SUPPLEMENTAL AGREEMENT NO. 2 TO AGREEMENT OF NOVEMBER 15, 2017 FOR TOLL SYSTEMS OPERATION AND MAINTENANCE MASTER SERVICE AGREEMENT

THIS SUPPLEMENTAL AGREEMENT is made and entered into this 20 day of JUNE, 2018, and modifies the MASTER SERVICE AGREEMENT effective November 15, 2017 (the "Agreement"), by and between the Fort Bend Grand Parkway Toll Road Authority (the "Authority"), a Texas Local Government Corporation, and TransCore, LP (the "Contractor"), a limited partnership organized under the laws of the State of Delaware.

The Agreement is hereby modified as follows:

1. In accordance with Section 1.01 of the Agreement, the Authority and Contractor approve the addition of services evidenced by the proposal attached as **Exhibit C** to this Supplemental Agreement.

This Supplemental Agreement does not alter, modify, or otherwise change any part of the Agreement, except as specifically stated in this Supplemental Agreement.

[Remainder of page intentionally left blank.]

IN WITNESS WHEREOF, this Supplemental Agreement is hereby executed as of the date first set forth above.

FORT BEND GRAND PARKWAY TOLL ROAD AUTHORITY, a local government Texas corporation

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ATTEST:

By_______ Chairman, Board of Directors

Secretary, Board of Directors

TRANSCORE, LP

By:

Name:

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EFFECTIVE DATE

THIS AGREEMENT IS EFFECTIVE ON THE DATE IT IS APPROVED BY THE FORT BEND COUNTY COMMISSIONERS COURT, AND IF NOT SO APPROVED SHALL BE NULL AND VOID.

DATE OF COMMISSIONERS COURT APPROVAL: _____

AGENDA ITEM NO.: _____

EXHIBIT C

Scope of Work and Compensation for Initial ITS Camera System Installation and Design

General Description

Fort Bend County Toll Road Authority (FBCTRA) is planning to install and operate a new Intelligent Transportation System (ITS) "Project" which includes field CCTV cameras, communication network, Video Management System (VMS) and infrastructure for future ITS field devices. This ITS system is intended to provide information to FBCTRA on the movement of traffic along the FBCTRA toll facilities.

Project Description

As part of the initial stage of the Project, TransCore will investigate the existing field communications and power service along the Fort Bend Parkway and Westpark Tollway to provide a communication plan which will take into account the planned FBCTRA future ITS design. TransCore will provide, install and configure a VMS server located in the TransCore Data Center. The VMS will provide the FBCTRA staff remote access and control of the CCTV camera system. TransCore will replace the existing CCTV cameras and associated equipment along the Westpark and Ft Bend Tollways with new IP based cameras utilizing existing fiber optic communications, poles, cabinets and power. Along the Grand Parkway and Westpark Tollway Extension, temporary gantry attachments will be used at the tolling sites to install the CCTV cameras which will use the existing tolling cabinet power and communication.

Upon Notice to Proceed, the contractor has 10 weeks to install and bring the ITS project live. Routine maintenance will follow Exhibit A of the Master Service Agreement.

Communication Design

TransCore will investigate the fiber routing between all existing camera locations along the Fort Bend Parkway and Westpark Tollway. Once routing has been determined a communication plan will be developed using Microsoft Visio to show proposed fiber routing changes and proposed network diagrams for communication to all devices. During the investigation existing power service will also be checked and identified. The plan will also include recommendations for increased bandwidth for the existing third parry communications paid for by FBCTRA.

Installation Sites

Existing CCTV camera sites will utilize the existing 55' poles, 303 camera cabinets, power services and fiber optic patch panel. TransCore will provide and install new IP based CCTV camera, camera cabling, fiber optic routing changes and fiber optic managed switch. All fiber optic routing changes requiring splicing will utilize existing fiber optic enclosures. Below is a summary of the existing CCTV install sites:

• 9 CCTV sites on Ft Bend Tollway (8 along original roadway, 1 along extension)

• 2 CCTV sites on Westpark Tollway (2 at existing toll sites)

Temporary CCTV camera sites will be installed at existing FBCTRA tolling locations. Sites will use an extension pole attached to the toll structure to install the new IP based camera 6' above the existing structure. Existing toll power, communication switch, and network will be used. New IP based CCTV camera, camera cabling and extension pole will be provided and installed. If FBCTRA choses to move the camera to a final pole location at a later date the camera, cabling and POE power supply would be reused. TransCore will also provide traffic control based on Texas MUTCD guidelines as needed. Below is a summary of the temporary CCTV install sites:

- 7 CCTV sites on the Grand Parkway Toll Road
- 1 CCTV site on Westpark Tollway Extension

Video Management System (VMS) server will be installed and configured at TransCore's westside data center. VMS will allow FBCTRA staff web-based access to cameras for viewing and control. No video recording will be provided but can be added with additional storage hardware.

• 1 Server located at TransCore's westside data center

Any required increases in bandwidth for third party communication links and electrical service turn-on/upgrade costs are not included in this price.

Fiber optic re-routing is expected to only require re-splicing or jumpering in existing splice enclosures or panels. TransCore will repair spider termination kits at camera sites however the addition of patch panels or splice enclosures is not included in this price.

Compensation

Payments for the development of the ITS system will be made to TransCore at the following milestones:

Mobilization (at NTP)	\$ 10,000.00
Communication Design and Documentation (\$26,375.00 per month)	\$ 52,750.00
Video Management System (Server and Configuration)	\$ 103,300.00
Existing Camera Site Installation (\$12,095.00 per site)	\$ 133,045.00
Includes camera, fiber rework and comms switch	
Temporary Camera Site Installation (\$13,978.00 per site)	\$ 111,824.00
Includes temporary pole extension	

Total Compensation \$ 410,919.00