



**CENTRAL TEXAS
Regional Mobility Authority**

Meeting Date: February 24, 2016
AGENDA ITEM # 7

Award work authorization no. 2 and amend work authorization no.1 to extend the current project schedule for survey quality assurance services for the 183 South Project.

Strategic Plan Relevance: Regional Mobility

Department: Engineering

Contact: Justin Word, P.E., Director of Engineering

Associated Costs: \$625,770.00

Funding Source: Project Funds

Action Requested: Consider and act on draft resolution

Summary:

On September 30, 2015, the Board authorized the Executive Director to negotiate and execute a professional services contract and work authorization for survey quality assurance services on the 183 South Project. This included efforts through June 30, 2016 and in an amount not to exceed \$1,200,000. As a result, the contract and Work Authorization (WA) No. 1 was executed in the amount of \$394,180.

To continue survey quality assurance efforts on the 183 South project, the Executive Director seeks Board approval to execute Supplemental WA No. 1 to extend the schedule on WA No. 1 from June 30, 2016 to December 31, 2020 and to execute WA No. 2 in the amount of \$625,770 with a schedule through December 31, 2020.

Backup provided: Proposed Supplemental Work Authorization No. 1
Proposed Work Authorization No. 2
Draft Resolution for Board Consideration

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

RESOLUTION NO. 16-0XX

**AWARD WORK AUTHORIZATION NO. 2 AND AMEND WORK AUTHORIZATION
NO. 1 TO EXTEND THE CURRENT PROJECT SCHEDULE FOR MATERIALS
ACCEPTANCE TESTING FOR THE 183 SOUTH PROJECT**

WHEREAS, by Resolution 15-058 dated September 30, 2015, the Board of Directors authorized the Executive Director to negotiate and execute on behalf of the Mobility Authority an agreement with McGray & McGray and an initial work authorization for services to be provided through June 30, 2016, for survey quality assurance services; and

WHEREAS, a proposed Supplement to Work Authorization No. 1 to extend the schedule on Work Authorization No. 1 from June 30, 2016 to December 31, 2020 is attached hereto as Exhibit 1; and

WHEREAS, a proposed Work Authorization No. 2 in the amount of \$625,770 with a schedule through December 31, 2020 is attached as Exhibit 2; and

WHEREAS, the Executive Director recommends approval of both the proposed Supplemental Work Authorization No. 1 and new Work Authorization No. 2.

NOW THEREFORE, BE IT RESOLVED that the Board of Directors hereby adopts and approves both the proposed Supplement Work Authorization No. 1 and new Work Authorization No. 2 in substantially the form attached hereto as Exhibits 1 & 2.

BE IT FURTHER RESOLVED that the Executive Director is authorized to finalize and execute Supplement Work Authorization No. 1 and Work Authorization No. 2 on behalf of the Mobility Authority.

Adopted by the Board of Directors of the Central Texas Regional Mobility Authority on the 24th day of February, 2016.

Submitted and reviewed by:

Approved:

Geoffrey S. Petrov, General Counsel

Ray A. Wilkerson
Chairman, Board of Directors

Exhibit 1

ATTACHMENT C

**SUPPLEMENTAL WORK AUTHORIZATION NO. 1
TO WORK AUTHORIZATION NO. 1
CONTRACT FOR SURVEY QUALITY ASSURANCE SERVICES**

THIS SUPPLEMENTAL WORK AUTHORIZATION is made pursuant to the terms and conditions of Article 4 of the Contract for Survey Quality Assurance Services (the Contract) entered into by and between the Central Texas Regional Mobility Authority (the Mobility Authority) and McGray & McGray Land Surveyors, Inc. (the Surveyor).

The following terms and conditions of Work Authorization No. 1 are hereby amended as follows:

PART I. Exhibit C, Work Schedule, is deleted in its entirety and replaced with Exhibit C-1, Work Schedule, which is hereto attached and made part of this Supplemental Work Authorization.

PART IV. This Supplemental Work Authorization shall become effective on the date of final acceptance of the parties hereto and shall terminate upon completion of the work, unless extended by a Supplemental Work Authorization as provided in Article 4 of the Contract.

PART V. This Supplemental Work Authorization does not waive the parties' responsibilities and obligations provided under the Contract.

This Supplemental Work Authorization shall become effective on the date of final execution of the parties hereto. All other terms and conditions of Work Authorization No. 1 not hereby amended are to remain in full force and effect.

IN WITNESS WHEREOF, this Supplemental Work Authorization is executed in duplicate counterparts and hereby accepted and acknowledged below.

THE SURVEYOR

**CENTRAL TEXAS REGIONAL
MOBILITY AUTHORITY**

(Signature)

(Signature)
Mike Heiligenstein

(Printed Name)

Executive Director

(Title)

(Date)

(Date)

Exhibit C-1

Work Schedule

The Surveyor will perform Survey Quality Assurance Services as described in this Work Authorization and will submit deliverables to the Mobility Authority based on the following work schedule.

Original Notice to Proceed.....January 05, 2016

Contract Expiration..... December 31, 2020

ATTACHMENT B

**WORK AUTHORIZATION NO. 2
CONTRACT FOR SURVEY QUALITY ASSURANCE SERVICES**

THIS WORK AUTHORIZATION is made pursuant to the terms and conditions of Article 4 of the Contract for Survey Quality Assurance Services (the Contract) entered into by and between the Central Texas Regional Mobility Authority (the Mobility Authority) and McGray & McGray Land Surveyors, Inc. (the Surveyor).

PART I. The Surveyor will perform Survey Quality Assurance services in accordance with the project description attached hereto in Exhibit B and made a part of this Work Authorization. The responsibilities of the Mobility Authority and the Surveyor as well as the work schedule are further detailed in Exhibits A, B, and C which are attached hereto and made a part of the Work Authorization.

PART II. The maximum amount payable under this Work Authorization is \$625,770.00 and the method of payment is fixed hourly rate which includes overhead and profit. This amount is based upon the Surveyor's estimated Work Authorization costs included in Exhibit D, Fee Schedule/Budget, which is attached and made a part of this Work Authorization. DBE participation shall be tracked as documented in Work Authorization No. 1.

PART III. Payment to the Surveyor for the services established under this Work Authorization shall be made in accordance with the appropriate sections of the Contract.

PART IV. This Work Authorization shall become effective on the date of final acceptance of the parties hereto and shall terminate upon completion of the work, unless extended by a Supplemental Work Authorization as provided in Article 4 of the Contract.

PART V. This Work Authorization does not waive the parties' responsibilities and obligations provided under the Contract.

IN WITNESS WHEREOF, this Work Authorization is executed in duplicate counterparts and hereby accepted and acknowledged below.

THE SURVEYOR

**CENTRAL TEXAS REGIONAL
MOBILITY AUTHORITY**

(Signature)

(Printed Name)

(Title)

(Date)

(Signature)
Mike Heiligenstein

Executive Director

(Date)

LIST OF EXHIBITS TO WORK AUTHORIZATION

Exhibits	Title
A	Services to Be Provided by the Mobility Authority
B	Services to Be Provided by the Surveyor
C	Work Schedule
D	Fee Schedule/Budget

EXHIBIT A

SERVICES TO BE PROVIDED BY THE MOBILITY AUTHORITY

The Mobility Authority shall perform and provide the following in a timely manner so as not to delay the Services to be provided by the Surveyor:

1. Authorize the Surveyor in writing to proceed.
2. Render reviews, decisions and approvals as promptly as necessary to allow for the expeditious performance of the Services to be provided by the Surveyor.
3. Provide timely review and decisions in response to the Surveyor's request for information and/or required submittals and deliverables, in order for the Surveyor to maintain the agreed-upon work schedule.
4. Maintain the Project's Website.
5. Provide the Surveyor with relevant data available to the Mobility Authority related to people, agencies and organizations interested in the proposed project.

Exhibit 2

EXHIBIT B

SERVICES TO BE PROVIDED BY THE SURVEYOR

Consulting and professional services to be provided by the Surveyor include, but are not limited to, providing survey support and survey quality assurance services associated with this Project and the efforts of the Design-Build Team (the “D-B Contractor”).

The Surveyor will work at the direction and supervision of the Mobility Authority and its General Engineering Consultant (GEC) to provide the Services. The Mobility Authority expects the Surveyor to work cooperatively and collaboratively in assisting the GEC throughout all aspects and phases of construction operations and in its dealings with the D-B Contractor, suppliers, subcontractors, engineers, legal counsel, accountants, consultants, government entities, utilities, property owners, and the general public.

The Surveyor staff will report to the GEC’s Resident Engineer (references herein to the “GEC” shall include the GEC’s Resident Engineer), and his staff, and provide survey information as requested from the GEC, oversee and check survey-associated efforts of the D-B Contractor, and provide documentation for all survey efforts completed for this Project. The checks performed by the Surveyor do not signify acceptance and are not a hold-point for the D-B Contractor. Therefore, it is of the utmost importance that the Surveyor be aware of the D-B Contractor’s production schedule, perform all checks in a timely manner, and provide reports and information to the GEC in a timely fashion.

The Surveyor shall not control or direct the construction under the construction contract. Survey checks performed by the Surveyor will not relieve the D-B Contractor of sole responsibility for the means and methods of construction, or for health or safety precautions in connection with the work under the construction contract. The D-B Contractor will remain responsible for design related services.

Respondents should be aware that the time frames noted herein are tentative and subject to change. The Surveyor will remain committed to this Project until released by the Mobility Authority.

The Services to be provided by the Surveyor include, without limitation, the following key elements:

A. General Requirements

- 1) Provide all labor, equipment, tools and incidentals to perform the Services. This will require providing traffic control for surveying efforts as necessary.
- 2) Provide all Personal Protective Equipment (PPE), as necessary in performance of Services. PPE will meet all current standards set by OSHA and any additional project specific requirements.
- 3) Provide vehicles clearly displaying company logos, mobile phones, and computer equipment system (i.e. laptop, computers and/or tablets) capable of performing the Services.
- 4) Services will include online entry of documents into the GECs document control system. The GEC will provide access to the project document control system. The Surveyor will become familiar with the operation of this system, as needed, and respect the confidentiality of all information provided to and available on this system.

- 5) Assist in the resolution of construction issues and conflicts and provide timely data to the GEC and the D-B Contractor.
- 6) Perform the Services described in this agreement as needed before, during, and after the construction of improvements.

The Mobility Authority reserves the right to require replacement of any personnel assigned to the Project during this contract.

B. Survey Support

- 1) Perform initial and periodic verification of the D-B Contractor's surveyor by checking permanent and temporary benchmarks set by the D-B Contractor.
- 2) Develop off-site independent control throughout the project limits.
- 3) Attend coordination meetings as required.
- 4) Perform additional verification of the D-B Contractor's survey records and methods through semi-annual audits. Special emphasis shall be placed on whether the D-B Contractor is maintaining adequate records to produce accurate as-built drawings (i.e. bridge settlement reference elevations, utility profiles).
- 5) Check the horizontal location of 1 drilled shaft or more per bent/abutment for all bridge structures on the project.
- 6) Check the vertical location of 1 bearing seat or more per bent/abutment for all bridge structures on the project.
- 7) Check D-B Contractor's line and grade between VPT/VPCs and at the beginning and end of cross slope transitions as well as any points of 0% cross slope for all lanes and shoulders on the mainlanes and general purpose lanes.
- 8) Perform field survey, topo or drainage surveys as requested.
- 9) Perform LiDAR surveys of bridge decks, retaining walls or other areas as requested.
- 10) Perform miscellaneous spot checks as needed during the duration of the project.
- 11) Prepare survey and reports regarding bridge and wall settlement monitoring as requested.
- 12) Perform right-of-way verification as requested.
- 13) Perform additional survey support services as requested by the Mobility Authority or the GEC.
- 14) All deliverables will be in Microstation Format (latest TxDOT approved version) with Topographic information to be provided in 2D and 3D files. Digital Terrain Models will be in .tin format. Other point files will be required in ASCII or .dat file formats as requested by the GEC.

15) All deliverables must also conform to the coordinate system being used by the Project.

C. Deliverables

- 1) Initial Benchmark Verification Report
- 2) Complete establishment of Control Points throughout the Project Limits.
- 3) Audit Reports
- 4) Plan sheets for bridge drilled shaft and bearing seat checks
- 5) Develop other reports as required.
- 6) Spreadsheet for roadway grade checks

EXHIBIT C

WORK SCHEDULE

The Surveyor will perform Survey Quality Assurance Services as described in this Work Authorization and will submit deliverables to the Mobility Authority based on the following work schedule.

Notice to Proceed..... Approximately March 01, 2016

Contract Expiration..... December 31, 2020

EXHIBIT D

FEE SCHEDULE/BUDGET

Exhibit D - Fee Schedule/Budget

Survey Quality Assurance

McGray & McGray Land Surveyors, Inc.

183 South Project (Bergstrom Expressway)

Work Authorization #2

Efforts from March 01, 2016 through December 31, 2020

	Principal	Project Manager	RPLS	Field Coordinator	GPS Processing	Sr. Survey Technician	Survey Technician	Survey Crew 2-Man	Survey Crew 3-Man	Admin	TOTAL
Hourly Labor Rate	\$190.00	\$165.00	\$145.00	\$98.00	\$108.00	\$96.00	\$88.00	\$150.00	\$186.00	\$63.00	HRS
1.1 Project Management and Administration	200	300	300							130	930
a Project Oversight and Coordination											
b Financial Management											
c Coordination Meetings											
1.2 Survey Support Services		300	350	400	400	300	300	650	640	130	3470
a Develop Independent Off-Site Project Control											
b Verification of Contract Survey Efforts											
c Check Horizontal and Vertical Alignments											
d Data Reduction											
e Addition Survey Efforts											

TOTAL LABOR (HOURS)	200	600	650	400	400	300	300	650	640	260	4400
% Total by Classification	4.55%	13.64%	14.77%	9.09%	9.09%	6.82%	6.82%	14.77%	14.55%	5.91%	

Overhead Rate 162.50%
 Profit Rate 12.00%

Total Labor (Profit and OH Included) \$ 38,000 \$ 99,000 \$ 94,250 \$ 39,200 \$ 43,200 \$ 28,800 \$ 26,400 \$ 97,500 \$ 119,040 \$ 16,380 \$ 601,770

Total Direct Expenses \$ 24,000.00

Total Fee (Labor and Direct Expenses) \$ 625,770