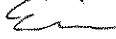




MEMORANDUM

May 13, 2013

TO: Board of Mayor and Aldermen

FROM: Eric Stuckey, City Administrator 
David Parker, City Engineer/CIP Associate
Paul Holzen, Engineering Director
Carl Baughman, Traffic/Transportation Engineer III
Jonathan Marston, Engineer III
Abby Gambill, TOC Operator

SUBJECT: Consideration of PSA with Atkins North America, Inc. (ANA) for Franklin ITS Extension Planning and Design (Contract COF 2014-0121)

Purpose

The purpose of this memorandum is to provide information to the Board of Mayor and Aldermen (BOMA) with information to consider entering into a contract for professional engineering services with Atkins, North America, Inc. for planning and design services on the Franklin Intelligent Transportation System (ITS) Extension.

Background

The most recent City project expansion of ITS installations was in the Cool Springs area with completion in 2012. Also, the Tennessee Department of Transportation (TDOT) will be completing this month the Mack Hatcher ITS installations on the widening project. These expansions have only partially fulfilled the current City of Franklin ITS Master Plan. TDOT has given an authorization for the City of Franklin to proceed with expanding and upgrading the City's ITS Master Plan. Under COF Contract No. 2013-0184, the City has undertaken a qualifications-based selection process and has identified ANA to provide professional services for the Franklin ITS extension inventory and planning project.

Financial Impact

The ITS – ARRA project (Adaptive Signal is a 80/20 grant match) was included in the approved FY 2013-2014 TOC Capital Budget (89530-8) in the amount of \$1,250,000. The proposed fee of \$108,150 provides a sufficient balance for the remaining design development and construction/inspection elements of the ITS Extension.

Recommendation

Approval of Contract 2014-0121 is recommended.

**CITY OF FRANKLIN, TENNESSEE
PROFESSIONAL SERVICES AGREEMENT
COF Contract No 2014-0121**

THIS PROFESSIONAL SERVICES AGREEMENT ("Agreement") is by and between the City of Franklin, Tennessee, hereinafter referenced as City, and **ATKINS NORTH AMERICA, INCORPORATED**, hereinafter referenced as Consultant, who mutually agree as follows:

DECLARATIONS. City desires to retain Consultant to provide engineering, related technical, and other services in connection with City's project hereinafter referenced as Project. The Project is described as follows:

**Engineering Services for
Franklin Intelligent Transportation Systems (ITS) Extension
Planning and Design**

1. **SCOPE OF SERVICES.** Consultant shall provide engineering and related technical services for the Project in accordance with the **SCOPE OF SERVICES**. The **SCOPE OF SERVICES** as found in **Attachment A** shall be considered as an integral part hereof.

2. Consultant shall be paid monthly for a percent of work completed per Task basis for Tasks 1, 2.1, 2.2, 2.3 and 2.4 as per the Tasks Fees contained in Attachment A in the Amount Not To Exceed **ONE HUNDRED EIGHT THOUSAND ONE HUNDRED FIFTY AND NO/100 DOLLARS (\$108,150.00)**.

3. In event of a conflict between this Agreement and the attached document(s), this Agreement shall supersede conflicting terms and conditions.

The Board of Mayor and Aldermen Approved this Agreement on the _____ Day of _____ 201__.

BY: _____
Consultant's Signature
TITLE: _____
Date: _____

BY: _____
Dr. Ken Moore
Mayor
Date: _____

TERMS AND CONDITIONS FOR PROFESSIONAL SERVICES

ARTICLE 1. SERVICES. Consultant will:

- 1.1 Act for City in a professional manner, using that degree of care and skill ordinarily exercised by and consistent with standards of competent consultants using the standards in the industry:
- 1.2 Consider all reports to be confidential and distribute copies of the same only to those persons specifically designated by the City.
- 1.3 Perform all services under the general direction of a senior professional employee, licensed and/or registered in the State of Tennessee, when appropriate.
- 1.4 Retain pertinent records relating to the services performed for a period of seven (7) years following the completion of the work; during this period the records shall be available for review by City at all reasonable times.

ARTICLE 2. CITY'S RESPONSIBILITIES. City, or its authorized representative, will:

- 2.1 Provide Consultant with all information regarding the Project, which is available to, or reasonably obtainable by, the City.
- 2.2 Furnish right-of-entry onto the Project site for Consultant's necessary field studies and surveys. Consultant will endeavor to restore the site to its original condition and shall remain solely liable for all damages, costs and expenses, including reasonable attorneys' fees, for failure to make such restoration.
- 2.3 Designate, in writing, the sole Project representative to coordinate with and direct the Consultant, including all contact information.
- 2.4 Guarantee to Consultant that it has the legal capacity to enter into this contract and that sufficient monies are available to fund Consultant's compensation.

ARTICLE 3. GENERAL CONDITIONS.

- 3.1 Consultant, by the performance of services covered hereunder, does not in any way assume, abridge or abrogate any of those duties, responsibilities or authorities customarily vested in other professionals or agencies participating in the Project.
- 3.2 Consultant shall be responsible for the acts or omissions of any party involved in concurrent or subsequent phases of the PROJECT acting upon written instruction issued by the Consultant.
- 3.3 Neither City nor Consultant may assign or transfer its duties or interest in this Agreement without written consent of the other party. However, nothing in this Article shall prevent Consultant from engaging

independent consultants, associates, and subcontractors to assist in the performance of the Services at Consultant's cost.

3.4 **ALLOCATION OF RISK AND LIABILITY; GENERAL.** Considering the potential liabilities that may exist during the performance of the services of this Agreement, the relative benefits and risks of the Project, and the Consultant's fee for the services rendered, and in consideration of the promises contained in this Agreement, the City and the Consultant agree to allocate and limit such liabilities in accordance with this Article.

3.5 **INDEMNIFICATION.** Consultant agrees to indemnify and hold City harmless from and against legal liability for all judgments, losses, damages, and expenses to the extent such judgments, losses, damages, or expenses are caused by Consultant's negligent act, error or omission in the performance of the services of this Agreement. In the event judgments, losses, damages, or expenses are caused by the joint or concurrent negligence of Consultant and City, they shall be borne by each party in proportion to its own negligence.

3.5.1 **SURVIVAL.** The terms and conditions of this paragraph shall survive completion of this services agreement.

3.6 **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 unless specifically undertaken in Attachment A, **SCOPE OF SERVICES**; (b) the failure of any contractor, subcontractor, Consultant, or other Project participant, not under contract to Consultant, to fulfill contractual responsibilities to City 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**.

ARTICLE 4. TERMINATION BY THE CITY. The City may terminate this Agreement in accordance with the following terms and conditions:

4.1 **Termination for Convenience.** The City may, when in the interests of the City, terminate performance under this Agreement with the Consultant, in whole or in part, for the convenience of the City. The City shall give written notice of such termination to the Consultant specifying when termination becomes effective. The Consultant shall incur no further obligations in connection with the work so terminated, other than warranties and guarantees for completed work and installed equipment, and the Consultant shall stop work when such termination becomes effective. The Consultant shall also terminate outstanding orders and subcontracts for the affected work. The

Consultant shall settle the liabilities and claims arising out of the termination of subcontracts and orders. The City may direct the Consultant to assign the Consultant's right, title and interest under termination orders or subcontracts to the City or its designee. The Consultant shall transfer title and deliver to the City such completed or partially completed work and materials, equipment, parts, fixtures, information and Contract rights as the Consultant has in its possession or control. When terminated for convenience, the Consultant shall be compensated as follows:

- (1) The Consultant shall submit a termination claim to the City specifying the amounts due because of the termination for convenience together with costs, pricing or other data required by the City. If the Consultant fails to file a termination claim within one (1) year from the effective date of termination, the City shall pay the Consultant the amount the City deems the Consultant is due.
- (2) The City and the Consultant may agree to the compensation, if any, due to the Consultant hereunder.
- (3) Absent agreement to the amount due to the Consultant, the City shall pay the Consultant the following amounts:
 - (a) Contract costs for labor, materials, equipment and other services accepted under this Agreement;
 - (b) Reasonable costs incurred in preparing to perform and in performing the terminated portion of the work, and in terminating the Consultant's performance, plus a fair and reasonable allowance for direct job site overhead and earned profit thereon (such profit shall not include anticipated profit or consequential damages); provided however, that if it reasonably appears that the Consultant would have not profited or would have sustained a loss if the entire Agreement would have been completed, no profit shall be allowed or included and the amount of compensation shall be reduced to reflect the anticipated rate of loss, if any;

The total sum to be paid the Consultant under this Section shall not exceed the total Agreement Price, as properly adjusted, reduced by the amount of payments otherwise made, and shall in no event include duplication of payment.

- 4.2 Termination for Cause. If the Consultant does not perform the work, or any part thereof, in a timely manner, supply adequate labor, supervisory personnel or proper equipment or materials, or if it fails to timely discharge its obligations for labor, equipment and materials, or proceeds to disobey applicable law, or otherwise commits a violation of a material provision of this Agreement, then the City, in addition to any other rights it may have against the Consultant or others, may terminate the performance of the Consultant, in whole or in part at the City's sole option, and assume possession of the Project Plans and materials and may complete the work.

In such case, the Consultant shall not be paid further until the work is complete. After Completion has been achieved, if any portion of the Contract Price, as it may be modified hereunder, remains after the cost to the City of completing the work, including all costs and expenses of every nature incurred, has been deducted by the City, such remainder shall belong to the Consultant. Otherwise, the Consultant shall pay and make whole the City for such cost. This obligation for payment shall survive the termination of the Agreement.

In the event the employment of the Consultant is terminated by the City for cause pursuant to this Section and it is subsequently determined by a Court of competent jurisdiction that such termination was without cause, such termination shall thereupon be deemed a Termination for Convenience under this Section and the provisions of Section 4.1 shall apply.

- 4.3 Termination for Non-Appropriation. The City may also terminate this Agreement, in whole or in part, for non-appropriation of sufficient funds to complete or partially complete the Project, regardless of the source of such funds, and such termination shall be on the terms of Section 4.1.
- 4.4 The City's rights under this Section shall be in addition to those contained elsewhere herein or provided by law.

ARTICLE 5. SCOPE OF SERVICES. Consultant shall provide the Services as described in Attachment A, SCOPE OF SERVICES.

5.1 By mutual agreement, this contract and scope can be amended by the parties. The scope and fee for any additional tasks or services under such amendment shall be mutually negotiated and agreed to in writing prior to beginning such additional tasks or services.

5.2 **ENVIRONMENTAL RESPONSIBILITY.**

Where drilling/sampling services are involved, the samples obtained from the Project site are the property of the City. Should any of these samples be recognized by the Consultant to be contaminated, the City shall remove them from the Consultant's custody and transport them to a disposal site, all in accordance with applicable government statutes, ordinances, and regulations. For all other samples, the Consultant shall retain them for a sixty (60)-day period following the submission of the drilling/sampling report unless the City directs otherwise; thereafter, the Consultant shall discard the samples in accordance with all federal, state and local laws.

ARTICLE 6. SCHEDULE.

6.1 **TIME OF THE ESSENCE.** The parties agree that TIME IS OF THE ESSENCE with respect to the parties' performance of all provisions of the Agreement.

6.2 **FORCE MAJEURE.** Neither party will be liable to the other for any delay or failure to perform any of the services or obligations set forth in this Agreement due to causes beyond its reasonable control, and performance times will be considered extended for a period of time equivalent to the time lost because of such delay plus a reasonable period of time to allow the parties to recommence performance of their respective obligations hereunder. Should a circumstance of force majeure last more than ninety (90) days, either party may by written notice to the other terminate this Agreement. The term "force majeure" as used herein shall mean the following: acts of God; strikes, lockouts or other industrial disturbances; acts of public enemies; orders or restraints of any kind of the government of the United States or of the State or any of their departments, agencies or officials, or any civil or military authority; insurrections, riots, landslides, earthquakes, fires, storms, tornadoes, droughts, floods, explosions, breakage or accident to machinery, transmission pipes or canals; or any other cause or event not reasonably within the control of either party.

6.3 Should City request changes in the scope, extent, or character of the Project, the fee and the time of performance of Consultant's services as indicated in Attachment A shall be adjusted equitably.

ARTICLE 7. USE OF DOCUMENTS, DATA.

7.1 All Documents, including, but not limited to, reports, drawings, specifications, and computer software prepared by Consultant pursuant to this Agreement are instruments of service in respect to the Project. Consultant shall retain an ownership and property interest therein (including the right of reuse at the discretion of the Consultant) whether or not the Project is completed.

7.1.1 **USE OF DATA SYSTEMS:** Ownership, property interests and proprietary rights in data systems used by Consultant do not extend to the data created by or supplied to Consultant by the City; all rights to that data (including derivative or hidden data such as metadata) shall vest solely in City at the moment of creation.

7.1.2 **DISCLOSURE OF DOCUMENTS/DATA.** City may be required to disclose documents or data under state or federal law. City shall notify Consultant if a request for data or documents has been made and shall give Consultant a reasonable opportunity under the circumstances to respond to the request by redacting proprietary or other confidential information. Consultant waives any right to confidentiality of any document, e-mail or file it fails to clearly mark on each page as confidential or proprietary. In exchange, Consultant agrees to indemnify, defend, and hold harmless City for any claims by third parties relating thereto or arising out of (i) the City's failure to disclose such documents or information required to be disclosed by law, or (ii) the City's release of documents as a result of City's reliance upon Consultant representation that materials supplied by Consultant (in full or redacted form) do not contain trade secrets or proprietary information, provided that the City impleads Consultant and Consultant assumes control over that claim.

7.2 City-furnished data that may be relied upon by Consultant is limited to the printed copies that are delivered to the Consultant pursuant to Article 2 of this Agreement. Any copyrighted electronic files furnished by City shall be used by Consultant only for the Project as described herein. City's posting or publication of such documents created by Consultant for City shall constitute fair use and shall not constitute an infringement of Consultant's copyright, if any.

7.3 Documents that may be relied upon by City are limited to the printed copies (also known as hard copies) that are signed or sealed by the Consultant. Files in electronic media format of text, data, graphics, or of other types that are furnished by Consultant to City are only for

convenience of City, unless the delivery of the Project in electronic media format has been dictated in Attachment A, SCOPE OF SERVICES. Any conclusion or information obtained or derived from electronic files provided for convenience will be at the user's sole risk.

- 7.4 Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving electronic files agrees that it will perform acceptance tests or procedures within 60 days, after which the receiving party shall be deemed to have accepted the data thus transferred. Any errors detected within the 60-day acceptance period will be corrected by the party delivering the electronic files. Unless stated otherwise herein, Consultant shall not be responsible to maintain documents stored in electronic media format after acceptance by City.
- 7.5 When transferring documents in electronic media format, Consultant makes no representations as to long term compatibility, usability, or readability, of documents resulting from the use of software application packages, operating systems, or computer hardware differing from that as required of, and used by, Consultant at the beginning of this Project.
- 7.6 City may make and retain copies of Documents for information and reference in connection with use on the Project by the City, or his authorized representative. Such Documents are not intended or represented to be suitable for reuse by City or others on extensions of the Project or on any other project. Any such reuse or modifications without written verification or adaptation by Consultant, as appropriate for the specific purpose intended, will be at City's sole risk and without liability or legal exposure to the Consultant or to Consultant's Consultants.
- 7.7 If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.
- 7.8 Any verification or adaptation of the Documents for extensions of the Project or for any other project will entitle Consultant to further compensation at rates to be agreed upon by City and Consultant.

ARTICLE 8. INSURANCE.

- 8.1 During the performance of the Services under this Agreement, Consultant shall maintain the following minimum insurance:
- a) General Liability Insurance with a combined single 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 Coverage A in accordance with statutory requirements and Coverage B, Employer's Liability Insurance, with a limit of \$500,000 for each occurrence.

- d) Professional Liability Insurance with a limit of \$1,000,000 annual aggregate.
- 8.2 Consultant shall add the City an additional insured on all policies unless otherwise prohibited.
- 8.3 Consultant shall, upon execution of this Agreement, furnish City certificates of insurance, which shall include a provision that such insurance shall not be canceled without at least thirty days' written notice to City.
- 8.4 No insurance, of whatever kind or type is to be considered as in any way limiting other parties' responsibility for damages resulting from their activities in the execution of the Project. City agrees to include, or cause to be included, in the Project's construction contract, such requirements for insurance coverage and performance bonds by the Project's construction contractor as City deems adequate to indemnify City, Consultant, and other concerned parties against claims for damages and to insure compliance of work performance and materials with Project requirements.

ARTICLE 9. PAYMENT.

- 9.1 City will pay Consultant for services and expenses in accordance with the Fee Schedule proposal submitted for the Project as part of the Scope Of Services. Consultant's invoices will be presented at the completion of the work or monthly and will be payable upon receipt. Payment is due upon presentation of invoice and is past due thirty (30) days from invoice date. City shall give prompt written notice of any disputed amount and shall pay the remaining amount.
- 9.2 Consultant shall be paid in full for all services under this Agreement, including City-authorized overruns of the Project budget or unforeseen need for Consultant's services exceeding the original Scope Of Services.
- 9.3 **TRAVEL; EXPENSES**
The City shall reimburse reasonable expenses, including travel and meals, when specified in the Scope Of Services, but only in accordance with the City's Travel and Expense Policy and Procedures Manual. The maximum amount will be applied as of the date of travel and as listed in the per diem reimbursement rates on the "CONUS" website developed by the United States General Services Administration, located at www.gsa.gov [click on 'per diem rates' under the 'etools' category].

ARTICLE 10. MISCELLANEOUS PROVISIONS

- 10.1 **EQUAL EMPLOYMENT OPPORTUNITY.** In connection with this Agreement and the Project, the City and the Consultant shall not discriminate against any employee or applicant for employment because

of race, color, sex, national origin, disability or marital status. The City and Consultant will take affirmative action to ensure that contractor used for the Project does not discriminate against any employee and employees are treated during employment without regard to their race, age, religion, color, gender, national origin, disability or marital status. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination, rates of pay or other forms of compensation; and selection for training, including apprenticeship.

10.1.1 The Consultant shall insert the foregoing provision in all contracts relating to this Project.

10.2 TITLE VI – CIVIL RIGHTS ACT OF 1964. The City and the Consultant shall comply with all the requirements imposed by Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d), 49 C.F.R., Part 21, and related statutes and regulations.

10.2.1 The Consultant shall insert the foregoing provision in all contracts relating to this Project.

10.3 NO THIRD PARTY RIGHTS CREATED. City 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 their successors, executors, administrators, permitted assigns, legal representatives and partners of such other party in respect to all provisions of this Agreement. The Services provided for in this Agreement are for the sole use and benefit of City and Consultant. Nothing in this Agreement shall be construed to give any rights or benefits to anyone other than the City and the Consultant.

10.4 WARRANTIES/LIMITATION OF LIABILITY/WAIVER. The City reserves all rights afforded to local governments under law for all general and implied warranties. The City does not waive any rights it may have to all remedies provided by law and therefore any attempt by Consultant to limit its liability shall be void and unenforceable.

ARTICLE 11. EXTENT OF AGREEMENT:

11.1 APPLICABLE LAW/CHOICE OF FORUM AND VENUE. This Agreement is made under and will be construed in accordance with the laws of the State of Tennessee without giving effect to that state's choice of law rules. The parties' choice of forum and venue shall be exclusively in the courts of Williamson County, Tennessee. Any provision of this Agreement held to violate a law or regulation shall be deemed void, and all remaining provisions shall continue in force.

11.2 **ENTIRE AGREEMENT.** This Agreement, including these terms and conditions, represent the entire Agreement between City and Consultant for this Project and supersedes all prior negotiations, representations or agreements, written or oral. This Agreement may be amended only by written instrument signed by City and Consultant.

ARTICLE 12. DISPUTE RESOLUTION, BREACH.

12.1 If a dispute should arise relating to the performance of or payment for the services under this Agreement, the aggrieved party shall notify the other party of the dispute within a reasonable time after such dispute arises. During the pendency of any dispute, the parties shall continue diligently to fulfill their respective obligations hereunder. No arbitration or mediation shall be required as a condition precedent to filing any legal claim arising out of or relating to the Contract. No arbitration or mediation shall be binding.

12.2 **BREACH.** Upon deliberate breach of the Contract by either party, the non-breaching party shall be entitled to terminate the Contract with notice, with all of the remedies it would have in the event of termination, and may also have such other remedies as it may be entitled to in law or in equity.

ARTICLE 13. SURVIVAL.

The provisions contained in this Professional Services Agreement shall survive the completion of or any termination of the Contract, agreement or other document to which it may accompany or incorporate by reference or which subsequently may be modified, unless expressly excepted from this Article upon consent of both parties.

City of Franklin ITS Planning & Design

PROJECT UNDERSTANDING

The City of Franklin developed an ITS Master Plan (map) as part of the 2004 Major Thoroughfare Plan Update. The ITS Master Plan consists of a map of the City of Franklin with the various ITS components shown. Currently, the ITS Master Plan shows all fiber that were installed prior to December 2012, closed circuit television (CCTV) cameras that were installed prior to February 2013 and all proposed fiber and CCTV cameras as of February 2013. The most recent ITS projects completed by the City was the expansion of the ITS system into the Cool Springs area and the connection along SR 96. The Cool Springs project was completed in 2011 and included installation of underground fiber optic throughout the Cool Springs area, installation of CCTV and connection of the CCTV and traffic signals back to the City's traffic operations center (TOC). The SR 96 ITS project was completed in 2012 and included installation of fiber optics and CCTV and connection of the CCTV and traffic signals back to the TOC.

This project will build from the City's previous ITS projects to complete the ITS system. This project will include an inventory of the existing infrastructure, an evaluation of the City's current ITS Master Plan, a technology review, communications infrastructure evaluation, and identification of recommended ITS projects. Future projects beyond the scope of this project will incorporate design packages for prioritized ITS projects, and construction engineering and inspection (CEI) for the ITS projects that are moved forward into the construction phase.

SCOPE OF SERVICES

The purpose of this Exhibit is to define as clearly as possible the duties of Atkins with regard to the City of Franklin (City) ITS Planning and Design Expansion contract. The administration of this ITS project will be conducted by Atkins in full cooperation with the City's Project Manager and/or his representative(s) assigned to the project.

Task 1 – Project Management & Meetings

This task includes any management activities by Atkins that will result in the successful completion of the City of Franklin's ITS System.

Subtask 1.1 – Project Management

Project management is a continuous task that will be performed by Atkins for the duration of this contract. Monitoring, coordination, scheduling, and reporting requirements of this task will be used to facilitate periodic review by the City to ascertain Atkins's conformance with the requirements of this task. All deliverables included within this task will be provided to the City's Project Manager in .pdf format in addition to the hard copies identified below.

Each month during the contract, Atkins will prepare and submit a concise monthly status report covering work progress and contract fulfillment. The monthly status report will be submitted with the monthly invoice.

Subtask 1.2 - Meetings and Presentations

Atkins will attend a project kick off meeting where the City will provide relevant project information, along with procedures for administering the contract. Atkins will have full responsibility for identifying

the need for organizing, scheduling, and conducting technical and/or management meetings required for the successful completion of the work defined in this contract. This will include a monthly progress meeting.

Atkins will prepare the agenda for all meetings and provide all necessary materials and handouts for discussion. At the conclusion of each meeting, Atkins will prepare meeting minutes and a cumulative list of "action items" developed for assignment to the appropriate party. Atkins will distribute these items to the attendees and appropriate others within five (5) working days following the meeting.

Subtask 1.3 - Quality Control/Quality Assurance

Atkins will apply a quality assurance/quality control (QA/QC) process throughout the project life cycle. Atkins will develop a Project Control Plan as part of the QA/QC process. This document will require documentation of how the project will proceed and will consist of the following elements:

- Project description with notation of special project issues
- Detailed scope
- Budgets
- Communication plans
- Document control plans (electronic and hard copy)
- Internal kick-off meeting agenda and minutes
- Quality Control Plan

Subtask 1.4 - Coordination with ASCT Consultant

Throughout the project, Atkins will coordinate with the ASCT consultant conducting the study and/or design for the traffic signal system in the Cool Springs area. The communication media and technologies that may be deployed as part of the traffic signal system must be coordinated with this ITS expansion planning and design project.

Task 1 Deliverables:

- Preparation of meeting minutes and agendas for all project related meetings
- Facilitate all project meetings and issue resolution
- Copies of all meeting agenda and minutes via email or hard copy no later than five (5) business days after meeting
- Progress Report provided at each invoice or on a monthly basis. The progress report shall include at a minimum a review of work performed during the previous period, upcoming work activities to be performed for the current billing period, and a list of outstanding issues requiring resolution.

Task 2 – ITS Planning

Subtask 2.1 – Existing Conditions/ITS Inventory

The City currently has an ITS Master Plan (GIS map) that shows the locations of the existing, planned and proposed ITS components (CCTV and fiber optics). Part of the current fiber optic network was installed by the City's Information Technology (IT) department and traffic engineering/ITS is utilizing it for a communications backbone. The inventory of existing conditions will provide the basis for recommended changes in device or communications technology and will also serve to identify any gaps between the existing ITS deployments and those which will be envisioned in a citywide complete ITS system.

The City will conduct the field inventory of the current ITS and traffic signal system. Atkins will coordinate with the City to validate existing traffic signal equipment and ITS devices. This inventory should document the location, type of devices (traffic signal controllers, CCTV, VDS, etc), and classify as existing, under construction, and planned/funded. Once the inventory is complete, Atkins will review the database/spreadsheets of the existing devices to verify all information. Also, based on review of the asset management database/spreadsheets, Atkins will provide recommendations on preventative maintenance plans and service life of devices. This information will be utilized to assist the City in the development of a preventative maintenance plan and during the project identification and prioritization phase.

Also, Atkins will coordinate with the City (Traffic Engineering and IT Department) to document the existing communications utilized for the traffic/ITS system. This will be utilized as part of *Subtask 2.3 Network/Communications Review*.

City Responsibility

The City will provide to Atkins the existing GIS database for the traffic and ITS devices as well as communications infrastructure.

Subtask 2.1 Deliverables

- Draft Existing Conditions Report including device database/spreadsheet (four hard copies and one electronic copy (.pdf))
- Final Existing Conditions Report including device database/spreadsheet (two hard copies and one electronic copy (.pdf))

Subtask 2.2 – Technology Review

Once the existing conditions/inventory task is complete, Atkins will evaluate the existing conditions and planned infrastructure improvements to identify and develop technology recommendations for any current or emerging ITS technologies that the City may want to deploy to achieve their goals. This includes updated models of existing devices or different types of technologies that may be useful to the City. Examples of technologies included in this task are CCTV cameras, vehicle detection, and communications media and hardware.

Subtask 2.2 Deliverables

- Draft Technology Document (four hard copies and one electronic copy (.pdf))
- Final Technology Document (two hard copies and one electronic copy (.pdf))

Subtask 2.3 – Network/Communications Review

Atkins will coordinate with the City to validate the existing communication infrastructure and network configuration. This inventory will include the specific brands and models of each device, such as encoder/decoders and will document the network configuration and use of switches and other communication hardware. This inventory will rely on agency records and will not detail the specific usage of individual fibers in the network. Additionally, validating existing conduit routes and innerduct in existing conduit is not included in this scope of services.

Atkins will perform a complete telecommunications needs assessment for the City's communications network infrastructure. Atkins will evaluate the existing communications infrastructure to determine if modifications to current or future communications infrastructure should be considered to support expansion of the ITS. This task includes considering the feasibility of different communications schemes and network design to provide communications with all city traffic signals, flashing beacons, and CCTV cameras in the City from the Traffic Operations Center (TOC). Atkins will recommend communication equipment necessary to support the system.

Atkins will review and recommend logical addressing for ITS devices and if not already in place, Atkins will assist in the development of a logical IP addressing plan for existing and future devices. The document will include a brief review of IP addressing, IP address classes, and sub-netting.

Atkins will evaluate the best method for data exchange with TDOT and adjacent agencies and may include recommendations such as shared communication infrastructure and investigating interagency agreements to provide access to CCTV.

Subtask 2.3 Deliverables

- Draft Network/Communications Needs Assessment (four hard copies and one electronic copy (.pdf))
- Final Network/Communications Needs Assessment (two hard copies and one electronic copy (.pdf))

Subtask 2.4 – Identification of ITS Projects

Based on the information obtained in the previous task, Atkins will work with the City to identify the priority areas for ITS implementation. Once the areas are determined, Atkins will coordinate with the City to create a list of future projects to fill in gaps or expand the current system. This will include such projects as, but not limited to, system detection, traffic signal interconnection, traffic signal control, communications, and CCTV, or the development of a traffic incident management plan. After the future projects are identified, Atkins will develop specific project write-ups and concept designs with corresponding Engineer's Opinion of Probable Cost for the projects.

Atkins will evaluate the projects against the goals of the City, need of the specific project, current funding and anticipated future funding of the ITS system. This evaluation will determine the draft prioritization list that will be provided to the City for review. During the City's review, Atkins will work with the City to fine-tune scopes of the specific projects. Once the City has completed the review, Atkins will finalize the project list.

Subtask 2.4 Deliverables

- Draft List of Potential Projects (four hard copies and one electronic copy (.pdf))
- Final List of Prioritized Projects (two hard copies and one electronic copy (.pdf))

Task 3 – Additional Services

From time to time, the City may need Atkins to perform additional tasks under this assignment. This may include, but not limited to, stakeholder coordination, supporting the City with funding applications, design services, system engineering, signal timing development and implementation, ITS system integration, and other miscellaneous services, as deemed necessary by the City. At the request of the City, Atkins will provide a scope of services and fee proposal for additional services.

COMPENSATION

The above scope of services will be completed as a lump sum project billed on a percent complete per task basis.

<u>TASK</u>	<u>DESCRIPTION OF WORK</u>	<u>FEE</u>
1	Project Management and QA/QC	\$14,950
2.1	Existing Conditions/ITS Inventory	\$28,100
2.2	Technology Review	\$19,150
2.3	Network/Communications Review	\$27,900
2.4	Identification of ITS Projects	\$18,050
TOTAL PROJECT FEE		\$108,150