

AGREEMENT FOR PROFESSIONAL SERVICES

THIS AGREEMENT is entered into between The City of Norman (OWNER) and Stantec Consulting Services Inc. (CONSULTANT) for the following reasons:

1. OWNER intends to construct a Traffic Management Center (TMC) Including a Staffing Needs Study and Final Design; and,
2. OWNER requires certain professional survey, design, analysis and engineering services in connection with the Project (the Services); and,
3. CONSULTANT is prepared to provide the Services.

In consideration of the promises contained in this Agreement, OWNER and CONSULTANT agree as follows:

ARTICLE 1 - EFFECTIVE DATE

The effective date of this Agreement shall be 23rd day of October 2019.

ARTICLE 2 - GOVERNING LAW

This Agreement shall be governed by the laws of the State of Oklahoma.

ARTICLE 3 - SCOPE OF SERVICES

CONSULTANT shall provide the Services described in Attachment A, Scope of Services.

ARTICLE 4 - SCHEDULE

CONSULTANT shall exercise its reasonable efforts to perform the Services described in Attachment A according to the Schedule set forth in Attachment B.

ARTICLE 5 -COMPENSATION

OWNER shall pay CONSULTANT in accordance with Attachment C, Compensation. Invoices shall be due and payable upon receipt. OWNER shall give prompt written notice of any disputed amount and shall pay the remaining amount.

ARTICLE 6 - OWNER'S RESPONSIBILITIES

OWNER shall be responsible for all matters described in Attachment D, OWNER'S Responsibilities. OWNER hereby represents that it owns the intellectual property rights in any plans, documents or other materials provided by OWNER to CONSULTANT. If OWNER does not own the intellectual property rights in such plans, documents or other materials, prior to providing same to CONSULTANT, OWNER shall obtain a license or right to use, including the right to sublicense to CONSULTANT. OWNER hereby grants CONSULTANT the right to use the intellectual property associated with plans, documents or other materials it owns or has the right to use for the limited purpose of performing the Services. OWNER represents that CONSULTANT'S use of such documents will not infringe upon any third parties' rights.

ARTICLE 7 - STANDARD OF CARE

The same degree of care, skill, and diligence shall be exercised in the performance of the Services as is ordinarily possessed and exercised by a member of the same profession, currently practicing, under similar circumstances. No other warranty, express or implied, is included in this Agreement or in any drawing, specification, report, opinion, or other instrument of service, in any form or media, produced in connection with the Services.

ARTICLE 8 -INDEMNIFICATION AND LIABILITY

Indemnification. The CONSULTANT and the OWNER each hereby agree to defend, indemnify, and hold harmless the other party, its officers, servants, and employees, from and against any and all liability, loss, damage, cost, and expense (including attorneys' fees and accountants' fees) caused by an error, omission, or negligent act of the indemnifying party in the performance of services under this Agreement. The CONSULTANT and the OWNER each agree to promptly serve notice on the other party of any claims arising hereunder and shall cooperate in the defense of any such claims. In any and all claims asserted by any employee of the CONSULTANT against any indemnified party, the indemnification obligation shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for the CONSULTANT or any of the CONSULTANT'S employees under workers' compensation acts, disability benefit acts, or other employee benefit acts. The acceptance by OWNER or its representatives of any certification of insurance providing for coverage other than as required in this Agreement to be furnished by the CONSULTANT shall in no event be deemed a waiver of any of the provisions of this indemnity provision. None of the foregoing provisions shall deprive the OWNER of any action, right, or remedy otherwise available to the OWNER at common law.

Survival. The terms and conditions of this Article shall survive completion of the Services, or any termination of this Agreement.

ARTICLE 9 - INSURANCE

During the performance of the Services under this Agreement, CONSULTANT shall maintain the following insurance:

- (a) General Liability Insurance, with a limit of \$1,000,000 per occurrence and \$2,000,000 annual aggregate.
- (b) Automobile Liability Insurance, with a combined single limit of \$1,000,000 for each person and \$1,000,000 for each accident.
- (c) Workers' Compensation Insurance in accordance with statutory requirements and Employers' Liability Insurance, with a limit of \$500,000 for each occurrence.
- (d) Professional Liability Insurance, with a limit of \$1,000,000 per claim and annual aggregate.

CONSULTANT shall, upon written request, furnish OWNER certificates of insurance which shall include a provision that such insurance shall not be canceled without at least thirty days' written notice to OWNER. OWNER shall require all Project contractors to include OWNER, CONSULTANT, and its parent company, affiliated and subsidiary entities, directors, officers and employees, as additional insureds on their General and Automobile Liability insurance policies, and to indemnify both OWNER and CONSULTANT, each to the same extent.

ARTICLE 10 - LIMITATIONS OF RESPONSIBILITY

CONSULTANT shall not be responsible for (a) construction means, methods, techniques, sequences, procedures, or safety precautions and programs in connection with the Project; (b) the failure of any contractor, subcontractor, vendor, or other Project participant, not under contract to CONSULTANT, to fulfill contractual responsibilities to OWNER or to comply with federal, state, or local laws, regulations, and codes; or (c) procuring permits, certificates, and licenses required for any construction unless such procurement responsibilities are specifically assigned to CONSULTANT in Attachment A, Scope of Services. In the event the OWNER requests CONSULTANT to execute any certificates or other documents, the proposed language of such certificates or documents shall be submitted to CONSULTANT for review at least 15 days prior to the requested date of execution. CONSULTANT shall not be required to execute any certificates or documents that in any way would, in CONSULTANT's sole judgment, (a) increase CONSULTANT'S legal or contractual obligations or risks; (b) require knowledge, services or responsibilities beyond the scope of this Agreement; or (c) result in CONSULTANT having to certify, guarantee or warrant the existence of conditions whose existence CONSULTANT cannot ascertain.

ARTICLE 11 - OPINIONS OF COST AND SCHEDULE

Because CONSULTANT has no control over the cost of labor, materials, or equipment furnished by others, or over the resources provided by others to meet Project schedules, CONSULTANT's opinion of probable costs and of Project schedules shall be made on the basis of experience and qualifications as a practitioner of its profession. CONSULTANT does not guarantee that proposals, bids, or actual Project costs will not vary from CONSULTANT'S cost estimates or that actual schedules will not vary from CONSULTANT'S projected schedules.

ARTICLE 12 - REUSE OF DOCUMENTS

All documents, including, but not limited to, plans, drawings, and specifications prepared by CONSULTANT as deliverables pursuant to the Scope of Services are instruments of service in respect to the Project. They are not intended or represented to be suitable for reuse by OWNER or others on modifications or extensions of the Project or on any other project. Any reuse without prior written verification or adaptation by CONSULTANT for the specific purpose intended will be at OWNER'S sole risk and without liability or legal exposure to CONSULTANT. OWNER shall indemnify and hold harmless CONSULTANT and its subconsultants against all judgments, losses, damages, injuries, and expenses, including reasonable attorneys' fees, arising out of or resulting from such reuse. Any verification or adaptation of documents will entitle CONSULTANT to additional compensation at rates to be agreed upon by OWNER and CONSULTANT.

ARTICLE 13 - OWNERSHIP OF DOCUMENTS AND INTELLECTUAL PROPERTY

Except as otherwise provided herein, documents, drawings, and specifications prepared by CONSULTANT and furnished to OWNER as part of the Services shall become the property of OWNER; provided, however, that CONSULTANT shall have the unrestricted right to their use. CONSULTANT shall retain its copyright and Ownership rights in its design, drawing details, specifications, data bases, computer software, and other proprietary property. Intellectual property developed, utilized, or modified in the performance of the Services shall remain the property of CONSULTANT.

ARTICLE 14 - TERMINATION AND SUSPENSION

This Agreement may be terminated by either party upon written notice in the event of substantial failure by the other party to perform in accordance with the terms of this Agreement; provided, however, the nonperforming party shall have 14 calendar days from the receipt of the termination notice to cure or to submit a plan for cure acceptable to the other party. OWNER may terminate or suspend performance of this Agreement for OWNER'S convenience upon written notice to CONSULTANT. CONSULTANT shall terminate or suspend performance of the Services on a schedule acceptable to OWNER, and OWNER shall pay CONSULTANT for all the Services performed. Upon restart of suspended Services, an equitable adjustment shall be made to CONSULTANT'S compensation and the Project schedule.

ARTICLE 15 - DELAY IN PERFORMANCE

Neither OWNER nor CONSULTANT shall be considered in default of this Agreement for delays in performance caused by circumstances beyond the reasonable control of the nonperforming party. For purposes of this Agreement, such circumstances include, but are not limited to, abnormal weather conditions; floods; earthquakes; fire; epidemics; war, riots, and other civil disturbances; strikes, lockouts, work slowdowns, and other labor disturbances; sabotage; judicial restraint; and delay in or inability to procure permits, licenses, or authorizations from any local, state, or federal agency for any of the supplies, materials, accesses, or services required to be provided by either OWNER or CONSULTANT under this Agreement. CONSULTANT shall be granted a reasonable extension of time for any delay in its performance caused by any such circumstances. Should such circumstances occur, the nonperforming party shall, within a reasonable time of being prevented from performing, give written notice to the other party describing the circumstances preventing continued performance and the efforts being made to resume performance of this Agreement.

ARTICLE 16 - NOTICES

Any notice required by this Agreement shall be made in writing to the address specified below:
OWNER:

Angelo A. Lombardo, P.E.
Transportation Engineer
City of Norman
P.O. Box 370
Norman, OK 73070

(Stantec Consulting Services Inc.):

Daniel H. Baxter P.E. (Colorado #0054826)
Senior Principal
2000 South Colorado Boulevard
Denver, Colorado 80122

Nothing contained in this Article shall be construed to restrict the transmission of routine communications between representatives of OWNER and CONSULTANT.

ARTICLE 17 - DISPUTES

In the event of a dispute between OWNER and CONSULTANT arising out of or related to this Agreement, the aggrieved party shall notify the other party of the dispute within a reasonable time after such dispute arises. If the parties cannot thereafter resolve the dispute, each party shall nominate a senior officer of its management to meet to resolve the dispute by direct negotiation or mediation.

Should such negotiation or mediation fail to resolve the dispute, either party may pursue resolution of the dispute by arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association; provided, however, in the event the parties are unable to reach agreement to arbitrate under terms reasonably acceptable to both parties, either party may pursue resolution in any court having jurisdiction. During the pendency of any dispute, the parties shall continue diligently to fulfill their respective obligations hereunder.

ARTICLE 18 - EQUAL EMPLOYMENT OPPORTUNITY

CONSULTANT hereby affirms its support of affirmative action and that it abides by the provisions of the "Equal Opportunity Clause" of Section 202 of Executive Order 11246 and other applicable laws and regulations. CONSULTANT affirms its policy to recruit and hire employees without regard to race, age, color, religion, sex, sexual preference/orientation, marital status, citizen status, national origin or ancestry, presence of a disability or status as a Veteran of the Vietnam era or any other legally protected status. It is CONSULTANT'S policy to treat employees equally with respect to compensation, advancement, promotions, transfers and all other terms and conditions of employment. CONSULTANT further affirms completion of applicable governmental employer information reports including the EEO-1 and VETS-1 00 reports, and maintenance of a current Affirmative Action Plan as required by Federal regulations.

ARTICLE 19 - WAIVER

A waiver by either OWNER or CONSULTANT of any breach of this Agreement shall be in writing. Such a waiver shall not affect the waiving party's rights with respect to any other or further breach.

ARTICLE 20 - SEVERABILITY

The invalidity, illegality, or unenforceability of any provision of this Agreement or the occurrence of any event rendering any portion or provision of this Agreement void shall in no way affect the validity or enforceability of any other portion or provision of this Agreement. Any void provision shall be deemed severed from this Agreement, and the balance of this Agreement shall be construed and enforced as if it did not contain the particular portion or provision held to be void. The parties further agree to amend this Agreement to replace any stricken provision with a valid provision that comes as close as possible to the intent of the stricken provision. The provisions of this Article shall not prevent this entire Agreement from being void should a provision which is of the essence of this Agreement be determined void.

ARTICLE 21 - INTEGRATION

This Agreement, including Attachments A, B, C, and D incorporated by this reference, represents the entire and integrated agreement between OWNER and CONSULTANT. It supersedes all prior and contemporaneous communications, representations, and agreements, whether oral or written, relating to the subject matter of this Agreement.

ARTICLE 22 - SUCCESSORS AND ASSIGNS

OWNER and CONSULTANT each binds itself and its successors, executors, administrators, permitted assigns, legal representatives and, in the case of a partnership, its partners, to the other party to this Agreement and to the successors, executors, administrators, permitted assigns, legal representatives, and partners of such other party in respect to all provisions of this Agreement.

ARTICLE 23 - ASSIGNMENT

Neither OWNER nor CONSULTANT shall assign any rights or duties under this Agreement without the prior written consent of the other party, which consent shall not be unreasonably withheld; provided, however, CONSULTANT may assign its rights to payment without OWNER'S consent. Unless otherwise stated in the written consent to an assignment, no assignment will release or discharge the assignor from any obligation under this Agreement. Nothing contained in this Article shall prevent CONSULTANT from engaging independent CONSULTANTS, associates, and subcontractors to assist in the performance of the Services.

ARTICLE 24 - NO THIRD PARTY RIGHTS

The Services provided for in this Agreement are for the sole use and benefit of OWNER and CONSULTANT. Nothing in this Agreement shall be construed to give any rights or benefits to anyone other than OWNER and CONSULTANT.

IN WITNESS WHEREOF, OWNER and (Stantec Consulting Services Inc.) have executed this Agreement.

DATED this 23rd day of October 2019.

The City of Norman
(OWNER)

Signature _____

Name _____

Title _____

Date _____

Attest:

City Clerk
Stantec Consulting Services Inc.
(CONSULTANT)

Signature _____

Name Daniel H. Baxter

Title . Senior Principal

Date November 6, 2019

Attest:

Secretary

Approved as to form and legality this ____ day of _____ 201__.

City Attorney

ATTACHMENT A SCOPE OF SERVICES

PART I – DESCRIPTION OF PROJECT

CONSULTANT shall, except as otherwise provided for herein, furnish all Engineering services, labor, equipment and incidentals (Services) as required for this AGREEMENT.

CONSULTANT is to provide SERVICES in connection with the development of systems engineering reports, design, bidding, and procurement (construction) documents for the following improvements located within the City of Norman, Oklahoma:

Systems Engineering Analysis (SEA) for a Traffic Management Center Including a Staffing Needs Study for the Traffic Control Division (TCD) and Final Design for the Traffic Management Center (TMC) in Norman, Oklahoma.

PROJECT Location:

The TMC is to be constructed within space provided in a new Emergency Operations Center (EOC) (by others) on Robinson Street between Gray Fox Drive and 24th Avenue NE.

PROJECT Exceptions:

Design of any part of the EOC in which the TMC will be constructed, other than the TMC itself, is excluded from this Scope of Work unless specifically added by addendum. Any aspects of the EOC including structural, electrical service, lighting, HVAC, walls, floors, ceilings other than the provision of requirements to accommodate the TMC are excluded from this scope of work.

Incidental Construction:

The PROJECT does not include incidental construction.

Specific PROJECT Requirements:

Design criteria and other requirements specific to this PROJECT include:

- The SEA should be performed consistently with the requirements of CFR 23 Rule 940, so that the documentation generated will conform to Federal Regulations. The documents will be engineered to achieve the approval of the Federal Highway Administration (FHWA) Division Office.
- The USDOT System Engineering Guidelines shall be referred to and applied to the SEA portion of the project.
- The Intelligent Transportation Systems (ITS) Architecture reviews shall conform to applicable industry practice.
- The CONSULTANT will provide cost estimates to compare TMC alternative configurations.
- Engineering reports, bidding, procurement (construction), and supporting documents developed by CONSULTANT shall comply with the established requirements of OWNER, the Association of Central Oklahoma Governments (ACOG), Oklahoma Department of Transportation (ODOT), and FHWA for the purpose of seeking/securing federal ITS funds by OWNER. CONSULTANT makes no representations warranties or guarantees with regard to the success of OWNER in securing said funds.

In addition, PROJECT shall be designed in accordance with the general criteria identified in PART III - Design Criteria.

PART II - SERVICES PROVIDED BY OTHERS

Engineering and ancillary services including but not limited to those identified below, shall be the responsibility of others:

- EOC building design – Architectural and engineering design services for the EOC building in which the TMC will be implemented are not included in CONSULTANT's SERVICES. Design of OWNER-owned facilities (such as TMC support appurtenances), may be provided by CONSULTANT if authorized by OWNER in writing in the form of an executed Amendment to this AGREEMENT.
- Utility relocation design - Relocation design for utility systems to support or in conflict with the proposed construction are not included in CONSULTANT's SERVICES. Relocation designs shall be the responsibility of each Utility Owner. Design of OWNER-owned utilities (such as power, water and sanitary sewer services), services may be provided by CONSULTANT if authorized by OWNER in writing in the form of an executed Amendment to this AGREEMENT.
- Bidding, Construction Management, and Inspection Services - Bidding, construction management, and inspection services ordinarily provided/administered by ODOT are not included in CONSULTANT's SERVICES.

PART III - DESIGN CRITERIA

The systems engineering reports, TMC design and related plans shall conform to current Federal, State and local policies, regulations, guidelines and standards (as modified under the direction of OWNER in writing).

- Rule 940 (Provide reference)
- USDOT SE Guidelines (Provide Reference)

PART IV – GENERAL PERFORMANCE REQUIREMENTS

CONSULTANT agrees to the following as appropriate and when applicable, SERVICES included in this AGREEMENT:

1. To prepare and furnish complete detailed final TMC procurement and construction plans as called for in “DESCRIPTION OF PROJECT”.
2. Engineering computations, as follows:
 - a. CONSULTANT shall ensure that any engineering computations are independently checked in detail by competent personnel and shall provide a written statement to that effect when the plans based on or containing the computations are submitted.
 - b. All computations shall be neat, legible, identified, indexed, and provided in a manner that is easy to follow by someone unfamiliar with PROJECT. They shall be considered a part of the work done under this AGREEMENT and shall become the sole property of the OWNER.

3. CONSULTANT shall furnish, if requested by the OWNER, comparative estimates for alternate TMC and ITS configurations with alternatives of capital cost, potential operations and maintenance costs, durability, and life-cycle costs.
4. To furnish any additional plan sheets identified in the scope of services and as required by the OWNER.
5. That all preliminary designs, final plans and reports submitted for review by the OWNER shall be accompanied by a written statement signed and sealed by a professional engineer attesting that a prior detailed check has been made of the plans and reports.
6. To provide public involvement participation, coordination and support between the OWNER, any affected local business owners, residents, and community-based organizations. Such services shall include, but are not limited to, attendance and participation at meetings, gatherings, assemblies or hearings as requested by the OWNER.
7. To be available for such conferences as the OWNER may deem necessary in connection with the work. The OWNER shall have the right to inspect the work at all reasonable times at CONSULTANT's office.
8. To coordinate the CONSULTANT's work with other consultants on adjoining projects, if any, and to furnish and share data identified in the scope of services in such a manner as to facilitate and expedite the completion of AGREEMENTS for adjacent work.
9. To prepare and/or update CONSULTANT's Opinion of Probable Cost at each submittal milestone.
10. To furnish a legible copy of all computations used in developing cost estimates which are neatly arranged, produced and are properly identified and indexed. The computations shall be submitted when the documents are submitted to the OWNER.
11. To furnish bi-monthly progress reports to the OWNER and attend progress meetings or conference calls with OWNER at monthly or bi-monthly intervals. Monthly reports shall be prepared in accordance with the OWNER'S requirements. In the event of any delay in performing the work and/or increase in anticipated construction costs of the resulting PROJECT provided for in this AGREEMENT, CONSULTANT shall immediately notify the OWNER and shall fully explain the nature, time, and reason for the delay.

PART V – WORK BREAKDOWN STRUCTURE & WORK PRODUCT REQUIREMENTS

The following Work Breakdown Structure (WBS) and Work Product Requirement are an outline and understanding of the scope of services that supports CONSULTANT's fee and PROJECT schedule. The WBS is an expansion on the general requirements presented in PARTS I through IV. All requirements set forth in PARTS I through IV shall be met regardless of whether or not more specific requirements are stipulated herein. A list of the sizes and number of sets of plans included in the AGREEMENT is provided in PART VI – PLAN REQUIREMENTS.

PHASE 1 – SYSTEMS ENGINEERING ANALYSIS

Systems engineering services include assessment of the base conditions upon which the TMC functionality will be established, and generation of the key documentation such as the Concept of Operations. The "Vee" diagram structure is followed to perform the SEA. The tasks to be performed by CONSULTANT include:

Task 1A – Baseline Inventory of Traffic Management Capabilities

The CONSULTANT shall conduct the following systems engineering services to establish the baseline ITS and traffic management condition:

- a. OWNER shall provide map(s) of all traffic signal locations (including flashers) from the City of Norman staff. CONSULTANT shall review and assess device locations.
- b. OWNER shall provide an inventory of adjacent ITS deployments. CONSULTANT shall review and assess the ITS device locations.
- c. OWNER shall provide map(s) of fiber optic plant connections from the City of Norman staff. CONSULTANT shall review and assess fiber network locations.
- d. CONSULTANT shall identify surface street hot spots (recurring congestion, frequent crashes, key corridors.)
- e. CONSULTANT shall review current incident management roles and responsibilities (includes interviews with City of Norman staff and select first responders.
- f. CONSULTANT shall review special event management (e.g. Oklahoma Sooners home football games.)
- g. CONSULTANT shall review transit operations and routes.
- h. CONSULTANT shall review existing maintenance and inventory program
- i. CONSULTANT shall provide a preliminary TMC floorplan layout based upon the established baseline ITS and traffic management conditions.

Task 1B – Assess the Current and Future City ITS and TMC Needs

CONSULTANT shall assess current and future City needs to meet goals based on improving the baseline condition established in Task 1A.

- a. CONSULTANT shall establish an operational vision and supporting performance goals.
- b. CONSULTANT shall assess current status of closed loop systems and coordinated signal timing plans.
- c. CONSULTANT shall perform a systems engineering concept exploration (ConEx) exercise. The ConEx will evaluate alternative approaches and feasibility of each based on relevant factors including comparative costs.
- d. CONSULTANT shall determine available (and establish the desired) traveler information measures and provisions based upon TMC capabilities to support traditional messaging, social media and travel apps (e.g. WAZE).
- e. CONSULTANT shall establish operational performance measures with which to evaluate the effectiveness of TMC operations in meeting the program goals and visions established in Task 1B (a.).
- f. CONSULTANT shall evaluate smart cities innovations that may be managed from the TMC.
- g. CONSULTANT shall provide a revised/enhanced TMC floorplan layout that reflects Task 1B determinations.

Task 1C – Review ITS Architecture

The CONSULTANT shall conduct the Review ITS Architecture:

- a. CONSULTANT shall review the Oklahoma Statewide Architecture and establish the need for changes to reflect the ITS capabilities for the city of Norman.
- b. CONSULTANT shall review the Oklahoma City Regional Architecture and establish the need for changes to reflect the ITS capabilities for the city of Norman.
- c. CONSULTANT shall Identify Required Architecture Updates based on ConEx developed in task 1B.
- d. CONSULTANT shall Provide RAD-IT Architecture Update File(s) based on the reviews performed in tasks 1Ca, 1Cb and 1Cc.

Task 1D – Concept of Operations (ConOps) Development High-level Identification of User Needs and System Capabilities

CONSULTANT shall develop a Concept of Operations (ConOps) report for the proposed system. The ConOps will be developed so as to ensure a common understanding of the project by all key stakeholders before commencing with design:

- a. CONSULTANT shall identify high-level user needs and system capabilities.
- b. CONSULTANT shall review any existing ITS roadside device deployment plans.
- c. CONSULTANT shall identify TMC stakeholders' roles and responsibilities as well as coordination with the EOC and other external stakeholders.
- d. CONSULTANT shall develop operational scenarios that show the operation of the proposed TMC ITS and validate them with stakeholders.
- e. CONSULTANT shall develop and deliver a draft and final Concept of Operations (ConOps) report based on the information gathered during the workshops.
- f. CONSULTANT shall provide the final TMC floorplan/layout based on the initial plans developed in task 1A, 1B and the information gathered during the ConOps development.

Task 1E System Requirements

CONSULTANT shall develop TMC system requirements to address the user needs identified in the ConOps:

- a. CONSULTANT shall develop high level requirements that trace to user needs developed in task 1D.
- b. CONSULTANT shall evaluate alternative technical configurations to meet developed requirements.
- c. CONSULTANT shall identify applicable standards and testing procedures.
- d. CONSULTANT shall evaluate TMC software needs and alternatives.
- e. CONSULTANT shall address IT enterprise hardware configuration, cyber-security and O&M needs.

Task 1F Communication Network Planning

CONSULTANT shall develop a communication network plan which accommodates the proposed TMC operation needs:

- a. CONSULTANT shall assess the feasibility of a fiber optic network expansion to support the operation of the proposed system.
- b. CONSULTANT shall assess the applications of wireless networks for the proposed system operation.
- c. CONSULTANT shall assess the communication back up options with self-healing fiber rings and/or wireless systems.
- d. CONSULTANT shall describe a strategy for a communication network expansion over 3 to 5 years to support the proposed system operation.

Task 1G Staffing Needs for the TMC and TCD

CONSULTANT shall review current City of Norman transportation organization, past staffing patterns, and perform future staffing needs both for the TMC, and the TCD:

- a. CONSULTANT shall develop staffing requirements/needs for TMC based on the developed ConOps in task 1D.
- b. CONSULTANT shall develop staffing requirements/needs for TCD.
- c. CONSULTANT shall develop staffing knowledge, skill and ability (KSA) framework.
- d. CONSULTANT shall develop strategic personnel attainment and training plan.
- e. CONSULTANT shall develop staffing requirements/needs for the TMC, including alternative coverage scenarios, costs and staffing alternatives.
- f. CONSULTANT shall address training requirements for TMC assignees.
- g. CONSULTANT shall develop up to 12 (twelve) position descriptions for Traffic Management jobs.

PHASE 2 – TMC DESIGN

Phase 2 of the PROJECT includes detailed development of the TMC operations room provisions, and procurement (construction) technical support. Workstations, furnishings, video wall, monitors, server racks, networks and ancillary

spaces will be designed in this phase. Initial operational assistance including hiring and operator training as well as development of standard operation procedures will be done as a part of this phase. The tasks to be performed by CONSULTANT include:

Task 2A Detailed Design of the TMC Operations Room

- a. CONSULTANT shall develop workstations and furnishings final design.
- b. CONSULTANT shall develop video wall and monitors designs.
- c. CONSULTANT shall develop server racks and network designs.
- d. CONSULTANT shall develop failover and redundancy design.
- e. CONSULTANT shall develop requirements for ancillary space to support TMC O&M.

Task 2B Procurement (Construction) Technical Support

- a. CONSULTANT shall provide the TMC procurement (construction) technical support as needed to create a fully functional operations environment and capability as developed in the systems engineering analysis and described in the ConOps.

Task 2C Initial Operation Assistance

- a. CONSULTANT shall assist with hiring and provide operator training.
- b. CONSULTANT shall provide standard operating procedures and policy development.

PART VI – PLAN REQUIREMENTS

Any drawings needed to aid in the procurements of the TMC capability shall conform to ordinary ODOT drafting standard and shall be 22 x 34 inches (full size) and 11 x 17 (half size) prints. CONSULTANT shall provide and submit the required number of plan sets to complete the PROJECT. It is currently unknown the exact number of full size and half size plan sets required. Work in progress sets and progress meeting sets will be half size and included in the base fees.

PART VII – MUTUAL AGREEMENTS

OWNER and CONSULTANT mutually agree:

- a. Services to be performed by CONSULTANT shall include and encompass those services identified in “PART V – WORK BREAKDOWN STRUCTURE & WORK PRODUCT REQUIREMENTS”.
- b. CONSULTANT shall hold the OWNER as a confidential client. CONSULTANT shall make no statements or publish any materials regarding any investigations to any party on behalf of the OWNER without prior written authorization from the OWNER. CONSULTANT shall refer all questions regarding this AGREEMENT and the work defined herein to the OWNER.
- c. Because CONSULTANT has no control over the cost of labor, materials, or equipment furnished by others, CONSULTANT’s Opinion of Probable Cost shall be made on the basis of its experience and qualifications as a professional engineer. CONSULTANT does not guarantee that proposals, bids, or actual PROJECT construction costs will not vary from CONSULTANT’s construction cost estimates.
- d. When the documents and plans are completed to the field review stage (in this case the under-construction EOC), representatives of the OWNER will accompany CONSULTANT on a field review investigation to mutually determine design features to be incorporated in the final plans.

- e. All reports, and plans, specifications, and maps prepared or obtained under the terms of the AGREEMENT shall be delivered to and become the property of the OWNER. All data prepared or obtained under this AGREEMENT shall be made available upon request to the OWNER without restriction of limitation on their use. When an AGREEMENT is for preliminary plans only, no commitment is made or implied that would constitute a limitation on the subsequent use of the plans or the ideas incorporated therein for preparation of procurement documents (construction plans).
- f. CONSULTANT shall furnish all engineering services, labor, equipment, and incidentals as may be required to perform this AGREEMENT, except as may be otherwise specifically provided for herein.
- g. CONSULTANT shall sign the final product of CONSULTANT's efforts submitted to the OWNER and affix the appropriate Oklahoma seal as proof of Professional engineer registration in the State of Oklahoma.
- h. CONSULTANT shall place his professional seal of endorsement and signature on all final documents and engineering data furnished to the OWNER when such is required by the Level or Type of Service defined by this AGREEMENT and additionally, as may be required by State Law.
- i. CONSULTANT and its subconsultants are to maintain all files, books, documents, papers, accounting records and other evidence pertaining to costs incurred and to make such materials available at its respective offices at all reasonable times, during the AGREEMENT period and for three (3) years from the date of final payment under the AGREEMENT, for inspection by the OWNER and copies thereof shall be furnished to the OWNER, and if required, to ODOT.

**ATTACHMENT B
PROJECT SCHEDULE**

Article 4 of the AGREEMENT is amended and supplemented to include the following agreement of the parties.

It is understood and agreed that the date of beginning, rate of progress, and the time of completion of SERVICES under this AGREEMENT are essential provisions of this AGREEMENT. It is further understood and agreed that the services under this AGREEMENT shall commence upon execution of the AGREEMENT between OWNER & CONSULTANT and after receipt of a written Notice to Proceed from OWNER. The parties mutually agree that completing tasks on schedule in performance of this AGREEMENT allows OWNER to have advantage of existing funding. CONSULTANT agrees to provide SERVICES for each phase of PROJECT as stated in Attachment A – Scope of Services, in accordance with the time frame as stated below:

TASK/MILESTONE	ANTICIPATED COMPLETION DATE
Notice to Proceed	NTP
System Engineering Analysis (SEA)	240 days after NTP
Baseline Inventory of Traffic Management Capabilities	45 days after NTP
Assess the Current and Future City ITS and TMC Needs	104 days after NTP
Review ITS Architecture	55 days after NTP
Concept of Operations (ConOps) Development High-level Identification of User Needs and System Capabilities	169 days after NTP
System Requirements	240 days after NTP
Communication Network Planning	229 days after NTP
Staffing Needs for the TMC and Traffic Control Division	87 days after NTP
Final Design for Implementation of TMC	346 days after NTP
Detailed Design of the TMC Operations Room	329 days after NTP
Construction Technical Support	TBD days after NTP
Initial Operation Assistance	TBD days after NTP

The parties further agree that CONSULTANT will meet this schedule using standards and procedures for their submissions consistent with those currently used by Engineers/Surveyors practicing in Oklahoma. This schedule excludes the governing agency review time (except as provided above) and any time lost while CONSULTANT is waiting for direction either by government agency or OWNER, and any excusable delays as described in Article 15 of the AGREEMENT.

Dates indicated are dependent upon timely review by OWNER & ODOT, Environmental Clearance, Right-of-Way Acquisition, Utility Relocations, and other factors beyond direct control of CONSULTANT.

ATTACHMENT C COMPENSATION

The CONSULTANT agrees to perform the SERVICES identified in **Attachment A - Scope of Services**, in accordance with the limitations and conditions set forth in the AGREEMENT. The OWNER agrees, in accordance with the limitations and conditions set forth in the AGREEMENT to pay an amount not to exceed \$274,022.31 unless changed or modified by a mutually executed contract amendment between the OWNER and the CONSULTANT.

The OWNER shall pay the CONSULTANT for completion of the SERVICES of each task identified in **Attachment A - Scope of Services**, in accordance with the amounts stated below:

PROJECT TASK	COMPENSATION
Task 1A – Baseline Inventory of Traffic Management Capabilities (15%)	\$ 27333.82
Task 1B – Assess the Current and Future City ITS and TMC Needs (11%)	\$ 18824.24
Task 1C – Review ITS Architecture (15%)	\$ 26302.36
Task 1D – Concept of Operations (ConOps) Development High-level Identification of User Needs and System Capabilities (22%)	\$ 38679.94
Task 1E System Requirements (13%)	\$ 22692.23
Task 1F Communication Network Planning (10%)	\$ 17277.04
Task 1G Staffing Needs for the TMC and Traffic Control Division (15%)	\$ 26044.49
Task 1 Expenses	\$ 29,975.00
Task 2A Detailed Design of the TMC Operations Room (57%)	\$ 31,097.38
Task 2B Construction Technical Support (10%)	\$ 5,528.42
Task 2C Initial Operation Assistance (33%)	\$ 17,967.38
Task 2 Expenses	\$ 12,300
TOTAL COMPENSATION	\$274,022.31

ATTACHMENT D
OWNER'S RESPONSIBILITIES

Article 6 of the AGREEMENT is amended and supplemented to include the following agreement of the parties.

I. OWNER RESPONSIBILITIES

1. Owner shall furnish to CONSULTANT all available information pertinent to PROJECT including previous reports, and any other data relative to design and construction of PROJECT.
2. OWNER shall be responsible for all permit fees.
3. OWNER shall examine all studies, reports, sketches, estimate specifications, plan drawings, proposals and any other documents presented by the CONSULTANT and render in writing decisions pertaining thereto within a reasonable time so as not to delay SERVICES of CONSULTANT.
4. OWNER shall designate in writing a person to act as its representative in respect to the work to be performed under this AGREEMENT, and such person shall have complete authority to transmit instructions, receive information, interpret and define OWNER's policies and decisions with respect to materials, equipment, elements, and systems pertinent to the services covered by this AGREEMENT.
5. OWNER shall furnish legal assistance as required in the preparation, review, and approval of construction documents.
6. OWNER shall provide for meeting facilities (or arrange for meeting facilities) for all PROJECT meetings with OWNER or Public Meetings in connection with PROJECT.

II. SPECIAL RESPONSIBILITIES

1. OWNER shall furnish to CONSULTANT traffic studies as may be required for by ACOG, ODOT, and/or FHWA for consideration of PROJECT funding and/or PROJECT letting.