automatically generates an email to the contractor associated with a construction project at the asset in question.
- II. It is anticipated, based on previous MDC Signal System Maintenance Projects, that Trouble Report Work Orders will be titled: "Miami Dade County, Traffic Signals & Daily Work Orders List"
- III. Trouble Reports will be sent by MDC from [DoNotReply@MiamiDade.gov](mailto:DoNotReply@MiamiDade.gov) with carbon copy (Cc) to [PWWM-TSS@MiamiDade.gov](mailto:PWWM-TSS@MiamiDade.gov)

- IV. The Trouble Reports from MDC Traffic Signals and Signs Division Enterprise Asset Management System in a document titled "Open TSS Work Orders for TransCore" will initiate the scheduling of a TransCore traffic signal technician to respond and diagnose any issues communicated by the trouble report.
- V. Work Orders will include:
  - i. Work Order Number
  - ii. Date and Time Trouble Report and Work Orders were emailed to TransCore
  - iii. Asset Name, Number, and Location (address)
  - iv. Description of the failure, received by the MDC Operations Center.
- VI. TransCore will acknowledge receipt of Trouble Report through automatic email confirmation received through Enterprise Asset Management System (EAMS).
- VII. TransCore shall then assign a technician to address the Work Order within a reasonable time from TransCore's acknowledgement of the Trouble Report and Work Order.
- VIII. TransCore Technician, once at site, will first observe the site and photograph the entire intersection. Video snapshots may also be taken to capture intersections or any other issue that may require a video to properly photo document findings.
- IX. If the issue found at an intersection is related to ITS installation work or negligence by the DBOM firm, TransCore will email both "Signal.Complaints" and "TSS.Construction" and provide information about the issue. TransCore shall also notify MDC, the City and KHA of the problem and make the necessary repairs. ITS Repairs will be done at no charge to the MDC or the City.
- X. Any signal system component that may need replacement as a result of a failure related to the ITS device and not associated with negligence, may be forwarded by MDC to TransCore. The cost of resupplying material to MDC shall constitute a reimbursable expense from the City to MDC.
- XI. If the issue at the site is determined to be unrelated to the ITS installation work, the DBOM Firm shall notify MDC to dispatch an MDC technician to restore the intersection to normal operations.
- XII. Once normal operation is restored, the DBOM Firm will close the trouble ticket. The trouble report provided by EAMS will be updated by the Contractor so that MDC can confirm and close the trouble report in EAMS. This is contingent on MDC providing access to the DBOM Contractor to EAMS.
- XIII. The DBOM Firm will maintain for each Trouble Report and Work Order a "TransCore Signal System Maintenance Response Spreadsheet" that will provide the following information:
  - i. Trouble Report and Work Order Numbers
  - ii. Time Trouble Report and Work Order was emailed to the DBOM Firm
  - iii. Time Trouble Report and Work Order was acknowledged by the DBOM Firm
  - iv. Time Technician assigned to Work Order arrived at intersection identified in Work Order
  - v. Time Technician provided his or her findings to MDC, the City and KHA
  - vi. Time Trouble Report and Work Order was closed.
- XIV. TransCore Signal System Maintenance Spread Sheet shall also include photos and video, as well as any other supporting documentation that may be required to properly illustrate the findings and the resolution at each specific site.

5) **MDC Acceptance Procedure**

Once installation is complete at a site the DBOM contractor will coordinate with MDC, the City and KHA to schedule a final inspection of the completed site. This inspection shall occur within calendar 14 days upon receiving written confirmation that the installation on a certain signal is completed.

- I. TransCore Inspection Spread Sheet will include:
  - i. List of all ITS devices installed at each site.
  - ii. Labeling Identification and Verification
  - iii. Pre-Construction and Post-Construction Verification of Signal System Status and Condition.
  - iv. Reference Documents that will be available during the Acceptance will be the initial photo and video inventory that was taken prior to construction as well as the pre-construction Check List