

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

RESOLUTION NO. 18-051

**APPROVING A CONTRACT AND WORK AUTHORIZATION NO. 1 WITH HDR, INC.
FOR CONSTRUCTION ENGINEERING AND INSPECTION SERVICES,
WORK AUTHORIZATION NO. 13 WITH ATKINS NORTH AMERICA INC., AND A
CONTINGENCY BUDGET FOR CONSTRUCTION PHASE PROFESSIONAL
SERVICES FOR THE MANOR EXPRESSWAY (290E) PHASE III PROJECT**

WHEREAS, by Resolution No. 17-047, dated September 7, 2017, the Board authorized and directed the Executive Director to initiate the procurement of construction engineering and inspection services for the Manor Expressway (290E) Phase III Project (“Project”); and

WHEREAS, by Resolution No. 18-022, dated June 27, 2018, the board awarded a contract for construction engineering and inspection services for the Manor Expressway (290E) Phase III Project to HDR, Inc. and authorized the Executive Director to negotiate the contract awarded to HDR, Inc. on behalf of the Mobility Authority and directed the Executive Director to present the proposed contract to the Board for its approval once an agreement is reached; and

WHEREAS, the Executive Director and HDR, Inc. have negotiated a contract for construction engineering and inspection services for the Manor Expressway (290E) Phase III Project and Work Authorization No. 1 under that contract in an amount not to exceed \$8,284,409.28, not including contingency, which are attached hereto as Exhibit A; and

WHEREAS, by Resolution No. 17-067, dated December 13, 2017, the board approved an agreement with Atkins North America Inc. for general engineering consultant services; and

WHEREAS, in order to oversee and manage the construction phase of the Manor Expressway (290E) Phase III Project, the Executive Director and Atkins North America Inc. have negotiated proposed Work Authorization No. 13 for general engineering consultant services for the Manor Expressway (290E) Phase III Project in an amount not to exceed \$3,309,459.76, not including contingency, which is attached hereto as Exhibit B; and

WHEREAS, the Executive Director estimates the reasonable contingency budget for construction phase professional services for the Manor Expressway (290E) Phase III Project in the amount of \$1,739,080.36, which includes contingency amounts for both the construction engineering and inspection services to be provided by HDR, Inc. under Work Authorization No. 1 and the general engineering consultant services to be provided by Atkins North America Inc. under Work Authorization No. 13; and

WHEREAS, the Executive Director recommends that the Board authorize him to finalize and execute the proposed contract and Work Authorization No. 1 with HDR, Inc. in an amount not to exceed \$8,284,409.28 and in substantially the form attached hereto as Exhibit A; and

WHEREAS, the Executive Director recommends that the Board authorize him to finalize and execute the proposed Work Authorization No. 13 with Atkins North America Inc. in in an amount not to exceed \$3,309,459.76 and in substantially the form attached hereto as Exhibit B; and

WHEREAS, the Executive Director recommends that the Board approve a contingency budget in the amount of \$1,739,080.36 for construction phase professional services for the Manor Expressway (290E) Phase III Project to be used at the discretion of the Director of Engineering as contingency for both Work Authorization No. 1 with HDR, Inc. and Work Authorization No. 13 with Atkins North America Inc.; and

NOW THEREFORE, BE IT RESOLVED, that the Board of Directors authorizes and directs the Executive Director to finalize and execute a contract and Work Authorization No. 1 with HDR, Inc. in an amount not to exceed \$8,284,409.28 and in the form or substantially the same form as attached hereto as Exhibit A; and

BE IT FURTHER RESOLVED, that the Board of Directors authorizes and directs the Executive Director to finalize and execute Work Authorization No. 13 with Atkins North America Inc. in an amount not to exceed \$3,309,459.76 and in the form or substantially the same form as attached hereto as Exhibit B; and

BE IT FURTHER RESOLVED, that the Board of Directors approves approve a contingency budget in the amount of \$1,739,080.36 for construction phase professional services for the Manor Expressway (290E) Phase III Project to be used at the discretion of the Director of Engineering as contingency for both Work Authorization No. 1 with HDR, Inc. and Work Authorization No. 13 with Atkins North America Inc.

Adopted by the Board of Directors of the Central Texas Regional Mobility Authority on the 26th day of September 2018.

Submitted and reviewed by:



Geoffrey Petrov, General Counsel

Approved:



Ray A. Wilkerson
Chairman, Board of Directors

Exhibit A

CONTRACT FOR CONSTRUCTION ENGINEERING & INSPECTION SERVICES

Cost Plus,

Unit Cost, Lump Sum, or Specified Rate

Specific Deliverable with Work Authorizations

THIS CONTRACT FOR CONSTRUCTION ENGINEERING & INSPECTION SERVICES (the “Contract”) is made by and between the Central Texas Regional Mobility Authority, 3300 N. I-35, Suite 300, Austin, Texas 78705, (the “Authority,”) and HDR, Inc. having its principal business address at 810 Hesters Crossing Suite 120 Round Rock, TX 78681 (the “Engineer”).

WITNESSETH

WHEREAS, the Authority desires to contract for services generally described as construction, engineering and inspection services, and more specifically described in Article I (the “Services”); and,

WHEREAS, pursuant to a qualifications-based selection conducted in accordance with the Professional Services Procurement Act (Tex. Gov’t Code Sec. 2254.001, et. seq.), and the Authority’s Policy Code regarding the procurement of professional services, the Authority has selected the Engineer to provide the needed Services; and

WHEREAS, the Engineer has agreed to provide the Services subject to the terms and conditions hereinafter set forth.

NOW, THEREFORE, the Authority and the Engineer, in consideration of the mutual covenants and agreements herein contained, do hereby mutually agree as follows.

AGREEMENT

**ARTICLE 1
SCOPE OF SERVICES**

The Engineer will furnish items and perform those Services for fulfillment of the Contract as identified in Exhibit B of the Attachment B - Work Authorization(s) (the “Services”). All Services provided by the Engineer shall comply with the terms and conditions of this Contract and any Work Authorizations issued pursuant hereto.

**ARTICLE 2
COMPENSATION**

Compensation for the Engineer’s Services and other aspects of the mutual obligations concerning the Engineer’s Services and payment therefore are as follows:

A. Basis for Compensation.

The compensation type(s) to be used shall be specified in the Work Authorization issued pursuant to Article 4. Compensation types can include:

(1) Cost Plus

Subject to the terms of a Work Authorization issued pursuant to Article 4 below (including any maximum amount to be paid as stated therein), the Authority agrees to pay, and the Engineer agrees to accept as full and sufficient compensation and reimbursement for the performance of all Services as set forth in this Contract, hourly rates for the staff working on the assignment computed as follows:

Direct Labor Cost x (1.0 + OH Rate) x (1.0 + Profit %, in decimal form)

where Direct Labor Cost equals employee's actual annual salary divided by 2080 hours per year (subject to any applicable cap); OH Rate equals the Engineer's most recent auditable overhead rate under 48 C.F.R. Part 31, Federal Acquisition Regulations (FAR) or otherwise approved overhead rate pursuant to this subsection 2.A; and Profit % reflects a ten percent (10%) profit. No increase shall be made to the specified profit percentage.

The Direct Labor Cost caps for the classifications of employees working for the Authority as of the effective date of this Contract are reflected in Attachment A-1. Revisions to Direct Labor Cost caps for employee classifications and the auditable overhead rate may be proposed no more frequently than once per calendar year, and no sooner than 12 months after contract execution, and are subject to the written approval of the Executive Director or his designee.

The actual annual salaries for employees working greater than 80 hours/month for the Authority are reflected in Attachment A-2. Revisions to actual annual salaries may be proposed no more frequently than once per calendar year, and no sooner than 12 months after contract execution, and are subject to the written approval of the Executive Director or his designee. Actual annual salaries shall not increase more than 3% annually.

The Authority shall have the right to review and/or audit the Engineer's Direct Labor Costs and auditable overhead rates upon written request. Once approved, the range of Direct Labor Costs and auditable overhead rate will be used going forward until the next annual adjustment is requested and approved. Changes to the auditable overhead rate will not be applied retroactively to Direct Labor Costs incurred in the previous year. If the Engineer or a subconsultant of the Engineer does not have a FAR Part 31 overhead rate, they may submit, for Authority approval, alternate documentation supporting an appropriate auditable overhead rate. If an auditable overhead rate is not submitted or available, fixed hourly rates must be submitted per subsection 2. A.4. During the term of this Contract the Engineer shall provide to the Executive Director or his designee, prior to requesting

any adjustment to its auditable overhead rate, a copy of the report establishing a new FAR Part 31 rate for the Engineer.

The payment of the hourly rates and allowed costs shall constitute full payment for all Services, liaisons, products, materials, and equipment required to deliver the Services.

(2) Unit Cost

The Authority agrees to pay the Engineer an agreed upon unit price times the number of units completed for each billing. This method of payment is generally reserved for work which has a definable work product but the quantity is uncertain and the Engineer assumes the risks for all costs. Each invoice submitted shall identify the specific contract task(s) listed in Exhibit B and the completed work product/deliverable for the agreed upon price listed in Exhibit D Fee Schedule.

(3) Lump Sum

The Authority agrees to pay Engineer a Lump Sum amount for the specified category of services.

The Lump Sum will include compensation for Engineer's services and services of sub consultants, if any. Appropriate amounts will be incorporated in the Lump Sum to account for labor, overhead, profit, and Reimbursable Expenses.

The portion of the Lump Sum amount billed for Engineer's services will be based upon Engineer's estimate, as approved by the Authority, of the proportion of the total services actually completed during the billing period to the Lump Sum.

(4) Specified Rate

For the specified category of services, the Owner shall pay Engineer an amount equal to the cumulative hours charged to the specific project by each class of Engineer's employees times Standard Hourly Rates for each applicable billing class for all services performed on the specific project, plus Reimbursable Expenses and sub consultant's charges, if any.

Standard Hourly Rates include salaries and wages paid to personnel in each billing class plus the cost of customary and statutory benefits, general and administrative overhead, non-project operating costs, and operating margin or profit.

Engineer's Reimbursable Expenses Schedule and Standard Hourly Rates are attached and included in Attachment A-1.

The total estimated compensation for the specified category of services shall be stated in the Work Authorization. This total estimated compensation will incorporate all labor at Standard Hourly Rates, Reimbursable Expenses, and sub consultants' charges, if any.

The amounts billed will be based on the cumulative hours charged to the specified category of services during the billing period by each class of Engineer's employees

times Standard Hourly Rates for each applicable billing class, plus Reimbursable Expenses and Engineer's sub consultant's charges, if any.

Revisions to the Standard Hourly Rates may be proposed no more frequently than once per calendar year, and no sooner than 12 months after contract execution, and are subject to written approval of the Executive Director or his designee.

B. Limitations on Rates Utilized. FOR COST PLUS, The Engineer represents that at all times, subject to the limitations on timing and approval in subsection 2.A, throughout the term of this Contract that it shall not use an auditable overhead rate that exceeds the rate determined in accordance with FAR Part 31 (or successor regulations); and shall be based on actual salary amounts for the individuals performing the Services; that the Direct Labor Costs shall not exceed the caps reflected in Attachment A-1 and shall be based on actual salary amounts for the individuals performing the Services. Individuals working on the project will be required to be invoiced at the approved field overhead rate unless approved, in advance, by the Authority.

C. Reimbursable Expenses. As indicated above, and subject to the terms of any Work Authorization, the compensation computed in accordance with subsections 2.A. and B. is anticipated by the Authority and the Engineer to be full and sufficient compensation and reimbursement for the Services, and includes all customary out-of-pocket expenses anticipated to result from the Engineer's performance under the Contract that are included in the computation of the approved overhead rate. Construction plans sets will be provided to the Engineer in electronic format, only, and the printing of plan sets will not be reimbursed by the Authority. Roadway tolls incurred by Engineer or any of its subconsultants in connection with the performance of the Services will not be a reimbursable expense under this contract. Notwithstanding the foregoing, the Engineer shall be entitled to reimbursement for reasonable out-of-pocket expenses actually incurred by the Engineer that are necessary for the performance of its duties under this Contract and which are not included in the approved overhead rate, said expenses being limited to travel costs at the Current State Rate, printing costs for specified reports and deliverables (not construction plan sets), automobile expenses being reimbursed at the federal mileage rates for travel originating from the office of the Engineer employee or subconsultant, and other expenses directly approved, in advance, by the Executive Director or his designee. Except for automobile expenses paid at the federal mileage rate and travel paid at Current State Rate (if available), all such reimbursement shall be at one-hundred percent (100%) of the actual cost thereof paid by the Engineer to unaffiliated entities; provided, however, that aggregate amounts in excess of \$2,500 for which the Engineer intends to seek reimbursement pursuant to this subsection must be approved in advance and in writing by the Executive Director or his designee, except when such advance approval is impractical due to a bona fide emergency situation. Except as otherwise authorized in a executed Work Authorization, and only then to the extent reimbursable by the Texas Department of Transportation ("TxDOT") under the terms of any form of financial assistance agreement, the Authority shall not reimburse the Engineer for travel, lodging, and similar expenses incurred by the Engineer to bring additional staff to its local office or to otherwise reassign personnel to provide basic engineering support of the Engineer's performance of the Services, provided, however, that the Authority shall reimburse, but only in accordance with the terms of this subsection, such costs incurred by the Engineer to bring to its local office or the Authority's facilities, with advance approval by the Executive Director or his designee, staff with

specialized skills or expertise required for the Services and not customarily available from a staff providing services of the type described in this Contract.

Engineer acknowledges that all expenses and costs paid or reimbursed by the Authority using federal or state funds shall be paid or reimbursed in accordance with, and subject to, applicable policies of the Authority and other applicable state and federal laws, including the applicable requirements of OMB Circular A-87, which may reduce the amount of expenses and costs reimbursed to less than what was actually incurred.

At the Authority's sole option, and approved in a Work Authorization pursuant to Article 4, the Engineer may charge vehicles used for the Project on a lump sum monthly basis. The monthly lump sum amount shall include all vehicle expenses including: ownership, insurance, fuel, maintenance, title, registration and all other operating and maintenance expenses.

At the Authority's sole option, and approved in a Work Authorization pursuant to Article 4, the Engineer may charge Reimbursable Expenses for the Project on a lump sum monthly basis. The monthly lump sum amount shall be considered full compensation for all expenses incurred by the Engineer in performance of the Work.

D. Subconsultants. For the purposes of this Contract, a "subconsultant" is an individual or entity contracted by the Engineer to provide services related to or part of those which the Engineer owes to the Authority under this Contract. The Engineer may engage a subconsultant to provide services, and the Authority will reimburse the Engineer for the Engineer's cost of engaging the subconsultant for those services, if the Engineer provides a written description of the proposed services and the proposed price (using rates approved in Attachment A-1), to the Authority before the services are provided and the Authority has provided to the Engineer a written approval for the services and the proposed price. If an approved subconsultant bills on an hourly rate, each invoice from the subconsultant submitted to the Authority for reimbursement must report the tasks performed by each billing person and the amount of time spent performing the task. The Engineer may not charge a mark-up or commission on a subconsultant's invoice, and the Authority will not reimburse the Engineer in an amount that exceeds the price proposal from the subconsultant that was approved by the Authority.

E. Non-compensable Time. Time spent by the Engineer's personnel or subconsultants in an administrative or supervisory capacity not related to the performance of the Services is not compensable and shall not be billed to the Authority. Time spent on work in excess of what would reasonably be considered appropriate under industry standards for the performance of such Services is not compensable, unless that additional time spent resulted from the Authority's delay in providing information, materials, feedback, or other necessary cooperation to the Engineer. The Authority will not pay any hourly compensation to the Engineer for Services or deliverables required due to an error, omission, or fault of the Engineer.

F. Taxes. All payments to be made by the Authority to the Engineer pursuant to this Contract are inclusive of federal, state, or other taxes, if any, however designated, levied, or based. The Authority acknowledges and represents that it is a tax-exempt entity under Sections 151.309, et seq., of the Texas Tax Code. Title to any consumable items purchased by the Engineer in performing this Contract shall be deemed to have passed to the Authority at the time the Engineer takes possession or earlier, and such consumable items shall immediately be marked, labeled, or physically identified as the property of the Authority, to the extent practicable.

ARTICLE 3 INVOICE REQUIREMENTS

A. Invoices and Records. The Engineer shall submit its monthly invoices certifying the fees charged and any Reimbursable Expenses for Services provided during the previous month, and shall also present a reconciliation of monthly invoices (and related estimates) to which the work relates. Each invoice shall be in such detail as is required by the Authority and, if the work is eligible for payment through an agreement with the Texas Department of Transportation (“TxDOT”), in such detail as TxDOT may require, including a breakdown of Services provided on a project-by-project basis, together with other Services requested by the Authority, with the Engineer provided advance notice of such TxDOT requirements. Upon request of the Authority, the Engineer shall also submit certified time and expense records directly related to Services provided to the Authority, and copies of invoices that support invoiced fees and Reimbursable Expenses. All invoices must be consistent with the rates established by this Contract. Unless waived in writing by the Executive Director, **or his designee**, no invoice may contain, and the Authority will not be required to pay, any charge for billable hours which is more than (90) days old at the time of invoicing.

B. Form of Invoices. The invoice shall show: (1) the Work Authorization number for each Work Authorization included in the billing; (2) the total amount earned thru the billing period; and (3) the amount due and payable as of the date of the current billing statement for each Work Authorization. The invoice shall indicate if the work has been completed or if the invoice is for partial completion of the work. The invoice shall be in the form provided by the Authority.

C. DBE Forms. The Engineer will be responsible for completing and including with each invoice all TxDOT required DBE reporting forms included in Exhibits E, and F of Attachment B - Work Authorization(s).

D. Time and place of payment. Upon receipt of an invoice that complies with all invoice requirements set forth in this Contract, the Authority shall make a good faith effort to pay the amount, which is due and payable within thirty (30) days, provided that if all or a portion of the Services reflected in the invoice are to be reimbursed by TxDOT through an agreement between TxDOT and the Authority, the Authority shall make a good faith effort to pay such amounts within thirty (30) days of receipt of such payments from TxDOT. **If the Authority disputes a request for payment by the Engineer, the Authority agrees to pay any undisputed portion of the invoice when due. Any such dispute must be detailed in writing within 30 days**

after the Authority's receipt of the monthly invoice. The Engineer reserves the right to stop work under this Contract if payments are not timely made per the terms of this Contract.

E. Withholding Payments. The Authority reserves the right to withhold payment of the Engineer's invoice in the event of any of the following: (1) if a dispute over the work or costs thereof is not resolved within a thirty (30) day period following receipt of the invoice; (2) pending verification of satisfactory work performed; or (3) if required reports (including third-party verifications, if any) are not received.

F. Invoice and Progress Report Submittal Process. The protocol for invoice and progress report submittal, review, and approval will be as follows:

- (1) The invoice submittal shall include:
 - Progress report
 - Forecast for completion of the scope
 - Invoice
 - Supporting documents as requested
- (2) A progress report shall be submitted to Authority at least once each calendar month;
- (3) In the event that invoices are not submitted on a monthly basis, a monthly submittal of the progress report information will be required nevertheless;
- (4) The invoice submittal shall not be later than the 10th day of the month following service;
- (5) The Authority and/or the Authority's GEC (as defined below) will review the invoices for supporting documentation, compliance with the Contract, and consistency with the submitted progress report;
- (6) The invoice will either be recommended for approval by Authority and/or GEC, or the Authority and/or GEC will return it to the Engineer for required correction; and
- (7) Upon satisfactory review and approval of the invoice, the Authority will submit it to the Authority CFO for payment.

G. Effect of Payments. No payment by the Authority shall relieve the Engineer of its obligation to deliver timely the Services required under this Contract. If, prior to acceptance of any Service, product or other deliverable, the Authority determines that said Service, product or deliverable does not satisfy the requirements of this Contract, the Authority may reject same and

require the Engineer to correct or cure same within a reasonable period of time and at no additional cost to the Authority.

H. Audit. The Authority shall have the right to examine the books and records of the Engineer for the purpose of checking the amount of work performed by the Engineer. The Engineer shall maintain all books, documents, papers, accounting records and other evidence pertaining to cost incurred and shall make such materials available at its office during the Contract period and for four (4) years from the date of final payment under this Contract or until any pending litigation has been completely and fully resolved and the Authority approves of the destruction of records, whichever occurs last. The Authority or any of its duly authorized representatives, TxDOT, the Federal Highway Administration (“FHWA”), the United States Department of Transportation Office of Inspector General and the Comptroller General shall have access to any and all books, documents, papers and records of the Engineer which are directly pertinent to this Contract for the purpose of making audits, examinations, excerpts and transcriptions.

ARTICLE 4 WORK AUTHORIZATIONS

A. Use. Services performed shall be in strict accordance with the scope, schedule, and budget set forth in each Work Authorization issued pursuant to this Contract, and no Services shall be performed which are not the subject of a validly issued Work Authorization. The Authority will issue Work Authorizations using the form attached as Attachment B to authorize all work under this Contract. No work shall begin on the activity until the Work Authorization is approved and fully executed. All work must be completed on or before the completion date specified in the Work Authorization.

B. Contents. Each Work Authorization shall include: (1) types of Services to be performed and a full description of the work required to perform those Services (2) a full description of general administration tasks exclusive to that Work Authorization (3) a work schedule (including beginning and ending dates) with milestones; (4) the basis of payment whether cost plus fixed fee, unit cost, lump sum, or specified rate; (5) a Work Authorization budget as described in subsection C below ; and (6) DBE Requirements. The Engineer shall not include additional contract terms and conditions in the Work Authorization.

C. Work Authorization Budget. A Work Authorization budget shall be prepared by the Engineer and shall set forth in detail the following: (1) the computation of the estimated cost of the work as described in the Work Authorization; (2) the estimated time (hours/days) required to complete the work using the fees set forth in Attachment A-1; (3) a work plan that includes a list of the work to be performed; and (4) a maximum cost (not-to-exceed) amount or unit or lump sum cost and the total cost or price of the Work Authorization as defined in the Work Authorization.

D. No Guaranteed Work. Work Authorizations will be issued at the sole discretion of the Authority. While it is the Authority's intent to issue Work Authorizations hereunder, the Engineer shall have no cause of action conditioned upon the lack or number of Work Authorizations issued.

E. Incorporation into Contract. Each Work Authorization shall be signed by both parties and become a part of the Contract. No Work Authorization will waive the Authority's or the Engineer's responsibilities and obligations established in this Contract. The Engineer shall promptly notify the Authority of any event that will affect completion of the Work Authorization in accordance with the terms thereof.

F. Supplemental Work Authorizations. Before additional work may be performed or additional costs incurred beyond those authorized in a Work Authorization, a change in a Work Authorization shall be enacted by a written Supplemental Work Authorization in the form identified and attached hereto as Attachment C. Supplemental Work Authorizations, if required, must be executed by both parties within the period of performance specified in the Work Authorization. The Engineer shall allow adequate time for review and approval of the Supplemental Work Authorization by the Authority.

(1) **Notice.** If the Engineer is of the opinion that any assigned work is beyond the scope of this Contract and constitutes additional work beyond the Services to be provided under this Contract, it shall promptly notify the Authority and submit written justification presenting the facts of the work and demonstrating how the work constitutes supplementary work.

(2) **Changes in Scope.** Changes that would modify the scope of the work authorized in a Work Authorization must be enacted by a written Supplemental Work Authorization. If the change in scope affects the amount payable under the Work Authorization, the Engineer shall prepare a revised Work Authorization budget for the Authority's approval. The Authority shall analyze the proposed justification, work hour estimate and cost. Upon approval of the need, the Authority shall negotiate the Supplemental Work Authorization scope with the Engineer, and then process the final Supplemental Work Authorization, subject to final written approval by the Authority.

(3) **Limitation of Liability.** The Authority shall not be responsible for actions by the Engineer or any costs incurred by the Engineer relating to additional work not directly associated with or prior to the execution of a Supplemental Work Authorization.

G. Deliverables. Upon satisfactory completion of the Work Authorization, the Engineer shall submit the deliverables as specified in the executed Work Authorization to the Authority for review and acceptance.

ARTICLE 5 SCHEDULE

A. Progress meetings. As required and detailed in the Work Authorizations, the Engineer shall from time to time during the progress of the work confer with the Authority. The Engineer shall prepare and present such information as may be pertinent and necessary or as may be requested by the Authority in order to evaluate features of the work.

B. Conferences. At the request of the Authority or the Engineer and as required and detailed in the Work Authorizations, conferences shall be provided at the Engineer's office, the office of the Authority, or at other locations designated by the Authority. These conferences shall also include evaluation of the Engineer's Services and work when requested by the Authority.

C. Reports. The Engineer shall promptly advise the Authority in writing of events that have a significant impact upon the progress of a Work Authorization, including:

(1) problems, delays, adverse conditions that will materially affect the ability to meet the time schedules and goals, or preclude the attainment of project work units by established time periods; this disclosure will be accompanied by a statement of the action taken or contemplated, and any Authority or federal assistance needed to resolve the situation; and

(2) favorable developments or events that enable meeting the work schedule goals sooner than anticipated.

D. Corrective Action. Should the Authority determine that the progress of work does not satisfy the milestone schedule set forth in a Work Authorization, the Authority shall review the work schedule with the Engineer to determine the nature of corrective action needed.

E. More Time Needed. If the Engineer determines or reasonably anticipates that the work authorized in a Work Authorization cannot be completed within the work schedule contained therein, the Engineer shall promptly notify the Authority and shall follow the procedure set forth in the Work Authorization. The Authority may, at its sole discretion, modify the work schedule to incorporate an extension of time.

ARTICLE 6 SUSPENSION OF WORK AUTHORIZATION

A. Notice. Should the Authority desire to suspend a Work Authorization but not terminate the Contract, the Authority may verbally notify the Engineer followed by written confirmation, giving fifteen (15) days prior notice. Both parties may waive the fifteen (15) day notice requirement in writing.

B. Reinstatement. A Work Authorization may be reinstated and resumed in full force and effect within sixty (60) days of receipt of written notice from the Authority to resume the work. Both parties may waive the sixty (60) day notice in writing.

C. Limitation of Liability. The Authority shall have no liability for work performed or costs incurred prior to the date authorized by the Authority to begin work, during periods when work is suspended, or after the completion of the Contract or Work Authorization.

ARTICLE 7 CHANGES IN WORK

A. Work Previously Submitted as Satisfactory. If the Engineer has submitted work in accordance with the terms of this Contract and Work Authorization(s) but the Authority requests changes to the completed work or parts thereof which involve changes to the original scope of services or character of work under the Contract and Work Authorization(s), the Engineer shall make such revisions as requested and as directed by the Authority, provided the work is reflected in a Supplemental Work Authorization.

B. Work Does Not Comply with Contract. If the Engineer submits work that does not comply with the terms of this Contract or Work Authorization(s), the Authority shall instruct the Engineer to make such revision as is necessary to bring the work into compliance with the Contract or Work Authorization(s). No additional compensation shall be paid for this work.

C. Errors/Omissions. The Engineer shall make revisions to the work authorized in this Contract or Work Authorization(s) that are necessary to correct errors or omissions appearing therein, when required to do so by the Authority. No additional compensation shall be paid for this work.

ARTICLE 8 OWNERSHIP OF DATA

A. Work for Hire. All services provided under this Contract are considered work for hire and, as such, all data, basic sketches, charts, calculations, plans, specifications, electronic files, and other documents created or collected under the terms of this Contract are the property of the Authority.

B. Disposition of Documents. All documents and electronic files prepared by the Engineer and all documents furnished to the Engineer by the Authority shall be delivered to the Authority upon request by the Authority. The Engineer, at its own expense, may retain copies of such documents or any other data which it has furnished the Authority under this Contract, but further use of the data is subject to express written permission by the Authority.

C. Release of Design Plan. The Engineer (1) will not release any design plan created or collected under this Contract except to its subconsultants as necessary to complete the Contract; (2) shall include a provision in all subcontracts which acknowledges the Authority's ownership of the design plan and prohibits its use for any use other than the project identified in this Contract; and (3) is responsible for any improper use of the design plan by its employees, officers, or subconsultants, including costs, damages, or other liability resulting from improper use. Neither the Engineer nor any subconsultants may charge a fee for any portion of the design plan created by the Authority.

ARTICLE 9 PUBLIC INFORMATION AND CONFIDENTIALITY

A. Public Information. The Authority will comply with Government Code, Chapter 552, the Public Information Act, in the release of information produced under this Contract.

B. Confidentiality. The Engineer shall not disclose information obtained from the Authority under this Contract without the express written consent of the Authority. All employees of the Engineer and its subconsultants working on the Project are required to sign a confidentiality agreement.

ARTICLE 10 PERSONNEL, EQUIPMENT AND MATERIAL

A. Engineer Resources. The Engineer shall furnish and maintain quarters for the performance of all Services, in addition to providing adequate and sufficient personnel and equipment to perform the Services required under the Contract. The Engineer certifies that it presently has adequate qualified personnel in its employment for performance of the Services required under this Contract, or it will be able to obtain such personnel from sources other than the Authority.

B. Removal of Employee. All employees of the Engineer assigned to this Contract shall have such knowledge and experience as will enable them to perform the duties assigned to them. The Authority may instruct the Engineer to remove any employee from association with work authorized in this Contract if, in the sole opinion of the Authority, the work of that employee does not comply with the terms of this Contract or if the conduct of that employee becomes detrimental to the work.

C. Authority Approval of Replacement Personnel. The Engineer may not replace the Key Personnel, as designated in the applicable Work Authorization, without prior written approval of the Authority. If any Key Personnel cease to work on this Contract, the Engineer must notify the Authority in writing as soon as possible, but in any event within (3) three business days. The notification must give the reason for removal. The Engineer must receive written approval from the Authority of proposed replacement Key Personnel. The Authority's approval will be based upon the proposed replacement Key Personnel qualifications to provide the required services. Approval will not be unreasonably withheld.

Violation of this Section by the Engineer is a material breach of contract.

D. Liquidated Damages. Because of the importance and unique nature of the services to be provided by Key Personnel it is impractical to calculate the actual losses that would be suffered by the Authority by the loss of Key Personnel from the Contract. Therefore, the Engineer agrees to compensate the Authority for its losses by paying liquidated damages in the amount of \$2,500 per day per Key Personnel position if any Key Personnel are removed by the Engineer by reassignment without prior written approval from the Authority. Liquidated damages may accrue from the date the Engineer removes the Key Personnel from the Contract if the parties do not agree on a replacement within (14) calendar days after the Key Personnel are removed from the Contract. Liquidated damages shall cease when the parties agree on a substitute or when the Contract is terminated.

(1)

E. Ownership of Acquired Property. Except to the extent that a specific provision of this Contract states to the contrary, the Authority shall own all intellectual property acquired or developed under this Contract and all equipment purchased by the Engineer or its subconsultants under this Contract. All intellectual property and equipment owned by the Authority shall be delivered to the Authority when the Contract or applicable Work Authorization terminates, or when it is no longer needed for work performed under this Contract, whichever occurs first.

ARTICLE 11 SUBCONTRACTING

A. Prior Approval. The Engineer shall not assign, subcontract, or transfer any portion of professional services related to the work under this Contract unless specified in an executed Work Authorization or otherwise without first obtaining the prior written approval from the Authority. Request for approval should include a written description of the proposed services, and, using rates established in Attachment A-1, a proposed price.

B. DBE Compliance. The Engineer's subcontracting program shall comply with the requirements of Exhibits E, and F of Attachment B - Work Authorization(s).

C. Required Provisions. All subcontracts for professional services shall include the provisions included in this Contract and any provisions required by law. The Engineer is authorized to pay subconsultants in accordance with the terms of the subcontract.

D. Engineer Responsibilities. No subcontract shall relieve the Engineer of any of its responsibilities under this Contract and of any liability for work performed under this Contract, even if performed by a subconsultant or other third party performing work for or on behalf of the Engineer.

E. Invoice Approval and Processing. All subconsultants shall prepare and submit their invoices on the same billing cycle and format as the Engineer (so as to be included in invoices submitted by the Engineer), and in the event that the cycles are not concurrent, a detailed explanation will be submitted to the Authority.

ARTICLE 12 INSPECTION OF WORK

A. Review Rights. Under this Contract, the Authority, TxDOT, and the U.S. Department of Transportation, and any authorized representative of the Authority, TxDOT, or the U.S. Department of Transportation, shall have the right at all reasonable times to review or otherwise evaluate the work performed hereunder and the premises in which it is being performed.

B. Reasonable Access. If any review or evaluation is made on the premises of the Engineer or a subconsultant under this Article, the Engineer shall provide and require its subconsultants to provide all reasonable facilities and assistance for the safety and convenience of the persons performing the review in the performance of their duties.

ARTICLE 13 SUBMISSION OF REPORTS

All applicable study reports shall be submitted in preliminary form for approval by the Authority before a final report is issued. The Authority's comments on the Engineer's preliminary report must be addressed in the final report.

ARTICLE 14 VIOLATION OF CONTRACT TERMS

A. Increased Costs. Violation of contract terms, breach of contract, or default by the Engineer shall be grounds for termination of the Contract, and any increased or additional cost incurred by the Authority arising from the Engineer's default, breach of contract or violation of contract terms shall be paid by the Engineer.

B. Remedies. This Contract shall not be considered as specifying the exclusive remedy for any default, but all remedies existing at law and in equity may be availed of by either party and shall be cumulative.

C. Excusable Delays. Except with respect to defaults of subconsultants, the Engineer shall not be in default by reason of any failure in performance of this Contract in accordance with its terms (including any failure to progress in the performance of the work) if such failure arises out of causes beyond the control and without the default or negligence of the Engineer. Such causes may include, but are not restricted to, acts of God or the public enemy, acts of the Government in

either its sovereign or contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and unusually severe weather.

ARTICLE 15 TERMINATION

- A. Termination.** The Contract may be terminated by any of the following conditions:
- (1) by mutual agreement and consent, in writing from both parties;
 - (2) by the Authority by notice in writing to the Engineer as a consequence of failure by the Engineer to perform the Services set forth herein in a satisfactory manner or if the Engineer violates the provisions of Article 22, Gratuities, or Exhibit E to Attachment B, DBE Requirements;
 - (3) by either party, upon the failure of the other party to fulfill its obligations as set forth herein, following thirty (30) days written notice and opportunity to cure;
 - (4) by the Authority for its convenience and in its sole discretion, not subject to the consent of the Engineer, by giving thirty (30) days written notice of termination to the Engineer; or
 - (5) by satisfactory completion of all services and obligations described herein.

B. Measurement. Should the Authority terminate this Contract as herein provided, no fees other than fees due and payable at the time of termination shall thereafter be paid to the Engineer. In determining the value of the work performed by the Engineer prior to termination, the Authority shall be the sole judge. Compensation for work at termination will be based on a percentage of the work completed at that time. Should the Authority terminate this Contract under paragraph A (3) or (4) above, the Engineer shall not incur costs during the thirty-day notice period in excess of the amount incurred during the preceding thirty (30) days and only as necessary to terminate the work in progress.

C. Value of Completed Work. If the Engineer defaults in the performance of this Contract or if the Authority terminates this Contract for fault on the part of the Engineer, the Authority will give consideration to the following when calculating the value of the completed work: (1) the actual costs incurred (not to exceed the rates set forth in the applicable Work Authorization) by the Engineer in performing the work to the date of default; (2) the amount of work required which was satisfactorily completed to date of default; (3) the value of the work which is usable to the Authority; (4) the cost to the Authority of employing another firm to complete the required work; (5) the time required to employ another firm to complete the work; (6) delays in opening a revenue generating project and costs (including lost revenues) resulting therefrom; and (7) other factors which affect the value to the Authority of the work performed.

D. Calculation of Payments. The Authority shall use the fee structure established by the applicable Work Authorization in determining the value of the work performed up to the time

of termination. In the event that a cost plus fixed fee basis of payment is utilized in a Work Authorization, any portion of the fixed fee not previously paid in the partial payments shall not be included in the final payment.

E. Surviving Requirements. The termination of this Contract and payment of an amount in settlement as prescribed above shall extinguish the rights, duties, and obligations of the Authority and the Engineer under this Contract, except for those provisions that establish responsibilities that extend beyond the Contract period, including without limitation the provisions of Article 17.

F. Payment of Additional Costs. If termination of this Contract is due to the failure of the Engineer to fulfill its Contract obligations, the Authority may take over the project and prosecute the work to completion, and the Engineer shall be liable to the Authority for any additional cost to the Authority.

ARTICLE 16 COMPLIANCE WITH LAWS

The Engineer shall comply with all applicable federal, state and local laws, statutes, codes, ordinances, rules and regulations, and the orders and decrees of any court, or administrative bodies or tribunals in any manner affecting the performance of this Contract, including, without limitation, worker's compensation laws, minimum and maximum salary and wage statutes and regulations, nondiscrimination, licensing laws and regulations, the Authority's enabling legislation (Chapter 370 of the Texas Transportation Code), and all amendments and modifications to any of the foregoing, if any. When required, the Engineer shall furnish the Authority with satisfactory proof of its compliance therewith.

ARTICLE 17 INDEMNIFICATION

THE ENGINEER SHALL INDEMNIFY AND HOLD HARMLESS THE AUTHORITY AND ITS OFFICERS, DIRECTORS, EMPLOYEES, ENGINEERS, AND AGENTS (WHICH, FOR THE PURPOSES OF THIS CONTRACT, SHALL INCLUDE THE AUTHORITY'S GEC, GENERAL COUNSEL, BOND COUNSEL, FINANCIAL ADVISORS, TRAFFIC AND REVENUE ENGINEERS, TOLL OPERATIONS/COLLECTIONS FIRMS, AND UNDERWRITERS) FROM ANY CLAIMS, COSTS, OR LIABILITIES OF ANY TYPE OR NATURE AND BY OR TO ANY PERSONS WHOMSOEVER, TO THE EXTENT CAUSED BY THE NEGLIGENT ACTS, ERRORS, OR OMISSIONS OF THE ENGINEER OR ITS OFFICERS, DIRECTORS, EMPLOYEES, AND AGENTS WITH RESPECT TO THE ENGINEER'S PERFORMANCE OF THE WORK TO BE ACCOMPLISHED UNDER THIS CONTRACT. IN SUCH EVENT, THE ENGINEER SHALL ALSO INDEMNIFY AND HOLD HARMLESS THE AUTHORITY, ITS OFFICERS, DIRECTORS, EMPLOYEES, ENGINEERS, AND AGENTS (AS DEFINED ABOVE) FROM ANY AND ALL REASONABLE AND NECESSARY EXPENSES, INCLUDING REASONABLE ATTORNEYS' FEES, INCURRED BY THE AUTHORITY IN LITIGATING OR

OTHERWISE RESISTING SAID CLAIMS, COSTS OR LIABILITIES. IN THE EVENT THE AUTHORITY, ITS OFFICERS, DIRECTORS, EMPLOYEES, ENGINEERS, AND AGENTS (AS DEFINED ABOVE), IS/ARE FOUND TO BE PARTIALLY AT FAULT, THE ENGINEER SHALL, NEVERTHELESS, INDEMNIFY THE AUTHORITY FROM AND AGAINST THE PERCENTAGE OF FAULT ATTRIBUTABLE TO THE ENGINEER OR ITS OFFICERS, DIRECTORS, EMPLOYEES, AND AGENTS OR TO THEIR CONDUCT.

ARTICLE 18 ROLE OF GENERAL ENGINEERING CONSULTANT

The Authority will utilize a General Engineering Consultant (“GEC”) to assist in its management of this Contract. The GEC is an independent contractor and is authorized by the Authority to provide the management and technical direction for this Contract on behalf of the Authority. All the technical and administrative provisions of the Contract shall be managed by the GEC, and the Engineer shall comply with all of the GEC’s directives that are within the purview of the Contract. Decisions concerning Contract amendments and adjustments, such as time extensions and Supplemental Work Authorizations, shall be made by the Authority; however, requests for such amendments or adjustments shall be made through the GEC, who shall forward such requests to the Authority with its comments and recommendations.

Should any dispute arise between the General Engineering Consultant and the Engineer, concerning the conduct of this Contract, either party may request a resolution of said dispute by the Executive Director of the Authority or his designee, whose decision shall be final. The parties shall first try to resolve the dispute at the lowest level practical. In the event that an agreement cannot be reached, the Engineer may schedule a meeting with the GEC Manager. If an agreement cannot be reached at this level, then a meeting will be scheduled with the Authority and the GEC Manager, so the Engineer can present its case. The Authority’s decision in the matter will be final. In no case will the Engineer go directly to the Authority with a dispute unless the Engineer believes that the GEC is violating, or is directing the Engineer to take an action which would violate, any laws or similar provisions described in Article 16 or any ethical obligations owed to the Authority.

ARTICLE 19 ENGINEER’S RESPONSIBILITY

A. Accuracy. The Engineer shall have total responsibility for the accuracy and completeness of the documents prepared under this Contract and shall check all such material accordingly.

B. Errors and Omissions. The Engineer's responsibility for all questions arising from errors and/or omissions will be determined by the Authority. The Engineer shall not be relieved of the responsibility for subsequent correction of any such errors or omissions or for clarification of any ambiguities until after the project has been completed. In the event that the Authority discovers a possible error or omission, the Authority shall notify the Engineer and seek to involve the Engineer in determining the most effective solution with respect to time and cost, provided that the Authority shall ultimately determine the solution that is chosen.

C. Seal. The responsible Engineer shall sign, seal and date all appropriate engineering submissions to the Authority in accordance with the Texas Engineering Practice Act and the rules of the Texas Board of Professional Engineers.

D. Resealing of Documents. Once the work has been sealed and accepted by the Authority, the Authority, as the owner, will notify the Engineer, in writing, of the possibility that a Authority engineer, as a second engineer, may find it necessary to alter, complete, correct, revise or add to the work. If necessary, the second engineer will affix his seal to any work altered, completed, corrected, revised or added. The second engineer will then become responsible for any alterations, additions or deletions to the original design including any effect or impacts of those changes on the original engineer's design.

ARTICLE 20 NONCOLLUSION

A. Warranty. The Engineer warrants that it has not employed or retained any company or person, other than a bona fide employee working solely for the Engineer, to solicit or secure this Contract and that it has not paid or agreed to pay any company or Engineer any fee, commission, percentage, brokerage fee, gifts, or any other consideration, contingent upon or resulting from the award or making of this Contract.

B. Liability. For breach or violation of this warranty, the Authority shall have the right to annul this Contract without liability or, in its discretion, to deduct from the Contract compensation, or otherwise recover, the full amount of such fee, commission, percentage, brokerage fee, gift or contingent fee.

ARTICLE 21 INSURANCE

The Engineer and all subconsultants shall furnish the Authority a properly completed Certificate of Insurance approved by the Authority prior to beginning work under the Contract and shall maintain such insurance through the Contract period. The Engineer shall provide proof of insurance (and the Professional Liability Insurance discussed herein) in a form reasonably acceptable by the Authority. The Engineer certifies that it has and will maintain insurance coverages as follows:

A. Workers Compensation Insurance. In accordance with the laws of the State of Texas and employer's liability coverage with a limit of not less than \$1,000,000. This policy shall be endorsed to include a waiver of subrogation in favor of the Authority.

B. Comprehensive General Liability Insurance. With limits not less than \$1,000,000 for bodily injury, including those resulting in death, and \$1,000,000 for property damage on account of any one occurrence, with an aggregate limit of \$1,000,000.

C. Comprehensive Automobile Liability Insurance. Applying to owned, non-owned, and hired automobiles in an amount not less than \$1,000,000 for bodily injury, including death, to any one person, and \$1,000,000 on account on any one occurrence, and \$1,000,000 for property damage on account of any one occurrence. This policy shall not contain any limitation with respect to a radius of operation for any vehicle covered and shall not exclude from the coverage of the policy any vehicle to be used in connection with the performance of the Engineer's obligations under this Contract.

D. Excess Liability Insurance. In an amount of \$5,000,000 per occurrence and aggregate.

E. Valuable Papers Insurance. In an amount sufficient to assure the full restoration of any plans, drawings, field notes, logs, test reports, diaries, or other similar data or materials relating to the services provided under this Contract in the event of their loss or destruction, until such time as the work has been delivered to the Authority.

F. Architects and/or Engineers Professional Liability insurance. Engineer shall provide and maintain professional liability coverage, with limits not less than \$5,000,000 per claim and \$5,000,000 aggregate. The professional liability coverage shall protect against any negligent act, error or omission arising out of design or engineering activities, including environmental related activities, with respect to the project, including coverage for negligent acts, errors or omissions by any member of the Engineer and its subconsultants (including, but not limited to design subconsultants and subconsultants) of any tier. The policy must provide that coverage extends a minimum of three (3) years beyond the Engineer's completion of the services. This policy shall be endorsed to include a waiver of subrogation in favor of the Authority.

G. General for All Insurance. The Engineer shall promptly, upon execution of this Contract, furnish certificates of insurance to the Authority indicating compliance with the above requirements. Certificates shall indicate the name of the insured, the name of the insurance company, the name of the agency/agent, the policy number, the term of coverage, and the limits of coverage.

All policies are to be written through companies (a) authorized to transact that class of insurance in the State of Texas; (b) rated (i), with respect to the companies providing the insurance under subarticles 21.a. through d., above, by A. M. Best Company as "A-X" or better (or the equivalent rating by another nationally recognized rating service) and (ii) with respect to the company providing the insurance under subarticle 21.e., a rating by A. M. Best Company or similar rating service satisfactory to the Authority and/or its insurance consultant; and (c) otherwise acceptable to the Authority.

All policies are to be written through companies authorized to transact that class of insurance in the State of Texas. Such insurance shall be maintained in full force and effect during the life of this Contract or for a longer term as may be otherwise provided for hereunder. Insurance

furnished under subarticles 21.b., c., and d., above, shall name the Authority as additional insured and shall protect the Authority, its officers, employees, and directors, agents, and representatives from claims for damages for bodily injury and death and for damages to property arising in any manner from the negligent or willful acts or failures to act by the Engineer, its officers, employees, directors, agents, and representatives in the performance of the services rendered under this Contract. Certificates shall also indicate that the contractual liability assumed in Article 17, above, is included.

The insurance carrier shall include in each of the insurance policies required under subsections 21.a., b., c., d., e., and f., the following statement: “This policy will not be canceled or materially changed during the period of coverage without at least thirty (30) days prior written notice addressed to the Central Texas Regional Authority, 3300 N. IH-35, Suite 300, Austin, Texas 78705, Attn: Executive Director”

H. Subconsultant. In the event a subconsultant selected by the Engineer to perform work associated with this Contract is unable to secure insurance coverage in the amounts set forth in subarticles 21.b., d., and f. above, Engineer may provide to the Authority an explanation of coverages that a subconsultant does possess, why those coverages are adequate to cover the potential exposure for the work to be performed by the subconsultant, and an acknowledgement that the Engineer remains liable for the work performed under the Contract, including that performed by the subconsultant. The Authority may decide, in its sole discretion, whether to accept the coverages available to the subconsultant.

ARTICLE 22 GRATUITIES

A. Employees Not to Benefit. Authority policy mandates that the director, employee or agent of the Authority shall not accept any gift, favor, or service that might reasonably tend to influence the director, employee or agent in making of procurement decisions. The only exceptions allowed are ordinary business lunches and items that have received the advance written approval of the Executive Director of the Authority.

B. Liability. Any person doing business with or who reasonably speaking may do business with the Authority under this Contract may not make any offer of benefits, gifts or favors to Authority employees, except as mentioned above. Failure on the part of the Engineer to adhere to this policy may result in the termination of this Contract.

ARTICLE 23 DISADVANTAGED BUSINESS ENTERPRISE REQUIREMENTS

The Engineer agrees to comply with the DBE requirements and reporting guidelines set forth in Exhibits E, and F of Attachment B - Work Authorization(s). The DBE Goal established for this project is as set forth in the Work Authorization. The Engineer also agrees to comply with

the DBE subcontracting plan that was included in the response that the Engineer submitted to the Authority's Request for Qualifications.

ARTICLE 24

CERTIFICATE OF INTERESTED PARTIES (FORM 1295)

The Engineer must comply with the Certificate of Interested Parties (Form 1295) adopted by the Texas Legislature as House Bill 1295, which added section 2252.908 of the Government Code, available for review at the Texas Ethics Commission website:

<https://www.ethics.state.tx.us/tec/1295-Info.htm>

The Engineer, after award, is required to complete and submit Form 1295 (attached as Exhibit B) if the Engineer has either of the following contracts with a governmental entity or state agency starting as of January 1, 2016:

- 1) Requires an actions or vote by the governing body of the entity or agency before the contract may be signed; or
- 2) Has a value of at least \$1 million.

ARTICLE 25

MAINTENANCE, RETENTION AND AUDIT OF RECORDS

A. Retention Period. The Engineer shall maintain all books, documents, papers, accounting records and other evidence pertaining to costs incurred and services provided (hereinafter called the Records). The Engineer shall make the Records available at its office during the Contract period and for four years from the date of final payment under this Contract, until completion of all audits, or until pending litigation has been completely and fully resolved, whichever occurs last.

B. Availability. The Authority shall have the exclusive right to examine the books and records of the Engineer for the purpose of checking the amount of work performed by the Engineer. The Engineer shall maintain all books, documents, papers, accounting records and other evidence pertaining to cost incurred and shall make such materials available at its office during the contract period and for four (4) years from the date of final payment under this Contract or until pending litigation has been completely and fully resolved, whichever occurs last. The Authority or any of its duly authorized representatives, the Texas Department of Transportation ("TxDOT"), the Federal Highway Administration ("FHWA"), the United States Department of Transportation Office of Inspector General and the Comptroller General shall have access to any and all books, documents, papers and records of the Engineer which are directly pertinent to this Contract for the purpose of making audits, examinations, excerpts and transcriptions.

ARTICLE 26

CIVIL RIGHTS COMPLIANCE

A. Compliance with Regulations. The Engineer shall comply with the regulations of the Department of Transportation, Title 49, Code of Federal Regulations, Parts 21, 24, 26 and 60 as they relate to nondiscrimination; also Executive Order 11246 titled Equal Employment Opportunity as amended by Executive Order 11375.

B. Nondiscrimination. The Engineer, with regard to the work performed by it during the Contract, shall not discriminate on the grounds of race, color, sex, or national origin in the selection and retention of subconsultants, including procurement of materials and leases of equipment.

C. Solicitations for Subcontracts, Including Procurement of Materials and Equipment. In all solicitations either by competitive bidding or negotiation made by the Engineer for work to be performed under a subcontract, including procurement of materials or leases of equipment, each potential subconsultant or supplier shall be notified by the Engineer of the Engineer's obligations under this Contract and the Regulations relative to nondiscrimination on the grounds of race, color, sex, or national origin.

D. Information and Reports. The Engineer shall provide all information and reports required by the Regulations, or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and facilities as may be determined by the Authority or the FHWA to be pertinent to ascertain compliance with such Regulations or directives. Where any information required of the Engineer is in the exclusive possession of another who fails or refuses to furnish this information, the Engineer shall so certify to the Authority or the FHWA, as appropriate, and shall set forth what efforts it has made to obtain the information.

E. Sanctions for Noncompliance. In the event of the Engineer's noncompliance with the nondiscrimination provisions of this Contract, the Authority shall impose such Contract sanctions as it or the FHWA may determine to be appropriate, including, but not limited to:

- (1) withholding of payments to the Engineer under the Contract until the Engineer complies; and/or
- (2) cancellation, termination, or suspension of the Contract, in whole or in part.

ARTICLE 27

PATENT RIGHTS

The Authority and the U. S. Department of Transportation shall have the royalty free, nonexclusive and irrevocable right to use and to authorize others to use any patents developed by the Engineer under this Contract.

**ARTICLE 28
DISPUTES**

A. Disputes Not Related to Contract Services. The Engineer shall be responsible for the settlement of all contractual and administrative issues arising out of any procurement made by the Engineer in support of the Services authorized herein.

B. Disputes Concerning Work or Cost. The Executive Director of the Authority shall decide all questions, difficulties and dispute of any nature whatsoever that may arise under or by reason of this Contract, and his decision upon all claims, questions and disputes shall be final. The Engineer shall comply with the provisions of Article 18 in proceeding with such disputes.

**ARTICLE 29
SUCCESSORS AND ASSIGNS**

The Engineer and the Authority do each hereby bind themselves, their successors, executors, administrators and assigns to each other party of this Contract and to the successors, executors, administrators and assigns of such other party in respect to all covenants of this Contract. The Engineer shall not assign, subcontract, or transfer its interest in this Contract without the prior written consent of the Authority.

**ARTICLE 30
SEVERABILITY**

In the event any one or more of the provisions contained in this Contract shall for any reason be held to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision thereof and this Contract shall be construed as if such invalid, illegal, or unenforceable provision had never been contained herein.

**ARTICLE 31
PRIOR CONTRACTS SUPERSEDED**

This Contract, including all attachments, constitutes the sole agreement of the parties hereto for the services authorized herein and supersedes any prior understandings or written or oral contracts between the parties respecting the subject matter defined herein.

**ARTICLE 32
CONFLICT OF INTEREST**

The undersigned Engineer represents that such firm has no conflict of interest that would in any way interfere with its or its employees' performance of services for the Authority or which in any way conflicts with the interests of the Authority. The Authority shall exercise reasonable care and diligence to prevent any actions or conditions that could result in a conflict with the Authority's interests.

**ARTICLE 33
ENTIRETY OF AGREEMENT**

This writing, including attachments and addenda, if any, embodies the entire agreement and understanding between the parties hereto, and there are no agreements and understandings, oral or written, with reference to the subject matter hereof that are not merged herein and superseded hereby. No alteration, change or modification of the terms of the Contract shall be valid unless made in writing signed by both parties hereto.

**ARTICLE 34
SIGNATORY WARRANTY**

The undersigned signatory for the Engineer hereby represents and warrants that he or she is an officer of the organization for which he or she has executed this Contract and that he or she has full and complete Authority authorization to enter into this Contract on behalf of the firm. These representations and warranties are made for the purpose of inducing the Authority to enter into this Contract.

**ARTICLE 35
NOTICES**

A notice, demand, request, report, and other communication required or permitted under this Contract, or which any party may desire to give, shall be in writing and shall be deemed to have been given on the sooner to occur of (i) receipt by the party to whom the notice is hand-delivered, with a written receipt of notice provided by the receiving party, or (ii) two days after deposit in a regularly maintained express mail receptacle of the United States Postal Service, postage prepaid, or registered or certified mail, return receipt requested, express mail delivery, addressed to such party at their address set forth below, or to such other address as a party may from time to time designate under this article, or (iii) receipt of an electronic mail transmission (attaching scanned documents in a format such as .pdf or .tif) for which confirmation of receipt by the other party has been obtained by the sending party:

In the case of the Engineer:

Paul Bowen, P.E.
HDR, Inc.
810 Hesters Crossing Suite 120
Round Rock, TX 78681 Paul.Bowen@hdrinc.com

In the case of the Authority:

Mike Heiligenstein, Executive Director
Central Texas Regional Mobility Authority
3300 North IH 35, Suite 300

Austin, TX 78705

Email: mstein@ctrma.org

with a copy to:

Justin Word, Director of Engineering
Central Texas Regional Mobility Authority

3300 North IH 35, Suite 300

Austin, TX 78705

Email: jword@ctrma.org

A party may change the information provided in this article for notification purposes by providing notice to the other party of the new information and the effective date of the change.

ARTICLE 36 BUSINESS DAYS AND DAYS

For purposes of this Contract, “business days” shall mean any day the Authority is open for business and “days” shall mean calendar days.

ARTICLE 37 INCORPORATION OF PROVISIONS

Attachments A-1 through C are attached hereto and incorporated into this Contract as if fully set forth herein.

ARTICLE 38 PRIORITY OF DOCUMENTS/ORDER OF PRECEDENCE

This Contract, and each of the Attachments (together, the “Contract Documents”), are an essential part of the agreement between the Authority and the Engineer, and a requirement occurring in one is as binding as though occurring in all. The Contract Documents are intended to be complementary and to describe and provide for a complete Contract. In the event of any conflict among the Contract Documents or between the Contract Documents and other documents, the order of precedence shall be as set forth below:

- A. Supplemental Work Authorizations;
- B. Work Authorizations;
- C. Contract Amendments;
- D. This Contract.

- E. The Request for Qualifications
- F. The Engineer's Response to the Request for Qualifications.

Additional details and more stringent requirements contained in a lower priority document will control unless the requirements of the lower priority document present an actual conflict with the requirements of the higher level document. Notwithstanding the order of precedence among Contract Documents set forth in this Article 36, in the event of a conflict within a Contract Document or set of Contract Documents with the same order of priority (including within documents referenced therein), the Authority shall have the right to determine, in its sole discretion, which provision applies.

IN WITNESS WHEREOF, the **Authority** and the **Engineer** have executed this Contract in duplicate.

THE ENGINEER	CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY
(Signature)	(Signature)
(Printed Name)	Mike Heiligenstein
(Title)	Executive Director
(Date)	(Date)

Attachments and Exhibits to Contract for Construction Engineering & Inspection Services

Attachments	Title
A-1	Rate Schedule
A-2	Actual Employee Rates
B	Work Authorization
C	Supplemental Work Authorization
D	Key Personnel

ATTACHMENT A-1

RATE SCHEDULE

RATE SCHEDULE

2018 Raw Labor Rate	
Position	Max
HDR	
Project Manager	\$ 110.00
Resident Engineer	\$ 70.00
Lead Materials Manager	\$ 90.00
Office Engineer	\$ 60.00
Lead Roadway Inspector	\$ 55.00
Roadway Inspector I	\$ 35.00
Lead Structural Inspector	\$ 60.00
Structural Inspector I	\$ 35.00
Structural Inspector II	\$ 45.00
Structural Steel Inspector	\$ 75.00
Electrical Inspector	\$ 60.00
Record Keeper	\$ 35.00
SW3P/Barricade Inspector	\$ 45.00
Utility Coordinator	\$ 110.00
Survey Manager	Specified Rate
Testing Technician	Specified Rate

2018 Raw Labor Rate	
Position	Max
G Sylva	
Office Engineer	\$ 60.00
Lead Roadway Inspector	\$ 55.00
Roadway Inspector I	\$ 35.00
Lead Structural Inspector	\$ 60.00
Structural Inspector I	\$ 35.00
Structural Inspector II	\$ 45.00
Structural Steel Inspector	\$ 75.00
Electrical Inspector	\$ 60.00
Record Keeper	\$ 35.00
SW3P/Barricade Inspector	\$ 45.00
Utility Coordinator	\$ 110.00

2018 Raw Labor Rate	
Garver	
Position	Max
Office Engineer	\$ 60.00
Lead Roadway Inspector	\$ 55.00
Roadway Inspector I	\$ 35.00
Lead Structural Inspector	\$ 60.00
Structural Inspector I	\$ 35.00
Structural Inspector II	\$ 45.00
Structural Steel Inspector	\$ 75.00
Electrical Inspector	\$ 60.00
Record Keeper	\$ 35.00
SW3P/Barricade Inspector	\$ 45.00
Utility Coordinator	\$ 110.00

2018 Raw Labor Rate	
CDM Smith	
Position	Max
Office Engineer	\$ 60.00
Lead Roadway Inspector	\$ 55.00
Roadway Inspector I	\$ 35.00
Lead Structural Inspector	\$ 60.00
Structural Inspector I	\$ 35.00
Structural Inspector II	\$ 45.00
Structural Steel Inspector	\$ 75.00
Electrical Inspector	\$ 60.00
Record Keeper	\$ 35.00
SW3P/Barricade Inspector	\$ 45.00
Utility Coordinator	\$ 110.00

Company	2017 Office OH Rate	2017 Field OH Rate
HDR Eng, Inc	1.4891	1.3494
CDM Smith		1.3207
Garver		1.3350
G Sylva		1.4000

Profit	10%
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ATTACHMENT A-2

Actual Employee Rates

ACTUAL EMPLOYEE RATES

		Actual Raw Labor (W2) Rates
Position	Key Personnel	2018-2019
		Regular
Project Manager	Paul Bowen	\$ 99.64
Resident Engineer	Raphael Campos	\$ 61.10
Lead Materials Manager	Chien-Nan Fu	\$ 76.50
Office Engineer	John Grounds	\$ 51.77
Lead Roadway Inspector	Terry Gentry	\$ 45.62
Survey Manager	Chris Conrad	\$ 165.00

ATTACHMENT B

WORK AUTHORIZATION

WORK AUTHORIZATION NO. 1

CONTRACT FOR CONSTRUCTION ENGINEERING & INSPECTION SERVICES

THIS WORK AUTHORIZATION is made pursuant to the terms and conditions of Article 4 of the Contract for Construction Engineering & Inspection Services (“the Contract”) entered into by and between the Central Texas Regional Authority (“the Authority”) and HDR, Inc. (“the Engineer”) dated _____.

PART I. The Engineer will perform Construction Engineering & Inspection Services in accordance with the project description attached hereto in Exhibit B and made a part of this Work Authorization. The responsibilities of the Authority and the Engineer 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 \$8,284,409.28 and the method of payment will be calculated on a per-hour basis using hourly billing rates. This amount is based upon the Engineer’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 and documented as detailed in Exhibits E, and F.

PART III. Payment to the Engineer 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 ENGINEER

**CENTRAL TEXAS REGIONAL MOBILITY
AUTHORITY**

(Signature)

(Signature)

(Printed Name)

Mike Heiligenstein

(Title)

Executive Director

(Date)

(Date)

LIST OF EXHIBITS TO WORK AUTHORIZATION

Exhibits	Title
A	Services to Be Provided by the Authority
B	Services to Be Provided by the Engineer
C	Work Schedule
D	Fee Schedule/Budget
E	DBE Participation Forms (E-1 through E-7)
F	Disadvantaged Business Enterprise (DBE) for Federal Funded Professional or Technical Services Contracts – See Exhibit E Instructions
G	Invoice Template
H	Confidentiality Agreement

EXHIBIT A

SERVICES TO BE PROVIDED BY THE AUTHORITY

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

- 1) Authorize the Engineer 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 Engineer.
- 3) Provide timely review and decisions in response to the Engineer's request for information and/or required submittals and deliverables, in order for the Engineer to maintain the agreed-upon work schedule.
- 4) Maintain the Project's website.
- 5) Provide the Engineer with relevant data available to the Authority related to people, agencies and organizations interested in the proposed project.
- 6) Provide for inspections of tolling equipment (including ITS elements and lightning protection).
- 7) Either provide directly, or have its designated General Engineering Consultant ("GEC") provide general oversight services of the Engineer.
- 8) Provided for inspections of materials prepared, fabricated, or produced off-site at a supplier facility.

EXHIBIT B

SERVICES TO BE PROVIDED BY THE ENGINEER

Professional services (“the Services”) to be provided by the Construction Engineering and Inspection Consultant Team (“the Engineer”) include providing and maintaining construction engineering, inspection, survey, and materials testing staff at the field office supplied by the Authority’s construction contractor (“Contractor”). The Engineer would oversee, review and document construction activities performed by the Contractor.

Scheduling of activities below will conform to the Project milestones established by the Authority and the Texas Department of Transportation (“TxDOT”).

The Engineer will serve as a member of the project oversight team (“Oversight Team”) comprised of the Authority, General Engineering Consultant (“GEC”), and TxDOT staff members. The Engineer shall work at the direction and supervision of the Authority and the Authority’s GEC, who will assist with oversight of the Project. The Engineer shall work cooperatively and collaboratively throughout all aspects and phases of construction operations and in its dealings with the Authority, Contractor, GEC, toll system integrators, suppliers, subcontractors, engineers, legal counsel, accountants, consultants, government entities, utilities, property owners, and the general public.

The Engineer shall coordinate with the Authority’s public involvement team, as required, in the Authority’s dealings with the general public, adjacent property owners, and interested advocacy groups.

The Engineer shall keep the Oversight Team informed of the Contractor’s operations in the field, especially issues related to safety, quality, schedule, potential change orders, and potential construction claims. The Engineer will have the authority to stop construction activity in response to emerging life safety issues.

The Engineer will not control or direct the construction under the construction contract. Field inspections will not relieve the 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 Engineer should be aware that the time frames noted herein are tentative and subject to change. The Engineer will remain available for the duration that the services are required by the Authority, unless the Contract is terminated as described therein.

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

A. General Requirements

- 1) Provide all labor, equipment, tools and incidentals to perform the Services.
- 2) Establish and maintain the Project field office operation within the Contractor-provided facility. The Engineer shall install and maintain all necessary computer network equipment for their use. The Authority’s Contractor will provide, install, and maintain business class ethernet system internet services provided with minimum 100 Megabyte/sec download and 10 megabyte/sec upload. The Authority’s Contractor will provide, install, and maintain one high-speed color copier / printer / scanner capable of handling 11x17 prints which will be available

for use by the Engineer and the Authority. The Engineer shall supply all paper for this printer.

- 3) In delivery of Services, the Engineer will be required to track and document all project activities, as appropriate, to the two individual project CSJs. The CTRMA improvements are included in CSJ# 0114-02-0104 and the TxDOT improvements are included in CSJ# 0114-02-0105. Both CSJs will be constructed as part of this project.
- 4) 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.
- 5) Provide vehicles clearly displaying company logos (or team logo), mobile phones, and computer equipment system (i.e. laptop, computers and/or tablets) capable of performing the Services.
- 6) Assist in the resolution of construction issues and conflicts and provide timely data to the Authority and the Contractor.
- 7) The scope and duration of the Project is based on the construction contract construction schedule, including any added days to the schedule by contract, as well as a close-out period. The Engineer shall be available as requested by the Authority during close-out and will be responsible to verify that all documentation has been submitted and all outstanding project-related issues have been resolved.

B. Project Controls

The Engineer shall provide the following in support of project control efforts for the Project:

- 1) Project correspondence – issue and follow-up on all correspondence to and from the Contractor for the Project. All key communication with the Contractor must be in writing.
- 2) Record keeper duties – perform all duties necessary to properly document Project activities and validate conformance of the Project by its participants with Authority, TxDOT and Federal guidelines and requirements.
- 3) Document control – maintain oversight of the online document control system for the Authority and properly file all appropriate documents within the system using the Authority’s filing system. The Engineer will respect the confidentiality of all information provided to and available on this system.
- 4) Project scheduling – continuously evaluate the overall Project schedule and the Contractor schedule updates to verify that the Project is on track. Notify members of the Oversight Team immediately if there are potential threats to the Project schedule. Monthly schedule updates submitted by the Contractor with the pay application will be evaluated and validated to document adequate reporting of the Contractor project progress and to support the associated pay request.
- 5) Contractor pay requests – review, validate, require revisions to or recommend payment of the Contractor pay requests. This will include a detailed evaluation of the Contractor’s associated schedule as discussed above.
- 6) Changes/Assessment – identify, develop, evaluate and negotiate (if necessary) all change orders, lane rental bank assessments, liquidated damage assessments, and

other elements of the Contract which may have an impact on the overall Contractor reimbursement. The Engineer will notify the Authority when these issues arise and will receive approval prior to issuance of the associated correspondence to the Contractor.

- 7) Project report and metrics – assist the Authority or GEC in production of Project-specific reports, presentations, and updates as required. This will require providing data, tables, write-ups, status summaries, graphs and other information as necessary. The Engineer will be responsible for the completeness and accuracy of the information provided.

C. Construction Engineering

- 1) The Engineer will provide quality control and assurance for the construction of the project through construction engineering and management in accordance with the plans, specifications, and approved Construction Quality Management Plan to be developed by the Engineer in collaboration with the Authority. Included with this task will be the following responsibilities:
 - a. Establish and maintain the Project Field Office operation within the Contractor-provided facility.
 - b. Review the Contractor's plan for construction Quality Control.
 - c. Maintain the Project diary and all required documentation.
 - d. Document pre-construction conditions via still photography and video.
 - e. Coordinate review of construction documents including, but not limited to, Requests for Information (RFIs), shop drawings, and submittals from the Contractor with the Design Engineer for concurrence with the Project design and specifications.
 - f. Prepare and maintain an Engineering Judgement Log in accordance with the Construction Quality Management Plan.
- 2) The Engineer will provide technical advice to assist the Oversight Team on matters of construction related to interpretation of design details, construction techniques and procedures, specifications, standard construction details, and construction plans prepared by the Design Engineer. As required, the Engineer will seek clarifications from the Design Engineer on the intent reflected in the designs, plans, and specifications. The Design Engineer will remain responsible for design related services.
- 3) Additionally, the Engineer will be responsible for the following:
 - a. Requests for Information (RFI) Processing – receive RFIs from Contractor or create as necessary. Review and facilitate resolution of all RFI responses, and maintain all documents. Coordinate with the GEC for RFIs that require Design Engineer review.
 - b. Shop Drawing Submittal Processing – coordinate all reviews of shop drawings with the Design Engineer, comments and approvals, and maintain a shop drawing log.
 - c. Utility Coordination – provide oversight of the utility adjustment process including attendance and participation at utility coordination meetings review of assembly packages, and assistance with utility conflict resolution as required.

D. Construction Inspections

The Engineer's inspection team ("Inspectors") shall perform their work in a manner that minimizes disruption to the Contractor's operations and schedule.

Perform and report construction inspections of all operations related to structures, roadway, drainage, traffic (i.e. signs, striping, signals, illumination), stormwater pollution prevention plan and maintenance of traffic to validate that the Contractor's work, including sequencing of work, is conducted in accordance with the approved contract documents.

The Engineer will not be responsible for providing inspections of tolling equipment (including ITS elements and lightning protection). These services will be provided by the Authority or its designated consultant. The Engineer will be responsible for coordination and scheduling of the ITS inspections.

Other inspection efforts required of the Engineer include:

- Toll gantry column and truss inspections.
- Identify, document and make recommendations to the Oversight Team regarding plan errors and omissions, substitutions, defects and deficiencies in the work of the contractor, subcontractors, vendors, etc.
- Provide sufficient staff and a staffing plan to maintain consistency throughout the Project to schedule and perform inspections of the Contractor's work. The Engineer shall be required to be on-site performing inspection duties at any time the work is being performed which requires inspection.
- Review and report daily documentation of construction quantities in support of Contractor draw requests.
- Regularly review and provide input on the Contractor's reported progress shown in the detailed project schedule.
- Contribute to a digital photograph log of the Project area during construction to document construction progress, with emphasis on areas with potential claim items/issues and on areas of real/potential public controversy. All photographs shall have embedded time, date, and georeferencing data.
- Verify that the Project is implemented in accordance with the direction provided in RFIs. Inspectors will prepare RFIs as necessary during the Project.
- Inspectors will be provided with access to the Contractor's shop drawings and submittals. Inspectors will verify that the Project is constructed in compliance with these documents.
- Prepare, follow-up on, and be responsible for resolution of Non-Compliance Reports (NCRs) for non-compliant work.
- Schedule or conduct material testing as needed for inspection of the construction work.
- Review material testing reports and assist in the resolution of any deficiencies reported.
- Perform quality control checks on all documentation (i.e. drill shaft logs, daily work reports) prior to incorporating them into the Project records.
- Become familiar with and utilize the standard reporting forms used to document construction inspections.

1) Inspector Training and Certifications

All Inspectors shall have a current OSHA-10 Card (safety training).

Project inspectors will be required to have appropriate training and certifications to understand the methods and criteria for sampling and testing of materials that they will be inspecting.

Although not a comprehensive list, at least one certified inspector will be required for each of the following construction components, where applicable, and will require the Authority approval prior to commencement of work:

- a. Traffic Control – A certified inspector is a person who has passed the Work Zone Traffic Control course offered by Texas A&M Engineering Extension Service (TEEX) and has a minimum of five (5) years of experience in Traffic Control inspection.
- b. Electrical – A certified inspector is a person who has a minimum of five (5) years of experience in electrical inspection of roadway illumination and traffic signals and within 6 months of Contract Execution (depending on course availability) be able to pass the tests for TxDOT’s course TRFS450, “Roadway Illumination” and TRF453 “Electrical Requirements for Installation of Traffic Signals.”
- c. Asphalt – A certified inspector is a person with a current Texas Asphalt Pavement Association (TxAPA) Hot-Mix Asphalt (HMA) Roadway Specialist – Level 1B certification and a minimum of five (5) years of experience in asphalt inspection for roadways.
- d. Concrete – A certified inspector is a person with a current American Concrete Institute (ACI) Concrete Field Testing Technician – Field Grade I certification and a minimum of 5 years of experience in inspection of structural concrete.
- e. Capital Metro Railroad (“Railroad”) Work Zone Training – The Engineer and appropriate staff will attend and become certified in Railroad Work Zone Training as provided by the Railroad or their approved training provider. There shall be no crossings of the Railroad's tracks without the presence of a “Railroad Worker-in- Charge”, as approved by the Railroad.

2) Inspection Levels

Inspections will be performed at three different levels:

- Full Time Inspection (FTI) – continuous inspection during construction operation.
- Hold Point Inspection (HPI) – inspection at specific hold points in the work prior to the Contractor continuing.
- Spot Inspection (SI) – Spot inspection during operation and inspection of end product.

The Project’s Quality Assurance Program for Design-Bid-Build Projects (QAP), lists the inspection level for different elements of the work. These may be modified to meet specific needs as discussed in the pre-activity meeting for that element of work. For items not listed in the QAP, the Engineer will develop inspection levels and hold points and present them to the Contractor at the pre-activity meeting.

3) Construction Inspection Checklists

Inspection checklists will be provided by the Authority as a tool for the Inspectors to verify that the Project is built in compliance with the approved construction documents. Inspectors shall utilize these checklists as part of the Services.

4) Traffic Control

- Review, monitor, and recommend modification to the Contractor’s maintenance of traffic/traffic control operations according to applicable specifications and standards using approved inspection reports.
- Modifications to the Contractor’s maintenance of traffic/traffic control operations will require sign and sealed plans from a licensed engineer.
- Provide an inspector that is certified to perform barricade inspections and submit proof of certification to the Authority for each inspector utilized on the Project for maintenance of traffic inspections.
- Provide barrier inspections and document deficiencies or actions needed. Corrective actions should be submitted to the Contractor and tracked until completed.
- Document and issue deficiency reports to the Contractor on any non-compliant traffic control devices or layouts.
- Verify Contractor requests for lane closures and detours are in accordance with applicable standards and submit lane closure notifications to TxDOT.
- Document and track lane rental fees.
- Verify the Contractor makes repairs to critical items immediately and that other deficiencies or actions are being addressed within the timeframes specified by the contract and specifications, or within reasonable timeframes. Advise the Authority on non-payment of applicable contract pay items, if needed.
- Verify all traffic control items used by the Contractor meet requirements of Texas Manual on Uniform Traffic Control Devices (“TMUTCD”, current version at the time of proposal or latest edition).

5) Drill Shafts (i.e. Bridges, Large Signs, Toll Gantries, Signals, High Mast Illumination)

The Inspector shall verify proper drill shaft or pile installations. Inspectors should have knowledge in geological materials to verify proper founding is achieved, proper underwater and slurry displacement concrete placement procedures and proper use of steel casing for dewatering and stability applications are implemented. The Inspector shall complete a separate log for each drill shaft/pile.

6) Daily Work Reports (“DWR”)

Prepare a DWR for each day of work from the begin work date until final acceptance. All inspectors shall prepare their own DWR on approved RMA format each day they are on the Project. Each DWR must have all applicable information included (i.e. the weather recorded for that day, including temperature high and low, weather conditions, all visitors to the Project, traffic conditions, lane closure hours, police officer names and hours worked, portable message sign hours, instruction given to the Contractor, the Contractor work hours, the Contractor’s equipment and utilization, safety concerns, and accidents).

DWRs will be accompanied by inspector photo logs documenting the daily work being done. These will be included as part of the DWR.

7) Contractor Quantities

Complete a TxDOT Form 1257 or other approved form for all applicable items to pay for items of work inspected. Input the station number, supporting calculations, quantity being paid, any comments or remarks necessary, and any other information to properly distinguish the item being paid. Quantities will be assigned, as appropriate to each of the two individual CSJs on the Project.

Quantities should be assigned to schedule activity IDs for purposes of documenting and tracking pay items.

Track and report, on a monthly basis, Contractor's materials on hand.

8) Non-Conformance Reports ("NCR"s)

If the inspection identifies work that is in non-conformance, and that work can be corrected and completed in conformance with the approved construction documents, and the Contractor corrects and completes the work in accordance with the approved construction documents, then no additional action is required.

If the work is not in conformance and is not easily correctable, then the Inspector will prepare an NCR for submittal to the Contractor.

E. Survey Oversight

Survey oversight is primarily intended as survey quality assurance of the efforts of the Contractor and the Contractor's surveyor. Efforts shall include, but are not limited to:

- 1) Provide separate permanent benchmarks outside of the construction footprint to assist in performing independent verification of the Contractor's surveyor's permanent and temporary benchmarks for the duration of the project.
- 2) Perform additional verification of the Contractor's survey records and methods through semi-annual audits.
- 3) Check the horizontal and vertical locations of bridge structure components to verify conformance with the plans.
- 4) Check Contractor's line and grade between PVT/PVCs 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.
- 5) Perform miscellaneous spot checks as needed during the duration of the project.
- 6) All deliverables shall be in Microstation Format (latest TxDOT approved version) with topographic information to be provided in 2D and 3D files. digital terrain models shall be in *.tin format. Other point files shall be required in ASCII or *.dat file formats as requested by the Authority.
- 7) All deliverables must also conform to the following TxDOT coordinate system:
Texas Central Zone #4203, NAD 83, Adjusted to Surface using a combined scale factor of 1.00011.

F. Materials Engineering and Acceptance

- 1) Provide a Qualification Program for materials utilized for the construction of the Project in accordance with the Authority's Quality Acceptance Program ("QAP"). Maintain documentation of all qualified individuals who perform required tests for acceptance of materials.
- 2) Prepare reports for all material tests, clearly stating whether the material meets specifications, includes all information required by the testing method, and are signed by the Materials Engineer (or his designee). Provide all reports in a timely manner for review by the GEC.
- 3) Develop and implement a testing plan in compliance with TxDOT's Guide Schedule of Sampling and Testing ("Guide Schedule") for the Project. As recommended in the Guide Schedule, testing will be performed at a four-fold

increase at the start of production until the GEC has confidence in the Contractor's (or the Contractor's suppliers) process.

- 4) Prepare Non-Conformance Reports ("NCR"s) for failing tests as appropriate.
- 5) Prepare control charts for applicable test values.
- 6) Monitor test results, maintain a material testing database capable of tracking failing tests, inform the GEC of failing test results in a timely manner, and work with the GEC to resolve failed tests on the project.
- 7) Perform IRI testing of finished pavement surfaces per applicable TxDOT testing methodology.
- 8) Approve the Contractor's procedures and requirements for handling, storage, shipping, delivery, and preservation of materials incorporated into the work; including Corrective Action procedures for test or inspection failures, malfunctions or deficiencies.
- 9) Perform the testing of construction materials utilized on the project in accordance with the Quality Assurance Plan
- 10) Submit construction Quality Acceptance Material Certification letters quarterly to the GEC.
- 11) Conduct the materials acceptance testing program and provide materials advice as deemed necessary.
- 12) Prepare the end of project material certification binder and sign materials certification letter stating that the materials incorporated into the construction work are in accordance with standards and specifications.

G. Project Closeout

1) Record Drawings

Compile and provide the Authority with Record ("As-Built") Plans incorporating construction revisions into the original "as bid" construction plans. This should include electronic version of the *.dgn files and a complete set of As-Builts in Adobe format.

2) Requests for Information ("RFI")

Inspectors are responsible for verifying that the Project is implemented in accordance with the direction provided in RFIs. Inspectors will prepare RFIs or forward those received from the Contractor to the Design Engineer for clarification.

3) Shop Drawings and Submittals

Inspectors will be provided with access to the Contractor's shop drawings and submittals. Inspectors will verify that the Project is constructed in compliance with these documents.

4) Punch List

- a. Coordinate with the GEC, Contractor and TxDOT in the generation of a final punch list.
- b. Monitor the resolution of outstanding construction items.
- c. Perform inspection to verify satisfactory completion of punch list items.

H. Other Requirements

1) Meetings

- a. Attend weekly progress meetings held by the GEC with the Contractor.
- b. Attend staff meetings for the construction oversight team held by the GEC.
- c. Attend monthly construction meetings held and hosted by the Authority.

- d. Attend pre-activity meetings, safety meetings, and any other meetings requiring construction inspection expertise, as requested by the Authority or the GEC.
- 2) Deliverables
- a. The following construction documentation will be maintained and kept up-to-date during the course of the construction contract on the Authority's document control system for review by the Oversight Team and will be submitted in a timely manner after being checked by an appropriate member (senior inspector, project manager, etc.) of the Engineer's staff.
 - b. Weekly Progress Reports and Weekly Meeting Minutes
 - c. Proof of Certification and Training
 - d. RFI Files and Log
 - e. Submittal Files and Log
 - f. Change Order Files and Log
 - g. Monthly Schedule Update
 - h. Project Diary (objective and consisting of documented facts and statements only)
 - i. Project Reports and Metrics (as defined in Project Controls)
 - j. Construction Quality Management Plan
 - k. Engineering Judgement Log
 - l. Utility Documentation
 - m. Inspector Daily Work Reports
 - n. Inspector Checklists (includes any required calculations or worksheets)
 - o. Inspector Verified Quantities
 - p. Non-Conformance Reports
 - q. Embankment, Sub-grade, Sub-base, and Base Course Testing Reports
 - r. Concrete Plant and Concrete Related Field Inspection Reports (calibrations, gradations, admixtures, slump, air content, etc.)
 - s. HMA Plant Reports
 - t. HMA and Cement Concrete Mix Designs
 - u. Concrete Volume Checks
 - v. Off-Site Testing and Inspection Reports (by others)
 - w. Miscellaneous materials certifications and documents (source of aggregate, shop drawings, subcontractor acceptance, purchase orders, etc.)
 - x. Inspector Photographs
 - y. Drill Shaft Logs
 - z. Barricade Inspection Reports
 - aa. SW3P Reports
 - bb. Provide materials tickets for all applicable items (i.e. Concrete, HMA, Flexbase, Prime, Fertilizer, Seed, etc.) with an attached documentation indicating date, pay item(s), placement location, and cumulative quantity
 - cc. Punch list Documentation;
 - dd. Project Close-Out Documentation
 - ee. Initial Benchmark Survey Verification Report
 - ff. Survey Audit Reports
 - gg. Survey plan sheets for bridge drilled shaft and bearing seat checks
 - hh. Survey spreadsheet for roadway grade checks
 - ii. Accident Reports prepared by others for major accidents within the work zone (fatality or medical treatment required)
 - jj. Correspondence
 - kk. Final Record Drawings

- ll. Test reports, plant reports, test failure tracking database, IRI results, and certifications related to the project for incorporation into the project records
- nn. Compile the end of project materials certification binder to be signed by the Materials Engineer (professional engineer licensed and registered in Texas), including deficiency report, letters of certification, summary of NCRs and Engineering Judgments, and test exception letters

3) Schedule

The scope and duration of the Project is based on the construction contract construction schedule, including any added days to the schedule by contract, as well as a close-out period. The Engineer shall be available as requested by the Authority during close-out and will be responsible to verify that all documentation has been submitted and all outstanding project-related issues have been resolved.

4) Local Government Project Procedures (LGPP)

The Engineer is required to provide a “qualified person” to the project. This person must be a member of the Key Personnel and have successfully completed the TxDOT Local Government Project Procedures Training and Qualification Course, LGP101.

EXHIBIT C

WORK SCHEDULE

The Engineer will perform Construction Engineering & Inspection Services as described in this Work Authorization or until all tasks are complete and will submit deliverables to the Authority based on the following work schedule:

Notice to Proceed Approximately Fall 2018
Construction completionApproximately Summer 2021

EXHIBIT D

FEE SCHEDULE/BUDGET

FEE SCHEDULE/BUDGET

JOB CLASSIFICATION	FIRM	2018-2019 LOADED RATE	2018-2019 LOADED OT RATE	Nov-18		Dec-18		Jan-19		Feb-19		Mar-19		Apr-19		May-19		Jun-19		Jul-19		Aug-19		Sep-19		Oct-19		Nov-19	
				HOURS/ MONTH	OT	HOURS/ MONTH	OT	HOURS/ MONTH	OT	HOURS/ MONTH	OT	HOURS/ MONTH	OT	HOURS/ MONTH	OT	HOURS/ MONTH	OT	HOURS/ MONTH	OT	HOURS/ MONTH	OT	HOURS/ MONTH	OT	HOURS/ MONTH	OT	HOURS/ MONTH	OT	HOURS/ MONTH	OT
Project Manager	HDR	\$ 272.82		160	0	160	0	160	0	140	0	120	0	64	0	64	0	64	0	64	0	64	0	64	0	64	0	64	0
Resident Engineer	HDR	\$ 157.90		160	20	160	20	168	20	152	20	168	20	176	20	176	20	160	20	176	20	176	20	160	20	176	20	152	20
Lead Materials Manager	HDR	\$ 197.70		80	0	120	0	126	0	114	0	126	0	132	0	132	0	120	0	132	0	132	0	120	0	132	0	114	0
Office Engineer	Garver	\$ 132.97		80	0	160	0	168	0	152	0	168	0	176	0	176	0	160	0	176	0	176	0	160	0	176	0	152	0
Lead Roadway Inspector	CDM Smith	\$ 116.46	\$ 174.69	160	0	160	20	168	30	152	40	168	40	176	40	176	40	160	40	176	40	176	40	160	40	176	40	152	40
Roadway Inspector I	HDR	\$ 72.36	\$ 108.54			80	0	80	0	152	20	168	20	176	20	176	20	160	20	176	20	176	20	160	20	176	20	152	20
Lead Structural Inspector	G Sylva	\$ 132.05	\$ 198.08			80	0	168	20	152	30	168	40	176	40	176	40	160	40	176	40	176	40	160	40	176	40	152	40
Structural Inspector I	HDR	\$ 78.74	\$ 118.12					80	0	152	20	168	30	176	40	176	40	160	40	176	40	176	40	160	40	176	40	152	40
Structural Inspector II	HDR	\$ 104.67	\$ 157.00																	80	0	176	10	160	20	176	30	152	40
Structural Steel Inspector	HDR	\$ 182.49																											
Electrical Inspector	HDR	\$ 145.11		160	0	80	0									80	0												
Record Keeper	HDR	\$ 82.70	\$ 124.05	160	0	160	0	168	0	152	0	168	0	176	0	176	0	160	0	176	0	176	0	160	0	176	0	152	0
SW3P/Barricade Inspector	HDR	\$ 97.25	\$ 145.87	64	0	64	0	64	0	64	0	64	0	64	0	64	0	64	0	64	0	64	0	64	0	64	0	64	0
Utility Coordinator	HDR	\$ 265.40		40	0	40	0	40	0	40	0	40	0	20	0														
Survey Manager	McGray	\$ 165.00																											
Suvey Crew	McGray																												
Materials & Testing Field	REL	\$ 65.00	\$ 80.50	80	0	160	10	168	20	152	30	168	40	176	40	176	40	160	40	176	40	176	40	160	40	176	40	152	40
Materials & Testing Lab	REL																												

DBE Sub-consultants	%	\$
G Sylva	11.06%	\$ 915,815.34
McGray	4.29%	\$ 355,028.00
REL	5.76%	\$ 476,916.38
Total DBE	21.10%	\$ 1,747,759.71

Budget % of Construction Contract

Engineer's Estimate	\$ 84,053,224.20	9.86%
Awarded Contractor	\$ 71,236,424.39	11.63%

Garver	9.89%	\$ 818,990.12
CDM Smith	9.91%	\$ 821,161.17
Total Partners	19.80%	\$ 1,640,151.29

HDR	59.10%	\$ 4,895,278.63
Total HDRE	59.10%	\$ 4,895,278.63

Sub-Total	100.00%	\$ 8,283,189.63
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FEE SCHEDULE/BUDGET

JOB CLASSIFICATION	FIRM	2018-2019 LOADED RATE	2018-2019 LOADED OT RATE	2020 LOADED RATE	2020 LOADED OT RATE	Dec-19		Jan-20		Feb-20		Mar-20		Apr-20		May-20		Jun-20		Jul-20		Aug-20		Sep-20		Oct-20	
						HOURS/ MONTH	OT	HOURS/ MONTH	OT	HOURS/ MONTH	OT	HOURS/ MONTH	OT	HOURS/ MONTH	OT	HOURS/ MONTH	OT	HOURS/ MONTH	OT	HOURS/ MONTH	OT	HOURS/ MONTH	OT	HOURS/ MONTH	OT	HOURS/ MONTH	OT
Project Manager	HDR	\$ 272.82		\$ 281.00		64	0	64	0	64	0	64	0	64	0	64	0	64	0	64	0	64	0	64	0	64	0
Resident Engineer	HDR	\$ 157.90		\$ 162.64		168	20	168	20	152	20	176	20	176	20	160	20	176	20	176	20	168	20	168	20	168	20
Lead Materials Manager	HDR	\$ 197.70		\$ 203.63		126	0	126	0	114	0	132	0	132	0	120	0	132	0	132	0	126	0	126	0	126	0
Office Engineer	Garver	\$ 132.97		\$ 136.96		168	0	168	0	152	0	176	0	176	0	160	0	176	0	176	0	168	0	168	0	168	0
Lead Roadway Inspector	CDM Smith	\$ 116.46	\$ 174.69	\$ 119.95	\$ 179.93	168	40	168	40	152	40	176	40	176	40	160	40	176	40	176	40	168	40	168	40	168	40
Roadway Inspector I	HDR	\$ 72.36	\$ 108.54	\$ 74.53	\$ 111.80	168	20	168	20	80	0	80	0														
Lead Structural Inspector	G Sylva	\$ 132.05	\$ 198.08	\$ 136.01	\$ 204.02	168	40	168	40	152	40	176	40	176	40	160	40	176	40	176	40	168	40	168	40	168	40
Structural Inspector I	HDR	\$ 78.74	\$ 118.12	\$ 81.11	\$ 121.66	168	40	168	40	152	40	176	40	176	40	160	40	176	40	176	40	168	40	168	40	168	40
Structural Inspector II	HDR	\$ 104.67	\$ 157.00	\$ 107.81	\$ 161.71	168	40	168	40	152	40	176	40	176	40	160	40	176	40	176	40	168	40	168	40	168	40
Structural Steel Inspector	HDR	\$ 182.49		\$ 187.96						48	0	48	0	48	0												
Electrical Inspector	HDR	\$ 145.11		\$ 149.47																							
Record Keeper	HDR	\$ 82.70	\$ 124.05	\$ 85.18	\$ 127.77	168	0	168	0	152	0	176	0	176	0	160	0	176	0	176	0	168	0	168	0	168	0
SW3P/Barricade Inspector	HDR	\$ 97.25	\$ 145.87	\$ 100.17	\$ 150.25	64	0	64	0	64	0	64	0	64	0	64	0	64	0	64	0	64	0	64	0	64	0
Utility Coordinator	HDR	\$ 265.40		\$ 273.36																							
Survey Manager	McGray	\$ 165.00		\$ 169.95																							
Suvey Crew	McGray																										
Materials & Testing Field	REL	\$ 65.00	\$ 80.50	\$ 66.95	\$ 82.92	168	40	168	40	152	40	176	40	176	30	160	20	176	20	176	10	168	10	168	10	168	10
Materials & Testing Lab	REL																										

FEE SCHEDULE/BUDGET

JOB CLASSIFICATION	FIRM	2020 LOADED RATE	2020 LOADED OT RATE	2021 LOADED RATE	2021 LOADED OT RATE	Nov-20		Dec-20		Jan-21		Feb-21		Mar-21		Apr-21		May-21		Jun-21		Jul-21		Aug-21	
						HOURS/ MONTH	OT	HOURS/ MONTH	OT	HOURS/ MONTH	OT	HOURS/ MONTH	OT	HOURS/ MONTH	OT	HOURS/ MONTH	OT	HOURS/ MONTH	OT	HOURS/ MONTH	OT	HOURS/ MONTH	OT	HOURS/ MONTH	OT
Project Manager	HDR	\$ 281.00		\$ 289.43		64	0	64	0	64	0	64	0	64	0	64	0	64	0	64	0	64	0	64	0
Resident Engineer	HDR	\$ 162.64		\$ 167.52		152	20	176	20	152	20	152	20	184	0	176	0	160	0	176	0	168	0	176	0
Lead Materials Manager	HDR	\$ 203.63		\$ 209.74		114	0	132	0	114	0	114	0	138	0	132	0	120	0	132	0	126	0	132	0
Office Engineer	Garver	\$ 136.96		\$ 141.07		152	0	176	0	152	0	152	0	184	0	176	0	160	0	176	0	168	0	176	0
Lead Roadway Inspector	CDM Smith	\$ 119.95	\$ 179.93	\$ 123.55	\$ 185.32	152	40	132	30	114	20	114	10	138	0	88	0	80	0	88	0	40	0	40	0
Roadway Inspector I	HDR	\$ 74.53	\$ 111.80	\$ 76.77	\$ 115.15																				
Lead Structural Inspector	G Sylva	\$ 136.01	\$ 204.02	\$ 140.09	\$ 210.14	152	40	176	40	152	40	152	40	138	20	80	0	80	0	80	0	40	0	40	0
Structural Inspector I	HDR	\$ 81.11	\$ 121.66	\$ 83.54	\$ 125.31	152	40	176	40	152	30	152	20	92	0	80	0	80	0	40	0				
Structural Inspector II	HDR	\$ 107.81	\$ 161.71	\$ 111.04	\$ 166.56	152	40	176	30	152	20	152	10	92	0										
Structural Steel Inspector	HDR	\$ 187.96		\$ 193.60																					
Electrical Inspector	HDR	\$ 149.47		\$ 153.95								80	0	80	0										
Record Keeper	HDR	\$ 85.18	\$ 127.77	\$ 87.74	\$ 131.60	152	0	176	0	152	0	152	0	184	0	176	0	160	0	176	0	168	0	176	0
SW3P/Barricade Inspector	HDR	\$ 100.17	\$ 150.25	\$ 103.17	\$ 154.76	64	0	64	0	64	0	64	0	64	0	20	0	20	0	20	0	20	0	20	0
Utility Coordinator	HDR	\$ 273.36		\$ 281.56																					
Survey Manager	McGray	\$ 169.95		\$ 175.05																					
Suvey Crew	McGray																								
Materials & Testing Field	REL	\$ 66.95	\$ 82.92	\$ 68.96	\$ 85.40	152	10	176	10	152	10	152	10	80	0	40	0	20	0	20	0				
Materials & Testing Lab	REL																								

FEE SCHEDULE/BUDGET

JOB CLASSIFICATION	FIRM	2018-2019 LOADED RATE	2018-2019 LOADED OT RATE	2020 LOADED RATE	2020 LOADED OT RATE	2021 LOADED RATE	2021 LOADED OT RATE	OT Factors	2018-2019 Regular Hours	2018-2019 OT Hours	2020 Regular Hours	2020 OT Hours	2021 Regular Hours	2021 OT Hours	Total Hours Worked	Total Hours Available	Utilization	ODE's	Total	Contract %	
Project Manager	HDR	\$ 272.82		\$ 281.00		\$ 289.43		1.0	1316	0	768	0	512	0	2596	5893	44%	\$ 21,744.65	\$ 744,765.48	8.99%	
Resident Engineer	HDR	\$ 157.90		\$ 162.64		\$ 167.52		1.0	2328	280	2016	240	1344	40	6248	5893	106%	\$ 54,361.63	\$ 1,064,936.51	12.86%	
Lead Materials Manager	HDR	\$ 197.70		\$ 203.63		\$ 209.74		1.0	1706	0	1512	0	1008	0	4226	5893	72%	\$ 54,361.63	\$ 910,954.46	11.00%	
Office Engineer	Garver	\$ 132.97		\$ 136.96		\$ 141.07		1.0	2248	0	2016	0	1344	0	5608	5893	95%	\$ 54,361.63	\$ 818,990.12	9.89%	
Lead Roadway Inspector	CDM Smith	\$ 116.46	\$ 174.69	\$ 119.95	\$ 179.93	\$ 123.55	\$ 185.32	1.5	2328	490	1972	470	702	30	5992	5893	102%	\$ 51,051.62	\$ 821,161.17	9.91%	
Roadway Inspector I	HDR	\$ 72.36	\$ 108.54	\$ 74.53	\$ 111.80	\$ 76.77	\$ 115.15	1.5	2000	220	328	20	0	0	2568	5893	44%	\$ 20,936.60	\$ 216,221.53	2.61%	
Lead Structural Inspector	G Sylva	\$ 132.05	\$ 198.08	\$ 136.01	\$ 204.02	\$ 140.09	\$ 210.14	1.5	2088	450	2016	480	762	100	5896	5893	100%	\$ 51,051.62	\$ 915,815.34	11.06%	
Structural Inspector I	HDR	\$ 78.74	\$ 118.12	\$ 81.11	\$ 121.66	\$ 83.54	\$ 125.31	1.5	1920	410	2016	480	596	50	5472	5893	93%	\$ 46,086.61	\$ 523,669.65	6.32%	
Structural Inspector II	HDR	\$ 104.67	\$ 157.00	\$ 107.81	\$ 161.71	\$ 111.04	\$ 166.56	1.5	912	140	2016	470	396	30	3964	5893	67%	\$ 46,086.61	\$ 505,829.64	6.11%	
Structural Steel Inspector	HDR	\$ 182.49		\$ 187.96		\$ 193.60		1.0	0	0	144	0	0	0	144	5893	2%	\$ 4,820.40	\$ 31,887.07	0.38%	
Electrical Inspector	HDR	\$ 145.11		\$ 149.47		\$ 153.95		1.0	320	0	0	0	160	0	480	5893	8%	\$ 9,360.00	\$ 80,428.97	0.97%	
Record Keeper	HDR	\$ 82.70	\$ 124.05	\$ 85.18	\$ 127.77	\$ 87.74	\$ 131.60	1.5	2328	0	2016	0	1344	0	5688	5893	97%	\$ 54,361.63	\$ 536,523.36	6.48%	
SW3P/Barricade Inspector	HDR	\$ 97.25	\$ 145.87	\$ 100.17	\$ 150.25	\$ 103.17	\$ 154.76	1.5	896	0	768	0	292	0	1956	5893	33%	\$ 17,939.34	\$ 212,127.79	2.56%	
Utility Coordinator	HDR	\$ 265.40		\$ 273.36		\$ 281.56		1.0	220	0	0	0	0	0	220	5893	4%	\$ 9,547.20	\$ 67,934.17	0.82%	
Survey Manager	McGray	\$ 165.00		\$ 169.95		\$ 175.05		1.0											\$ 10,230.00	0.12%	
Suvey Crew	McGray																		\$ 1,500.00	\$ 344,798.00	4.16%
Materials & Testing Field	REL	\$ 65.00	\$ 80.50	\$ 66.95	\$ 82.92	\$ 68.96	\$ 85.40	1.5	2248	460	2016	250	464	20	5458	5893	93%	\$ 54,361.63	\$ 426,916.38	5.15%	
Materials & Testing Lab	REL																		\$ 50,000.00	0.60%	

Sub-Total (Labor+Monthly ODEs)	\$ 8,283,189.63
Project ODEs	\$ 1,219.65
TOTAL	\$ 8,284,409.28

OTHER DIRECT EXPENSES				
Description	Unit	2018/2019 Rate	2020 Rate	2021 Rate
Cell Phone & Data Plan	Month	\$ 75.00	\$ 77.25	\$ 79.57
Wireless Router/Server	Month	\$ 35.00	\$ 36.05	\$ 37.13
Laptop & Data Plan	Month	\$ 50.00	\$ 51.50	\$ 53.05
Vehicle	Month	\$ 1,400.00	\$ 1,442.00	\$ 1,485.26
Total recurring monthly cost per person		\$ 1,560.00	\$ 1,606.80	\$ 1,655.00
Copy/Print Paper*	Month	\$ 35.00	\$ 36.05	\$ 37.13
Datum Monument Materials**	Each	\$ 500.000	\$ 515.000	\$ 530.450

*Monthly charge

**Only used by Survey team

OTHER DIRECT EXPENSES				
Description	Unit	2018/2019 Rate	2020 Rate	2021 Rate
Vehicle Mileage*	Mile	\$ 0.545	\$ 0.561	\$ 0.578
Lodging In-State/Out-of-State**	Day	\$ 93.00	\$ 95.79	\$ 98.66
Meals In-State/Out-of-State**	Day	\$ 51.00	\$ 52.53	\$ 54.11
Air Travel - In State - Short Notice***	Rd Trip/Person	\$ 500.00	\$ 515.00	\$ 530.45
Air Travel - In State - 2+ Wks Notice***	Rd Trip/Person	\$ 350.00	\$ 360.50	\$ 371.32
Air Travel - Out of State - 2+ Wks Notice**	Rd Trip/Person	\$ 450.00	\$ 463.50	\$ 477.41
Air Travel - Out of State - Short Notice***	Rd Trip/Person	\$ 600.00	\$ 618.00	\$ 636.54
Rental Car (including fuel)***	Day	\$ 75.00	\$ 77.25	\$ 79.57
Parking	Day	\$ 25.00	\$ 25.75	\$ 26.52

* Federal rate

** State rate

*** Max Negotiated Rate

PRO-RATED ODEs

Vehicle Charge Calculation Basis

Hours Range	Monthly Veh Fee	% Charged	Monthly Amount
0 - 50 Hrs./Month	\$1,400.00	25%	\$350.00
51 - 100 Hrs./Month	\$1,400.00	50%	\$700.00
100 - 150 Hrs./Month	\$1,400.00	75%	\$1,050.00
151 - 200+ Hrs./Month	\$1,400.00	100%	\$1,400.00

Computer Charge Calculation Basis

Hours Range	Monthly Com Fee	% Charged	Monthly Amount
0 - 50 Hrs./Month	\$50.00	25%	\$12.50
51 - 100 Hrs./Month	\$50.00	50%	\$25.00
100 - 150 Hrs./Month	\$50.00	75%	\$37.50
151 - 200+ Hrs./Month	\$50.00	100%	\$50.00

Phone Charge Calculation Basis

Hours Range	Monthly Cell Fee	% Charged	Monthly Amount
0 - 50 Hrs./Month	\$75.00	25%	\$18.75
51 - 100 Hrs./Month	\$75.00	50%	\$37.50
100 - 150 Hrs./Month	\$75.00	75%	\$56.25
151 - 200+ Hrs./Month	\$75.00	100%	\$75.00

* add 3 % increase to these amounts for years 2020, 2021

McGRAY & McGRAY LAND SURVEYORS, INC.

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CTRMA 2018 Rates

Principal	\$190.00
Project Manager	\$165.00
RPLS	\$145.00
Field Coordinator	\$98.00
GPS Processing	\$108.00
Senior Survey Technician	\$96.00
Survey Technician	\$88.00
LiDAR Technician	\$98.00
Researcher (Abstractor)	\$73.00
Administrative	\$63.00
Survey Crew - 1 Man Crew	\$110.00
Survey Crew - 2 Man Crew	\$150.00
Survey Crew - 3 Man Crew	\$186.00
GPS Field Person + GPS	\$150.00
Real Time Kinematic (RTK) Crew + Rover	\$220.00
LiDAR Scanner	\$100.00
Additional Vehicle (per day)	\$70.00
ATV (per day)	\$85.00

**US290/SH130 PROJECT
CONSTRUCTION MATERIALS TESTING
FEE SCHEDULE**

	Unit	Fees
1. Field Technician (2 hr. minimum)		
1.1 Soil Technician	Per hr	\$65.00
1.2 Concrete Technician TxDOT or ACI Grade I	Per hr	\$65.00
1.3 Asphalt Technician		
1.3.1 TxDOT Certified Technician (Level IA & IB)	Per hr	\$65.00
1.3.2 TxDOT Certified Technician (Level II)	Per hr	\$75.00
1.4 Senior Field Inspector	Per hr	\$75.00
1.5 Structural Steel Technician		
1.5.1 CWI	Per hr	\$95.00
1.5.2 NDT Level II	Per hr	\$95.00
1.6. Bolting Inspection	Per hr	\$95.00
1.7 NICET Level III	Per hr	\$95.00
2. Field Testing Equipment (2 hr. minimum, technician time not included)		
2.1 Vehicle		
2.1.1 Vehicle (Whitin 50 miles from our office)	Per day	\$80.00
2.1.2 Vehicle (More than 50 miles from our office)	Per mile	\$0.545
2.2 Dye Penetrant – Magnetic Particle Supplies		At Cost
2.3 Ultrasonic Testing Equipment	Per hr	\$24.00
2.4 Concrete Coring Equipment	Per hr	\$41.00
2.4.1 Concrete Core Bit Charges		
2.4.1.1 3 inch diameter core	Per inch	\$4.75
2.4.1.2 4 inch diameter core	Per inch	\$5.75
2.4.1.3 6 inch diameter core	Per inch	\$8.00
2.5 Heavy Falling Weight Deflectometer (20 Test-points minimum, Technician time not included)	Test Point	\$21.00
2.6 Profilograph Testing (Technician time not included)	Day	\$400.00
3. Testing of Soils and Base Materials		
3.1 Bulk Sample Pick-Up (2 hrs Minimum), plus vehicle	Per hr	\$65.00
3.2 Field Nuclear Density (Tex-115-E, Part I) [Without Technician Time (3 Minimum)]	Per ea	\$38.00
3.3 Sample Preparation (TEX-101-E)	Per hr	\$65.00
3.4 Natural Moisture Content (TEX-103-E)	Per ea	\$15.00
3.5 Sieve Analysis (TEX-110-E)	Per ea	\$80.00
3.6 Atterberg Limits:		
3.6.1 Liquid Limit (TEX-104-E)	Per ea	\$35.00
3.6.2 Plastic Limit (TEX-105-E)	Per ea	\$35.00
3.6.3 Plasticity Index (TEX-106-E)	Per ea	\$35.00
3.7 Percent Passing No. 200 Sieve (TEX-111-E)	Per ea	\$46.00
3.8 Bar Linear Shrinkage of Soils (TEX-107-E)	Per ea	\$60.00
3.9 Moisture Density Relationship (ASTM D 698) Standard Proctor Compaction Test)	Per ea	\$265.00
3.10 Moisture Density Relationship (ASTM D 1557) (Modified Proctor Compaction Test)	Per ea	\$265.00
3.11 Moisture Density Relationship (TEX-113-E) Compaction Test	Per ea	\$275.00
3.12 Moisture Density Relationship (TEX-114-E, Part I) Compaction Test	Per ea	\$275.00
3.13 Moisture Density Relationship (TEX-114-E, Part II) Compaction Test	Per ea	\$275.00
3.14 Texas Triaxial Compression Test on Base Material TEX- 117E, Part II; Including the following		
3.15 Molding, Curing and Testing 9 Specimens (TEX-117-E)	Per ea	\$1,650.00
3.3 Sample Preparation (TEX-101-E)	Per hr	\$65.00
3.5 Sieve Analysis (TEX-110-E)	Per ea	\$80.00
3.6 Atterberg Limits (TEX-104-E, TEX-105-E, TEX-106-E)	Per ea	\$105.00
3.8 Bar Linear Shrinkage of Soils (TEX-107-E)	Per ea	\$60.00
3.11 Moisture Density Relationship (TEX-113-E) Compaction Test	Per ea	\$275.00
3.16 Wet Ball Mill (TEX-116-E)	Per ea	\$210.00

**US290/SH130 PROJECT
CONSTRUCTION MATERIALS TESTING
FEE SCHEDULE**

	Unit	Fees
3.17 Permeability/Conductivity of Silt or Clay (ASTM D 5084)	Per ea	\$450.00
3.18 Sample Remolding	Per ea	\$65.00
3.19 Soil Specific Gravity (TEX-108-E)	Per ea	\$68.00
3.20 Soil Lime Test (TEX-121-E), One proctor or one-set of 3 specimens	Per ea	\$325.00
3.21 Resistivity of Soils (TEX-129-E)	Per ea	\$120.00
3.22 Lime Series Curve (ASTM D 4318)	Per point	\$99.00
3.23 Stabilization Ability of Lime by Soil pH (TEX-121-E Part III) up to 6 Points	Per Each	\$285.00
3.24 Field Gradation of Lime Soil (1.75, 0.75, No 4)(TEX-101-E), in addition to technician time	Per Point	\$21.00
3.25 Soluble Sulfate Content (TEX-145-E)	Per ea	\$85.00
3.26 pH of Soils (TEX-128-E)	Per ea	\$45.00
3.27 Hydrometer Analysis (ASTM D 422) (Without mechanical sieve analysis)	Per ea	\$110.00
3.28 Thickness Determination (TEX-140-E), in addition to technician time	Per ea	\$19.00
3.29 Soil Cement Testing (TEX-120-E), One Proctor or one-set of 3 Specimens	Per ea	\$325.00
4. Testing of Concrete and Aggregates		
4.1 Sample Pick-Up (2 hrs Minimum), plus vehicle	Per hr	\$65.00
4.2 Aggregate Gradation:		
4.2.1 Coarse Aggregate Gradation (TEX-401-A)	Per ea	\$88.00
4.2.2 Fine Aggregate Gradation (TEX-401-A)	Per ea	\$80.00
4.3 Specific Gravity of Aggregate (TEX-403-A)	Per ea	\$58.00
4.4 Absorption of Aggregate (TEX-403-A)	Per ea	\$38.00
4.5 Unit Weight of Aggregate (TEX-404-A)	Per ea	\$38.00
4.6 Abrasion Test (TEX-410-A)	Per ea	\$245.00
4.7 Decantation (TEX-406-E)	Per ea	\$65.00
4.8 Organic Impurities (TEX-408-A)	Per ea	\$80.00
4.9 Soundness, Sodium or Magnesium, 5 cycles (TEX-411-A)	Per ea	\$370.00
4.10 Concrete Cylinder Compressive Strength (TEX-418-A)	Per ea	\$26.00
4.11 Beam Flexural Strength (TEX-420-A or TEX 448-A)	Per ea	\$40.00
4.12 Coarse Aggregate Angularity (AASHTO T326)	Per ea	\$78.00
4.13 Fine Aggregate Angularity (ASTM C1252)(AASHTO T304)	Per ea	\$78.00
4.14 Flat, Elongated Particles (ASTM D4791)	Per ea	\$78.00
4.15 Deleterious Materials (Clay Lumps/Friable Part I) (TEX-413-A) (ASTM C142)	Per ea	\$88.00
4.16 Crushed Face Count (TEX-460-A)	Per ea	\$79.00
4.17 Sand Equivalent (Clay Content) (TEX-203-F)	Per ea	\$95.00
4.18 Fineness Modulus of FA (TEX-402-A)	Per ea	\$55.00
5. Testing of HMAc and Liquid Asphalt		
5.1 Bag Sample Pick-up From Source, Project, or Field Office (2 hrs Minimum), plus vehicle	Per hr	\$65.00
5.2 Obtaining Field-cut Specimens		
5.2.1 0" to 6" Depth & 6" Ø, including patching & sample Preparation, 3 minimum)	Per ea	\$98.00
5.2.2 > 6" to 10" Depth & 6" Ø, including patching & sample Preparation, 3 minimum)	Per ea	\$109.00
5.2.3 > 10" to 14" Depth & 6" Ø, including patching & sample Preparation, 3 minimum)	Per ea	\$144.00
5.2.4 > 14" Depth & 6" Ø, including patching & sample Preparation, 3 minimum)		\$144.00
plus \$5 per inch beyond 14"		\$5.80
5.3 Specimen Molding by TGC (TEX-206-F) (3 per set)	Per ea	\$63.00
5.4 Specimen Molding by SGC (TEX-241-F) (3 per set)	Per ea	\$89.00
5.5 Bulk Density of Compacted Specimens (TEX-207-F, Part I) (3 per set)	Per ea	\$63.00
5.6 Hveem Stability (TEX-208-F) (3 per set)	Per ea	\$66.00
5.7 Asphalt Content by Extraction (TEX-210-F)	Per ea	\$175.00
5.8 Asphalt Content by Ignition Oven (TEX-236-F)	Per ea	\$175.00
5.9 Gradation of Aggregate from Extraction or Ignition (TEX-200-F)	Per ea	\$75.00
5.10 Maximum Theoretical Specific Gravity, Rice Method (TEX-227-F)		

**US290/SH130 PROJECT
CONSTRUCTION MATERIALS TESTING
FEE SCHEDULE**

	Unit	Fees
5.10.1 Bag Sample, Rice (TEX-227-F)	Per ea	\$55.00
5.10.2 Core Sample, Rice (TEX-227-F)	Per ea	\$65.00
5.11 Bulk Density of Core Specimens (TEX-207-F, Part I)	Per ea	\$27.00
5.12 Bulk Density of Core Specimens (Vacuum Method) (TEX-207-F, Part I & VI)	Per ea	\$66.00
5.13 Sand Equivalent (TEX-203-F)	Per ea	\$95.00
5.14 Micro Deval Abrasion (TEX-461-A)	Per ea	\$235.00
5.15 Indirect Tensile Strength (TEX-226-F) (Molding Not Included)	Per ea	\$72.00
5.16 Residue by Evaporation (AASHTO T59)	Per ea	\$142.00
5.17 Boiling Stripping Test (TEX-530-C)	Per ea	\$105.00
5.18 Hamburg Wheel Tracker (TEX-242-F)	Per ea	\$525.00
5.19 Hamburg Wheel Tracker (TEX-242-F) (Molded by Client)	Per ea	\$365.00
5.20 Cantabro Loss (TEX-245-F) (Molding Not Included)	Per ea	\$110.00
5.21 Abson Recovery (TEX-211-F) (Extraction Not Included)	Per ea	\$225.00
5.22 Storage Stability (24 Hrs) (AASHTO T59)	Per ea	\$105.00
5.23 Density of Emulsified Asphalt (ASTM D6937)	Per ea	\$68.00
5.24 Demulsibility (Anionic or Cationic Emulsions) (AASHTO T59)	Per ea	\$68.00
5.25 Viscosity (Brookfield or Saybolt) (AASHTO T72)	Per ea	\$58.00
5.26 Penetration (AASHTO T49)	Per ea	\$60.00
5.27 Ductility (AASHTO T51)	Per ea	\$96.00
5.28 Float Test (AASHTO T50)	Per ea	\$79.00
5.29 Elastic Recovery (TEX-539-C)	Per ea	\$79.00
5.30 Cement Mix (AASHTO T59)	Per ea	\$68.00
5.31 Softening Point (Ring and Ball) (AASHTO T53)	Per ea	\$96.00
5.32 Absolute Viscosity (Cutback Asphalt or Coal Tars) (AASHTO T201)	Per ea	\$60.00
5.33 Residue by Distillation (Cutback or Emulsified Asphalts) (AASHTO T59)	Per ea	\$142.00
5.34 Breaking Index (Asphalt Emulsions) (TEX-542-C)	Per ea	\$89.00
5.35 Sieve Test (AASHTO T59)	Per ea	\$42.00
6. Geotechnical Services		
6.1 Mobilization/Demobilization (Whitin 50 miles from our office), 2-Man Crew with Rig	Per ea	\$286.00
6.2 Mobilization/Demobilization, 2-Man Crew with Rig (More than 50 miles from our office)	Per mile	\$3.50
6.3 Vehicle (Water Truck, Pick-Up, etc.)		
6.3.1 Vehicle (Whitin 50 miles from our office)	Per day	\$80.00
6.3.2 Vehicle (More than 50 miles from our office)	Per mile	\$0.545
6.4 Technician (Drilling Support)		
6.4.1 Helper, Engineering Technician (Mobilization/Demobilization)	Per hr	\$65.00
6.4.2 Logger, Senior Engineering Technician (Portal to Portal)	Per hr	\$75.00
6.5 Drilling		
6.5.1 Auger or Wash Borings, Soil (Add \$3.00/LF for drilling deeper than 50 ft)	Per LF	\$15.00
6.5.2 Auger or Coring, Soft Rock	Per LF	\$20.00
6.5.3 Rock Coring	Per LF	\$23.00
6.6 Grout/Bentonite Backfill	Per LF	\$4.50
6.7 Undisturbed Shelby Tube Sample (ASTM D1587)	Per ea	\$25.00
6.8 Standard Penetration Test (ASTM D1586)	Per ea	\$45.00
6.9 Texas Cone Penetration Test (TEX-132-E)	Per ea	\$45.00
6.10 Dynamic Cone Penetrometer (Without Technician time) (ASTM D6951)	Per ea	\$125.00
6.11 Unconsolidated/Consolidated Undrained Triaxial (Multiple Stage)(ASTM D2850 & D4767)	Per ea	\$540.00
6.12 Consolidated Drained Triaxial (Multiple Stage) (ASTM D7181)	Per ea	\$785.00
6.13 Direct Shear Test of Soils (ASTM D3080)	Per ea	\$450.00
6.14 Organic Content Determination (TEX-148-E)	Per ea	\$175.00
6.15 Consolidation Test (ASTM D2435)	Per ea	\$550.00

**US290/SH130 PROJECT
CONSTRUCTION MATERIALS TESTING
FEE SCHEDULE**

	Unit	Fees
6.16 California Bearing Ratio (CBR) Test (AASHTO T193)	Per ea	\$500.00
6.17 Dry Unit Weight Test (ASTM D7263)	Per ea	\$37.00
6.18 Unconfined Compressive Strength Test (ASTM D2166)	Per ea	\$58.00
6.19 Traffic Control (Safety Cones and Signs)	Per day	\$260.00
6.20 Traffic Control (Single Moving Lane Closure)	Per day	\$920.00
6.21 Flagging Services (Incl. Equipment, Set-up, Two-man Crew)	Per day	\$1,050.00
6.22 Patching Bores/Cores	Per ea	\$26.00
6.23 Bulk Sample (Triaxial, Proctor, etc)	Per hr	\$65.00
6.24 Cut & Excavate Test Pit on Pavement, Approx. 18"x18", Inc. Sampling	Per ea	\$210.00
6.25 Standby Time (Drill Rig and Crew)	Per hr	\$205.00
7. Engineering Consultation		
7.1 Senior Materials Engineer	Per hr	\$149.00
7.2 PM / Materials Engineer	Per hr	\$139.00
7.3 Laboratory Engineer	Per hr	\$139.00
7.4 Graduate Engineer	Per hr	\$89.00
7.5 Senior Engineering Technician	Per hr	\$75.00
7.6 Secretary/Clerical	Per hr	\$54.00
8. Outside Services (Reimbursables)		At Cost
9. Subconsultants		At Cost

- Ø Minimum call-out charge for technician and equipment is 2 hours. Charges are accrued portal to portal.
- Ø The densities test unit rate is based on a minimum of 3 tests per trip.
- Ø Transportation charges are applicable for all field testing assignments including sample pick up, but, if the technician is already at the job site, there is no sample pick up charges.
- Ø Subconsultants' fees shall be approved previous to work beginning.

EXHIBIT E
INSTRUCTIONS
DBE PARTICIPATION

he following pages contain seven (7) different forms (Forms E-1 through E-7) covering participation of DBE providers and subproviders. The correct form to use is determined by whether or not a DBE goal has been set for the contract. The following pages contain separate reporting forms for federally funded DBE participation. **Select the forms that are appropriate for your contract and delete the rest along with these instructions from the Work Authorization.**

Federally Funded Contracts
<p>Exhibit F, Disadvantaged Business Enterprise (DBE) for Federal-Aid Professional or Technical Services Contracts</p> <ul style="list-style-type: none"> ◆ This provision is applicable to federally funded contracts with assigned DBE goals. ◆ The appropriate forms for this provision are Forms E-1, E-2, E-3, E-4, E-5, E-6 and E-7. Examples of each form required is included in the contract. The native forms that will need to be submitted can be downloaded from the Authority’s website. ◆ Note: a completed Form E-2 will be required with each Work Authorization, if a DBE will be performing work. If a non-DBE subprovider is used, insert N/A (not applicable) on the line provided on the Form E-2. ◆ Form E-4 must be submitted monthly to the Authority even if there is no invoice being submitted or subcontracting to report. ◆ Form E-4 must be submitted with each invoice to the appropriate agency contact for payment.
<p>Exhibit G, Disadvantaged Business Enterprise (DBE) for Race Neutral Professional or Technical Services Contracts</p> <ul style="list-style-type: none"> ◆ This provision is applicable to federally funded contracts with no DBE goal assigned. ◆ If no subconsultants will be used, the appropriate forms for this provision are E-3 and E-5 forms. Examples of each form required is included in the contract. The native forms that will need to be submitted can be downloaded from the Authority’s website. ◆ Note: If subconsultants are used, the required forms would be Forms E-1, E-2, E-3, E-4, E-5, E-6 and E-7. A copy of each form required is in the contract. ◆ Form E-4 must be submitted monthly to the Authority even if there is no invoice being submitted or subcontracting to report. ◆ Form E-4 must be submitted with each invoice to the appropriate agency contact for payment.
<p>Form E-4, Texas Department of Transportation/Authority Subprovider Monitoring System for Federally Funded Contracts. This is a DBE Monthly Progress Report.</p> <ul style="list-style-type: none"> ◆ Required for all federally funded contracts. ◆ This form is required monthly and must be submitted to the Authority even if there is no invoice being submitted or subcontracting to report. ◆ This form must be submitted with each invoice to the appropriate agency contact for payment.
<p>Form E-7, Federal Subprovider and Supplier Information</p> <p>Required for all federally funded contracts.</p>

FORM E-1
Central Texas Regional Mobility Authority
Subprovider Monitoring System
Commitment Worksheet

Contract #: _____ Assigned Goal: 10% Federally Funded _____ State Funded _____

Prime Provider: _____ Total Contract Amount: _____

Prime Provider Info: DBE ___ HUB ___ Both ___

Engineer ID #: _____ DBE/HUB Expiration Date: _____

(First 11 Digits Only)

If no subproviders are used on this contract, please indicate by placing "N/A" on the 1st line under Subproviders.

Subprovider(s) (List All)	Type of Work	Engineer ID # (First 11 Digits Only)	D=DBE H=HUB	Expiration Date	\$ Amount or % of Work *
Subprovider(s) Contract or % of Work* Totals					

*For Work Authorization Contracts, indicate the % of work to be performed by each subprovider.

Total DBE or HUB Commitment Dollars \$ _____

Total DBE or HUB Commitment Percentages of Contract _____%

(Commitment Dollars and Percentages are for Subproviders only)



FORM E-2
Disadvantaged Business Enterprise (DBE) Program
Commitment Agreement Form

FormSMS. 4901

(Rev. 06/08)

Page 1 of 1

This commitment is subject to the award and receipt of a signed contract from the Texas Department of Transportation for the subject project.

Project #:		County:		Contract-CSJ:	
Items of work to be performed (attach a list of work items if more room is required):					
Bid Item #	Item Description	Unit of Measure	Unit Price	Quantity	Total Per Item
Total					
The contractor certifies by signature on this agreement that subcontracts will be executed between the prime contractor and the DBE subconsultants as listed on the agreement form. If a DBE Subconsultant is unable to perform the work as listed on this agreement form, the prime contractor will follow the substitution/replacement approval process as outlined in the Contract DBE Special Provision.					
IMPORTANT: The signatures of the prime contractor and the DBE, and the total commitment amount must always be on the same page.					
Prime Contractor:			Name/Title (please print):		
Address:			Signature:		
Phone:	Fax:				
E-mail:			Date:		
DBE:			Name/Title (please print):		
Engineer No.:			Signature:		
Address:					
Phone:	Fax:		Date:		
E-mail:					
Subconsultant (if the DBE will be a second tier sub):			Name/Title (please print):		
Address:			Signature:		
Phone:	Fax:				
E-mail:			Date:		

The Texas Department of Transportation maintains the information collected through this form. With few exceptions, you are entitled on request to be informed about the information that we collect about you. Under §§552.021 and 552.023 of the Texas Government Code, you also are entitled to receive and review the information. Under §559.004 of the Government Code, you are also entitled to have us correct information about you that is incorrect.

To ensure prompt and efficient handling of your project file we are requesting that all commitments to be presented to the Office of Civil Rights, using this basic format.



FORM E-3
DBE Prime Contractor
To Non-DBE Subconsultants

Form SMS.4902

(Rev. 05/08)

Page 1 of 1

Project: _____

Contract CSJ: _____

County: _____

District: _____

Letting Date: _____

For Month of (Mo./Yr.): _____

Contractor: _____

Contract Amount: _____

Name of Non-DBE Subconsultant	\$ Amount Paid This Period	Total \$ Amount Paid to Date

Send this report to the District DBE Coordinator. Report is due within 15 days following the end of each calendar month.

Signature: _____ Date: _____
 _____ Company Official

The Texas Department of Transportation maintains the information collected through this form. With few exceptions, you are entitled on request to be informed about the information that is collected about you. Under §§552.021 and 552.023 of the Texas Government Code, you also are entitled to receive and review the information. Under §559.004 of the Government Code, you are also entitled to have us correct information about you that is incorrect.



FORM E-4

Form SMS. 4903

TxDOT Department of Transportation

(Rev. 05/08)

DBE Monthly Progress Report

Page 1 of 1

Project: _____

Contract CSJ: _____

County: _____

District: _____

Letting Date: _____

For Month of (Mo./Yr.): _____

Contractor: _____

Contract Amount: _____

DBE Goal: _____%

DBE Goal Dollars: _____

Engineer Number	Name of DBE Sub/Supplier	* RC or RN	** DBE \$ Amt Paid for Work Performed this Period (X)	*** \$ Amt Paid to Non-DBE 2nd Tier Subs and Haulers (Y)	Amt Paid to DBEs to Date (X-Y)	For TxDOT use Only

* Race Conscious or Race Neutral.

**Goal/commitment progress report amount and/or race-neutral amount. Do not subtract non-DBE second-tier subcontracts and haulers from this column.

*** Report amount of payment DBE subconsultants paid to non-DBE subconsultants/haulers.

If using a non-DBE hauling firm that leases from DBE truck owner-operators, payments made to each owner-operator must be reported separately.

Any changes to the DBE commitments approved by the department must be reported to the area Engineer.*

Submissions of this report for periods of negative DBE activity is required. This report is required until all DBE subcontracting or material supply activity is completed.

I hereby certify that the above is a true and correct statement of the amounts paid to the DBE firms listed above.

Signature: _____

Date: _____

This report must be sent to the area Engineer's office within 15 days following the end of the calendar month.

The Texas Department of Transportation maintains the information collected through this form. With few exceptions, you are entitled on request to be informed about the information that is collected about you. Under §§552.021 and 552.023 of the Texas Government Code, you also are entitled to receive and review the information. Under §559.004 of the Government Code, you are also entitled to have us correct information about you that is incorrect.

FORM E-5

Central Texas Regional Mobility Authority Subprovider Monitoring System for Federally Funded Contracts

Progress Assessment Report for month of (Mo./Yr.) _____/_____

Contract #: _____

Original Contract Amount: _____

Date of Execution: _____

Approved Supplemental Agreements: _____

Prime Provider: _____

Total Contract Amount: _____

Work Authorization No. _____

Work Authorization Amount: _____

If no subproviders are used on this contract, please indicate by placing "N/A" on the 1st line under Subproviders.

DBE	All Subproviders	Category of Work	Total Subprovider Amount	% Total Contract Amount	Amount Paid This Period	Amount Paid To Date	Subcontract Balance Remaining

Fill out Progress Assessment Report with each estimate/invoice submitted, *for all subcontracts*, and forward as follows:

1 Copy with Invoice - Contract Manager/Managing Office

1 Copy – CTRMA DBE Liaison, c/o Atkins or WSP, _____, Austin, Texas

I hereby certify that the above is a true and correct statement of the amounts paid to the firms listed above.

Print Name - Company Official /DBE Liaison Officer

Signature

Phone

Date

Email

Fax



**FORM E-6
DBE Final Report**

The DBE final report form should be filled out by the contractor and submitted to the appropriate district office upon completion of the project. One copy of the report must be submitted to the area Engineer's office. The report should reflect all DBE activity on the project. The report will aid in expediting the final estimate for payment. If the DBE goal requirements were not met, documentation supporting good faith efforts must be submitted.

Project: _____

Contract CSJ: _____

County: _____

Control Project: _____

Letting Date: _____

DBE Goal: _____

Contractor: _____

Contract Amount: _____

Engineer Number	Name of DBE Sub/Supplier	* RC or RN	** DBE \$ Amt Paid for Work Performed this Period (X)	*** \$ Amt Paid to Non-DBE 2nd Tier Subs and Haulers (Y)	Amt Paid to DBEs to Date (X-Y)	For TxDOT use Only

* Race Conscious or Race Neutral.

**Goal/commitment progress report amount and/or race-neutral amount. Do not subtract non-DBE second-tier subcontracts and haulers from this column.

*** Report amount of payment DBE subconsultants paid to non-DBE subconsultants/haulers.

Was there a project under-run caused by a TxDOT change order that impacted DBE Goal attainment?

_____ Yes _____ No Change Order Number _____

This is to certify that _____ % of the work was completed by Disadvantaged Business Enterprises as stated above.

By _____ Per: _____

Name of General Contractor

Contractor's Signature

Subscribed and sworn to before me, this _____ day of _____, A.D. _____

Notary Public

County

EXHIBIT F
Disadvantaged Business Enterprise (DBE)
for Federal-Aid Professional or Technical Services Contracts
Special Provision

- 1) **PURPOSE.** The purpose of this attachment is to carry out the U.S. Department of Transportation's ("DOT") policy of ensuring nondiscrimination in the award and administration of DOT assisted contracts and creating a level playing field on which firms owned and controlled by minority or socially and economically disadvantaged individuals can compete fairly for DOT assisted contracts.

- 2) **POLICY.** It is the policy of the DOT, the Central Texas Regional Mobility Authority (the "Authority") and the Texas Department of Transportation (the "Department") that Disadvantaged Business Enterprises (DBEs) as defined in 49 CFR Part 26, Subpart A and the Department's Disadvantaged Business Enterprise Program ("DBE Program"), shall have the opportunity to participate in the performance of contracts financed in whole or in part with Federal funds. The Authority and the Department previously entered into a Memorandum of Understanding Regarding the Adoption of the Texas Department of Transportation's Federally-Approved Disadvantaged Business Opportunity Program by the Central Texas Regional Authority (the "MOU") dated effective February 1, 2007. The MOU provides that the Authority has adopted the Department's DBE Program with the consent of the Federal Highway Administration for contracts financed in whole or in part with Federal funds. Consequently, the Disadvantaged Business Enterprise requirements of 49 CFR Part 26, and the Department's DBE Program, apply to this contract as follows:
 - a. The Provider will offer Disadvantaged Business Enterprises, as defined in 49 CFR Part 26, Subpart A and the Department's DBE Program, the opportunity to compete fairly for contracts and subcontracts financed in whole or in part with Federal funds. In this regard, the Provider shall make a good faith effort to meet the Disadvantaged Business Enterprise goal for this contract.
 - b. The Provider and any subprovider(s) shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Provider shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT assisted contracts. The requirements of this Special Provision shall be physically included in any subcontract.
 - c. When submitting the contract for execution by the Authority, the Provider must complete and furnish Form E-1 which lists the commitments made to certified DBE subprovider(s) that are to meet the contract goal and Form E-2 which is a commitment agreement(s) containing the original signatures of the Provider and the proposed DBE(s). For Work Authorization Contracts, Form E-1 is required at the time of submitting the contract for execution by the Authority. Form E-2 will be required to be completed and attached with each work authorization number that is submitted for execution, if the DBE will be performing work. Any substitutions or changes to the DBE subcontract amount shall be subject to prior written approval by the Authority. If non-DBE subprovider is performing work, insert N/A (not applicable) on the line provided.

- d. Failure to carry out the requirements set forth above shall constitute a material breach of this contract and may result; in termination of the contract by the Authority; in a deduction of the amount of DBE goal not accomplished by DBEs from the money due or to become due to the Provider, not as a penalty but as liquidated damages to the Authority; or such other remedy or remedies as the Authority deems appropriate.

3) **DEFINITIONS.**

- a. “Authority” means the Central Texas Regional Mobility Authority.
- b. “Department” means the Texas Department of Transportation (TxDOT).
- c. “Federal-Aid Contract” is any contract between the Authority and a Provider which is paid for in whole or in part with U. S. Department of Transportation (“DOT”) financial assistance.
- d. “Provider” is any individual or company that provides professional or technical services.
- e. “DBE Joint Venture” means an association of a DBE firm and one (1) or more other firm(s) to carry out a single business enterprise for profit for which purpose they combine their property, capital, efforts, skills and knowledge, and in which the DBE is responsible for a distinct, clearly defined portion of the work of the contract and whose share in the capital contribution, control, management, risks and profits of the joint venture are commensurate with its ownership interest.
- f. “Disadvantaged Business Enterprise” or “DBE” means a firm certified as such by the Department in accordance with 49 CFR Part 26 and listed on the Department’s website under the Texas Unified Certification Program.
- g. “Good Faith Effort” means efforts to achieve a DBE goal or other requirement of this Special Provision which, by their scope, intensity, and appropriateness to the objective, can reasonably be expected to fulfill the program requirement.
- h. “Race-neutral DBE Participation” means any participation by a DBE through customary competitive procurement procedures.
- i. “DBE Liaison” shall have the meaning set forth in Section 5.e. herein.

- 4) **PERCENTAGE GOAL.** The goal for Disadvantaged Business Enterprise participation in the work to be performed under this contract is 6% of the contract amount. This goal is established in accordance with the provisions of the MOU.

- 5) **PROVIDER’S RESPONSIBILITIES.** A DBE prime may receive credit toward the DBE goal for work performed by his-her own forces and work subcontracted to DBEs. A DBE prime must make a good faith effort to meet the goals. In the event a DBE prime subcontracts to a non-DBE, that information must be reported to the Authority on Form E-3.

- a. A Provider who cannot meet the contract goal, in whole or in part, shall document the “Good Faith Efforts” taken to obtain DBE participation. The following is a list of the types of actions that may be considered as good faith efforts. It is not intended to be a mandatory checklist, nor is it intended to be exclusive or exhaustive. Other factors or types of efforts may be relevant in appropriate cases.

- (1) Soliciting through all reasonable and available means the interest of all certified DBEs who have the capability to perform the work of the contract. The solicitation must be done within sufficient time to allow the DBEs to respond to it. Appropriate steps must be taken to follow up initial solicitations to determine, with certainty, if the DBEs are interested.
- (2) Selecting portions of the work to be performed by DBEs to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the Provider might otherwise prefer to perform the work items with its own forces.
- (3) Providing interested DBEs with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.
- (4) Negotiating in good faith with interested DBEs by making a portion of the work available to DBE subproviders and suppliers and selecting those portions of the work or material needs consistent with the available DBE subproviders and suppliers.
- (5) The ability or desire of the Provider to perform the work of a contract with its own organization does not relieve the Provider's responsibility to make a good faith effort. Additional costs involved in finding and using DBEs is not in itself sufficient reason for a Provider's failure to meet the contract DBE goal, if such costs are reasonable. Providers are not, however, required to accept higher quotes from DBEs if the price difference is excessive or unreasonable.
- (6) Not rejecting DBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities.
- (7) Making efforts to assist interested DBEs in obtaining bonding, lines of credit, or insurance as required by the recipient or Provider.
- (8) Making efforts to assist interested DBEs in obtaining necessary equipment, supplies, materials or related assistance or services.
- (9) Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and Federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBEs.
- (10) If the Department's Director of the Business Opportunity Programs Office or the Authority's DBE Liaison determines that the Provider has failed to meet the good faith effort requirements, the Provider will be given an opportunity for reconsideration by the Department or the Authority, as appropriate.

NOTE: The Provider must not cause or allow subproviders to bid their services.

- b. The preceding information shall be submitted directly to the Chair of the Engineer Selection Team responsible for the project.
- c. The Provider shall make all reasonable efforts to honor commitments to DBE subproviders named in the commitment submitted under Section 2.c. of this attachment. Where the Provider terminates or removes a DBE subprovider named in the initial commitment, the Provider must

demonstrate on a case-by-case basis to the satisfaction of the Authority that the originally designated DBE was not able or willing to perform.

- d. The Provider shall make a good faith effort to replace a DBE subprovider that is unable or unwilling to perform successfully with another DBE, to the extent needed to meet the contract goal. The Provider shall submit a completed Form E-2 for the substitute firm(s). Any substitution of DBEs shall be subject to prior written approval by the Authority. The Authority may request a statement from the firm being replaced concerning its replacement prior to approving the substitution.
- e. The Provider shall designate a DBE liaison officer (“DBE Liaison”) who will administer the DBE program and who will be responsible for maintenance of records of efforts and contacts made to subcontract with DBEs.
- f. Providers are encouraged to investigate the services offered by banks owned and controlled by disadvantaged individuals and to make use of these banks where feasible.

6) **ELIGIBILITY OF DBEs.**

- a. The Department certifies the eligibility of DBEs, DBE joint ventures and DBE truck-owner operators to perform DBE subcontract work on DOT financially assisted contracts. Under the terms of the MOU, only DBEs certified as eligible to participate on Department roadway construction projects and listed on the Department’s website under the Texas Unified Certification Program are eligible to participate on Authority roadway construction projects.
- b. This certification will be accomplished through the use of the appropriate certification schedule contained in the Department’s DBE program and adopted by the Authority under the terms of the MOU.
- c. The Department publishes a Directory of Disadvantaged Business Enterprises containing the names of firms that have been certified to be eligible to participate as DBEs on DOT financially assisted contracts. The directory is available from the Department’s Business Opportunity Programs Office. The Texas Unified Certification Program DBE Directory can be found on the Internet at:
http://www.dot.state.tx.us/services/business_opportunity_programs/tucp_dbe_directory.htm .
- d. Only DBE firms certified at the time the contract is signed or at the time the commitments are submitted are eligible to be used in the information furnished by the Provider as required under Section 2.c. and 5.d. above. For purposes of the DBE goal on this contract, DBEs will only be allowed to perform work in the categories of work for which they were certified.

- 7) **DETERMINATION OF DBE PARTICIPATION.** A firm must be an eligible DBE and perform a professional or technical function relating to the project. Once a firm is determined to be an eligible DBE, the total amount paid to the DBE for work performed with his/her own forces is counted toward the DBE goal. When a DBE subcontracts part of the work of its contract to another firm, the value of the subcontracted work may be counted toward DBE goals only if the subprovider is itself a DBE. Work that a DBE subcontracts to a non-DBE firm does not count toward DBE goals.

A DBE subprovider may subcontract no more than 70% of a federal aid contract. The DBE subprovider shall perform not less than 30% of the value of the contract work with assistance of employees employed and paid directly by the DBE; and equipment owned or rented directly by the DBE. DBE subproviders must perform a commercially useful function required in the contract in order for payments to be credited toward meeting the contract goal. A DBE performs a commercially useful function when it is responsible for executing the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the DBE must also be responsible, with respect to materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material, and installing (where applicable) and paying for the material itself. When a DBE is presumed not to be performing a commercially useful function, the DBE may present evidence to rebut this presumption.

A Provider may count toward its DBE goal a portion of the total value of the contract amount paid to a DBE joint venture equal to the distinct, clearly defined portion of the work of the contract performed by the DBE.

Proof of payment, such as copies of canceled checks, properly identifying the Authority's contract number or project number may be required to substantiate the payment, as deemed necessary by the Authority.

8) **RECORDS AND REPORTS.**

- a. After submission of the initial commitment reported (Form E-1), required by Section 2.c. of this attachment, the Provider shall submit Monthly Progress Assessment Reports (Forms E-4 and E-5), after contract work begins, on DBE involvement to meet the goal and for race-neutral participation. One copy of each report is to be sent monthly to the Authority as provided in Section 8.b. below and should also be submitted with the Provider's invoice. **Only actual payments made to subproviders are to be reported. These reports will be required until all subprovider activity is completed.** The Authority may verify the amounts being reported as paid to DBEs by requesting copies of canceled checks paid to DBEs on a random basis.
- b. DBE subproviders should be identified on the report by name, type of work being performed, the amount of actual payment made to each during the billing period, cumulative payment amount and percentage of the total contract amount. These reports will be due within fifteen (15) days after the end of a calendar month. Reports are required even when no DBE activity has occurred in a billing period.
- c. All such records must be retained for a period of four (4) years following final payment or until any investigation, audit, examination, or other review undertaken during the four (4) years is completed, and shall be available at reasonable times and places for inspection by authorized representatives of the Authority, the Department or the DOT.
- d. Prior to receiving final payment, the Provider shall submit a Final Report (Form E-6), detailing the DBE payments. The Final Report is to be sent to the Authority and one (1) copy is to be submitted with the Provider's final invoice. If the DBE goal requirement is not met, documentation of the good faith efforts made to meet the goal must be submitted with the Final Report.

- 9) **COMPLIANCE OF PROVIDER.** To ensure that DBE requirements of this DOT-assisted contract are complied with, the Authority and/or the Department will monitor the Provider's efforts to involve DBEs during the performance of this contract. This will be accomplished by a review of DBE Monthly Progress Reports (Form E-4), submitted to the Authority by the Provider indicating his progress in achieving the DBE contract goal, and by compliance reviews conducted by the Authority or the Department. The DBE Monthly Progress Report (Form E-4) must be submitted at a minimum monthly to the Authority, in addition to with each invoice to the appropriate agency contact.

The Provider shall receive credit toward the DBE goal based on actual payments to the DBE subproviders with the following exceptions and only if the arrangement is consistent with standard industry practice. The Provider shall immediately contact the Authority in writing if he/she withholds or reduces payment to any DBE subprovider.

- (1) A DBE firm is paid but does not assume contractual responsibility for performing the service;
- (2) A DBE firm does not perform a commercially useful function;
- (3) Payment is made to a DBE that cannot be linked by an invoice or canceled check to the contract under which credit is claimed;
- (4) Payment is made to a broker or a firm with a brokering-type operation; or
- (5) Partial credit is allowed, in the amount of the fee or commission provided the fee or commission does not exceed that customarily allowed for similar services, for a bona fide service, such as professional, technical, Engineer, or managerial services, and assistance in the procurement of essential personnel, facilities, equipment, materials, or supplies required for performance of the contract.

A Provider's failure to comply with the requirements of this Special Provision shall constitute a material breach of this contract. In such a case, the Authority reserves the right to terminate the contract; to deduct the amount of DBE goal not accomplished by DBEs from the money due or to become due the Provider, not as a penalty but as liquidated damages to the Authority; or such other remedy or remedies as the Authority deems appropriate.

EXHIBIT G
Invoice Template

To be provided after execution

EXHIBIT H
Confidentiality Agreement

I, _____, hereby agree as follows:
(print first and last name)

Except as otherwise permitted by this Agreement, I will maintain the confidentiality of any and all information relating to the consideration, study, evaluation, planning, procurement, and development of the **Manor Expressway (290E) Phase III Project** that I gain access to. This includes, but is not limited to, proprietary information, information designated confidential by the Central Texas Regional Mobility Authority (Mobility Authority) or by proposer teams, information discussed at meetings or contained in minutes or notes of those meetings, qualification submittals, proposals, information and requests submitted by proposer teams, information regarding project-related cost estimates, proposal prices, alternative technical concepts, project development or financing plans, tolling policies, advanced funding agreements, project development agreements, traffic and revenue data or any other information related to the **Manor Expressway (290E) Phase III Project** to which that I gain access (Confidential Information).

I will not, without the prior written consent of the Mobility Authority’s Executive Director, or unless ordered by a court of competent jurisdiction or an opinion of the Office of the Attorney General, or as otherwise required by law, disclose any Confidential Information to any person or entity to whom disclosure is not authorized under this Agreement, or use any Confidential Information for any unauthorized purpose. I will only communicate Confidential Information to Mobility Authority employees or consultants retained by the Mobility Authority who have executed a confidentiality agreement in this same or substantially similar form or who are covered under similar confidentiality agreements for the **Manor Expressway (290E) Phase III Project**, attorneys employed by the Mobility Authority who have executed a confidentiality agreement in this same or substantially similar form and are representing Mobility Authority’s interests in a matter related to the **Manor Expressway (290E) Phase III Project**, persons employed by the Office of the Attorney General who are administering and reviewing requests under the Texas Public Information Act for Confidential Information and who are prohibited by law from disclosing information submitted in response to a request, and members of the Mobility Authority Board of Directors. If contacted by a person to whom disclosure is not authorized with a request for Confidential Information, I will promptly forward such request to the Mobility Authority Director of Engineering. I will also maintain security and control over all documents containing such Confidential Information in my custody.

The requirements of this Agreement shall not apply to any disclosure of information that is in the public domain or to any disclosure that is protected under the whistleblower provisions of federal or state law or regulation.

Signed: _____

Company/Organization: _____

Date: _____

ATTACHMENT C
SUPPLEMENTAL WORK AUTHORIZATION NO. ____
TO WORK AUTHORIZATION NO. ____
CONTRACT FOR CONSTRUCTION ENGINEERING & INSPECTION SERVICES

THIS SUPPLEMENTAL WORK AUTHORIZATION is made pursuant to the terms and conditions of Article 4 of the Contract for Construction Engineering & Inspection Services (the "Contract") entered into by and between the Central Texas Regional Mobility Authority (the Authority") and _____ (the "Engineer") dated _____.

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

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. ____ 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 ENGINEER

**CENTRAL TEXAS REGIONAL
MOBILITY AUTHORITY**

(Signature)

(Signature)

(Printed Name)

Mike Heiligenstein

(Title)

Executive Director

(Date)

(Date)

ATTACHMENT D
LIST OF KEY PERSONNEL

At a minimum the Key Personnel shall consist of the following:

1. Project Manager/Construction Manager – Paul Bowen
2. Resident Engineer – Raphael Campos
3. Lead Materials Manager – Chien-Nan Fu
4. Office Engineer – John Grounds
5. Lead Roadway Inspector – Terry Gentry
6. Lead Structural Inspector - Undetermined
7. Survey Manager – Chris Conrad

Exhibit B

EXHIBIT A
WORK AUTHORIZATION

Work Authorization No.13

This Work Authorization is made as of this 26th day of September, 2018, under the terms and conditions established in the AGREEMENT FOR GENERAL CONSULTING ENGINEERING SERVICES, dated as of December 19th, 2017 (the Agreement), between the **Central Texas Regional Mobility Authority** (Authority) and **Atkins North America, Inc.** (GEC). This Work Authorization is made for the following purpose, consistent with the services defined in the Agreement:

*Manor Expressway (290E) Phase III
Construction Services*

Section A. - Scope of Services

A.1. GEC shall perform the following Services:

Please reference Attachment A – Services to be Provided by the GEC

A.2. The following Services are not included in this Work Authorization, but shall be provided as Additional Services if authorized or confirmed in writing by the Authority.

Not applicable.

A.3. In conjunction with the performance of the foregoing Services, GEC shall provide the following submittals/deliverables (Documents) to the Authority:

Please reference Attachment A – Services to be Provided by the GEC

Section B. - Schedule

GEC shall perform the Services and deliver the related Documents (if any) according to the following schedule:

Services defined herein are expected to be substantially complete within thirty-six (36) months from the date this Work Authorization becomes effective. This Work Authorization will not expire until all tasks associated with the Scope of Services are complete.

Section C. - Compensation

C.1. In return for the performance of the foregoing obligations, the Authority shall pay to the GEC the amount not to exceed \$3,309,460 based on Attachment B -Fee Estimate. Compensation for Direct Expenses under this Supplement which are incurred as part of normal business operations (i.e., internal document reproduction, internal plotting, travel and parking associated with local meetings, etc.) will be reimbursed on a Lump-Sum basis in the amount of: \$290,300 (with \$8,063.89 to be

invoiced monthly). Profit will be 10% for all services. Compensation shall be in accordance with the Agreement.

C.2. Compensation for Additional Services (if any) shall be paid by the Authority to the GEC according to the terms of a future Work Authorization.

Section D. - Authority’s Responsibilities

The Authority shall perform and/or provide the following in a timely manner so as not to delay the Services of the GEC. Unless otherwise provided in this Work Authorization, the Authority shall bear all costs incident to compliance with the following:

Not applicable

Section E. - Other Provisions

The parties agree to the following provisions with respect to this specific Work Authorization:

Not applicable.

Except to the extent expressly modified herein, all terms and conditions of the Agreement shall continue in full force and effect.

Authority: Central Texas Regional Mobility Authority

GEC: Atkins North America, Inc.

By: Mike Heiligenstein

By: _____

Signature: _____

Signature: _____

Title: Executive Director

Title: _____

Date: _____

Date: _____

CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY

WORK AUTHORIZATION NO. 13

Atkins

**ATTACHMENT A
SERVICES TO BE PROVIDED BY GEC**

GENERAL

The work to be performed by the General Engineering Consultant (GEC) will include project management services necessary to oversee the construction of the Manor Expressway (290E) Phase III (hereinafter referred to as the “Project”) through the use of a Design/Bid/Build Contract (hereinafter referred to as the “Contract”). This will entail those professional services and associated deliverables required to complete the oversight activities associated with the management of the Construction Engineering and Inspection Consultant and the construction Contractor.

The Mobility Authority has procured a Construction Engineering and Inspection (CE&I) contract to support the project oversight team. The GEC will provide support to assist with administering the CE&I service provider contract.

The GEC will be the single point of contact between the Mobility Authority and Contractor, acting as an extension of the Mobility Authority’s staff by providing qualified technical and professional personnel to perform the duties and responsibilities assigned under the terms of this Agreement. The GEC shall not control the construction under the Contract. Oversight reviews by the GEC will not relieve the Contractor of sole responsibility for the means and methods of construction, or for health or safety precautions in connection with the work under the Contract. With comments and recommendations provided by the GEC, Final Acceptance decisions for construction shall be made by the Mobility Authority staff and coordinated with TxDOT as applicable.

The GEC will maintain core oversight staff at the Contractor-provided project office to manage and administer the planning, execution and construction; including invoicing and administrative support, for activities required to complete the overall oversight efforts. This staff will represent the Mobility Authority’s interests on the Project.

TASK 1 PROJECT MANAGEMENT (CODE 13720)

The GEC will provide staff to administer, manage, review and coordinate development of the Project. The GEC will develop and maintain a staffing plan for consistency and appropriate levels of Project staffing. Activities included in this task:

A. Contracting Support

Complete various Contracting phase efforts associated with the Contractor and CE&I procurement, including:

- Assist Mobility Authority in negotiating the final contract language.
- Assist Mobility Authority in reviewing insurance and bond documents for inclusion in the Contract.
- Assist Mobility Authority in preparing the final conformed Contract for execution.
- Conduct debriefings on behalf of the Mobility Authority for proposers to the CE&I procurement that were not selected.
- Final filing and documentation.

B. Bond Sale/Finance Support

- Develop detailed capital cost estimates defining all elements necessary for project implementation as part of the System.

- Develop detailed annualized cost estimate for funding of necessary operations, maintenance, and renewal & replacement elements for the duration of the bonds.
- Develop comprehensive schedules defining all elements of the project, including the critical path tasks that directly affect the opening of the project.
- Prepare the Engineer's Report necessary for the bond sale with a detailed description and history of the bonded project, comprehensive schedules, detailed capital cost estimates, and annualized operations, maintenance, and renewal & replacement cost estimates.
- Support the Mobility Authority in development of the Preliminary Official Statement and the Final Official Statement.
- Coordinate as necessary with the Authority, Bond Counsels, Financial Advisors, and Underwriters on the bond finance team.
- Issue such certificates as are required to be delivered by the GEC regarding specific scope of the project; estimated capital costs; estimated operations, maintenance, and renewal & replacement costs; and implementation/open to traffic schedule.
- Present the accuracy and reliability of project costs and schedules to the bond rating agencies and insurers during bond sales.
- Support the Mobility Authority with the preparation of a TIFIA application and supporting documentation.
- Provide support as needed for the management of the terms and conditions of the Financial Agreement and Project Development Agreement with TxDOT.

C. Project Administration

- Report Project progress and issues in a timely manner.
- Review, monitor, and report on Contractor's Project schedule.
- Review and submit a report on the Contractor's as-built plans.
- Maintain accurate records of the costs involved in potential change order work. These records will include labor and equipment times and materials installed (temporary or permanent) in the portion of the work in dispute.
- Assist in the surveillance of the Contractor's compliance with contract requirements. The GEC is responsible for reviewing, monitoring, evaluating, and acting upon documentation required for Contract compliance and maintaining the appropriate files thereof. Typical areas of compliance responsibility include EEO Affirmative Action, DBE, OJT positions and number of hours, and payroll and subcontracts.
- Provide management and administrative support for Mobility Authority oversight team service providers that will perform public involvement, construction inspection, materials testing, and survey services as part of the oversight team.
- Provide compliance oversight of third party agreements and development permits that are to be completed and executed by the Contractor including:
 - Dewatering permits
 - NPDES permits
 - Demolition permits
 - Noise permits
 - Capital Metro agreements

D. Project Coordination

- Work with the Mobility Authority, TxDOT, Contractor, third party consultants, utility companies, public agencies, TxDOT's SH 130 contractors, contractors and the general public to coordinate Project development and implementation.

- Coordinate the details of and participate in Project’s preconstruction meeting to be held shortly after notice to proceed has been given to the Contractor.

E. Sub-Consultants

- Coordinate, contract, and provide oversight for all sub-consultants to the GEC.

F. Change Order Processing & Management

- Provide review of potential change orders on the Project and process in accordance with the Contract and coordinate with external agencies as required.
- Review change order cost estimates prepared by the Contractor, evaluate Contractor claims for extension of time, and provide comments and recommendations to the Mobility Authority.
- Maintain log and retain all documents associated with potential change orders.
- Provide constructability reviews of Work Sequence Plans submitted by the Contractor. The Contractor will be responsible for final approval.

G. Dispute/Claims Support

The GEC will provide consultation and assistance to the Mobility Authority and their General Counsel related to aspects of the design, construction, duties and services required during the development and implementation of the Project:

- Assemble supporting documentation, review, analyze and provide recommendations to the Mobility Authority on the Contractor’s submittal of a dispute.
- Review, analyze and make recommendations to the Mobility Authority on the Contractor’s claim package submittal.

H. Project Meetings & Documentation

The GEC will facilitate the following Project meetings to assess progress, schedule, and quality of services being provided as well as identify issues:

- Internal Team Meetings (Weekly)
- Internal Project Review Meetings (Monthly)
- Issue Resolution Meetings (As Needed)
- Mobility Authority Construction Status Update Meetings (Monthly)
- Mobility Authority Board Meetings (Quarterly)
- Maintenance of Traffic (Weekly)
- Public Information (Weekly)
- 4-Week Rolling Schedule Review (Weekly)
- Comprehensive Schedule (Monthly)

The GEC will prepare agendas, meeting minutes, action plans and follow-up action item status for each of the GEC Project meetings and distribute to attendees and appropriate personnel.

I. Documentation

The GEC will review for completeness and accuracy the agendas, meeting minutes, action items and follow-up action item status prepared by the Contractor for each of the Contractor meetings.

J. Document Controls

- Develop and implement a document control plan; including training of Project personnel including the CE&I firm and the Contractor in the use of document management system application and protocol.
- Assist the CE&I firm in the maintenance of the Project files for the duration of the Project.
- Transfer program files to the Mobility Authority upon completion of the work or as directed by the Mobility Authority.
- Import documents into the Mobility Authority's Electronic Document Management System (EDMS) as necessary.

K. Document Distribution

- Assign identification coding to incoming and outgoing Project related documentation and perform entry into the EDMS.
- Prepare, manage, record, distribute and archive documentation of Project activities, progress, and related communications.
- Log and track submittals and deliverables.

L. Response to Open Records Requests

- Perform retrieval of documents as a result of open records requests.

TASK 2 – REPORTING (CODE 13720)

The GEC will provide reporting required in accordance with the TxDOT Project Development Agreement (PDA), TxDOT Financial Agreement (FA), Bond Indenture, TIFIA, and the Mobility Authority. The GEC will provide qualified technical and professional personnel to perform this task. The following activities are included:

A. Program Reporting

- Prepare and issue monthly reports on the Project's status which will document any issues, delays encountered, and corrective actions as necessary.
- Provide a monthly update to the Mobility Authority on key milestones accomplished during the preceding month, meetings and key activities for the upcoming month, and identify outstanding issues requiring resolution.
- Track, monitor, and report on contracts and budgets for the GEC, third party consultants and the Contractor.
- Track, monitor, and prepare reports on DBE/HUB utilization for Contractor's DBE/HUB program, third party consultants, and GEC Team.

B. TxDOT Reporting

- In coordination with TxDOT Austin District staff, develop template documents to be used for Project status to TxDOT.
- Prepare and issue required monthly reports on the Project's status to TxDOT.
- Develop and submit monthly reimbursement requests to TxDOT.

C. Trust Indenture Obligations

- Prepare monthly reports with an executive summary that provides a comprehensive summary of the monthly activities and the overall Project progress.

- Prepare quarterly reports with an executive summary that provides a comprehensive summary of the monthly reports and the overall Project progress.

D. TIFIA

- Prepare monthly reports with an executive summary that provides a comprehensive summary of the monthly activities and the overall Project progress.
- Prepare quarterly reports with an executive summary that provides a comprehensive summary of the monthly reports and the overall Project progress.

TASK 3 – PROJECT CONTROLS (CODE 13720)

The GEC will provide project controls required to manage the project and inform the Mobility Authority of key developments. The GEC will provide qualified technical and professional personnel to perform this task. The following activities are included:

A. Project Schedule

The GEC will provide staff to coordinate the Project scheduling efforts. Specific activities include:

- Evaluate, monitor and verify according to contractual requirements, Contractor’s Project schedule (baseline and updates) and Recovery Schedule.
- Report and verify the Contractor’s progress and upcoming milestones on a monthly basis to the Mobility Authority.
- Identify, catalog, and archive Baseline Schedule, schedule revisions, updates and Recovery Schedules. Evaluate time impacts and report recommendations to the Mobility Authority.
- Develop and maintain a detailed owner project schedule that will be used to independently assess the status and health of the project.

TASK 4 – CONSTRUCTION OVERSIGHT (CODE 13720)

The GEC will provide professional services associated with construction oversight including the construction engineering in accordance with the PDA, Contract and Systems Integrator (SI) Contract. The GEC will provide qualified technical and professional personnel to perform this task. In performance of this task, the GEC shall not direct, manage or control the Contractor’s or SI’s construction work activities. Construction Oversight by the GEC will not relieve the Contractor or SI of sole responsibility for the means and methods of the construction, or for health or safety precautions in connection with this work. The Engineer(s) of Record will remain responsible for design related services.

Construction oversight efforts will focus on coordination with the Contractor’s and SI’s construction processes to provide monitoring and oversight of reasonable compliance obligations, sound engineering practices and regulatory requirements. The following activities are included:

A. General Technical Support

The GEC will provide technical support and management assistance as required by the Mobility Authority toward the successful completion of the Project; including:

- Advise the Mobility Authority on matters of engineering related to interpretation of design details, construction techniques and procedures, specifications, standard construction details, and construction plans prepared by the Engineer of Record.

- Seek clarifications from the Engineer of Record when necessary on the intent reflected in the design plans and specifications. The Engineer of Record will remain responsible for design related services.
- Review, monitor and recommend modification to the Contractor's maintenance of traffic/traffic control operations according to applicable specifications and standards.
- Document and issue deficiency reports to the Contractor on any non-compliance of traffic control devices or layouts.
- Coordinate with the Contractor, affected third parties, interested agencies, emergency responders and the Mobility Authority for major traffic disruptions.
- Attend meetings pertaining to the traffic control and maintenance of traffic that are held by the Contractor.
- Track lane/shoulder/ramp/cross-street rental and/or Liquidated Damages fees.
- Review ITS elements including CCTV, Microwave vehicle detection, fiber installation, DMS install, and ATM.

B. Requests for Information (RFI) and Non-Conformance Report Processing and Management

- Review and comment on Project RFIs.
- Prepare and manage Non-Compliance Reports (NCRs) for non-compliant work.
- Maintain, log and retain all documents associated with RFIs and NCRs.

C. Shop Drawing / Submittals Processing and Management

- Review shop drawings, erection drawings, working drawings, samples, material and product certifications, and catalog cuts and brochure submittals for general conformance with the design plans and specifications submitted by the Contractor. Check that the Engineer of Record has provided required approvals. The Engineer of Record will be responsible for final approval.
- Maintain, log and retain all documents associated with shop drawings.
- Coordinate with the Contractor on processing, submittal documentation, follow-up activities, and clarifications.

D. Contractor Draw Requests

- Review completeness of Contractor's submittal in accordance with the requirements of the Contract, including:
 - Cover sheet
 - Monthly progress report
 - Report of personnel hours
 - DBE utilization report
 - Updated Project schedule
 - Waiver of liens from previous draw requests
 - Material on hand invoices
 - Lane rental fee report
- Evaluate that the request accurately reflects monies due for acceptable work completed.
- Review and provide required certifications to the Mobility Authority for processing of the Contractor's partial and final pay requests.
- Track Project contingency funds. Maintain, log and retain all documents associated with expenditure of Project contingency.

E. Mobility Authority Construction Coordination Support

The GEC will support the Mobility Authority in coordination and any interlocal agency agreements including exhibit preparation and supporting document preparation and assembly with the following agencies:

- Texas Department of Transportation (TxDOT)
- Federal Highway Administration (FHWA)
- Capitol Area Metropolitan Planning Organization (CAMPO)
- City of Austin
- Capitol Metropolitan Transportation Authority (CapMetro)
- Travis County
- Other Agencies as identified and as directed by the Mobility Authority.
- Provide information to the Contractor concerning previous negotiations with certain property owners along the Project corridor.

F. Environmental Compliance

The GEC will provide staff to review and report on the Contractor’s environmental compliance efforts. Specific activities include:

- Monitor the Contractor’s activities to determine if environmental encounters are being promptly reported and managed in accordance with applicable laws and regulations.

G. Final Punch List/Final Inspection/Notice of completion

The GEC will:

- Coordinate with the Contractor and TxDOT in the generation of a final punch list.
- Monitor the resolution of outstanding construction items.
- Inspection of punch list completion.
- Verify there are no outstanding claims related to the Contractor’s work.
- Provide a Notification of Completion to the Mobility Authority.
- Review/Confirm accuracy of As-Built record drawings.

TASK 5 - PUBLIC INVOLVEMENT (CODE 13750)

The GEC will provide staff as needed to support the Mobility Authority with the administration, management, coordination, and implementation of the public involvement oversight efforts. Activities included in this task:

A. Support for Director of Community Relations

Provide assistance as requested from the Mobility Authority Communications Department for the day to day construction communications throughout the life of the contract, including:

- Acting as the secondary point of contact for the project.
- Attending internal meetings.
- Responding to public inquiries regarding the project.
- Assisting with community outreach strategy.
- Providing assistance with the development of and implementation of the Public Information Plan (PIP) and Emergency Response Plan for the project.
- Managing the updates of content and graphics on the Project website.
- Managing the stakeholder mailing list.

- Providing public involvement materials, such as fact sheets and frequently asked questions.
- Assisting with the writing and dissemination of construction updates to the public, including but not limited to e-newsletters and social media.
- Assisting with emergency/crisis communications, as needed.
- Provide ongoing reports to the Authority regarding the status of work performed and the success of the PIP.
- Help coordinate media inquiries.
- Support event management efforts with coordination and participation, as needed.

B. Website Management

Manage the project website, throughout the life of the contract, including maintenance support and analytic reports.

TASK 6 – SYSTEM INTEGRATION SUPPORT AND INSPECTION (CODE 13720)

The GEC will oversee the SI’s development of the toll collection system layout, including the location of the toll collection gantries, toll collection system design and toll collection system infrastructure requirements and the integration with the Contractor’s work. The GEC will monitor adherence to the Toll System Collection Responsibility Matrix by both the Contractor and SI.

LIST OF ASSUMPTIONS

A. Project Scope

The services provided by the GEC as described in this Work Authorization are based upon the Project scope as defined in the Contract. It is assumed that construction inspection, materials testing, and survey services will be provided by other consultants contracted directly with the Mobility Authority.

B. Project Schedule

The services provided by the GEC as described in this Work Authorization are based upon the Project schedule. Any change to the project schedule dates as noted below may require a supplement to this Work Authorization.

- Substantial Completion 580 working days after NTP.
- Final Acceptance 90 Calendar days after Substantial Completion.
- Project Closeout completed 90 calendar days after Final Acceptance.

C. Project Vehicles

Vehicles will not be invoiced separately as they are included in the monthly lump sum direct expense.

D. Staff Labor and Overhead Rates

Hourly rates and overhead rates shown in Attachment B are estimates or averages used for the purpose of establishing the not to exceed budget for this work authorization. The actual rates used will be in accordance with Section 4, Compensation in the Agreement.

[END OF ATTACHMENT]

TASK NO	DESCRIPTION	Title	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	
1.0	290E/SH 130 GEC Project Management		120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
	ATKINS																								
		Program manager	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
		Corridor Manager	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
		Administration	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
2.0	290E/SH 130 GEC Reporting		40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
	ATKINS																								
		TIFIA/OS/Financial-reporting	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
3.0	290E/SH 130 GEC Project Controls		18	18	48	48	16	48	16	16	48	16	16	48	16	16	48	16	16	48	16	16	48	16	16
	ATKINS																								
		Corridor Manager	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
	SUBCONSULTANTS																								
	LPC		10	10	40	40	8	40	8	8	40	8	8	40	8	8	40	8	8	40	8	8	40	8	8
4.0	290E/SH 130 GEC Construction Oversight		176	176	176	144	144	144	144	144	144	144	144	144	144	144	144	144	144	144	144	144	144	144	144
	ATKINS																								
		Construction manager	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
		Corridor Manager	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
		Administration	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
		EB support	40	40	40	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
5.0	290E/SH 130 GEC PI		70	70	70	260	260	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
	ATKINS																								
		Communication	20	20	20	80	80	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
		Communication	40	40	40	80	80	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
	SUBCONSULTANTS																								
	Blonde Ambition	PI	10	10	10	100	100	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	Monkeyboy	Website	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6.0	290E/SH 130 GEC SI Support & Inspection		10	10	10	10	10	10	10	10	10	10	10	10	90	90	90	90	90	90	90	90	10	10	10
	ATKINS																								
		Toll System Inspection													80	80	80	80	80	80	80				
		SI support	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
99.EXP	Expenses																								
	ATKINS																								
	Expenses		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Vehicles		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	Drone footage		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Aerial				1		1				1			1			1			1			1		
	SUBCONSULTANTS																								
90.02.	Expenses																								

TASK NO	DESCRIPTION	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Hours Total	FORECAST TOTAL
1.0	290E/SH 130 GEC Project Management	120	120	120	120	120	120	120	120	120	120	120	120	120	120	4,320	\$ 929,610.52
	ATKINS															-	\$ 929,610.52
		40	40	40	40	40	40	40	40	40	40	40	40	40	40	1,440	\$ 444,721.08
		40	40	40	40	40	40	40	40	40	40	40	40	40	40	1,440	\$ 379,742.86
		40	40	40	40	40	40	40	40	40	40	40	40	40	40	1,440	\$ 105,146.58
2.0	290E/SH 130 GEC Reporting	40	40	40	40	40	40	40	40	40	40	40	40	40	40	1,440	\$ 197,213.13
	ATKINS															-	\$ 197,213.13
		40	40	40	40	40	40	40	40	40	40	40	40	40	40	1,440	\$ 197,213.13
3.0	290E/SH 130 GEC Project Controls	16	48	16	16	48	16	16	48	16	16	48	16	16	16	964	\$ 225,922.60
	ATKINS															-	\$ 75,948.57
		8	8	8	8	8	8	8	8	8	8	8	8	8	8	288	\$ 75,948.57
	SUBCONSULTANTS															-	\$ 149,974.03
	LPC	8	40	8	8	40	8	8	40	8	8	40	8	8	8	676	\$ 149,974.03
4.0	290E/SH 130 GEC Construction Oversight	144	144	144	144	144	144	144	144	144	144	144	144	144	144	5,280	\$ 1,035,557.98
	ATKINS															-	\$ 1,035,557.98
		120	120	120	120	120	120	120	120	120	120	120	120	120	120	4,320	\$ 908,763.25
		8	8	8	8	8	8	8	8	8	8	8	8	8	8	288	\$ 75,948.57
		8	8	8	8	8	8	8	8	8	8	8	8	8	8	288	\$ 21,029.32
		8	8	8	8	8	8	8	8	8	8	8	8	8	8	384	\$ 29,816.85
5.0	290E/SH 130 GEC PI	70	70	70	70	70	70	70	70	70	260	260	70	70	70	3,280	\$ 388,082.90
	ATKINS															-	\$ 309,738.91
		20	20	20	20	20	20	20	20	20	80	80	20	20	20	960	\$ 133,978.91
		40	40	40	40	40	40	40	40	40	80	80	40	40	40	1,600	\$ 175,760.00
	SUBCONSULTANTS															-	\$ 78,343.99
	Blonde Ambition	10	10	10	10	10	10	10	10	10	100	100	10	10	10	720	\$ 60,343.99
	Monkeyboy	1	1	1	1	1	1	1	1	1	1	1	1	1	1	18	\$ 18,000.00
6.0	290E/SH 130 GEC SI Support & Inspection	10	90	90	90	90	90	0	0	0	0	0	0	0	0	1,240	\$ 242,772.64
	ATKINS															-	\$ 242,772.64
			80	80	80	80	80									960	\$ 210,968.26
		10	10	10	10	10	10									280	\$ 31,804.38
99.EXR	Expenses															-	\$ 290,300.00
	ATKINS															-	\$ 290,300.00
	Expenses	1	1	1	1	1	1	1	1	1	1	1	1	1	1	36	\$ 144,000.00
	Vehicles	2	2	2	2	2	2	2	2	2	2	2	2	2	2	72	\$ 100,800.00
	Drone footage	1	1	1	1	1	1	1	1	1	1	1	1	1	1	36	\$ 18,000.00
	Aerial		1			1			1			1				11	\$ 27,500.00
	SUBCONSULTANTS															-	\$ -
90.02.1	Expenses															-	\$ -

Total Fee \$ 3,309,460