

**GENERAL MEETING OF THE BOARD OF DIRECTORS
OF THE
CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY**

RESOLUTION NO. 23-045

**APPROVE A CONTRACT WITH KAPSCH TRAFFICOM USA, INC. FOR INTELLIGENT
TRANSPORTATION SYSTEM PERFORMANCE-BASED MAINTENANCE SERVICES**

WHEREAS, the Mobility Authority has an ongoing need for intelligent transportation system (ITS) maintenance and construction services for all existing and future ITS elements on the Mobility Authority's system, including installation services, on-call emergency repair and/or replacement work, and regular maintenance related to ITS devices, communications, electrification, and infrastructure; and

WHEREAS, by Resolution No. 22-049, dated October 26, 2022, the Board approved the release of a request for proposals (RFP) for ITS Performance-Based Maintenance Services; and

WHEREAS, the Mobility Authority issued an RFP for ITS Performance-Based Maintenance Services on January 27, 2023, and subsequently issued a request for best and final offers (BAFO) on June 7, 2023, to the three firms that responded to the RFP; and

WHEREAS, each of the three offers received by the July 12, 2023 deadline to respond to the BAFO were evaluated by Mobility Authority operations and information technology staff who determined that the offer submitted by Kapsch TrafficCom USA, Inc, provides the best value to the Mobility Authority based on the criteria established in the RFP; and

WHEREAS, based on the results of the Mobility Authority staff's evaluations, the Executive Director recommends that the Board approve a contract Kapsch TrafficCom USA, Inc. for ITS performance-based maintenance services in an amount not to exceed \$1,940,000.00 and in the form or substantially the same form attached hereto as Exhibit A.

NOW THEREFORE, BE IT RESOLVED that the Board hereby approves a contract with Kapsch TrafficCom USA, Inc. for ITS performance-based maintenance services in an amount not to exceed \$1,940,000.00 and authorizes the Executive Director to finalize and execute the contract in the form or substantially the same form attached hereto as Exhibit A


Adopted by the Board of Directors of the Central Texas Regional Mobility Authority on the 25th day of October 2023.

Submitted and reviewed by:



James M. Bass
Executive Director

Approved:



Robert W. Jenkins, Jr.
Chairman, Board of Directors

Exhibit A

CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY

AGREEMENT FOR

INTELLIGENT TRANSPORTATION SYSTEM

PERFORMANCE-BASED MAINTENANCE SERVICES

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**CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY
AGREEMENT FOR
INTELLIGENT TRANSPORTATION SYSTEM PERFORMANCE-BASED
MAINTENANCE SERVICES**

This Agreement for Intelligent Transportation System Performance-Based Maintenance Services (the “Agreement”) is made and entered into by and between the Central Texas Regional Mobility Authority (the “CTRMA”), a regional mobility authority and a political subdivision of the State of Texas, and Kapsch TrafficCom USA, Inc. (the “Contractor”), to be effective as of the 1 day of November, 2023 (the “Effective Date”).

WITNESSETH:

The parties acknowledge the following:

WHEREAS, pursuant to that certain Request for Proposals dated January 27, 2023 (the “RFP”), the CTRMA sought to identify and obtain the services of a qualified firm to provide intelligent transportation system (“ITS”) performance-based maintenance services (PBMC) for the CTRMA, and, potentially, other toll authorities; and

WHEREAS, three (3) firms were shortlisted from a total of three (3) firms that submitted responses setting forth their respective qualifications and proposals for the work; and

WHEREAS, pursuant to Resolution No. _____, approved on October 25, 2023, the Board authorized the execution of this Agreement; and

WHEREAS, this Agreement has been negotiated and finalized between the parties whereby services will be provided by the Contractor and compensation will be paid by the CTRMA pursuant to the terms hereof.

NOW, THEREFORE, in consideration of the benefits received and realized by the respective parties hereto, the parties do hereby agree as follows:

**ARTICLE 1
THE SERVICES**

The CTRMA hereby retains the Contractor, as an independent contractor, and the Contractor agrees to provide ITS performance-based maintenance services to the CTRMA, and possibly other toll authorities upon the terms and conditions provided in this Agreement. The scope of services are described in Appendix “A”, and shall include, but not be limited to: (1) the maintenance of CTRMA’s ITS facilities and equipment (the “Maintenance Services”); and (2) the construction and installation of replacement CTRMA’s ITS facilities and equipment (the “Installation Services”) (the Maintenance Services and Installation Services, along with other services described in Appendix “A”, are collectively referred to herein as the “Services”).

The Contractor acknowledges and agrees that the Services provided for herein will be provided to the CTRMA and may also be provided for the benefit of other toll authorities through

agreements between the CTRMA and the other entities. All terms related to the performance of the Services hereunder to and for the CTRMA shall apply equally to Services provided to other toll authorities, and the CTRMA shall have the right, without objection from the Contractor, to seek performance hereunder and enforce the terms of this Agreement on its own behalf and on behalf of any other entities receiving the Services provided for herein.

The Contractor shall be expected to operate independently from the CTRMA and without extensive oversight and direction. The Contractor represents and warrants that it shall commit the personnel and resources required to respond promptly and fully to the responsibilities and tasks assigned by the CTRMA throughout the term of the Contractor's performance of the Services described in this Agreement.

ARTICLE 2 **PROSECUTION OF WORK AND COMPENSATION**

A not to exceed amount for this Agreement will be established by the CTRMA Board of Directors in the CTRMA annual operating budget. In no event will the not to exceed amount for a given year be exceeded without prior approval by the CTRMA Board of Directors. No compensation shall be paid for work performed that is not authorized by the CTRMA Executive Director in a written Work Authorization, as described below. Authorization for Contractor to perform the Services, payment of compensation for Contractor's work, and other aspects of the mutual obligations concerning Contractor's work and payment therefore are as follows:

2.1 INSTALLATION SERVICES

a. Commencement of Work. The Contractor shall not proceed with any Installation Services until a Work Authorization has been issued pursuant to subsection 2.1.b. below.

b. Work Authorizations. Each activity, task, or project related to the Installation Services shall be performed pursuant to a separate Work Authorization, signed by the CTRMA and the Contractor. Work shall be performed in accordance with the scope, schedule, and budget set forth in said Work Authorization. The standard form of Work Authorization is attached hereto as Appendix "B" and made a part hereof. The standard form of Work Authorization may be modified during the term of this Agreement at the direction of the CTRMA or as agreed to by the Parties. No amendment of this Agreement is required if the standard form of Work Authorization is amended.

Upon written (including emailed) request from the CTRMA, the Contractor shall prepare a Work Authorization for a specific task or project, to be submitted for the CTRMA's approval. A proposed Work Authorization must be submitted within thirty (30) days of receipt of the written (or emailed) request. No work shall begin on the activity until the Work Authorization is approved by the CTRMA's Executive Director and is fully executed. The basis for payment on each Work Authorization will be stated in the Work Authorization as either (i) a lump sum, which may be paid in multiple milestone payments, or (ii) cost plus, using the ITS Equipment Prices shown in Appendix "C" and estimated hours calculated based on the labor rates shown in Appendix "E". In all cases a maximum "not-to-exceed" amount for the work will be identified in the Work

Authorization, and in no event will the maximum be exceeded without prior approval by the CTRMA Executive Director.

The assignment and authorization of work, if any, shall be at the sole discretion of the CTRMA.

c. Delays in Completing Installation Services. It is critical to the financial stability of the CTRMA and essential for the convenience of the traveling public that the performance of Installation Services is carried out in accordance with the schedules set forth in any Work Authorization. Damages for failure to meet a schedule deadline are difficult to estimate, and therefore shall result in liquidated damages being assessed by the CTRMA at a rate specified in the applicable Work Authorization, unless specific time extensions have been requested by the Contractor and approved by the CTRMA, at its sole discretion. The CTRMA reserves the right to deduct the amount of liquidated damages from any funds due the Contractor. If retained funds or other funds due the Contractor are not sufficient to cover the liquidated damages, the Contractor, or surety (as set forth in Article 7) shall promptly pay the amount due. Nothing herein shall preclude the delay in performance from being an event providing for notice and possible termination under Article 4. Without waiving the foregoing, if at any time during the term of this Agreement the Contractor cannot provide the requested Installation Services within the time required by the CTRMA or for any other reason, the CTRMA may, without waiving any other rights it may have under this Agreement, procure the Installation Services from any other source it deems capable of providing those Installation Services.

d. Adjustment of Installation Services Prices. The initial prices to be used for establishing the Installation Services in any Work Authorization are set forth in Appendix "C" and Appendix "E" and shall be adjusted annually commencing on the second anniversary of this Agreement to account for increases or decreases in the costs of labor and materials from the costs as of the Effective Date. Any increase or decrease in the annual adjustment shall not result in rates increasing or decreasing by more than 5% from the prior years' adjustment. Notwithstanding the foregoing, the prices for Installation Services in any Work Authorization in effect at the time of an adjustment will not be subject to such adjustment. Price adjustments subject to this subsection 2.1.d. shall be based on the following indices:

i. labor amounts shall be adjusted in accordance with the Consumer Price Index (CPI) for Urban Wage Earners and Clerical Installation Workers for the Austin, Texas metropolitan area ("all items") as published by the U.S. Department of Labor, Bureau of Labor Statistics.

ii. material amounts shall be adjusted in accordance with the Electrical Machinery and Equipment Index (WPU 117), as published by the U.S. Bureau of Labor Statistics.

2.2 MAINTENANCE SERVICES

a. Commencement of the Maintenance Services. The initiation of the Maintenance Services shall commence with the issuance of a Work Authorization describing the ITS facilities and equipment to be maintained. The Work Authorization for Maintenance Services

will be renewed on an annual basis in connection with the CTRMA Board of Directors' adoption of an annual budget for the Services.

b. Fees and Charges. The CTRMA shall pay a monthly fee (the "Monthly Fee") for the Maintenance Services to be performed using the Maintenance Services Unit Prices set forth in the Appendix "D".

c. Revisions to Scope of Maintenance Services. Any revision to the scope of the Maintenance Services assigned to the Contractor in accordance with this Agreement or an adjustment in the price for the Maintenance Services, shall be implemented pursuant to a Supplemental Work Authorization authorized by the CTRMA, which shall also include any changes to the Monthly Fee.

d. Delays in Completing Maintenance Services. It is critical to the financial stability of the CTRMA and essential for the convenience of the traveling public that the performance of Maintenance Services is carried out in accordance with the Service Level Agreements ("SLAs") set forth in Appendix "F". Damages for failure to meet a schedule deadline are difficult to estimate, and therefore shall result in liquidated damages being assessed by the CTRMA at a rate specified in the Appendix "F", unless specific time extensions have been requested by the Contractor and approved by the CTRMA, at its sole discretion. The CTRMA reserves the right to deduct the amount of liquidated damages from any funds due the Contractor. If retained funds or other funds due the Contractor are not sufficient to cover the liquidated damages, the Contractor, or surety (as set forth in Article 7) shall promptly pay the amount due. Nothing herein shall preclude the delay in performance from being an event providing for notice and possible termination under Article 4. Without waiving the foregoing, if at any time during the term of this Agreement the Contractor cannot provide the requested Maintenance Services within the time required by the CTRMA or for any other reason, the CTRMA may, without waiving any other rights it may have under this Agreement, procure the Maintenance Services from any other source it deems capable of providing those Maintenance Services.

e. Adjustment of Maintenance Services Prices. The Monthly Fee shall not be increased or decreased during the Initial Term except for adjustment as a result of adding or removing ITS facilities or equipment from the scope of work, resulting in an increase or decrease in fees. The initial prices to be used for establishing the Monthly Fee are set forth in Appendix "D" and shall be adjusted annually commencing on the second anniversary of this Agreement to account for increases or decreases in the costs of labor and materials from the costs as of the Effective Date. Any increase or decrease in the annual adjustment shall not result in rates increasing or decreasing by more than 5% from the prior years' adjustment. Price adjustments subject to this subsection 2.2.e. shall be based on the Electrical Machinery and Equipment Index (WPU 117), as published by the U.S. Bureau of Labor Statistics.

2.3 COMPENSATION, GENERALLY

a. EXPENSES. The compensation described above is anticipated by the CTRMA and the Contractor to be full and sufficient compensation and reimbursement for the performance of the Services. The Contractor shall not be entitled to reimbursement from the

CTRMA for out of pocket expenses incurred by the Contractor related to the performance of its duties under this Agreement.

b. **INVOICES AND RECORDS.** The Contractor shall submit a monthly invoice certifying the time sheets reflecting the number of hours worked by Contractor personnel and the costs associated with providing the Services under this Agreement during the previous month, and shall also present a reconciliation of monthly invoices and the Work Authorization (and related estimates) to which the work relates. Each invoice shall be in such detail as is required by the CTRMA, including a breakdown of Services provided pursuant to specified Work Authorizations and, if applicable, a report reflecting the progress on each SLA subject to the specified Work Authorization. The costs associated with work performed on any Work Authorization will be tracked and reported to the CTRMA separately from other work performed by the Contractor. The monthly invoice to the CTRMA will include a progress summary of the work performed the previous month on each ongoing Work Authorization.

Upon request of the CTRMA, the Contractor shall also submit certified time and expense records and copies of invoices that support the invoiced time and expense figures. In the event that the work performed under this Agreement is subject to federal or state reporting requirements, Contractor shall submit any supporting information required to comply with such reporting requirements not otherwise provided for under this Agreement.

c. **EFFECT OF PAYMENTS.** Payment shall be required thirty (30) days after receipt of an undisputed invoice. No payment by the CTRMA shall relieve the Contractor of its obligation to timely deliver the Services required under this Agreement. If after approving or paying for any Service, product or other deliverable, the CTRMA determines that said Service, product, or deliverable does not satisfy the requirements of this Agreement, the CTRMA may reject the same and, if the Contractor fails to correct, cure, or provide a plan acceptable to the CTRMA for cure within a reasonable period of time, but no later than thirty (30) days after receipt of written notice of the manner in which a Service, product, or deliverable does not satisfy the requirements of this Agreement, and at no additional cost to the CTRMA, the Contractor shall return any compensation received therefore. In addition to all other rights provided in this Agreement, the CTRMA shall have the right to set off any amounts owed by the Contractor pursuant to the terms of this Agreement upon providing the Contractor prior written notice thereof. Disputed amounts are to be resolved pursuant to the dispute resolution process as provided in Article 38 of this Agreement. If it is determined that the CTRMA has wrongfully withheld amounts from payment, the CTRMA shall promptly pay all withheld amounts.

Except to the extent amounts owed may be set off as provided above, the CTRMA shall make timely payments for all undisputed amounts. If any undisputed amounts remain outstanding for more than one hundred and eighty (180) days and the Contractor has provided documentation to substantiate its right to be paid for the amount in dispute, the Contractor retains the right to suspend performance under this Agreement (including but not limited to suspending CTRMA's license to Software) without any further obligation or liability. Contractor's right to suspend performance is subject to first providing a written notice to the CTRMA detailing the undisputed amounts which have been outstanding for more than one hundred and eighty (180). If the CTRMA fails to cure such outstanding undisputed amounts no later than thirty (30) days after receipt of the written notice, Contractor may suspend performance under this Agreement.

d. **TAXES.** The Contractor acknowledges that the CTRMA is a tax-exempt entity under Sections 151.309, et seq., of the Texas Tax Code.

ARTICLE 3 **TERM OF AGREEMENT**

It is understood and agreed that the initial term of this Agreement shall be a period of three (3) years, commencing on November 1, 2023, and concluding on October 31, 2026, (the “Initial Term”) subject to the earlier termination of this Agreement pursuant to Articles 4 or 5 below or further extension upon agreement of both parties. There shall be three (3) successive two (2) year renewal terms following the expiration of the Initial Term, each of which shall be subject to approval of the CTRMA Board of Directors.

If at any time during the term of this Agreement the Contractor cannot provide the requested Services within the time required by the CTRMA or for any other reason, the CTRMA may, without waiving any other rights it may have under this Agreement, procure the Services from any other source it deems capable of providing those Services.

ARTICLE 4 **TERMINATION FOR DEFAULT**

Time is of the essence with respect to the performance and completion of all the Services to be furnished by the Contractor pursuant to Work Authorizations issued and which specify an agreed-upon completion or delivery date. Without limiting the foregoing, the Contractor shall furnish all Services in such a manner and at such times as the CTRMA may require. Except as provided below, should the Contractor at any time (a) not carry out its obligations under this Agreement or (b) not be providing the Services to be rendered hereunder in an expeditious and efficient manner and in full compliance with this Agreement, or if the Contractor shall fail in any manner to discharge any other of its obligations under this Agreement, the CTRMA may, upon providing the Contractor with not less than thirty (30) days prior written notice and opportunity to cure (provided that in no event shall the cure period be more than thirty (30) days from receipt of the written notice unless a plan for a longer cure period is provided by Contractor and approved by the CTRMA in its sole discretion), terminate this Agreement. Notwithstanding the foregoing, the CTRMA may terminate this Agreement by providing not less than five (5) days prior written notice (an no opportunity to cure) in the event the Contractor fails to provide any bond, including the renewal of any bond, pursuant to the requirements under Article 7.

Any such termination under this Article 4 shall not constitute a waiver or release by the CTRMA of any claims for damages, claims for additional costs incurred by the CTRMA to complete and/or correct the work described in this Agreement, or any other claims or actions arising under this Agreement or available at law or equity which it may have against the Contractor for its failure to perform satisfactorily any obligation hereunder, nor shall such termination pursuant to this Article 4 or Article 5 below abrogate or in any way affect the indemnification obligations of the Contractor set forth in Article 17 hereof.

Contractor has provided the CTRMA with three (3) years of financial statements as part of its Proposal (as defined in Article 20), and has represented that it has experienced positive cash flow

during that three (3) year period. Contractor shall have a continuing obligation under this Agreement to notify the CTRMA of: (i) any material adverse change in its financial position or the occurrence of any event which may result in an adverse change (such as claims, litigation, etc.); (ii) the failure to maintain a positive cash flow for any fiscal year during the term of this Agreement; or (iii) any event of insolvency or the initiation of any bankruptcy proceeding or other action seeking protection from creditors or claimants during the term of this Agreement. The failure to provide required notification shall be an event of default for which the CTRMA may terminate this Agreement without the requirement for notice as set forth in the preceding paragraph.

If the CTRMA terminates this Agreement as provided either in this Article 4 or Article 5, no fees of any type, other than fees due and payable as of the termination date pursuant to Article 2 hereof for work performed and acceptable to the CTRMA, shall thereafter be paid to or collected by the Contractor, and the CTRMA shall have a right to offset or otherwise recover any damages incurred by reason of the Contractor's breach hereof, together with the right to offset amounts owed to the Contractor pursuant to Article 7 hereof. In determining the amount of any payments owed to the Contractor, the value of the work performed by the Contractor prior to termination shall be no greater than the value that would result by compensating the Contractor in accordance with Article 2 hereof for all Services performed and expenses reimbursable in accordance with this Agreement.

ARTICLE 5 **OPTIONAL TERMINATION**

In addition to the process for termination described above, this Agreement may also be terminated as follows:

a. **GENERALLY.** The CTRMA has the right to terminate this Agreement at its reasonable option, at any time with or without cause, by providing sixty (60) days written notice of such intention to terminate pursuant to this subsection 5.a. hereof and by stating in said notice the optional termination date. Upon such optional termination, the CTRMA shall enter into a settlement with the Contractor upon an equitable basis as determined by the CTRMA, which shall fix the value of the work performed by the Contractor prior to the optional termination date. In determining the value of the work performed, the CTRMA in all events shall compensate the Contractor for any reasonable costs or expenses actually incurred and which are attributable to the exercise of the CTRMA's optional termination, on an equitable basis as determined by the CTRMA as noted above, provided, however, that no consideration will be given to anticipated profit which the Contractor might possibly have made on the uncompleted portion of the Services.

b. **NO FURTHER RIGHTS, ETC.** Termination of this Agreement and payment of an amount in settlement as described in this Article 5 shall extinguish all rights, duties, obligations, and liabilities of the CTRMA and the Contractor under this Agreement (except those which are designated as surviving termination, including without limitation the indemnification obligations of Contractor set forth in Article 17), and this Agreement shall be of no further force and effect, provided, however, such termination shall not act to release the Contractor from liability for any previous default, known or unknown, either under this Agreement or under any standard of conduct set by common law or statute.

c. **NO FURTHER COMPENSATION.** If the CTRMA shall terminate this Agreement as provided in this Article 5, no fees of any type, other than fees due and payable as of the optional termination date, shall thereafter be paid to the Contractor, provided that the CTRMA shall not waive any right to damages incurred by reason of the Contractor's breach thereof. The Contractor shall not receive any compensation for Services performed by the Contractor after the optional termination date, and any such Services performed shall be at the sole risk and expense of the Contractor.

ARTICLE 6 **TERMINATION, GENERALLY**

The CTRMA's rights and options to terminate this Agreement, as provided in any provision of this Agreement, shall be in addition to, and not in lieu of, any and all rights, actions, options, and privileges otherwise available under law or equity to the CTRMA by virtue of this Agreement or otherwise. Failure of the CTRMA to exercise any of its said rights, actions, options, and privileges to terminate this Agreement as provided in any provision of this Agreement or otherwise shall not be deemed a waiver of any of said rights, actions, options, or privileges or of any rights, actions, options, or privileges otherwise available under law or equity with respect to any continuing or subsequent breaches of this Agreement or of any other standard of conduct set by common law or statute.

ARTICLE 7 **SERVICE LEVEL AGREEMENTS AND PERFORMANCE GUARANTY**

a. **SLA NONCOMPLIANCE.** Timely and accurate performance of the Services is critically important to the CTRMA. Contractor has represented that it will perform the Services in a timely and accurate manner, and Contractor acknowledges that the failure to do so will cause material harm to the CTRMA. Without waiving any other rights provided for in this Agreement, the Parties have identified certain SLAs intended to assure that critical aspects of the Services are provided in a timely and reliable manner, and that if they are not that there are consequences for Contractor's failure to perform. The SLAs and a table showing financial consequences for failure to adhere to those SLAs is set for in Appendix "F". In the event Contractor fails to adhere to the standards associated with one or more SLAs, the CTRMA shall notify Contractor of such event of noncompliance and shall be authorized to withhold, or offset, the penalty amount indicated in Appendix "F" from amounts owed to the Contractor for Services performed. Nothing in this Article 7 shall preclude the CTRMA from asserting any other remedies related to the failure to perform in accordance with the SLAs, including without limitation termination pursuant to Article 5.

b. **LOSS OF REVENUE.** Notwithstanding any other provision in this Agreement and whether or not the performance of the Services is in conformance with the requirements specified herein (including the appendices), in the event the CTRMA incurs a loss of revenue due to any action or inaction of the Contractor (or any individual or entity working on Contractor's behalf), the Contractor shall be obligated to make payment to the CTRMA of all lost revenue and other direct damages associated with the loss, including payments made to the CTRMA's third-party vendors. In the event that the CTRMA is unable to determine the amount of lost revenue because data is lost or otherwise unavailable, the Parties agree that lost revenue shall be based on historical

figures (e.g., traffic, payments) maintained by the CTRMA. The CTRMA may offset lost revenue and associated damages by reducing the amount of the subsequent Monthly Fee.

c. **NON-REVENUE DAMAGES.** In the event the CTRMA incurs damages due to any action or inaction of the Contractor (or any individual or entity working on Contractor's behalf) for its failure to perform satisfactorily any obligation under this Agreement, and which are not subject to subsection 7.b., then the Contractor shall be obligated to make payment to the CTRMA for any costs incurred by the CTRMA to complete and/or correct the work for which the Contractor failed to perform. The CTRMA may offset costs incurred by the CTRMA by reducing the amount of the subsequent Monthly Fee. The maximum amount of payments Contractor is required to pay under this subsection 7.c. shall not exceed \$10,000,000, with such amount being exclusive of any proceeds paid under Contractor's insurance policies or by the surety on any bonds required by this Agreement.

d. **PAYMENT AND PERFORMANCE BONDS.** The Contractor shall furnish the performance bonds and a payment bonds described in this subsection 7.d (collectively, the "Bonds") in the exact form set forth in the applicable appendix to this Agreement. The Bonds do not serve as the full extent of the Contractor's liabilities under this Agreement but are intended to secure the Contractor's obligations in providing the Services as well as to ensure adequate compensation for loss of revenue incurred by the CTRMA under subsection 7.b.

i. **Surety Financial Requirements.** The Bonds shall be issued by a surety with an A.M. Best and Company rating level of A-minus (A-) or better, Class VIII or better, or as otherwise approved in writing by the CTRMA, in its sole discretion. If any bond previously provided becomes ineffective, or if the surety that provided the bond no longer meets the requirements hereof, the Contractor shall provide a replacement bond in the same form issued by a surety meeting the foregoing requirements, or other assurance satisfactory to the CTRMA in its sole discretion.

ii. **Installation Performance and Payment Bonds.** Upon issuance of each Work Authorization under Article 2, subsection 2.1, the Contractor shall provide, and continuously maintain in place for the benefit of the CTRMA, a performance bond in the form of Appendix "I-1" (a "Installation Performance Bond") and a payment bond in the form of Appendix "I-2" (a "Installation Payment Bond") for the Installation Services covered by each applicable Work Authorization. The Installation Performance Bond and Installation Payment Bond shall each be in an amount of 100% of the relevant Work Authorization cost. If a price is increased in connection with a Work Authorization, the CTRMA may, in its sole discretion require a corresponding proportionate increase in the amount of the applicable Installation Performance Bond and Installation Payment Bond.

The Contractor's obligation to maintain and provide the Installation Performance Bond and Installation Payment Bond with respect to the Installation Services shall continue throughout the term of the applicable Work Authorization, but the CTRMA will accept the Installation Performance Bond and Installation Payment Bond with a stated term of one (1) year with a statement set forth in the applicable bond that it shall be renewable annually in accordance with the surety's customary renewal practices, provided further that it shall be an event of default if a

bond is not renewed and there is no replacement bond provided prior to the expiration of the bond. If such an event of default occurs, the CTRMA may terminate this Agreement by providing five (5) days written notice to Contractor. The CTRMA will release any individual Installation Performance Bond relating solely to a Work Authorization upon the later of (1) expiration of the applicable warranty period related to such Work Authorization, provided that no outstanding claims are then pending or threatened against the Contractor hereunder, or (2) satisfaction of the conditions required for final acceptance of the Installation Services of the applicable Work Authorization. The CTRMA will release any individual Installation Payment Bond relating solely to a Work Authorization (1) upon receipt of (i) evidence satisfactory to the CTRMA that all persons eligible to file a claim against the bond have been fully paid and (ii) unconditional releases of liens and stop notices from all subcontractors who filed preliminary notice of a claim against the bond, (2) upon expiration of the statutory period for subcontractors to file a claim against the bond if no claims have been filed, or (3) upon satisfaction of the conditions required for final acceptance of the Installation Services of the applicable Work Authorization.

iii. Maintenance Performance and Payment Bonds. Upon the issuance of the Work Authorization under Article 2, subsection 2.2., the Contractor shall furnish the CTRMA with (a) a Maintenance Performance Bond in the form of Appendix "J-1" (with such modifications as the CTRMA approves in writing, in its sole discretion) (the "Maintenance Performance Bond"), and (b) a Maintenance Payment Bond in the form of Appendix "J-2" (with such modifications as the CTRMA approves in writing, in its sole discretion) (the "Maintenance Payment Bond").

The Maintenance Performance Bond and Maintenance Payment Bond shall each be in an amount equal to (a) 100% of the aggregate two-year cost for the Maintenance Services for the Work Authorization under Article 2, subsection 2.2.a. and any Supplemental Work Authorizations under Article 2, subsection 2.2.c. If the price of the Maintenance Services is increased in connection with a Supplemental Work Authorizations under Article 2, subsection 2.2.c., the Contractor shall provide a corresponding proportionate increase in the amount of the Maintenance Performance Bond and Maintenance Payment Bond, provided that it shall be an event of default if the bonds reflecting the increased amounts are not provided within ten (10) business days of the date of the Supplemental Work Authorization providing for the increased amount.

e. The Contractor's obligation to maintain and provide the current Maintenance Performance Bond and Maintenance Payment Bond with respect to the Maintenance Services shall continue throughout the term of this Agreement, but the CTRMA will accept the Maintenance Performance Bond and Maintenance Payment Bond with a stated term of at least two (2) years with a statement set forth in the applicable bond that it shall be renewable annually in accordance with the surety's customary renewal practices. Provided that the Contractor has paid the CTRMA any applicable damages, compensation for revenue losses, and any other amounts that are payable to the CTRMA under this Agreement, the Maintenance Performance Bond shall be released upon expiration of the term of this Agreement and after the satisfaction of all conditions required for completion of the Maintenance Services. Upon expiration of the term of this Agreement, the CTRMA will release the Maintenance Payment Bond (i) upon receipt of (A) evidence satisfactory to the CTRMA that all persons eligible to file a claim against the bond have been fully paid and (B) unconditional releases of liens and stop notices from all subcontractors

who filed preliminary notice of a claim against the bond, or (ii) upon expiration of the statutory period for subcontractors to file a claim against the bond if no claims have been filed.

ARTICLE 8

SUSPENSION OR MODIFICATION OF SERVICES; DELAYS AND DAMAGES

In addition to the foregoing rights and options to terminate this Agreement, the CTRMA may elect to suspend any portion of the Services of the Contractor hereunder, but not terminate this Agreement, by providing the Contractor with prior written notice to that effect. Thereafter, the suspended Services may be reinstated and resumed in full force and effect upon receipt from the CTRMA of written notice requesting same.

Similarly, the CTRMA may expand, cancel (in whole or part), or otherwise modify any portion of the Services previously assigned to the Contractor in accordance with this Agreement. Such modification may include, but is not limited to, technological advances resulting in the development of equipment, software or any other aspect of the Services that would benefit the CTRMA and is not contemplated under this Agreement. In the event the Services are modified, the Parties shall agree to and execute a Work Authorization and Contractor's compensation shall be adjusted (up or down) based on the rates set forth in Appendices "D" or "E" as applicable. Without limiting the foregoing, the Contractor agrees that no claims for damages or other compensation shall be made by the Contractor for any delays, hindrances or modifications occurring during the progress of any portion of the Services specified in this Agreement as a result of any suspension or modifications occurring during the progress of any portion of the Services specified in this Agreement. Such delays or hindrances, if any, shall be provided for by an extension of time for such reasonable periods as the CTRMA may decide. It is acknowledged, however, that permitting the Contractor to proceed to complete any Services or any part of them after the originally specified date for completion, or after the date to which the time for completion may have been extended, shall in no way operate as a waiver on the part of the CTRMA or any of its rights herein.

ARTICLE 9

PERSONNEL, EQUIPMENT AND MATERIAL, GENERALLY

Contractor shall provide personnel and equipment as follows:

a. **ADEQUATE PERSONNEL, ETC.** The Contractor shall furnish and maintain, at its own expense, adequate and sufficient personnel (drawn from its own employees or from approved subcontractors) and equipment, in the reasonable opinion of the CTRMA, to perform the Services with due and reasonable diligence customary of a firm providing similar services and enjoying a favorable national reputation, and in all events without delays attributable to the Contractor which have a reasonable likelihood of adversely affecting the progress of others involved with one or more of the Projects. All persons, whether employees of the Contractor or of an approved subcontractor, providing the Services shall be fully licensed to the extent required by their professional discipline associations' codes or otherwise by law.

b. **REMOVAL OF PERSONNEL.** All persons providing the Services, whether employees of the Contractor or of an approved subcontractor, shall have such knowledge and experience as

will enable them, in the Contractor's reasonable belief, to perform the duties assigned to them. Any such person who, as determined by the CTRMA in its sole discretion, is incompetent or by his/her conduct becomes detrimental to the provision of the Services shall, upon request of the CTRMA, immediately be removed from the Services. The Contractor shall furnish the CTRMA with a fully qualified candidate for the removed person within thirty (30) days thereafter, provided, however, said candidate shall not begin work under this Agreement unless and until approved by the CTRMA.

c. **CONTRACTOR FURNISHES EQUIPMENT, ETC.** Except as otherwise specified or agreed to by the CTRMA, the Contractor shall furnish all equipment, transportation, supplies, and materials required for its performance of Services under this Agreement.

ARTICLE 10 **KEY PERSONNEL**

The Contractor acknowledges and agrees that the individual(s) identified on Appendix "G" attached hereto and incorporated herein are key and integral to the satisfactory performance of the Contractor under this Agreement. Throughout the term of this Agreement, the Contractor agrees that the identified individual(s) will remain in charge of the performance of the Services and they shall devote substantial and sufficient time and attention thereto. The death or disability of any such individual, his/her disassociation from the Contractor or the approved subcontractor, or his/her failure or inability to devote sufficient time and attention to the Services shall require the Contractor promptly to replace said individual with a person suitably qualified and otherwise acceptable to the CTRMA. If such individual has not been replaced by an individual approved by the CTRMA within thirty (30) days of the event requiring replacement, Contractor acknowledges that the CTRMA will suffer significant and substantial additional losses due to the unavailability of an approved individual and that it is impracticable and extremely difficult to ascertain and determine the actual losses which would accrue to the CTRMA in such event. Therefore, for each day that an individual identified on Appendix "G" is not filled by an approved individual, the CTRMA may require that the Contractor pay a daily liquidated amount with such amount calculated pursuant to the formula shown in Appendix "G".

ARTICLE 11 **BUSINESS OPPORTUNITY PROGRAM AND POLICY COMPLIANCE**

Contractor acknowledges that the CTRMA has a Business Opportunity Program and Policy ("BOPP") with which it requires contractors to comply in connection with Disadvantaged Business Enterprises. To the extent the Contractor utilizes third parties to provide the Services hereunder, Contractor agrees to comply with the BOPP and observe the guidelines set forth therein. Contractor shall provide annual reporting to the CTRMA (beginning one (1) year from the Effective Date) regarding its utilization of disadvantaged business enterprises ("DBEs") and the manner in which such utilization complies with, or deviates from, Contractor's commitment to DBE utilization as reflected in its response to the RFP attached as Appendix "H".

ARTICLE 12
PLANNING AND PERFORMANCE REVIEWS; INSPECTIONS

As directed by the CTRMA, key personnel shall meet with the CTRMA's Executive Director and/or his designee(s) upon request to: (a) assess the Contractor's performance of the Services; and (b) plan staffing levels to be provided by the Contractor to the CTRMA for the upcoming calendar quarter. The Contractor shall permit inspections of its Services and work by the CTRMA or its designated representative, when requested by the CTRMA. Nothing contained in this Agreement shall prevent the CTRMA from scheduling such other planning and performance reviews with the Contractor or inspections as the CTRMA determines necessary.

ARTICLE 13
OWNERSHIP OF REPORTS

Ownership of reports and related materials prepared by Contractor (or any subcontractor) at the direction of the CTRMA shall be as follows:

a. **GENERALLY.** Excluding Contractor's ownership rights as provided in Article 13.d., all of the documents, reports, plans, computer records, software maintenance records, discs and tapes, proposals, sketches, diagrams, charts, calculations, correspondence, memoranda, opinions, testing reports, photographs, drawings, analyses and other data and materials, and any part thereof, created, compiled or to be compiled by or on behalf of the Contractor solely under this Agreement ("work product"), including all information prepared for or posted on the CTRMA's website and together with all materials and data furnished to it by the CTRMA, shall at all times be and remain the property of the CTRMA and, for a period of four (4) years from completion of the Services or such period as is required by Texas law, whichever is longer, if at any time demand be made by the CTRMA for any of the above materials, records, and documents, whether after termination of this Agreement or otherwise, such shall be turned over to the CTRMA without delay. The CTRMA hereby grants the Contractor a revocable license to retain and utilize the foregoing materials, said license to terminate and expire upon the earlier to occur of (a) the completion of Services described in this Agreement or (b) the termination of this Agreement, at which time the Contractor shall deliver to the CTRMA all such materials and documents. If the Contractor or a subcontractor desires later to use any of the data generated or obtained by it in connection with the Projects or any other portion of the work product resulting from the Services, it shall secure the prior written approval of the CTRMA. Notwithstanding anything contained herein to the contrary, the Contractor shall have the right to retain a copy of the above materials, records, and documents for its archives.

b. **SEPARATE ASSIGNMENT.** If for any reason the agreement of the CTRMA and the Contractor set forth in subsection 13.a. above regarding the ownership of work product and other materials is determined to be unenforceable, either in whole or in part, the Contractor hereby assigns and agrees to assign to the CTRMA all right, title, and interest that Contractor may have or at any time acquire in said work product and other materials which are prepared for this Agreement, without royalty, fee or other consideration of any sort, and without regard to whether this Agreement has terminated or remains in force. The CTRMA hereby acknowledges, however, that all documents and other work product provided by the Contractor to the CTRMA and resulting from the Services performed under this Agreement are intended by the Contractor solely for the

use for which they were originally prepared. Notwithstanding anything contained herein to the contrary, the Contractor shall have no liability for the use by the CTRMA of any work product generated by the Contractor under this Agreement on any project other than for the specific purpose and Project for which the work product was prepared. Any other reuse of such work product without the prior written consent of the Contractor shall be at the sole risk of the CTRMA.

c. **DEVELOPMENT OF CONTRACTOR WORK PRODUCT.** The CTRMA acknowledges that the Contractor's work product will be developed using data that is available at the time of the execution of a given Work Authorization, and will not constitute any guarantee or other assurance of future events. The Contractor will prepare work product using practices that are standard procedures in the industry.

d. **OWNERSHIP OF MATERIALS, SOFTWARE AND LICENSES.** The CTRMA acknowledges and agrees that, the Contractor and/or its subcontractors or licensors of are the exclusive owners all copyrights, trade secret rights and related intellectual property rights (such rights together referred to herein as "Intellectual Property Rights") in all software and accompanying documentation developed, produced or implemented in connection with this Agreement by the Contractor, its officers, employees, subcontractors or agents (the "Software"). Except as expressly stated herein, this Agreement does not grant the CTRMA any rights in or to such Intellectual Property Rights. The Contractor reserves the right to grant licenses to use such Software to any other party or parties, provided that any such licenses do not affect the provision of any of the Services to the CTRMA pursuant to this Agreement.

i. The provisions of this subsection 13.d. shall be without prejudice to, and shall not interfere with the CTRMA's ownership of reports as provided for under subsections 13.a to 13.c. of this Agreement.

ii. The Contractor reserves all rights in Software and all Intellectual Property associated therewith that have not been expressly granted herein.

iii. For the duration of this Agreement, the Contractor hereby grants to the CTRMA a nonexclusive, non-sublicensable, non-transferable license to use the Software for such purposes and to the extent necessary to enable the CTRMA to receive the Contractor's Services under this Agreement. Notwithstanding anything to the contrary in this Agreement, the license referred to in this sub-clause (iii) shall not survive termination or expiration of this Agreement (except as required to facilitate succession to a new provider). Provided however that the license referred to in this sub-clause (iii) shall be extended for the limited purposes and term that may be necessary to give effect to any post termination or post expiration transition related obligations expressly undertaken by the Contractor under this Agreement, such that Contractor's Services shall remain continuous and uninterrupted for the duration of any post termination or post expiration transition period under this Agreement, with Contractor providing the CTRMA with all permissions and licenses necessary to enable the CTRMA to receive Contractor's Services throughout any such transition period, including permissions and licenses necessary for use of any third-party software implemented by Contractor under this Agreement.

iv. The CTRMA shall have no right to access or use the source code of the Software. Notwithstanding the foregoing, with respect to any contract between the Contractor and

any cloud service hosting provider related to the provision of the Services, the Contractor shall grant the CTRMA, upon termination or expiration of this Agreement, all of the rights and privileges of such contract, including but not limited to the CTRMA's right to secure the cloud service hosting services directly from the cloud service hosting provider.

v. The CTRMA shall not attempt to make any part of the Software or any accompanying documentation supplied by the Contractor along with the Software, available to any third party, or otherwise allow access to the same to any third party except as required by law.

vi. The CTRMA shall not attempt to reverse compile, decompile, disassemble or reverse engineer the Software, nor shall it amalgamate, amend, incorporate, modify, reproduce, translate or otherwise alter the same into or with any other software or use the same in conjunction with any third party's software.

vii. For purposes of this Agreement, the term Software shall mean any software used by the Contractor or any subcontractor of the Contractor to provide the Services to the CTRMA, including any software owned or provided by the Contractor or by a sub-consultant of the Contractor.

ARTICLE 14 **SUBLETTING OF WORK**

The Contractor shall not sublet, assign, or transfer any part of the work or obligations included in this Agreement without the prior written approval of the CTRMA. Responsibility for sublet, assigned or transferred work shall remain in all instances with the Contractor.

ARTICLE 15 **APPEARANCE AS WITNESS AND ATTENDANCE AT MEETINGS**

Contractor shall cooperate with the CTRMA and requests for attendance at meetings and in various types of proceedings as follows:

a. **WITNESS.** If requested by the CTRMA, the Contractor shall prepare such exhibits as may be requested for all hearings and trials related to any of the Services provided under this Agreement.

b. **MEETINGS.** At the request of the CTRMA, the Contractor shall provide appropriate personnel for conferences at its offices, or attend meetings and conferences at (a) the various offices of the CTRMA, (b) the offices of the CTRMA's legal counsel, bond counsel, and/or financial advisors, or (c) any reasonably convenient location.

ARTICLE 16 **COMPLIANCE WITH LAWS AND AUTHORITY POLICIES; PROTECTION OF DATA AND INFORMATION**

The Contractor shall comply with all federal, state, and local laws, statutes, ordinances, rules, regulations, codes and with the orders, judgements, and decrees of any courts or administrative bodies or tribunals in any matter affecting the performance under this Agreement,

including, without limitation, workers' compensation laws, antidiscrimination laws, environmental laws, minimum and maximum salary and wage statutes and regulations, health and safety codes, licensing laws and regulations, the CTRMA's enabling legislation (Chapter 370 of the Texas Transportation Code), other applicable portions of the Texas Transportation Code, and all amendments and modifications to any of the foregoing, if any. The Contractor shall also comply with the CTRMA's policies and procedures provided to the Contractor or which are generally available to the public related to operational and administrative matters, such as, but not limited to, security of and access to the CTRMA information and facilities. When requested, the Contractor shall furnish the CTRMA with satisfactory proof of compliance with said laws, statutes, ordinances, rules, regulations, codes, orders, judgements, and decrees above specified.

As part of their operations, the CTRMA, and other toll authorities to whom services may be provided collect and maintain information about individuals (including toll customers, vehicle owners, and employees) that may include data such as a license-plate number, geolocation or travel data, employment-related information, or login and password credentials (all such data pertaining to individuals, whether or not specifically listed, being "Personal Information"). As part of its performance of the Services, Contractor may have access to, handle, or receive Personal Information or other confidential or proprietary materials, information, or data maintained by or concerning the CTRMA, and other toll authorities to whom services may be provided (collectively with Personal Information, "RMA Information"). Contractor therefore agrees that:

a. Contractor is responsible for the security of RMA Information that it receives or accesses in performing Services, and Contractor shall at all times maintain appropriate information-security measures with respect to RMA Information in a manner consistent with applicable law.

b. Contractor must implement and maintain current and appropriate administrative, technical, and physical safeguards with respect to RMA Information in its possession, custody, or control, or to which it has access, to protect against unauthorized access or use of such RMA Information. At a minimum, such safeguards shall be consistent with generally-recognized best practices for information security in the handling of similar types of data. Without limiting the foregoing, Contractor must appropriately and effectively encrypt RMA Information (i) transmitted over the Internet, other public networks, or wireless networks, and (ii) stored on laptops, tablets, or any other removable or portable media or devices.

c. Contractor must identify to the CTRMA all subcontractors, consultants, and other persons who may have access to RMA Information in connection with the Services. Contractor must restrict the RMA Information to which a given employee or approved subcontractor has access to only that RMA Information which such employee or approved subcontractor needs to access in the course of such employee's or approved subcontractor's duties and responsibilities in connection with the Services.

d. Before granting access to RMA Information, Contractor must ensure that its employees and each approved subcontractor agrees to abide by these information security measures (or other applicable measures that are at least as protective of RMA Information).

e. Absent the CTRMA's advance written permission, RMA Information must not be stored, accessed, or processed at any location outside of the United States.

f. Contractor may use RMA Information only for performing the Services, and Contractor must ensure that its employees and approved subcontractor are restricted from any use of RMA Information other than for such purpose.

g. Except to the extent otherwise expressly permitted, Contractor may not disclose RMA Information except as required by law or a governmental authority having jurisdiction over Contractor. In the event of such required disclosure, Contractor must notify the CTRMA in advance (if legally permissible to do so) and reasonably cooperate with any decision by the CTRMA to seek to condition, minimize the extent of, or oppose such disclosure.

h. Contractor will immediately notify the CTRMA if Contractor discovers any actual or reasonably suspected breach of security or unauthorized use of RMA Information (i) in the possession, custody, or control of Contractor, its employees, or its subcontractors and/or (ii) effectuated using access permissions or credentials extended to an employee or subcontractor of Contractor (either of occurrences (i) or (ii) being referred to as a "Security Incident"). In no event shall Contractor's notification to the CTRMA be later than three (3) days after Contractor discovers the Security Incident; provided, however, that more immediate notification shall be given as the circumstances warrant or if more immediate notification is required by law. Contractor must provide all necessary and reasonable cooperation with respect to the investigation of such Security Incident, including the exchange of pertinent details (such as log files). In addition, Contractor must promptly undertake appropriate remediation measures and inform the CTRMA regarding the same.

i. Subject to requirements of data security or privacy laws, the CTRMA, in its sole discretion, will determine whether, and when to provide notice of a Security Incident to (a) any individuals whose personal information has been actually or potentially compromised; (b) any governmental authority; and/or (c) any other entity, including, but not limited to, consumer credit reporting agencies or the media. All notices must be approved by the CTRMA before they are distributed. Contractor must reimburse the CTRMA for costs or expenses the CTRMA incurs in connection with such notices (including the provision of credit monitoring or other identity protection services, to the extent the provision of such services is legally required or customary for similar data security incidents). Furthermore, and in addition to any other indemnification requirements under this Agreement, Contractor shall indemnify and hold the CTRMA harmless from all claims, costs, expenses, and damages (including reasonable attorneys' fees) that the CTRMA incurs in connection with any regulatory action or third-party claim arising from a Security Incident.

j. Contractor must cooperate and permit the CTRMA (and any governmental authorities with jurisdiction in connection with an audit requested by the CTRMA) reasonable access for on-site review of Contractor's data security systems and procedures to verify Contractor's compliance with its obligations under this Addendum.

k. Contractor must cooperate and permit the CTRMA's back office service provider reasonable access to all RMA Information in Contractor's possession, custody, or control

(including RMA Information in the possession, custody, or control of any of Contractor's subcontractors or consultants) in connection with any PCI DSS compliance audits.

ARTICLE 17
AUTHORITY INDEMNIFIED

THE CONTRACTOR SHALL INDEMNIFY AND SAVE HARMLESS THE CTRMA AND ITS OFFICERS, DIRECTORS, EMPLOYEES, AGENTS, AND CONTRACTORS FROM ANY CLAIMS, COSTS OR LIABILITIES OF ANY TYPE OR NATURE AND BY OR TO ANY PERSONS WHOMSOEVER, ARISING FROM THE CONTRACTOR'S ACTS, ERRORS OR OMISSIONS, OR THE ACTS, ERRORS OR OMISSIONS OF CONTRACTORS AGENTS, EMPLOYEES, SUBCONSULTANTS, OR OTHERS WORKING FOR OR ON BEHALF OF CONTRACTOR, WITH RESPECT TO PERFORMANCE OF THE WORK TO BE ACCOMPLISHED UNDER THIS AGREEMENT, WHETHER SUCH CLAIM OR LIABILITY IS BASED IN CONTRACT, TORT OR STRICT LIABILITY. IN SUCH EVENT, THE CONTRACTOR SHALL ALSO INDEMNIFY AND SAVE HARMLESS THE CTRMA, ITS OFFICERS, DIRECTORS, EMPLOYEES, AGENTS, AND CONTRACTORS (COLLECTIVELY THE "INDEMNIFIED PARTIES") FROM ANY AND ALL EXPENSES, INCLUDING REASONABLE ATTORNEYS' FEES, INCURRED BY THE CTRMA OR ANY OF THE INDEMNIFIED PARTIES IN LITIGATING OR OTHERWISE RESISTING SAID CLAIMS, COSTS OR LIABILITIES. IN THE EVENT THE CTRMA, ITS OFFICERS, DIRECTORS, EMPLOYEES, AGENTS, OR CONTRACTORS IS/ARE FOUND TO BE PARTIALLY AT FAULT, THE CONTRACTOR SHALL, NEVERTHELESS, INDEMNIFY THE CTRMA OR ANY OF THE INDEMNIFIED PARTIES FROM AND AGAINST THE PERCENTAGE OF FAULT ATTRIBUTABLE TO THE CONTRACTOR, ITS OFFICERS, DIRECTORS, EMPLOYEES, AGENTS, SUB CONSULTANTS, AND CONTRACTORS OR TO THEIR CONDUCT.

ARTICLE 18
CONFLICTS OF INTEREST

The Contractor represents and warrants to the CTRMA, as of the effective date of this Agreement and throughout the term hereof, that it, its employees and subcontractors (a) have no financial or other beneficial interest in any contractor, engineer, product or service evaluated or recommended by the Contractor, except as expressly disclosed in writing to the CTRMA, (b) shall discharge their responsibilities under this Agreement professionally, impartially and independently, and (c) are under no contractual or other restriction or obligation, the compliance with which is inconsistent with the execution of this Agreement or the performance of their respective obligations hereunder. In the event that a firm (individually or as a member of a consortium) submits a proposal to work for the CTRMA, the Contractor shall comply with the CTRMA's conflict of interest policies and shall make disclosures as if it were one of the key personnel designated under such policies.

ARTICLE 19 INSURANCE

Prior to beginning the Services designated in this Agreement, the Contractor shall obtain and furnish certificates to the CTRMA for the following minimum amounts of insurance:

a. **WORKERS' COMPENSATION INSURANCE.** In accordance with the laws of the State of Texas covering all of Contractor's employees and employer's liability coverage with a limit of not less than \$1,000,000. A "Waiver of Subrogation" in favor of the CTRMA shall be provided.

b. **COMMERCIAL GENERAL LIABILITY INSURANCE.** On an "occurrence basis" with limit a limit of not less than \$1,000,000 combined single limit per occurrence for bodily injury, including those resulting in death; and property damage on an "occurrence basis" with an aggregate limit of not less than \$2,000,000. A "Waiver of Subrogation" in favor of the CTRMA shall be provided.

c. **BUSINESS AUTOMOBILE LIABILITY INSURANCE.** Applying to owned, non-owned, and hired automobiles in an amount not less than \$1,000,000 for bodily injury, including death, to anyone person, and for property damage on account of anyone occurrence. The policy shall insure any vehicle used in connection with the Contractor's obligations under this Agreement. A "Waiver of Subrogation" in favor of the CTRMA shall be provided.

d. **VALUABLE PAPERS INSURANCE.** With limits not less than \$500,000 to cover the full restoration of any records, information, logs, reports, diaries, or other similar data or materials of Contractor relating to the Services provided under this Agreement in the event of their loss or destruction, until such time as the work has been delivered to the CTRMA or otherwise completed.

e. **PROFESSIONAL/CYBERSECURITY INSURANCE.** Professional errors and omissions liability insurance, including liability for financial loss and/or business interruption suffered by the CTRMA, due to error, omission, negligence of employees and machine malfunction in connection with all Services provided by Contractor, in an amount of at least \$3,000,000;

Technology cyber liability insurance, including liability for financial loss and/or business interruption suffered by the CTRMA, due to cyber liability/network security/privacy coverage arising from errors, omission, negligence of employees and hardware malfunction, or causing electronic data to be inaccessible, computer viruses, denial of service, loss of service, network risks (such as data breaches, unauthorized access or use, identity theft, invasion of privacy, damage/loss/theft of data, degradation, downtime, etc.) in connection with all Services provided by Contractor, in an amount of at least three million dollars (\$3,000,000), and which has no exclusion or restriction for encrypted or unencrypted portable devices.

f. **EXCESS UMBRELLA LIABILITY.** With minimum limits of \$6,000,000 per claim and in the aggregate, annually, as applicable excess of the underlying policies required at a. - c. above. The Umbrella Policy shall contain the provision that it will continue in force as an underlying insurance in the event of exhaustion of underlying aggregate policy limits.

g. **EMPLOYEE DISHONESTY INSURANCE.** Coverage for employee dishonesty, loss of money and other property belonging to the CTRMA resulting directly from a fraudulent or

dishonest act by an agent or employee of the Contractor while performing the Services, with limits of not less than \$3,000,000 per claim.

h. **GENERAL FOR ALL INSURANCE.** The Contractor shall promptly, upon execution of this Agreement, furnish certificates of insurance to the CTRMA indicating compliance with the above requirements. Certificates shall indicate the name of the insured, the name of the insurance company, the name of the agency/agent, the policy number, the term of coverage, and the limits of coverage.

All policies are to be written through companies (a) registered to do business in the State of Texas; (b) rated: (i), with respect to the companies providing the insurance under subsections 19.a. through e. and 19.g., above, by A. M. Best Company as “A-X” or better (or the equivalent rating by another nationally recognized rating service) and (ii) with respect to the company providing the insurance under subsection 19.f., a rating by A. M. Best Company or similar rating service satisfactory to the CTRMA and/or its insurance consultant; and (c) otherwise acceptable to the CTRMA.

All policies are to be written through companies registered to do business in the State of Texas. Such insurance shall be maintained in full force and effect during the life of this Agreement or for a longer term as may be otherwise provided for hereunder. Insurance furnished under subsections 19.b., c., d., e. f, and g. above, shall name the CTRMA as additional insureds and shall protect the CTRMA, the Contractor, their officers, employees, directors, agents, and representatives from claims for damages for bodily injury and death and for damages to property arising in any manner from the negligent or willful wrongful acts or failures to act by the Contractor, its officers, employees, directors, agents, and representatives in the performance of the Services rendered under this Agreement. Applicable Certificates shall also indicate that the contractual liability assumed in Article 17, above, is included.

The insurance carrier shall include in each of the insurance policies required under subsections 19.a., b., c., d., e., f, and g. the following statement: “This policy will not be canceled or non-renewed during the period of coverage without at least thirty (30) days prior written notice addressed to the Central Texas Regional Mobility Authority, 3300 N. IH 35, Suite 300, Austin, TX 78705, Attention: Executive Director.”

ARTICLE 20 **COORDINATION OF CONTRACT DOCUMENTS**

The Proposal dated March 31, 2023, 2023 submitted by the Contractor in response to the RFP and Best and Final Offer, dated July 6, 2023 is attached hereto and incorporated herein as Appendix “H” for all purposes (the “Proposal”). In the event of a conflict, the order of prevailing precedence (a-highest order to d-lowest order of precedence) shall be as follows:

- (a) Any amendments to the Agreement.
- (b) The Agreement.
- (c) Appendices to the Agreement.

- (d) Work Authorizations Issued by the CTRMA
- (e) The Proposal.

However, if the Proposal can reasonably be interpreted as providing higher quality materials or services than those required by the other contract documents or otherwise contains offers, statements or terms more advantageous to the CTRMA, Contractor's obligations under the Agreement shall include compliance with all such statements, offers and terms contained in the Proposal

ARTICLE 21 **MAINTENANCE OF, ACCESS TO, AND AUDIT OF RECORDS**

a. **RETENTION AND AUDIT OF RECORDS.** Contractor shall maintain at its offices in Austin, Texas, a complete set of all books, records, electronic files and other documents prepared or employed by Contractor in its management, scheduling, cost accounting and other activities related to this Agreement. Contractor shall maintain all records and documents relating to this Agreement, including copies of all original documents, or electronic copies of such documents if approved by the CTRMA, delivered to the CTRMA until four (4) years after the date of the termination of this Agreement, or such period as is required by Texas law, whichever is longer. Contractor shall notify the CTRMA where such records and documents are kept. If approved by the CTRMA, photographs, microphotographs or other authentic reproductions may be maintained instead of original records and documents.

Contractor shall make these records and documents available for audit and inspection to the CTRMA, at the CTRMA's offices in Austin, Texas, at all reasonable times, without charge, and shall allow the CTRMA or its representatives to make copies of such documents. The CTRMA may direct its own auditors or representatives to perform such audits or reviews. Contractor shall cooperate fully with the entity performing the audit or review.

Notwithstanding the foregoing, the Contractor shall comply with all laws pertaining to the retention of records and the provision of access thereto. The Contractor shall maintain its books and records in accordance with generally accepted accounting principles in the United States, subject to any exceptions required by existing bond indentures of the CTRMA, and shall provide the CTRMA with a copy of any audit of those books and records as provided herein or otherwise requested by the CTRMA.

b. **PUBLIC INFORMATION ACT.** Contractor acknowledges and agrees that all records, documents, drawings, plans, specifications and other materials in the CTRMA's possession, including materials submitted by Contractor, are subject to the provisions of Chapter 552, Texas Government Code (the "Public Information Act"). Contractor shall be solely responsible for all determinations made by it under such law, and for clearly and prominently marking each and every page or sheet of materials with "Trade Secret" or "Confidential", as it determines to be appropriate. Contractor is advised to contact legal counsel concerning such law and its application to Contractor.

If any of the materials submitted by the Contractor to the CTRMA are clearly and prominently labeled "Trade Secret" or "Confidential" by Contractor, the CTRMA will endeavor

to advise Contractor of any request for the disclosure of such materials prior to making any such disclosure. Under no circumstances, however, will the CTRMA be responsible or liable to Contractor or any other person for the disclosure of any such labeled materials, whether the disclosure is required by law, or court order, or occurs through inadvertence, mistake or negligence on the part of the CTRMA.

In the event of litigation concerning the disclosure of any material marked by Contractor as “Trade Secret” or “Confidential,” the CTRMA’s sole obligation will be as a stakeholder retaining the material until otherwise ordered by a court, and Contractor shall be fully responsible for otherwise prosecuting or defending any action concerning the materials at its sole cost and risk; provided, however, that the CTRMA reserves the right, in its sole discretion, to intervene or participate in the litigation in such manner as it deems necessary or desirable. All costs and fees, including attorneys’ fees and costs, incurred by the CTRMA in connection with any litigation, proceeding or request for disclosure shall be reimbursed and paid by Contractor.

The requirements of Subchapter J of the Public Information Act may apply to this Agreement, and the Contractor agrees that the Agreement can be terminated if the Contractor knowingly or intentionally fails to comply with a requirement of that subchapter.

Notwithstanding any other provision of the Agreement, within five (5) business days of a request by the CTRMA, the Contractor shall provide any records related to this Agreement that are in the custody or possession of the Contractor that are subject to a pending request for information received by the CTRMA.

Not later than 180 days following the completion of the term of this Agreement the Contractor shall provide the CTRMA with all records related to this Agreement in the custody or possession of the Contractor. The cost of complying with Subchapter J of the Public Information Act is not subject to reimbursement by the CTRMA.

ARTICLE 22 **RELATIONSHIP BETWEEN THE PARTIES**

Notwithstanding the anticipated collaboration between the parties hereto, or any other circumstances, the relationship between the CTRMA and the Contractor shall be one of an independent contractor. The Contractor acknowledges and agrees that neither it nor any of its employees or subcontractors, shall be considered an employee of the CTRMA for any purpose. The Contractor shall have no authority to enter into any contract binding upon the CTRMA, or to create any obligation on behalf of the CTRMA. As an independent contractor, neither the Contractor nor its employees shall be entitled to any insurance, pension, or other benefits customarily afforded to employees of the CTRMA. Under no circumstances shall the Contractor, or its employees, or subcontractors, represent to suppliers, contractors or any other parties that it is employed by the CTRMA or serves the CTRMA in any capacity other than as an independent contractor. The Contractor shall clearly inform all suppliers, Contractors and others that it has no authority to bind the CTRMA. Nothing contained in this Agreement shall be deemed or construed to create a partnership or joint venture, to create the relationship of employee-employer or principal-agent, or to otherwise create any liability for the CTRMA whatsoever with respect to the liabilities, obligations or acts of the Contractor, its employees, subcontractors, or any other person.

ARTICLE 23
DELIVERY OF NOTICES, ETC.

In each instance under this Agreement in which one party is required or permitted to give notice to the other, such notice shall be deemed given either (a) when delivered by hand; (b) one (1) business day after being deposited with a reputable overnight air courier service; or (c) three (3) business days after being mailed by United States mail, registered or certified mail, return receipt requested, and postage prepaid. Any notices provided under this Agreement must be sent or delivered to:

In the case of the Contractor:

Kapsch TrafficCom USA, Inc.
2855 Premiere Parkway, Suite F
Duluth, GA 30097
Attn: Brooke Chaplain, Senior Legal Counsel

In the case of the CTRMA:

Central Texas Regional Mobility Authority
3300 N IH-35, Suite 300
Austin, TX 78705
Attn: Director of Information Technology

and:

Central Texas Regional Mobility Authority
3300 N IH-35, Suite 300
Austin, TX 78705
Attn: General Counsel

Either party hereto may from time to time change its address for notification purposes by giving the other party prior written notice of the new address and the date upon which it will become effective.

ARTICLE 24
REPORTING OF SUBPOENAS, NOTICES, ETC.

The Contractor shall immediately send the CTRMA a copy of any summons, subpoena, notice, or other documents served upon the Contractor, its agents, employees, subcontractors, or representatives, or received by it or them, in connection with any matter related to the Services under this Agreement.

ARTICLE 25
AUTHORITY'S ACTS

Anything to be done under this Agreement by the CTRMA may be done by such persons, corporations, firms, or other entities as the CTRMA may designate.

ARTICLE 26
LIMITATIONS

Notwithstanding anything herein to the contrary, all covenants and obligations of the CTRMA under this Agreement shall be deemed to be valid covenants and obligations only to the extent authorized by Chapter 370 of the Texas Transportation Code and permitted by the laws and the Constitution of the State of Texas, and no officer, director, or employee of the CTRMA shall have any personal obligations or liability thereunder or hereunder.

The Contractor is obligated to comply with applicable standards of professional care in the performance of the Services. The CTRMA shall have no obligation to verify any information provided to the Contractor by the CTRMA or any other person or entity.

ARTICLE 27
CAPTIONS NOT A PART HEREOF

The captions or subtitles of the several articles, subsections, and divisions of this Agreement are inserted only as a matter of convenience and for reference, and in no way define, limit or describe the scope of this Agreement or the scope or content of any of its articles, subsections, divisions, or other provisions.

ARTICLE 28
CONTROLLING LAW, VENUE

This Agreement shall be governed and construed in accordance with the laws of the State of Texas. The parties hereto acknowledge that venue is proper in Travis County, Texas, for all disputes arising hereunder and waive the right to sue and be sued elsewhere.

ARTICLE 29
COMPLETE AGREEMENT

This Agreement, including all Appendices attached hereto, sets forth the complete agreement between the parties with respect to the Services and supersedes all other agreements (oral or written) with respect thereto. Capitalized terms shall have the definitions provided herein. Any changes in the character, agreement, terms and/or responsibilities of the parties hereto must be enacted through a written amendment. No amendment to this Agreement shall be of any effect unless in writing and executed by the CTRMA and the Contractor. This Agreement may not be orally canceled, changed, modified or amended, and no cancellation, change, modification or amendment shall be effective or binding, unless in writing and signed by the parties to this Agreement. This provision cannot be waived orally by either party.

ARTICLE 30
TIME OF ESSENCE

With respect to any specific delivery or performance date or other deadline provided hereunder, time is of the essence in the performance of the provisions of this Agreement. The Contractor acknowledges the importance to the CTRMA of the timely provision of the Services and will perform its obligations under this Agreement with all due and reasonable care.

ARTICLE 31
SEVERABILITY

If any provision of this Agreement, or the application thereof to any person or circumstance, is rendered or declared illegal for any reason and shall be invalid or unenforceable, the remainder of this Agreement and the application of such provision to other persons or circumstances shall not be affected thereby but shall be enforced to the greatest extent permitted by applicable law.

ARTICLE 32
AUTHORIZATION

Each party to this Agreement represents to the other that it is fully authorized to enter into this Agreement and to perform its obligations hereunder, and that no waiver, consent, approval, or authorization from any third party is required to be obtained or made in connection with the execution, delivery, or performance of this Agreement.

ARTICLE 33
SUCCESSORS

This Agreement shall be binding upon and inure to the benefit of the CTRMA, the Contractor, and their respective heirs, executors, administrators, successors, and permitted assigns. The Contractor may not assign the Agreement or any portion thereof without the prior written consent of the CTRMA.

ARTICLE 34
INTERPRETATION

No provision of this Agreement shall be construed against or interpreted to the disadvantage of any party by any court, other governmental or judicial authority, or arbiter by reason of such party having or being deemed to have drafted, prepared, structured, or dictated such provision.

ARTICLE 35
BENEFITS INURED

This Agreement is solely for the benefit of the parties hereto and their permitted successors and assigns. Nothing contained in this Agreement is intended to, nor shall be deemed or construed to, create or confer any rights, remedies, or causes of action in or to any other persons or entities, including the public in general. Notwithstanding the foregoing, the Contractor acknowledges that the Services provided for hereunder may be made available to other toll authorities through agreements between the CTRMA and those entities, and that Contractor is required to perform for those entities in a manner which complies with the requirements and obligations of this Agreement. The CTRMA shall have the right to enforce this Agreement against Contractor on behalf of other entities to which the Services are being provided.

ARTICLE 36
SURVIVAL

The parties hereby agree that each of the provisions in the Agreement are important and material and significantly affect the successful conduct of the business of the CTRMA, as well as its reputation and goodwill. Any breach of the terms of this Agreement is a material breach of this Agreement, from which the Contractor may be enjoined and for which the Contractor also shall pay to the CTRMA all damages which arise from said breach. The Contractor understands and acknowledges that the Contractor's responsibilities under Articles 13, 16 and 17 of this Agreement shall continue in full force and effect after the Contractor's contractual relationship with the CTRMA ends for any reason.

ARTICLE 37
FORCE MAJEURE

If a Force Majeure Event occurs, the Nonperforming Party is excused from performance of its obligations under this Agreement but only for the time and to the extent that such performance is prevented by the Force Majeure Event. During a Force Majeure Event that prevents Contractor from delivering Services, Contractor's entitlement to compensation under this Agreement is suspended.

When the Nonperforming Party is able to resume performance of its obligations under this Agreement, it will immediately give the Performing Party (defined below) written notice to that effect and promptly resume performance under this Agreement.

The relief offered by this Force Majeure provision is the exclusive remedy available to the Nonperforming Party with respect to a Force Majeure Event.

The Performing Party may terminate this Agreement if:

- (a) the Nonperforming Party's failure to perform under this Agreement due to a Force Majeure Event impairs material benefits of this Agreement to the other party (the "Performing Party"); and
- (b) the Nonperforming Party does not resume performance in accordance with this Agreement within thirty (30) days following the giving of notice to the Nonperforming Party of the Performing Party's intent to terminate this Agreement.

In this Agreement, "Force Majeure Event" means any act, event, or condition not foreseeable by a party (the "Nonperforming Party") that: (A) prevents the Nonperforming Party from performing its obligations under this Agreement; (B) is beyond the control of, not caused in whole or in part by, and not otherwise the fault of the Nonperforming Party; and (C) is not able to be overcome or avoided by the Nonperforming Party's exercise of diligence or preventative measures. Notwithstanding the foregoing, Force Majeure Events shall be limited to the following: any earthquake, tornado, hurricane, flood or other natural disaster, fire, freight embargo, strike, blockade, rebellion, war, riot, act of sabotage or civil commotion. The following do not constitute a Force Majeure Event: economic hardship, changes in market conditions, or insufficiency of funds.

ARTICLE 38
DISPUTE RESOLUTION

The parties have established an issues resolution ladder in order to resolve disputes expeditiously and effectively at appropriate organizational levels of each party. In the event of any dispute whatsoever arising out of or relating to this Agreement, the disputing party must submit a written notice of the dispute to the Tier 1 designee of the other party shown in the issues resolution ladder below. The notice must state clearly, and in detail, the good faith basis for the dispute. Disputes shall be considered as quickly as possible, taking into consideration the particular circumstances and the time required to prepare detailed documentation. Steps may be omitted as agreed by both parties, and the time periods stated below may be shortened in order to hasten resolution.

Issues Resolution Ladder

| <i>Tier</i> | <i>Contractor</i> | | <i>CTRMA</i> | <i>Time Limit*</i> |
|-------------|-------------------------|-----|-------------------------------------------------------------|--------------------|
| 1 | Project Manager | and | CTRMA Assistant Director of Information Technology | 10 days |
| 2 | Account Vice President | and | CTRMA Director of Operations | 10 days |
| 3 | Chief Financial Officer | and | CTRMA Executive Director | 10 days |

** Time (in calendar days) in which dispute must be resolved or passed on to the next tier.*

If a dispute is processed under the issues resolution ladder and not resolved, the parties may attempt to resolve the dispute through mediation, using a mediator mutually agreed upon by the Contractor and the CTRMA, prior to initiating litigation.

At all times during this dispute resolution process or any subsequent administrative, mediation or court proceeding, the Contractor shall proceed with the provision of the Services, without delay, in accordance with this Agreement, and as directed by the CTRMA through a Work Authorization. The Contractor acknowledges that it shall be solely responsible for any delay that results from its actions or inactions during the dispute resolution process, even if the Contractor's position in connection with the dispute ultimately prevails.

ARTICLE 39
CONTRACTOR CERTIFICATIONS

a. **Entities that Boycott Israel.** The Contractor represents and warrants that (1) it does not, and shall not for the duration of this Agreement, boycott Israel or (2) the verification required by Section 2271.002 of the Texas Government Code does not apply to this Agreement. If circumstances relevant to this provision change during the course of the contract, the Contractor shall promptly notify the CTRMA.

b. **Entities that Boycott Energy Companies.** The Contractor represents and warrants that: (1) it does not, and will not for the duration of this Agreement, boycott energy companies or (2) the verification required by Section 2274.002 of the Texas Government Code does not apply to this Agreement. If circumstances relevant to this provision change during the course of this Agreement, the Contractor shall promptly notify the CTRMA.

c. **Entities that Discriminate Against Firearm Entities or Trade Associations.** The Contractor verifies that: (1) it does not, and will not for the duration of this Agreement, have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association or (2) the verification required by Section 2274.002 of the Texas Government Code does not apply to this Agreement. If circumstances relevant to this provision change during the course of this Agreement, the Contractor shall promptly notify the CTRMA.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the parties have executed this Agreement effective on the date and year first written above.

CONTRACTOR: **KAPSCH TRAFFICCOM USA, INC.**

By: _____
Name: JB Kendrick
Title: President

CTRMA: **CENTRAL TEXAS REGIONAL MOBILITY
AUTHORITY**

By: _____
Name: James Bass
Title: Executive Director

APPENDIX A
Scope of Services

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1. SCOPE OF WORK

1.1 GENERAL

The Central Texas Regional Mobility Authority (CTRMA) hereafter known as the MOBILITY AUTHORITY, requires maintenance and construction services by a qualified Intelligent Transportation Systems (ITS) device maintenance and construction firm, hereafter known as the VENDOR, for all work related to ITS devices, communications, electrification, and infrastructure, hereafter known as the SYSTEM, located in the counties of Hays, Travis, and Williamson. The SYSTEM consists of, but is not limited to, the following:

- Concrete encased conduit ductbank
- Conduit (laterals)
- Ground and junction boxes
- Underground cable vaults (UCV)
- Communications cable
- Electrical system and device grounding and surge suppression
- Electrical service wiring
- Electrical power service assemblies (i.e., electrical meter, service disconnect, step-up / step-down transformer, branch circuit disconnect)
- Pre-stressed concrete and steel device poles
- Field device equipment cabinets
- Communication equipment cabinets
- Network devices (e.g., aggregation/distribution, edge switches, terminal servers, Ethernet extenders, media converters)
- Wireless communication devices
- Remote Power Management Units (RPMU)
- Radar Vehicle Sensing Devices (RVSD)
- Bluetooth travel time reader units
- Video equipment (e.g., closed-circuit television (CCTV) cameras, video encoders/decoders, mounting hardware, video wall components, back-end software)
- Camera lowering systems
- Dynamic highway signing (e.g., dynamic message signs (DMS), LED highlighted signs, blankout signs, and electronic display signs, portable changeable message signs, sign support structures)
- Wrong way vehicle detection systems (WWVDS)
- Connected Vehicle (CV) technology (e.g., roadside units (RSU), edge-computer platforms, on-board units (OBU) within maintenance fleet vehicles)
- Road weather information systems (RWIS)
- Ancillary device equipment (e.g., power supplies, Power-over Ethernet (PoE) injectors)
- Portable and permanent emergency power generators

- Uninterruptable power supplies (UPS)
- Communications hubs and equipment shelters
- Ancillary facilities (e.g., central software servers, licensing, workstations)
- Environmental conditioning equipment
- Hardware, software, and firmware related to ITS equipment and other traffic control devices

The SYSTEM described in this Scope of Work (SOW) shall cover all existing and future ITS elements within the geographic coverage area and term defined in this agreement, hereafter known as the CONTRACT.

1.1.1 Item Additions and Deletions

During the Contract period and any renewal periods, the MOBILITY AUTHORITY shall have the right to add or delete items (services and/or commodities) to or from this agreement. Any new items added shall be at the requirements, specifications, terms, and conditions stated herein or as later stipulated by the MOBILITY AUTHORITY, and at mutually agreed pricing accepted, in writing, by both the VENDOR and the MOBILITY AUTHORITY. Items may be removed at the sole discretion of the MOBILITY AUTHORITY, per the requirements, terms, and conditions herein and/or as permitted by Texas Statutes or Texas Administrative Code.

Due to the changing dynamics within any ITS deployment, the VENDOR will be able, upon written authorization by the MOBILITY AUTHORITY and upon supplemental agreement to the CONTRACT as to compensation and time, to perform additional services pertaining to the support and/or maintenance of the ITS field devices and infrastructure not otherwise identified in this CONTRACT, as may be required by the MOBILITY AUTHORITY.

1.1.2 Applicable Specifications and Standards

All work shall be prepared using English units in accordance with the latest editions of standards and requirements utilized by the MOBILITY AUTHORITY, which include, but are not limited to, publications such as:

- 29 Code of Federal Regulations (CFR), Part 1910.1101 – Asbestos Standard for Industry, U.S. Occupational Safety and Health Administration (OSHA)
- 29 CFR, Part 1926, 1101 – Asbestos Standard for Construction, OSHA
- 40 CFR, Part 61, Subpart M - National Emission Standard for Hazardous Air Pollutants (NESHAP), Environmental Protection Agency (EPA)
- 40 CFR, Part 763, Subpart E – Asbestos-Containing Materials in Schools, EPA
- 40 CFR, Part 763, Subpart G – Asbestos Worker Protection, EPA
- Americans with Disabilities Act Accessibility Guidelines
- Manual on Uniform Traffic Control Devices (MUTCD), Federal Highway Administration
- Mobility Authority Policy Code
 - <https://www.mobilityauthority.com/about/policy-disclaimers/code>.

- National Electrical Safety Code (NESC)
- National Electrical Code (NEC)
- Standard Highway Signs Manual, Federal Highway Administration
- Texas Administrative Code
- Texas Department of Transportation Standard Specification for Construction and Maintenance of Highways, Streets, and Bridges
- Texas Department of Transportation CAD Standards
- Texas Department of Transportation Traffic Operations Division Standard Details
- Texas Department of Transportation Design Division Standard Details
- Texas Department of Transportation Design Maintenance Division Standard Details
- Texas Department of Transportation Bridge Division Standard Details
- Texas Department of Transportation Manual on Uniform Traffic Control Devices (TMUTCD)
- Texas Statutes

1.2 APPROVAL OF PRODUCTS

The VENDOR shall submit detailed technical product data sheets for all products for review and approval by the MOBILITY AUTHORITY prior to purchasing and installation of any field device, infrastructure, back-end hardware, or software. The VENDOR shall clearly identify the selected manufacturer and model number of each product submitted for approval. The VENDOR shall be responsible for providing product data sheets for all elements required for a complete installation—including but not limited to devices, communication equipment, mounting hardware, surge protection devices, power supplies, and cabling. The VENDOR shall provide a complete submittal package to the MOBILITY AUTHORITY a minimum of ten (10) business days prior to the scheduled work.

In the case of materials that have been previously approved, the MOBILITY AUTHORITY may elect to forego the review and approval process at the sole discretion of the MOBILITY AUTHORITY.

1.3 SERVICES TO BE PROVIDED

1.3.1 Maintenance Services

The objective of services required under this CONTRACT is to ensure continuous (24 hours/day, 7 days/week, 365 days/year) operation and functionality of all components of the SYSTEM and provide locate services for all ITS equipment. The MOBILITY AUTHORITY will assign a Project Manager responsible for oversight of this CONTRACT and assignment of tasks to the VENDOR. References to the MOBILITY AUTHORITY or the MOBILITY AUTHORITY'S Project Manager within this scope include the MOBILITY AUTHORITY'S Project Manager or designated representatives.

The VENDOR will be evaluated periodically based on SYSTEM uptime, this includes the use of automated performance monitoring software or periodic manual observation. The VENDOR will

be responsible for all SYSTEM support, including but not limited to scheduled, periodic, and routine maintenance; and replacement of failed or destroyed components. All preventative and routine maintenance services shall be performed as part of a recurring (e.g., annual) Work Authorization (WA); additional identified work—such as replacement of failed or destroyed infrastructure—will be assigned on a Work Authorization (WA) basis, as directed by the MOBILITY AUTHORITY'S Project Manager.

The VENDOR shall be on-call on a 24 X 7 X 365 basis for the duration of the CONTRACT to respond to emergency repair and/or replacement work, including but not limited to severe weather events and warnings. If a State of Emergency is declared by the Governor of Texas, the VENDOR may be called upon to provide repair and replacement services associated with disaster recovery. The VENDOR shall provide the MOBILITY AUTHORITY'S Project Manager with a list of at three (3) telephone numbers that will be answered at all times by the VENDOR'S personnel. The VENDOR shall maintain staffing levels required by this Scope of Work (SOW) at all times to ensure services required by the SOW under this CONTRACT are met.

Throughout the term of this CONTRACT, the MOBILITY AUTHORITY'S Project Manager will conduct reviews of the VENDOR'S work and daily operations. The VENDOR shall cooperate and assist the MOBILITY AUTHORITY'S Project Manager throughout the review process.

1.3.1.1 Scheduled and Preventive Maintenance Services

Coordinate the frequency of standard scheduled maintenance services with the MOBILITY AUTHORITY'S Project Manager, or as identified in the Work Authorization (WA). It shall be the VENDOR'S responsibility to respond to maintenance requests according to the priority assigned by the MOBILITY AUTHORITY. The definitions below shall be a baseline for this CONTRACT. At the discretion of the MOBILITY AUTHORITY, the VENDOR may be dispatched to any work priority deemed appropriate by the MOBILITY AUTHORITY.

1.3.1.1.1 Scheduled and Preventive Maintenance Activities

Typical scheduled maintenance includes SYSTEM inspection and other activities recommended by equipment manufacturers to be performed at periodic intervals. During the term of the CONTRACT, the VENDOR will perform scheduled, periodic preventive maintenance based upon manufacturer recommendations, budget limitations, and as general services are authorized by the MOBILITY AUTHORITY. If periodic maintenance intervals and activities are not specified by the equipment manufacturer, the VENDOR will develop periodic maintenance intervals and activities for approval by the MOBILITY AUTHORITY'S Project Manager. Scheduled preventive maintenance also includes periodic inspections and cleaning, as well as documentation of these actions. The MOBILITY AUTHORITY will work with the VENDOR to develop preventive maintenance checklists to ensure that consistent, comprehensive maintenance activities are executed correctly and documented. All work for scheduled and preventative maintenance shall be compensated by the monthly Maintenance Service Unit Price, unless otherwise noted.

1.3.1.1.2 Identified Deficiencies

In the event that the VENDOR encounters minor and/or major infrastructure (e.g., field device, equipment, hardware, cabling, wiring) deficiencies while performing preventive maintenance services as outlined above, the VENDOR shall correct such deficiencies during the preventive maintenance site visit, whenever possible.

The MOBILITY AUTHORITY considers minor repair to be the repair of minor deficiencies including, but not limited to, an unplugged device cable; tripped circuit breaker; loose connector; displaced or disorganized cabinet equipment; untidy or unlabeled cabling; debris, trash, dirt, or vermin droppings in cabinets or enclosures; and more. Additionally, minor repairs include the replacement of ancillary system components and hardware the VENDOR is reasonably expected to have on-hand spares including, but not limited to, surge protection devices, relays, power supplies, media converters, transceivers, patch cables, jumpers, mounting brackets, and more.

The MOBILITY AUTHORITY considers major repair to be the repair of major deficiencies including, but not limited to, a non-functional field device, physically damaged equipment, components exposed to weather, exposed power cabling, or items constituting a safety hazard. The VENDOR shall immediately contact the MOBILITY AUTHORITY'S Project Manager to report major deficiencies. The MOBILITY AUTHORITY will issue Work Authorizations (WA) to complete the necessary repair activities. The VENDOR shall identify all materials and labor necessary to complete the work and provide a price proposal, in accordance with the pricing included in the CONTRACT.

1.3.1.1.3 Non-Scheduled Maintenance and Repairs

Non-scheduled maintenance includes reactive maintenance, replacements, and diagnostic work necessary to correct deficiencies and keep the SYSTEM operational. This work may not be scheduled but is often generated by failures caused by acts of nature, construction, or accidents. Non-scheduled maintenance may include, but is not limited to:

1. Field repair or replacement of ancillary parts or equipment for any ITS field device, equipment, or cabling
2. Resetting of field devices, including DMS displays, controllers, CCTV cameras, vehicle detection systems, etc.
3. Focusing and re-aiming of CCTV cameras, vehicle detection systems, and other field sensors
4. Configuring or repairing the communications network, including switches, media converters, wireless communication devices, and terminal servers
5. Configuring or repairing CCTV video transmission equipment, including, PoE injectors, encoders, and decoders
6. Testing fiber optic cable (FOC) for optical budget requirements
7. Repairing damage caused by vandalism, accidents, or weather

If the cause of a failure is unknown, the MOBILITY AUTHORITY may have the VENDOR perform diagnostic work as required to determine the cause of the failure. The VENDOR shall perform all work to repair and restore the failed systems while on-site. In the event the VENDOR is unable to correct the failed system, the MOBILITY AUTHORITY will issue Work Authorizations (WA) to complete the necessary repair activities. The VENDOR shall identify all materials and labor necessary to complete the work and provide a price proposal, in accordance with the unit costs in the CONTRACT.

1.3.1.2 Diagnostic and Troubleshooting Services

The VENDOR will be required to provide diagnostic and troubleshooting services when equipment is inoperable and field troubleshooting is needed to identify the problem. When possible, the VENDOR shall perform minor repairs following diagnosis. The VENDOR must document troubleshooting and repair activities and services performed at the site. Major repairs require approval by the MOBILITY AUTHORITY before additional service can be performed.

If the VENDOR detects a device that exhibits frequent failures or requires an “on-off-on” power cycle in order to maintain operation, it shall be the responsibility of the VENDOR to notify the MOBILITY AUTHORITY, contact the equipment manufacturer, and recommend corrective action to the MOBILITY AUTHORITY. It is the responsibility of the VENDOR to service equipment and restore SYSTEM components to a 100-percent functional status and ensure all field devices and equipment are online. The VENDOR is responsible for all troubleshooting and repair of SYSTEM devices. The MOBILITY AUTHORITY Project Manager may provide MOBILITY AUTHORITY staff and resources to assist the VENDOR with troubleshooting and repair.

Should a particular device continue to fail, and the issue cannot be resolved by repair or replacement, the MOBILITY AUTHORITY, at its sole discretion, may remove the device from the VENDOR’S responsibility.

The VENDOR, through diagnostic service, shall investigate the cause for the failure of equipment and determine if the failure is related to a severe weather event, materials, or workmanship, supplied power, leased communications, electrical and/or mechanical components, hardware or software, or other failures. The diagnostic results shall define the type of repair needed to restore the device(s) to 100-percent functional status. The VENDOR shall investigate whether or not failures are covered under existing equipment warranties. If the diagnosis indicates the need for repairs or parts replacement, the VENDOR shall follow the procedures established between the VENDOR and the MOBILITY AUTHORITY’S Project Manager under this CONTRACT.

1.3.1.3 Repair Services

Repairs and/or parts replacement will be covered under Work Authorizations (WA) on an as-needed basis dependent upon the categorization of the repair (e.g., minor, major, warranty). The VENDOR shall identify all materials and labor necessary to complete the work and provide a

price proposal, in accordance with the unit costs the CONTRACT. Descriptions of labor, materials, and equipment shall be included as part of a work request as well as a justification for the work. The VENDOR shall submit written request(s) to the MOBILITY AUTHORITY for approval of any additional labor usage and expenditures that are not covered under a Work Authorization (WA).

- **Minor Repair**

Minor repairs for this CONTRACT are repairs/replacement of components due to equipment malfunction or end of service life. The MOBILITY AUTHORITY considers minor repair to be the repair of minor deficiencies including, but not limited to, an unplugged device cable; tripped circuit breaker; loose connector; displaced or disorganized cabinet equipment; untidy or unlabeled cabling; debris, trash, dirt, or vermin droppings in cabinets or enclosures; and more. Additionally, minor repairs include the replacement of ancillary system components and hardware the VENDOR is reasonably expected to have on-hand spares including, but not limited to, surge protection devices, relays, power supplies, media converters, transceivers, patch cables, jumpers, mounting brackets, and more. The VENDOR shall perform the necessary repair/replacement work, which includes diagnostic services.

Minor repairs are generally considered to be repairs that require less than four (4) hours of labor and can be completed on-site utilizing available materials and/or spare parts. Minor repairs shall be compensated by the monthly Maintenance Service Unit Price.

- **Major Repair**

Major repairs for this CONTRACT are defined as non-typical repairs that need diagnostic services to identify the problem, extensive repair services, temporary traffic control (TTC) and lane closures, utility coordination, or other regional agency coordination, such as damage caused by crashes, vandalism, theft, weather events, fiber cuts, power loss from the utility service point, and construction activity. The MOBILITY AUTHORITY considers major repair to be the repair of major deficiencies including, but not limited to, a non-functional field device, physically damaged equipment, components exposed to weather, exposed power cabling, or items constituting a safety hazard. Typical major repairs and parts replacement consist of, but are not limited to, repair or replacement of damaged, missing, or malfunctioning equipment in order to maintain the ITS operation and functionality.

For all major repairs, the VENDOR shall contact the MOBILITY AUTHORITY'S Project Manager to report field findings and receive instruction and authorization for related work. The MOBILITY AUTHORITY will issue Work Authorizations (WA) to complete the necessary repair activities. The VENDOR shall identify all materials and labor necessary to complete the work and provide a price proposal, in accordance with the unit costs in the CONTRACT. The VENDOR shall prepare and submit a diagnostic report, including

damage assessment, cost estimates, and recommendations for repair. The VENDOR shall not make major repairs prior to issuance of the WA covering specific corrective actions necessary for restoration.

Major repairs are generally considered to be repairs that require more than four (4) hours of labor and cannot be completed on-site utilizing on-hand materials and/or spare parts.

- **Warranty Repair**

The VENDOR shall act on behalf of the MOBILITY AUTHORITY to track manufacturer warranties and pursue warranty repairs from device manufacturers when failures are covered by the manufacturer's warranty. The VENDOR is responsible for coordinating warranty repairs with the MOBILITY AUTHORITY'S Project Manager and the device manufacturer/reseller. In the event warranty or insurance coverage is applicable, the VENDOR shall identify the proper procedure for contacting the entity responsible for coverage, secure the proper forms used for claim notification, and coordinate the repair, return, and disposition of equipment. Repaired MOBILITY AUTHORITY equipment returned from the manufacturer shall be held in inventory as spare parts if it is not to be immediately reinstalled.

The VENDOR shall support the MOBILITY AUTHORITY in pursuing claims until each claim is resolved to the satisfaction of the DEPARTMENT.

Repairs that require expertise and/or specialized equipment of the manufacturer shall be considered original equipment manufacturer (OEM) repairs. OEM repairs are specialized repairs that cannot be made by the VENDOR and must be made by the manufacturer or vendor of the equipment/component. On an as-needed basis, the VENDOR shall notify the MOBILITY AUTHORITY'S Project Manager of OEM repairs necessary for the continued safe and efficient operation of the SYSTEM. Accompanying notification, the VENDOR shall submit an OEM repair request to the MOBILITY AUTHORITY'S Project Manager for review. Approval of this request is required in order to proceed with the repair. If a device manufacturer is no longer producing, selling, or repairing a specific device, the VENDOR shall research, price, and present an alternate product to the MOBILITY AUTHORITY.

The VENDOR is required to assure the MOBILITY AUTHORITY that warranties are not voided by VENDOR repair services or other actions of the VENDOR at any point during the contract. If a device warranty expires, the VENDOR shall notify the MOBILITY AUTHORITY for the option to renew and/or replace the device if the unit is non-operational within 60 days of the warranty's expiration.

The VENDOR shall have the necessary equipment and personnel capable of maintaining and repairing the field equipment and infrastructure deployed throughout the geographic coverage area within the MOBILITY AUTHORITY's geographic boundaries. This includes a variety of

devices and communications infrastructure. Field site repair includes, but is not limited to, device replacement, electrical service work and repair, optical fiber cable splicing and troubleshooting, optical time domain reflectometer (OTDR) testing, fiber enclosure/fiber distribution panel installations, and terminations. The VENDOR shall have the capability to install and repair concrete encased conduit ductbank. The VENDOR shall have the capability to install and repair open trench, directional bored, and above ground lateral conduit. It shall be the responsibility of the VENDOR to perform all subsurface utility engineering (SUE) and obtain any permits required by the MOBILITY AUTHORITY and third-party entities before the VENDOR commences any work. After completion of device and/or communications infrastructure work by the VENDOR, documentation shall be presented to the MOBILITY AUTHORITY for record keeping of changes made to the fiber communication infrastructure and other components of the SYSTEM. At a minimum documentation must include repair notes; material quantities; and marked-up as-built construction plans and/or schematics that reflect post-repair conditions. No fiber related work shall be started by the VENDOR without written authorization and approval by the MOBILITY AUTHORITY.

1.3.1.3.1 On-Site Repairs

This work includes on-site repairs of devices and systems using readily available spare and component parts. New replacement parts for repairs are to be used unless otherwise directed by the MOBILITY AUTHORITY. If the existing component is to be replaced by a part that is not the same, the VENDOR shall not purchase or install the spare part until it has been approved by the MOBILITY AUTHORITY. The VENDOR shall be responsible for inventory control of all parts held in inventory for repair of devices that they have responsibility to maintain. Parts commonly used for shop and field repairs include, but are not limited to:

- Pan-tilt-zoom (PTZ) camera modules
- DMS LED display modules
- Vehicle Detectors
- Network Switches
- Power supplies
- Batteries
- UPS
- Media Converters
- PoE Injectors
- Terminal Blocks
- Surge Protection Devices
- Cabling and cabling connectors

The VENDOR shall submit requests to purchase spare parts including manufacturer, model, quantity, and unit cost to the MOBILITY AUTHORITY for review and approval prior to purchasing. The VENDOR shall notify the MOBILITY AUTHORITY of any part or component of the SYSTEM moved from its original location for the purpose of inventory control. The VENDOR

shall ensure all spare equipment is available in a timely manner and all inventory control records will be updated within seventy-two (72) hours.

1.3.1.3.2 Equipment Replacement

This work includes furnishing replacement devices needed for maintenance of the SYSTEM. Technical product data sheets for all new replacement parts must be submitted and approved by the MOBILITY AUTHORITY, in accordance with **Section 1.2 - Approval of Products**. The VENDOR shall not purchase or install equipment that has not been approved by the MOBILITY AUTHORITY. Proposed replacement parts shall be procured at the unit costs identified in the CONTRACT. The Vendor shall ensure the latest compatible technology, equal to or better in function and quality to existing SYSTEM components or equipment is provided for all replacement parts. Provide the specific manufacturer and model identified in the CONTRACT, where applicable. The VENDOR shall be responsible for inventory control of all equipment that they have responsibility to maintain within the SYSTEM and all devices, parts, and materials used to perform work.

When the MOBILITY AUTHORITY determines that additional parts are to be provided by the VENDOR as spares, the VENDOR shall procure and maintain the parts in MOBILITY AUTHORITY designated or approved location(s). The VENDOR shall notify the MOBILITY AUTHORITY of any part or component of the SYSTEM moved from its original location for the purpose of inventory control.

1.3.1.4 Emergency Repair Services

Emergency services consist of the restoration of components resulting from any malfunction or damage that creates a safety hazard or severely reduces the operational effectiveness of the overall SYSTEM. The VENDOR shall immediately correct any safety hazards discovered in the SYSTEM. Failures tend to be caused by severe and unusual forces of nature, crashes and collisions, vandalism, theft, fire, erosion, and extreme exposure to chemicals or pollutants. Communication and electrical cable cuts and loss of communications between the Traffic Incident Management Center (TIMC) and multiple field sites can warrant emergency repair services, as determined by the MOBILITY AUTHORITY.

The VENDOR will be required to supply substitute devices approved by the MOBILITY AUTHORITY to immediately restore normal operations during emergency repair services, when directed. Failure to restore normal operations in a timely manner may result in deductions of monies due or which may become due the VENDOR. If a structural failure causes a safety hazard or obstructs a roadway or waterway, the VENDOR will be required to remove the structure immediately.

The VENDOR must document malfunction and damage that necessitates emergency repair services. At a minimum, documentation shall include:

1. Device location, type, model, and serial and control number
2. Date and time of incident

3. Cause of failure and name of person reporting failure
4. Site needs analysis and digital photo documentation
5. Immediate repairs and corrective actions taken, including temporary repairs and repair cost breakdown
6. Corrective actions necessary for permanent repairs to be performed, including parts list, schedule, and estimated cost
7. Date, time, equipment, and personnel utilized for all corrective actions taken, temporary and permanent

The MOBILITY AUTHORITY will issue Work Authorizations (WA) to complete the necessary emergency repair activities. The VENDOR shall identify all materials and labor necessary to complete the work and provide a price proposal, in accordance with the unit costs in the CONTRACT. If an immediate repair order is needed, the MOBILITY AUTHORITY may issue a pre-approved, limited-amount WA to start the work. The VENDOR must receive approval prior to executing this WA. The VENDOR must document any verbal approvals issued for service/repair orders including the date, time, reason, and the name of the MOBILITY AUTHORITY Project Manager who issued and approved the WA.

1.3.1.5 Utility Locating Services

The VENDOR shall be responsible for locating and designating existing and future subsurface utilities associated with the SYSTEM. Cost to repair or replace underground facilities damaged as a result of incorrect locates shall be the responsibility of the VENDOR. The VENDOR must register with the Texas811 system within thirty (30) days of CONTRACT execution. The VENDOR shall be responsible for evaluating all locate tickets within the geographic area defined in this CONTRACT and shall be responsible for locating all MOBILITY AUTHORITY owned communications infrastructure (e.g., fiber optic communications) and electrical conductors within the SYSTEM. The MOBILITY AUTHORITY will issue Work Authorizations (WA) to complete necessary locates. The VENDOR shall identify all materials and labor necessary to complete the work and provide a price proposal, in accordance with the labor and material costs in the CONTRACT. All footages shall be validated by the original locate ticket and field photos when location of facilities is completed, and the ticket has been closed as “clear or flagged.” The VENDOR will be required to locate specific ITS facilities and document their findings within plan sets or another method approved by the MOBILITY AUTHORITY.

1.3.1.6 Equipment Logs

The VENDOR is required to document equipment and activities performed at each ITS device location. The VENDOR must maintain an equipment log documenting preventive scheduled maintenance and repair services, including repair logs, parts replacement, special notes, recommendations, and equipment warranty records. Device records must include, but are not limited to:

1. Device location, number, and type
2. Model and serial number

3. Firmware version
4. Manufacturer
5. Date, time, and description of failure
6. Report of failure source
7. Response details including arrival time, site conditions, and actions taken
8. Resolution details with documentation including date, time, equipment, and personnel utilized
9. Spare part(s) used, including type, model, serial, and control number
10. Replacement part notes and repair actions
11. Digital photo documentation before and after repair

1.3.2 New Construction Services

At the request of the MOBILITY AUTHORITY, the VENDOR shall perform all work for the installation of new infrastructure, facilities, and equipment related to the overall Intelligent Transportation System (ITS). This work may include, but is not limited to, the installation or retrofit of existing conduit ductbank, underground cable vaults, ground boxes, electrical power services, device poles, equipment cabinets, networking hardware, power service equipment, field devices (e.g., CCTV cameras, radar vehicle sensing devices (RVSD), dynamic message signs (DMS), wrong way vehicle detection systems (WWVDS), Connected Vehicle (CV) roadside units (RSU)), power and communications cabling, grounding arrays, and more. The VENDOR shall be responsible for furnishing all hardware, materials, and tools necessary to provide complete installations. Additionally, the VENDOR shall be responsible for the installation, configuration, licensing, and support of any associated software packages and/or backend support equipment (e.g., servers), as necessary.

The MOBILITY AUTHORITY will issue Work Authorizations (WA) for all new construction services activities. The VENDOR shall identify all materials and labor necessary to complete the work and provide a price proposal, in accordance with the unit costs in the CONTRACT. Refer to Table 1 for additional information regarding the proposed new construction services anticipated as part of the CONTRACT.

Table 1: New construction services activities for Intelligent Transportation System (ITS) deployment

| ITS Field Devices |
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| <p>CCTV Camera, Pan-Tilt- Zoom (PTZ) – installation includes all work to attach device to device pole or structure, route cabling between cabinet and device, install in-cabinet equipment, properly ground system, integrate system into Mobility Authority network and systems, testing; does <u>not</u> include device pole installation.</p> <p>Furnish one (1) Cohu 4261HD camera, or equivalent, and include all necessary components for a complete installation, including camera unit, power-over Ethernet (POE) injector, power</p> |

supply, in-line surge protection device (SPD), camera mounting hardware, outdoor-rated CAT-6 Ethernet cabling, power cabling, and ground wire. All cameras shall be capable of H.264 and H.265 video streams and compliant with applicable National Transportation Communications for Intelligent Transportation System Protocol (NTCIP) and Texas Department of Transportation (TxDOT) specifications and TxDOT Traffic Standards.

CCTV Camera, Fixed – installation includes all work to attach device to device pole or structure, route cabling between cabinet and device, install in-cabinet equipment, properly ground system, integrate system into Mobility Authority network and systems, testing; does not include device pole installation.

Furnish one (1) Cohu 3430HD camera, or equivalent, and include all necessary components for a complete installation, including camera unit, power-over Ethernet (POE) injector, power supply, in-line surge protection device (SPD), camera mounting hardware, outdoor-rated CAT-6 Ethernet cabling (device), power cabling, and ground wire. All cameras shall be capable of H.264 and H.265 video streams and compliant with applicable NTCIP and Texas Department of Transportation (TxDOT) specifications and TxDOT Traffic Standards.

Radar Vehicle Sensing Device (RVSD) – installation includes all work to attach device to device pole or structure, route cabling between cabinet and device, install in-cabinet equipment, properly ground system, integrate system into Mobility Authority network and systems, testing; does not include device pole installation.

Furnish one (1) Wavetronix SmartSensor HD sensor including all necessary components for a complete installation, including radar unit, serial-to-Ethernet media converter (CLICK! series), in-line surge protection device (SPD) (CLICK! series), power supply (CLICK! series), radar unit mounting hardware, proprietary composite cabling (device), power cabling, and ground wire. Ensure all necessary licenses with proprietary vendor software are included, as appropriate. All radar units shall be compliant with applicable NTCIP and Texas Department of Transportation (TxDOT) specifications and TxDOT Traffic Standards.

Dynamic Message Sign (DMS) – installation includes all work to attach device to butterfly, cantilever, or overhead sign structure, route cabling between cabinet and device, install in-cabinet equipment, properly ground system, integrate system into Mobility Authority network and systems, testing; does not include structure installation.

Furnish one (1) Daktronics VF-2420-80-352-20-RGB front-access, full matrix color display including all necessary components for a complete installation, including front-access sign housing, in-cabinet rack-mounted controller unit (Vanguard VFC series), in-sign auxiliary controller panel, twelve-count fiber optic patch panel with matching connector panel, proprietary composite cabling (device), power cabling, and ground wire. Ensure all necessary licenses with proprietary vendor software (e.g., Vanguard) are included, as appropriate. All DMS shall be compliant with applicable NTCIP, Manual on Uniform Traffic Control Devices

(MUTCD), and Texas Department of Transportation (TxDOT) specifications and TxDOT Traffic Standards.

Wrong Way Vehicle Detection System (WWVDS) - installation includes all work to install complete pole assemblies (4X) for with concrete foundation, reinforcement, conduit sweeps, and transformer bases; attach all system componentry to pole assemblies, route cabling between cabinet and device, install in-cabinet equipment, properly ground system, integrate system into Mobility Authority network and systems, testing.

Furnish one (1) complete ramp assembly system, including all necessary components for a complete installation with two (2) sets of signs on both sides of the ramps for a total of four sites per ramp, including aluminum pole assemblies with transformer base, "WRONG WAY" (R5-1a) sign panels, red rectangular rapid flashing beacon (RRFB) light bars, thermal imaging sensors, high-definition verification cameras, LED illuminators, controller cabinet assembly, proprietary cabling (device), power cabling, and ground wire. Ensure all necessary licenses with proprietary vendor software (e.g., Blinkerbeam) are included, as appropriate. All WWVDS shall be compliant with applicable NTCIP, Manual on Uniform Traffic Control Devices (MUTCD), and Texas Department of Transportation (TxDOT) specifications and TxDOT Traffic Standards.

Connected Vehicle to Everything (C-V2X) Roadside Unit - installation includes all work to attach device to device pole or structure, route cabling between cabinet and device, install in-cabinet equipment, properly ground system, integrate system into Mobility Authority network and systems, testing; does not include device pole installation.

Furnish one (1) C-V2X RSU including all necessary components for a complete installation, including roadside unit (RSU), power-over Ethernet (POE) injector, power supply, in-line surge protection device (SPD), radio mounting hardware, outdoor-rated CAT-6 Ethernet cabling (device), power cabling, and ground wire. Ensure all necessary licenses with proprietary vendor software are included, as appropriate. All RSU shall be compliant with applicable Texas Department of Transportation (TxDOT) specifications and TxDOT Traffic Standards.

Physical Infrastructure

Underground Conduit (2-2") – installation includes all work to install conduit run with two (2) two-inch conduits, including open trench and/or directional bore installation methods, conduit coupling, horizontal-to-vertical sweeps, warning tape, pulling, and grounding tone wire, and conduit fittings to boxes, cabinets, or enclosures.

Furnish underground conduit including all necessary components for a complete installation, including high-density polyethylene (HDPE), and polyvinyl chloride (PVC) conduits of two-inch nominal size, conduit couplers, horizontal-to-vertical sweeps, warning tape, stainless steel conduit straps, weatherheads, pull strings, tone wire with grounding unit, and conduit fittings for box and cabinet entrances. All conduits shall meet the applicable requirements of the Texas Department of Transportation (TxDOT) specifications and Traffic Standards.

Aboveground Conduit – installation includes all work to install two (2) conduits, including underground to aboveground transitions, stainless steel conduit straps, conduit fittings to boxes, cabinets, or enclosures, and weatherheads. Conduit diameter may vary.

Furnish aboveground conduit including all necessary components for a complete installation, including galvanized rigid-metallic conduits, conduit couplers, horizontal-to-vertical sweeps, warning tape, stainless steel conduit straps, weatherheads, pull strings, tone wire with grounding unit, and conduit fittings for box and cabinet entrances. All conduits shall meet the applicable requirements of the Texas Department of Transportation (TxDOT) specifications and Traffic Standards.

Conduit Ductbank (16-2") - installation includes all work to install a concrete encased ductbank with sixteen (16) two-inch conduits, including opening of trench, forming and reinforcement of ductbank, concrete encasement, installation of pull tapes in each conduit, conduit connections to UCVs, sealing of unused conduit knockouts, backfilling trench, and grounding.

Furnish conduit ductbank including all necessary components for a complete installation, including sixteen (16) two-inch concrete encased conduits, warning table, pull strings, tone wire with grounding unit, and conduit fittings for box and cabinet entrances. All conduit ductbank shall meet TxDOT Special Specification 6129 – Concrete Encased Duct Bank and any other applicable requirements of the Texas Department of Transportation (TxDOT) specifications and Traffic Standards.

Conduit Ductbank is not included in the CONTRACT pricing. Material and installation costs associated with conduit ductbank shall be determined at the time of a Work Authorization.

Underground Cable Vault (UCV) – installation includes all work to install a custom 5 ft x 5 ft concrete UCV meeting TxDOT Special Specification 6130 – Underground Cable Vault and any other applicable requirements of the Texas Department of Transportation (TxDOT) specifications and Traffic Standards.

Provide a 5 ft x 5 ft precast concrete UCV with a minimum depth of 4 ft and a maximum depth of 5 ft. Each vault wall shall have sixteen (16) conduit knock outs with 2" duct terminators in each knock out. Duct terminators shall be Carlon E297JN, Condux, or equivalent. Vault walls must be compatible with existing concrete ductbank.

Provide UCV with a self-draining bolting system that will secure cover positively in place. Provide double hinged cover with hinges operating freely for 180 degrees. Provide cover with drop handles and torsion assisted opening mechanism. Cover shall be grounded and permanently stamped "Communication". The cover and its frame shall be Vulcan V-6875, Neenah R-6663, or equivalent.

Provide frame with a Neoprene seal measuring 3/4" wide and 3/16" thick. Provide a bonded seal the entire length of each side of the frame contacting cover.

Provide UCV with a graded sump bottom with a minimum 4" weep hole. Provide UCV with heavy duty, non-metallic, and non-corrosive cable racks.

Install vault level and orient the frame normal to surrounding slopes. Slopes may require modification.

UCV is not included in the CONTRACT pricing. Material and installation costs associated with UCV's shall be determined at the time of a Work Authorization.

Ground Box – installation includes all work to install a ground box with an appropriately stamped lid, including finished grade, concrete apron with reinforcement, crushed aggregate subbase, connection of conduits to knockouts, installation of grounding array. Ground box material, type, and size may vary.

Furnish one (1) ground box including all necessary components for a complete installation, including pre-cast polymer concrete box, stamped lid with pull slots and security fastener holes, conduit knockouts, and grounding array. All ground boxes shall meet the applicable requirements of the Texas Department of Transportation (TxDOT) specifications and Traffic Standards.

ITS Device Pole, 40' (8-sided) – installation includes all work to install steel device pole, including concrete foundation with reinforcement, anchor bolts, and conduit sweeps, concrete apron, grounding array.

Furnish one (1) steel device pole including all necessary components for a complete installation, including octagonal (8-sided) steel pole, stiffeners, two-inch threaded cabling entrance nipples, handholes, air terminal, top-mount plate, base plate, anchor bolts, and concrete foundation with reinforcement and conduit sweeps. All steel device poles shall meet the applicable requirements of the Texas Department of Transportation (TxDOT) specifications and Traffic Standards.

ITS Device Pole, 60' (12-sided) with Lowering Device - installation includes all work to install steel device pole, including concrete foundation with reinforcement, anchor bolts, and conduit sweeps, concrete apron, grounding array, lowering device with internal winch.

Furnish one (1) steel device pole including all necessary components for a complete installation, including dodecahedral (12-sided) steel pole, stiffeners, two-inch threaded cabling entrance nipples, handholes, air terminal, base plate, anchor bolts, lowering device with included winch and quick disconnect junction box, and concrete foundation with reinforcement and conduit sweeps. All steel device poles shall meet the applicable requirements of the Texas Department of Transportation (TxDOT) specifications and Traffic Standards.

Cabinet Assembly, Pole Mount – installation includes all work attach cabinet assembly to device pole or structure, including physically securing of cabinet to the structure, attachment

of conduits and cabling entrances, grounding array, terminating wiring and cabling, testing; does not include installation of the pole.

Furnish one (1) Type 336S cabinet assembly (*TxDOT Type 3*) including all necessary components for a complete installation, including aluminum cabinet assembly with 19" EIA/TIA rack, front and rear doors, sunshields (top, sides, and doors), two (2) adjustable shelves, complete power distribution assembly, mounting brackets, and stainless-steel banding. Cabinet shall be provided with a minimum of two (2) standard Type 2 keys. All cabinet assemblies shall meet the applicable requirements of the Texas Department of Transportation (TxDOT) specifications and TxDOT Traffic Standards.

Cabinet Assembly, Ground Mount – installation includes all work attach cabinet assembly concrete foundation, including installation of concrete foundation with reinforcement, conduit sweeps, and anchor bolts, grounding array, terminating wiring and cabling, testing.

Furnish one (1) Type 332/334 cabinet assembly (*TxDOT Type 4*) including all necessary components for a complete installation, including aluminum cabinet assembly with 19" EIA/TIA rack, front and rear doors, sunshields (top, sides, and doors), two (2) adjustable shelves, complete power distribution assembly, and concrete foundation with technician pad. Cabinet shall be provided with a minimum of two (2) standard Type 2 keys. All cabinet assemblies shall meet the applicable requirements of the Texas Department of Transportation (TxDOT) specifications and TxDOT Traffic Standards.

Fiber Optic Communications

Fiber Optic Cabling, 12-Count, Single-Mode - installation includes all work to install fiber optic cabling through conduit pathways, coil minimum 200' slack in vaults and 50' in boxes.

Furnish fiber optic cabling meeting the applicable requirements of the Texas Department of Transportation (TxDOT) specifications and Traffic Standards.

Fiber Optic Cabling, 48-Count Single-Mode – installation includes all work to install fiber optic cabling through conduit pathways, coil minimum 200' slack in vaults and 50' in boxes.

Furnish fiber optic cabling meeting the applicable requirements of the Texas Department of Transportation (TxDOT) specifications and Traffic Standards.

Fiber Optic Cabling, 96-Count Single-Mode – installation includes all work to install fiber optic cabling through conduit pathways, coil minimum 200' slack in vaults and 50' in boxes.

Furnish fiber optic cabling meeting the applicable requirements of the Texas Department of Transportation (TxDOT) specifications and Traffic Standards.

Fiber Optic Cabling, 144-Count Single-Mode – installation includes all work to install fiber optic cabling through conduit pathways, coil minimum 200' slack in vaults and 50' in boxes.

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| <p>Furnish fiber optic cabling meeting the applicable requirements of the Texas Department of Transportation (TxDOT) specifications and Traffic Standards.</p> |
| <p>Fiber Optic Patch Panel, 24-fiber capacity – installation includes all work to install fiber optic patch panel in cabinet with a minimum of one (1) 12-count ST-connector panels, splice trays, connection pigtails to cable with fusion splices (color-to-color), terminate all pigtail fibers.</p> <p>Furnish one (1) fiber optic patch panel including all necessary components for a complete installation, including 19" EIA/TIA rack-mounted enclosure unit (minimum capacity of 24 fibers), singlet ST-connector panels, splice trays, and buffer tube fan-out kits. All fiber optic patch panels shall meet the applicable Texas Department of Transportation (TxDOT) specifications and TxDOT Traffic Standards.</p> |
| <p>Fiber Optic Patch Panel, 96-fiber capacity – installation includes all work to install fiber optic patch panel in cabinet with a minimum of four (4) 12-count ST-connector panels, splice trays, connection pigtails to cable with fusion splices (color-to-color), terminate all pigtail fibers.</p> <p>Furnish one (1) fiber optic patch panel including all necessary components for a complete installation, including 19" EIA/TIA rack-mounted enclosure unit (minimum capacity of 96 fibers), singlet ST-connector panels, splice trays, and buffer tube fan-out kits. All fiber optic patch panels shall meet the applicable Texas Department of Transportation (TxDOT) specifications and TxDOT Traffic Standards.</p> |
| <p>Fiber Optic Connection, Fusion Splice</p> |
| <p>Fiber Optic Connection, Connectorized Termination</p> |
| <p>Fiber Optic Splice Enclosure – Furnish one (1) splice enclosure including all necessary components for a complete installation, including hardened underground splice enclosure with a minimum of four (4) cabling entry ports capable of accommodating a 144-count fiber optic cable and four (4) splice trays. Provide minimum of two (2) splice trays with each enclosure. All fiber optic splice enclosures shall be compliant with applicable Texas Department of Transportation (TxDOT) specifications and TxDOT Traffic Standards.</p> |
| <p>In-Cabinet Equipment</p> |
| <p>Managed Field Ethernet Switch – installation includes all work to install the switch, including configuration of network parameters (e.g., IP addressing, routing tables, VLAN settings, etc.), SFP transceivers, power supply, and end-to-end network connectivity testing.</p> <p>Furnish one (1) Cisco IE 4000 series switch including all necessary components for a complete installation, including network switch with a minimum of twelve (12) RJ-45 copper ports and two (2) fiber optic ports, minimum of two (2) small-form factor pluggable (SFP) transceivers compatible with Cisco products, power supply (Cisco model), and DIN-rail mounting assembly unit. Ensure all necessary licenses with proprietary vendor software are included, as</p> |

appropriate. All managed field Ethernet switches shall be compliant with NTCIP and Texas Department of Transportation (TxDOT) specifications and TxDOT Traffic Standards.

Uninterruptible Power Supply (UPS) with Battery Backup System - installation includes all work to install the UPS head unit, automatic transfer switch (ATS), battery array with wiring harness; ground the system, configure equipment to the network, and perform testing.

Furnish one (1) UPS including all necessary components for a complete installation, including outdoor-rated UPS head unit with network connectivity via RJ-45 (10/100) Ethernet port and SNMP enabled, four (4) 12V 100 Ah batteries, wiring harness, automatic transfer switch (ATS), and mounting hardware for 19" EIA/TIA rack. All UPS shall meet the applicable Texas Department of Transportation (TxDOT) specifications and TxDOT Traffic Standards.

Remote Power Management Unit (RPMU) – installation includes all work to install the RPMU, ground the system, configure equipment to the network, and perform testing.

Furnish one (1) RPMU including all necessary components for a complete installation, including RPMU with a minimum of eight (8) standard NEMA 5-15 120V plugs and network connectivity via RJ-45 (10/100) Ethernet port and SNMP enabled. Ensure the RPMU is capable of being mounted in a 19" EIA/TIA rack and each individual plug is isolated to allow for remote cycling of power. All RPMU shall meet the applicable Texas Department of Transportation (TxDOT) specifications and TxDOT Traffic Standards.

Electrical Power Service

Electrical Power Service - includes all work to establish a new electrical power service, including installation of service disconnect, utility service meter, transformer (step-down, step-up), and distribution panel board, and all associated infrastructure; coordination with the utility service provider; wiring connections, terminations, grounding, and testing.

Furnish one (1) Type D electrical service including all necessary components for a complete installation. At a minimum, the electrical service shall have the following characteristics: a service voltage of 120/240V; a stainless-steel enclosure; a steel pole service support.

Electrical Service Wire - includes all work to install electrical wires through conduit pathways in a manner which will ensure that damage to the installation will not occur. Ensure wire is of sufficient length after installation in the conduit to provide for attachment to the power company service and for termination within the cabinet for which power is required. This shall also include termination of wiring where necessary.

Furnish electrical wire to meet the applicable requirements of the Texas Department of Transportation (TxDOT) Specifications and Traffic Standards.

1.3.3 Design Liaison and Support Services

The VENDOR shall provide technical design review and coordination services, as requested by the MOBILITY AUTHORITY. This work may include, but is not limited to, participation in design workshops, construction plans review, on-site field meetings with stakeholders (e.g., utility service providers, Contractors, TxDOT), document development, and more.

The MOBILITY AUTHORITY will issue Work Authorizations (WA) for all design liaison and support services activities. The VENDOR shall identify all labor necessary to complete the work and provide a price proposal, in accordance with the unit costs in the CONTRACT.

1.3.4 Control of Materials

The VENDOR shall maintain and store all SYSTEM equipment and spare parts at a storage facility provided by the VENDOR. Storage of parts or equipment outside the MOBILITY AUTHORITY'S designated storage area(s) must be approved by the MOBILITY AUTHORITY.

Any equipment purchased by the VENDOR on behalf of the MOBILITY AUTHORITY, using MOBILITY AUTHORITY funds, belongs to the MOBILITY AUTHORITY, and shall be entered into the inventory system maintained by the VENDOR. Upon termination or ending date of the CONTRACT, all MOBILITY AUTHORITY property shall be transferred to the responsibility of the MOBILITY AUTHORITY.

By default, all spare parts or equipment not installed, and operating will be stored at the VENDOR'S facility dedicated to this project. However, the MOBILITY AUTHORITY reserves the right to store devices and/or parts at an independent storage area of its choosing within thirty (30) miles of the TIMC located at 104 N Lynnwood Trail, Cedar Park, TX 78613. The VENDOR is responsible for picking up parts as needed from MOBILITY AUTHORITY storage area(s) under the terms of this CONTRACT.

The VENDOR will maintain and have readily available an up-to-date inventory of all equipment and/or parts that are under the VENDOR'S supervision. Upon request, the VENDOR must be able to produce individual devices shown on the inventory within twenty-four (24) hours of request or replace with a new device at no cost to the MOBILITY AUTHORITY. If the MOBILITY AUTHORITY chooses to do so, it will be the responsibility of the VENDOR to pick up parts as needed under the terms of this CONTRACT and adhere to the response times as listed in this CONTRACT.

Upon request, the VENDOR shall provide an up-to-date inventory report to the MOBILITY AUTHORITY within seventy-two (72) hours of receiving a request. The inventory report must contain, but not be limited to, at a minimum:

1. Manufacturer
2. Model number
3. Descriptive name
4. Quantity
5. Manufacturer serial number

6. Purchase date
7. Current storage location
8. Condition (new, used, damaged, or available for parts)

1.3.4.1 Device Inventory

The VENDOR shall maintain and have readily available an up-to-date inventory of all the MOBILITY AUTHORITY'S equipment that the VENDOR is responsible to maintain and all spare parts and devices in the VENDOR'S or MOBILITY AUTHORITY'S possession. The VENDOR shall provide an inventory management system in accordance with the requirements of **Section 1.3.4 – Control of Materials**. The VENDOR shall be responsible for the procurement, configuration, maintenance, development, and updating of the inventory management system.

1.3.4.1.1 Existing TIMC Device Inventory

The VENDOR shall maintain and have readily available an up-to-date inventory of all the MOBILITY AUTHORITY'S equipment and/or parts within the TIMC and under the VENDOR'S supervision. The inventory shall contain, but not be limited to:

1. Asset ID No. (MOBILITY AUTHORITY)
2. Manufacturer
3. Model number
4. Descriptive name
5. Manufacturer serial number
6. Current location (e.g., server room, operational floor)
7. Current function and/or utilization
8. Condition (new, used, damaged, or available for parts)
9. Equipment status (spare or in-use)
10. Date of purchase
11. Date(s) of repair
12. Date when scrapped (as applicable)
13. Warranty status

1.3.4.1.2 Existing Field Device Inventory

The VENDOR shall maintain and have readily available an up-to-date inventory of all the MOBILITY AUTHORITY'S field devices, equipment, infrastructure, and/or parts that are under the VENDOR'S supervision. The inventory shall contain, but not be limited to:

1. Asset ID No. (MOBILITY AUTHORITY)
2. Manufacturer
3. Model number
4. Descriptive name
5. Manufacturer serial number,
6. Current site location (corridor, milepost, and side of the road)

7. Position (latitude, longitude)
8. Condition (new, used, or damaged), including contextual photos from the latest site visit
9. Equipment status (spare or in-use)
10. Site where equipment belongs and type of site (e.g., CCTV camera, DMS, etc.)
11. Date of purchase
12. Date(s) of repair
13. Date when scrapped (as applicable), and
14. Warranty status

1.3.4.1.3 Inventory Disposal

The VENDOR shall be responsible for monitoring the viability and usefulness of MOBILITY AUTHORITY inventory. When inventory (e.g., field devices, equipment, infrastructure, and/or parts) under the VENDOR'S supervision is determined to have no value, is beyond repair, out of warranty, or beyond useful service life the VENDOR shall label the inventory, physically and in the IMS, as "Disposable". The VENDOR shall dispose of equipment identified within the IMS as disposable at a standard frequency agreed upon by the MOBILITY AUTHORITY no greater than six (6) months. An inventory disposal list must be approved by the MOBILITY AUTHORITY prior to disposal. Recycling shall be the primary method of disposal.

Items with resale or trade-in value that are of no use to the MOBILITY AUTHORITY shall be labeled, physically and in the IMS, as "Commodity". The Vendor shall deliver an annual commodities report detailing the inventory commodities to the MOBILITY AUTHORITY. The report shall include:

1. Manufacturer
2. Model number
3. Descriptive name
4. Quantity
5. Manufacturer serial number
6. Purchase date
7. Current storage location
8. Condition (new, used, damaged, or available for parts)
9. Warranty Status
10. Estimated resale value
11. Potential trade-in options

At the request of the MOBILITY AUTHORITY the VENDOR may be asked to sell or trade-in inventory. All sales must be by competitive bid or auction. All trade-ins must be for new property of a similar type.

All disposal, sale, and trade-in of MOBILITY AUTHORITY inventory must abide by Article 23 of the Mobility Authority Policy Code.

1.3.4.2 Inventory Management System

The VENDOR shall furnish, maintain, configure, support, and populate a full-scale Inventory Management System (IMS) to support the long-term ITS asset and configuration management needs of the MOBILITY AUTHORITY. The IMS shall include configurable databases and a web-accessible user interface to allow users to access the system remotely. Access to the IMS shall be restricted to pre-approved users via username and password. All users shall be vetted by both the MOBILITY AUTHORITY and VENDOR prior to receiving access to the system. The MOBILITY AUTHORITY'S Project Manager shall remain a pre-approved user with full access to the IMS for the duration of this CONTRACT.

The VENDOR shall use the IMS for inventory and facilities management purposes. The VENDOR will be responsible for the operations and maintenance of all data used to inventory the SYSTEM field equipment and parts including, but not limited to, ITS devices; enclosures, cabinets, communication hubs, and the devices within; network equipment; electrical service equipment; communication cabling; ductbank; conduit; underground boxes and UCVs; communication connection points (e.g., splice, terminations); connection hardware; and other field installed assets. The VENDOR shall document as-built information about the SYSTEM and work performed under this CONTRACT which shall be made available to the MOBILITY AUTHORITY at all times.

The information contained within the IMS is confidential material; therefore, the VENDOR must ensure that VENDOR staff working under this CONTRACT have been pre-approved. The VENDOR shall be responsible for providing user training on the IMS and assign appropriate login credentials to VENDOR staff and MOBILITY AUTHORITY staff and designees that successfully complete training.

The VENDOR shall provide an IMS that is accessible from the field. The VENDOR shall provide field staff with a compatible laptop computer with direct Internet access from anywhere within the MOBILITY AUTHORITY system. Asset changes to the system shall be updated to the IMS database in real-time or as otherwise directed by the MOBILITY AUTHORITY. The VENDOR will be responsible for recurring usage cost including computer hardware, software licenses, data usages for connection to the Internet, etc.

The VENDOR shall include all necessary resources required to populate the database and routinely update the database as maintenance work changes the inventory and configuration. Information populated in the IMS shall meet the positional accuracy requirements of differential global positioning systems (D-GPS).

1.4 GENERAL REQUIREMENTS FOR EXECUTION OF WORK

The VENDOR is responsible for all labor, materials, and incidentals required to execute and complete the requirements of this CONTRACT including, but not limited to, the following:

1. Project management and contract administration

2. Communications and coordination between the MOBILITY AUTHORITY and the VENDOR
3. Communications and coordination with other MOBILITY AUTHORITY maintenance providers (e.g., performance-based roadway maintenance contractor, Toll Systems Integrator (TSI))
4. Communications and coordination with other stakeholder(s) (e.g., TxDOT, City of Austin, CapMetro, third-party contractors and vendors)
5. Personnel requirements
6. Project recordkeeping
7. Device availability matrices
8. WA requirements for payment of services
9. Status meetings, including meeting minutes and agendas
10. Utility locate administration
11. Scheduled and preventive maintenance
12. Minor and major repairs and parts replacement (including warranties and replacement parts)
13. New construction and installations
14. Design support services
15. Material and equipment requirements
16. Utility coordination for network and utility services
17. Emergency power, and
18. Disaster reporting

The VENDOR shall be responsible for obtaining any and all necessary subconsultants to perform specialty work (e.g., geotechnical boring), as necessary.

The VENDOR shall fully cooperate with all utility owners during activities such as, but not limited to, construction, installation, or repair associated with this CONTRACT. The VENDOR shall call Texas811 a minimum of forty-eight (48) hours and a maximum of ninety-six (96) hours before any excavation work requiring locate services from member operators of Texas811.

The VENDOR shall furnish and install all equipment and materials and perform all work in accordance with all applicable standards and procedures (refer to **Section 1.1.2 – Applicable Specifications and Standards**). The VENDOR is responsible for ascertaining the exact location of all utilities prior to beginning work in an area. Utility locations as shown on plans are approximate and may not include all utilities. If any utility damages are incurred as a result of VENDOR'S operations, it shall be the VENDOR'S sole responsibility to repair such damages or bear the cost of repairs performed by others.

The VENDOR shall be responsible for coordinating all scheduled and preventative maintenance, repairs, and emergency maintenance activities with the Toll Systems Integrator (TSI) where equipment or infrastructure is collocated, or existing tolling equipment is in the immediate proximity and may be impacted. The VENDOR may be required to have a representative of the TSI on-site during maintenance activities, at the discretion of the MOBILITY AUTHORITY. Communication between parties shall be coordinated through the Project Manager.

The VENDOR shall be responsible for coordinating and meeting with all utility companies having overhead or underground facilities in proximity with work performed under this CONTRACT. The VENDOR shall be responsible for determining and performing any needed subsurface utility exploration (SUE) work.

The VENDOR shall be responsible for providing the MOBILITY AUTHORITY with a detailed damage report after the occurrence of a disaster, natural or otherwise (e.g., vehicle collision). This report shall include an individual site analysis including, but not limited to, the following information:

- Field device or equipment location
- Date and time of visit
- Description of failure or issue and system impacts
- Site conditions noted (e.g., submerged, structure down, no power)
- Digital photo documentation
- Damaged parts list: type, model, and serial and control numbers
- Needed parts list, including reference to needed parts/devices currently in inventory
- Repair cost breakdown
- General notes, and
- Schedule of repair duration

The damage report by the VENDOR shall be per site and include all devices connected to the cabinet location. The VENDOR'S report shall include an Executive Summary and a Cost Summary including all parts necessary to re-establish the system in working order. In the event the damage requires the services of a subcontractor, the VENDOR shall include a short-list of quotes from at least three (3) different subcontractors, subconsultants, or sub-vendors. The MOBILITY AUTHORITY shall establish time frames for damage reports to be delivered to the MOBILITY AUTHORITY depending on the severity of the disaster.

1.4.1 Location of the Work

The VENDOR shall be responsible for maintenance of all existing, under-construction, and future MOBILITY AUTHORITY owned and operated SYSTEMS located in the following counties:

- Hays, Travis, and Williamson Counties

1.4.1.1 Traffic Incident Management Center (TIMC)

The VENDOR is to provide scheduled and preventative, repair, and emergency maintenance services for applicable components of the SYSTEM located within the TIMC. The VENDOR shall not be responsible or attempt to perform maintenance on any collocated electronic tolling or revenue generating equipment within the TIMC, including the server room unless otherwise approved by the MOBILITY AUTHORITY. The VENDOR shall coordinate with the MOBILITY AUTHORITY and Toll Systems Integrator (TSI) to determine specific requirements for equipment located within the TIMC and schedule maintenance periods.

Example work to be performed by the VENDOR within the TIMC includes, but is not limited to:

- Parts-only replacement warranty from the manufacturer registered in the MOBILITY AUTHORITY'S name
- Diagnostic and/or troubleshooting maintenance visits (e.g., video wall alignment, configuration, and color balance)
- Scheduled preventative maintenance visits (e.g., clean or replace air filters, clean screens)
- Repair service for video wall, servers, and operator workstation components. Repair work is to be coordinated with the MOBILITY AUTHORITY to determine the level of response/repair needed and scheduled downtime
- Video wall controller, software, and firmware upgrades
- Video wall servers
- Video wall displays (e.g., televisions, monitors)
- Workstation computer, monitor, software, and firmware upgrades
- Central servers

1.4.1.2 Field Sites

The VENDOR is to provide preventative and scheduled maintenance, emergency maintenance, and repair services for components of the SYSTEM located at existing and future field sites throughout the geographic coverage area of the CONTRACT.

1.4.2 Scheduling and Execution of Work

All work shall be scheduled with and approved by the MOBILITY AUTHORITY, including schedule and preventative maintenance, repairs, emergency maintenance, and new construction activities. The VENDOR shall work with the MOBILITY AUTHORITY'S Project Manager under this CONTRACT to establish recurring scheduled activities (e.g., preventative maintenance) and timelines. Additional work not covered under the Scope of Work (SOW) must be reviewed, approved, and authorized by the MOBILITY AUTHORITY.

The VENDOR will perform all SYSTEM support, including routine and preventative maintenance; repairs; utility locate services; and failed or destroyed component replacement, as needed by the MOBILITY AUTHORITY. The VENDOR may be required to perform new field device, equipment, and infrastructure installations; and design liaison and support services, as needed. All services will be performed on a WA basis.

The MOBILITY AUTHORITY will issue WAs to approve the VENDOR to work on any and all services on the SYSTEM directed by the MOBILITY AUTHORITY. Work estimates will be prepared by the VENDOR for all WAs, in accordance with the CONTRACT, and submitted to the MOBILITY AUTHORITY for review and approval. The work estimates will include, at a minimum, personnel, labor rates, materials, equipment and/or resources; documentation of proposed work to be performed; potential impacts to tolling systems and revenue, roadway, and users; travel requirements if outside the contract area; itemized cost breakdown; and proposed work

schedule. No work will be undertaken by the VENDOR unless it has been authorized in writing from the MOBILITY AUTHORITY. Each Work Authorization issued by the MOBILITY AUTHORITY will serve as a formal notice-to-proceed (NTP) and may include an effective time period for the particular Work Authorization being issued.

1.4.3 Mobilization

Work under this contract will require movement of personnel, equipment, supplies, and incidentals. All preparatory work and operations for beginning work, including movement of personnel, equipment, supplies, and other incidentals for a project (one Work Authorization), must be authorized by the MOBILITY AUTHORITY. Mobilization shall be compensated as five percent (5%) of the total proposed installation unit costs. Due to the unique nature of the CONTRACT and the work specified herein, mobilization may be adjusted by the MOBILITY AUTHORITY as needed on a case-by-case basis.

1.4.4 Temporary Traffic Control

Temporary Traffic Control (TTC) shall include the planning, furnishing, installing, maintaining, and removing of traffic control and safety devices. The need for lane closures shall be determined on a case-by-case basis as requested by the VENDOR. Any request for a planned lane closure(s) shall be submitted to the MOBILITY AUTHORITY a minimum of two (2) weeks in advance of the proposed lane(s) closure and coordinated with the Toll Systems Integrator (TSI), as appropriate. The VENDOR will be given a notification list by the MOBILITY AUTHORITY containing all contacts that shall be notified of the lane(s) closure by the VENDOR. The VENDOR shall coordinate TTC activities with traffic incident management center (TIMC) operations personnel and any other governing operations center that may be impacted (e.g., City of Austin, TxDOT).

The VENDOR shall have at least one (1) individual on its staff throughout the term of this CONTRACT with the appropriate Texas Department of Transportation (TxDOT) approved training, as outlined in TxDOT Standard Specifications, Item 7.

All system maintenance related TTC activities shall be compensated by the monthly Maintenance Service Unit Price, refer to the CONTRACT. All Work Authorization related TTC activities shall be compensated on an as needed basis. Under a Work Authorization, the VENDOR shall identify all materials and labor necessary to complete the work and provide a price proposal to the MOBILITY AUTHORITY for review and approval.

1.4.5 Warranty for Vendor Services and Materials

The VENDOR warrants to the MOBILITY AUTHORITY that all services, materials, parts, and supplies furnished under this CONTRACT shall be free from defects in material or workmanship and in accordance with good trade practices and local, state, and federal codes.

The VENDOR guarantees that upon completion of the services required by the CONTRACT, the work areas shall be left in a clean, sanitary, and safe condition.

The VENDOR agrees that each job assignment performed will be reviewed and approved by the VENDOR'S Project Manager before the MOBILITY AUTHORITY is requested to approve and process invoices for payment.

The VENDOR will correct deficient work and replace defective material provided and supplied, or credit the MOBILITY AUTHORITY for the inadequate services and materials. The MOBILITY AUTHORITY shall have the right to determine which course of correction must be taken.

Upon completion of a repair, the VENDOR shall warranty their work for a period of ninety (90) calendar days from the date of acceptance by the MOBILITY AUTHORITY. The VENDOR shall transfer manufacturer's warranties for parts and materials to the MOBILITY AUTHORITY upon completion of the necessary repairs and acceptance by the MOBILITY AUTHORITY.

1.4.6 Lost, Stolen, or Damaged MOBILITY AUTHORITY Owned Resources

The MOBILITY AUTHORITY'S Project Manager will provide a list of MOBILITY AUTHORITY owned resources for the VENDOR. The VENDOR shall acknowledge receipt and responsibility of the MOBILITY AUTHORITY owned resources by executing a Property Transfer Receipt form (<https://fmx.cpa.texas.gov/fmx/forms/spa/spaprotransrcpt.pdf>).

The VENDOR will inventory all MOBILITY AUTHORITY owned resources annually and provide the data to the MOBILITY AUTHORITY in a pre-approved format for review and record retention. The MOBILITY AUTHORITY may audit the inventory data at their own discretion. In the event MOBILITY AUTHORITY owned resources have been lost, stolen, or damaged, and had been in exclusive possession and control of the VENDOR, the VENDOR will replace the MOBILITY AUTHORITY owned resources before the end of the calendar year when the item(s) was known to be lost, stolen, or damaged. If the item(s) is not directly replaceable due to non-availability of identical models, the VENDOR will replace the item(s) with a functionally equal or better item or directly compensate the MOBILITY AUTHORITY. The risk of loss to any equipment being repaired or replaced shall be the responsibility of the VENDOR having possession or control of the equipment at the time of the loss.

1.4.7 Materials to be Furnished

All equipment and component parts that are furnished will be new, unused, will meet all requirements of this CONTRACT, and will be in operable condition at the time of delivery. All parts will be of high-quality workmanship and no part or attachment will be applied contrary to the manufacturer's recommendations or standard practice. If authorized by the MOBILITY AUTHORITY, cannibalized parts from damaged MOBILITY AUTHORITY equipment may be used if it does not affect a warranty.

1.4.8 Software

The VENDOR is expected to use, purchase, or provide the following software available for the performance of work described in the contract: inventory management system (IMS) software, network management system (NMS) software, proprietary software for field devices (as necessary), video management software, database management software, as well as Rekor One and SWRI Lonestar proprietary central management software(s).

1.4.9 Incidental Materials

The VENDOR shall be responsible for providing incidental materials that are necessary to perform the general nature of work described in this CONTRACT.

1.4.10 Equipment, Machinery, Tools, and Vehicles

The VENDOR shall provide on-site equipment including, but not limited to, bucket trucks, cranes, inspection/maintenance vehicles, field engineering equipment, air compressor, machinery, tools, materials, cellular phones, laptops, and other equipment necessary to perform the service required under this CONTRACT.

The VENDOR shall provide a bucket truck capable of reaching a minimum height of 40 feet for regular use under this CONTRACT. In addition, the VENDOR shall be able to provide a bucket truck capable of reaching 55 feet within twenty-four (24) hours of request by the MOBILITY AUTHORITY.

The VENDOR shall provide maintenance and inspection vehicles for the ITS Project Manager, ITS Maintenance Technician(s), Electrical Technician(s), and Utility Technician(s). The VENDOR shall provide the availability of an environmentally controlled van or trailer accustomed for conducting fiber optic fusing splicing and other similar type of work inside the van or trailer, within forty-eight (48) hours of the request of the MOBILITY AUTHORITY. All vehicle(s) shall have sufficient towing and hauling capabilities to carry out the tasks specified in this CONTRACT.

VENDOR logos shall be required on vehicles and equipment dedicated for use and performance of work under this CONTRACT. VENDOR vehicles that are regularly used to perform work under the CONTRACT must have the following markings: VENDOR logo and any other safety messages required for vehicles stopping on limited-access facilities to conform to all safety agency regulations. Vehicles shall be outfitted with the appropriate strobe and safety lights required to perform their field duties.

The VENDOR shall be responsible to provide a laptop computer with docking station and off-site internet access for each primary maintenance staff member. The laptop shall be compatible with the MOBILITY AUTHORITY'S network and include all appropriate software(s) to configure, monitor, and manage the SYSTEM. Computers and individuals using MOBILITY AUTHORITY technology resources shall comply all cyber-security, data privacy, and use of information and technology resources policies of the MOBILITY AUTHORITY.

The VENDOR shall be responsible to provide smartphones to field personnel in order for the MOBILITY AUTHORITY to immediately reach staff in the field. The VENDOR shall provide the MOBILITY AUTHORITY with a complete contact list of all key personnel including mobile phone numbers for all field staff. Smartphones provided to VENDOR field personnel shall be capable of capturing and transmitting high-resolution photographs (e.g., 300 pixels per inch).

The cost of the machinery, equipment tools, and vehicles including, but not limited to pliers, multi-meters, crimp tools, screwdrivers, crowbars, ground box pull hooks, conduit snakes, ratchets, hammers, shovels, battery or electrical power tools, Ethernet packet sniffers, laptop computers, smartphones, video monitors, vehicles, etc., shall be the VENDOR'S responsibility. The VENDOR shall be responsible for maintaining their equipment, machinery, tools, and vehicles, and all fixed and recurring costs for these items throughout the term of this CONTRACT.

VENDOR shall be responsible to provide suitable equipment (e.g., pull box hook, manhole cover hook) to field personnel for the opening of UCVs. Under no circumstances shall anyone attempt to open a UCV by hand or with the use of wire.

All measurement equipment and tools shall be calibrated by the manufacturer's certified calibrator and be calibrated on the frequency required by the manufacturer. These equipment and tools include, but are not limited to:

- Maintenance trucks with oscillating buckets
- OTDR
- Oscilloscopes
- Waveform and video generators
- Multi-meters, and
- Earth ground testers

The MOBILITY AUTHORITY may, at its sole discretion, provide certain maintenance and measurement tools/equipment for the VENDOR to use under this CONTRACT.

The VENDOR shall maintain and inventory all equipment and tools associated with this CONTRACT, including items provided by the MOBILITY AUTHORITY. The VENDOR shall ensure that all warranties remain valid on all equipment and that they are properly calibrated for the duration of the CONTRACT.

1.4.10.1 Control of Equipment

The VENDOR shall maintain and store equipment associated with this CONTRACT at the VENDOR's facility or other location(s) approved by the MOBILITY AUTHORITY. Storage locations shall be marked specifically for this CONTRACT and shall not be used for any other purposes. Parts or equipment to be stored outside the MOBILITY AUTHORITY storage area shall be authorized by the MOBILITY AUTHORITY'S Project Manager; by default, all spare parts or equipment not installed and operating shall be stored at the storage area dedicated to this project as approved by the MOBILITY AUTHORITY.

The VENDOR shall secure a new storage container(s), as necessary, under this CONTRACT to store spare parts at the location(s) approved by the MOBILITY AUTHORITY. The MOBILITY AUTHORITY may elect for the VENDOR to pick-up and deliver parts as needed to locations in the geographic coverage area of this CONTRACT.

1.4.11 Working Hours, On-Call Responsibilities, and Response Times

1.4.11.1 Standard Hours of Operation

The VENDOR shall have maintenance personnel available at all times including nights, weekends, and holidays. However, standard hours of operation are Monday through Friday from 6:00 a.m. – 7:30 p.m.

1.4.11.2 On-call Responsibilities

The VENDOR shall provide on-call staff at all times. On-call staff assignments shall be coordinated with the MOBILITY AUTHORITY and clearly communicated to staff responsible for TIMC operation. Qualified maintenance staff shall be on-call during weekends and statutory state holidays and at all times for the term of this CONTRACT to respond to calls and issues, as needed. The VENDOR may be required to perform repairs and emergency maintenance outside of normal business hours.

1.4.11.3 Response Times

The response times below require that qualified VENDOR staff with appropriate equipment, tools, and available parts be on-site and ready to perform work for repair services and emergency maintenance, as necessary. Response times are intended to identify the maximum allowable time for VENDOR personnel to acknowledge the maintenance need, mobilize staff on-site to assess the issue(s), perform diagnostic and/or troubleshooting efforts, perform corrective action for minor repairs or identify proposed work strategies to correct the issues for major repairs, and communicate the current situation with the MOBILITY AUTHORITY.

The VENDOR is expected to be readily available and responsive throughout the duration of the CONTRACT. The VENDOR shall respond to communications and requests from the MOBILITY AUTHORITY for non-critical activities (e.g., troubleshooting, diagnostics, general communications) no later than one (1) business day (state holidays excluded), unless otherwise deemed necessary by the MOBILITY AUTHORITY.

1.4.11.3.1 Repair Services Response Time

Response times for repair services, as identified in **Section 1.3.1.3 – Repair Services**, shall be no later than seventy-two (72) hours to the site, unless otherwise deemed necessary by the MOBILITY AUTHORITY.

1.4.11.3.2 Emergency Repair Response Time

Response times for emergency maintenance, as identified in **Section 1.3.1.4 – Emergency Repair Services**, shall be no later than four (4) hours to the site 24 X 7 X 365, unless otherwise deemed necessary by the MOBILITY AUTHORITY.

1.4.12 Security and Safety Requirements

The VENDOR shall utilize proper safety measures to ensure the proper protection for persons and property at all times.

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

The VENDOR shall follow all safety requirements outlined in the National Electric Safety Code (NESC), Occupational Safety and Health Administration (OSHA), and any standards or practices for safe installation or maintenance of required equipment per this CONTRACT.

The VENDOR shall be responsible for any injury to person(s) or damage to property that occurs as a result of VENDOR activities under this CONTRACT. The VENDOR shall notify the MOBILITY AUTHORITY immediately after any injury incurred by person(s) working under this CONTRACT.

At the conclusion of a workday, the VENDOR'S personnel must leave the work area free of safety hazards. The VENDOR shall remove all trash, personal belongings, debris, and unwanted items from the site at the end of each workday. The MOBILITY AUTHORITY assumes no liability for any equipment, personal belongings, or effects left unattended on MOBILITY AUTHORITY property.

The VENDOR shall be solely responsible for the safety of all its personnel.

The VENDOR 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) where work is performed under this CONTRACT.

If any deficiency may cause harm to life or property, or violate any rules or regulations such as, but not limited to, Americans with Disabilities Act (ADA), OSHA, or otherwise contained herein, the MOBILITY AUTHORITY may take immediate corrective action(s), and the VENDOR shall be responsible for the burden of any associated direct and/or indirect costs.

1.4.13 License and Insurance Qualifications

The VENDOR shall hold the licenses and certifications necessary to provide the services described in this CONTRACT in the counties specified and be required to submit proof of licenses and certifications prior to work being performed.

The VENDOR shall certify that skilled employees and/or subcontractor(s), who possess the necessary specialty licenses, as required by law to perform the work, shall provide the services being performed and provided by the VENDOR as described in this CONTRACT.

All records, insurance, and licenses must be current. The VENDOR must provide the MOBILITY AUTHORITY with evidence of current records, insurance, and licenses and copies must be kept on file for the duration of this CONTRACT and all renewals.

1.5 REQUIRED QUALIFICATIONS OF VENDOR

1.5.1 Use of Subcontractor(s) or Subconsultant(s)

The support of the SYSTEM may require a multi-disciplinary team made up of a prime VENDOR and subcontractors to successfully fulfill the obligations of this CONTRACT. The VENDOR must provide contact information for all subcontractors and indicate their areas of expertise and responsibility. Use of subcontractors must be coordinated with, and approved by, the MOBILITY AUTHORITY's Project Manager.

1.5.2 Staffing Requirements

Support of the SYSTEM will require a multi-disciplinary team. The following areas of expertise are considered to be the minimum necessary to successfully fulfill the obligations of this CONTRACT. Subcontractors submitted with the response are allowed.

- Project management / administration
- Electrical trades
- Electronic and electro-mechanical component diagnostics, troubleshooting, and repair
- Computer hardware troubleshooting and repair
- Layer 2/3 local area network (LAN) and wide area network (WAN) design, operation, and maintenance
- Ethernet, serial, and wireless communications
- Networking and network protocols, including switching, routing, VLANs, OSPF, PIM, SNMP, IGMP, IGRP, DVMRP, DNS, etc.
- Computer applications / database management
- Cyber-security
- Digital video transmission
- Fiber optic network configuration and administration
- Fiber optic cabling termination, splicing, testing, and management
- Installation, configuration, troubleshooting, and maintenance of digital video equipment (e.g., CCTV), network communication devices, DMS, RVSD, WWVDS, RWIS, Connected Vehicle (CV) technology, and vehicle detection systems (VDS)
- ITS design and plans production
- Review of civil construction plans

- Grounding and surge protection systems and related equipment
- Configuration management
- Database management
- Security devices for SYSTEM installations
- Installation of ITS device poles and structural supports
- Installation and maintenance of roadside infrastructure including cabinets, conduit, and ground boxes
- Temporary Traffic Control (TTC)

The VENDOR shall keep a staff of the required levels to respond to all requirements of this CONTRACT at all times during the term of the CONTRACT. The VENDOR shall have the option to provide the same dedicated maintenance staff on-site full-time in the MOBILITY AUTHORITY'S designated location(s). The VENDOR shall develop a staffing plan indicating how absences and vacations will be covered, and the expected activities of each proposed staff member. The VENDOR shall provide suitable replacement staff during vacations or sick periods of primary staff.

The MOBILITY AUTHORITY will conduct VENDOR performance reviews on an annual basis. When deficiencies are identified with VENDOR employees assigned to the CONTRACT, the VENDOR will immediately implement remedial action. Remedial actions may include further training of the employee, subdivision or reassignment of the employee, addition of staff, and removal of the employee from the CONTRACT. All VENDOR employees working on this CONTRACT are understood to be working under the direction and at the will of the MOBILITY AUTHORITY Project Manager.

1.5.3 Maintenance Staff Location and Availability

VENDOR staff whose primary function is performing work associated with this CONTRACT shall be located within the geographic coverage area designated by the MOBILITY AUTHORITY. The VENDOR may supply additional skilled staff from other locations, as requested by the MOBILITY AUTHORITY. The MOBILITY AUTHORITY may provide workspace at MOBILITY AUTHORITY locations within the geographic coverage area at no cost, at the direct discretion of the MOBILITY AUTHORITY. The VENDOR must coordinate staff locations and schedules with the MOBILITY AUTHORITY'S Project Manager and provide updates within five (5) business days, as necessary.

1.5.4 Vendor Facilities

The VENDOR shall provide a facility in order to maintain and store the MOBILITY AUTHORITY'S SYSTEM equipment or spare parts, in a location approved by the MOBILITY AUTHORITY. The facility must be located within thirty (30) miles of the TIMC located at 104 N Lynnwood Trail, Cedar Park, TX 78613. This location shall be marked specifically for this CONTRACT and shall not be used for any other purposes, unless otherwise approved by the MOBILITY AUTHORITY. This location will be temperature and humidity controlled, provide restricted access (log in/out of personnel), require logging in and out of parts and equipment by an individual, and be separate

from any other general use warehouse area(s). A copy of the checkout procedures and security system is required to be presented to the MOBILITY AUTHORITY for approval.

1.5.5 Position Descriptions

The VENDOR-provided key personnel roles are listed below and shall collectively have the areas of expertise mentioned above in **Section 1.5.2 – Staffing Requirements**. The final quantities of each position shall be determined during the CONTRACT negotiations and agreed upon by the VENDOR and the MOBILITY AUTHORITY. The VENDOR and/or MOBILITY AUTHORITY shall have the ability to add staff that is not defined herein, at any time under the term of this CONTRACT, as requested by the project requirement and staffing needs change.

The VENDOR must provide resumes for all key personnel proposed for this CONTRACT as part of the proposal package. Any changes to the key personnel identified in the proposal package submitted by the VENDOR shall be subject to review and approval by the MOBILITY AUTHORITY in writing before any billable services are authorized. Requests to add or change staff must be accompanied with accurate and current resumes for proposed individuals, including information on their licenses and certifications as well as a description of their expected duties.

ITS Project Manager

The VENDOR shall designate an ITS Project Manager who shall respond to all authorizations for services to the SYSTEM under this CONTRACT. The VENDOR'S ITS Project Manager shall be responsible for all work necessary to provide for the general management, oversight, quality control, and administration of all CONTRACT activities and support personnel. The VENDOR'S ITS Project Manager ensures that the requirements of the CONTRACT are met on a daily basis at all times. The ITS Project Manager is responsible for ensuring that maintenance activities supporting the SYSTEM are in accordance with this CONTRACT, Standard Operating Procedures (SOP), protocols, and policies.

The responsibilities include, but are not limited to, the following:

- Provide oversight of all work performed under this CONTRACT
- Follow direction set by the MOBILITY AUTHORITY'S Project Manager
- Perform project-related assignments to include the planning, organizing, and developing of complicated tasks as assigned by the MOBILITY AUTHORITY
- Direct oversight of project professionals and staff
- Direct training and indoctrination of workers to improve performance and acquaint workers with CONTRACT requirements, policies, and procedures
- Recommend changes, review progress, and approve work products for the maintenance program
- Recommend ITS equipment specifications and assist in developing operating procedures for ITS devices
- Represent the MOBILITY AUTHORITY in meetings for design and/or construction phases of projects, utility coordination, and others as directed

- Requisition tools, spare parts, equipment, and supplies required for maintenance operations
- Train assigned staff in proper work methods and techniques and in the set up and use of equipment
- Monitor allocated budget for spare parts and supplies and manage spare parts consumption and usage to ensure that budget levels are met
- Track project budget, inventory, and tasks assigned, and provide monthly updates, status of work, and cost summaries
- Prepare and submit monthly invoices, progress reports, and other documents within ten (10) business days of each month's end
- Provide sufficient staff and resources for all tasks and activities throughout the duration of the CONTRACT
- Ensure that maintenance staff have the required qualifications and background check documentation before being employed by the VENDOR
- Meet on a bi-weekly basis with the MOBILITY AUTHORITY'S Project Manager to review and discuss tasks completed during the previous week, task assignments for the current week, and two-week "look ahead" schedule
- Provide summary minutes within one (1) week after each meeting for review and approval by the MOBILITY AUTHORITY
- Coordinate activities of workers repairing, upgrading, modifying, or installing equipment or systems in order to improve existing equipment
- Interact with the MOBILITY AUTHORITY management, operations personnel, staff, and consultants to review issues pertaining to equipment or systems performance and status
- Perform other tasks as assigned by the MOBILITY AUTHORITY

Coordinator/Administrative Assistant

The Coordinator/Administrative Assistant position is responsible for supporting the VENDOR'S maintenance staff and MOBILITY AUTHORITY'S Project Manager on day-to-day business matters regarding maintenance services and utility locate coordination. The Coordinator/Administrative Assistant shall possess, but not be limited to, the following qualifications:

- Supplies administrative support services to the maintenance staff and assumes the role as an administrative liaison with internal and/or external sources
- Performs routine office or clerical support tasks according to well-established procedures. Examples of work performed may include scheduling of meetings; coordination between stakeholders; recording meeting minutes; establishing meeting agendas; control and organization of documentation; quality control and assurance; photocopying, filing, posting, or proofing data; or answering telephone calls
- Work performed may also include composing routine correspondence, preparing routine reports, scheduling appointments, screening and directing incoming calls, providing information, maintaining files, or transcribing dictation

- Prepares documents using Microsoft® applications; formats, proofs, edits for errors
- Assists ITS Project Manager on the data entry of the IMS
- Monitoring of scheduling, field activities, and all other deadlines and requirements of this CONTRACT
- Performs other tasks as assigned by the MOBILITY AUTHORITY

Technical Design Lead

The position will be responsible for representing the interests of the MOBILITY AUTHORITY for technical matters related to the SYSTEM, including the review and development of technical engineering and design documents. This individual shall be a subject-matter expert with related project experience in the design, installation, integration, testing, and maintenance of field devices, networking equipment, electrical systems, and associated infrastructure. The Technical Design Lead may be required to represent the MOBILITY AUTHORITY in meetings for ongoing or future construction projects, including on-site meetings, as necessary. This role shall be capable of developing technical design documents, including but not limited to, construction plans, technical specifications, as-built drawings, schematics, installation and maintenance documentation, testing plans, and Systems Engineering documents.

The responsibilities and duties may include, but are not limited to, the following:

- Represents the MOBILITY AUTHORITY in design, construction, integration, testing, utility, and other technical focused meetings
- Reads diagrams, plan sets, manuals, and specifications for new installations and continued maintenance of SYSTEM devices; makes corrections to schematics and plan sets, as necessary
- Designs elements of the SYSTEM, including field devices, networking equipment, electrical systems, and associated infrastructure and provides experience in the design and deployment of fiber optic and wireless communication technology, CCTV cameras, Dynamic Message Signs (DMS), Wrong Way Vehicle Detection Systems (WWVDS), and vehicle detection sensor technology
- Develops technical documents, including but not limited to Systems Engineering, technical specifications, construction plans, as-built drawings, installation schematics, testing plans, design standards, minimum technical requirements
- Performs technical plans and document reviews on behalf of the MOBILITY AUTHORITY
- Updates existing conditions information as SYSTEM
- Documents work performed on all SYSTEM devices, including real-time updates to the IMS
- Evaluates new technology and introduces creative solutions for the SYSTEM
- Interacts with the MOBILITY AUTHORITY management, operations personnel, staff, and consultants to review issues pertaining to equipment or systems performance and status

ITS Maintenance Technician(s)

The ITS Maintenance Technician shall be responsible for installing, maintaining, and repairing ITS devices; assisting in the ITS design review and the development of SOP; and performing a variety of technical tasks related to their assigned area of responsibility. The ITS Maintenance Technician shall receive general supervision from the VENDOR'S ITS Project Manager and MOBILITY AUTHORITY'S Project Manager. The technician shall document all work performed on all site conditions and daily activities.

The responsibilities and duties may include, but are not limited to, the following:

- Installs and maintains a wide variety of SYSTEM devices
- Troubleshoots malfunctions; isolates defects and repairs devices and equipment using above ground equipment on high-speed, high-volume roads and freeways
- Verifies proper device and system operation; conducts inspections and periodic preventive maintenance
- Monitors ITS device operation through the use of a laptop computer; uses SYSTEM software, both proprietary and nonproprietary; recommends and safely completes appropriate changes for effective SYSTEM operation
- Performs repair, removal, and replacement of poles, cabinets, controllers, and other equipment; repairs conduit and pull wires and cable, as needed; performs emergency repairs as needed
- Modifies or updates existing SYSTEM devices and equipment
- Reads diagrams, plan sets, manuals, and specifications for new installations and continual maintenance of SYSTEM devices; makes corrections to schematics and plan sets
- Performs field and bench testing procedures on a variety of SYSTEM equipment; tests, troubleshoots, and repairs SYSTEM equipment to component level of micro processing systems; maintains and services a variety of test and repair equipment
- Assists network administrator with repairs and connection of intercommunication cable and related equipment, as necessary
- Documents work performed on all SYSTEM devices and daily activities, including real-time updates to the IMS
- Performs other tasks as assigned by the MOBILITY AUTHORITY

Electrical Technician(s)

The Electrical Technician shall be responsible for installing, maintaining, and repairing electrical SYSTEM devices; assisting in SYSTEM design review and the development of SOPs; and performing a variety of technical tasks related to their assigned area of responsibility. The Electrical Technician shall receive general supervision from the VENDOR'S ITS Project Manager and MOBILITY AUTHORITY'S Project Manager. The Electrical Technician shall document and photograph the work performed on all site conditions and daily activities.

The responsibilities and duties may include, but are not limited to, the following:

- Directs and participates in a wide range of functional electrical tasks on SYSTEM components; isolates prime power malfunctions and coordinates repairs with power company; replaces power service points, as needed
- Performs field and bench testing procedures on a variety of SYSTEM and power equipment, such as UPS, automatic transfer switches, generators, load switches, power service assemblies, CCTV cameras, VDS, DMS, wireless communication facilities, WWVDS, RWIS, Connected Vehicle technology, and others; tests, troubleshoots, and repairs SYSTEM equipment to component level of micro-processing systems; maintains and services a variety of test and repair equipment
- Installs and maintains a wide variety of SYSTEM devices
- Troubleshoots malfunctions; isolates defects and repairs devices and equipment using a bucket truck on high-speed, high-volume roads and freeways; has exposure to electrical energy, high voltage, heat, cold, noise, dust, fumes, inclement weather conditions
- Verifies proper device and system operation; conducts inspections and periodic preventive maintenance
- Monitors SYSTEM device operation (e.g., UPS input/out) through the use of a laptop; uses sophisticated SYSTEM software, both proprietary and non-proprietary; recommends and safely completes appropriate changes for effective system operation
- Performs repair, removal, and replacement of poles, cabinets, controllers, and other equipment; repairs conduit and pulls wires and cable, as needed; performs emergency repairs as needed
- Reads diagrams, plan sets, manuals, and specifications for new installations and continual maintenance of SYSTEM devices; makes corrections to schematics and plan sets
- Documents work performed on all SYSTEM devices and daily activities, including real-time updates to the IMS
- Performs other tasks as assigned by the MOBILITY AUTHORITY

Utility Technician(s)

The Utility Technician shall be responsible for identifying the underground location, delineating, and marking on the ground of existing utilities, per requests from Texas811, the VENDOR'S ITS Project Manager, or MOBILITY AUTHORITY'S Project Manager. The utility locates shall include, but not be limited to, fiber optic communication backbone and drop cables, power cables, composite cables, UCV, and all ground boxes that constitute MOBILITY AUTHORITY owned underground utilities. The Utility Technician shall also meet with parties requesting utility locates as necessary in the field to supplement marking SYSTEM utilities. Whenever available, the Utility Technician shall assist with the installation, maintenance, and repair of SYSTEM devices. The Utility Technician shall be able to respond to emergency utility locate ticket(s) as requested by the VENDOR'S ITS Project Manager or the MOBILITY AUTHORITY'S Project

Manager. The Utility Technician shall document and photograph the work performed on all utility locating and daily activities.

Fiber Optic Technician(s)

The Fiber Technician shall be responsible for troubleshooting and repairing or replacing patch panels, fiber jumper cables, patch cables, splice enclosures, splice trays, splices, snowshoes, optics, terminations (e.g., pigtailed, buffer tube fan out kits), and any such items related to network and device connectivity.

Network Administrator

The Network Administrator shall be responsible for installing, configuring, maintaining, monitoring, diagnosing, troubleshooting, and repairing all networking equipment related to the SYSTEM; assisting in the design and modification of the MOBILITY AUTHORITY'S existing Layer 2/3 network; conducting technical design reviews for construction and maintenance projects; and performing a variety of technical tasks related to their assigned area of responsibility. The Network Administrator shall receive general supervision from the VENDOR'S ITS Project Manager and MOBILITY AUTHORITY'S Project Manager. The Network Administrator shall be responsible for maintaining a database of all pertinent configuration parameters for network equipment—including, but not limited to—IP addresses, default gateways, VLANs, port assignments, routing tables, and firewall rules. The Network Administrator shall also be responsible for all elements of the implementation and maintenance of the MOBILITY AUTHORITY'S cybersecurity features.

1.5.6 General Appearance and Conduct

VENDOR staff shall exercise good judgment in carrying out their duties and conduct themselves in such a manner that will reflect favorably upon the MOBILITY AUTHORITY. These requirements extend anywhere and anytime VENDOR staff represent the MOBILITY AUTHORITY, including in office buildings, on the roadside, and most importantly when travelling the roadways. MOBILITY AUTHORITY reserves the right to require removal of any VENDOR employee from this CONTRACT who cannot perform their duties to the satisfaction of the MOBILITY AUTHORITY or damages the reputation of the MOBILITY AUTHORITY and/or the VENDOR.

VENDOR staff shall be provided photo identification by the VENDOR and shall be able to present this identification at any time VENDOR staff are operating on MOBILITY AUTHORITY property.

1.5.7 Training

The VENDOR shall provide qualified instructors and all materials for training VENDOR staff in the maintenance, operation, and troubleshooting of equipment, hardware, software, and firmware for all SYSTEM devices. MOBILITY AUTHORITY staff may participate in training with

VENDOR staff. Training shall be conducted on an as-needed basis and shall consist of formal classroom lectures and online webinars, as well as “hands-on” training that consists of working with actual equipment and testing of SYSTEM devices and the entire SYSTEM.

1.5.8 Personnel Vetting

During the term of the CONTRACT, the VENDOR shall provide resumes of all proposed primary maintenance staff and all new hires along with certification or documentation of the following: drug test results, criminal background check, drivers’ licenses, and other information for approval prior to hiring.

1.5.8.1 Background Check

Each of the VENDOR’S staff assigned to service this CONTRACT and SYSTEM must pass a background check. The VENDOR shall provide the MOBILITY AUTHORITY’s Project Manager with proper documentation. It will be the responsibility of the VENDOR’S ITS Project Manager to ensure coordination of the background checks for the term of this CONTRACT.

The MOBILITY AUTHORITY reserves the right to reject any staff prior to being assigned duties.

1.5.8.2 Criminal Record Check

Individuals with felony conviction records shall not be hired. A criminal history record check shall be conducted by an approved MOBILITY AUTHORITY agency and shall be provided by the VENDOR to the MOBILITY AUTHORITY for each employee before hire. These criminal record checks shall go back as far as the employee’s birth. The VENDOR shall perform criminal checks annually for all VENDOR staff. Additionally, the MOBILITY AUTHORITY may elect to have VENDOR perform periodic criminal record checks on VENDOR staff.

1.5.8.3 Drug-Free Workplace Certification

The VENDOR shall provide proof, by a licensed medical practitioner or technician, that all VENDOR staff is drug-free in accordance with 37 Tex. Admin. Code 35.13, prior to beginning operations. The VENDOR shall submit the proof described above for staff every year thereafter.

1.6 CRITERIA FOR PERFORMANCE MEASURES AND EVALUATION

Throughout the term of the CONTRACT, the MOBILITY AUTHORITY will conduct reviews of various phases of the VENDOR’S operations to determine compliance with the CONTRACT and the sufficiency with which control procedures are applied to assure activities are in conformity with CONTRACT provisions and MOBILITY AUTHORITY procedures. Activities include staff performance and availability, system uptime, data management, and general performance measures.

Immediate remedial action is required for deficiencies to correct work that is not at the level of accepted performance. Failures to correct deficiencies shall result in assessment of liquidated damages.

1.6.1 Staff Performance

VENDOR staff performance will be reviewed with regard to work quality, professionalism, reliability, and punctuality, and other performance assessments consistent with MOBILITY AUTHORITY policy.

1.6.2 Availability

The VENDOR will be evaluated with respect to overall responsiveness to MOBILITY AUTHORITY requests. Response times longer than those agreed upon between the VENDOR and the MOBILITY AUTHORITY, or instances when the MOBILITY AUTHORITY is unable to reach the VENDOR to request services under this CONTRACT, will negatively impact evaluation of availability.

1.6.2.1 Staff Availability

VENDOR staff assigned to this CONTRACT will be evaluated with respect to availability of time, reliability, and prompt responsiveness.

1.6.2.2 System and Device Uptime

The VENDOR will be evaluated by the overall uptime of the SYSTEM—including field devices, equipment, and backend software—as CONTRACT performance indicators. The VENDOR will implement and maintain tools that collect and report SYSTEM availability—including SYSTEM device and overall SYSTEM uptime percentages. Tools and network access used to determine device and system availability must be coordinated with, and approved by, the MOBILITY AUTHORITY. Uptime percentages must be monitored and reported for the following:

1. Network devices (e.g., Layer 2/3 Ethernet switches, wireless communication devices)
2. CCTV cameras
3. Vehicle detection systems (e.g., RVSD, Bluetooth travel time reader)
4. DMS (e.g., full-matrix display, embedded single-line)
5. WWVDS
6. Connected Vehicle technology (e.g., RSU)
7. TIMC equipment (e.g., video wall, servers, operator workstation, central computer system)

Any field device or equipment within the SYSTEM shall be considered “down” if not 100-percent functional. The VENDOR shall be responsible for the operation and maintenance of a network monitoring system (NMS) software used to monitor and manage the SYSTEM communications network. The VENDOR shall configure the NMS to communicate with ITS field

network devices via simple network management protocol (SNMP), allowing field devices to be auto-discovered, monitored, and controlled. The NMS shall determine and display physical and logical connectivity in networks, as well as information pertaining to protocols running over the network. The VENDOR shall expand the NMS as the growth of the SYSTEM network warrants. The VENDOR shall utilize the NMS to run diagnostics of the SYSTEM and provide the report to the MOBILITY AUTHORITY within twenty-four (24) hours of being requested. The VENDOR shall provide remote access to the NMS software to the MOBILITY AUTHORITY, including MOBILITY AUTHORITY personnel and designated representatives.

The VENDOR shall be responsible for developing an availability report and submitting it for approval to the MOBILITY AUTHORITY. Availability reports using a tabular format with graphical charts that display historical device system availability carried forward for the duration of the CONTRACT are acceptable. Coordinate the final format of reports with the MOBILITY AUTHORITY. The VENDOR shall develop the report using data recorded in the NMS and in conjunction with information collected through TIMC operations and the MOBILITY AUTHORITY.

The report shall include the uptime of all field devices, networking equipment, subsystems, and systems, including but not limited to, CCTV cameras, network devices, vehicle detection systems, DMS, WWVDS, Connected Vehicle technology, and TIMC equipment. This information shall be included within a monthly report and an aggregated annual report documenting the total downtime and percentage available (e.g., 99.999 percent/year for each device), with a weighted average for the total equipment percentage reported submitted to the MOBILITY AUTHORITY. Downtime related to incidents or natural disasters shall be recorded separately from all other SYSTEM failures and will be excluded from the downtime percentages at the discretion of the MOBILITY AUTHORITY.

1.6.2.3 Response and Repair Times

The VENDOR will be evaluated by the overall responsiveness when notified of maintenance needs. Criteria for response and repair activities are defined in **Section 1.4.11.3 – Response Times**. The clock will begin at the time the VENDOR is notified of the maintenance need or identified issue.

1.6.2.4 General Performance Measures

General performance measures will be used to indicate how well the VENDOR is adhering to the submitted proposal for this CONTRACT. General performance measures include:

- Adherence to Proposed Staffing Levels – reporting of the number of working staff hours for the month versus the VENDOR’S proposed staffing hours
- Adherence to Operating Hours – reporting of the number of hours the SYSTEM was operational during the month versus the hours of operation established by the MOBILITY AUTHORITY, as well as the number of hours worked by the VENDOR’S

- assigned staff versus the hours of operation established by the MOBILITY AUTHORITY
- Other data as agreed to between the VENDOR and the MOBILITY AUTHORITY

1.7 SERVICES, MATERIALS PROVIDED BY THE MOBILITY AUTHORITY

As part of this CONTRACT, the following activities will be performed by the MOBILITY AUTHORITY, including contract management/payment, coordination, access to facilities, technical reviews, and providing existing documentation, including as-builts, studies, and reports, as necessary.

1.7.1 Contract Management

The MOBILITY AUTHORITY will assign a Project Manager to be responsible for coordination with the VENDOR and the direct management of personnel and tasked activities (e.g., Work Authorization) as required to perform work on behalf of the MOBILITY AUTHORITY under this CONTRACT.

1.7.2 Coordination

The MOBILITY AUTHORITY'S Project Manager will assist the VENDOR with coordination efforts for ongoing projects, maintenance activities, and with other stakeholders, as required to perform work on behalf of the MOBILITY AUTHORITY under this CONTRACT. This does not alleviate the VENDOR for being responsible for coordination efforts with third-party contractors, stakeholders, VENDOR personnel, and MOBILITY AUTHORITY staff.

1.7.3 Access to Facilities

The MOBILITY AUTHORITY will provide access to any and all MOBILITY AUTHORITY facilities and resources in accordance as necessary by the VENDOR and approved by the MOBILITY AUTHORITY. THE MOBILITY AUTHORITY reserves the right to reject any and all requests for facility access into MOBILITY AUTHORITY facilities made by the VENDOR. The VENDOR shall be responsible for strict adherence to all MOBILITY AUTHORITY policies and procedures while on the property and inside of MOBILITY AUTHORITY facilities.

1.7.4 Technical Reviews

The MOBILITY AUTHORITY will perform technical peer reviews for plans, schematics, bill of materials, product data sheets, reports, and other documentation submitted by the VENDOR as a deliverable. The MOBILITY AUTHORITY reserves the right to review and provide comments to the VENDOR to be addressed and revise the submittal, as appropriate, prior to approval. All deliverables from the VENDOR to the MOBILITY AUTHORITY require approval prior to notice to proceed on construction or closeout of the Work Authorization. The VENDOR is responsible for the documentation of all comments received, as well as recording VENDOR responses,

disposition (e.g., agree, disagree, more clarification needed), and status (e.g., complete, incomplete, address in future submittal) for each comment received. The MOBILITY AUTHORITY will perform reviews and provide feedback/comments within fifteen (15) days of the submittal unless an extension is otherwise requested by the MOBILITY AUTHORITY.

1.7.5 Existing Documentation

To the best of its abilities, the MOBILITY AUTHORITY will provide the VENDOR will all relevant documentation on the existing SYSTEM. This includes, but may not be limited to, as-built plan sets, existing conditions reports, bill of materials, asset inventory, studies, research findings, technical product data sheets, and more.

1.8 CONTRACT MONITORING, PROGRESS, REPORTING AND COORDINATION

The MOBILITY AUTHORITY will use VENDOR reports and periodic contact with the VENDOR to monitor the contract and VENDOR compliance with agreement terms and conditions, applicable laws, and regulations. Contract monitoring will also be used to verify that activities are being or have been performed in accordance with this agreement, that deliverables have been completed, that funds have been accounted for and used appropriately, and that the goals and objectives of this CONTRACT are being met by the VENDOR. The VENDOR is required to develop and maintain a two-week “look ahead” schedule to assist with coordination and monitoring of work performed under the CONTRACT. The VENDOR shall coordinate the format of the schedule and the frequency of updates with the MOBILITY AUTHORITY.

1.8.1 Status Reports

The VENDOR shall maintain complete and accurate records, in hard copy and electronic file formats acceptable to and approved by the MOBILITY AUTHORITY for all SYSTEM maintenance activities and any other events relating to the CONTRACT. All documentation shall be stored in a SharePoint site (or equivalent) accessible by both the VENDOR and MOBILITY AUTHORITY. The MOBILITY AUTHORITY may elect to save copies of files onto a local hard drive at its own discretion.

All project records and files (e.g., as-built drawings, bill of materials), as well as any equipment owned by the MOBILITY AUTHORITY shall be delivered to the MOBILITY AUTHORITY within thirty (30) calendar days prior to submittal of the final invoice by the VENDOR. Final payment shall not be rendered by the MOBILITY AUTHORITY until all of the conditions of the CONTRACT have been met.

The VENDOR shall keep a documented log of each and every device location. Preventive and routine maintenance, repair logs, parts replacement, special notes, recommendations, and equipment warranty records (if available) shall be included as part of the device log. Multiple device logs can be compiled into a single site log if multiple devices are at a single location. This

log shall be presented to the MOBILITY AUTHORITY by the final working day of each month and shall be in an Excel file format. The Excel document shall include sortable columns and must be in a format approved by the MOBILITY AUTHORITY.

Device records, at a minimum, shall include, but not be limited, to the following:

- Asset ID No. (MOBILITY AUTHORITY)
- Device location (corridor, milepost, and side of the road)
- Date and time of failure(s) or preventative maintenance visit
- Description of failure(s) or issue(s) and impacts
- Report of failure source
- Technician responding
- Arrival time at device location
- Site conditions noted (e.g., weather, accident, fire)
- Action(s) taken and result (e.g., successful, otherwise)
- Date and time of resolution
- Spare parts used – type, manufacturer, model, serial number
- Photo documentation
- Replaced parts – type, manufacturer, model, serial number
- Action for replaced parts (e.g., in-house repair, return to manufacturer, scrap); and
- General notes.

It shall be the VENDOR'S responsibility to maintain complete and accurate records of all work activities and all other events relating to this CONTRACT. Project records shall include, but not be limited to, such items as status reports, meeting notes, cost proposals, invoices, current and historical inventory records, locate tickets and reports, updated as-built plans, time sheets, technical product data sheets, and VENDOR'S staff records. Project files shall contain all correspondence to and from the VENDOR and subcontractors, consultants, manufacturers, equipment vendors, local, state, and federal agencies, etc., as related to this CONTRACT. These files shall also include all materials information obtained by or given to the VENDOR. All records shall be categorized and organized by date, activity, and subject. Paper documentation shall be scanned into an electronic format and become part of an electronic document repository for the CONTRACT.

The project files shall be established such that they can be delivered to the MOBILITY AUTHORITY within forty-eight (48) hours of request.

1.8.1.1 Monthly Report

The VENDOR shall prepare and submit a monthly status report describing all activities to the MOBILITY AUTHORITY'S Project Manager. The purpose of the monthly report is to provide a summary of all work performed by the VENDOR and the status of that work over one (1) month's period. The VENDOR shall supply a monthly report within ten (10) business days of each month's end following the monthly report period of the CONTRACT. This report shall

include all information collected during the reporting period; device availability information; preventive maintenance plan update and progress; and a work breakdown listing the technician, equipment utilized, and repair procedure for each occurrence of work. The monthly status reports shall commence at CONTRACT Notice to Proceed (NTP) and shall continue for the duration of the CONTRACT. This report shall include descriptions of all services performed and results of testing conducted during the report period. The report format shall be coordinated with the MOBILITY AUTHORITY for approval prior to the submittal of the first report. The report shall be a collection of events, data, calculations, decisions, instructions, notifications, circumstances, photographs, and work performed each day during the CONTRACT period. The monthly status report shall include, but not be limited to, the following information:

- Overall System Uptime (summary)
- Emergency Maintenance Repairs Performed (each)
 - Location
 - Date and time
 - Description of event, including digital photo documentation
 - Contributing factors, cause of issue
 - Arrival time
 - Departure time
 - Action(s) taken
 - Result and status, including digital photo documentation
 - Next steps, as appropriate
- Preventative Maintenance Performed (summary)
- Completed/ongoing projects and efforts (e.g., previous month)
- Upcoming projects and efforts (e.g., next month)
- Status of purchase orders
- Status of Action Items (from bi-weekly coordination meetings)
- Staffing changes
- General Comments

1.8.1.2 Annual Report

The VENDOR shall develop and submit an annual report to the MOBILITY AUTHORITY to provide a summary of all work performed by the VENDOR and the status of ongoing/upcoming work over a twelve-month period, recurring every March 31.

The VENDOR shall supply the annual report on the final MOBILITY AUTHORITY each year for the twelve-month period duration between April 1 and March 31, beginning at the start of the CONTRACT. This report shall include all information from the monthly reports for the previous year, as well as overall device and system uptime percentage information. This report shall also document and certify that all work has been completed in accordance with manufacturer's recommendations and the requirements of this CONTRACT. This report shall include an assessment by the VENDOR of equipment failures and their causes, such as design/construction

errors, aging, environmental problems (such as lightning/surge/power issues), etc., as well as maintenance recommendations for the upcoming twelve-month period.

1.8.2 Meetings

The VENDOR will be required to participate in bi-weekly status meetings relating to SYSTEM maintenance, ongoing project/effort status, and upcoming projects/efforts, as scheduled by the MOBILITY AUTHORITY or its representatives. The VENDOR shall ensure that key personnel is available and prepared for the bi-weekly status meetings. The VENDOR is required to provide meeting minutes within two (2) working days of each meeting, unless otherwise directed by the MOBILITY AUTHORITY. The MOBILITY AUTHORITY will be provided one (1) week to review and comment.

The VENDOR will be required to participate in monthly status meetings coordinated by the MOBILITY AUTHORITY with the Toll Systems Integrator (TSI). The VENDOR shall ensure that key personnel is available and prepared for the monthly status meetings.

The MOBILITY AUTHORITY reserves the right to schedule additional as-needed meetings involving the VENDOR, including, but not limited to, design coordination, construction status, vendor presentations, in-house staffing meetings, stakeholder coordination, and budget planning meetings.

1.8.3 Transition Plan

The VENDOR shall be responsible for developing a Transition Plan and submitting it for approval to the MOBILITY AUTHORITY within thirty (30) days after the CONTRACT execution date. The Transition Plan shall detail how the VENDOR will work with the current service provider to ensure a seamless transfer of maintenance services and to ensure continuous (24 X 7 X 365) system operation and functionality of all components of the SYSTEM. The transition period will occur from the time of this CONTRACT execution until the time the previous contract expires, unless otherwise directed by the MOBILITY AUTHORITY.

1.8.4 Project Management Plan

The VENDOR shall be responsible for creating the Project Management Plan (PMP) and submitting it for review and approval by MOBILITY AUTHORITY within thirty (30) days after the CONTRACT Notice to Proceed (NTP). The Project Management Plan shall include, but not be limited to, the VENDOR'S staffing plan, hiring plan, tiered staff support plan, emergency response plan, vehicle and equipment maintenance plan, training and certification plan, communication protocols with MOBILITY AUTHORITY personnel, and any other items necessary to identify how the VENDOR intends on executing the CONTRACT.

1.8.5 Preventative Maintenance Activities Plan

The VENDOR shall be responsible for creating a Preventative Maintenance Activities Plan (PMAP) and submitting for review and approval by MOBILITY AUTHORITY within sixty (60) days after the CONTRACT Notice to Proceed (NTP). The Preventative Maintenance Activities Plan shall be a living document that details the evaluation criteria, procedures, and timelines for performing preventative maintenance on the SYSTEM components. The PMAP shall establish standard operating guidelines (SOP) and procedures for maintenance responsibilities, detail typical maintenance activities per device and equipment, identify intercommunication protocols, identify roles and responsibilities, and create an atmosphere conducive to teamwork, accuracy, consistency, and professionalism. At a minimum, the PMAP will be reviewed once a year, and recommended updates must be submitted to the MOBILITY AUTHORITY for review and approval. The VENDOR may be requested to revise this document earlier at the discretion of the MOBILITY AUTHORITY. Please refer to Section 3.10 for additional details on the minimum requirements for scheduled and preventative maintenance.

1.9 SUBMITTALS / DELIVERABLES

The executed Work Authorization (WA) will serve as official Notice to Proceed (NTP) for any and all work authorized and performed under this contract. The VENDOR will be required to provide the following submittals based on the work outlined in the WA.

1.9.1 Estimates

The VENDOR shall provide all cost estimates related to performing the work identified in the WA, including purchasing devices, equipment, and software; man-hours; rental equipment; and more. The VENDOR must receive MOBILITY AUTHORITY approval of the submitted estimate request prior to receiving begin work.

1.9.2 Equipment Submittal

The VENDOR shall provide detailed technical data sheets and unit costs for equipment to be purchased to complete the work identified in the WA. The VENDOR must receive MOBILITY AUTHORITY approval of the submitted equipment prior to ordering and purchasing.

1.9.3 Maintenance Documentation

The VENDOR shall develop and submit all documentation for maintenance efforts performed, including preventative and emergency as defined in the CONTRACT.

1.9.3.1 Maintenance Checklists

Preventative Maintenance Checklists will be submitted for approval by the MOBILITY AUTHORITY within thirty (30) days of Notice to Proceed (NTP). Completed checklists will be

maintained by the VENDOR and subject to review at the request of the MOBILITY AUTHORITY at any time.

1.9.3.2 Equipment Maintenance Logs

The VENDOR shall log all maintenance activities performed for repair and emergency maintenance efforts. Completed logs will be maintained by the VENDOR and included as part of the monthly and annual status reports and subject to review at the request of the MOBILITY AUTHORITY at any time.

1.9.4 As-Built Plans

The VENDOR shall develop as-built plans for all new and/or revised infrastructure, field devices, and equipment removed, replaced, modified, or installed under this CONTRACT. The VENDOR shall submit final as-built plans to the MOBILITY AUTHORITY within thirty (30) days of completing the work. The VENDOR shall be responsible for keeping the latest version of the as-built plans for the duration of the CONTRACT.

1.9.5 Status Reports

The VENDOR shall develop and submit monthly and annual status reports to the MOBILITY AUTHORITY for review and approval as defined in the CONTRACT.

1.10 PREVENTATIVE MAINTENANCE MINIMUM REQUIREMENTS

1.10.1 General

The following section details the minimum requirements expected by the MOBILITY AUTHORITY for scheduled and preventative maintenance activities only. These minimum requirements do not account for non-scheduled maintenance, minor repairs, diagnostics and troubleshooting, or any other services which are also compensated by the monthly Maintenance Service Unit Price. Maintenance procedures must fall within manufacturer recommendations and must not void equipment warranty.

1.10.2 Minimum Requirements for Monthly Maintenance

ITS Field Equipment Maintenance Minimum Requirements

CCTV Camera, Pan-Tilt-Zoom (PTZ) and Fixed – preventative maintenance of a CCTV camera includes, but is not limited to, the camera assembly and associated infrastructure located external to the device’s cabinet or enclosure. The camera assembly includes the lens, housing and all internal components, mounting hardware, communication and power cabling, air terminals and grounding array, power supplies, PoE injectors, and any other in-cabinet

ITS Field Equipment Maintenance Minimum Requirements

equipment exclusive to the CCTV assembly. Associated infrastructure includes any non-structural infrastructure related to the camera system including any ground boxes and conduit containing camera communication and/or power cabling.

The following scheduled maintenance for CCTV cameras shall occur a minimum of **1 time per year**. At a minimum maintenance must include (pursuant to manufacturer recommendations):

- Assessing structural integrity and alignment of the camera assembly
- Inspecting camera assembly for physical damage and degraded conditions (e.g., cracks, rust, loose connections)
- Operational maintenance of mechanical components, including removal of sediment and lubrication of pan-tilt-zoom (PTZ) tracking components
- Physical opening and cleaning of any aerially mounted junction boxes (if applicable)
- Physically testing and inspecting grounding system(s), surge protective devices, PoE injectors, connections, cable assemblies, and other related hardware. Inspecting cabling for kinks, damage to outer jacket, and other irregularities
- Physically opening ground boxes to remove dirt, debris, vegetation, and standing water; cleaning bolt holes and threads; Replace missing or damaged bolts, as necessary; Inspecting condition of ground box lids and replacing, as necessary. Inspecting cabling for kinks, damage to outer jacket, and other irregularities
- Providing weed, grass, and erosion control around devices, above-ground conduit, ground boxes, etc.

The following scheduled maintenance for CCTV cameras shall occur a minimum of **4 times per year**. At a minimum maintenance must include (pursuant to manufacturer recommendations):

- Cleaning of housing and lens, including application of rain repellent to the lens and video feed quality verification

Radar Vehicle Sensing Device (RVSD) – preventative maintenance of a RVSD includes, but is not limited to, the RVSD assembly and associated infrastructure located external to the device’s cabinet or enclosure. The RVSD assembly includes the device, mounting assembly, communication and power cabling, grounding array, wireless communication device(s) (if applicable), power supplies, media converters, and any other in-cabinet equipment exclusive to the RVSD assembly. Associated infrastructure includes any non-structural infrastructure related to the RVSD system including ground boxes and conduit containing RVSD communication and/or power cabling. If the RVSD is mounted to a device pole without a cabinet, the device pole shall be considered as associated infrastructure.

Scheduled maintenance for RVSDs shall occur a minimum of **1 time per year**. At a minimum maintenance must include (pursuant to manufacturer recommendations):

ITS Field Equipment Maintenance Minimum Requirements

- Validating operation and physical positioning of RVSD to collect accurate vehicle detection data on a per lane basis; adjusting as necessary
- Assessing structural integrity and alignment of the RVSD assembly and device pole (if applicable)
- Inspecting RVSD assembly for physical damage and degraded conditions (e.g., cracks, rust, loose connections)
- Cleaning of the device housing
- Physically opening and cleaning of any aerially mounted junction boxes (if applicable)
- Physically testing and inspecting grounding system(s), surge protective devices, media converters, connections, cable assemblies, and other related hardware. Inspecting cabling for kinks, damage to outer jacket, and other irregularities
- Physically opening ground boxes to remove dirt, debris, vegetation, and standing water; cleaning bolt holes and threads; Replace missing or damaged bolts, as necessary; Inspecting condition of ground box lids and replacing, as necessary. Inspecting cabling for kinks, damage to outer jacket, and other irregularities
- Providing weed, grass, and erosion control around devices, above-ground conduit, ground boxes, poles, etc.

Dynamic Message Sign (DMS) – preventative maintenance of a DMS includes, but is not limited to, the sign assembly and associated infrastructure located external to the device’s cabinet or enclosure. The sign assembly includes the housing, LED modules, internal electronics and all miscellaneous hardware within the sign, power supplies, and any mounting connections to the sign structure. Infrastructure associated with the DMS includes the sign structure, foundation, cabling providing power and/or communications¹, and ground boxes and conduit containing DMS cabling.

The following scheduled maintenance for DMS shall occur a minimum of **1 time per year**. At a minimum maintenance must include (pursuant to manufacturer recommendations):

- Inspecting the field controller for proper operation (e.g., error codes, alarms), damage, and degraded conditions; performing diagnostics as necessary
- Inspecting, testing, and cleaning fan blades, bearings, and air filters inside sign housing
- Visually inspecting equipment status LED modules, light fixtures, light bulbs, and all wiring for proper function, damage, and degraded conditions
- Inspecting the mounting structure for corrosion, loose bolts, and overall stability (e.g., rust, cracks, foundation or structure settling, off-plumb positioning)
- General cleaning inside sign housing including debris and dust removal
- Performing pest control as necessary, including placement of barriers to prevent rodent or insect entry
- Cleaning the external sign panel of dirt, dust, and debris

ITS Field Equipment Maintenance Minimum Requirements

- Physically opening and cleaning of any aerial mounted junction boxes (if applicable)
- Physically testing and inspecting of grounding system(s), surge protective devices, connections, and cable assemblies. Inspecting cabling for kinks, damage to outer jacket, and other irregularities
- Physically opening ground boxes to remove dirt, debris, vegetation, and standing water; cleaning bolt holes and threads; Replace missing or damaged bolts, as necessary; Inspecting condition of ground box lids and replacing, as necessary; Inspecting cabling for kinks, damage to outer jacket, and other irregularities¹
- Providing weed, grass, and erosion control around devices, above-ground conduit, ground boxes, poles, etc.

¹Includes communication cabling from the DMS to its termination point (i.e., fiber splice vault, patch panel, network switch) and power cabling from the DMS to its termination point (i.e., electrical service, toll facility breaker panel, ITS cabinet)

Wrong Way Vehicle Detection System (WWVDS) – preventative maintenance of a WWVDS includes, but is not limited to, the WWVDS assembly and associated infrastructure. The WWVDS assembly includes CCTV cameras, thermal cameras, “Wrong Way” signs, Retro-reflective Flashing Beacons (RRFB’s), device poles and foundations, mounting assemblies, pole-mounted cabinets and internal components, cabling, grounding array, wireless communication devices. Associated infrastructure includes cabling providing power and/or communications¹ and ground boxes and conduit containing WWVDS communication and/or power cabling.

The following scheduled maintenance for WWVDS shall occur a minimum of **1 time per year**. At a minimum maintenance must include (pursuant to manufacturer recommendations):

- Conducting a standard test procedure to test and document functionality of the detection system
- Testing wireless connectivity
- Assessing structural integrity and alignment of cameras, wireless communication devices, and mounting hardware
- Inspecting the structure for corrosion, loose bolts, and overall stability
- Physically testing and inspecting of grounding system(s), surge protective devices, connections, and cable assemblies. Inspecting cabling for kinks, damage to outer jacket, and other irregularities.
- Physically opening ground boxes to remove dirt, debris, vegetation, and standing water; cleaning bolt holes and threads; Replace missing or damaged bolts, as necessary; Inspecting condition of ground box lids and replacing, as necessary; Inspecting cabling for kinks, damage to outer jacket, and other irregularities¹
- Providing weed, grass, and erosion control around devices, above-ground conduit, ground boxes, poles, etc.

ITS Field Equipment Maintenance Minimum Requirements

- General cleaning, including debris and dust removal from equipment, cabinets enclosures, sign panels, Retro-reflective Flashing Beacons (RRFB's) and associated junction boxes; replacing of air filter(s); checking general operation of internal lights, fans, outlets, and other system components
- Checking cabinet door locks, opening mechanisms, and entry detection sensors, for proper function, damage, and degraded conditions (e.g., corrosion, wear and tear); lubricating locks and other mechanisms and replacing as necessary
- Physically testing and inspection of in-cabinet equipment, including the power array, media converters, power supplies, ethernet switches, patch panels, grounding system(s), surge protective devices, cable connections, and cable assemblies
- Visually inspecting devices, cabinets, enclosure exteriors, and checking for corrosion, punctures, graffiti, and vandalism
- Performing pest control as necessary, including placement of barriers to prevent rodent or insect entry.

The following scheduled maintenance for CCTV camera and thermal detection cameras within the WWVDS assembly shall occur a minimum of **4 times per year**. At a minimum maintenance must include (pursuant to manufacturer recommendations):

- Cleaning of housing and lens, including application of rain repellent to the lens and video feed quality verification

¹Includes communication cabling from the WWVDS cabinet to its termination point (i.e., fiber splice vault) and power cabling from the WWVDS cabinet to its termination point (i.e., electrical service)

Connected Vehicle to Everything (C-V2X) Roadside Unit (RSU) – preventative maintenance of a RSU includes, but is not limited to, the RSU assembly and associated infrastructure located external to the device's cabinet or enclosure. The RSU assembly includes the device, antennas, mounting assembly, communication/power cabling, grounding wires, power supplies, PoE injectors, and any other in-cabinet equipment exclusive to the RSU assembly. Associated infrastructure includes any non-structural infrastructure related to the RSU system including ground boxes and conduit containing RSU communication and/or power cabling.

Scheduled maintenance for RSUs shall occur a minimum of **1 time per year**. At a minimum maintenance must include (pursuant to manufacturer recommendations):

- Validating RSU broadcasts, including verification of all enabled TIM messages, CV applications, MAP messages, etc.; adjusting as necessary
- Checking RSU assembly for structural integrity and alignment
- Cleaning of the device housing and antennas to remove dust and dirt
- Physically opening and cleaning any junction boxes (if applicable)

ITS Field Equipment Maintenance Minimum Requirements

- Physically testing and inspecting grounding system(s), surge protective devices, PoE injectors, connections, cable assemblies, and other related hardware. Inspecting cabling for kinks, damage to outer jacket, and other irregularities
- Physically opening ground boxes to remove dirt, debris, vegetation, and standing water; cleaning bolt holes and threads; Inspecting condition of ground box lids and replace as necessary; Inspecting cabling for kinks, damage to outer jacket, and other irregularities.
- Providing weed, grass, and erosion control around devices, above-ground conduit, ground boxes, poles, etc.

ITS Cabinets – preventative maintenance of ITS cabinets¹ includes, but is not limited to, the cabinet and infrastructure associated with the cabinet. The ITS cabinet includes the shell, opening mechanisms, and assembly located within (e.g., power array, ethernet switches, patch panels). Infrastructure associated with the ITS cabinet includes above-ground conduit, junction boxes, cabling providing power and/or communications², any ground boxes or conduit containing cabinet communication and/or power cabling, mounting assembly, and the pole structure and foundation the cabinet is mounted to, provided it is not a sign structure or tolling gantry. In cabinets, enclosures, or buildings where the co-location of tolling and ITS equipment exists, preventative maintenance on the cabinet and associated infrastructure shall be the responsibility of the Toll Systems Integrator.

The following scheduled maintenance for ITS cabinets shall occur a minimum of **1 time per year**. At a minimum maintenance must include (pursuant to manufacturer recommendations):

- General cleaning including debris and dust removal from equipment, cabinets, enclosures, and associated junction boxes; replacing of air filter(s); checking general operation of internal lights, fans, outlets, and other system components
- Checking cabinet door locks, opening mechanisms, and entry detection sensors, for proper function, damage, and degraded conditions (e.g., corrosion, wear and tear); lubricating locks and other mechanisms and replacing as necessary
- Physically testing and inspecting in-cabinet equipment, including the power array, power supplies, ethernet switches, patch panels, grounding system(s), surge protective devices, cable connections, and cable assemblies
- Physically opening ground boxes to remove dirt, debris, vegetation, and standing water; cleaning bolt holes and threads; Replace missing or damaged bolts, as necessary; Inspecting condition of ground box lids and replacing, as necessary; Inspecting cabling for kinks, damage to outer jacket, and other irregularities
- Providing weed, grass, and erosion control around devices, above-ground conduit, ground boxes, poles, etc.

ITS Field Equipment Maintenance Minimum Requirements

- Checking mounting hardware and poles for structural integrity and alignment
- Visually inspecting devices, cabinets, enclosure exteriors, and checking for corrosion, punctures, graffiti, and vandalism
- Performing pest control as necessary, including placement of barriers to prevent rodent or insect entry

¹ Does not include WWVDS cabinets which shall be maintained as a part of the WWVDS System.

² Includes communication cabling from the ITS cabinet to its termination point (i.e., fiber splice vault, patch panel, network switch) and power cabling from the ITS cabinet to its termination point (i.e., electrical service, toll facility breaker panel)

Underground Cable Vault (UCV) – preventative maintenance of an UCV includes inspecting and providing maintenance to the entire UCV structure, including, but not limited to, the steel lid and its hinges, opening mechanism (if applicable), concrete apron, vault side-walls, conduit entry ports, cable rack system, and vault floor drain.

Scheduled maintenance for UCVs shall occur a minimum of **1 time per year**. At a minimum maintenance must include (pursuant to manufacturer recommendations):

- Physically opening UCV to remove dirt, debris, vegetation, and standing water
- Physically clearing the vault floor drain of all obstruction or potential obstruction (e.g., dirt, debris, mud)
- Lubricating the lid hinges and opening mechanism(s); Replacing as necessary
- Physically Inspecting UCV conditions for proper function, damage, and degraded conditions (e.g., corrosion, wear and tear), and replacing parts as necessary (e.g., duct terminators/caps in the conduit entry ports, cable rack system, concrete apron)
- Rearranging cables to utilize the cable rack system and prevent potential damage
- Physically testing and inspecting grounding system(s) to ensure steel lid is properly grounded
- Providing weed, grass, and erosion control around UCV apron, including filling in any missing earth material around and underneath the concrete apron
- Performing pest control as necessary

Electrical Service – preventative maintenance of electrical services includes the service assembly and infrastructure associated with the service assembly. The service assembly includes the pole, enclosure, all hardware within the enclosure, power meter, safety switch, mounting assembly, pole structure, and its foundation.

The following scheduled maintenance for electrical services shall occur a minimum of **1 time per year**. At a minimum maintenance must include (pursuant to the local utility company recommendations):

ITS Field Equipment Maintenance Minimum Requirements

- General cleaning, including debris and dust removal from within the enclosure and wiping of the external surface and panel labels. Replacing labels as necessary
- Checking enclosure locks and opening mechanisms, for proper function, damage, and degraded conditions (e.g., corrosion, wear and tear); lubricating locks and other mechanisms and replacing as necessary
- Physically testing and inspecting grounding system(s), disconnect, and safety switch(es) for proper function, exposed electrified wires, damage, and degraded conditions (e.g., corrosion, wear and tear)
- Providing weed, grass control, and around service pole, above-ground conduit, ground boxes, etc.

APPENDIX B
Form of Work Authorization

WORK AUTHORIZATION NO. ____

This Work Authorization is made as of this ____ day of _____, 202_, under the terms and conditions established in the AGREEMENT FOR INTELLIGENT TRANSPORTATION SYSTEM PERFORMANCE-BASED MAINTENANCE SERVICES, dated as of _____, 2023 (the “Agreement”), between the Central Texas Regional Mobility Authority (the “Authority”) and Kapsch TrafficCom USA, Inc. (“Contractor”). This Work Authorization is made for the following purpose, consistent with the services defined in the Agreement:

[Brief description of the Project elements to which this Work Authorization applies]

Section A. - Scope of Services

A.1. Contractor shall perform the following Services:

[Enter description of the Scope of Services here for which this Work Authorization applies, or make reference to an attached Appendix]

A.2. The following Services are not included in this Work Authorization but shall be provided as Additional Services if authorized or confirmed in writing by the Authority.
[optional]

A.3. In conjunction with the performance of the foregoing Services, Contractor shall provide the following submittals/deliverables (Documents) to the Authority:

Section B. - Schedule

This Work Authorization shall become effective on the date both parties have signed this Work Authorization No. ___. This Work Authorization No. ___ will terminate upon the Authority's final acceptance of the work described herein as determined by the Authority.

Contractor shall perform the Services and deliver the related Documents (if any) according to the following schedule:

[Insert description of proposed project schedule.]

Section C. - Compensation

C.1. In return for the performance of the foregoing obligations, the Authority shall pay to the Contractor the amount not to exceed \$ _____, based on the attached fee estimate. Compensation shall be in accordance with the Agreement.

C.2. Compensation for Additional Services (if any) shall be paid by the Authority to the Contractor according to the terms of a future Work Authorization.

Section D. - Authority's Responsibilities

The Authority shall perform and/or provide the following in a timely manner so as not to delay the Services of the Contractor. Unless otherwise provided in this Work Authorization, the Authority shall bear all costs incident to compliance with the following:

[Insert Authority's responsibilities, if any.]

Section E. - Other Provisions

The parties agree to the following provisions with respect to this specific Work Authorization:

Except to the extent expressly modified herein, all terms and conditions of the Agreement shall continue in full force and effect.

IN WITNESS WHEREOF, this Work Authorization No. [] is executed in duplicate counterparts and hereby accepted and acknowledged below.

CTRMA DIVISION DIRECTOR (*Requesting Work Authorization*)

Signature

Date

Typed/Printed Name and Title

CTRMA LEGAL (*Noting Legal Sufficiency*)

Signature

Date

Typed/Printed Name and Title

CTRMA FINANCE (*Noting Funds Availability*)

Signature

Date

Typed/Printed Name and Title

THE CONTRACTOR (Kapsch TrafficCom USA, Inc)

Signature

Date

Typed/Printed Name and Title

CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY

Executed for and approved by the Central Texas Regional Mobility Authority for the purpose and effect of activating and/or carrying out the orders, established policies or work programs heretofore approved and authorized by the Texas Transportation Commission.

Signature

Date

Typed/Printed Name and Title

APPENDIX C
ITS Equipment Prices

APPENDIX D
Maintenance Services Unit Prices

APPENDIX E
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Service Level Agreements

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1. SERVICE LEVEL AGREEMENTS (SLA)

1.1 GENERAL PROVISIONS

The VENDOR shall meet defined levels of performance in the execution of the Scope of Work. **Appendix A – Scope of Work** describes the minimum performance requirements the VENDOR must meet. The VENDOR is responsible for demonstrating that the performance requirements described herein can be met or exceeded for all maintenance and installation activities before Final Acceptance. The measurement of these Service Level Agreements (SLA) shall be automated where possible and shall be straightforward and data-driven, as agreed to by the VENDOR and the MOBILITY AUTHORITY. The MOBILITY AUTHORITY, at their sole discretion, will periodically audit reports SLA results.

The VENDOR shall develop reports that compare actual, field-verified results to the requirements defined in this appendix and shall submit these reports to the MOBILITY AUTHORITY within ten (10) business days of each month's end. The VENDOR shall maintain all corresponding data in compliance with MOBILITY AUTHORITY Data Retention policies, and the data shall be made available to the MOBILITY AUTHORITY upon request. The methods and results of the measurement process shall be fully subject to independent audit and the results shall be utilized by the VENDOR to take corrective action to correct any deficiencies and failures to meet the required availability, accuracy, and performance requirements. The VENDOR shall be subject to liquidated damages as described in the SLA Table for failure to provide the required reports within the specified timeframe, or if reports are not accurate or complete.

Actual performance shall be defined and measured against the requirements and time periods in the SLA Table to assess the availability, accuracy, and performance of the delivered system. This appendix addresses these requirements for the following levels of service:

1. Accuracy
2. Availability
3. System Performance
4. Maintenance (response / repair timing)

The following sections provide general conditions that apply to the SLAs described herein. Should a specific SLA section define terms or conditions which appear contrary to these general provisions, the terms or conditions within the specific SLA section take precedence.

1.2 KEY PERFORMANCE REQUIREMENTS

1.2.1 Availability Requirements

The availability requirements, as specified in the SLA Table, shall be measured during monthly operations testing. The availability requirements will not include approved scheduled preventative maintenance activities.

For existing field devices, subsystems, and systems, the availability requirements shall begin immediately following the execution of this Contract (START DATE) as part of the maintenance phase. For newly installed systems, these requirements shall begin at the start of the warranty phase. The warranty phase shall conclude twelve (12) months after successful completion of Final Acceptance. Once the MOBILITY AUTHORITY has provided Final Acceptance and upon expiration of the warranty phase, the appropriate field device, subsystem, and system will transition in the maintenance period. The monthly warranty or maintenance fee, as applicable, shall be subject to the monthly assessment of availability and reliability measurements, as well as other criteria outlined in the SLA Table, and applicable damages for failure to meet such criteria.

1.2.2 Performance Reviews

The MOBILITY AUTHORITY will review the VENDOR's performance monthly using required system reports developed by the VENDOR in a format with content approved by the MOBILITY AUTHORITY. Performance reviews shall begin one (1) month following the execution of this Contract (START DATE) or one (1) month after the commencement of the warranty phase and shall include evaluation of the previous month of operation. The MOBILITY AUTHORITY may elect to waive or impose damages during the first four (4) months of the warranty phase for new installations.

The availability calculation will not include downtime during any period when the MOBILITY AUTHORITY does not allow the VENDOR to close a lane or otherwise work along the roadway, unless such failure to approve is the result of the VENDOR not following the MOBILITY AUTHORITY procedures in making the request.

1.2.3 Chargeable vs. Non-Chargeable Failures

For purposes of calculating availability performance requirements for testing and maintenance, performance chargeable and non-chargeable failures are defined as follows:

1.2.3.1 Chargeable Failures

Chargeable failures include any failures that are not specifically identified as non-chargeable in **Section 1.2.3.2 – Non-Chargeable Failures**, including but not limited to:

1. Malfunction that prevents Intelligent Transportation System (ITS) field devices, subsystems, or systems whether hardware or software from performing their designated function, when used and operated under the intended operational and environmental conditions
2. Malfunction that poses a threat to the safety of the general motoring public, maintenance personnel, employees, other roadway users, or the functionality of existing MOBILITY AUTHORITY systems (e.g., ITS, electronic toll collection systems)
3. Occurrence where data is not successfully transmitted between the field devices and the associated subsystems and systems unless the failure is already accounted for as a separate performance failure. For example, if video streams from a CCTV camera are not reaching the video wall within the Traffic Incident Management Center (TIMC) due to a physical fiber cut on the roadside, the failure would be charged to the fiber cut, but the camera would not be cited as a failure
4. Any failure of equipment or software—including ransomware, bugs—that result in failure of revenue-generating systems for the MOBILITY AUTHORITY (e.g., electronic toll collection systems)
5. Shutdown or unavailability of field devices, subsystems, or systems, unless otherwise specifically directed
6. Failure to properly record and transmit accurate data (e.g., vehicle data) from field devices to various associated subsystems and systems
7. Loss of data including failure to meet data retention requirements
8. Failure to generate the reports required to reconcile and audit the overall system and performance

1.2.3.2 Non-Chargeable Failures

Non-chargeable failures include events that fall outside of the direct control of the VENDOR, including but not limited to:

1. Force majeure event, as defined in the Contract
2. Vandalism
3. System component failures caused by environmental or operating conditions outside the design standards of the equipment
4. Customer or user induced failures

1.2.4 Accuracy Requirements

Accuracy requirements are specified in the SLA Table.

1.2.5 Time Constraint Requirements

Time constraint requirements are specific in the SLA Table.

1.2.6 Maintenance Service Level Requirements

The VENDOR shall provide sufficient personnel, tools, and other necessary resources to meet the service level requirements defined in the SLA Table.

1.2.6.1 Maintenance Support Requirements

Response times shall be measured from the time the overall system generates a fault/alert, the VENDOR is notified an event requiring maintenance or a failure event has occurred, or a maintenance ticket has been generated, and end when the VENDOR acknowledges the alert, ticket, and/or event via an approved communication method approved by the MOBILITY AUTHORITY.

Repair times shall be measured from the time the VENDOR acknowledges the maintenance ticket for the event and ends when the failure condition is corrected, and the system is returned to regular operation. If access to the equipment in question or associated equipment necessary to complete the repair is denied by the MOBILITY AUTHORITY, the repair time shall be measured beginning when the VENDOR is permitted to access the relevant equipment.

Both the response time and the repair time shall be registered in the maintenance ticketing systems provided by the VENDOR with access provided to the MOBILITY AUTHORITY upon request. Failure to meet the required response and repair times shall be monitored through performance reports provided by the VENDOR.

1.2.6.2 Scheduled Preventative Maintenance Activities Requirements

The VENDOR shall perform scheduled preventative maintenance activities per the provided maintenance schedule approved by the MOBILITY AUTHORITY.

1.2.6.3 Stop Clock Conditions

In specific circumstances, the VENDOR may be excused from its obligations to meet the performance and service level requirements set forth above under certain conditions agreed upon by the MOBILITY AUTHORITY, hereinafter referred to as STOP CLOCK CONDITIONS. Only the time during which these conditions are present shall be excluded from the timeframes used to measure the VENDOR's performance, as described below:

The VENDOR will exclude from the availability calculations the time arising from any of the following STOP CLOCK CONDITIONS:

1. Loss of connectivity to all of the MOBILITY AUTHORITY provisioned network and networking equipment if a third-party causes the loss of network connectivity, not under the direct or indirect control of the VENDOR and not reasonably preventable by the VENDOR, including, but not limited to, fiber optic cabling cuts not caused by the VENDOR. For purposes of this provision, the VENDOR's employees, subcontractors,

affiliates, subsidiaries, data service providers, agents, or suppliers shall be deemed to be under the control and responsibility of the VENDOR concerning equipment, services, or facilities to be provided under this Agreement.

2. The following MOBILITY AUTHORITY contact and/or access problems, provided that the VENDOR makes reasonable efforts to contact the MOBILITY AUTHORITY approved contacts immediately upon the commencement of the STOP CLOCK period:
 - a. Access necessary to correct the problem at a MOBILITY AUTHORITY owned site (e.g., TIMC) is not available because access is improperly denied or not arranged by the site contact or the MOBILITY AUTHORITY representative, provided that the VENDOR properly scheduled the visit or access beforehand, if advanced notice was required.
 - b. MOBILITY AUTHORITY construction activities prevent the VENDOR from performing scheduled maintenance or repair of field devices, subsystems, or systems.
 - c. Incorrect site contact information, which prevent access, provided that the VENDOR takes reasonable steps to notify the MOBILITY AUTHORITY of the improper contact information immediately and takes reasonable steps to obtain the correct information.
3. Scheduled Preventative Maintenance provided such schedule was provided to and approved by the MOBILITY AUTHORITY in advance and in writing; provided, however, that in no event shall the STOP CLOCK CONDITION time period be extended beyond the standard Scheduled Preventative Maintenance time period.
4. Force majeure events.

The VENDOR shall be required to submit the appropriate "Stop Clock Documentation" for each use of a STOP CLOCK CONDITION. The VENDOR shall submit documentation to the MOBILITY AUTHORITY as soon as the VENDOR is aware of a STOP CLOCK CONDITION occurring. Failure to provide the MOBILITY AUTHORITY with written notice when a STOP CLOCK CONDITION event arises waives the VENDOR's right to seek such amnesty. All "Stop Clock Documentation" must be included in the VENDOR's Monthly Report. The MOBILITY AUTHORITY may evaluate all "Stop Clock Documentation" and is entitled to request additional justification for each STOP CLOCK CONDITION identified. At the sole discretion of the MOBILITY AUTHORITY, use of STOP CLOCK CONDITIONS may be rejected, conditionally accepted, or accepted on a case-by-case basis. The VENDOR shall coordinate with the MOBILITY AUTHORITY to define all processes related to STOP CLOCK CONDITIONS, notification thereof, documentation requirements, and other relevant processes, as necessary, and document those processes in the VENDOR's Maintenance Plan submitted to the MOBILITY AUTHORITY for review, comment, and approval.

If it is determined during the review of a monthly maintenance invoice that the cause of the problem was not the fault or responsibility of the MOBILITY AUTHORITY, or in the event of denied access, if the reason was determined to be proper, then the STOP CLOCK CONDITION shall not apply. Further, if it is determined that the cause of the problem was not the fault or responsibility of the MOBILITY AUTHORITY, or in the event of denied access, if the reason was determined to be proper, after the MOBILITY AUTHORITY has paid the VENDOR the monthly

maintenance amount for the month in question, the MOBILITY AUTHORITY shall be able to deduct any penalties that should have been applied from a future monthly maintenance payment amount.

Notwithstanding any other provisions of the contract documents to the contrary, the following STOP CLOCK CONDITIONS do not apply to:

1. The VENDOR's response time performance requirements, as outlined in the Service Level Agreement.
2. Testing or maintenance initiated by the VENDOR outside of the Scheduled Preventative Maintenance windows.
3. Power fluctuations caused by electrical utility providers, common carriers, the VENDOR—including all subcontractors, affiliates, subsidiaries, data service providers, agents, or suppliers.
4. Time period during which the MOBILITY AUTHORITY has made reasonable efforts to notify the VENDOR of a problem, but the VENDOR was not available or unreachable.
5. Failure of the VENDOR to provide adequate facilities (including cabinets, sunshields, replacement field devices, networking equipment, power supplies, etc.) to ensure delivery of the contracted services will not be considered a valid STOP CLOCK CONDITION.
6. Any other reason or cause not expressly listed above for which the VENDOR is responsible.
7. If the VENDOR asserts force majeure or failure of the MOBILITY AUTHORITY provided equipment as an excuse to performance, the VENDOR shall have the burden of (i) providing sole proximate cause to the satisfaction of the MOBILITY AUTHORITY, (ii) that the VENDOR took reasonable steps to minimize the delay and damages caused by events when known or should have been known, and (iii) that the VENDOR timely notified the MOBILITY AUTHORITY of the actual occurrence which is claimed as grounds for a defense under this clause (if any).

1.2.6.4 Help Desk Support Requirements

The VENDOR shall supply personnel with direct expertise in support of the system hardware—including field devices, subsystems, and systems; software; networking equipment; and database management system(s) during the MOBILITY AUTHORITY normal operating hours to provide “help desk” support function for all VENDOR-supplied field devices, subsystems, and systems. The “help desk” is intended to act as a central point of contact for all technical support, including hardware and software questions; installation of updated versions of software and firmware; networking equipment; network connections; and general troubleshooting.

1.2.7 Miscellaneous

1.2.7.1 Single Event Causing Cumulative Liquidated Damages

If the VENDOR can prove to the reasonable satisfaction of MOBILITY AUTHORITY that a single event causes the VENDOR to fail to meet more than one Service Level Agreement (SLA), cumulative liquidated damages shall not be imposed. Instead, the highest applicable liquidated damages relative to such occurrence(s) shall apply.

If the VENDOR fails to complete the repair according to the services levels outlined in the SLAs, the VENDOR shall, in addition to the liquidated damages assessed for the single event, will be responsible for liquidated damages resulting from not meeting the repair time service levels for the impacted systems.

1.2.7.2 Calculation of Damages

To calculate liquidated damaged, all timeframes stated in the “Damages” column of the SLA Table shall be the time stated or any portion thereof.

Formulas for measuring each SLA have been provided for each SLA description below. While a measurement formula is provided, the VENDOR shall coordinate with the MOBILITY AUTHORITY to review, finalize, and agree upon all measurement formulas prior to execution of the Contract. The VENDOR shall document each approved, agreed upon measurement method within the Maintenance Plan for the MOBILITY AUTHORITY’s review and approval. The VENDOR shall be responsible for updating the Maintenance Plan to reflect the most current version of the measurement formula(s) upon request from or agreement between the MOBILITY AUTHORITY to modify any formulas(s) in the future.

1.2.7.3 Calculation of Damages for Consecutive Failures

Recurring and consecutive failure to comply with the SLAs provided in this Agreement may result in substantial harm to the MOBILITY AUTHORITY, but damages from such harm are difficult to quantify. Damages will increase for prolonged periods, and therefore for any SLA that is missed for three (3) consecutive months, the liquidated damages will be doubled for each subsequent month where the SLA is missed. The liquidated damages will revert to the original value upon the SLA being met for one (1) month.

1.3 SERVICE LEVEL AGREEMENT (SLA) DETAILS

| SLA ID | Name | Key Performance Indicator Description | Service Level Agreement | Damages | Measurement Requirement | | | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|--------------------------------------------------------------------------------------------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------------|------------------|---|
| RV1 | RVSD – Volume Accuracy | Per lane volume provided by radar vehicle sensing devices (RVSD) shall be 95.00% accurate. | 95.00% | For every 0.1% below the SLA, the VENDOR shall be subject to liquidated damages in the amount of 0.25% of the monthly maintenance fee. Liquidated damages for the SLA are capped at a maximum of 25% of the monthly maintenance fee. | Every three (3) months, unless otherwise agreed upon by the MOBILITY AUTHORITY. VENDOR shall coordinate with the MOBILITY AUTHORITY monthly to determine a statistically significant sample size, as shown below, to show compliance with the SLA. VENDOR shall coordinate with the MOBILITY AUTHORITY to determine the specific RVSD(s) to be audited each period, minimum of three (3) average taken for all accuracy measurements. Accruing more errors than allowed, as indicated in the following table, shall result in an audit failure of SLA: | | | | |
| | | | | | <table border="1"> <thead> <tr> <th>Sample Set</th> <th>Required Samples</th> <th>Allowable Errors</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>300</td> <td>15</td> </tr> <tr> <td>2</td> <td>250</td> <td>12</td> </tr> </tbody> </table> | Sample Set | Required Samples | Allowable Errors | 1 |
| Sample Set | Required Samples | Allowable Errors | | | | | | | |
| 1 | 300 | 15 | | | | | | | |
| 2 | 250 | 12 | | | | | | | |
| <p>Measurement Method:</p> $RVSD \text{ Volume Accuracy (\%)} = \left[1 - \left(\frac{Ground \text{ Truth Volume} - RVSD \text{ Volume}}{Ground \text{ Truth Volume}} \right) \right] \times 100$ <p>Where,</p> <ul style="list-style-type: none"> RVSD Volume is the volume provided by the specific RVSD field device, subsystem, and system being measured Ground Truth Volume is the volume determined by manual means (e.g., recorded CCTV camera feeds) over the same time interval for which the specific RVSD is being measured. | | | | | | | | | |

| SLA ID | Name | Key Performance Indicator Description | Service Level Agreement | Damages | Measurement Requirement |
|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| RV2 | RVSD – Availability | On average, each RVSD unit shall be available 99.50% of the time. Available is defined as functioning properly and recording accurate field conditions data. | 99.50% | <p>For every 0.1% or portion thereof below the SLA, the VENDOR shall be subject to liquidated damages in the amount of 0.5% of the monthly maintenance fee.</p> <p>Liquidated damages for the SLA are capped at a maximum of 25% of the monthly maintenance fee.</p> | Each month, as determined by the VENDOR provided monthly report(s), systemwide. |
| | <p>Measurement Method:</p> $RVSD \text{ Measured Availability } (\%) = \left[1 - \left(\frac{\text{Total Hours RVSD Downtime} - \text{Exclusions}}{\text{Total Expected Hours of Operation} - \text{Exclusions}} \right) \right] \times 100$ <p>Where,</p> <ul style="list-style-type: none"> ▪ The Expected Hours of Operation for each RVSD unit is 24 hours a day, seven (7) days a week. ▪ The <i>Total Expected Hours of Operation</i> is the sum of the Expected Hours of Operation for all deployed RVSD units in the SYSTEM. ▪ <i>Total Hours RVSD Downtime</i> is the sum of the down hours for all deployed RVSD units in the SYSTEM. | | | | |

| SLA ID | Name | Key Performance Indicator Description | Service Level Agreement | Damages | Measurement Requirement |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| CC1 | CCTV Camera – Availability | <p>On average, each CCTV camera shall be available 99.50% of the time. Available is defined as functioning properly, including responding to remote control functions (e.g., pan, tilt, zoom) and transmission of video streams without pixilation or dropped frames.</p> <p>This includes all camera models / types (e.g., dome enclosure and external positioner pan-tilt-zoom cameras; fixed or stationary cameras).</p> | 99.50% | <p>For every 0.1% or portion thereof below the SLA, the VENDOR shall be subject to liquidated damages in the amount of 0.75% of the monthly maintenance fee.</p> <p>Liquidated damages for the SLA are capped at a maximum of 25% of the monthly maintenance fee.</p> | Each month, as determined by the VENDOR provided monthly report(s), systemwide. |
| <p>Measurement Method:</p> $CCTV \text{ Measured Availability } (\%) = \left[1 - \left(\frac{\text{Total Hours CCTV Camera Downtime} - \text{Exclusions}}{\text{Total Expected Hours of Operation} - \text{Exclusions}} \right) \right] \times 100$ <p>Where,</p> <ul style="list-style-type: none"> ▪ The Expected Hours of Operation for each CCTV Camera is 24 hours a day, seven (7) days a week. ▪ The <i>Total Expected Hours of Operation</i> is the sum of the Expected Hours of Operation for all deployed CCTV Cameras in the SYSTEM. ▪ <i>Total Hours CCTV Camera Downtime</i> is the sum of the down hours for all deployed CCTV Cameras in the SYSTEM. | | | | | |

| SLA ID | Name | Key Performance Indicator Description | Service Level Agreement | Damages | Measurement Requirement |
|--------|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| DM1 | DMS – Availability | <p>On average, each dynamic message sign (DMS) shall be available 99.50% of the time. Available is defined as functioning properly, including displaying proper messages / displays that are clearly legible and responding to remote control and diagnostic functions.</p> | 99.50% | <p>For every 0.1% or portion thereof below the SLA, the VENDOR shall be subject to liquidated damages in the amount of 0.1% of the monthly maintenance fee.</p> <p>Liquidated damages for the SLA are capped at a maximum of 25% of the monthly maintenance fee.</p> | Each month, as determined by the VENDOR provided monthly report(s). |
| | | <p>Measurement Method:</p> $DMS \text{ Measured Availability } (\%) = \left[1 - \left(\frac{\text{Total Hours DMS Downtime} - \text{Exclusions}}{\text{Total Expected Hours of Operation} - \text{Exclusions}} \right) \right] \times 100$ <p>Where,</p> <ul style="list-style-type: none"> ▪ The Expected Hours of Operation for each DMS is 24 hours a day, seven (7) days a week. ▪ The <i>Total Expected Hours of Operation</i> is the sum of the Expected Hours of Operation for all deployed DMS in the SYSTEM. ▪ <i>Total Hours DMS Downtime</i> is the sum of the down hours for all deployed DMS in the SYSTEM. | | | |

| SLA ID | Name | Key Performance Indicator Description | Service Level Agreement | Damages | Measurement Requirement |
|--------|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|
| CV1 | Connected Vehicle RSU – Availability | <p>On average, each Connected Vehicle (CV) Roadside Unit (RSU) shall be available 95.00% of the time. Available is defined as functioning properly, including transmitting and receiving applicable messages as defined by the SAE J2735 standard.</p> | 95.00% | <p>\$200 per each 1.0% below SLA threshold.</p> <p>Liquidated damages for the SLA are capped at a maximum of 25% of the monthly maintenance fee.</p> | <p>Each month, as determined by the VENDOR provided monthly report(s).</p> |
| | | <p>Measurement Method:</p> $RSU \text{ Measured Availability } (\%) = \left[1 - \left(\frac{\text{Total Hours RSU Downtime} - \text{Exclusions}}{\text{Total Expected Hours of Operation} - \text{Exclusions}} \right) \right] \times 100$ <p>Where,</p> <ul style="list-style-type: none"> ▪ The Expected Hours of Operation for each RSU is 24 hours a day, seven (7) days a week. ▪ The <i>Total Expected Hours of Operation</i> is the sum of the Expected Hours of Operation for all deployed RSU in the SYSTEM. ▪ <i>Total Hours DMS Downtime</i> is the sum of the down hours for all deployed RSU in the SYSTEM. | | | |

| SLA ID | Name | Key Performance Indicator Description | Service Level Agreement | Damages | Measurement Requirement | | | | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------|------------------|---|----|---|
| WW1 | WWVDS – Event Accuracy | <p>Each vehicle traveling in the incorrect direction of an off-ramp shall be correctly identified and verified by the Wrong Way Vehicle Detection System (WWVDS) with 93.33% accuracy.</p> <p>Additionally, each WWVDS shall not produce significant false-positive events (e.g., greater than 5.00%).</p> | 93.33% | <p>For every 3.33% below the SLA, the VENDOR shall be subject to liquidated damages in the amount of 1.5% of the monthly maintenance fee.</p> <p>Liquidated damages for the SLA are capped at a maximum of 25% of the monthly maintenance fee.</p> | <p>Every six (6) months, as determined by the VENDOR audited sample WWVDS event detection data. This may be achieved by perform vendor testing runs to simulate wrong-way driving events.</p> <p>VENDOR shall coordinate with the MOBILITY AUTHORITY monthly to determine a statistically significant sample size, as shown below, to show compliance with the SLA.</p> <p>VENDOR shall coordinate with the MOBILITY AUTHORITY to determine the specific WWVDS site(s) to be audited each period.</p> <p>Accruing more errors (e.g., false-positives) than allowed, as indicated in the following table, shall result in an audit failure of SLA:</p> <table border="1" data-bbox="1255 917 1892 1096"> <thead> <tr> <th>Sample Set</th> <th>Required Samples</th> <th>Allowable Errors</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>30</td> <td>2</td> </tr> </tbody> </table> | Sample Set | Required Samples | Allowable Errors | 1 | 30 | 2 |
| | | | | | Sample Set | Required Samples | Allowable Errors | | | | |
| 1 | 30 | 2 | | | | | | | | | |
| <p>Measurement Method:</p> $WWVDS \text{ Volume Accuracy (\%)} = \left[1 - \left(\frac{\text{Ground Truth Event Total} - WWVDS \text{ Events Detected}}{\text{Ground Truth Event Total}} \right) \right] \times 100$ <p>Where,</p> <ul style="list-style-type: none"> ▪ <i>WWVDS Events Detected</i> is the total number of events identified by the specific WWVDS being measured ▪ <i>Ground Truth Event Total</i> is the volume determined by manual means (e.g., recorded CCTV camera feeds, manual observation) over the same time interval for which the specific WWVDS is being measured. | | | | | | | | | | | |

| SLA ID | Name | Key Performance Indicator Description | Service Level Agreement | Damages | Measurement Requirement |
|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| WW2 | WWVDS – Availability | Each Wrong Way Vehicle Detection Systems (WWVDS) shall be available 99% of the time. Available is defined as functioning properly, including properly identifying wrong-way driving vehicles, initiating a localized response (e.g., flashing signs), and alerting MOBILITY AUTHORITY personnel of confirmed wrong-way driving events. | 99% | \$500 per each 1.0% below SLA threshold. Liquidated damages for the SLA are capped at a maximum of 25% of the monthly maintenance fee. | Each month, as determined by the VENDOR provided monthly report(s). |
| | <p>Measurement Method:</p> $WWVDS \text{ Measured Availability } (\%) = \left[1 - \left(\frac{\text{Total Hours WWVDS Downtime} - \text{Exclusions}}{\text{Expected Hours of Operation} - \text{Exclusions}} \right) \right] \times 100$ <p>Where,</p> <ul style="list-style-type: none"> ▪ <i>Expected Hours of Operation</i> is 24 hours a day, seven (7) days a week ▪ <i>Total Hours WWVDS Downtime</i> is measured as the number of down hours for a single WWVDS. | | | | |

| SLA ID | Name | Key Performance Indicator Description | Service Level Agreement | Damages | Measurement Requirement |
|--------|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|
| VW1 | Video Wall – Availability | <p>The video wall located in the TIMC shall be available 99.50% of the time. Available is defined as functioning properly, including properly displaying multiple live video feeds from CCTV cameras and allowing user-customizable display features.</p> | 99.50% | <p>\$500 per each 0.5% below SLA threshold. Liquidated damages for the SLA are capped at a maximum of 25% of the monthly maintenance fee.</p> | <p>Each month, as determined by the VENDOR provided monthly report(s).</p> |
| | | <p>Measurement Method:</p> $\text{Video Wall Measured Availability (\%)} = \left[1 - \left(\frac{\text{Total Hours Video Wall Downtime} - \text{Exclusions}}{\text{Expected Hours of Operation} - \text{Exclusions}} \right) \right] \times 100$ <p>Where,</p> <ul style="list-style-type: none"> ▪ <i>Expected Hours of Operation</i> is 24 hours a day, seven (7) days a week | | | |

| SLA ID | Name | Key Performance Indicator Description | Service Level Agreement | Damages | Measurement Requirement |
|--------|----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| MM1 | Monthly Maintenance Report – Processing Time | <p>The monthly report, accurately detailing system performance relative to the project SLAs, shall be submitted to the MOBILITY AUTHORITY within ten (10) business days of each month's end, commencing the first full month (Month 1) following Notice to Proceed.</p> | <p>Within ten (10) business days of each month's end.</p> | <p>For every one (1) calendar day outside the SLA, 0.5% of the monthly maintenance fee. Liquidated damages for the SLA are capped at a maximum of 25% of the monthly maintenance fee.</p> | <p>Determined by the data Monthly Maintenance report received, measured by e-mail timestamp.</p> |
| | | <p>Measurement Method:</p> $Report\ Tardiness\ (days) = Date_{Report\ Delivered} - Date_{Report\ Due}$ | | | |

| SLA ID | Name | Key Performance Indicator Description | Service Level Agreement | Damages | Measurement Requirement |
|--------|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| AR1 | Annual Report – Processing Time | <p>The VENDOR shall develop a comprehensive annual report accurately detailing the past year’s activities.</p> <p>The annual report, accurately detailing system performance relative to the project SLAs, shall be submitted to the MOBILITY AUTHORITY within ten (10) business days of the year’s end, measured twelve (12) full months following Notice to Proceed and each twelve (12) months following.</p> | <p>Within ten (10) business days of each year’s end.</p> | <p>For every one (1) calendar day outside the SLA, 0.1% of the monthly maintenance fee.</p> <p>Liquidated damages for the SLA are capped at a maximum of 25% of the monthly maintenance fee.</p> | <p>Determined by the data Annual Report received, measured by e-mail timestamp.</p> |
| | | <p>Measurement Method:</p> $Report\ Tardiness\ (days) = Date_{Report\ Delivered} - Date_{Report\ Due}$ | | | |

| SLA ID | Name | Key Performance Indicator Description | Service Level Agreement | Damages | Measurement Requirement |
|--------|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|
| RT1 | Response Time | <p>Response times for repair services, as identified in Section Error! Reference source not found. – Error! Reference source not found., shall be no later than seventy-two (72) hours to the site, unless otherwise deemed necessary by the MOBILITY AUTHORITY.</p> <p>Response times for emergency maintenance, as identified in Section Error! Reference source not found. – Error! Reference source not found., shall be no later than four (4) hours to the site 24 X 7 X 365, unless otherwise deemed necessary by the MOBILITY AUTHORITY.</p> | <p>Repair Services: Respond within seventy-two (72) hours to the site</p> <p>Emergency Repair Services: Respond within four (4) hours to the site</p> | <p>For every response one (1) hour over the SLA, 0.1% of the monthly maintenance fee.</p> <p>For every response one (1) hour over the SLA, 0.5% of the monthly maintenance fee.</p> <p>Liquidated damages for the SLA are capped at a maximum of 25% of the monthly maintenance fee.</p> | Determined by repair documentation and/or audit by the MOBILITY AUTHORITY. |
| | | <p>Measurement Method:</p> $Response\ Time(Hours) = Time_{Incident\ Reported} - Time_{On-Site\ Response}$ | | | |

APPENDIX G
Key Personnel

APPENDIX H
Contractor's Proposal

APPENDIX I-1
Form of Installation Performance Bond

FORM OF INSTALLATION PERFORMANCE BOND

AGREEMENT FOR INTELLIGENT TRANSPORTATION SYSTEM PERFORMANCE-BASED MAINTENANCE SERVICES

Bond No. _____

KNOW ALL PERSONS BY THESE PRESENTS, that that [_____], a [_____], as “Principal” and [_____], as “Surety” or as “Co-Sureties”, each a corporation duly organized under the laws of the State indicated on the attached page, having its principal place of business at the address listed on the attached page, in the State indicated on the attached page, and authorized as a surety in the State of Texas, are hereby jointly and severally held and firmly bound unto the CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY (the “Authority”), a political subdivision of the State of Texas, as “Obligee”, in the sum of [\$ _____] (the “Bonded Sum”), for the payment whereof Principal and Surety (or Co-Sureties), bind themselves, and their heirs, executors, administrators, representatives, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Obligee, has awarded to Principal, the Agreement for Intelligent Transportation System Performance-Based Maintenance Services, duly executed and delivered as of [_____], 2023 (the “Agreement”), on the terms and conditions set forth therein; and

WHEREAS, upon the issuance of Work Authorization Number __, dated _____ pursuant to Article 2, subsection 2.1., Principal is required to furnish a bond guaranteeing the faithful performance of its obligations under the Agreement;

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH THAT, if Principal shall promptly and faithfully perform all of its obligations under the Agreement, including any and all amendments and supplements thereto, then this obligation shall be null and void; otherwise it shall remain in full force and effect. The Obligee shall release this bond upon the conclusion of the term of the Agreement as set forth in Article (7)(d)(ii) of the Agreement.

The following terms and conditions shall apply with respect to this bond:

1. The Agreement is incorporated by reference herein.
2. This bond specifically guarantees (1) the performance of each and every obligation of Principal under the Agreement, as it may be amended and supplemented, including but not limited to, its liability for liquidated damages as specified in the Agreement, but not to exceed the penal amount described in Article (7)(d)(ii).
3. Whenever Principal shall be, and is declared by the Obligee to be, in default under the Agreement and the Obligee has formally terminated the Principal’s right to complete the Services required under the Agreement, provided that the Obligee is not then in material default thereunder, Surety shall promptly take one of the following actions with the consent of the Obligee:
 - a. arrange for the Principal to perform and complete the Agreement;

b. complete the Services required under the Work Authorization then in effect in accordance with the terms and conditions of the Agreement then in effect, through its agents or through independent contractors;

c. obtain bids or negotiated proposals from qualified contractors acceptable to the Obligee for a contract for performance and completion of the Services required under the Work Authorization, arrange for a contract to be prepared for execution by the Obligee and the contractor selected with the Obligee's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Agreement in an amount that corresponds to the amount of the Work Authorization to be completed, and pay to the Obligee the amount of damages as described in Article 7 of the Agreement; or

d. waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances, (i) after investigation, determine the amount for which it may be liable to the Obligee and, as soon as practicable after the amount is determined, tender payment therefore to the Obligee, or (ii) deny liability in whole or in part and notify the Obligee citing reasons therefore.

5. If Surety does not proceed as provided in Paragraph 3 with reasonable promptness, Surety shall be deemed to be in default on this Bond fifteen (15) days after receipt of an additional written notice from the Obligee to Surety demanding that Surety perform its obligations under this Bond, and the Obligee shall be entitled to enforce any remedy available to the Obligee. If Surety proceeds as provided in Subparagraph 3.d, and the Obligee refuses the payment tendered or Surety has denied liability, in whole or in part, without further notice the Obligee shall be entitled to enforce any remedy available to the Obligee.

6. After the Obligee has terminated the Principal's right to complete the Agreement, and if Surety elects to act under Subparagraph 3.a, 3.b, or 3.c above, then the responsibilities of Surety to the Obligee shall not be greater than those of the Principal under the Agreement, and the responsibilities of the Obligee to Surety shall not be greater than those of the Obligee under the Agreement. To the limit of the Bonded Sum, Surety is obligated without duplication for:

a. the responsibilities of the Principal for correction of defective work and completion of the Services required under the Agreement;

b. additional legal and delay costs resulting from Principal's default, and resulting from the actions or failure to act of Surety under Paragraph 3; and

c. liquidated damages under the Agreement.

7. No alteration, modification or supplement to the Agreement or the nature of the work to be performed thereunder, including without limitation any extension of time for performance, shall in any way affect the obligations of Surety under this bond.

8. Correspondence or claims relating to this bond should be sent to Surety at the following address:

9. No right of action shall accrue on this bond to or for the use of any entity other than the Obligee or its successors and assigns.

10. If any legal action be filed on this bond, venue shall be in Travis County, Texas.

11. This bond is executed in accordance with the provisions of Chapter 2253 of the Texas Government Code, as amended.

12. Initially capitalized terms not otherwise defined herein shall have the definition set forth in the Agreement.

IN WITNESS WHEREOF, Principal and Surety have caused this bond to be executed and delivered as of [_____], 202[_____].

Principal:

By: _____

Its: _____

(Seal)

Surety:

By: _____

Its: _____

(Seal)

[ADD APPROPRIATE SURETY ACKNOWLEDGMENTS]

APPENDIX I-2
Form of Installation Payment Bond

FORM OF INSTALLATION PAYMENT BOND

AGREEMENT FOR INTELLIGENT TRANSPORTATION SYSTEM PERFORMANCE-BASED MAINTENANCE SERVICES

Bond No. _____

KNOW ALL PERSONS BY THESE PRESENTS, that that [_____], a [_____], as “Principal” and [_____], as “Surety” or as “Co-Sureties”, each a corporation duly organized under the laws of the State indicated on the attached page, having its principal place of business at the address listed on the attached page, in the State indicated on the attached page, and authorized as a surety in the State of Texas, are hereby jointly and severally held and firmly bound unto the CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY (the “Authority”), a political subdivision of the State of Texas, as “Obligee”, in the sum of [\$ _____] (the “Bonded Sum”), for the payment whereof Principal and Surety (or Co-Sureties), bind themselves, and their heirs, executors, administrators, representatives, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Obligee, has awarded to Principal, the Agreement for Intelligent Transportation System Performance-Based Maintenance Services, duly executed and delivered as of [_____], 2023 (the “Agreement”), on the terms and conditions set forth therein; and

WHEREAS, upon the issuance of Work Authorization Number __, dated _____ pursuant to Article 2, subsection 2.1., Principal is required to furnish a bond guaranteeing payment of claims, subcontractors, suppliers, materialmen and mechanics.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH THAT, if Principal shall fail to pay any valid and timely claims of subcontractors, suppliers, materialmen and mechanics with respect to the Services, then Surety shall pay for the same in an amount not to exceed, in the aggregate, the Bonded Sum; otherwise this obligation shall be null and void upon the conclusion of the term of the Agreement as set forth in Article (7)(d)(ii) of the Agreement.

The following terms and conditions shall apply with respect to this bond:

1. The Agreement is incorporated by reference herein.
2. No alteration, modification or supplement to the Agreement or the nature of the work to be performed thereunder, including without limitation any extension of time for performance, shall in any way affect the obligations of Surety under this bond.
3. Correspondence or claims relating to this bond should be sent to Surety at the following address:

4. This bond shall inure to the benefit of the persons identified above so as to give a right of action to such persons and their assigns in any suit brought upon this bond.

5. To the extent permitted by law, the only permitted claimants under this Bond shall be those entities having a contract with Principal and those entities having a contract with an entity which has a contract with Principal.

6. If any legal action be filed on this bond, venue shall be in Travis County, Texas.

7. This bond is executed in accordance with the provisions of Chapter 2253 of the Texas Government Code, as amended.

8. Initially capitalized terms not otherwise defined herein shall have the definition set forth in the Agreement.

IN WITNESS WHEREOF, Principal and Surety have caused this bond to be executed and delivered as of [_____], 202[___].

Principal: _____

By: _____

Its: _____

(Seal)

Surety: _____

By: _____

Its: _____

(Seal)

[ADD APPROPRIATE SURETY ACKNOWLEDGMENTS]

APPENDIX J-1
Form of Maintenance Performance Bond

FORM OF MAINTENANCE PERFORMANCE BOND

AGREEMENT FOR INTELLIGENT TRANSPORTATION SYSTEM PERFORMANCE-BASED MAINTENANCE SERVICES

Bond No. _____

KNOW ALL PERSONS BY THESE PRESENTS, that that [_____], a [_____], as “Principal” and [_____], as “Surety” or as “Co-Sureties”, each a corporation duly organized under the laws of the State indicated on the attached page, having its principal place of business at the address listed on the attached page, in the State indicated on the attached page, and authorized as a surety in the State of Texas, are hereby jointly and severally held and firmly bound unto the CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY (the “Authority”), a political subdivision of the State of Texas, as “Obligee”, in the sum of [\$_____] (the “Bonded Sum”), for the payment whereof Principal and Surety (or Co-Sureties), bind themselves, and their heirs, executors, administrators, representatives, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Obligee, has awarded to Principal, the Agreement for Intelligent Transportation System Performance-Based Maintenance Services, duly executed and delivered as of [_____], 2023 (the “Agreement”), on the terms and conditions set forth therein; and

WHEREAS, as prior to the issuance of the Work Authorization under Article 2, subsection 2.2., Principal is required to furnish a bond guaranteeing the faithful performance of its obligations under the Agreement;

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH THAT, if Principal shall promptly and faithfully perform all of its obligations under the Agreement, including any and all amendments and supplements thereto, then this obligation shall be null and void; otherwise it shall remain in full force and effect. The Obligee shall release this bond upon the conclusion of the term of the Agreement as set forth in Article (7)(d)(iii) of the Agreement.

The following terms and conditions shall apply with respect to this bond:

1. The Agreement is incorporated by reference herein.
2. This bond specifically guarantees (1) the performance of each and every obligation of Principal under the Agreement, as it may be amended and supplemented, including but not limited to, its liability for liquidated damages as specified in the Agreement and loss of revenue incurred by the CTRMA under Article 7(b), but not to exceed the penal amount described in Article (7)(d)(iii).
3. Whenever Principal shall be, and is declared by the Obligee to be, in default under the Agreement and the Obligee has formally terminated the Principal’s right to complete the Services required under the Agreement, provided that the Obligee is not then in material default thereunder, Surety shall promptly take one of the following actions with the consent of the Obligee:

- a. arrange for the Principal to perform and complete the Agreement;
- b. complete the Services required under any Work Authorization(s) then in effect in accordance with the terms and conditions of the Agreement then in effect, through its agents or through independent contractors;
- c. obtain bids or negotiated proposals from qualified contractors acceptable to the Obligee for a contract for performance and completion of the Services required under any Work Authorization(s) then in effect, arrange for a contract to be prepared for execution by the Obligee and the contractor selected with the Obligee's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Agreement in an amount that corresponds to the amount of Work Authorization(s) to be completed, and pay to the Obligee the amount of damages as described in Article 7 of the Agreement; or
- d. waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances, (i) after investigation, determine the amount for which it may be liable to the Obligee and, as soon as practicable after the amount is determined, tender payment therefore to the Obligee, or (ii) deny liability in whole or in part and notify the Obligee citing reasons therefore.

5. If Surety does not proceed as provided in Paragraph 3 with reasonable promptness, Surety shall be deemed to be in default on this Bond fifteen (15) days after receipt of an additional written notice from the Obligee to Surety demanding that Surety perform its obligations under this Bond, and the Obligee shall be entitled to enforce any remedy available to the Obligee. If Surety proceeds as provided in Subparagraph 3.d, and the Obligee refuses the payment tendered or Surety has denied liability, in whole or in part, without further notice the Obligee shall be entitled to enforce any remedy available to the Obligee.

6. After the Obligee has terminated the Principal's right to complete the Agreement, and if Surety elects to act under Subparagraph 3.a, 3.b, or 3.c above, then the responsibilities of Surety to the Obligee shall not be greater than those of the Principal under the Agreement, and the responsibilities of the Obligee to Surety shall not be greater than those of the Obligee under the Agreement. To the limit of the Bonded Sum, Surety is obligated without duplication for:

- a. the responsibilities of the Principal for correction of defective work and completion of the Services required under the Agreement;
- b. additional legal and delay costs resulting from Principal's default, and resulting from the actions or failure to act of Surety under Paragraph 3; and
- c. liquidated damages under the Agreement.

7. No alteration, modification or supplement to the Agreement or the nature of the work to be performed thereunder, including without limitation any extension of time for performance, shall in any way affect the obligations of Surety under this bond.

8. Correspondence or claims relating to this bond should be sent to Surety at the following address:

9. No right of action shall accrue on this bond to or for the use of any entity other than the Obligee or its successors and assigns.

10. If any legal action be filed on this bond, venue shall be in Travis County, Texas.

11. This bond is executed in accordance with the provisions of Chapter 2253 of the Texas Government Code, as amended.

12. Initially capitalized terms not otherwise defined herein shall have the definition set forth in the Agreement.

IN WITNESS WHEREOF, Principal and Surety have caused this bond to be executed and delivered as of [____], 202[].

Principal:

By: _____

Its: _____

(Seal)

Surety:

By: _____

Its: _____

(Seal)

[ADD APPROPRIATE SURETY ACKNOWLEDGMENTS]

APPENDIX J-2
Form of Maintenance Payment Bond

FORM OF MAINTENANCE PAYMENT BOND

AGREEMENT FOR INTELLIGENT TRANSPORTATION SYSTEM PERFORMANCE-BASED MAINTENANCE SERVICES

Bond No. _____

KNOW ALL PERSONS BY THESE PRESENTS, that that [_____], a [_____], as “Principal” and [_____], as “Surety” or as “Co-Sureties”, each a corporation duly organized under the laws of the State indicated on the attached page, having its principal place of business at the address listed on the attached page, in the State indicated on the attached page, and authorized as a surety in the State of Texas, are hereby jointly and severally held and firmly bound unto the CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY (the “Authority”), a political subdivision of the State of Texas, as “Obligee”, in the sum of [\$ _____] (the “Bonded Sum”), for the payment whereof Principal and Surety (or Co-Sureties), bind themselves, and their heirs, executors, administrators, representatives, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Obligee, has awarded to Principal, the Agreement for Intelligent Transportation System Performance-Based Maintenance Services, duly executed and delivered as of [_____], 2023 (the “Agreement”), on the terms and conditions set forth therein; and

WHEREAS, prior to the issuance of the Work Authorization under Article 2, subsection 2.2., Principal is required to furnish a bond guaranteeing payment of claims, subcontractors, suppliers, materialmen and mechanics.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH THAT, if Principal shall fail to pay any valid and timely claims of subcontractors, suppliers, materialmen and mechanics with respect to the Services, then Surety shall pay for the same in an amount not to exceed, in the aggregate, the Bonded Sum; otherwise this obligation shall be null and void upon the conclusion of the term of the Agreement as set forth in Article (7)(d)(iii) of the Agreement.

The following terms and conditions shall apply with respect to this bond:

1. The Agreement is incorporated by reference herein.
2. No alteration, modification or supplement to the Agreement or the nature of the work to be performed thereunder, including without limitation any extension of time for performance, shall in any way affect the obligations of Surety under this bond.
3. Correspondence or claims relating to this bond should be sent to Surety at the following address:

4. This bond shall inure to the benefit of the persons identified above so as to give a right of action to such persons and their assigns in any suit brought upon this bond.

5. To the extent permitted by law, the only permitted claimants under this Bond shall be those entities having a contract with Principal and those entities having a contract with an entity which has a contract with Principal.

6. If any legal action be filed on this bond, venue shall be in Travis County, Texas.

7. This bond is executed in accordance with the provisions of Chapter 2253 of the Texas Government Code, as amended.

8. Initially capitalized terms not otherwise defined herein shall have the definition set forth in the Agreement.

IN WITNESS WHEREOF, Principal and Surety have caused this bond to be executed and delivered as of [_____], 202[___].

Principal: _____

By: _____

Its: _____

(Seal)

Surety: _____

By: _____

Its: _____

(Seal)

[ADD APPROPRIATE SURETY ACKNOWLEDGMENTS]