#### CAMINO REAL REGIONAL MOBILITY AUTHORITY BOARD RESOLUTION

WHEREAS, pursuant to a procurement process completed in 2012, the Camino Real Regional Mobility Authority (CRRMA) selected Telvent USA LLC (Telvent) as the toll systems integration and maintenance provider to the CRRMA, resulting in an Agreement for Toll System Integration and Maintenance (Agreement) between the CRRMA and Telvent; and

WHEREAS, the County of El Paso (County) is currently developing the Tornillo-Guadalupe Port of Entry (TGPOE), which will include a toll collection system consisting of both cash collection and transponder collection components; and

WHEREAS, the County and CRRMA have executed an Interlocal Agreement, whereby the CRRMA will provide necessary planning, design and installation services for a toll collection system at the TGPOE through the use of the CRRMA's expertise, available resources and consultants; and

WHEREAS, the CRRMA now desires to issue Proposed Change Order Letter No. 01 to Telvent, pursuant to and in accordance with the Agreement, for the development of the TGPOE toll collection system as provided for in the Interlocal Agreement;

NOW, THEREFORE, BE IT RESOLVED BY THE CAMINO REAL REGIONAL MOBILITY AUTHORITY:

THAT the Executive Director is hereby authorized to execute and submit to Telvent USA, LLC, a Proposed Change Order Letter No. 1 for the development of a toll collection system at the Tornillo-Guadalupe Port of Entry, including any additional documents or materials as may be required; and THAT the Executive Director is authorized to issue any associated Notices to Proceed or take such other actions as necessary to develop the referenced toll collection system.

CAMINO REAL REGIONAL MOBILITY AUTHORITY

PASSED AND APPROVED THIS 19<sup>TH</sup> DAY OF MAY 2014.

APPROVED AS TO CONTENT:

Raymond L. Telles Executive Director

Proposed Change Order No. 01 - Telvent USA, LLC Tornillo-Guadalupe POE - Toll Collection System SCOTT MCLAUGHLIN

JOE. D. WARDY VICE CHAIR

LES PARKER TREASURER

SUSAN A. MELENDEZ
SECRETARY

Via:



DORI FENENBOCK ALTERNATE SECRETARY

> JAMES VOLK MEMBER

RICARDO DOMINGUEZ MEMBER

RAYMOND L. TELLES EXECUTIVE DIRECTOR

May 19, 2014

Certified U.S. Mail No. 91 7199 9991 7030 7900 6675 Email Address steve.haddix@telvent.com

Telvent USA LLC 211 East 7<sup>th</sup> Street, Suite 800 Austin, Texas 78701 Attn: Steve Haddix

> Re: Agreement for Toll System Integration and Maintenance dated December 12, 2012 Proposed Change Order Letter No. 01 – Tornillo-Guadalupe Toll Collection System

Mr. Haddix,

This Proposed Change Order Letter No. 1 ("PCO Letter No. 1") is made pursuant to a Camino Real Regional Mobility Authority (the "CRRMA") Board of Directors Resolution dated May 19, 2014, and in accordance with Article 4 of the Agreement for Toll System Integration and Maintenance, between the CRRMA and Telvent USA LLC ("Contractor"), effective as of December 12, 2012 (the "Agreement"). This PCO Letter No. 1 is in support of the Interlocal Agreement between the County of El Paso and the CRRMA, also effective as of May 19, 2014 for the development of a toll collection system at the Tornillo-Guadalupe Port of Entry.

The Contractor will perform toll system implementation services described in <u>Attachment "A"</u> to this PCO Letter No. 1. The maximum amount payable to Contractor under this PCO Letter No. 1 is \$1,086,002.30. This amount is based on the cost estimate shown in <u>Attachment "B"</u>. This PCO Letter No. 1 is effective on the date both parties have signed this PCO Letter No. 1 and will terminate on the completion of the toll system implementation services described in <u>Attachment "A"</u>.

This PCO Letter No. 1 does not waive any party's responsibilities and obligations established by the Agreement, and except as specifically modified by this PCO Letter No. 1, all such responsibilities and obligations under the Agreement remain in full force and effect. This PCO Letter No. 1 is executed in duplicate counterparts and hereby accepted and acknowledged below.

Sincerely,

Raymond L. Telles

# TELVENT USA LLC Signed: \_\_\_\_\_ By: \_\_\_\_ Date: \_\_\_\_

# CAMINO REAL REGIONAL MOBILITY AUTHORITY

# PCO No. 1 Toll System Integration Scope of Work TGPOE

Attachment A Scope of Work 19 May 2014

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#### 1 GENERAL PROJECT SCOPE OF WORK

The lanes include three toll collection points (Toll Points) at the El Paso County TGPOE facility. Toll rates will be based on a pre-determined time-of-day rate schedule. Toll rate adjustments will be reviewed and potentially adjusted by CRRMA on a regular basis. Toll rates will be transmitted to the lanes to display information in accordance with the current rate schedule.

The toll concept for the TGPOE has been developed to employ two toll collection methods: Automatic Vehicle Identification (AVI) and cash collection. The Toll Points will accept commercial and personal vehicles; vehicle classification is required in the Work. Toll Collection System (TCS) equipment will detect vehicles; capture the date and time of vehicle passage and apply the appropriate toll rate, capture associated transponder reads, and collect, store, and transmit the data through specified interfaces. The TCS equipment will also have reporting capabilities to both monitor TCS performance and support CRRMA's business operations.

CRRMA requires toll systems and technology to be interoperable with the other Texas ETC systems; this allows ETC customers to use any Texas toll agency facility without multiple transponders in their vehicle. Transponders, readers, and antennas are required to be compatible with the American Trucking Association (ATA) protocol, and multi-protocol readers are acceptable.

CRRMA cash transactions shall be able to be processed on site through the project host server and AVI transactions shall be processed through a Back Office System (BOS) provided by a third-party. The BOS provider will process AVI transactions, and will process interoperable transactions through the Texas Interoperability Hub.

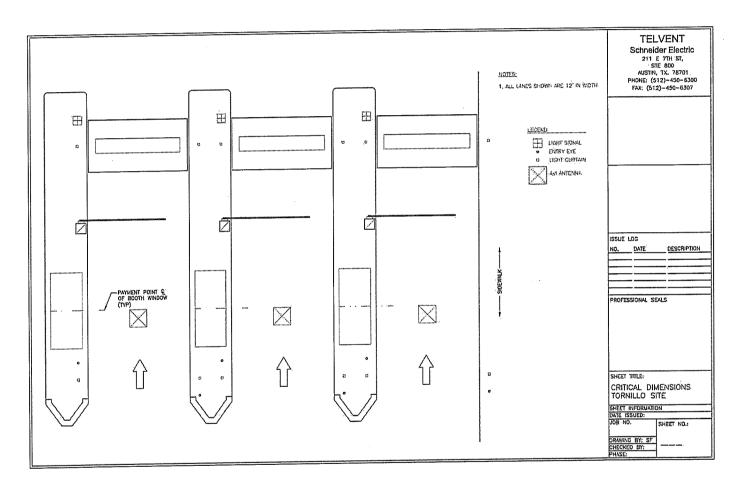
The Contractor shall furnish all hardware; cables and connections; software; interfaces; installation; integration, testing; labor, personnel; transportation; materials; storage; tools; supplies; permits; licenses; equipment; and any other services, equipment, or materials necessary to supply fully functional AVI and Manual Toll Collection System MTCS in accordance with the requirements of the Agreement.

## 2 TOLL COLLECTION SYSTEM

#### 2.1 Configuration

The Contractor shall deliver a TCS that meets the configuration parameters reflected in Exhibit 2.1-1 below. Note that Figure is not to scale.

**Exhibit 2.1-1: Manual Toll Lanes Configuration Schematic** 



#### 2.2 Systems Architecture

El Paso County has designed and is currently constructing the TGPOE. Any and all Work that is required for a fully functioning AVI and MTCS is the Contractor's responsibility. If there is an item of Work required for a fully functioning TCS that is not currently constructed, it shall be the Contractor's responsibility and all costs shall be included in the Price Schedule. The CRRMA is not obligated to provide anything other than the infrastructure that exists as of the execution of this change order. The Contractor is responsible for all Work required to provide the CRRMA with a fully functional and operating TCS in accordance with the Agreement. The Contractor will be responsible for providing a Toll Collection System (TCS) capable of transmitting transaction data to the new Project Host Server to be located at TGPOE, to the Loop 375 Project Host Server (PHS), and processing through an integrated interface. Cash transactions shall be able to be processed locally through either the TGPOE PHS or the Loop 375 PHS.

#### 2.3 TCS Requirements

The Contractor shall provide equipment, systems, subsystems, and components to comply with the requirements of the Agreement for the following:

- Automatic Vehicle Detection (AVD)
- Readers and antennas (AVI)
- Lane Controllers
- Digital Video Audit System (DVAS)
- Remote Online Management System (ROMS)
- Project Host Server (PHS)
- Secure cabinets or enclosures that are not otherwise provided
- Spare parts
- Data connectivity to each Lane location
- System interfaces, including an interface to the current CCRMA back office processing.

#### 2.4 Toll Transaction Requirements

In accordance with the requirements of the Agreement, toll transactions recorded by the TCS shall include:

- Date and time
- Lane
- Transaction type
- Axles: indicated (by Toll collector), detected (by treadles/loops) and AVC
- Toll rate
- Transponder ID (if applicable)

The Contractor shall compile transaction data from all lanes in a format that is compatible with the Texas Interoperability Hub.

#### 2.5 PHS Requirements

In accordance with the requirements of the Agreement, the Contractor shall provide a PHS to collect all toll transactions from all Toll Points and transmit transactions to a CCRMA BOS for processing. The PHS shall have dedicated hardware and software for the CRRMA TCS and shall process and store data exclusive to CRRMA. The PHS shall be housed in a secure and climate-controlled location provided by El Paso County. Redundant systems developed for data backup, business continuity, and disaster recovery requirements are required to be located in El Paso, Texas.

Once in production, the Contractor shall use a system environment separate from the PHS for testing software modifications, fixes, and updates prior to their release into CRRMA's production environment.

#### 2.6 Reporting

The PHS shall have the following reporting capabilities provided by the Contractor in conformance with the requirements of the Agreement:

- Produce user-generated reports based on predefined and ad-hoc report criteria.
- Monitor and report on the condition and maintenance of the MTCS through an integrated ROMS.
- Agreed upon manual audit process.

#### 2.7 Performance Requirements

The Contractor shall deliver a TCS that meet or exceed the Performance Requirements specified in the Agreement, which include:

- Vehicle detection
- Vehicle identification (AVI)
- Transponder read/write accuracy
- Lane identification accuracy
- Transaction management
- System availability
- Response and repair time
- Toll rate posting to the lanes

#### 3 PROJECT MANAGEMENT

The Contractor shall provide project management and support in conformance with the requirements of the Agreement for the following:

- Schedule
- Project status meeting participation and documentation
- Project coordination with CRRMA, El Paso County, and other third parties
- Risk management
- Quality management
- Progress reporting
- Document control
- Development of system training and manuals
- Administration of deliverable review and approval processes
- System documentation
- Within ROMS, spare parts inventory and management
- System configuration verification and requirements traceability
- Performance verification and documentation
- Security compliance verification and documentation

#### 4 DESIGN AND DEVELOPMENT

The Contractor shall design and develop the TCS to meet or exceed all requirements set forth in the Agreement. The Contractor shall coordinate with CRRMA and El Paso County during the design process that is required to modify the Contractor's TCS.

The Contractor shall use existing and tested TCS modules where possible and appropriate to limit the amount of development and customization needed for the CRRMA. The Contractor shall clearly distinguish for CRRMA TCS components that are configurable in the base TCS, and TCS components that require modification or enhancement through a development effort.

The Contractor shall deliver, in conformance with the requirements of the Agreement, the following:

- System detailed design, which is the installation and implementation of drawings, shop drawings, cut sheets, component serial numbers, and as-built / as-installed diagrams and configurations / settings.
- Design changes, which shall be the changes or modifications from the Contractor's base system required to meet the requirements and specifications of this CRRMA Project.

#### 5 INSTALLATION

The Contractor shall update the Installation Work Plan and perform all installation activities in conformance with the requirements of the Agreement. The Contractor shall safely and effectively fulfill the successful installation of all TCS components in coordination with CRRMA, El Paso County, and third parties to mitigate negative impacts to the Project and Project personnel. The Contractor is responsible for maintaining all design documentation, permits, certification, and licenses required for installation activities.

The Contractor is responsible for determining its lay down/staging requirements and for providing them. The CRRMA will not provide a lay down/staging area for the Work. The Contractor shall be responsible for any and all utilities, security, and improvements needed at its lay down/staging area.

It is not anticipated the traffic control will be required for this Work. In the event that traffic control is required at no fault of the Contractor's, traffic control provided by the Contractor will be considered as a change order under Article 4 of the Agreement.

The Contractor shall perform installation inspections and provide report documentation to CRRMA to certify compliance with design documentation and any approved Change Orders.

#### 6 TESTING

In accordance with the requirements of the Agreement, the Contractor shall provide a complete Master Test Plan and perform all TCS testing activities. In addition to any other entry criteria specified by CRRMA, test plans, procedure, and parameters shall be approved by CRRMA prior to commencing TCS testing. After completing each test phase or event, the Contractor shall produce and submit a Test Report documenting the test results to CRRMA. The Contractor shall maintain multiple test environments as needed to ensure that CRRMA's configurations are matched exactly during every phase of development, installation, and testing.

The following test phases shall be performed in conjunction with and witnessed by CRRMA's staff and/or designees, unless otherwise determined by CRRMA:

- On-site First Installation Test
- Commissioning Test
- Operations Test
- Final System Acceptance Test Report

#### 7 SCHEDULE MILESTONE DATES

The Contractor shall deliver the Work in accordance with the Milestones listed in Table 1 below. The Contractor shall deliver the Work in the sequence shown in Table 1, and the Contractor's schedule shall meet the Guaranteed Date or an accelerated date. The Contractor shall meet the requirements for the specified Deliverables and qualifying events as specified in the Agreement. In the event of the Guaranteed Date is not met, liquidated damages shall be assessed in accordance with the Agreement.

Table 1: TCS Integration Schedule Milestones

Milestone	Dates
Mobilization	TBD
Ordering Verified for Long Lead Item's	TBD
1st Draft of Plan's accepted	TBD
1st Draft of System Design Doc accepted	TBD
Equipment/Materials Received and Verified	TBD
Start Installation	TBD
Successful completion of the On-Site First Installation Test	TBD
Open to Tolling	TBD
Successful completion System Acceptance Testing	TBD

#### **CAMINO REAL REGIONAL MOBILITY AUTHORITY**

### **PCO No. 1 Toll System Integration TGPOE**

# Attachment B Not to Exceed Pricing 19 May 2014

Task No.	Description	Oty	Unit	Unit Price (US \$'s)	Extended Price (US \$'s)
1	HW - Materials / Equipment	1	Lot	303,670.86	303,670.86
2	PHS H/W, Oracle Lic's & PHS Setup	1	Lot	41,930.68	41,930.68
3	Program Management	1	Lot	158,317.69	158,317.69
4	SW Design & System Documentation	1	Lot	116,190.58	116,190.58
5	SW Development	1	Lot	155,154.10	155,154.10
6	SW Integration/Test (FAT, Commissioning, Final Accept, etc.)	4	Lot	105,343.30	105,343.30
7	Installation	1	Lot	205,395.09	205,395.09
	TOTAL				1,086,002.30