



**CENTRAL TEXAS
Regional Mobility Authority**

AGENDA ITEM #8 SUMMARY

Approve a new work authorization with MSX International, Inc., to provide general toll system consulting services for the Manor Expressway Project and the Mopac Improvement Project.

Strategic Plan Relevance: Regional Mobility

Department: Operations

Associated Costs: Not to exceed \$604,188.90 for the duration of both the Manor Expressway and MoPac Improvement Projects

Funding Source: Capital Project Funds

Board Action Required: Yes

Description of Matter: The contract with MSX International, Inc. for General Toll Systems Consultant Services did not anticipate obtaining the consulting services necessary for the Manor Expressway ITS system and the dynamic toll system required for the MoPac Improvement Project. This work authorization would provide for MSX to provide needed consulting services through completion of these two capital projects at a “not to exceed” cost of \$604,188.90.

Reference documentation:

Draft Resolution
Proposed Work Authorization

Contact for further information: Tim Reilly, Director of Operations

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

RESOLUTION NO. 12-___

**APPROVING A NEW WORK AUTHORIZATION WITH MSX INTERNATIONAL,
INC., TO PROVIDE GENERAL TOLL SYSTEM CONSULTING SERVICES FOR THE
MANOR EXPRESSWAY PROJECT AND THE MOPAC IMPROVEMENT PROJECT.**

WHEREAS, the Mobility Authority contracts with MSX International, Inc. (“MSXI”) for general toll systems consultant services under an Agreement for General Systems Consultant Services effective April 1, 2011 (the “Agreement”), as amended by the First Amendment to the Agreement for General Systems Consultant Services approved by the Board of Directors on December, 5, 2012; and

WHEREAS, the Mobility Authority wishes to obtain additional toll consulting services from MSXI for capital projects not included within the scope of services provided under the Agreement or by Work Authorization No. 1 issued under the Agreement; and

WHEREAS, the Executive Director and MSXI have agreed on a work authorization to provide toll system consulting services for the Manor Expressway and MoPac Improvement Projects; and

WHEREAS, the Executive Director recommends that the Board approve the proposed work authorization, at a total cost for those services not to exceed \$604,188.90 as established by the proposed work authorization attached as Exhibit 1 to this resolution.

NOW THEREFORE, BE IT RESOLVED that the Board of Directors approves the proposed work authorization with MSXI; and

BE IT FURTHER RESOLVED that the Board of Directors authorizes the Executive Director to execute the work authorization with MSXI in the form or substantially similar to the form attached as Exhibit 1 to this resolution.

Adopted by the Board of Directors of the Central Texas Regional Mobility Authority on the 5th day of December, 2012.

Submitted and reviewed by:

Approved:

Andrew Martin
General Counsel for the Central
Texas Regional Mobility Authority

Ray A. Wilkerson
Chairman, Board of Directors
Resolution Number 12-___
Date Passed: 12/05/12

Exhibit 1 to Resolution No. 12-
Proposed Work Authorization No. 2

(on the following 6 pages)

WORK AUTHORIZATION NO. 2

This Work Authorization No. 2 is made as of this ____ day of December, 2012, under the terms and conditions established in the AGREEMENT FOR GENERAL SYSTEMS CONSULTANT SERVICES, dated as of April 1, 2011 (the "Agreement"), between the Central Texas Regional Mobility Authority ("Authority") and MSX International, Inc. ("Consultant" or "MSXI"), as the Agreement is amended by the First Amendment dated December 5, 2012.

This Work Authorization is made for the following purpose, consistent with the services defined in the Agreement:

The Consultant shall provide technical assistance and advice to the Authority and assist in the management and oversight of the Toll Collection Implementation and Maintenance Services Agreement between the Authority and the Toll Systems Integrator, as more specifically detailed in the Agreement at Appendix A (Scope of Services), Section II (Services).

Scope of Services

Consultant shall perform the services and provide the deliverables described in Appendix A attached to this Work Authorization No. 2 on an "as needed" basis pursuant to the written request of the Authority.

Compensation

Compensation for providing services and deliverables described by this Work Authorization shall in accordance with Article 2 of the Agreement. Compensation paid for services and deliverables provided under this Work Authorization shall not exceed a total amount of \$604,188.90. This maximum payment is based on the estimated costs set out in Appendix A.

IN WITNESS WHEREOF, the parties have executed this Work Authorization No. 2 to be effective on the date and year first written above.

**CENTRAL TEXAS REGIONAL MOBILITY
AUTHORITY**

MSX INTERNATIONAL, INC.

By: _____
Mike Heiligenstein, Executive Director

By: _____
Name: _____
Title: _____

APPENDIX A

Scope of Services

Roadway Projects Support

I. Purpose

The Consultant shall provide technical assistance and advice to the Authority and assist in the management and oversight of the toll system design and implementation for new road projects. MSXI shall provide qualified technical and professional personnel to perform the duties and responsibilities assigned under this work authorization. The Authority, at its option, may elect to expand, reduce or delete the extent of each work element described in this Scope of Services document, provided such action does not alter the intent of this Agreement.

Any Service provided under this Work Authorization is to be provided on an “as-needed” basis at the written request of the Authority. There is no guarantee that any or all of the Services described in this Agreement will be assigned during the term of this Agreement. Further, the Consultant is providing these Services on a nonexclusive basis. The Authority at its option may elect to have any of the Services set forth herein performed by other consultants or Authority's staff.

II. Services for the MoPac Improvement Project.

The Scope of Services to be provided by the Consultant may include the following:

1. Document existing system architecture and components for use in a change order for the Authority's current systems contractor.
2. Participate in the development of business rules and policies, including pricing policies, system operational plans, and enforcement strategies. Document the same business rules and policies. Ensure rules and policies can be effectively implemented and maintained.
3. Document a high-level system design that will become the basis of a toll system implementation work authorization for the MoPac Improvement Project system. Detail the high level system design to the point that effects on the current Toll Collection (Host and 183A) system can be categorized and assessed. Consider implications of system impact to the existing system and craft required considerations, upgrades and replacements into the design document. Obtain feedback from affected personnel and document the most effective system design based on cost, schedule, features, usability, maintainability, and adherence to the Authority's long-range strategic goals for the MoPac Improvement Project and the existing 183A systems.
4. Using the output of the tasks above, develop the technical specifications for the toll system work authorization to be used for the MoPac Improvement Project system. In addition to technical specifications, the work authorization will prescribe the high-level testing methodology to be used throughout the development and delivery of the toll system.

5. Assist with the evaluation of technical and cost proposal for work authorization negotiation.
6. Facilitate the System Integrator's (SI's) discovery efforts required for the SI to properly customize their existing products/services to meet the particular MoPac Improvement Project requirements. This will include onsite design meetings and other communications required to communicate the Authority's project requirements to the SI in a timely, accurate fashion that does not compromise the project schedule or system functionality.
7. Review, comment, and recommend approval (where appropriate) on all technical submittals provided by the SI related to the Project requirements. This may include the following plans/documents:
 - a) Implementation Schedule
 - b) Project Management Plan
 - c) Security Plan
 - d) Configuration Management and Document Control Plan
 - e) Quality Management Plan
 - f) Software Development Plan
 - g) System Requirements Document
 - h) System Detailed Design Document
 - i) Master Test Plan
 - j) All Required Test Completion Reports
 - k) Training Plan
 - l) Training Schedule and Training Materials
 - m) System User Manuals
 - n) System Administrator Manuals
 - o) Audit Manual
 - p) Maintenance Plan
 - q) Maintenance Service Manual
 - r) Disaster Recovery Plan
 - s) Installation Plan
 - t) Installation Checklist
 - u) Factory Acceptance Test Plan
 - v) Back Office (Host/IOP Hub) Integration Test Plan
 - w) As-Built System Detailed Design Document
8. Oversee system testing to ensure compliance with project requirements.
9. Track the SI's project schedules, risk analysis, and project status reporting.
10. Assist with the telecommunications required for connectivity of the tolling sites with the Authority's Host and disaster recovery site.
11. Assist with the fiber optic connectivity integration to TxDOT fiber infrastructure.
12. Assist in the definition of toll locations naming to comply with the Texas Interoperability requirements.

13. Provide other related technical services as requested by the Authority.

14. Deliverables: Deliverables from the tasks above include the following:

- a) Monthly Project Status Reports.
- b) New business rule and policy documentation.
- c) High level system design document.
- d) Technical requirements of the toll collection system.
- e) Design information required by System Integrator throughout this phase of the project.
- f) Comments related to all SI submitted documentation detailed above.
- g) Testing Status/Results Reports.

Table 1

Proposed Task Distribution of Hours	
Task Name: Mopac Improvement Project	
Sub-Task Description	Total Estimated Hours
Design definitions and requirements	1100
Project Document Review	400
Project Meetings / Reports	200
Installation Support	200
System Testing Support/Coordination	1100
<i>Total:</i>	<u><u>3000</u></u>

Table 2

Proposed Task Costs and Hours			
Task Name: Mopac Improvement Project			
Resource Name	Estimated Hours	Rate	Estimated Cost
Greg Mack	2250	\$137.00	\$308,250.00
Bill Brownsberger	400	\$183.07	\$73,228.00
Steve Doolin	200	\$129.59	\$25,918.00
Barbara Jewell	100	\$138.84	\$13,884.00
Robin Carty	50	\$107.99	\$5,399.50
<i>Total:</i>	<u><u>3000</u></u>		<u><u>\$426,679.50</u></u>

III. Services for the Manor Expressway Project.

1. Assist the Authority with the oversight of its contract with the Toll System Integrator.
2. Participate in any Toll Collection System (TCS) design reviews
3. Review contract deliverables from the Toll Systems Integrator to include, without limitation, the System Design documents, Interface Control documents, and testing documentation to ensure that deliverables conform to the TCS contract terms and Authority standards.
4. Participate in system development testing and assist the Authority in monitoring of tests.
5. Oversee TCS Acceptance testing and advise the Authority regarding testing process, progress and results.
6. Assist with the telecommunications required for connectivity of the tolling sites with the CTRMA Host and disaster recovery site.
7. Assist with the fiber optic connectivity integration with the TxDOT fiber infrastructure.
8. Assist with integration requirements for interfacing with the Traffic Management Control Center for CTRMA.
9. Assist in the definition of toll locations naming to comply with the Texas Interoperability requirements.
10. Provide other related technical services as requested by the Authority.

11. Deliverables

Deliverables from the tasks above include the following:

- 1 High level system design document review
- 2 Communication network documentation review
- 3 Testing Status/Results Reports

Table 3

Proposed Task Distribution of Hours	
Task Name: Manor Expressway	
Sub-Task Description	Total Estimated Hours
Project Document Review	160
Project Meetings / Reports	100
Installation Support / Coordination	200
System Testing Support/Coordination	750
<i>Total:</i>	<u><u>1210</u></u>

Table 4

Proposed Task Costs and Hours			
Task Name: Manor Expressway			
Resource Name	Estimated Hours	Rate	Estimated Cost
Greg Mack	650	\$137.00	\$89,050.00
Bill Brownsberger	300	\$183.07	\$54,921.00
Steve Doolin	110	\$129.59	\$14,254.90
Barbara Jewell	100	\$138.84	\$13,884.00
Robin Carty	50	\$107.99	\$5,399.50
<i>Total:</i>	<i>1210</i>		<i>\$177,509.40</i>