

**Scope of Services (“Attachment A”) for City of Franklin
Adaptive Signal Control Technology (ASCT) System Implementation
(COF Contract No. 2018-0189)**

Description of Services

Title I Services (*Before Contractor Selection*):

Service tasks provided during the development of the construction plan will include:

- Initial evaluation of corridor(s), challenges and opportunities
- Site Survey to include:
 - Temple, Inc. (Temple) traveling on-site to gather intersection information to determine material needed
 - Observation of traffic conditions and general observations (not a formal traffic study)
 - Review existing intersection detection and associated cabinet wiring inputs
 - Review existing signal control cabinets and communications networking
- Present initial project details: construction needs, early signal groupings, basic configurations
- Provide report from the survey, which includes:
 - Documenting observations regarding traffic patterns/trends that affect detection placement (i.e. justification for set-back distance and filter zones)
 - Possible recommendations on any required Traffic Cabinet Modifications (i.e. card rack space, controller firmware, etc.)
 - Identify challenges and make recommendations for strategies to help mitigate these challenges
- Schedule and attend a formal review meeting with the City of Franklin and consultants to discuss implementation changes that are necessary from the project plan review.
- Assist in the development of Final Construction/Project Plans to be completed by the City of Franklin and their consultants with any questions they may have regarding operation. This includes Temple’s trip(s) to assist with any design-related questions.
- Initial PC SCOOT Design – Temple will work with the engineering firm to recommend detector placement for PC SCOOT operation.
- Review and Implement Changes – Temple will solicit City/Consultant feedback from the final review of the plans and make changes as needed/required.

Description of Services (Continued):

Title II Services (*After Contractor Selection*):

Service tasks provided during the construction and implementation phase will include:

- Provide Detailed Project Plan/Configuration
- Contractor Installation Training, which will “certify” that the contractor is properly trained on providing Service Provider with detailed information (such as a detector input to controller report) that is needed for SCOOT to operate correctly
- PC SCOOT Database Development
 - Measurement: To be paid upon completion of Validation
- PC SCOOT Intersection Validation
 - Measurement: Validation will be completed just prior to System Turn-On
- Adaptive Turn-On and Configuration
- Fine Tuning and System Calibration
- Intersection & Region (Group) Graphics/Maps Development as part of Validation Services
- Maintenance/Installation Checklists - Temple will provide on-site maintenance training for City staff and perform all hardware related verification checklists for system installation.
- Operation/Theory Training – Temple will provide on-site training for operation of the PC SCOOT system and training on the theory of how PC SCOOT works. Training will comply with approved Systems Engineering Analysis (SEA) requirements, and a training plan will be submitted for approval prior to conducting the training.
- Testing/Report – Temple will conduct on-site testing, along with the City and engineering firm, as described in the Request for Proposals (RFP). Temple will submit a testing plan for approval prior to testing. Temple will also deliver a results report upon conclusion of testing.
- Configuration Audits – Temple will conduct configuration audits as described in the RFP.
- Post Acceptance Test / Maintenance / Warranty Period – After the project completes acceptance testing, the Temple/Siemens team will support the project under the maintenance plan, which includes remote support of the system as well as on-site visits as required. If remote support cannot solve an issue, then Temple will send a SCOOT specialist on-site.

General Schedule

Title I Services

- On-Site Services – Up to forty-five (45) calendar days of on-site work to complete Title I Services.
- Remote Services – Up to sixty (60) calendar days, performed concurrently with on-site services, to complete Title I Services. The additional time includes full documentation and report.

Title II Services

- Title II work for Functional Adaptive Control will provide on-site and remote services to deploy the Siemens SCOOT adaptive system in the City of Franklin, TN.
- On-Site Services – Up to one hundred fifty-two (152) person days (e.g. 8 person days per intersection) of on-site work to complete Title I Services.
- Remote Services – Performed concurrently with on-site services

General Note(s) (Title I and Title II Services)

- The above scope of work is subject to the requirements, terms, and conditions of the RFP. If there are inconsistencies between the scope and the RFP requirements, then the RFP requirements shall govern.

Free Breakdown

The breakdown of fees for this scope of services are as follow:

Title I Services				
Item	Quantity	Unit	Unit Price (\$)	Ext. Amount (\$)
On-site Technical Services	1	Lump Sum	40,000.00	40,000.00
Remote Technical Services	1	Lump Sum	15,000.00	15,000.00
<i>Total for Title I Services:</i>				55,000.00

Free Breakdown (Continued)

Title II Services					
Item	Description	Quantity	Unit	Unit Price (\$)	Ext. Amount (\$)
Adaptive Software	PC SCOOT (Set of 10 Licenses)	2	Each	72,042.00	144,084.00
	SCOOT Interface for TACTICS	1	Included	No Cost	No Cost
<i>Subtotal for Adaptive Software:</i>					144,084.00
Adaptive Services	Validation/Field Tuning	19	Each*	7,500.00	142,500.00
	Acceptance Testing	19	Each*	987.00	18,753.00
	Annual SCOOT Maint. Services	5	Each*	12,000.00	60,000.00
	SCOOT Training	1	Lump Sum	15,000.00	15,000.00
<i>Subtotal for Adaptive Services:</i>					236,253.00
<i>Total for Title II Services:</i>					380,337.00

* Denotes "All Inclusive"

Total Cost of services for implementation of the adaptive signal control technology system, as described in this Scope of Services is \$435,337.00.

Payment Terms

Payment is full compensation for furnishing and installing the adaptive signal control technology items complete and in place according to the RFP requirements. Payment(s) shall be made on a Lump Sum basis per Task as follows:

Title I Services:

- Task 1A (On-Site Technical Services) - \$40,000.00
 - Full payment (100%) shall be made upon completion of Title I Services.
- Task 1B (Remote Technical Services) - \$15,000.00
 - Full payment (100%) shall be made upon completion of Title I Services.

Payment Terms (Continued)

Title II Services:

- Task 2A (Adaptive Software) - \$144,084.00
 - Partial payment (50%) shall be made upon completion of the following:
 - Acceptance of SCOOT computers & software installation, and
 - Proof of Purchase of Adaptive Software
 - Remaining payment (50%) shall be made upon final delivery of a fully functional (i.e. delivered, installed, integrated, tested, and accepted) adaptive system.
- Task 2B (Adaptive Services) - \$236,253.00
 - Partial payment (50%) shall be made after service provider completes the following:
 - Initial intersection geometric & timing discovery,
 - Communications & intersection detection layout discovery,
 - SCOOT intersection translation plan development,
 - SCOOT build documentation, and
 - Database creation.
 - Remaining payment (50%) shall be made after final delivery (i.e. delivered, installed, integrated, tested, and accepted) of a fully functional adaptive system.
 - *This final payment includes, but is not limited to: acceptance testing, annual maintenance services for five (5) years, SCOOT training, and use taxes.*